



## **Introduction**

Wellington's infrastructure consists of its drainage systems, roads, water and sewer systems, parks, recreation facilities, open space, and public buildings and facilities, which are a considerable community investment. Millions of dollars have been invested in the community for Wellington's quality of life. This investment has made Wellington one of the best planned communities in South Florida. The quality and service delivery associated with the infrastructure has a significant effect on the quality of life for Wellington's residents. It contributes to the value of their personal investments in the community, i.e. their homes and businesses. Wellington strives to provide the highest quality and level of service to their residents and businesses for all of its infrastructure, facilities, and related services.

To protect our investment Wellington prioritizes capital improvements to improve our infrastructure and facilities and develop fiscally sound policies for future capital investments.

## **FORWARD**

The purpose of the Public Works Policy and Procedure Manual is to establish guidelines and procedures, which will be followed in the administration of the Public Works Department. Although not meant to cover every circumstance, it is intended to provide employees and the public alike with a greater understanding of the Public Works Department operations.

It is the intent of the Department to update and/or make changes to this document as necessary, at minimum annually.

As Public Works Director, I wish to thank all the staff for their effort in preparing and carrying out the details of this manual.

*Mitch Fleury*  
Director of Public Works

**Village of Wellington  
Public Works Department  
Policy and Procedure Manual**

**PUBLIC WORKS DEPARTMENT  
MISSION STATEMENT**

To enhance and maintain the appearance and infrastructure of Wellington through increased maintenance and planning of capital projects and programs designed to strengthen the underlying systems for roadways, surface water, landscaping, parks, facilities, equestrian trails, fleet and equipment.

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<b>1.</b>	<b>Administration (PWA)</b>	<b>N/A</b>	<b>1-7</b>
<b>2.</b>	<b>Building Maintenance and Custodial Services</b>	<b>Facilities Mgmt., Chapter 17</b>	<b>8-21</b>
<b>3.</b>	<b>Fleet Maintenance</b>	<b>Equipment and Fleet Maint., Chapter 18</b>	<b>22-42</b>
<b>4.</b>	<b>Landscape Maintenance, Aquatics &amp; Sportsfields, Neighborhood Parks, and Equestrian Trails</b>	<b>Parks, Grounds and Forestry, Chapter 19</b>	<b>43-60</b>
<b>5.</b>	<b>Solid Waste</b>	<b>Solid Waste Mgmt., Collections, Recycling and Reuse and Disposal, Chapters 20-23</b>	<b>61-68</b>
<b>6.</b>	<b>Roads</b>	<b>Street Maintenance, Chapter 24 Street Cleaning, Chapter 25 Traffic Operations, Chapter 33</b>	<b>69-107</b>
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## **Chapter 1**

### **Public Works Administration**

#### **Public Works Director, Office Manager and Clerical Support Staff**

##### **Emergency Management**

Public Works Administration plays a vital role in Emergency Management. Wellington must have accurate and verifiable documents for all FEMA reimbursement funding. This could not be accomplished without the Public Works Administration Office.

As Emergency Support Function 3 the Public Works Department provides support in the restoration of critical public services, roads and utilities. When a disaster strikes the Public Works Director serves as the Recovery Branch Manager for the Village of Wellington under the Incident Command System. The Parks, Building Maintenance, Roads, Surface Water and Debris Removal Divisions all report to the Recovery Branch Manager who in turns reports to the Incident Commander.

In the case of a major storm the Recovery Branch Manager will coordinate and execute the 1st Push for debris clearance of major arteries after the “All Clear” notification is given by the EOC. Wellington operates two EOC’s, one located at the Village Hall and the other at the Public Works Complex.

PWA Attachment PWA-100: ICS Organizational Chart

##### **Budget**

The Director’s Office oversees a 9.8 million dollar Public Works Budget with 96 positions and 9 divisions. Each year the Director and Office Manager meet with Managers and Supervisors to prepare a budget based on forecasting, planning and managing expenditures. When the Director is satisfied with all departmental budgets, the final package is prepared by the Office Manager and sent to Finance and for approval by Council as part of the total budget process.

##### **Boards & Committees**

The Operations Supervisor for the Landscape Division is the staff liaison to the Wellington Tree Board, which is a citizen advisory board appointed by the Wellington Village Council. The Office manager assists the liaison and serves as the clerk for the Tree Board. The Tree Board meets the first Wednesday of each quarter, but may have additional meetings or subcommittee meetings periodically.

The Public Works Director attends the Pine Tree Water Control District Board of Supervisors (PTWCD) meetings on a regular basis to provide staff support in regards to any road or surface water management items. An Operations Report is produced and included in the agenda packet.

Attachment PWA-101: Operations Report – Pine Tree Water Control District

### **NPDES Permit and Annual Report Requirements**

The Village of Wellington participates and is part of the Palm Beach County Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Program. This permit allows Wellington (permittee) to discharge storm water from its storm water collection and conveyance system into receiving water(s) owned by the state and/or federal government. There are requirements detailed in the permit and are intended to reduce storm water pollutant discharges into those receiving water bodies.

Palm Beach County MS4 permittees have taken a cooperative approach to permit compliance, jointly conducting several permit activities and collectively developing a number of tools used to carry out the permit programs. Each permit cycle, the lead permittee (Northern Palm Beach County Improvement District (NPBCID)) enters into inter-local agreements with each of the remaining permittees to oversee the joint activities. Wellington participates and enters into an inter-local agreement each permit cycle.

The Annual Report reflecting all the permit requirement activities is compiled and submitted on behalf of the Village of Wellington through the Public Works Administration Office each fiscal year.

Attachment PWA-102: NPDES Annual Report 2012/2013

<W:\Programs\NON-CIP\NPDES\NPDES\2012-2013\12-13 Annual Report & Backup\Wellington NPDES Annual Report 12-13.pdf>

### **On Call/After Hours Emergency Information**

An "On Call/After Hours Contact" list is maintained by the Public Works Administrative Assistant (PWAA) for all departments and contains contact information for each. This list is used to contact the proper employee/supervisor to respond should an emergency arise after hours and/or on weekends.

If the department supervisor assigns an employee to be "On Call" it is their responsibility to make certain the employee can perform emergency work for their department and knows when to contact the appropriate supervisor for further direction or consult. This contact list also includes supervisor and manager contact information.

PWAA periodically checks with each department for any updates to the "On Call/After Hours Contact" list and distributes it through email every six (6) months, unless changes or updates are made and at that time the list will be redistributed, accordingly.

During normal Village of Wellington business hours the appropriate supervisor is to be contacted should an emergency arise. Staff phone directory is posted on the Village Website. All employee contact information including office telephone numbers are listed through the Office Communicator.

