

CITY OF KENT  
DEPARTMENT OF PUBLIC SERVICE

MEMO

July 30, 2009

To: Dave Ruller, City Manager  
From: Gene Roberts, Service Director  
RE: Citywide Energy Management

In keeping with Kent City Council direction to minimize the City's energy consumption staff released a Request for Qualifications (RFQ) for Energy Conservation. The attached Executive Summary from The Brewer-Garrett Company provides a general project outline to implement Citywide energy minimization project(s) that will self pay for the improvements for the savings for both electric and natural gas.

Mr. Kelly Tisdale, Energy Services Division Manager, The Brewer-Garrett Company will be available to present the Brewer-Garrett proposal to assist the City in reaching its goal of reducing energy use at City facilities. Staff respectfully requests Kent City Council Agenda time to present the Brewer-Garrett Proposal.

On a separate but related issue the changes that are currently in flux regarding the City's supplier of electrical generation are truly dynamic requiring short periods to respond to offers to purchase the generation component of our total electrical spend. This process is foreign to our standard for goods and services procurement but the current electrical generation component of our electric purchase does not allow for the process of seeking approval through board of control or general Council meetings as the offers are typically limited to 5 or 6 business days and then terminate. Equally the proposal from Brewer-Garrett recognizes this new electrical generation environment and they have included guidance in selection of a vendor as part of their scope of services. I respectfully request a brief moment to request approval by Council to allow staff the ability to enter into an agreement when the best possible rate has been obtained from multiple vendors.

Cc: Jim Silver, Law Director  
David Coffee, Budget & Finance Director  
File

## EXECUTIVE SUMMARY

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Outstanding cities like Kent should expect nothing but the best. Community leadership with an unwavering commitment to serve your community needs has driven Kent's success. The Brewer-Garrett Company welcomes the challenge to make energy savings and building improvements in your community. You will find, within this proposal, that our combined efforts have produced significant, positive and far-reaching results. We will continue to work countless hours to deliver an energy project that is second to none. The Brewer-Garrett Company is proud to present our Proposal for Energy Conservation Solutions to the City of Kent.

There has never before been a better time to implement an Energy Conservation Program. Energy costs are rising while interest rates are remaining low. These two conditions allow you to maximize your return on investment and expand your program.

An opportunity like this must be accompanied by a superior effort to design a program for Kent. Your Brewer-Garrett Company solution has involved a dedicated team who has worked hard to understand current infrastructure conditions, potential changes in infrastructure utilization, and utility rates. In addition we have worked diligently to identify comfort or safety issues. This information was then combined with the best expertise in the industry to produce a proposal, which will have positive, powerful and comprehensive impact on The City of Kent.

Your Brewer-Garrett Company program provides flexibility. Projects can be added or deleted from the scope as long as the project has an overall payback under 10 years.

Projects included in our base proposal include....

- *Lighting Upgrades in all buildings*
- *New Blower at Water Reclamation*
- *Expanded Controls at Water Reclamation*
- *New Automation at 8 Buildings*
- *Demand Ventilation Controls at Fire Station #1*
- *Vending Controls*
- *New A/C at Service Administration and Fire Station #1 server rooms*

Benefits of your Program will ....

- *Protect and extend the life of the City investments*
- *Increase Comfort*
- *Increase Reliability*
- *Increase controllability of mechanical systems*
- *Lower Energy/Operational Costs*
- *Make Improvements at NO NET COST to the City*

Essentially the City of Kent can make **\$652,955** in needed City wide infrastructure improvements at **no net cost!** In fact this Program will actually generate positive cash flow to Kent in its first year. Our program allows you to prioritize the projects you want implemented. To show the programs flexibility we have included a "Project Summary" in the financial section.

## EXECUTIVE SUMMARY

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We commit to the City of Kent to be a partner today and in the future. The detail and comprehensiveness of this proposal is merely the beginning. All of our extensive resources will constantly be at your disposal. We can aid in design, construction, maintenance, troubleshooting, training, and utility planning.

Our In-house business philosophy utilizes our significant local resources to develop the best solutions. We utilize our construction and installation departments to control the project, insuring the highest quality, minimizing your investment while maximizing our customer's return.

The Brewer-Garrett Company understands the process in selecting a partner to cost effectively implement a successful project. Our many customers have seen the flexibility, reliability, and dedication to customer satisfaction that is the Brewer-Garrett tradition.

Finally the Brewer-Garrett Company has a real connection with the City of Kent. Our lead engineer, Steve Bair, is a resident of Kent and we have multiple Kent State Alumni on staff, including myself. We are committed to the success of The City of Kent's Program. **We look forward to exceeding your expectations.**

Sincerely,



H. Kelly Tisdale  
C.E.M., LEED AP, C.D.S.M., C.C.P.  
Energy Services Division Manager  
The Brewer-Garrett Company

## SECTION 2.

### GENERAL APPROACH

#### 2. General Approach

##### a. Project Summary.

The Brewer-Garrett Company views each customer as unique. Each has its own concerns with finances and capital, operations and expenses, personnel, short-range goals, long-range goals, operational issues, risk tolerance, insurance, schedules, space utilization, infrastructure issues, etc. We listen to our customer's needs and concerns to develop a project that will successfully achieve as many goals as possible.

This is at the heart of our success. After listening to these concerns we will develop a program utilizing as many considerations as possible. Ultimately the design team will consist of the Customer, The Brewer-Garrett Project Manager, our CFO (financing options), Project Engineers, Energy Auditors, Utility Procurement Experts, Energy Engineers, Construction Management, Project Supervisors, Designers, Service Representatives, Electrical Managers, Lighting Experts, Automation Specialists and Field Personnel. Along with the customer, this entire team is housed within The Brewer-Garrett Company...assuring rapid and consistent communication while delivering desired results.

This Team will develop and analyze multiple solutions. Each of these will be analyzed for their merits and shortfalls. Improvements will continue to be made until the absolute best solution is determined.

Led by The Brewer-Garrett Project Manager this team will work tirelessly to develop a solution that will deliver Desired Results within Specified Time Limits with No Change Orders incorporating Financing consistent with the Goals of the Customer. Finally, the team will design a Service Program that will assure proper operation and system performance, guaranteed energy savings and fit within the customers' financial parameters.

Because The Brewer-Garrett Company is a single source provider, scheduling setbacks and cost overruns usually associated with these programs are virtually eliminated. The Brewer-Garrett Company Design/Building approach means no change orders unless there is a change in the scope of work requested by the City of Kent.

