

City Manager Department 201 Westward Drive Miami Springs FL 33166 305-805-5010

TO:

Honorable Mayor Garcia and Members of the City Council

FROM:

Ron Gorland, City Manager

DATE:

January 9, 2012

SUBJECT:

City of Miami Springs Public Works Department Organizational Review and

Operating Cost Analysis

It was brought to my attention that subject document (attachment "A") has not yet been reviewed by Council. This was recently completed by Fernando Rodriquez. Fernando a well thought of PW expert and recent Public Works Director. He holds an Industrial Engineer degree from Columbia University and an MBA. I've grown to respect him a great deal after working with him the last couple of months. Fernando's resume is Attachment "B."

Fernando was asked to do a study of our current PW processes and practices without any other direction which explains some of his suggestions that may be good for other communities, probably wouldn't work here (ex garbage and trash curbside pickup for our entire community rather than just the 30% or so currently receiving curbside pickup).

We are currently in process of implementing those recommendations that we believe are beneficial, and looking into other of his recommendations.

FR Business Solutions, LLC September 2011

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EXECUTIVE SUMMARY

The Public Works Department (PWD) Organizational Review was undertaken at the request of the City Manager. It focuses on evaluating the PWD's organizational capacity to perform its core service delivery functions and administrative responsibilities. The effort also aims to identify operational areas where efficiency improvements and cost savings may be achieved. The relatively short time frame of the review precluded in-depth, technical analysis of all areas of the Department. However, the combined qualitative and quantitative approach focused on the most obvious and feasible areas of opportunity and applied the consultant's significant industrial engineering and municipal operations management background.

Office and Field Operations

These important areas of the PWD were found to be well organized, supervised and overall adequately staffed. The office staff is providing a good and consistent level of customer service and clerical support. All work is well documented via work orders (WOs) that are inputted into the City's HTE system. The field functions provide service delivery of good quality in terms of the basic functions of the Department, namely residential waste collection, grounds maintenance, streets and stormwater system maintenance, and building maintenance.

In terms of staffing, the review determined that the Materials Management (MMC) position (the incumbent is scheduled to retire in about a year) within the office/clerical function can be absorbed by the other two office/clerical positions and to a smaller measure by the field supervisors. This would result in roughly \$52,000 of annual savings (including fringe costs). Alternatively, this position can be converted to a construction superintendent/project manager type of position. These options are discussed in some detail near the end of the report.

The Department benefits from a high level of cross training as well as managerial, office, supervisory, and field staff with significant years of service in the City and solid experience in field operations. These factors result in well functioning field crews and fast response times to address field issues. This is borne out by the overall field conditions observed, the low number of complaints typically received, and an extensive WO analysis that indicates superior job turnaround times and fast response to start on work requests.

The garbage collection and tree trimming operations were identified as areas where efficiency gains and cost savings could be achieved. A change in the method of alleyway garbage can collection would result in significant fuel cost savings, decreased maintenance costs, and prolong the useful life of collection vehicles. In addition, the route times can be shortened by as much as one hour, providing an opportunity to change the garbage vehicle drivers' schedule to five-days/eight hours. If this schedule change is adopted, nearly one full-time equivalent is gained.

The review does recognize some significant obstacles that need to be overcome in order to make the more efficient collection method feasible. These include the expected resistance on the part of residents (who would be required to re-locate their garbage cans on alternating years) as well as likely space limitations of the alleys.

It was determined that the tree trimming operation, which has not been fully operational for nearly a year, is well suited to be shifted to a private contractor. A number of important benefits would accrue from this change, including savings that will approach \$30,000 annually and the elimination of liability risks and potential workman's compensation claims.

Management/Administration

Several weaknesses were identified in terms of the higher level functions of the PWD. These involved mainly longer-term, vision oriented matters such as development of capital improvement programs (CIP), human resources (HR) administration and enhancing the Department's capacity to address emerging needs of the city. Recommendations to address the CIP include the expansion of the building maintenance function to incorporate a more general contractor/project management component. The recommendations in this area also encompass personnel transition planning options that address the need to expand the capacity of the PWD.

In terms of the very important HR administration component, recommendations aimed at addressing the significant absenteeism prevailing in the Department are provided. Records show that minimal documentation in employee evaluations and disciplinary actions are being pursued to deter the abuse of sick leave. This severely impacts the Department's productivity and can have an adverse effect on morale. The review also points out that the lack of disciplinary actions concerning an employee with numerous vehicular accidents within a four-year span needs to addressed.

A summary of total cost reductions amounting to \$92,000 annually and other benefits resulting from the review's recommendation is provided in Attachment 15.

Future Areas of Consideration

Despite the recommendation to adopt a more efficient garbage collection method, the truly optimal method is acknowledged to be curbside collection. Implementation is much simpler than the one-sided alley collection approach proposed by the review. Curbside collection is common throughout Miami-Dade and Broward Counties, particularly with the increased use of mechanized equipment. Despite these facts, it is recognized that requiring residents to place their garbage cans on the frontage of their property will be met with very strong resistance, given the long standing convenience of placing the containers at the rear alleyway or having it retrieved from the property by City work crews. Nevertheless, the City should seriously consider changing over to this method in the future.

It is suggested that the PWD closely monitor its electrical contractor costs in the coming year. The cost effectiveness of performing electrical work in-house should be seriously evaluated, given the fact that costs of contracted services may approach \$100,000 annually (hourly charges alone). Current pay rates for licensed, experienced electricians need to be reviewed, as hiring an in-house employee may result in lower total annual costs and increased flexibility. Factors such as costs associated with a vehicle, tools and supplies as well as the frequent need to provide a semi-skilled helper need to be considered in this evaluation as well.

INTRODUCTION

The City of Miami Springs' Public Works Department (PWD) has undergone several significant changes in the past several years. The most impacting of these was the transfer of its water and sanitary sewer function to Miami-Dade County in 2008. This resulted in a significant downsizing of the Department's staff as well as a reduction the scope of responsibility primarily at the administrative level. The Department has also been in the process of updating its equipment and has outsourced its fleet maintenance function. Additionally, the PWD has recently made some field supervisory re-assignments and work schedule changes.

Throughout this time, the PWD's core services to the community, which include a high quality and convenient solid waste collection service, and a strong commitment to grounds maintenance and the maintenance of its storm drainage system, have continued unchanged. Given the continuing economic climate calling for budget reductions city-wide, the PWD is challenged more than ever to provide the same or better level of service while reducing operating costs.

In light of the above developments and recognizing that the PWD will need to continue evolving in order to effectively address Miami Spring's emerging needs, the City Manager called upon the services of FR Business Solutions to undertake a general organizational review of the PWD.

The time, cooperation, insight, and expertise, of many City staff members was truly invaluable in completing this review. FR Business Solutions wishes to thank the many PWD staff members as well as numerous employees at all levels within the City Administration. This includes, but is not limited to: the PW Director, the Department's office and supervisory staff, and many of its field employees. Many thanks also go to the City Manager and his secretary, the Assistant City Manager, the Directors of the Building, Finance, Human Resources, Information Technology, Parks and Recreation, and Zoning Departments and certainly members of their staffs.

SCOPE

The scope of this review closely follows the two-pronged title of the project. Essentially, the review focuses on the overall organizational and administrative capacity of the Department with the aim of providing recommendations to improve performance and/or efficiency. A secondary goal was to identify cost reduction opportunities in one or several areas of the operation. The agreed upon scope also included evaluating and providing recommendations, if any, concerning functional areas where the PWD is not currently participating in (or where it has limited activity), including long-term fiscal administration planning and human resources (HR) management.

Given the time and budgetary allotment of this review the number of operational and administrative areas examined was limited. The depth of analysis undertaken also had to be restricted, though every effort was made to provide an adequate level of information/data collection and analysis. While virtually all of the review's findings and recommendations are founded on both quantitative and qualitative information collected, the results are based slightly more on a qualitative approach. This was due primarily to the time restrictions of the review, but it also allowed the reviewer to draw upon not only his industrial engineering background but on his substantial experience in public works and municipal operations management.

SUMMARY OF METHODOLOGY

The methodology adopted aimed at completing the information and data collection phase in a fairly quick and efficient manner while being sufficiently thorough to allow probing into and identification of the main areas of opportunities. The following steps summarize the work undertaken:

- 1. Discussed with the City Manager, the Assistant City Manager, and the Finance Director the areas of interest and/or concern in the PWD operation; additionally, continually updated and the assessed progress of the review with them.
- 2. Discussed inter-departmental activities, issues, and concerns regarding the PWD with Directors of the Human Resources, Building, and Parks and Recreation Departments.
- 3. Conducted detailed interviews with the PW Director, the two administrative staff members, the Materials Management Clerk, and 11 field employees. In all, over one third of the Department's staff was interviewed. The interviews varied depending on the level of the position, but the overall aim was to gain an understanding of the Department's functions, organization, some of the work methods, current projects and/or concerns, equipment needs, and solicit a perspective on the Department's strengths and weaknesses.
- 4. Review the PWD'd current budget, any capital project documentation, and administrative forms.
- 5. Performed a detailed review of Department work orders for all divisions. An analysis of over 500 work orders (WO's) was conducted, including determination of turnaround times and time lag from request to work initiation. Most of the operating departments were covered by the WO review, which encompassed nearly 15 percent of the annual volume and covered summer, spring and winter time periods.
- 6. Performed informal office observations, primarily focusing on the front office, to assess call volume and walk-in traffic as well customer service practices.

- 7. Spent significant time in the field, primarily with supervisory staff and garbage truck drivers. A major part of the operational focus was on the garbage collection operation, and as a result nearly 10 hours were collectively spent riding with three different drivers. In addition to noting field conditions and discussing the operation with the drivers, informal motion-time data was collected.
- 8. Roughly four days of independent field observations (not with PW staff) were gathered for several important purposes, including assessment and measurement of the city's roadways, reviewing signage and grounds, conducting an informal survey of tree trimming requirements, and random observations of field crews at work.
- 9. Researched and discussed public works field functions, including tree trimming and roadway resurfacing operations, with outside vendors and other municipalities.
- 10. Organized, processed and analyzed information and data gathered to formulate meaningful findings and recommendations.
- 11. Wrote a working report draft and reviewed same with the City Manager. The findings and recommendations were discussed in detail and any suggested editing was noted.
- 12. Finalized report, submitted to the City Manager, and reviewed the results.