Attachment PWA-103: On Call/After Hours Contact

[..\Chapter 17\17.11 Emergency Repairs\On Call-After Hrs Contact List.pdf](#)

Attachment PWA-104: On Call/After Hours Contact Distribution List

[..\Chapter 17\17.11 Emergency Repairs\On Call-After Hrs Contact Distribution List.pdf](#)

### **Mulching Report**

Wellington is permitted through the Solid Waste Authority to have a mulching facility (vegetation storage) at their Public Works Storage Yard located off of 120<sup>th</sup> Avenue along the access road into Village Park.

Wellington has a dumpster (roll- off) at this site for disposal of vegetative material, which in turns is picked up by Waste Management on a regular basis. Waste Management emails a report (Roll Off Revenue Report) to the Office Manager on a monthly basis showing the number of 30 yard dumpsters removed from the site and material disposed of.

A monthly compliance report (Recycling Facility Monthly Report) is completed recording any landscape material taken to this site. Processed and unprocessed material is recorded separately along with total retained at site, if any. This report is submitted to Solid Waste Authority on a monthly basis.

Attachment PWA-105: Roll Off Revenue Report

Attachment PWA-106: Recycling Facility Monthly Report

### **SWAMP Report (Surface Water Action Management Plan)**

The Public Works Administrative Office is responsible for compiling and distributing the monthly SWAMP Report in accordance with the South Florida Water Management District's General Permit.

Monthly report consists of the following:

- Report Letter
- Pump Station and Rainfall Data
- Canal Water Level Readings
- SFWM Report

The SWAMP Report letter can be located: [W:\Programs\NON-CIP\SWAMP\Monthly letters](#)

The Surface Water Management Division collects the pump station and rainfall data utilizing SCADA system and transfers the information into the appropriate and corresponding month's spreadsheet: [W:\Programs\NON-CIP\SWAMP\2014](#)

Canal Level Reading data is entered into an Excel document: [W:\Programs\NON-CIP\SWAMP\Water Levels](#)

The SFWM Report is produced on a monthly basis by Wellington's Lab Technician for the testing of discharge samples.

Report is distributed to persons referenced on the monthly letter and the copy of the report is scanned and filed in Laserfiche in *Wellington\Department Files\Operations/Public Works\Reports\Swamp Reports* in the appropriate year.

## **Fuel Cards Distribution**

### **Authorized Signers**

- A Palm Beach County Fleet Management Division User Department Authorized Signer Sheet must be completed for each person authorized to request new/replacement fuel cards.
- The employee being authorized must sign the sheet.
- The Public Works Director must sign as the authorized signature on behalf of the requesting government entity.
- The signer sheet is then scanned and sent to Karen Jones at: [krjones@pbcgov.org](mailto:krjones@pbcgov.org) for processing by the Palm Beach County Fleet Management Division. (PBCFMD)

### **Fuel Cards**

- Wellington's gasoline, diesel and propane pumps are located at the Public Works Complex and are overseen by the Fleet Maintenance Division. Wellington supplies gasoline for the use in Village owned vehicles and equipment for Village business only. Wellington has agreed to allow the Palm Beach County Sheriff's Office and the Boys and Girls Club to fuel at Village fuel pumps on a reimbursement basis only. These entities are invoiced on a monthly basis for the fuel they use.
- The gasoline pumps can only be operated by a card reading system; these cards are issued to all Wellington vehicles and drivers. When fueling a vehicle the white card is inserted first to identify the vehicle, followed by the blue card to identify the driver/user. The system will then ask the driver/user to enter the odometer reading and choice of pump. The driver/user is then free to fuel their vehicle.
- All Wellington vehicles and drivers/users are issued a fuel card to be used at the gasoline pumps located at the Public Works Complex. Vehicle cards are white and are to remain in the vehicle that the card was issued to.
- Driver/user cards are blue and should remain with the driver/user and not to be stored in the vehicle as the driver/user as the driver/user may have to drive another vehicle and may need to

fuel it. Also, the driver/user card is a personalized card designate only to the person whose name is listed on it; NO ONE ELSE IS AUTHORIZED TO USE ANOTHER DRIVER/USER'S CARD.

In the event an employee leaves the employment of the Village for any reason the driver/user card must be returned to Public Works.

All departments are issued a small equipment card for filling gasoline containers and small equipment such as riding lawn mowers, generators, pressure cleaners, etc. If for any reason an employee does not have a card and needs gasoline they should see the Fleet Maintenance

### **Fuel and Maintenance Transaction Processing**

- The Office Manager receives a text file (raw data of fuel transactions) from PBCFMD via email of all Wellington vehicle fuel transactions by the 10<sup>th</sup> of the month for the previous month's transactions.
- File is saved to the Q Drive and imported into Naviline.
- Report is generated and reviewed for any errors that must be resolved before further processing.
- Report also shows all warnings, which are reviewed to determine if there is reasonable explanation and if necessary he/she contacts the appropriate supervisor for further information or clarification on a specific warning. Appropriate comments are noted on the reports explaining and/or documenting the clarification on the warning, if necessary.
- Once all warnings have been reviewed and corrected within reason, transactions are posted into Fleet Module in Naviline and then into GMBA. If posting into Fleet during the work day while the Fleet Maintenance Division is utilizing the system, posting into GMBA must be done the following day prior to any transaction by the Fleet Maintenance Division.
- All reports generated during this processing are forwarded to the Finance Department.

See Fuel Card and Transaction Procedure for processing details.

Attachment PWA-107 Fuel Card and Transaction Procedure

### **Work Requests – Public Telephone Calls and/or Walk-Ins**

Work requests are processed through the Naviline SunGard and assigned to the appropriate division and contain the following information:

- Requestor's name and contact information
- Explanation of work requested

- If the request is a safety issue, the appropriate supervisor and/or their crew are notified immediately.
- An email is automatically sent notifying the supervisor or his/her designee of the work request.

Attachment PWA-108 Work Request Procedures

[..\PW Administration\WORK REQUEST PROCEDURES.pdf](#)

## **Supplies**

General office supplies are maintained for all Public Works Divisions housed at the Public Works Complex. Supplies are centrally located in the administrative office's copy room.

Office supplies are inventoried on a regular basis and ordered, as needed through the appropriate vendor.

Copy paper is supplied through the IT Department, and email is used to support communication. Fax machines, copiers and printers are restocked each morning and as needed throughout the course of the workday. Copier toner is supplied through the Clerk's Office, and print toner through Support Service.

## **Requisitions and Purchase Orders**

The majority of purchase order requisition forms are processed through the administrative office by the request of a Public Works supervisor, manager or director, or his/her designee. A Purchasing Request Form is completed by the requesting supervisor and submitted to office personnel for processing through SunGard Naviline Purchase Order Module, including information such as vendor name, GL and project number, and contracts or quotes as necessary.