We utilize tools such as Microsoft Project enable us to effectively schedule the various tasks associated with an energy conservation project such as this. We will update our master schedule monthly in order to keep a continuous line of communication open and seamless delivery of the project.

That being said construction projects and their schedules are never risk free. At The Brewer-Garrett Company our many years of implementing projects has



**SECTION 2. GENERAL APPROACH**

trained us to anticipate potential scheduling issues and voice them whenever possible. With the City of Kent project we do not foresee any major problems.

Because we are working in continually occupied spaces we will work very closely to develop the schedule to best accommodate the City of their activities.

Delays could potentially occur due to the following:

- Weather (heating/cooling equipment startups and commissioning)
- Equipment Delivery
- Environmental Hazards
- Unidentified Owner Requirements

A sample of the project schedule is provided on the following page.

City of Kent

ID	Task Name	Start	Finish	City of Kent																														
				August	September	October	November	December	January	February	March																							
	Project Start Date			7/26	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1	11/8	11/15	11/22	12/6	12/13	12/20	12/27	1/3	1/10	1/17	1/24	2/1	2/7	2/14	2/21	2/28
1	Engineering	Mon 8/3/09	Mon 8/3/09	[Gantt bar]																														
2	Mobilization	Mon 8/17/09	Mon 10/12/09	[Gantt bar]																														
3	Lighting	Mon 8/24/09	Fri 11/27/09	[Gantt bar]																														
4	Occupancy Sensors	Mon 10/5/09	Fri 11/27/09	[Gantt bar]																														
5	Sewage Treatment, VFD's/Motors	Mon 8/31/09	Fri 2/5/10	[Gantt bar]																														
6	Vending Machine Control	Mon 8/24/09	Fri 8/25/09	[Gantt bar]																														
7	Automation/Retro-Commissioning	Mon 9/14/09	Fri 12/18/09	[Gantt bar]																														
8	Administration Buildings, Server Room A/C	Mon 8/21/09	Fri 10/9/09	[Gantt bar]																														
9	Fire Station, Server Room A/C	Mon 10/12/09	Fri 10/30/09	[Gantt bar]																														
10	Project Punch List	Mon 2/8/10	Fri 2/18/10	[Gantt bar]																														
11	Project Close Out	Fri 2/26/10	Fri 2/26/10	[Gantt bar]																														

City of Kent  
 HB 300 Energy Conservation Program  
 Date: Tue 8/2/09

Task Split

Progress Milestone

Summary Project Summary

External Tasks External Milestone

Deadline

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#### b. Training Provisions.

The Brewer-Garrett Company places a high priority on training. The Brewer-Garrett Company expanded the Middleburg Heights headquarters to include "The Garrett Training Center." This training center is utilized for internal training as well as customer training.

We include training of your staff on new equipment, which we install. We will ensure that your staff has a high comfort level with all of this equipment. The Brewer-Garrett Company can also develop customized training programs for our customers. We utilize multi-media formatting and in-house expertise to present materials. We can also call upon a great number of manufacturers/vendors to augment our classes with speakers or training materials.

The Brewer-Garrett Company has been working with the personnel at Cuyahoga Community College over the last seven years. We developed a training course for their building automation system when it was first installed. We have provided additional training over the years as the need arises personnel changes, software upgrades etc. This training was conducted on site for each campus. We developed an interactive session that utilized their controls and equipment in real time. Training manuals were provided to each participant. We believe that continuous training is a good way to ensure a successful energy savings project.

Each client of The Brewer-Garrett Company is provided with the requested amount of training materials and operations and maintenance manuals. Through the commissioning process documentation is generated to benchmark performance the equipment and systems.

#### c. Engineering Design.

By selecting The Brewer-Garrett Company as your partner in performance contracting, you truly have a single-source to complete the entire project. You get all the services you need for your project in one company, which saves the costs incurred by a sub-contractor mark-up and engineering mark-up all from different companies. This also benefits the City of Kent by maintaining one open line of communication throughout the project. You will not have an issue with the contractor pointing a finger at a subcontractor or the contractor blaming the problems on the design. And you don't have to worry about which contractor or subcontractor to contract when you have a question, you know exactly who to call.

Because The Brewer-Garrett Company is a single source provider, scheduling setbacks and cost overruns usually associated with these programs are virtually eliminated. The Brewer-Garrett Company Design/Build approach means no

## SECTION 2.

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change orders unless there is a change in the scope of work requested by the City of Kent.

The Brewer-Garrett Company has a unique approach to performance contracting projects. The initial energy conservation project scope solution is determined by a team of Brewer-Garrett professionals that analyze each solution as it pertains to their individual field of expertise. Each team member is responsible for the following evaluation process.

- A). Energy Engineering
  - 1). Energy Savings
  - 2). Deregulatory Utility Negotiations
  - 3). Operational Savings
  - 4). Utility Contract Reviews
  
- B). Engineering
  - 1). Existing System Design Review
  - 2). Project Solution Engineering
  - 3). Sizing and Selection of New Equipment
  
- C). Contracting
  - 1). Project Solutions Costs
  - 2). Cost Avoidance Savings
  - 3). Construction Cost Saving Implementation Ideas
  
- D). Mechanical Service
  - 1). Equipment Life Cycle Costing
  - 2). Maintenance Operational Savings
  - 3). Extended Equipment Life Guarantees
  - 4). Preventative Maintenance Contract Solutions
  
- E). Temperature Controls
  - 1). Evaluate Existing Facility Control Systems
  - 2). Project Solution Control Engineering
  - 3). Integration of Existing Control Systems

A pre-engineering planning meeting with Brewer-Garrett's Engineering and Controls Managers will be held in order to determine the final engineering approach and set time lines on finished drawings for approval by the City of Kent and obtain local building permits.

After the final engineering drawings have been completed and approved the Project Manager will schedule a pre-construction meeting with the City of Kent designated personnel in order to finalize project scheduling and project implementation.

Joe Ksenich, Brewer-Garrett's Safety Manager will conduct a project safety review and discuss the rules and regulations of the City of Kent with Brewer-

**SECTION 2. GENERAL APPROACH**

Garrett's Field Superintendents, Site Foreman, and Sub-Contractors before any work begins on the City of Kent buildings.