FINDINGS AND RECOMMENDATIONS

The study's findings will be provided for three general areas of the Public Works Department (PWD): (1) Field operations/basic PWD services; (2) Administrative function; and (3) Management/Administration. As stated in the Scope, the review will also include areas where the Department currently has limited or no involvement in but that, by basic municipal PWD definition as well as City Administration directive, the Department should in fact be active in. Most findings are presented in conjunction with one or more recommendations that immediately follow it. However, there will be instances where a finding with the linked, so to speak, to other findings in the report and will be combined so as to support a specific recommendation.

I. Field Operations/Basic PWD Services - General description

The PWD's field operations consist of five operating divisions as follows: (1) Sanitation; (2) Public Properties (grounds maintenance); (3) Streets and Stormwater; (4) Building Maintenance; and (5) Fleet Maintenance (performed on-site by a private contractor and not covered by this review). The Sanitation and Streets/Stormwater divisions each has a supervisor assigned to it, while an Operations Supervisor/Arborist (OS) focuses on Public Properties as well the entire field operation. The OS functions essentially as an Assistant Director with particular focus on field operations, and his role seems to de-emphasize the administrative aspects of the Department. The bulk of the review's on-site observation focused on field operations, as some

of these areas were deemed as providing the greatest opportunities for improvement and/or savings. Although most of the field operations were observed, emphasis was placed on the residential garbage collection performed by the Sanitation Division and the tree trimming service provided by the Public Properties Division. Based on extensive discussions with and input from City Administration and PW staff at various levels, these two areas were identified as good opportunities for achieving efficiency improvements and/or cost savings.

Finding #1 - Organizational Structure

From an organizational perspective, the PWD's field operation structure is generally effective. Lines of communication between the Director and supervisors as well as among supervisors in different service areas appear to be functioning well. There is positive cooperation among the functions, which is helped greatly by the fact that the Department field staff is cross-trained well. To the credit of the Department's leadership and supervisory staff, efforts to maintain or enhance cross training appear to be ongoing. The PW Director displays a hands-on style of management, and attempts to have frequent field presence.

A fact that was found somewhat unusual was the assignment of one supervisor dedicated specifically to the sanitation collection operation. This would not be noted if there was less prevalent supervisory attention in the other areas of the field functions. However, given the fact that there is an "overall" field supervisory role provided by the OS (whose emphasis is the grounds maintenance function), a dedicated Streets/Stormwater Supervisor, and a field-oriented Director with a strong solid waste operations background, the need for a sanitation supervisor to oversee what is essentially a "fixed" operation (in terms of the day-to-day logistics) can be questioned. Having stated this, no specific recommendation on this will be provided for the following two reasons:

- A recommendation calling for an expanded administrative role for the PW Director (to be provided towards the end of the report) will likely de-emphasize his hands-on field focus, and thereby largely removes a layer of field supervision currently provided.
- 2. The acknowledgement of the value of supervisory coverage during absences and the likelihood that additional (though marginal) administrative responsibilities will be placed on the supervisors to facilitate a staffing recommendation concerning the purchasing/stock function (provided later in the report).

An organizational chart depicting the current structure is provided in Attachment 1.

Finding #2 - Service Delivery

The overall effectiveness of the PWD's service delivery in the areas of sanitation, streets and streetlights, stormwater collection (drainage), public properties (landscape maintenance), and

building maintenance all appear to be of consistently good quality. The PWD leadership, supervisory and office staff and employees in general are to be commended for their efforts in delivering reliable services to the residents, merchants and visitors of Miami Springs.

All work performed is documented and tracked via a work order system. Whether a "job" is generated via an external call, complaint, from field inspections or other source, it generates a work order (WO). These begin as a paper document but are inputted into the HTE system and closed out upon completion. Key information items such as the division engaged in the work, the number and name of employees, the request and start dates, and completion dates are all part of the WO. Useful reports can be generated from the HTE system.

The measure of effectiveness in terms of public works service delivery was ascertained by looking at three meaningful indicators: (1) general visual aesthetics and functionality of infrastructure such as lighting and the stormwater collection system; (2) field and office observations (including the volume of complaints received by phone, walk-ins, etc); and (3) WO performance. A brief summary of each provided below:

The city overall looks well maintained in terms of cleanliness and its landscaped areas are generally in good condition. Lighting, roadway signs, and stormwater drainage appear to be functioning well and are generally in good condition. The condition of many of the city's road surfaces and roadway markings does require improvement, as do the surface parking lots. Attachments 2 through 5 provide examples of these deficiencies. These will be discussed in more detail as part of the Capital Improvement Program recommendation in the Management/Administration section of the report. It should be recognized that the Department has made an effort in the past year to begin to address some of these areas by aggressively repairing sidewalks (roughly 7,000 square feet of sidewalks replaced) and resurfacing nearly .8 miles of roadways.

Based on observations of office and field activities, the volume of complaints regarding the basic PWD services appears to be low. Considering the number of residents in the city, the few calls concerning items like street lights not functioning, issues with debris or litter in certain areas, or waste collection complaints number very few on a daily basis. One of the more common requests for service (which do not necessarily need to be considered a "complaint") appears to be for tree trimming. This is not surprising given the fact that the two tree trimmer positions have not been fully active over the past 10 months. As of this report's writing, approximately 100 tree trimming WO's were outstanding. The tree trimming function of the Department will be addressed in more detail later in the report.

Approximately 540 WO's were reviewed to ascertain typical turnaround time and the time between the request date and start of work. The review was conducted using WO summary

reports as well as looking at many WO's themselves. Attachment 6 summarizes the turnaround times (completion time) as well as the "wait" or lag time between the date that the request is made and the date when the actual work begins. The fact that between 88 percent and 100 percent (depending on the division) of the WO's are completed within two days and that 75 to 100 percent of all WO are initiated within five days of the request date indicates a high level of performance on the part of the PWD as a whole. This level of performance, coupled with a minimal WO backlog also indicates that an adequate staffing level exists in terms of basic field operations services.

It should be noted that while the actual day-to-day processing mechanics of the WO's was not observed in detail, all indications are (from Department staff and informal observations) that the information on the source document (work order itself) is generally accurate and that the data/information input into the HTE system is properly performed. This reliability was assumed when the level of performance was assessed through HTE system WO reports.

Finding #3 - Staffing Level

A detailed staffing analysis, which would involve detailed workload measurement, formal time-motion studies and determination work completion rates for numerous functions, is beyond the scope of this review. However, the field operation's overall staffing level appears adequate. This is supported by the quality of service evident (aforementioned field conditions) and the lack of overtime required to meet ongoing workload demands. Additionally, informal and random field observations do not indicate a glaring problem with worksite productivity. The high level of cross training further contributes to the sufficiency of the current personnel. Furthermore, the Department benefits from having many long term, experienced employees who know the city and the PW operation well.

Despite the positives described above, there are some areas of concern that will be addressed later in the report. Included among these is a substantial absenteeism problem (which can be effectively addressed with basic HR measures) and somewhat inconsistent safety practices.

Finding #4 – Tree Trimming

The roughly 100 outstanding tree trimming WO's are mainly generated by resident call-ins, and consist almost entirely of trimming low hanging branches. These WO's are being addressed gradually and sometimes several days per week by using a two-person crew that is working "from the ground" to avoid using the lift truck. Issues with the assigned employees' physical limitations as well as (reportedly) the low pay scale offered to tree trimmers have prevented the Department from having a fully functioning tree trimming crew for nearly one year.

The above obstacles, coupled with the liability involved in lift truck operation and potential workman's compensation claims tend to make an in-house tree trimming operation more of a burden than a benefit. Furthermore, research conducted on local tree trimming contractor pricing from recent bids strongly indicate that an contract operation is less costly, more favorable from a risk management perspective, and just as effective as an in-house operation.

A city-wide informal survey conducted during the review indicates that there are currently an estimated 800 to 1,000 trees that require trimming consisting primarily of minimal cuts of a few small to medium sized branches. The minimum overhead clearance standard of 14 feet clearance for roadways and 10 feet for sidewalks was applied during the survey. This number is strictly "tree lifting", and does NOT include trees that require "thinning", or more involved work that removes internal limbs so as to allow strong winds to more easily move through the canopy. Typically this work requires the use of a lift truck. The vast majority of the trimming work estimated may be completed "from the ground".

Attachments 7 and 8 show several typical tree "lift" cases that make up the bulk of the estimated total in the aforementioned survey.

RECOMMENDATION

Obtain tree trimming service bids from private contractors or "piggyback" on an existing bid award in order to outsource this function.* In conjunction with this, do not fill the two tree trimming vacancies, thereby eliminating a \$62,338 payroll expense. The estimated resulting savings of roughly \$17,000 is calculated as follows:

2 tree trimming positions at the minimum pay rate in scale:

{2 X \$23,976} + 30% fringe factor = \$62,338

Less private contractor cost = \$45,000* {1,000 trees at \$45 per tree}

Resulting savings = \$17,338**

*N.Miami bid no. 18-10-11, awarded in February 2011 applied. Bid award of \$38/tree was increased by 20% (to \$45) to account for the higher volume of the N. Miami contract award (\$99,000). In actuality the price may be more in the \$40 per tree range.

**This is a conservative estimate and includes 'catch up' work required to address a larger than usual backlog. The savings will likely approach \$30,000 when a more typical work volume (not preceded by a limited trimming schedule) is applied.

Note that the fuel cost, vehicle and equipment maintenance, supplies, and other associated savings, while <u>not</u> negligible, are not factored in. Part of the reason is that it is recognized that some ground-based tree trimming will still take place in house. In addition to the annual savings the City will eliminate potentially significant costs in liability, workman's compensation claims and the effort required by various aspects of personnel management.

It should be noted that the current estimated backlog is partially the result of limited tree trimming activity in the past 10 months. It is therefore likely that as many as 300 less trees are part of the current backlog that normally would not be. Applying the \$45 per tree contractor rate, this would reduce the annual trimming cost by as much as an additional \$13,000.