Quotes are scanned into: [W:\Departments\Purchasing\Purchase Orders](#) in the applicable year.

Once the information is entered into Naviline, the Public Works Manager and appropriate Operations Manager are then notified for approval via email and provided the GL number being used, the vendor, the total requisition amount, and comments.

Scan in the Purchase Order Requisition form and place in [W:\Departments\Public Works\Purchase Order Backups](#) under the appropriate year and supervisor.

Once a requisition has been processed and approved, the Purchasing Department issues a purchase order and the processor is notified via email. Processor emails the appropriate supervisor the Purchase Order information.

Create a new folder with the Purchase Order number and vendor name in the title, and place the original requisition file within. All future invoices for this purchase order are also placed into this folder.

Attachment PWA-109 Purchasing Request Form  
[..\PW Administration\Purchasing Card Request Form.pdf](#)

### **Faxes**

The fax machine is checked frequently throughout the workday and faxes are distributed to the appropriate employee or placed in the appropriate mailbox.

### **Road Hauling Permits**

Road Hauling Permits are processed through the Public Works Administrative Office to ensure that unpaved roads are not damaged.

Applicants complete the Public Works Permit Application Form ([W:\Departments\Public Works\Permits\Hauling Permits\Hauling application form.pdf](#)) and submit it for review and approval through office personnel. Information is recorded in the Excel Spreadsheet located in: [W:\Departments\Public Works\Permits\Hauling Permits](#) and is issued a permit number. It is then routed to the Roads Supervisor or his/her designee for review and approval.

The Roadway Supervisor returns the application form to the office personnel to process and notify applicant of the approval status. Approved applications may be faxed or emailed back to the applicant, if requested.

Attachment PWA-110: Public Works Permit Application Form  
[..\PW Administration\PW Permit Application Form.pdf](#)

### **Visa Receipt Processing**

The Village of Wellington Purchasing Department oversees the Purchasing Card Program with procurement responsibility delegated to each department. Procedures and responsibilities are explained and documented in the Purchasing Card Procedures Manual.

Attachment PWA-111 Purchasing Card Procedure Manual  
[..\PW Administration\P- Card Procedures Manual - Updated August 2011.pdf](#)

Attachment PWA-112 Step by Step Procedure Instructions for Processing Purchasing Card (Visa) Receipts

### **General Files**

Files are stored in an applicable folder, which are located on the W drive, Laserfiche, or a physical folder in the Public Works Administrative Office.



## **Chapter 2**

# **Building Maintenance & Custodial Services**

### **APWA “Facilities Management” Chapter 17**

The Building Maintenance Division provides general maintenance for almost every aspect of the Village of Wellington facilities, which includes regular maintenance and repair of buildings, equipment and control systems, maintenance, repair and replacement of building components and equipment.

Building Maintenance conducts preventative maintenance, small and large remodeling projects, maintenance, installation and troubleshooting of electrical power and lighting systems, air conditioning and chiller repair and maintenance, and janitorial maintenance for all Wellington facilities. The majority of the work is scheduled through the Naviline SunGard work order system and is prioritized by immediate needs, schedules and current work load.

Janitorial maintenance is performed on building interiors and exteriors with the application of products and chemicals necessary for sanitation and hygiene.

Repairs and minor alterations of existing facilities includes remodeling, painting, sign work, hardware, additions to/or modifications to existing facilities, installation of departmental equipment, etc.

Services to assemble and place new furniture and equipment and/or move departmental offices and equipment are available and are requested through the SunGard Naviline Work Order/Facility Management system noting specific times and dates the relocation is to occur.

#### **Regulations (APWA 17.1)**

The Building Maintenance Division adheres to all federal, state and local building codes, regulations, ADA guidelines and environmental law. Wellington’s Code of Ordinances and Building Codes Regulations are followed with any and all remodeling or minor construction projects. All new construction is initiated through Wellington’s Engineering Department.

Please see the following link to Wellington’s Building Regulations:

[http://library.municode.com/HTML/13115/level2/PTIICOOR\\_CH18BUBURE.html](http://library.municode.com/HTML/13115/level2/PTIICOOR_CH18BUBURE.html)

The handling and disposal of hazardous materials such as: radon and asbestos are performed by a qualified contractor and Florida Department of Environmental Services shall be notified.

Please see Fleet Maintenance, Section 18.16 Fuels and Liquids Inventory for monitoring of underground storage tanks.

Handling, storage and disposal all hazardous materials and/or supplies are per Safety Data Sheet instructions.

A Freon recovery system is utilized by both the Fleet Maintenance (18.18 Parts and Materials Disposal) and Building Maintenance divisions when addressing air conditioning issues. See Attachment 17-104: Refrigerant Recovery Procedure.

Attachment 17-100: Wellington's Building Regulations

[..\Chapter 17\17.1 Regulations\Building codes & regulations.pdf](#)

Attachment 17-101: Sample – Approved Building Permit

[..\Chapter 17\17.1 Regulations\Approved Building Permit.pdf](#)

Attachment 17-102 and 17-103: Samples – Safety Data Sheets

[..\Chapter 17\17.1 Regulations\Safety Data Sheet-aerosol adh.pdf](#)

[..\Chapter 17\17.1 Regulations\Safety Data Sheet-bathroom cleaner.pdf](#)

### **Plan Reviews (APWA 17.2)**

Plan reviews are conducted by the Engineering and/or Building Department. The Building Maintenance Supervisor is consulted on preliminary design plans for operational input.

### **Inventory (APWA 17.3)**

Building Detail Report Sheets are kept on all Wellington building structures. These sheets contain major components in each of the building structures

#### **Municipal Complex**

- Village Hall
- Lake Wellington Professional Center

#### **Olympia Park**

- Concession Stand Pavilion #1
- Concession Stand Pavilion #2
- Smaller Utility Building
- Larger Utility Building

#### **PBSO**

- PBSO Gym and Breakroom
- PBSO Substation – PBSO Offices

#### **Public Works Complex**

- (Adjacent to PBSO Gym) - Pavilion
- Administration
- EOC Annex/PBSO
- EOC Shop Building
- Fleet Maintenance (including covered parking)
- Fuel Pump Shelter

- Mechanic Shop Shelter
- Sign Shop
- Village Clerk/Scanning

### **Tiger Shark Cove**

- Baseball Park Concession Stand
- Pavilion

### **Village Park**

- Baseball Park Concession Stand
- Football Concession Stand
- Gym
- Roller Hockey Rink
- Roller Hockey Concession Stand
- Soccer Fields Concession Stand #1
- Lacrosse Building
- Parks Operations Facility Break Room/Maintenance Building

### **WCC**

- Aquatics Center
- Aquatic Center Filter/Pump Building
- Boat House Pavilion
- Main Club House
- Pier
- Waterslide Restroom Building

### **Additional Locations**

- Community Services Office
- Community Park – Old B&G (currently used for storage)
- Boys & Girls Club (New)

Building Detail Sheets are located and can be found: <W:\Departments\Public Works\APWA\17.3 Inventory>

### **Entrance Walls**

The Building Maintenance Supervisor or his/her designee oversees the construction of Wellington Entrance Walls and various subdivision entry wall/features as performed by outside contractor and/or in-house staff. Such walls are maintained by the Building Maintenance division.