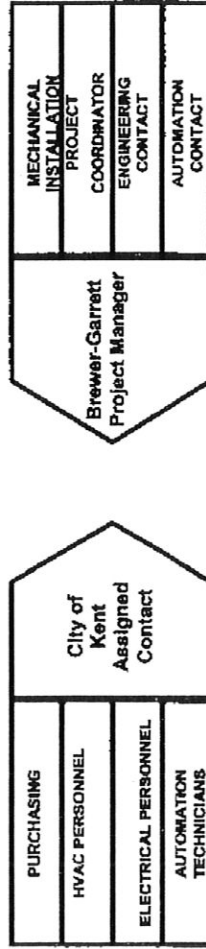
The Project Manager will hold a bi-monthly project review meeting with our project superintendent and the City of Kent personnel in order to discuss:

- A. Project Progress and Scheduling Revisions
- B. Upcoming Mechanical/Electrical Activities
- C. Coordinate Scheduling, and Facility Access
- D. Air Any Problems Before They Become Items of Contention

We strive to be as professional and effective as we can during our project installations. When occasional difficulties arise, it has served well in the past to define responsibilities ahead of time.

We find that predetermined, single main points of contact for the customer and ourselves work to everyone's benefit. In addition, predetermined contacts for specific job segments can be called upon in job meetings so communication remains consistent.

As a difficulty is examined and eliminated, the process will be documented by The Brewer-Garrett Company and communicated, in writing, directly back to the customer.



The Brewer-Garrett Company has been implementing energy conservation programs for nearly 50 years. Our success has come from our ability to meet and exceed our customers expectations. We have successfully implemented programs of the same scope and size for educational institutions across Northeast Ohio. We have the ability to phase projects in to take advantage of customer schedules and occupancy requirements. We can work in continuously occupied areas with little disruption to daily operations.

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d. Monitoring and Verification.

The Brewer-Garrett Company believes that energy auditing is an ongoing effort. Our staff of Energy Auditors and Certified Energy Managers works actively in reviewing each contract on monthly basis when current utility information is received from the customer. The benefit to the customer is the immediate identification of potential problems or concerns.

We follow the International Measurement and Verification Protocol when determining energy savings and will utilize the Whole Meter Auditing or Measure Specific Auditing depending on the ECM.

The Brewer-Garrett Company utilized Metrix™ software for its Whole Meter Analysis. Metrix™ is a data management program customized to track and analyze energy and utilities. Utility account and meter information is loaded into Metrix™. On a monthly basis, utility bills are entered and tracked.

e. Baseline Calculation Methodology.

Metrix™ uses a statistical regression based upon the relationship between past utility performance and weather or other variables to determine closely what your utility bill would have been if no changes had been made to the facility. The software allows our auditors to make appropriate adjustments based on changes in time, weather and events.

For projects like lighting retrofits we use a pre and post measurement and verification process.

Determination of Energy Savings/Measurement & Verification (Lighting)

Standard energy savings procedures will be applied in determining the energy savings generated during each guarantee year. A guarantee year shall be a period of 12 consecutive months. The energy savings will be the calculated differential electric consumption multiplied by runtime, multiplied by electric cost. The differential electric consumption savings will be determined by calculating the difference of a pre-retrofit (baseline) measurement of amps or watts and a post-retrofit (performance) measurement of agreed an upon representative sampling of electric circuits where end use capacity, demand or load can be measured or estimated with manufacturers measurement and energy consumption or hours of operation are known in advance, stipulated or agreed upon by both parties. The difference is then multiplied by previously agreed upon hours of use. The resulting capacity and demand savings will be inserted into the actual utility rate to convert units saved to dollars saved.

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A sample of our methodology used for a past project is the following:

Sample statistical regression equation for gas meter:

$$MCF = (7.8 * \#Days) + (8.81 * HDD)$$

f. Adjustment to Baseline Methodology.

Base Year energy usage will be adjusted to reflect changes in time, weather and population including, but not limited to, occupied square footage; energy-consuming equipment' operational changes' changes in daily temperature between the Base Year and the Guarantee Year; and documented or otherwise conclusively established metering errors for the Base Year and/or any Guarantee Year.

Energy savings guarantee contracts are long term relationships that rely on communication between parties. Each building incorporated into an agreement has a baseline of operational use. The Fire Stations, Police Department and Water Treatment Facility are occupied and used 24/7/365. The remaining buildings have a set schedule of operation with some after hours use. Throughout the course of the guarantee we will monitor all the buildings and request updates on the operational hours of each. Other changes that can occur in buildings like City Hall or the Administration Building would be additional technology and the addition of air conditioning that often accompanies bigger and faster computer systems. For the City's largest energy consumers, the Water Treatment and Reclamation Facilities, we will need to understand the base year energy use and how it relates to gallons of water / waste processed and monitor changes in those operating parameters over the course of the guarantee.



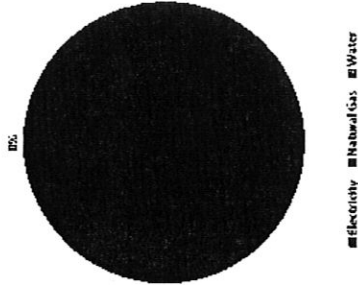
**SECTION 2.**

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**g. Savings Calculations.**

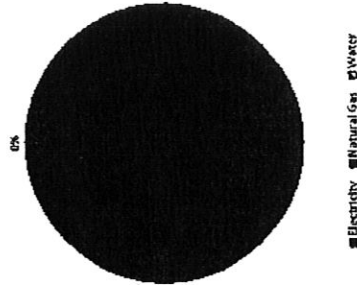
We have included a detailed review of the utility billing information provided by the City of Kent for 2007 and 2008. Below is a summary of costs for the all buildings addressed in this proposal. The 2007 utility cost for natural gas was \$156,797 and electricity was \$393,822. The total utility bill for 2007 was \$550,619.

**2007 Annual Utility Costs**



Below is a summary of costs for the all buildings addressed in this proposal. The 2007 utility cost for natural gas was \$194,748 and electricity was \$407,720. The total utility bill for 2007 was \$602,468.

**2008 Annual Utility Costs**



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Our team of Professional Engineers and Certified Energy Mangers have over 30 years experience in the Energy Services field. They utilize sound engineering practices, computer software and experience to project savings. They examine the interaction of systems in order to accurately identify savings opportunities.

Our savings projections also take into consideration our clients business environment, operations, local utility, and burnertip issues. Understanding these needs allows us to project savings for the near and long term.

We can offer the most cost-effective solutions with realistic savings analyses. We believe in being practical and realistic in calculating savings for our customers. We are always trying to build long-term customers by achieving beyond what is expected in all areas. Our team would rather see our customers exceed the savings estimates than fall short of them.