These figures are estimates, and that based on the PWD's current staffing it seems feasible that some of the smaller ground-based trimming work can continue to be performed on a limited basis by in-house staff (not on a daily or weekly basis). Conversely, the heavier trims and certainly the tree thinning work should be assigned to the contracted service. While the specific proportion of these assignments is certainly up to the PWD's discretion, the Department's overall staffing level and flexibility should enable it to make optimum use of a contracted service while retaining a minimal degree of in-house capacity for occasional trimming.

Finding #5 - Building Maintenance

The building maintenance function is staffed with one Building Maintenance Specialist (BMS) with strong handyman skills and solid general knowledge of building systems (plumbing, HVAC, etc.). The seven-year employee will be retiring in mid-September 2011, and has been grooming an individual to take his place. The basic, core, routine building maintenance services provided are generally considered to be of good quality. This is borne out by the overall condition of the buildings, the aforementioned WO review, and from discussions with City staff. However, during the interview with the BMS and in subsequent discussions during the field observations, two concerns were identified (formal recommendations not provided):

- Historically when a second individual is required to assist with building maintenance work, unskilled labor from another division was often provided. This practice has at times hampered the progress of the work and simply limits the effectiveness of the function. While this situation has improved in recent months (during the grooming period of the incoming BMS designee) it is a practice that the Department should avoid in the future.
- 2. The building maintenance shop is not equipped with a telephone or a computer. In the past, this limitation probably had little or no impact on the function. Moving forward, however, the shop should be outfitted with these two items. The need for this will become clear based on a recommendation to be provided later in the report.

Finding #6 - Sanitation Operation

The sanitation operation, while providing a high level of service to residents, offers opportunities for efficiency gains. The household garbage collection is performed via automated collection vehicles and primarily from garbage can collection points in the

residential neighborhoods' alleyways. The vehicles' right-side articulated arm mechanism requires travelling *twice* through the alleys to pick up the trash cans on either side. This makes the roughly 35 to 50 alleys in the route become nearly 100 trips through uneven terrain and often narrow paths. Drivers must maneuver through, over and around various obstacles, including encroaching vegetation, ground installed pole tie-cables, utility poles, and in-ground water meters. Street side collection stops are also part of the routes but their proportion of the overall collection route probably does not exceed 10 percent of the stops.

While adopting a curbside or frontage collection method would ultimately be the "optimal" approach from an efficiency standpoint, it is deemed infeasible by almost all City staff consulted. The reason is the expected resistance on the part of residents, who over decades have become fully accustomed and satisfied with a collection method that allows for the convenient placement of garbage cans in the rear alleyway or the property's side yard.

RECOMMENDATION

Implement one side garbage can placement in the alleys to enable garbage collection drivers to pass through the alleyways ONCE during the route. This is an idea that has been considered by City Administration in the past. A number of significant advantages will result from adopting this approach, including:

- 1. Significant reduction in "wear and tear" of the collection vehicle's engine, drive drain, brakes, and other components (obviously, the articulated arm mechanism will still be put through the same number of pickup operations). Though the savings associated with wear and tear are difficult to quantify, it is safe to state that the estimated reduction in travel distance will result in a significant decrease in maintenance and repair expense over time. Moreover, the useful life of the collection vehicles will be substantially lengthened, resulting in significant savings over the long term.
- 2. A considerable reduction in fuel that would be associated with an estimated 30 to 40 percent reduction is daily distance travelled. Assuming that the two garbage vehicles deployed four days per week account for 30 percent of the fuel cost for the sanitation fleet, this savings could approach \$10,000 annually (FY11 budget figures applied).
- 3. Measurable reductions in the time to complete the route will also result. Informal motion-time study data collected during the review indicate that as much as 35 to 50 minutes will be cut from each daily route. While the total collection-specific time required and number of individual collection operations remains unchanged for the alley portions of the route, the time savings accrues primarily from eliminating the "doubling back" maneuvers required to cover the alley a second time, the additional straight-line alley-to-alley transitions, and even the extra entry/exit times required for each alley. These time increments do add up, and the aggregate result in daily time savings per route was conservatively estimated.

From the drivers' standpoint, there are multiple benefits associated with the daily time savings, including: (1) less time enduring the bumpy ride as well as the stress associated with the need to continuously avoid the aforementioned drive path obstacles; (2) the increased opportunity to avoid queue delays at the garbage dump; and (3) the opportunity to finish the work shift earlier.

Like most major operational/service changes, this approach is not without its challenges. The two major obstacles are:

- 1. The expected resistance on the part of the residents to take the time and effort to place the garbage cans across the way on alternating years so as to cause all the cans to be placed on one side of the alley (the concept concerning the specific placement scheme proposed will be described later). This obstacle has been brought up almost to a person by PW staff and the City Administration. Although this expected difficulty of implementation certainly seems valid, it should not be insurmountable. For this change to be seriously pursued, in addition to the reconfiguration of the routes (to be addressed later in the report) and the obvious public awareness campaign that would be required, the following steps will be necessary (at a minimum):
- a) Reminder notices providing the upcoming change in brief and simple language should be placed on the garbage cans at least monthly and for at least three months prior to the start of the change (this task can be performed by the refuse collectors or "barrel pullers" and/or the Wednesday yard trash collection crews).
- b) Upon the program's inception, aggressively and consistently relocate the garbage cans that remain in their old position (whether due to forgetfulness or "protest"). It is recognized that this will likely be a significant challenge for the field staff if the number of non-compliant locations are many. However, after the first few weeks it seems likely that the non-compliant residents will comply.

An additional measure to seriously consider during the early period of the change is to place notices on the cans that City crews have to move to the correct position, a task which would not require much additional time. These notices simply need to state to the resident that the garbage can was found on the wrong side of the alleyway and it was moved by City staff as a courtesy, as well as politely ask the resident to place the can across the way for the remainder of the calendar year.

2. The second significant obstacle are the limitations posed by the geometry of the alley and specifically the garbage can and yard trash placement "niches" (and sometimes the lack of them). These niches, required by City code to be four feet deep by 10 feet wide, are not always of the size called for and in many cases are not even provided by the resident (who were "grandfathered" in). Insufficient space for the additional can and the yard trash pile that will

share the area some of the time can certainly impede the full-bore implementation of this change.

Two helpful factors can mitigate this difficulty: (1) coordination of the trash collection route with garbage routes whereby the problematic alleys can be handled by trash crews *before* the garbage collection; and (2) the fact that on many alleys the re-location of the garbage cans to one side will create useful additional driving room for the garbage truck to maneuver. Based on an informal survey (conducted while analyzing the collection route methods on-site) it appears that the percentage of the potentially problematic locations with trash pile-garbage cans conflict is not much more than 20 percent.

Clearly the most direct way to substantially reduce or eliminate this obstacle is to require that all residents provide these niches (and conform to the code's size requirement) and encourage this by perhaps providing some incentive such as making available for purchase at least some of the required building materials at a discount. On the wider alleys there will likely be little or no need to pursue the provision of niches nor be concerned about yard trash piles.

Route re-configuration

As currently envisioned by the Administration, alternating the location of the garbage containers by residents would be done by even numbered addresses on even numbered years and the same way for odd numbered addresses. While this is certainly a simple and easy way for residents to follow the scheme, it may not result in optimal routing of the collection vehicles. To maximize the benefits of shifting the alley garbage cans from "their" side to across the alley on alternating years, it may be best to plan out the optimal routes first. It is therefore strongly suggested that, while the simple "odd-even system" should be examined and preliminary routes planned out and evaluated under this scheme, the option to let route optimization be the "driver" for the alternating year assignments should be left open.

For route optimization drive the one-side collection method, sanitation supervisory staff and drivers need to work together and develop well-planned routes that will "weave" in and out of the alleyways in the most efficient and balanced manner. It is only after these modified routes are established that the specific addresses that will "shift" on odd and even years can be determined. For instance, if the route determined to be optimal involves the city section below to be travelled in the following fashion:

- a) Entering the CARLISLE alley (between Carlisle and Glendale) at 62ND Avenue and heading WEST to complete it all the way to OSAGE then
- b) Head SOUTH on OSAGE to enter the LAFAYETTE alley (between Lafayette and Carlisle) and head EAST to 62nd Avenue.

The FIRST YEAR addresses that need to shift their garbage cans across would be:

Alley 1 >> CARLISLE: 00 Block through 200 Block - ODD NUMBERED ADDRESSES

Alley 2 >> CARLISLE: 200 Block through 00 Block - EVEN NUMBERED ADDRESSES

Note that the above section of a route is put together and described for illustration purposes only and in no way suggest that the collection should be routed in this fashion.

The **second year** of the program would *reverse* the route direction and require the addresses on the opposite side to be shifted across the alley. Each subsequent year would follow the same alternating pattern.

It is extremely important that the planning of the routes with the aim of fully taking advantage of the one-side garbage collection method be done carefully and thoughtfully so as to achieve the best results. Moreover, once the route is established and leads to the specific addresses to be shifted on alternating years, the route must stay pretty much "static" (except for the reversal of direction on alternating years) to avoid confusion on the part of the residents.

Five day/8-hour Schedule versus "Task"- 4 day/10-hour Schedule

If the Department successfully implements the one-side garbage collection method, it should also consider changing the collection crews to a 5-day/8 hour schedule. The shorter route times will result in work shifts that will be in the five to six hours range, bringing issues of equitable work schedules (when compared to a 40 hour work week) into the question. Moreover, the opportunity to gain 32 hours per week (having the four member crew work on Wednesday) may be a highly valuable option, particularly if budgetary constraints persist in the coming years. The Wednesday work assignments for this crew can certainly include stepped up alleyway vegetation trimming and tree trimming. This increase in labor capacity amounts to nearly one additional employee and should certainly be seriously considered upon the implementation of the more efficient one-side collection method.

Finding #7 - Safety

Random field observations indicate that, while overall safety practices are adhered to, this may not be a consistent practice. Instances of employees not wearing goggles during times when this is called for and failing to wear seatbelts were observed. This may well not be pervasive, but it is certainly worth noting.

Other safety related items were identified, such as the lack of consistent trimming of the side vegetation along some of the narrower alleyways. The very tight passage created by the

vegetation creates an unnecessary risk of damage to equipment (such as side mirrors), in addition diverting the drivers' attention and increasing the chance of an accident. This situation was observed in a fair number of alleys during route observations.