Entry Wall Inventory Spreadsheet can be found: <..\17.3 Inventory\Entrance Walls, Signs & Info Sign Inventory Maint List.xls>

Entry Wall Detail Sheets are located and can be found: <..\17.3 Inventory\Entry Wall Details\001 All Entry Walls and Signs.docx>

## Informational “Wayfarer” Signs

- Forest Hill Boulevard
  - Four 8-Pack
  - One 4-Pack
- Stribling Way
  - One 8-Pack
  - One 6-Pack
- Lake Worth Road
  - Two 8-Pack
  - One 6-Pack
- South Shore Boulevard
  - Two 6-Pack
  - One 4-Pack
- Paddock Drive
  - One 8-Pack
- Binks Forest Drive
  - Two 8-Pack

## Double Horsehead Signs

- Southern Boulevard and Binks Forest Drive
- Southern Boulevard and Big Blue Trace
- Southern Boulevard and Forest Hill Boulevard
- Forest Hill Boulevard and Country Club Road
- Forest Hill Boulevard and Side Entrance to Wellington Green Mall
- Stribling Way west of 441
- Lake Worth Road east of Grand Isles

The Building Maintenance Division is responsible for the construction, maintenance and all electrical components for the entrance walls throughout Wellington.

1. An entry wall or feature with signage shall be for the purpose of identifying the development and shall only provide the name of the subdivision and primary address numbers.
2. A sign shall not be placed on fences or walls in any residential zoning district except a development identification sign located at an entrance and placed on an entry wall or feature in that development.
3. Sub-division or development entry feature walls shall comply with the following requirements:
  - **Size and Location:** Signage may consist of a maximum of two (2) signs per entranceway and shall be located:

- a minimum of five (5) feet from any property lines; and
  - within one hundred (100) feet of any access point
  - **Easements and Rights-of-Way:** Signage shall not be located within any street right-of-way utility easements, unless approved by the Village Engineer, the Planning, Zoning & Building Department, and with written permission of the utility company or companies holding interest in the easement on the
  - **Size:** Signs located on entrance walls or features shall comply with the size limitations listed below.
4. Signs shall not exceed eight (8) feet in height and the surface area of the sign shall not exceed thirty-two square feet per entrance wall or feature.
  5. A maximum of two (2) lines of copy may be permitted if the combined lettering height does not exceed thirty-two square feet per entrance wall or feature.
- Logos utilized in an entry sign shall not exceed twenty-four (24) inches in height.

Attachment 17-104: Sample of Building Detail Report Sheets

[..\Chapter 17\17.3 Inventory\Building Detail Information](#)

Attachment 17-105: Sample of Entry Wall Detail Report Sheets

[..\Chapter 17\17.3 Inventory\Entry Wall Details](#)

Attachment 17-117: Sample of Double Horse Head Signs Sheet

[..\Chapter 17\17.3 Inventory\Entry Wall Details\Sample of Double Horse Head signs.docx](#)

Attachment 17-118: Entry Walls, Signs, & Info Sign Inventory Maintenance List

[..\Chapter 17\17.3 Inventory\Entrance Walls, Signs & Info Sign Inventory Maint List.xlsx](#)

Attachment 17-131: Inventory Maps

[..\Chapter 17\17.3 Inventory\Double HorseHead Sign Location Map.pdf](#)

[..\Chapter 17\17.3 Inventory\Wayfarer Sign Location Map.pdf](#)

#### **Condition Assessment (APWA 17.4)**

Wellington's Facility Safety Inspection Checklist and Corrective Action Plan adopted OSHA Standards 29 CFR, Part 1910, as a guideline for this plan.

Inspections are to be conducted on a quarterly basis, at a minimum to identify needed repairs and evaluate the condition of the building and its components. Completed checklists (inspections) are recorded through City Reporter Software through IPads. These checklists are retained and filed into Laserfiche.

Attachment 17-106 – Sample of Facility General Inspection & Condition Reports

[..\Chapter 17\17.4 Condition Assessment](#)

#### **Component Replacement (APWA 17.5)**

Major components are tracked through the Building Detail Report Sheets (Section 17.3 Inventory) and maintained through periodic operational checks.

The general practice of component maintenance is to continue to repair until a determination is made to budget for a scheduled replacement.

Scheduled replacement of major components is determined by the Building Maintenance Supervisor and/or Grounds and Facilities Manager. This determination takes into consideration the number of repairs in a relative time-period, repair costs and current condition of said component. Once a determination is made a line item is included in the appropriate Fiscal Year budget planning cycle.

The following attachments are samples of Various Operational Inspections (PMs, Facility Inspections, etc.):

Attachment 17-107: AC Maintenance Checklist

[..\Chapter 17\17.5 Component Replacement\AC Maintenance checks.pdf](#)

Attachment 17-108: Janitorial Service Inspection

[..\Chapter 17\17.5 Component Replacement\Janitorial Cleaning Inspection checklist.pdf](#)

Attachment 17-109: Facility General Inspection & Condition Reports

[..\Chapter 17\17.5 Component Replacement\Facility Gen.&Insp and Condition Reports.pdf](#)

### **Request for Maintenance (APWA 17.6)**

The majority of the work provided by Building Maintenance is scheduled through Naviline SunGard work request system. The work is then prioritized based on the immediate needs, schedules and current workloads determined by the supervisor.

Upon completion of the work, the technician will complete the work order and enter all pertinent and related information on the request/work order (print out) and return it to their supervisor within 24 hours of completion. The supervisor will review the information provided for accuracy and then the information will be entered into the system.

In the event that work cannot be completed in the requested time or within (10) business days, the supervisor will notify the requestor and inform them of the reasons that the service requests will be delayed and provide them with an estimated time of completion.

Any unscheduled work will be documented through the SunGard Naviline Work Order/Facility Management system.

#### **1. External (Public) Requests**

Calls and/or walk-in request are received by a Village representative (i.e.: Call Center or Receptionist). A work request is initiated in the Work Order/Facility Management system and an electronic notification is sent immediately to the appropriate division supervisor (Requesting Department) and the work request/job order is automatically printed on supervisor's assigned printer.

## 2. Internal Requests

Employee processes a work request through the Work Order/Facility Management system and an electronic notification is sent immediately to the appropriate division supervisor and automatically printed on supervisor's assigned printer.