The key to verifying and quantifying system performance is gathering and analyzing accurate data. Trending incremental data of various inputs reveals system performance and efficiency. Many of the points necessary for proper system evaluation are resident in the building automation systems. Other points are gathered with stand alone test equipment that The Brewer-Garrett Company owns for use in building evaluations.

#### Data points:

1. Lighting levels
2. Occupancy
3. Lighting on/off
4. Carbon Dioxide
5. Temperature
  - a. Space
  - b. Return Air
  - c. Discharge Air
  - d. Outside Air
6. Damper Positioning
7. Valve Positioning
8. VFD percentage
9. Humidity
  - a. Space
  - b. Outside
10. CFM's
11. Metering
  - a. Electric
  - b. Gas
  - c. Water

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The measured values are entered into a variety of engineering calculations and computer models for evaluation. Our staff engineers and certified energy managers can then evaluate the systems and make recommendations for improved performance.

General information is gathered and data loggers are installed. The data loggers will enable us to see temperature, relative humidity, pressure, light levels, occupancy and CO<sup>2</sup> on 15 minute intervals that tells us how the building is performing. The data will then be analyzed to see when the buildings are not functioning economically or within the comfort zone. Equipment model numbers are gathered and researched to determine current performance expectations. This is valuable information when doing preliminary system comparisons.

Interviews with on-site personnel are a critical step in developing the best project for our customers. Knowing the history of the building and the issues being experienced by the building occupants helps to ensure all issues get addressed. The building occupants have years of experience in all weather conditions which can give our engineers insights that are difficult to see during off-season conditions.

A Sample Savings Calculation for Lighting is shown here. This is typical of the lighting in the City of Kent.

400w Metal Halide  
to  
240w TSHO Highbay

.4 kW - .24 kW = .16 kW Saved /month @ \$13.40 / kW = \$2.144 / month Saved  
(.4kW - .24 kW) x 2300 hr/yr = 988 kWh saved /yr @ \$0.07 / kWh = \$25.76 / year Saved  
Total Savings per Fixture  
(\$2.144 / month x 12 months) + \$25.76 / year = \$51.49 Saved Per Year

h. Dollar Savings Calculations.

The Brewer-Garrett Company believes in utilizing **ACTUAL RATE STRUCTURES** when calculating the savings for our customers. This method of converting units saved to dollars saved is the most accurate way to calculate energy savings.

**Determination of Energy Savings/Measurement & Verification (Lighting)**

Standard energy savings procedures will be applied in determining the energy savings generated during each guarantee year. A guarantee year shall be a period of 12 consecutive months. The energy savings will be the calculated differential electric consumption multiplied by runtime, multiplied by electric

## SECTION 2.

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cost. The differential electric consumption savings will be determined by calculating the difference of a pre-retrofit (baseline) measurement of amps or watts and a post-retrofit (performance) measurement of agreed an upon representative sampling of electric circuits where end use capacity, demand or load can be measured or estimated with manufacturers measurement and energy consumption or hours of operation are known in advance, stipulated or agreed upon by both parties. The difference is then multiplied by previously agreed upon hours of use. The resulting capacity and demand savings will be inserted into the actual utility rate to convert units saved to dollars saved.

#### **Determination of Energy Savings/ Audit (Non –Lighting)**

Standard energy savings auditing procedures will be applied in determining the energy savings generated during each guarantee year. A guarantee year shall be a period of 12 consecutive months. The energy savings will be measured by calculating the difference in energy consumption between each guarantee year and the pre-established base line year. Computerized energy accounting software will be utilized in making the above calculations of energy consumption in each guarantee year and in the determination of energy consumption in the base line year. This software adjusts for variables such as billing period length, outdoor temperature and outdoor humidity. The base line year will be a representative 12 month period prior to commencement of the retrofit program.

i. Maintenance Contract Flexibility. Describe the types of services included in the maintenance contract. Comment on whether City's maintenance staff or City's Contractor can perform some of these duties if desired, and describe any impact on the guarantee. (These duties could include programming and maintaining the control system, installing lighting retrofits, maintaining HVAC equipment, etc.). Describe the required length of the maintenance contract and the relationship with the guarantee in the event that the City chooses to terminate the maintenance contract prior to the end of the performance contract.

j. Cost Savings Guarantee Calculations. Describe your firm's procedures and schedule for measuring financial performance of projects. Describe how the guarantee provisions work in the event that project results vary from projections. Also describe how excess savings will be documented for the City's benefit.

If the savings generated during a Performance Guarantee year exceeds the guaranteed savings amount, the excess savings will either be carried forward and added to the savings generated during any future year or will be billed to the Customer as recovery of amounts previously paid by BG to the Customer for prior guarantee year savings shortfalls. In the event any Performance Guarantee years actual savings, including all excess savings from previous years, do not

## SECTION 2. GENERAL APPROACH

meet the Performance Guarantee savings amount for that year the Customer may:

- a) Request a check from BG equal to the difference. This request must be made within 60 days of the last day of guarantee year or receipt of the years Audit, or
- b) Carry forward negative balance to be considered in the following Audit's balance.
- k. Provision of Financing.  
The Brewer-Garrett Company will work hard on your behalf to seek the most appropriate type of financing for this project. We are able to seek financing from any available source including, but not limited to, banks and investment firms as well as government agencies that can add financial backing and possible tax exempt aspects to the transaction. Each transaction is unique based on the components and resultant benefits of the project, together with the credit rating of the customer and the financing structure desired. The Brewer-Garrett team will work with your internal team and your external advisors to find the financing structure that best fits your needs. Whether your financing priorities focused on cash flow, payout terms, buyout options, interest rates, etc., we will work to find the best solution. It is important that the firm from whom we seek financing understand the unique characteristics and financial benefits of the project so as not to view it as "just another construction project". The Brewer-Garrett team will invest the time necessary to educate each potential financial partner.

### FINANCING OPTIONS

#### Traditional:

The Brewer-Garrett Company is proud to offer our customers financial plans that deliver maximum energy efficiency at no net cost. Our approach is to recapture lost energy dollars you are currently spending to create the cash flow needed to fund 100% of this project. In addition to being self funding, you may also benefit by offsetting needed capital expenditures.

This is a no risk opportunity. Your proposal will include a 100% energy guarantee. Simply stated, if we project energy savings of \$400,000 per year and you only save \$390,000, we pay the difference. In addition, if you save \$410,000, you keep 100% of the \$10,000 of additional savings. There is no shared savings penalty with the Brewer-Garrett Company.