In-ground utility meters are not conspicuously marked in the alleys. While drivers do know the routes well, these meters are more apt to be damaged due to their placement and being partially covered by ground vegetation.

RECOMMENDATIONS

- 1. Supervisory personnel need to ensure that safety practices are followed at all times. Violation of safety practices should be documented on performance evaluations and, if necessary via the progressive discipline process.
- 2. Step up the trimming of the alleyway vegetation, particularly the high-growth period during the summer months.
- 3. Increase Code Compliance's participation to achieve more compliance from residents who often neglect vegetation overgrowth adjacent to and overhanging the fences.
- 4. Consider marking the in-ground meters with fluorescent orange paint and re-mark periodically.

II. Office/Clerical Functions

The office/clerical staff is comprised of an Administrative Assistant II (AAII), a Procurement Supervisor (PS), and a Materials Management Clerk (MMC). The AAII functions as an assistant to the Director as well as the telephone and two-way radio receptionist. Her duties also include attendance/payroll processing, contacting agencies for underground utility checks, and processing tree permits. The PS focuses primarily on purchasing activities and WO processing/coordination, as well as receiving and issuing building maintenance stock and other day-to-day items such as uniforms and work gear.

Finding #1:

The two administrative/clerical employees are cross trained and appear very capable of covering for one another during breaks and leave periods. These employees display good customer service skills and seem know the workings of the Department well. The MMC operates more or less independently but does interact frequently with the PS, the fleet mechanics and equipment operators. His duties are mainly focused on fleet maintenance job orders and stock processing.

Finding #2:

The MMC position's responsibilities are important but seem limited. Moreover, the MMC's duties have a work order and purchasing/stock focus that overlaps functionally with those of the PS.

RECOMMENDATION:

Consider the elimination of the MMC position upon the incumbent's retirement in October 2012. This would result in annual savings or roughly \$52,000 (including fringe costs). This is not presented as a firm course of action, as another option involving this position will be presented in some detail in the Management/Administration section of the report.

This recommendation obviously requires that the current duties of the MMC be absorbed by the Department's administrative/clerical staff and perhaps other personnel. The recommended approach to accomplish this is to shift some of the workload of the Procurement Supervisor (PS) to the front office administrative aide and other staff so that the former can take on much of the MMC's current duties. This may be facilitated by pursuing some of all of the following:

- a) Modify the front office call reception method so as to help free up the Administrative Assistant II to attend to additional duties. This would only affect customer service in the sense that callers may need to leave a voice mail (to be responded to within a couple of hours) every so often as opposed to speaking with a live PW representative each and every time they call. Based on the estimated 6 to 10 hourly incoming call volume typically experienced (tallied through informal observation), the impact of this change on the callers would be minimal.
- b) Re-assign some of the purchasing tasks from the Procurement Supervisor (PS) to the field supervisors.
- c) Examine in detail the full range of work components and processes performed by the AAII and the PS and possibly consolidate activities/documents and eliminate unnecessary or duplicated tasks, forms, or other elements that may currently be performed more due to tradition than actual need.

Ultimately, the AAII's re-structured and expanded responsibilities may call for a position upgrade and accompanying compensation adjustment. Specific position level and associated pay grade recommendations are not part of this review; however, this option may need to be considered light of the position's responsibility and role expansion that would likely result from these changes.

III. Management/Administration

As stated in the Operations Section of the Findings, the PWD's field level operations generally provide a high and consistent level of service for the City's residents, merchants and visitors. While this aspect of the Department's function is critical, there is another more internal but extremely important component of the Department that involves higher level managerial/administrative functions. This function rests almost entirely with the Department's leadership and involves a vision and long-term planning focus that goes beyond the day-to-day operational concerns. The specific areas associated with this administrative focus include:

- Fiscal Administration Beyond year-to-year budgeting, this entails longer term planning such as capital improvement programs (CIP), fleet replacement schedules, and facilities capital planning.
- 2. <u>Human resource (HR) administration</u> At the most basic level, this obviously involves staff training and development and employee promotions/discipline. Ideally, a more sophisticated, longer term outlook is also part of the department leadership's HR activities, such as personnel transition planning.
- 3. Organizational and functional needs assessment Times change and demands on departments do as well. Effective public works management typically looks ahead and adjusts to meet emerging requirements based on a "macro" city-wide outlook as opposed to what is perceived to be the traditional or static demands on the Department based on years past.

The time constraints and scope of this review precluded going beyond these basic administrative areas. Nevertheless, significant findings and associated recommendations can be proposed which should help guide the Department towards a road to improvement in an area where weaknesses are apparent. The following are findings and recommendations for each of the three areas summarized above:

Finding #1 - Fiscal Administration

Some concerns on the part of the City Administration were expressed at the outset of this review in terms of the PWD's budget preparation process. These issues include the perception that minimal year-to-year expense analysis and projections are conducted and that there is an overall lack of fiscal planning by the Department's leadership. The timing of the review (conducted after the City's budget process was substantially completed) and its broad scope precluded the confirmation or refutation of these concerns; however, the following areas for improvement were found:

Capital Improvements Program (CIP)

No detailed CIP has been developed by the Department for its roadways, sidewalks, and other infrastructure components. While the amount of roadway resurfacing /markings and sidewalk repairs completed during the past year shows an increase in activity, no structured multi-year plan has been developed in recent years, or does one exists currently.

Five-year CIP for basic infrastructure elements are typical and useful in PW management. Usually adjusted each year, the CIP provides an important guiding tool and assists PWDs in continually assessing and re-assessing the condition of its roads and other infrastructure, helps to better prioritize projects, and perhaps most important of all, it quantifies and justifies required funding.

RECOMMENDATION:

Develop a detailed five-year CIP starting in fiscal year 2012-13. For roadways and similar infrastructure elements, the basic steps to perform this are: (1) assess the condition of the city's roadways, sidewalks, etc. and prioritize the required work so as to assign each one to each of years One (FY12-13) through Five (FY16-17); (2) for each project, define the scope and quantify the amount of work required; (3) Using the most recent historical cost factors or other appropriate method, estimate the cost for the work assigned to each of the five years.

Attachment 9 provides an example of a possible starting scheme to follow for roadway resurfacing in terms of the third step of the process. The roadways listed were assessed during the review, the distances were actually measured and recent historical costs factors were applied. However, this is only an example to illustrate the concept, and in no way suggests that these should ultimately be the annual priorities followed by the CIP.

The Department would apply the minimum level of annual funding from the known sources (CITT, Local Option Gas Tax, etc.) to arrive at the baseline roadway pavement and stripping amounts and apportion these to address the Year 1 through Year 5 priorities. Any additional funding that can be obtained would allow for additional progress each year, requiring for the entire CIP to be readjusted. For instance, if \$200,000 to \$225,000 is available (or projected to be available) for each of the five years, the example starting scheme provided in Attachment 9 still leaves room for a significant amount of additional resurfacing work for each year.

As part of #3, a breakdown of other work components such as engineering design may need to be included. For instance, for roadway resurfacing that will involve drainage improvements, topographical study cost and drainage structure design work should be estimated as best possible and included. Finally, determine the broad work categories required for the projects and display them in a chart similar to that provided in Attachment 10. Note that the level of

detail and sophistication involved in CIPs tends to vary among municipalities and also depends on the complexity of the project.

Other important infrastructure items such as sidewalks and facility components such as roofs, generators, etc. need to be incorporated in a public works CIP. Additional discussion of the facility oriented capital items will be provided as part of a recommendation under the Human Resources Administration section below. When finalized, the CIP is re-assessed annually for each fiscal year's budget submittal. Funding constraints, the changing condition of infrastructure items, emerging priorities and various other factors will undoubtedly influence the re-assessment process.

Finding #2 - Human Resources Administration

The review found that current practices in basic personnel management need to be significantly improved. Two examples that illustrate this situation involve the manner in which sick leave abuse is being addressed.

- a) A review of absence patterns during FY2009-10 indicates that as many as 15 PW employees show clear patterns of abusing sick leave. Specifically, the Civil Service Code provision E (2) (p) which defines "chronically being absent from work " as <u>using sick</u> <u>leave three or more times in a 90-day period</u>, is being violated frequently throughout the Department. Furthermore, patterns of taking sick leave in an unacceptable manner are frequent and in some cases blatant. These patterns include taking sick leave as follows:
 - i. On Mondays and Fridays.
 - ii. The day after or before a scheduled day off. For sanitation staff members that are on a 4-day/10-hour work schedule, frequent sick leave absences on <u>Tuesday and/or Thursday</u> (following their Wednesday "off" day).
 - ii. For sanitation employees in the trash collection operation on a 5-day/8-hour schedule, the frequent use of sick leave on Wednesdays, the "non-driving" day.

A summary of the specific findings is provided in Attachment 11. The two divisions with the largest number of employees were reviewed for FY2009-10. Despite the number and frequency of violations identified, there is almost no addressing of these issues in employee evaluations and disciplinary actions taken and documented are rare. This inaction applies even for the "worst offender" cases (per the HR Department). Note that employees who had legitimate health issues during specific periods within the review time frame were not included in the chart.

In addition to numerous three sick days in a 90-day period violations (with a number of employees tallying more than one instance), there appear to be widespread patterns of taking sick leave on Monday, Fridays, and the day after the scheduled Wednesday off (for the crew on task schedule).

- b) The second issue found involves a practice which can be deemed questionable by most HR administration standards. An employee who recently exhibited a pattern of requesting sick leave on the day after his scheduled day off (Wednesday) was reassigned to a five-day/eight hour work schedule. While the rationale behind this change can be understood, this action is not recommended for the following reasons:
 - i. It sets a precedent that may be problematic in the future by suggesting that employees with absenteeism issues will not be penalized via the normal progressive discipline approach.
 - ii. A change in the schedule as some sort of punitive measure may well put the deterrent before the needs of the Department. It is certainly possible that maintaining this employee on the four-day/10 hour shift is the most advantageous setup for PW, yet the change in schedule to address sick leave abuse supersedes this priority.
- c) HR records show that a PW driver has had 11 accidents since 2007 (and had as many as three in one year on three different years), yet his performance evaluations for this period fail to comment or address this serious matter. It is acknowledged that a percentage of these incidents may not have been the driver's fault. Nevertheless, even if as many as half of the accidents were determined to fall this category, this leaves five or six incidents unaddressed in the employee's files.