## 3. Assignment of Work

The appropriate division supervisor reviews the work request and assigns the work request (job order) to a technician for completion. The priority classification (work type: Emergency, Routine, Schedule) will be requested by the person entering the work request but final determination will be the responsibility of the division supervisor and will be adjusted accordingly, if necessary.

## 4. Work Type Designation

### Emergency

Valid emergency requests are processed immediately and should be requested by telephone or in person to appropriate division supervisor and/or manager. A work request is still required but can be completed at the appropriate time. When the supervisor/manager is contacted with an "Emergency" request, the following information will be provided:

- Department calling
- Name of person to contact in that department
- Reason for urgent call and response

Work Type (priority classification) assigned to the requests will normally be determined by the person requesting the service, but the appropriate division supervisor and/or manager will review and make any necessary changes.

The following information should be provided on the Work Request, by the person originating the request for service:

- Requestor Name (person requesting )
- Requesting Department (department requesting)
- Request Origin (internal staff, customer on phone, in person, emails, etc.)
- Request Category (assigned department)
- Work Type (priority designation)
- Requested Completion Date
- Short Description (location and description of the problem)
- Detailed Description (if needed)

Upon completion of the work, the technician will complete job order and enter all pertinent and related information on work request/job order (print out) and return it to his/her supervisor within 24 hours of completion. Supervisor will review for accuracy and information will be entered into the electronic work request.

In the event that a work request cannot be completed in the requested time or within ten (10) business days, the assigned department will notify the requestor originator or department manager and inform them of the reasons that the service request will be delayed and provide them with an estimated time of completion. It is the responsibility of each division supervisor to follow-up on such situations, as needed and personally contact the request originator or department manager, if necessary.

Attachment 17-110: Samples of Work Requests

[..\Chapter 17\17.6 Request for Maintenance\Work Request.pdf](#)

Attachment 17-114 Work Request Processing Procedures

[..\Chapter 17\17.6 Request for Maintenance\Work Request Processing Procedure.docx](#)

### **Repair and Maintenance Quality (APWA 17.7)**

Standards contained in the Statewide Florida Building Codes and Wellington Ordinances are applied to all properties.

Repair and maintenance activities are facilitated through the Naviline SunGard work order system and distributed by the Building Maintenance Supervisor to the proper staff to complete the work. All repairs and maintenance are documented on the work order and returned to the Supervisor, who will in turn inspect the repair or maintenance work and close out the work order if all is satisfactory.

Please see Section 18.1 Regulations for the following attachment:

Attachment 17-100: Wellington's Building Regulations

[..\Chapter 17\17.7 Repair & Maint Qlty\Building codes & regulations.pdf](#)

Attachment 17-111: Samples of Work Requests with ref. to Building Codes

[..\Chapter 17\17.7 Repair & Maint Qlty\work req w-ref to building codes.pdf](#)

Attachment 17-112: Sample of completed Work Request

[..\Chapter 17\17.7 Repair & Maint Qlty\work requests completed.pdf](#)

### **Preventative Maintenance (APWA 17.8)**

Preventive Maintenance is that portion of the overall maintenance program that provides daily and periodic operational checks (inspections) and regular maintenance schedules, which address various features of the facilities, such as paint, A/C, lights, roof, plumbing, etc., adjustment, minor repair, lubrication, reporting and data recording necessary to minimize building equipment and utility system breakdown and maximize system and equipment efficiency.

Preventive Maintenance:

- Utilizes planned services, inspections, adjustments, and replacements designed to ensure maximum utilization of equipment at minimum cost
- A program in which wear, tear, and change are anticipated and continuous corrective action is taken to ensure peak efficiency and minimum deterioration.
- includes cleaning, adjustment, lubrication, minor repair, and parts replacement

The building maintenance division has developed a cleaning inspection schedule and regular maintenance schedule, which includes a life expectancy for various features of the facility, such as paint, A/C, lights, and roof.

Please Section 17.5 Component Replacement for the following attachments:

Attachment 17-107: AC Maintenance Checklist

Attachment 17-108: Janitorial Service Inspection Schedule

Attachment 17-109: Facility General Inspection & Condition Reports

### **Preventative Maintenance Schedule (APWA 17.9)**

The purpose of preventive maintenance is to protect the public's investment by effective managerial functions, and cost effective measures by planning future requirements and establishing effective reporting procedures to increase the level of productivity and response. To insure a safe and healthy work environment to all visitors and Village staff.

Wellington's Building Maintenance Department has daily planned procedures for facilities to maintain and prolong all facilities.

### **Emergency Repair Program (APWA 17.10)**

The operations supervisor and/or Facilities and Grounds Manager are notified of the building system emergency and will notify the appropriate technician to respond immediately. Upon arrival the technician will assess the situation and make necessary repairs. If the damage is too excessive an outside contractor will be deployed.

Valid emergency requests are processed immediately and should be requested by telephone or in person to appropriate division supervisor and/or manager. A work request is still required but can be completed at the appropriate time. When the supervisor/manager is contacted with an "Emergency" request, the following information will be provided:

- Department calling
- Name of person to contact in that department
- Reason for urgent call and response
- Inspection if required
- Creation of work order

This section is additionally covered in Section 17.6 Request for Maintenance.

Attachment 17-114 Work Request Processing Procedures

<..\Chapter 17\17.10 Emgy Repair Program\Work Request Processing Procedure.docx>

## **Emergency Repairs (APWA 17.11)**

An "On Call/After Hours Contact" list is maintained by the Public Works Administrative Assistant (PWAA) for all departments and contains contact information for each. This list is used to contact the proper employee/supervisor to respond should an emergency arise after hours and/or on weekends.

If the department supervisor assigns an employee to be "On Call" it is their responsibility to make certain the employee can perform emergency work for their department and knows when to contact the appropriate supervisor for further direction or consult. This contact list also includes supervisor and manager contact information.

PWAA periodically checks with each department for any updates to the "On Call/After Hours Contact" list and distributes it through email every six (6) months, unless changes or updates are made and at that time the list will be redistributed, accordingly.

During normal Village of Wellington business hours the appropriate supervisor is to be contacted should an emergency arise. Staff phone directory is posted on the Village Website. All employee contact information including office telephone numbers are listed through the Office Communicator.