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### Additional Financing Options:

Our team of project finance professionals will exhaust all public and private loan, grant and program participating options. The following options can be investigated for the City of Kent:

### The Ohio Department of Development Office of Energy Efficiency

The Ohio Department of Development Office of Energy Efficiency, Energy Loan Fund: The Ohio Department of Development created the Energy Loan Fund to help off set the cost of energy project financing in order to promote energy efficiency throughout Ohio. There are two programs offered to reduce the cost of energy project financing.

- The Energy Efficiency Revolving Loan Fund: Business and Institutional Program offers up to \$250,000 of the loan at "0%" interest. The Energy Efficiency loan is based on 50% of the total loan. The cap is \$250,000 for non-renewable energy programs.
- The Energy Efficiency Revolving Loan Fund: Renewable Energy Financial Assistance Program offers up to \$500,000 at "0%" interest for projects that use clean, renewable energy sources. Eligible renewable energy systems under the Renewable Energy Program include but are not limited to solar photovoltaic, wind electric and biomass systems.

### The Ohio Air Quality Development Authority

The Ohio Air Quality Development Authority provides financing assistance to businesses that implement pollution control, pollution prevention, energy efficiency and operational process changes. The authority's power is drawn from its enabling legislation, found in Ohio Revised Code Chapter 3706. OAQDA has the authority to:

1. Issue air quality revenue bonds, notes and refunding bonds;
2. Make loans and grants to government agencies for the acquisition and construction of air quality facilities;
3. Make loans for air quality projects for industry, commerce, distribution of research;
4. Acquire, construct and operate air quality facilities itself; and,
5. Engage in research and development with respect to air quality facilities.

Financing through The Ohio Air Quality Development Authority results in a number of benefits. Examples of the benefits include, bond financing available for up to forty years, and OAQDA bonds are also eligible for state and local tax exempt financing. This allows the City of Kent to potentially finance the project off balance sheet without losing its tax exempt benefit. These are just two

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examples of how OAQDA financing can provide value to the City of Kent Energy Efficiency Project.

### Miscellaneous Public Sector Financing Options

In addition to the above mentioned options, we research other Ohio business incentives loans and grants including but not limited to:

- **Ohio Enterprise Bond Fund** – up to 20 years fixed rate for up to 90% of total project cost.
- \$1.5 to \$10 million
- **Ohio 166 Direct Loan** – up to 30% of total eligible fixed cost at two-thirds of prime rate for five to fifteen years.

This is not a complete list, but two examples of additional project funding options.

### Energy Output Purchase Option

This option has many names depending on who you talk to—Asset Monetization, Output Purchase and Synthetic Lease seem to be a few of the more popular terms today. While these programs seem attractive, they usually come at a premium. Our project finance professionals will discuss these options with you if you desire.

#### l. Provision of Insurance

Please see Appendix for Certificate of Liability Insurance.

#### m. Environmental Liability.

Unless otherwise stated in the scope of work, Brewer-Garrett's obligation under this proposal and any subsequent contract does not include the identification or removal of any asbestos products or other hazardous substances. In the event such products or substances are encountered, Brewer-Garrett's sole obligation will be to notify the Owner of the existence of such products and materials. Brewer-Garrett shall have the right thereafter to suspend its work until such products or materials and the resultant hazards are removed. The time for completion of the work shall be extended to the extent caused by the suspension and the contract price equitably adjusted.

Brewer-Garrett will remove to a certified disposal company all lighting tubes, ballasts and other materials and shall provide the Customer with a disposal receipt from the disposal company noting all materials so delivered including any possible PCB latent materials.



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n. **Provision of Warranties.**

**Mechanical Systems:** After installation, a qualified representative will start, test and provide instructions on the use of the equipment. All equipment, material and labor furnished by us will bear a one year warranty from the date of installation against defects in workmanship and material.

**Lighting Systems:** In association with a lighting retrofit, the ballasts installed contain a 1 year parts and labor warranty plus a manufacturer's warranty of 4 additional years on material plus \$10.00 for labor. For lamps, there is a 1 year material and labor warranty plus a manufacturer's warranty of 1 additional year on materials. BG will be responsible for the administration of these warranties.

o. **Equipment Ownership and Service Responsibility.**

The City is the owner of the equipment and is responsible for servicing unless otherwise specified.

p. **Sample Contract Agreement.**

Please see Appendix for a sample contract.

CITY OF KENT  
DEPARTMENT OF PUBLIC SERVICE  
DIVISION OF ENGINEERING

MEMO

TO: Dave Ruller  
Linda Copley

FROM: Rhonda Boyd

DATE: July 24, 2009

RE: Donation of Easement  
Cherry Middlebury Waterline

Engineering is requesting council time for acceptance of the donation of an easement by The Shelly Company for the construction of the Cherry Middlebury Waterline.

The easement contains 1,746 square feet of land and is a 5 foot strip approximately 349 feet long, located along the northerly line of S.R. 261.

This easement is valued at \$536.76.

The easement will provide a location for the construction of waterline that is not on a steep roadway embankment or in conflict with other existing buried utilities.

c: Gene Roberts, P.E., Service Director  
Jim Silver, Law Director  
Jim Bowling, P.E., City Engineer  
file

**CITY OF KENT  
DEPARTMENT OF PUBLIC SERVICE**

MEMO

July 30, 2007

To: Dave Ruller, City Manager

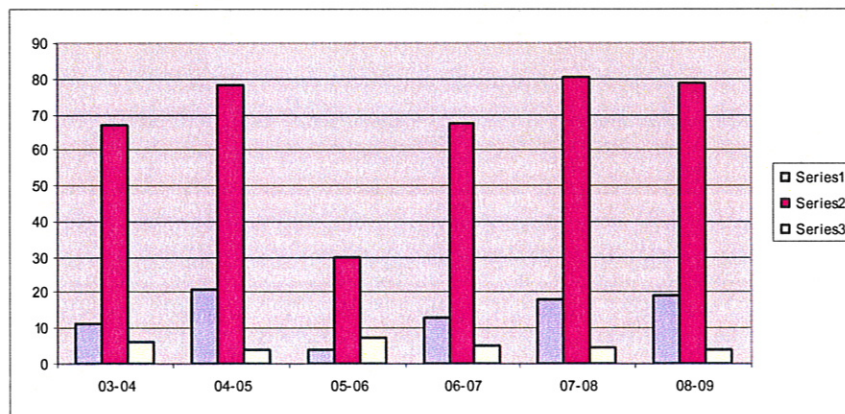
From: Gene Roberts, Service Director

RE: Sidewalk Snow Removal Program Implementation

The following information is provided as requested by KCC at their July 1, 2009 meeting and a couple of additional thoughts from staff.

