Agenda Report

TO: CITY COUNCIL   **DATE:** September 12, 2005

THROUGH: FINANCE COMMITTEE

FROM: CITY MANAGER

SUBJECT: APPROVAL OF JOURNAL VOUCHER AND CONTRACT AWARD TO
             GBB, INC. FOR THE INTEGRATED WASTE MANAGEMENT DATA
             COLLECTION AND ROUTING SYSTEM SERVICES

RECOMMENDATION

It is recommended that City Council:

1. Authorize the City Manager to enter into a contract with Gershman, Brickner &
   Bratton, Inc., a consultant firm, to provide a field audit of the residential refuse
   services in comparison to actual billing records, and to implement new
   residential refuse collection routes, in an amount not to exceed $497,987. The
   contract is exempt from competitive bidding pursuant to City Charter Section
   1002(F) (a contract for professional services); and

2. Approve a journal voucher recognizing and appropriating $497,987 of the
   unappropriated Refuse Fund balance to the Refuse Residential Fund budget
   account (8114-406-764120).

BACKGROUND

On May 23, 2005, City Council approved the 2006 Integrated Waste Management
Operations Plan. One of the goals included in the plan was to hire a consultant to
conduct an audit of residential refuse, yard waste, and recycling containers to ensure
accurate billing at each residence receiving service. A spot audit conducted in 2004
indicated that five percent or more of residences within the City may have refuse
containers for which they are not being billed or containers that are of a different size
than that which is reflected on their monthly billing statements. The proposed container
audit will rectify these problems by physically counting the number of containers, by size
and serial number located at each residence, and comparing those numbers to the
billing system. In addition, during the field audit, Radio Frequency Identification (RFID)
tags will be installed on each container. These tags will electronically store the
container's serial number, billing address, and size (i.e. 32, 60, or 100 gallon). With
the audit, RFID tags, and internal procedural changes, the Department will establish an

operational system with more integrity and accuracy to track individual containers and reflect appropriate billing information. This new operational system will give the Department the ability to know when a container was emptied, where it was emptied, if it is being paid for, and will allow the Department to locate the container's proper location, if lost or stolen, on a daily basis. This audit could recover as much as $250,000 per year to the Refuse Fund due to services that are provided which are currently inaccurately billed or not billed at all.

Another goal outlined in the 2006 Integrated Waste Management Operations plan was to balance refuse collection routes, thereby reducing overtime costs. The current refuse and recycling routes are unbalanced by day, route, and driver. Changes in the routes will result in reduced overtime for refuse truck operators and more efficient operation of the refuse collection program. Changes may result in some residents experiencing a change in the day of the week on which their refuse and recycling are collected. Subsequent to the findings of the audit, if any changes are recommended, Public Works staff will provide timely information and explanations to affected residents in order to ensure a smooth transition. The Department is conservatively estimating a reduction in overtime costs of forty percent, per fiscal year. In FY 2004, the Department's overtime costs were $290,979.

On April 4, 2005, the Street Maintenance and Integrated Waste Management Division of the Department of Public Works released a Request for Proposal (RFP) to solicit proposals for the field audit and the rerouting of residential refuse services.

Three firms responded and were evaluated based on criteria set forth in the RFP. The evaluation committee consisted of five staff members (four from the Department of Public Works and one from the Information Technology Services Division). Based on the evaluation, summarized in Attachment A, Gershman, Brickner & Bratton, Inc. was determined to be the best qualified to perform the needed services. The entire project including the audit, implementation of findings, and the implementation of the new routes will take approximately one year to complete. The implementation will be done in phases, to minimize the impact on staff and the residents of Pasadena.

Highlights of GBB contract:

- **Field Audit-** A field audit will be performed on refuse, yard waste, and recycling containers at 27,000 single-family residences to reconcile service provided with service billed.

- **Fleet Route-** Routing software that will be utilized to balance the refuse and recycling routes throughout the City.

- **Radio Frequency Identification (RFID) Tags-** RFID tags will be affixed to every container to track their location and maintain an accurate inventory.