This section is additionally covered in PWA Section: On Call/After Hours Emergency along with the following attachments:

Attachment PWA-103: On Call/After Hours Contact

<..\Chapter 17\17.11 Emergency Repairs\On Call-After Hrs Contact List.pdf>

Attachment PWA-104: On Call/After Hours Contact Distribution List

<..\Chapter 17\17.11 Emergency Repairs\On Call-After Hrs Contact Distribution List.pdf>

## **Energy Consumption Reports (APWA 17.12)**

Energy consumption reports are requested through Florida Power and Light periodically. This report outlines recommendations, cost of recommendations, annual energy savings, potential rebates, and return on investments in years. Additionally, FPL provides general comments for each building, citing ceiling tiles that need replacement, holes that need to be sealed, fixtures and lamps that need cleaning, etc. and includes a comprehensive chart comparing dollars spent by month for current and previous years. Internal review of this report is completed by the Operations Supervisor and/or Facilities and Grounds Manager or his/her designee.

Energy Usage Reports are kept on each applicable structure within the building inventory on a monthly basis. These reports are reviewed by the Operations Supervisor and/or Facilities and Grounds Manager or his/her designee for any inconsistencies, changes, etc. Review findings may be included as documentation for recommendations for operational and/or equipment changes.

Attachment 17-113: Energy Consumption/Usage Reports

<..\Chapter 17\17.12 Energy Consumption Reports\Energy Usage Reports 2012-2014.xlsx>

## **Testing Alarms (APWA 17.13)**

### **Building Security**

It is the responsibility of each department to secure all facilities, equipment, materials and other resources under their control/jurisdiction. Security begins in each department and with each person participating to some degree.

In a municipality there is a need to balance the accessibility and use of facilities with the need to provide a safe and secure environment. Convenience must sometimes be compromised in order to maintain security. Each employee must share in the responsibility to assure security for all employees, residents and property.

The Village of Wellington maintains a locking system for the protection of its employees, facilities, property, and information. All mechanical locks, keys, electronic identification cards and access codes are the sole property of the Village of Wellington and will be issued to employees based on their need for access. The Village reserves the right to change locks, keys, and access codes as needed.

No one may place a lock on a Village facility, interior or exterior, or transfer their keys to another person without the express permission of their Supervisor, or their designee.

All keys and electronic identification cards must be returned to The Village of Wellington upon termination of employment.

### **Testing and Maintenance of Alarm Systems**

All fire alarm systems are monitored and tested per local building code on an annual basis by the monitoring company. Testing and maintenance documentation is kept on site for each system.

Access to Wellington facilities are electronically controlled and maintained by Wellington's IT Department. All mechanical locks are maintained by Wellington's Public Works Department.

Attachment 17-115: Alarm Inspection & Testing Report

[..\Chapter 17\17.13 Testing Alarms\Alarm Inspection & Testing Report.pdf](#)

Attachment 17-116: Fire Alarm Inspection & Testing Report

[..\Chapter 17\17.13 Testing Alarms\Fire Alarm Inspection & Testing Report.pdf](#)

### **Custodial Services**

#### **Custodial Methods (APWA 17.14)**

Wellington's Custodial Staff maintains Wellington owned buildings both interior and exterior. Each complex has a pre-determined cleaning schedule and building inspection form and comment section that is completed either manually or electronically.

These reports are reviewed by the Custodial Services Supervisor and any comments or safety issues are addressed.

All safety issues that do not fall into the emergency category are processed to work orders for the Building Maintenance Division to correct. By using best practices as described in the Wellington Cleaning Policies and Practices Manual along with the proper cleaning agents, Wellington's Custodial practices meet all federal, state and local health codes. All cleaning products are environmentally friendly and purchased in the most cost effective way.

Please Section 17.5 Component Replacement for the following attachments:

Attachment 17-107: AC Maintenance Checklist

Attachment 17-108: Janitorial Service Inspection Schedule

Attachment 17-109: Facility General Inspection & Condition Reports

Attachment 17-119: Cleaning Policies and Practices

<..\Chapter 17\17.14 Custodial Methods\Cleaning Policies & Practices.pdf>

Attachment 17-120: Cleaning Schedules

<..\Chapter 17\17.14 Custodial Methods\Cleaning Schedule.pdf>

Attachment 17-121: Daily Cleaning Checklists

<..\Chapter 17\17.14 Custodial Methods\Daily Cleaning Checklists.pdf>

### **Custodial Inspection (APWA 17.15)**

Inspections of facilities are conducted on a regular basis by the Building Maintenance Custodial Trades Crew Chief to assure custodial methods are being followed. Input from all custodial staff is encouraged and taken into consideration for possible adjustments.

Attendees of programs conducted by the Parks and Recreation Department are asked to complete a Program Evaluation Form and one of the questions is, "The facilities were clean and well maintained." This gives us the input of the participant using the facilities.

Please Section 17.5 Component Replacement for the following attachments:

Attachment 17-108: Janitorial Service Inspection Schedule

Attachment 17-109: Facility General Inspection & Condition Reports

Attachment 17-122: Sample of Program Evaluation Forms

<..\Chapter 17\17.15 Custodial Inspections\Program Evaluation Forms.pdf>

### **Supply Inventories (APWA 17.16)**

Custodial storage areas are inventoried and maintained by the Building Maintenance Custodial Trades Crew Chief. A cleaning supply inventory is completed on a monthly basis.

Supplies are distributed bi-weekly by the Building Maintenance Custodial Trades Crew Chief and a cleaning supply usage list is maintained for all facilities and tracked by product and monthly usage.

Attachment 17-123: Monthly Cleaning Supply Inventory

[..\Chapter 17\17.16 Supply Inventories\Monthly Cleaning Supply Inventory.pdf](#)  
Attachment 17-124: Cleaning Supply Usage Listings and Dispenser Usage Listing  
[..\Chapter 17\17.16 Supply Inventories](#)  
[..\Chapter 17\17.16 Supply Inventories\Dispenser Usage Listing.pdf](#)

### **Life and Safety Systems (APWA 17.17)**

Inspection and maintenance of the following facility components are completed by an outside vendor(s):

- Elevators
- Fire alarms
- Sprinklers
- Emergency fire extinguishers
- A200 Fire Suppression System
- Lightning Prediction and Warning Systems

Emergency generators are tested on a monthly basis by the Fleet Maintenance Division (Please Section 18.28 Emergency Generators for additional information).

In addition, through the general inspection process various safety systems (i.e.: Exit lights, Emergency lighting, Fire Alarm signs, etc.) are inspected and documented on the General Inspection Form (IPad).

Attachment 17-125: Elevator Maintenance Agreement

[..\Chapter 17\17.17 Life & Safety Systems\Elevator Maintenance Agreement.pdf](#)

Attachment 17-126: Emergency Fire Extinguisher Service Agreement

[..\Chapter 17\17.17 Life & Safety Systems\Emgy Fire Ext Service Agreement.pdf](#)

Attachment 17-127: Fire and Sprinkler Test and Inspection Agreements

[..\Chapter 17\17.17 Life & Safety Systems\Fire & Sprinkler Test & Insp Agreement.pdf](#)

Attachment 17-132: Lightning Prediction and Warning Systems Agreement

[..\Chapter 17\17.17 Life & Safety Systems\Fire Systems Agreement WCC& Recreation.pdf](#)

Attachment 17-133: Sample of General Inspection Forms

[..\Chapter 17\17.17 Life & Safety Systems\Sample of General Inspection Forms.pdf](#)

### **Security (APWA 17.18)**

It is the responsibility of each department to secure all facilities, equipment, materials and other resources under their control and /or jurisdiction. Security begins in each department with each person in the department participating to some degree.