Council asked for more specific snow fall historical information in order to determine the relative cost for implementation of a program similar to that used in Bowling Green, the below table and graph present data from the winter season 2003 through 2009.

<u>Year</u>	<u>Series 1 No, Events Total</u>	<u>Series 2 Snowfall in Inches</u>	<u>Series 3 Average Snowfall Per Event</u>
03-04	11	66.7	6.1
04-05	21	78.3	3.7
05-06	4	30.0	7.5
06-07	13	67.5	5.2
07-08	18	80.5	4.5
08-09	19	78.7	4.1



The original data presented to Council did not include actual data relative to number of snow falls and average snow fall per event, which is shown above. Further data analysis is presented on the next page.

## 2004-2009 Average Snow Fall

<u>YEAR</u>	<u>2"-3"</u>	<u>3"-4"</u>	<u>4"-6"</u>	<u>6" &amp; Up</u>	No, Events	Snowfall
					<u>Total</u>	<u>in Inches</u>
03-04	4	1	4	2	11	66.7
04-05	6	5	10	0	21	78.3
05-06	3	0	1	0	4	30.0
06-07	5	4	2	2	13	67.5
07-08	9	5	3	1	18	80.5
08-09	7	8	3	1	19	78.7
<b>Total 03 - 09</b>	<b>34</b>	<b>23</b>	<b>23</b>	<b>6</b>	<b>86</b>	<b>401.7</b>
<b>Average</b>	<b>5.7</b>	<b>3.8</b>	<b>3.8</b>	<b>1.0</b>	<b>14.3</b>	<b>67.0</b>
<b>No. of Events</b>	<b>2.8</b>	<b>3.8</b>	<b>3.8</b>	<b>1.0</b>	<b>11.5</b>	

## 2004-2009 Average Snow Fall Oct. - Dec.

<u>YEAR</u>	<u>2"-3"</u>	<u>3"-4"</u>	<u>4"-6"</u>	<u>6" &amp; Up</u>	No, Events
					<u>Total</u>
03-04	1	0	2	1	4
04-05	1	1	2	0	4
05-06	1	0	1	0	2
06-07	0	0	0	1	1
07-08	3	3	1	0	7
08-09	2	4	1	0	7
<b>Total 03 - 09</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>2</b>	<b>25</b>
<b>Average</b>	<b>1.3</b>	<b>1.3</b>	<b>1.2</b>	<b>0.3</b>	<b>4.2</b>
<b>No. of Events</b>	<b>0.7</b>	<b>1.3</b>	<b>1.2</b>	<b>0.3</b>	<b>3.5</b>

## 2004-2009 Average Snow Fall Jan. - Apl.

<u>YEAR</u>	<u>2"-3"</u>	<u>3"-4"</u>	<u>4"-6"</u>	<u>6" &amp; Up</u>	No, Events
					<u>Total</u>
03-04	3	1	2	1	7
04-05	5	4	8	0	17
05-06	2	0	0	0	2
06-07	5	4	2	1	12
07-08	6	2	2	1	11
08-09	5	4	2	1	12
<b>Total 03 - 09</b>	<b>26</b>	<b>15</b>	<b>16</b>	<b>4</b>	<b>61</b>
<b>Average</b>	<b>4.3</b>	<b>2.5</b>	<b>2.7</b>	<b>0.7</b>	<b>10.2</b>
<b>No. of Events</b>	<b>2.2</b>	<b>2.5</b>	<b>2.7</b>	<b>0.7</b>	<b>8.0</b>

The table on the previous page titled "2004-2009 Average Snow Fall" includes all snowfall events for the period grouped by snowfall amount. By example from that period there were 34 total snowfalls in the 2-inch to 3-inch category equating to an average of 5.7 events per year. Based on present trigger to start enforcement actions of a 4-inch snowfall event the accumulation of snow would occur 2.8 times per winter. All other grouped events (3"-4" up to 6"& Up") are each counted as a 4-inch snowfall event. Thus for the period the data would indicate the need for enforcement a total of 11.5 times. The data was further divided into October through December and January through April in order to budget the total winter into accounting years.

Previously it was reported to Council using data for the October through December to anticipate five events and the data is showing that a more accurate number is 3.5 events. Equally for the period January through April staff used 10 events and the data more accurately predicts 10.2 events.

The data presented on the first page demonstrates the reliability of predicting the winter weather is relatively limited. By example the largest average snowfall per event is found during the 2005-2006 winter when the total snowfall was the least for the periods reported. The dependability of the data should be questioned relative to predicting the following winter events. Staff still continues to recommend 5 early winter and 10 late winter snowfall events for budgetary purposes.

There is the potential that the extension of time post snow storm event may allow for more property owners to clear their sidewalks prior to enforcement action. By example increasing from the current 24-hour post storm enforcement to a 48-hour post storm enforcement start may allow more property owners sufficient time clear their walks. It is difficult to place a reduction in the number of offenders that will require action but it is possible to reduce the requested funding a minimal 10% from previous requests. For early winter the original request of \$100,000 could be adjusted down to \$90,000 and the late winter original request of \$400,000 could be adjusted down to \$360,000 if the period for enforcement action was increased from 24-hours to 48-hours.

During discussions with Mr. Lillich in preparation of this memo he suggested the possibility of adding a Subscription Service to the contract let by the City for enforcement sidewalk clearing. The thought that a resident complaining about the fee charged by the City for enforcement sidewalk snow removal could be advised to Contract directly the City's Contractor at a predefined Subscription Service fee for sidewalk snow removal. The Subscription Service could have different levels of service based on snowfall but hopefully would be below the City's contract rate. The Subscription Option, if elected by the property owner, would minimize the necessity of enforcement action(s).

Please provide Council Agenda time to further discuss this issue.

Cc: Jim Silver, Law Director  
Bill Lillich, Safety Director  
Gary Locke, Community Development Director  
John Ferlito, Health Commissioner  
file



# CITY OF KENT, OHIO

## DEPARTMENT OF COMMUNITY DEVELOPMENT

**DATE:** JULY 10, 2009  
**TO:** KENT CITY BOARD OF ZONING APPEALS  
**FROM:** HEATHER PHILE, DEVELOPMENT PLANNER *HP*  
**RE:** STAFF REPORT FOR THE JULY 20, 2009 BOARD OF ZONING APPEALS MEETING

The following cases appear on the agenda for the July 20, 2009 Board of Zoning Appeals meeting:

### NEW BUSINESS

CASE NO.: BZ09-012

APPLICANT: Miller's Rental & Sales / Madelyne Williams

SITE LOCATION: 216 Valleyview drive

STATUS OF APPLICANT: The applicant is the contractor for the owner and the owner of the property.