The impact of this lack of disciplinary action is potentially serious. A driver that displays a heavy propensity to cause accidents while operating heavy equipment may be a danger to himself, to others, as well causing damage to private and City property. The liability that this situation creates for the City is substantial. Regardless of how many of the 11 incidents were determined to be not the operator's fault or only partially his fault, some degree of disciplinary action should certainly have been taken.

RECOMMENDATION:

The PWD needs to document cases of sick leave abuse and unsafe equipment operation via the performance evaluations and, for repeated instances, take appropriate disciplinary actions. If left undeterred, cases of sick leave abuse, excessive accidents and other violations can have significant and even serious consequences. The Department's HR practices need to be

consistent and equitable across all employees and functions. It is strongly recommended that current practices, which include an almost complete lack of action concerning abuse of sick leave, taking punitive measures to address same and the failure to address cases of potentially deficient equipment operation cease immediately.

Discussions with the HR Department indicate that no explicit, written attendance policy notice has been provided and explained to PW employees in years. It is therefore strongly recommended that a memorandum similar to that provided by a previous administration in March 2001 (see Attachment 12) be prepared and distributed to all PW employees. The memo should be amended to also include patterns of taking sick leave on Fridays, Mondays, the days after a scheduled day off, and the non-driving Wednesday (for the five-day/8-hour sanitation schedule). The memo's important content should be explained verbally to all staff and each employee should be required to sign off at the bottom of the document to indicate acknowledgement of its content.

Benefits of Improved Attendance

The absence data reviewed (which includes the current fiscal year's records, though this was not summarized) indicates that as many as 15 to 20 employees in the Department will have attendance violation instances on any given year. Of these, as many as 10 to 12 will have multiple violations. Overall, the number of annual sick leave hours taken, which approaches 3,000 for the field employees alone, certainly limits the productivity of the Department. Even a modest 15 percent improvement in attendance would yield nearly 500 additional work hours per year. This is a significant productivity gain, being equivalent to roughly three months of an additional full-time employee.

Many PW employees dutifully report to work on a consistent manner and only take sick leave when truly necessary. The morale of these individuals is often negatively impacted when they see widespread sick leave abuse. Proper enforcement of attendance rules, safe driving guidelines, and other areas of personnel compliance will reduce the incidence of violations. An improvement in employee morale for employees who consistently comply with personnel regulations is likely to follow.

Finding #3 - Long-term View/Transition Planning

Long-term personnel transition planning, taking into consideration the changing requirements of the City and the PWD's role in adapting to meet these, appears to be lacking. It is recognized that this is a challenging goal to achieve (and sometimes even to define), and that input as well as direction from City Administration plays a major role in this regard. Nevertheless, it is an

area of huge importance in that it does impact the Department's effectiveness in addressing issues such as facility capital planning and project management.

The lack of transition planning is best illustrated by the situation of the PWD's building maintenance function, staffed with one Building Maintenance Specialist (BMS) who will be retiring within a month of this report's writing. The PWD's plan to fill the position with an employee that has been groomed by the incumbent for only several months, as well as maintaining the scope of the building maintenance function as it historically has been may reflect a limited vision as to what this important function truly needs to encompass going forward. This is especially evident given the clear directive provided by the City Manager approximately 10 months ago outlining the expectations concerning a construction management function within the PWD (see Attachment 13).

The building maintenance function, even for a city of relatively small size and operating few facilities, is not necessarily limited to maintenance and repair in the basic building trades (such as patch and paint, carpentry, plumbing, electrical, etc.). The need to plan and manage at least small and even medium sized construction projects as well as to develop and update facility capital plans for high cost items such as roofs and HVAC systems is present in all municipalities. Replacing the incumbent BMS with an individual of similar skill level and experience and retaining the limited maintenance/repair responsibilities of this position will not effectively and fully address the needs of the City. Moreover, this personnel transition fails to address the aforementioned directive by the City Manager.

RECOMMENDATION #1:

- 1. Expand the responsibilities of the BMS to include the following:
- a) Develop, in collaboration with the PW Director, a formal and detailed capital replacement schedule for all City facilities, to include (but not be limited to):
 - i. Roofs (the roof on the original city hall building may be over 25 years old).
 - ii. Building painting (according to the incumbent BMS, City Hall has not been painted in at least seven years). The general building paint cycle in the South Florida environment is six to seven years.
 - iii. HVAC units, generators, and other high ticket items and mechanical systems.
 - iv. Other capital items as required.

All purchase, cost, specs and other information and data concerning the items above should be kept and maintained updated in the BMS files (digitally stored if possible).

- b) Plan, coordinate and manage small to medium size projects. This would include, but not be limited to:
 - i. Removal and installations of interior and exterior walls, windows, and fences.
 - ii. Building additions.
 - iii. Facility remodeling and upgrades.
 - iv. Asphalt/roadway resurfacing projects (this type of work may be shared with the Streets Supervisor).
 - v. Concrete work, including handicap ramps (this type of work may be shared with the Streets Supervisor).

Note that in the near term the PW Director should be able to undertake many of the responsibilities of the project management function. This is particularly applicable during the period of time leading to the formal expansion of the BM function (discussed below). Any training or familiarization with construction industry practices, city planning principles, building codes, project coordination, etc. that is required in the short-term may be provided by the Building Director (who has expressed a willingness to assist in this regard).

Whether the incoming BMS will be able to attain the skills required of a higher level project manager/capital program administrator and what the learning curve will be is difficult to determine. Ultimately it may be a less complicated and more surefire approach to recruit and select an experienced, hands-on construction management/general contractor (GC) individual with strong handyman skills. To defer the cost of this hiring, this incoming individual can essentially "replace" the Materials Management Clerk (MMC) position in about a year. As discussed later in this section, this option not only foregoes the savings associated with eliminating the MMC, but will end up increasing annual payroll costs for the Department.

Since the expanded role of the BM function will require skills that go beyond those of a building trades "handyman" and entail some of the skills of a GC and a project manager, consideration should be given to changing the job title to something like "Construction Superintendent" (CS) and probably adjust the pay grade of the position. It is not within the scope of this review to determine detailed job specifications. Rather, this recommendation calls for the PW leadership to take the lead on defining this job spec as well as the overall scope of the expanded BM function. This effort will require working in conjunction with the Building Director, HR, the Parks and Recreation Department, and City Administration. For instance, the number and complexity of City projects in the foreseeable future may or may not necessitate that a certified GC occupy the CS position.

What is certainly required for the expanded role of the position is a good understanding the components of facility and infrastructure construction projects so as to be able to develop an

overall scope, be actively involved in obtaining quotes and/or preparing bids as well as the associated selection process, and coordinate and manage actual project activities. In short, it will involve an administrative/planning component that is currently not part of the building maintenance function.

Another area that the CS should be involved in is energy management. Current trends in energy conservation include taking fairly low cost measures that can have a measurable impact on energy cost reduction. These include improved sealing of the building envelope, with particular attention to perimeter doors and windows as well as adjusting HVAC and lighting operating times. The latter can be largely accomplished by installing room motion sensors that deactivate lighting when the space is not occupied. Other measures such as window treatments to reduce cooling requirement and incorporating landscaping to increase shading along exposed building exteriors are also being effectively implemented.

Attachment 14 provides an example of a deficient door seal strip at City Hall's west side perimeter door (ground floor). Other door or window seals may require replacement as well. Collectively, deficient seals throughout a building's perimeter contribute to higher energy costs and may lead to humidity and air quality issues. Considering that the combined annual energy cost of the City Hall, Recreation, and PW facilities is an estimated \$100,000, even a modest six to eight percent reduction in energy costs can approach \$10,000 annually.

A Second Option

The option of eliminating the MMC position (to become vacant in October 2012) was detailed earlier in the report. A clear benefit is the substantial annual savings that will result. Nevertheless, another approach to be considered is converting the future vacancy of the MMC to the expanded BM position, or the suggested "Construction Superintendent" (CS) position. It must be emphasized again that this would be a *working* superintendent, retaining the hands-on field duties of the current position but with the expanded CIP/Project Management duties outlined above. Under this scenario, the current BMS position would remain in its current repair/maintenance capacity and would assist the CS with routine chores. During slower periods the BMS can cover for other field positions absences as needed. Alternatively, when the CS is heavily involved in project management, capital program work, or on leave the BMS would perform the basic facilities maintenance tasks.

The MMC's current salary is nearly \$40,000 annually. The particular pay scale to attract and retain a qualified CS position with the general skill set and experience described was not researched. However, it is estimated is that the incremental cost to reach the appropriate salary may fall in the range of \$10,000 to \$15,000 annually (to reach a \$50,000 to \$55,000

salary range). This option would result in a net increase in annual costs that would approach \$25,000 (factoring in fringe costs).

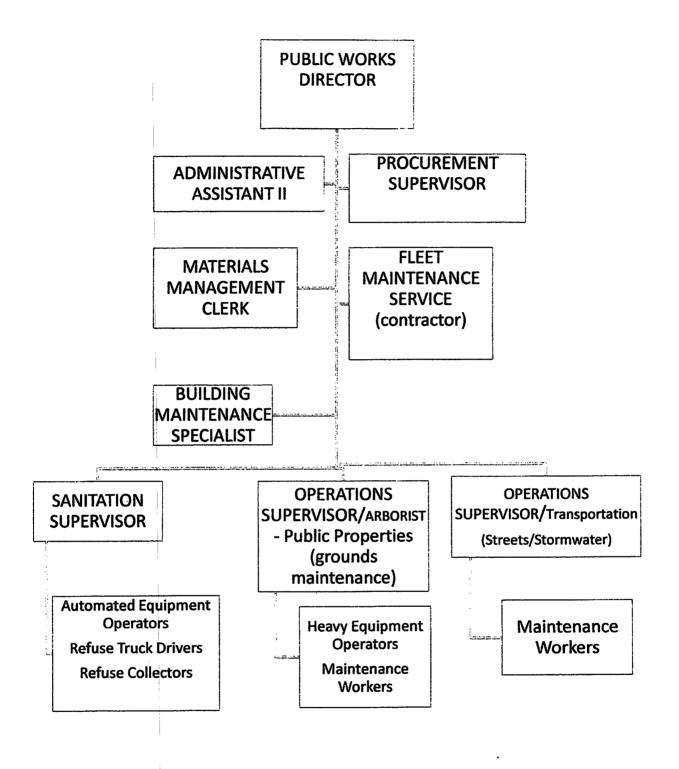
AREAS FOR FUTURE CONSIDERATION

While the review recommends pursuing a more efficient alleyway garbage collection method, it is acknowledged that the optimal method would be curbside collection. From the residents' perspective this radically reduces the current level of convenience; however, the actual implementation is much simpler than the one-sided alley collection approach proposed by the review. Curbside collection has been widely adopted throughout Miami-Dade and Broward Counties, and is almost universal for mechanized operations such as Miami Springs'. Despite the expected disapproval from many residents, the City should seriously consider changing over to this system in the coming years.