- **Asset Tracking-** Accu-Trax Asset Tracking software will be utilized to track the refuse vehicles and to read the RFID tags every time a container is emptied.

- **Training**- Seven days of staff training will be provided on the FleetRoute software system, and training will also be provided on the Accu-Trax Asset Tracking System.

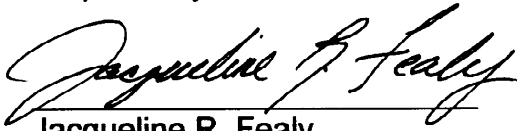For detailed information, see Attachment B.

FISCAL IMPACT

With recovery of billing revenue and reductions in overtime costs, it is anticipated that the cost of this contract will be recouped by FY 2008.
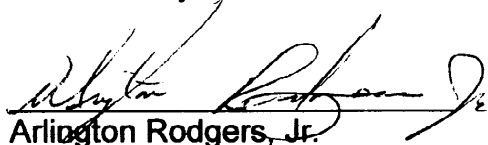
Respectfully submitted,

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Martin Pastucha
Director of Public Works

Attachment A

PROPOSER RANKINGS

Weight per category---------->	Project Team (10%)	Firms Qualifications (20%)	Project Understanding and Approach (30%)	Local Business Preference (5%)	Price (30%)	Small & Micro-Business Preference (5%)	Total 100%
Possible Total Points--------->	1.00	2.00	3.00	0.50	3.00	0.50	10.00
PROPOSER							
Gershman, Brickner & Bratton, Inc.	0.86	1.72	2.40	N/A	2.70	N/A	7.7
R3 Consulting Group, Inc.	0.66	1.44	1.92	N/A	1.44	0.50	6.0
Institute of Information Technology, Inc.*							

Institute of Information Technology was disqualified from the review process as it failed to submit a complete and responsive proposal.

Attachment B

Summary of Services

Field Audit-
The field audit team will inventory all of the City's approximately 27,000 residential unit's trash containers. The field audit staff will record the address, the number of containers, the size of the containers, and the container's serial number. This information will be input into an electronic data base. The audit will include two passes, as residents do not always place their recycling and yard waste containers on the curb, on their pick-up day. Once the field audit data is gathered, it will be compared to the billing data information. Any discrepancy in the amount or size of the container being billed, compared to the field audit information, will warrant notification to the resident along with an updated billing statement. The field audit is expected to take 3 months to complete.

Routing-
To redesign the routes, FleetRoute routing software will be utilized. This software is known to be the most sophisticated and flexible routing software ever developed for trash collection applications. The software will incorporate data captured during the field audit (addresses, number of containers, size of containers), as well as maximum weight capacity of each vehicle, wait times at disposal facilities, number of staff, number of vehicles, and road conditions such as one-way streets, u-turns, school zones, etc., to determine the most efficient and evenly distributed routes. With implementation of the new routes, the Department hopes to reduce overtime costs by a minimum of 40% per fiscal year.

Radio Frequency Identification (RFID) Tags-
During the physical audit of the containers, RFID tags will be affixed on every container, including yard and recycling. It is necessary to tag all of the containers in order to meet our business practice of being able to change the type of container, by simply switching the lid color (i.e. green-trash, blue- recycling, black- yard waste). The RFID tags will allow the Street Maintenance and Integrated Waste Management Division the ability to track the containers physical location at the time of pick up, the date and time the container was emptied, the size of the container, and the service address. The RFID tags will essentially maintain the inventory of the containers which will then be compared to the billing information. This system will help eliminate missing containers due to theft, and/or weather conditions such as wind and flooded streets.

Training-
This contract includes 7 days of staff training on the FleetRoute software. With this training, staff will be able to modify routes when necessary and print new route maps. Staff will also be able to run reports that show the dates/times containers were picked up.

Asset Tracking-
The Accu-Trax Asset Tracking System will provide real time information regarding the location of the waste management fleet vehicles. Specifically, this system will provide information such as detecting out of sequence collection, where the driver stopped and for how long, route sequence, the amount of fuel used, as well as landfill volume and weight. This software system will also read the Radio Frequency Identification Tags that will be affixed to the containers.