REQUESTED ACTION: The applicant is requesting a 15-foot variance from the 45-foot minimum front yard setback requirement to allow a handicap ramp to be constructed 30 feet from the front property line (Section 1133.04(a)).

ZONING: This property is currently located in an R-2: Medium Density Residential Zone District.

TRAFFIC: The property is accessible from Valleyview Drive.

SURROUNDING LAND USES: The property is surrounded by residential uses on all sides.

APPLICABLE CODE SECTIONS: 1133.04(a)

### ANALYSIS:

The property at 216 Valleyview Drive is currently a single family dwelling, zoned R-2: Medium Density Residential.

The applicant is requesting a front yard setback variance in order to construct a handicap ramp on the front of the home. The applicant explains that the ramp is needed for the residents to safely get in and out of their home. As shown on the site plan submitted by the applicant, the house sits 48 feet from the front property line. The proposed ramp will extend approximately 18 feet from the house, making the structure 30 feet from front property line.

**Page 2**  
**Staff Report to the Board of Zoning Appeals**  
**July 20, 2009 meeting**

The City of Kent Codified Ordinances states the minimum front yard setback in the R-2 zone district is 45 feet. Section 1161.10 of the code states an open, unenclosed porch or terrace may project into the front yard no more than 10 feet. The proposed ramp will project 18 feet into the front yard setback, and would still not meet the front yard setback requirement. Therefore, a variance from the front yard setback is being requested.

Should the Board wish to approve this project, the following language may be used for the motions:

Move that in Case BZ09-012, the Board of Zoning Appeals approve the 15-foot variance from the 45-foot minimum front yard setback requirement to allow a handicap ramp to be constructed 30 feet from the front property line.

cc: Applicant  
Case file  
Gary Locke, Community Development Director  
Jennifer Barone, Development Engineer  
Eric Fink, Asst. Law Director





## CIVIL SERVICE COMMISSION

CITY OF KENT  
221 EAST SUMMIT STREET  
KENT, OHIO 44240

TELEPHONE: (330) 678-8101  
OR (330) 676-7556  
FAX: (330) 676-7580

### CIVIL SERVICE COMMISSION REGULAR MEETING MINUTES JUNE 8, 2009 3:00 P.M.

**Present:** Ronald F. Heineking, Chairperson  
Jacqueline W. Loomis, Co-Chairperson  
Robert Bossar, Member  
Anna J. Lucas, Civil Service Coordinator

Elizabeth L. Zorc, Human Resources Manager

Commission Chairman Heineking called the meeting to order and took a voice roll call. He and Commissioner Loomis welcomed Mr. Robert Bossar who was appointed on May 20, 2009 by Kent City Council to serve on the Commission through January 17, 2012. The May 11, 2009 Commission Meeting Minutes were approved as prepared.

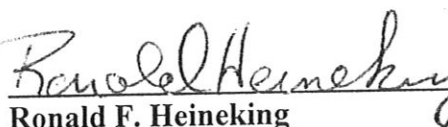
The resignation of Detention Officer Christopher Cogswell effective May 26, 2009 was noted for the record. Also noted for the record were the Police Sergeant Assessment Center partial results submitted to the Commission by the Ohio Association of Chiefs of Police. Chairman Heineking announced the appointment of a new member to the Kent Fire Department. Mr. Gregory Miller was appointed to the position of Firefighter/Paramedic effective June 22, 2009.

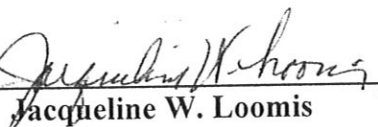
It was noted that the Plant Mechanic Written Examination shall be administered by Ramsey and Associates on June 6, 2009. The request for a Laborer Eligibility List was unanimously approved by the Commission and the process to establish such list will begin immediately.

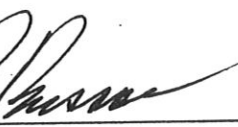
Two promotions via the AFSCME bidding process were noted for the record. Water Plant Operator Charles Matti was promoted to the position of Laboratory Technician at the Water Treatment Plant on May 19, 2009. And, also at the Water Treatment Plant, Laborer Matthew Benson was promoted to Plant Operator on June 8, 2009.

There was no need for an executive session and the meeting was adjourned.

MINUTES APPROVED:

  
Ronald F. Heineking  
Chairperson

  
Jacqueline W. Loomis  
Co-Chairperson

  
Robert Bossar  
Member



# CIVIL SERVICE COMMISSION

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## CIVIL SERVICE COMMISSION SPECIAL MEETING JUNE 26, 2009 3:00 P.M.

**Present:** Ronald F. Heineking, Chairperson  
Robert Bossar, Acting Co-Chairperson  
Anna J. Lucas, Coordinator

James Peach, Police Chief )  
Jennifer Ennemoser, Detective ) Kent  
James Prusha, Sergeant ) Police Department  
Robert Treharn, Detective Sergeant )

Chairman Heineking convened the meeting and took a voice roll call. The purpose of this special meeting was to resolve the protests filed regarding the promotional Police Lieutenant Assessment Center exercises that were administered on June 20, 2009 by the Ohio Association of Chiefs of Police (OACP).

It was understood that all three candidates (Sgts. Prusha, Treharn, and Wheeler) who participated in the assessment center exercises had been provided information from the Ohio Association of Chiefs of Police a few weeks prior to the date of the examination. That information specified that the candidates would be responsible for three assessment exercises: Oral Presentation, Written Problem Solving, and Supervisor/Subordinate Counseling. On June 20, 2009, the Supervisor/Subordinate Counseling exercise was not administered by the OACP and participants were instead given an Officer Complaint exercise.

The OACP lead assessor, Chief Sarver, was notified of this and responded as follows:

As I look back over the letter to the candidates that I provided to you to give to them I did list the exercises as a "supervisor/subordinate" counseling session. Somewhere in the mix of doing three of these for you I got my wires crossed up. I accept the responsibility. Ironically, the actual process of conducting a counseling session – whether to a subordinate or to a citizen – fundamentally would be the same. That would mean problem identification and problem resolution.

I have two possible alternatives I would be willing to present to you. First, we discard the scores from that portion of the process and move forward with the scores of the other two exercises.

Second, on the date we conduct the captain assessment process (7/11) we could re-do this portion of the lieutenant process and have all three candidates come back in just for that one exercise. Please let me know which way you would favor so I can make the appropriate adjustment.