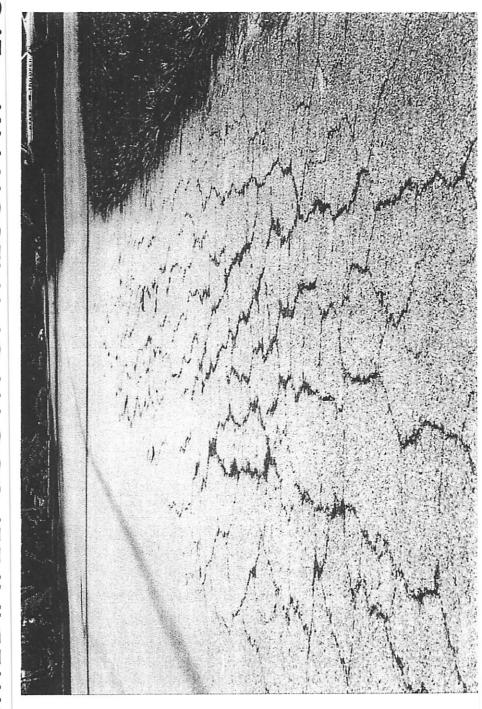
Another area that it is recommended for future monitoring and evaluation is the possibility of performing electrical work in-house. This was done by the PWD in the past, but was abandoned in favor of using an electrical contractor. The current fiscal year expenditures (through early August 2011) in hourly labor charges alone are roughly \$80,000. The total labor cost that will be incurred for the current FY as well as during next year should be monitored and compared with that of an in-house electrician. It is certainly possible that current pay rates for licensed, experienced electricians may result in lower total annual costs if this function is brought in-house. Other factors such as costs associated with a vehicle, tools and supplies as well as the frequent need to provide a semi-skilled helper need to be considered in this evaluation.

SUMMARY OF COST REDUCTIONS AND PRODUCTIVITY GAINS

Attachment 15 summarizes the cost reductions in productivity gains resulting from the recommendations presented in this review.

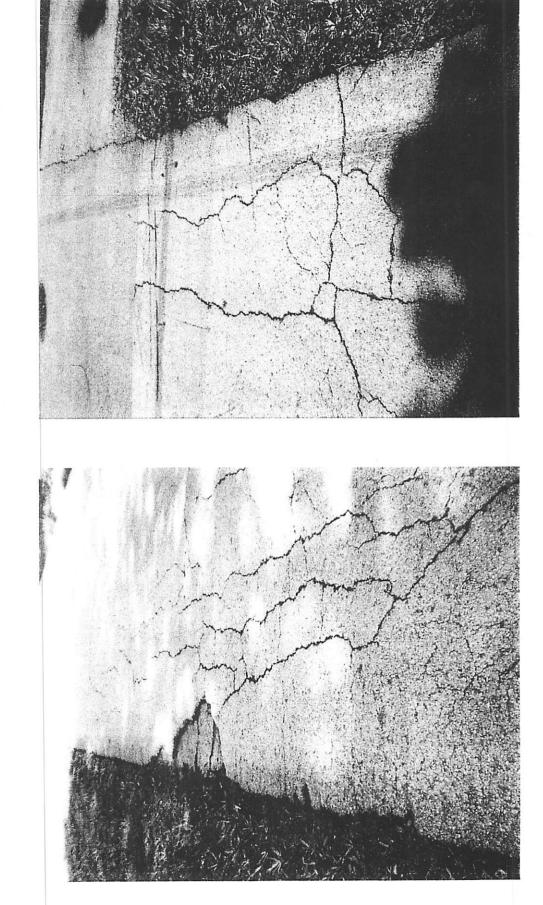


IMMEDIATELY SOUTH OF FALCON AV. - E. SIDE DEFICIENT ROADWAY SURFACE: CHEROKEE ST.



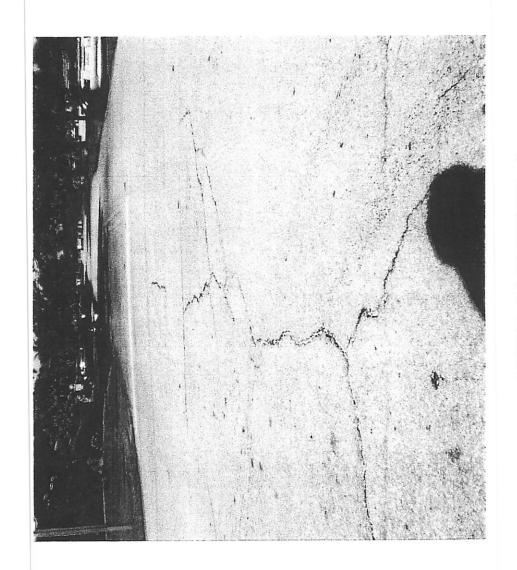
ATTACHMENT 2

DEFICIENT ROADWAY SURFACES: CHEROKEE ST. NEAR FALCON AV.



ATTACHMENT 3

DEFICIENT ROADWAY SURFACE: OAKWOOD DR. **NEAR KENMORE**



ATTACHMENT 4

ROYAL POINCIANA - FADED STALL STRIPING PUBLIC PARKING AT NAHKODA/EAST OF N.



ATTACHMENT 5

MIAMI SPRINGS PUBLIC WORKS DEPARTMENT WORK ORDER PROFILE - Sample months of Jan., Mar., & June 2011

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JUNE 2011 - W.O.'s

	_		%ge within		%ge within		%ge within		%ge within
Turnaround Time	P.Prop _		time_frame_	Sdrain	time frame	BMtce-	time-frame	Streets	time frame
1 d		39	85%	35	95%	25	86%	49	88%
2 d		5	11%	2	5%	2	7%	2	4%
3 to 5 d		0	0%		0%	2	7%	4	7%
over 5 d		2	4%		0%		0%	1	2%
over 10 d			0%		0%				0%
		16	100%	37	100%	29	100%	56	100%

Request date		%ge within		%ge within		%ge within		%ge within
to Start date	P.Prop	time frame	Sdrain	time frame	BMtce	time frame	Streets	time frame
1 d	44	96%	37	100%	12	41%	45	80%
2 d	1	2%		0%	7	24%	2	4%
3 to 5 d	1	2%		0%	8	28%	3	5%
over 5 d		0%		0%	2	7%	1	2%
over 10 d		0%		0%		0%	5	9%
	46	100%	37	100%	29	100%	56	100%

MIAMI SPRINGS PUBLIC WORKS DEPARTMENT WORK ORDER PROFILE - Sample months of Jan., Mar., & June 2011

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MARCH 2011 - W.O.'s

		%ge within		%ge within		%ge within	į	%ge within
Turnaround Time	P.Prop	time frame	Sdrain	time_frame	BMtce	time frame	Streets	time frame
1 d	55	87%	3	100%	26	96%	66	96%
2 d	3	5%			1	4%	1	1%
3 to 5 d	4	6%					1	1%
over 5 d	1	2%					1	1%
over 10 d		0%						
	63	100%	3	100%	27	100%	69	100%

Request date	_	%ge within		%ge within		%ge within		%ge within
to Start date	P.Prop	time frame	Sdrain	time frame	BMtce	time frame	Streets	time frame
1 d	51	81%	3	100%	15	56%	56	81%
2 d	9	14%			4	15%	8	12%
3 to 5 d	1	2%			1	4%	1	1%
over 5 d	2	3%			5	19%	2	3%
over 10 d					2	7%	2	3%
	63	100%	3	100%	27	100%	69	100%

Attachment 6

MIAMI SPRINGS PUBLIC WORKS DEPARTMENT WORK ORDER PROFILE - Sample months of Jan., Mar., & June 2011

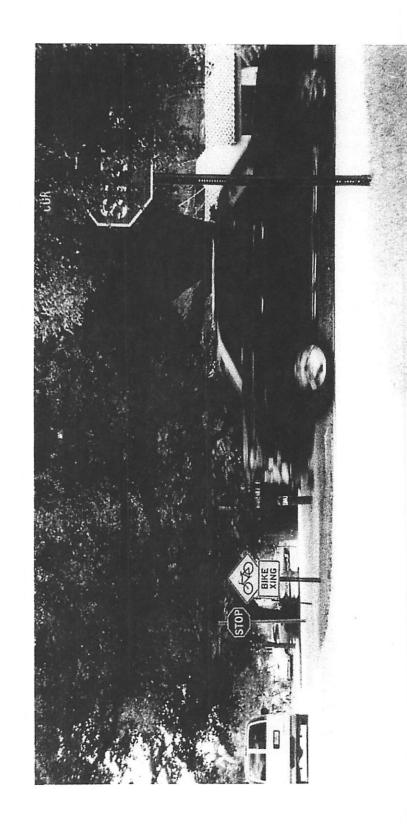
P. 3 of 3

JANUARY 2011 - W.O.'s

		%ge within		%ge within		%ge within		%ge within
Turnaround Time	P.Prop	time frame	Sdrain	time frame	BMtce	time frame	Streets	time frame
1 d	28	67%	13	93%	25	86%	120	96%
2 d	9	21%	1	7%	2	7%	3	2%
3 to 5 d	3	7%			2	7%	2	2%
over 5 d	2	5%						
over 10 d								
	42	100%	14	100%	29	100%	125	100%

Request date		%ge within		%ge within		%ge within	_	%ge within
to Start date	P.Prop	time frame	Sdrain	time frame	BMtce	time frame	Streets	time frame
1 d	3.	74%	14	100%	12	41%	112	90%
2 d		12%			8	28%	6	5%
3 to 5 d		2 5%			9	31%	3	2%
over 5 d		1 2%					2	2%
over 10 d		7%					2	2%
	4:	2 100%	14	100%	29	100%	125	100%

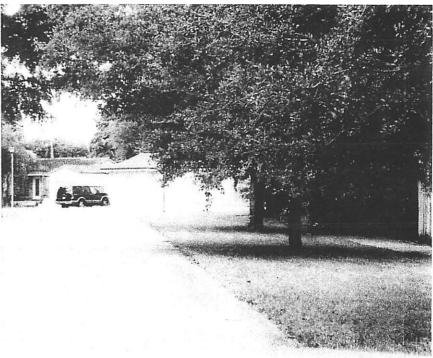
TYPICAL HIGH PRIORITY TREE TRIM JOB - eastbound lane of MORNINGSIDE DR.at CURTISS PKWY.