Wellington's security system includes, but is not limited to “electronic building access” to all buildings and is monitored by an outside monitoring company. Identification badges (ID) are issued through the IT Department for each employee and access is assigned on a need to have access basis as determined by their reporting supervisor. As outlined in the Employee Manual, Section II: General Employment, “Identification Badges.” Access to buildings and hours of access are the determination of the supervisor, but it is the employee’s responsibility to secure his/her access badge at all times. It is also the employee’s responsibility to report a lost or stolen

identification badge to his/her immediate supervisor and the IT Department. A law enforcement report may be required and will be the determination of the immediate supervisor and IT Department.

Keyed entry is a secondary security system to some buildings where electronic building access exists and primary to ancillary buildings, such as sportsfields, concession stands, pump stations, storage sheds, etc.

Please refer to the Key & Building Security Policy for standard operating procedure.

The Public Works Complex is protected by chain link fencing and electric gates that are accessed by the use of the electronic badge. The complex also has seven (7) cameras to monitor activities throughout the complex.

Attachment 17-128: Employee Manual, Page 3-4

[..\Chapter 17\17.18 Security\Empl Manual, P3-4 ID Badges.pdf](#)

Attachment 17-129: Key & Building Security Policy

[..\Chapter 17\17.18 Security\Key & Building Security Policy.docx](#)

Attachment 17-130: Key Distribution Form

[..\Chapter 17\17.18 Security\Key Distribution Form.pdf](#)

### **Holiday Decorations (APWA 17.19)**

- All decorations (draperies, hangings, wreaths, holiday trees, scenery and all related materials) must be non-combustible materials or must be treated chemically to be flame retardant.
- Natural trees should be freshly cut and mounted in a tree stand with water and kept away from heat sources.
- Water level should be checked and maintained on a regular basis (preferably daily).
- Nothing may be placed in front of an exit or corridor; an exit includes all aisles, stairways, and doors leading to a public area.
- Open candles are not permitted in any public area.
- Use only grounded and/or UL approved electrical devices and follow the manufacturer's instructions for safe operation.
- Check for frayed cords, loose connections, or cracked wires and sockets.
- Do not use electric lights on metallic trees because they short and could become energized and cause electrical shock.
- Before leaving buildings at the end of the workday or holidays all lights and electrically operated devices should be shut off.

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## **Chapter 3 Fleet Maintenance**

### **APWA “Equipment and Fleet Maintenance” Chapter 18**

The Wellington Fleet Maintenance Division is a vital part of the cost of service provided to our residents along with the productivity of nearly every employee in Wellington. Fleet Maintenance provides support maintenance of our infrastructure so our residents can enjoy an excellent quality of life.

Fleet maintenance maintains and repairs all of the Village’s vehicles and equipment and maintains everything in safe operating condition to ensure the safety of all employees, the residents of Wellington, and the public in general.

Fleet Maintenance performs a wide variety of preventive maintenance and repairs to Wellington’s Fleet. Maintenance includes safety inspections of vehicles & equipment, oil changes; tire replacement, proper tire air pressure, and proper function of all controls, tune-ups, brakes, proper fluid levels, alignments, AC diagnoses & repair, and overall condition of the fleet.

Fleet also maintains and repairs all of Wellington’s backup generators which are critical for maintaining power to Wellington’s facilities and lift stations in a power outage.

#### **Technician Qualifications (APWA 18.1)**

At the discretion of the Equipment and Fleet Maintenance Supervisor (FMS) technicians and crew chief will obtain training, licenses and certifications necessary to perform the functions of the job. All certifications and training certificates are kept on file in Human Resources.

Attachment 18-100 and 18-101: Maintenance Technician Job Descriptions

[..\Chapter 18\18.1 Technician Qualifications\Maintenance Technician I.docx](#)

[..\Chapter 18\18.1 Technician Qualifications\Maintenance Technician II.docx](#)

Attachment 18-102 Trades Crew Chief Job Description

[..\Chapter 18\18.1 Technician Qualifications\Trades Crew Chief.docx](#)

#### **Authority for Repair and Maintenance (APWA 18.2)**

Maintenance Technician and Trades Crew Chief job descriptions outline the qualifications required to perform maintenance and repairs functions.

Attachment 18-103: Organization Chart

[..\Public Works Org Chart as of 12-17-14.pdf](#)

See Section 18.1 for:

Attachment 18-100 and 18-101: Maintenance Technician Job Descriptions

Attachment 18-102 Trades Crew Chief Job Description

### **Operator Inspection (APWA 18.3)**

Vehicles owned by the Village of Wellington will have a primary responsible custodian or division.

No vehicle operator shall install or allow to be installed, any additional electrical or electronic equipment such as stereo, CB's lights, light chargers, and radio chargers in any Wellington owned vehicle/equipment. Equipment of this type will be authorized by the Public Works Director and Fleet Maintenance Supervisor and will only be installed by Fleet Maintenance or an approved vendor.

Thanks to the vehicle replacement program Wellington's fleet is exceptional. Operators need to take time to clean assigned vehicles and/or equipment. This not only projects a positive image but makes for a pleasant working environment to drive and use. If an employee (operator) does not have time to clean the vehicle, they should ask their supervisor to allow time for such tasks.

### **Inspecting Your Vehicle**

It doesn't take long to inspect a vehicle. Operators are not expected to perform maintenance on a vehicle or piece of equipment; however they are to check the oil and tires on a daily basis and prior to use.

Every employee who operates a vehicle or heavy equipment must complete an Operator's Daily Inspection Report on a daily basis prior to operation of vehicle or equipment and it must be submitted to their respective supervisor or department head. Operator's Daily Inspection Reports are kept by the respective department and made available to the FMS or his/her designee upon request. If a problem is noted the respective supervisor or department must contact the FMS immediately and report the problem/issue prior to operating the vehicle or equipment. FMS will determine whether vehicle or equipment is safe to operate or needs immediate repairs.

- If a vehicle is run with low oil levels, it can cause costly engine repairs.
- If tires are improperly inflated, it can cause an unsafe condition and may cause a pull in your steering, tire wear, poor handling, and even effect fuel mileage.
- An employee assigned to operate heavy equipment is expected to keep the equipment greased, as well as checking all fluids.
- Taking time to check your vehicle or equipment on a daily basis will ensure the operator's safety, as well as others.