Two of the Sergeants objected to both of Chief Sarver's suggestions. Sergeant Wheeler who was not present at the meeting submitted the following to the Commission:

It should be noted that in the critique of the assessment center, I noted that the memorandum provided to the Lieutenant candidates, indicated that one of the three exercises being used were to be the Supervisor/Subordinate Counseling Session. I also noted that it was changed the day of the test. This was done prior to knowing my final score. I did not verbally critique this prior to the assessors finalizing my score. The written critique was to be sealed and mailed and not viewed by the assessors until the score would be finalized. I did not feel comfortable criticizing the assessors or the center prior to receiving my score.

I also direct your attention to the Memorandum provided to the Ohio Association of Chiefs of Police. The memorandum indicates that the three exercises used were to be: Oral Presentation; Written Problem-Solving; Supervisor/Subordinate Counseling Session. Further, I received a summary of all assessment center exercises that could be used. On the day of the test, we were informed that the Counseling session would be a role playing session between the Lieutenant candidates and a role player wanting to file an officer complaint. This is not consistent with the memorandum and is not even a possible exercise according to the summary of assessment center exercises provided to the candidates. The Summary of the counseling session describes an interaction between an employee and a supervisor not an employee complaint. Even the title Supervisor/Subordinate Counseling Session portrays an interaction between an employee and a supervisor. A subordinate would have motivation to do well in and keep his job. A member of the public does not. Thus interactions are different.

I was prepared for the assessment based on the memorandum provided. Thus, I was prepared for a supervisor/subordinate counseling session.

I was not prepared to be critiques on handling an officer complaint. I would have liked to do research on how the OACP prefers officer complaints to be handled. This could be different on how Kent PD handles officer complaints. Since it is the OACP determining our scores and not Kent PD I feel this is logical. I relate this to a supervisor/subordinate counseling. I attended STEP which is sponsored by the OACP. In STEP we are trained in the 8 Step coaching model. I prepared for this and believe that the assessors would be familiar with this process.

I would be satisfied if that portion of the assessment was discarded. I would also be satisfied in re-taking the supervisor/subordinate counseling session or any other session with prior notice to prepare for. Also, I would request three different assessors who were not involved in this matter to eliminate any other possible complaints of bias.

Sergeant Detective Treharn submitted and voiced the following opinion:

On 06-20-09 I participated in the promotional assessment for police lieutenant. The assessment was very professionally conducted by the OACP. Weeks prior to the assessment information was provided to each candidate detailing each exercise that each candidate would have to perform. The exercises were to be an Oral Presentation, Written Problem Solving, and Supervisor/Subordinate Counseling. The Supervisor/Subordinate Counseling wasn't done and was substituted by another exercise (Officer Complaint).

A subordinate is a person belonging to a lower class or rank. Dealing with a citizen is in no way, shape, or form the same as dealing with a subordinate. The exercise for each would have been different. The interaction between a supervisor and subordinate would in now way resemble the interaction between a supervisor and a citizen. For someone to even related the two as being the same or similar couldn't be any further from the truth. The dimensions that the assessors were looking for were probably the same, but the role playing would have been different.

I prepared for a Subordinate/Counseling Session and I believe I may have possibly excelled in that exercise. I know I would have done better than I did in the officer complaint exercise. In my current assignment I don't handle officer complaints on a regular basis. If I would have known that an officer complaint was going to be a part of the assessment, I would have prepared for that exercise by researching it and speaking with other supervisors. There are different policies and procedures that deal with both situations.

After the assessment the assessors asked for our opinion about the assessment. I did very little talking. I did mention that I felt the officer complaint was unrealistic. I wasn't going to tell the assessors that I felt that the assessment was unfair because that possibly could have affected my score. If my assessment was already scored I would have voiced my opinion about the process.

In my opinion having us do the subordinate counseling in front of the same assessors wouldn't be fair because they have already formed their opinions. The only fair option would be to hire three new assessors or throw out that portion of the assessment.

Sgt. Prusha submitted and voiced the following opinion:

I participated in the promotional assessment center for the position of police lieutenant for the Kent Police Department. At the end of the assessment, the assessors asked all participants for feedback. They wanted information on how the assessment could have been done any better. All three participants commented that they thought the assessment was done fairly.

After receiving their scores, the two other participants decided to protest one section of the test. They stated that they were told they would be doing a "subordinate counseling session," however the section was a meeting with a disgruntled citizen. It is interesting to me that the participants had no problem with this section of the session, and stated the assessment was fair until they viewed their scores.

I don't believe the differences between a subordinate counseling session and a citizen complaints are substantial enough to cause

a concern. The assessors can evaluate the participant on the same aspects in either situation.

Even if the participants were informed of something and give something else, all participants were given the same material. All participants were tested the same. If there was any degree of something unfair, all participants were treated the same, so the evaluation was an accurate measure of the ability to assume the position of lieutenant. No participant was given any advantage. Thank you for your consideration. Please involve me in any meetings or discussions regarding this matter.

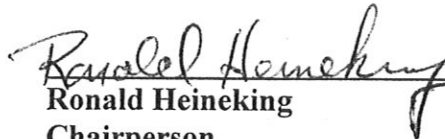
The Commission also considered the following additional response from the OACP's lead assessor, Chief Steven Sarver:

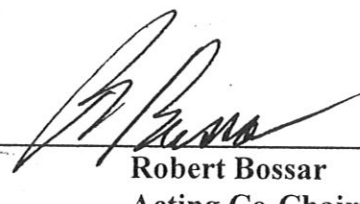
One more thought – all three candidates competed under the same circumstances. No one candidate had an unfair advantage over any of the others since they were all initially provide the same letter. As stated before, the dynamics that go into a counseling session, whether with a citizen or a subordinate are the same.

Commissioner Bossar asked Sgts. Prusha and Treharn whether any candidate participating in the assessment center was treated unfairly. Mr. Bossar did not see that any participant was wronged in any way. And, Commissioner Heineking mentioned that in 1972-2008, he was a member of the OACP and involved in administering approximately 50 assessments, and he felt that the Commission did not have any issue with the assessment process. Then, the Commission decided that no changes would be made to the Police Lieutenant Assessment Center results. In other words, the assessment center scores shall remain as is and as submitted by the OACP.

In conclusion, the Commissioners excused Commissioner Loomis' absence at this meeting and, then, the meeting was adjourned.

MINUTES APPROVED:

  
Ronald Heineking  
Chairperson

  
Robert Bossar  
Acting Co-Chairperson