ATTACHMENT 7

TYPICAL SMALL TO MEDIUM TREE BRANCH TRIMMING WORK – SOUTH DRIVE AT R. POINCIANA





Attachment 9

EXAMPLE OF INITIAL SCHEME FOR ROADWAY RESURFACING 5-YEAR C.I.P.

(ILLUSTRATION PURPOSES ONLY)

		Approx. Distance	Estimated	
FISCAL YEAR	Roadway	(Miles)	Cost*	Comments
2012-13 - YR 1	CHEROKEE ST.	0.5	\$38,167	From Hunting Lodge to Nightingale
	'			pavement especially deficient near
				Falcon Av (east side)
	SHADOW WAY	0.7	\$53,433	From Hunting Lodge to Dove Av
FY Totals:		1.2	\$91,600	
2013-14 - YR 2	OAKWOOD DR.	0.9	\$68,700	Pavement cracks such as those near Kenmore are typical in many sections
	SOUTH DR.	0.8	\$61,067	From NW 36th St to R. Poinciana
FY Totals:		1.7	\$129,767	
2014-15 - YR 3	HAMMOND	1.1	\$83,967	From Melrose to Wren Av.
	WESTWARD DR.	0.9	\$68,700	From Ludlam to Cardinal
FY Totals:		2	\$152,667	
2015-16 - YR 4	LENAPE	1.1	\$83,967	From Melrose to Meadowlark Av.
FY Totals:		1.1	\$83,967	
2017-18 - YR 5	i			

Capital Improvement Project

Project:	Wastewater (Sewer) System Rehabilitation Program						
Priority:				Project Manager:	3		
Department:				Division:	on: Water/Sewer		
Project Location:	Town-wide Wa	stewater (Sew	er) Syste	em			
Fiscal Year:	FY 11	FY 12	FY 13	FY 14	FY 15	5 year Total	PRIOR FYs
Plans and Studies:							135,000
Engineering/ Architecture:	78,200	26,000				104,200	206,988
Land Acquisition/ Site Preparation:							
Construction:	3,908,900	1,023,123				4,932,023	280,000
Equipment/ Furnishings:							
Other (Specify):							£
TOTAL COST:	3,987,100	1,049,123				5,036,223	621,988
Revenue Source:	WUB/WS	WUB/WS					WUB/WS

Description (Justification and Explanation)

Sewer Rehabilitation Plan: The Sewer Rehabilitation Plan will be broken into three phases. Phase II will bring the Town into partial complete the requirements as outlined in the Sanitary Sewer Evaluation Study (SSES).

Phase I: Phase I was completed by placing full dish gaskets on all manhole openings. In addition, any rain water leaders found to be attached to the sewer lines shall be disconnected from the sanitary sewer system. Any cleanouts that are open to the elements will also to be capped. These last two tasks should be at no cost to the city, as this is in violation and the responsibility of the individual home owner.

Phase II: Phase II requires investigating sewer problems using video, smoke testing and other techniques to determine the sources of infiltration / inflow. All broken sanitary laterals will be repaired or lined, as determined by the analysis. Severely deteriorated manholes will be sealed with a "Supercoat" system or full liner.

Phase III: Phase III will consist of renovating the existing pump stations. The pumps and controls along with generators will be replaced.

Funding is proposed through a combination of net assets and loan proceeds.

Future Annualized Impact on Operating Budget

Personnel:	45,000
Operating:	45,000
Replacement Costs:	2,200,000/30 years = \$73,335
Revenue/Other:	Debt Service = \$214,147
Total:	\$377,482

Post Phase Program: After the Phases have been implemented, the city should develop a continuing program to maintain the sewer system, consisting of: 1) Smoke testing, 2) Replace leaking manholes and cleanout caps, 3) Raise manhole ring and cover assemblies where necessary, 4) Grout and seal manholes and gravity sewer pipe where necessary, 5) Lined gravity sewer pipe, and 6) Inflow prevention devices for all new manholes. Costs to the left represent estimates for proper maintenance of these program components.

Debt service with fund balance offset = \$214 147

PUBLIC WORKS / SANITATION SICK LEAVE USAGE SUMMARY FY2009-10

Attachment 11

Page 1 of 2

Name*	# instances of > or = 3 SL in 90d**	# SL days within instance	Dates	# of Mon/Fri within instance	For "Task" empl. # of Tue/Thu within instance	For 5d/8hr empl. # of Wed within instance
EMPLOYEE 1	1	4	4/5, 4/6, 4/15; 5/6/10	1 Mon	n/a	
EMPLOYEE 2	1	3	3/12; 4/2; 6/25/10	3 Fri	n/a	0
EMPLOYEE 3	2	3	3/4, 3/5; 4/26/10	1 Mon; 1 Fri	n/a	1
	2nd warningwritten	5	7/19; 8/2, 8/3, 8/4; 9/15/10	2 Mon	n/a	3
EMPLOYEE 4	2	3	9/30; 10/28; 12/9/09	0	n/a	3
	2nd warningwritten	5	3/25, 3/26, 3/29; 5/6; 6/17/10	2 Mon; 1 Fri	n/a	2
EMPLOYEE 5		3	6/21, 7/9. 9/16/10	1 Mon		
EMPLOYEE 6	1	4	6/21, 6/22; 7/23; 8/6/10	1 Mon; 2 Fri	1 Tue	n/a
EMPLOYEE 7	4	5	10/19; 11/23/09; 1/4; 1/5; 1/19/10	3 Mon	n/a	0
	2nd warning; Suspns;	1 4	3/4, 3/16; 4/1, 2/10	1 Fri	n/a	1
	+ ??	4	4/15; 5/10; 6/17; 6/21/10	2 Mon	n/a	0
		5	7/19; 8/12; 8/30; 9/3, 9/9/10	2 Mon; 1 Fri	n/a	
EMPLOYEE 8	2	. 4	4/12; 5/13; 5/14; 7/12/10	2 Mon; 1 Fri	1 Thurs	0
	2nd warningwritten	3	7/16; 7/19; 7/20/10	1 Mon; 1 Fri	1 Tues	0
EMPLOYEE 9		2 5	9/30; 10/1; 12/11; 12/28; 12/30/09	1 Mon; 1 Fri	n/a	2
	2nd warningwritten	5	3/10; 3/23; 3/24; 6/4; 6/8*/10	1 Fri	1 Tue***	2

^{*}Employees who had documented, legitimate long-term illness excluded.

^{***} put on 4/10 sched sometime after 3/24/10

^{**}Only full-day (8 hour minimum) absences counted.

PUBLIC WORKS / PUBLIC PROPERTIES SICK LEAVE USAGE SUMMARY FY2009-10

Attachment 11

Page 2 of 2

Name*	# instances of > or = 3 SL in 90d**	# SL days within instance	Dates	# of Mon/Fri within instance	For "Task" empl. # of Tue/Thu within instance	For 5d/8hr empl. # of Wed within instance
EMPLOYEE 1	1	3	8/19; 8/23; 8/31/10	1 Mon	n/a	n/a
EMPLOYEE 2	2		5/25; 5/26; 5/27; 5/28/10 12/7; 12/8/09; 2/3/10	1 Fri 1 Mon	n/a	n/a
EMPLOYEE 3	1	7	10/9; 10/13; 10/14; 10/15; 10/16; 11/9/09; 1/22/10	3 Fri	n/a n/a	n/a n/a
EMPLOYEE 4	1	3	12/16; 12/30/09; 2/26/10	1 Fri	n/a n/a	n/a n/a

^{*}Employees who had documented, legitimate long-term illness excluded.

^{**}Only full-day (8 hour minimum) absences counted.

CITY OF MIAMI SPRINGS PUBLIC WORKS DEPARTMENT MEMORANDUM

TO:

All Public Works Employees

FROM:

Maria V. Davis, Public Works Director

SUBJECT:

ATTENDANCE

DATE:

March 26, 2001

Recently, I have been reviewing the attendance records of employees and have found that some of you are exhausting an excessive amount of sick time. This is having an adverse affect on the operation as a whole and is affecting my ability to get work done. Sick time is to be utilized for those instances when you are legitimately sick and not for personal leave.

I am attaching a copy of Civil Service Code E (2) (p) which specifically states "Chronically being absent from work. CHRONICALLY shall mean occurring 3 times within a 90-day period."

Many of you are already in violation of this provision.

In an effort to be fair, I am officially notifying each of you of the specific absenteeism provision of the Civil Code. I recommend that each of you take this provision very seriously because the volume of absenteeism in the Department is totally unacceptable and I will begin enforcing this provision immediately.

Further, please be formally advised that your attendance record will weigh very heavily on your performance evaluations and will be a strong determining factor with the level of compensation you receive.

I have received this document.

<u>4/6/2001</u> Date

attachment

CC:

Ms. Loretta Boucher Mr. Robert Williams procurement agent or construction manager on any project they may be required to inspect.

Department Heads will be responsible for project initiation and the overall success of the project including ensuring timely coordination between Departments (Construction Manager, Procurement, Zoning, Building Official/Inspectors, and Code Compliance). Department heads are not responsible for technical construction related issues/activities and related decisions but must be kept in the decision process.

Procurement, which is responsible for ensuring the procurement policies and procedures are strictly adhered to throughout the City at all times, will provide support as requested by any department within their capability and workload. Whether or not Procurement is directly involved, each department is required to keep Procurement completely informed. Similarly, it is Procurement's responsibility to do the same regarding their activities with all involved departments until final project sign-off.

Example - Recreation decides it would like to install an in-deck wading pool with sprinklers, etc. After Recreation obtains conceptual CM approval (cost/timing):

- 1. Recreation immediately contacts PW (Recreation is PW's "customer")
- 2. PW & Recreation jointly develop a preliminary job scope document
- 3. PW as construction manager then contacts the Building Department and Procurement to determine their level of involvement, work-flow contribution, spec considerations, etc.
- 4. PW, with the assistance of Recreation, Building, Zoning and Procurement develops the necessary bidding spec's for materials, construction, etc., (bid spec's are needed no matter how quotes are obtained verbal, written, RFP, etc). If the initiating department intends to manage the procurement process themselves they must keep Procurement completely informed of all related procurement actions (including communications, estimates, etc.).
- 5. Throughout each project, Finance, ACM and CM, must be kept in the information flow

Cc:
Building Official
Code Compliance
Finance/Procurement

CITY OF MIAMI SPRINGS



City Manager's Office 201 Westward Drive Miami Springs, FL 33166-5289 Phone: (305) 805-5010 Fax: (305) 805-5040

TO:

Department Heads

FROM:

Jim Borgmann, City Manager

SUBJECT:

Construction Manager Responsibility, Authority and Accountability

DATE:

October 12, 2010

While every function outlined below is already being accomplished, in many cases it's unclear who's responsible for what. This lays out the responsibility, authority and accountability of the City's "Construction Manager."

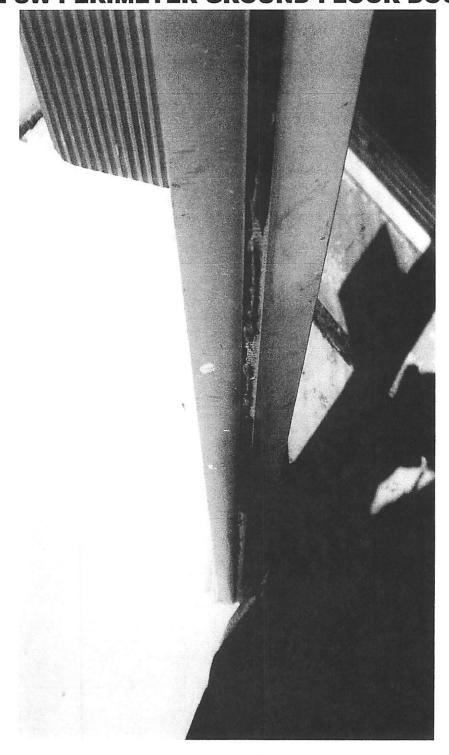
Several recent internal construction related issues have highlighted the need to revise the City's internal construction processes (those projects managed and paid for by the City) and the need for construction expertise including project management (project inception to conclusion). Preventing all problems is not realistically possible but making sure each project has a clearly defined "construction manager" who is directly responsible for the project needs to be established.

Because construction requires expertise, the Construction Manager for <u>all</u> internal City construction projects, no matter project scope (sidewalk repair to new buildings), is officially the Public Works Director (unless the City employs an independent construction manager as recently done for the new Community Center). This policy applies to all City construction projects covered by FL or M-DC zoning and/or building code(s). Exceptions to this must be approved by the City Manager. Subsequent to this directive, Public Works will issue a Construction Manager job description.

To make sure this functions as envisioned, close "continuous looping" coordination from project initiation is required at all times between Public Works, Procurement and the Building Department. To accomplish this, the Project Manager will initially contact the Building Department to coordinate permitting requirements, if any. This must be done for each project, no matter scope (\$'s small to large), on project inception. In addition to Procurement's direct involvement, the Building Department may also be involved in the job scope, specifications, etc., as well as the subsequently required "Notice to Proceed", permitting, inspections, etc.

Our Building (Building Official and Inspectors) function is responsible for making sure that they're providing support as requested however, to ensure there is no potential conflict of interest, the Building Official and Inspectors cannot act as a quasi-

Attachment 14
DEFICIENT DOOR STRIP SEAL
TOWN HALL SW PERIMETER GROUND FLOOR DOOR



ATTACHMENT 15

SUMMARY OF COST REDUCTIONS/PRODUCTIVITY GAINS

RECOMMENDATION	Pg #	COST REDUCTION/ PRODUCTIVITY GAINS	COMMENTS
Contracting out tree trimming	9	\$30,000 annually	First year savings more likely fall in \$15,000 to \$20,000 range.
One side alleyway garbage collection: 1. Estimated fuel savings	11	\$10,000 annually	Additional savings from decreased maintenance/repair costs and increased equipment life are expected (not estimated).
2. Increased labor capacity from changing 4 day/10-hour garbage drivers schedule to 5 day/8-hour	14	32 hours weekly	Assignments should include stepped up trimming of alleyway vegetation and tree trimming.
Not filling Materials Management Clerk vacanty (Oct. 2012)	16	\$52,000 annually	May consider converting to Construction Superintendent type position for building maintenance, project mgmt, CIP admin. (p.24).

TOTAL ESTIM. COST REDUCTION:

\$92,000

FERNANDO J. RODRIGUEZ

5701 Collins Avenue #1006 Miami Beach, FL 33140 786-246-0241

Email: fernan rod@yahoo.com

PROFESSIONAL EXPERIENCE:

Over 17 years of senior management/leadership experience, including high-level operations management in complex municipal settings such as public works, GSA, parking, and fleet management. Responsibility for administration of \$10-plus million, revenue-driven enterprise funds. Additional areas of experience include finance/budgeting, contract administration, procurement, and human resources. Proven skills in development and implementation of service delivery improvements, effective operating procedures, workflow improvement, and cost reduction programs. Skills and achievements include:

- Successful management of operating budgets exceeding \$9M and various large scale service contracts, including commercial solid waste collection, engineering services and landscape maintenance contracts.
- Achieved 15 percent reduction in public works budget (FY09-10) with minimal impact on service levels.
- Oversight of \$13M capital improvement program, including the replacement of all water main lines and substantial Town-wide repairs of the sanitary sewer system (in progress).
- Experienced in the development, preparation, and presentation of major items to the City Commission, various boards and committees, as well as county, state, and private organizations.
- Provided planning, oversight, and coordination of over \$6M in construction and remodeling projects in a complex arts education institution setting; all projects completed on time.
- Responsible for the supervision of over 60 employees ranging from field operations and clerical personnel to professional/engineering staff.
- Advanced oral and written communications skills.
- Effective in working with multi-cultural, ethnically diverse work force.

9/08 to present:

Public Works Director, Town of Surfside, FL

Job Description:

Provide leadership and direction for the planning, supervision, and coordination of Townwide PW activities, including stormwater, water supply and sanitary sewer infrastructure maintenance, repair and construction. Responsible for managing four operating divisions and a \$9.5M operating budget. Oversight of a \$13M capital improvement budget encompassing a wide variety of projects ranging from seawall repairs to Town-wide replacement of water main lines. Work closely with Town Manager and other department heads on various projects and initiatives. Supervision of in-house solid waste operations, as well as building, landscape, and fleet maintenance functions. Provide oversight and coordination of outsourced municipal engineering services, including infrastructure, roadway and environmental projects.

8/07 to 9/08:

Project Manager/consultant

Hajjar & Associates, Coral Cables, Florida

Job Description:

Coordinate and oversee facilities projects ranging from space build-outs and remodeling to remediation measures aimed at addressing fire, health and safety-to-life deficiencies.

4/01 to 7/07:

Director of Business Affairs and Facilities

New World School of the Arts / Miami Dade College, Miami, Florida

Job Description:

Budget and facilities executive with direct responsibility for a \$5.2M operating budget and two multi-story facilities incorporating 200 thousand square feet of office, arts education, and performance space. Responsible for facilities remodeling and new construction.

2/96 to 12/00:

Director, Public Works Department

City of South Miami, South Miami, Florida

Job Description:

Management and administration of a \$2.5M department comprised of roadway engineering and construction, contract administration, solid waste operations, building, landscape,

and fleet maintenance divisions. Oversight of outsourced parking operations.

RESUME OF FERNANDO J. RODRIGUEZ Page 2 of 2

11/93 to 1/96:

Assistant Director, Parking Department

City of Miami Beach, Miami Beach, Florida

Job Description:

Management and administration of \$6M revenue department. Duties included fiscal management and oversight of field operations, customer service, and developing parking

plans for special events.

10/91 to 10/93:

Assistant Department Head, General Services Administration and Solid Waste

City of Miami Beach, Miami Beach, Florida

Job Description:

Oversight and administration of Central Services (mail room and reproduction), Fleet and Property Maintenance Divisions, Purchasing/Warehouse Division. Additionally, provided

assistance with management and supervision of Solid Waste Division.

9/86 to 9/91:

Supervisor, Productivity Analysis Unit

City of Miami Beach, Miami Beach, Florida

Job Description:

Project leader on studies conducted by the unit, including staffing, organizational, and methods/procedures reviews aimed at efficiency improvement, optimizing resources and cost reduction. Operations analyzed included the solid waste, building maintenance and water divisions, the mayor's office clerical support staff, and the street and street lighting

maintenance operation.

6/83 to 8/86:

Management Engineer, Management and Budget Department

The Port Authority of New York & New Jersey / One World Trade Center, NYC

Job Description:

Conduct industrial engineering studies of facility operations and administrative units.

EDUCATION:

Master of Business Administration - December 1990

Florida International University (Miami, FL)

B.S. Industrial Engineering - May 1983 Columbia University (New York, NY)

B.A. Liberal Arts - May 1982

Columbia University (New York, NY)

CERTIFICATIONS/

TRAINING:

Specification Writing for Government Employees – FL Institute of Government/FAU (11/10)

Understanding Energy Performance Contracting (American Public Works Association)

NPDES - Requirements and Understanding Collections Systems class (APWA - 2009)

Advanced Incident Command Systems Course (2009)

OSHA Regulations (2009)

Grant Writing Best Practices (2009)

SPECIAL SKILLS:

Microsoft Office software, fluent in Spanish.