Attachment 18-104: Operator's Daily Inspection Report

[..\Chapter 18\18.3 Operator Insp\Operators Daily Insp Report.pdf](#)

Attachment 18-105: Employee Manual, Village Vehicle Use, P. 11

[..\Chapter 18\18.3 Operator Insp\Employee Manual P11 Village Veh Use.pdf](#)

Attachment 18-106: Vehicle & Equipment Policy

[..\Chapter 18\18.3 Operator Insp\VOW Vehicle & Equipment Policy.pdf](#)  
Attachment 18-107: Incident Report Form (“Employee Accident Report Form”)  
[..\Chapter 18\18.3 Operator Insp\Incident Report Form 1-2012 Revised.doc](#)

### **Preventative Maintenance (APWA 18.3)**

Fleet Maintenance has a preventive maintenance program designed to provide maximum safety, efficiency, and economy in the operation of the fleet and minimizes lost vehicle time caused by extensive repairs. We view preventative maintenance as being one of the most important aspects of our function. Preventive maintenance will ensure safety, longevity, minimize downtime, and cost of repairs to our fleet. The following are the recommend service intervals other than manufacture’s recommendations.

#### **Highway Vehicles - Every 3,000 miles**

Change motor oil & filter, grease all fittings, check air filter and replace if needed, check & replace brakes if needed, check tire condition and pressure, rotate if needed, check all fluid levels, check lights and turn signals, windshield wipers, belts, hoses, battery, check for any leaks, check air conditioning, and horn.

**Every 60,000 miles** - Flush transmission.

**Every 5 years or 60,000 miles** - Change coolant and flush radiator.

**Every 100,000 miles** - Change differential fluids.

#### **Heavy Equipment – Every 200 hours**

Change motor oil & filter, grease all fittings, check air filter and replace if needed, check brake function and condition, check lug nuts, wheel bearings, check for any leaks, check all fluid levels, windshield wipers, lights, signals, backup alarms, belts, hoses, battery, air conditioning, and horn.

**Every 600 hours** – Change fuel filters and water separators.

**Every 1,000 hours** – Change hydraulic filters, check and adjust valves.

**Every 2,000 hours** – Change hydraulic fluids.

**Every 5 years** – Change coolant and flush radiator.

Attachment 18-108: Vehicle Maintenance Work Request (VMWR)  
[..\Chapter 18\18.4 PM Program\Vehicle Maint Work Request form.pdf](#)

Please refer to 18.6 Preventative Maintenance Schedule for work request procedure.

### **Preventative Maintenance Program Evaluation (APWA 18.5)**

The FMS periodically reviews all work orders for vehicles and equipment to determine:

- Time per repair
- Cost of repair

- Technician efficiency (this becomes part of a yearly evaluation)
- Rework or not
- Proper paperwork

These steps help the Supervisor evaluate the program to determine if changes to the program should be instituted. Various reports from the Fleet Module in SunGard Naviline may be utilized periodically, as-needed.

Attachment 18-109: Cost Analysis Report

[..\Chapter 18\18.5 PM Program Evaluation\Cost Analysis Report.pdf](#)

Attachment 18-110: Maintenance Analysis Report

[..\Chapter 18\18.5 PM Program Evaluation\Maint. Analysis report.pdf](#)

Attachment 18-111: Mechanic Report

[..\Chapter 18\18.5 PM Program Evaluation\Mechanic Report.pdf](#)

### **Preventative Maintenance Schedule (APWA 18.6)**

#### Preventative Maintenance and/or Repairs Scheduling

1. Advanced scheduling of preventative maintenance is the responsibility of the primary operator.
2. Operator must obtain a blank Vehicle Maintenance Work Request (VMWR) from Fleet Maintenance (FM), complete it and turn it into FM. Fleet Maintenance will review VMWR and schedule a date for the vehicle/equipment to be brought in and serviced. This information will be written on the VMWR along with an estimated time of completion and operator will receive a copy.
3. FM will assure that adequate parts/supplies are in stock for date of scheduled service.
4. The work order will list all work going to be performed. If operator notices any issue with the vehicle/equipment at the time of scheduled PM Service, he/she should note it on the work request. FM will determine if other service work will be done at the time of PM Service or will need to be rescheduled for a later date.
5. VMWR for preventative maintenance on vehicles should be turned in 100 miles before service is due. VMWR for preventative maintenance on equipment should be turned in 20 hours before it service is due.
6. . Vehicle/equipment should be clean and free from debris when brought in for service. Mechanic will be check and if vehicle/equipment is not clean respective supervisor will be notified.
7. A service sticker will be placed in vehicle/equipment by odometer or hour meter to notify operator of next service due. It is the operator's responsibility to schedule the vehicle/equipment PM Service.

8. Operator must have the vehicle/equipment in for service on time. There many things that are checked to ensure the vehicle/equipment is in safe operating condition and scheduled time has been allotted to ensure enough time is available.

9. Safety is the most important reason for preventative maintenance, but it will also ensure that all vehicles/equipment will last longer with less maintenance cost.

Attachment 18-108: Vehicle Maintenance Work Request (VMWR)  
[..\Chapter 18\18.6 PM Schedule\Vehicle Maint Work Request form.pdf](#)

### **Replacement Policy (APWA 18.7)**

The following is the replacement policy to provide Wellington with reliable dependable vehicles and equipment in good working order to maintain streets, utilities, parks, infrastructure, etc. ensuring public services are available to citizens in a timely and professional manner with the highest possible safety standards for its employees and residents.

#### Procedure

This policy provides an evaluation method for replacement of Wellington's current fleet based upon a points system that includes the following:

1. Year of Vehicle
2. Mileage
3. General Overall Condition
4. Type of Service
5. Reliability of Vehicle
6. Total Repair/Maintenance Cost

#### A. Replacement Selection

The replacement of economically obsolete or inoperable vehicles is necessary to encourage and maintain a safe, efficient, reliable and operable fleet.

Replacement criteria are established to serve as a general guideline of the entire fleet. Each vehicle should be evaluated individually by such factors as cost of maintenance, age, condition, downtime, and severity of use via a point system. Also, considering when it is no longer cost effective to keep a vehicle, it is in the best interest of Wellington to dispose of it regardless of age or mileage.

Although eligibility for vehicle replacement may be determined by established replacement criteria, this neither expresses nor implies vehicle actually will be replaced.

#### B. Replacement Schedule

1. Vehicle Equipment Replacement Guidelines

- a. Year of Vehicle – one point is assigned for each year of chronological age, based on in service date of vehicle.
- b. Mileage – one point is assigned for each 10,000 miles of operation. Example: a vehicle with 87,000 miles would receive 9 points because it is closer to 90,000 than 80,000 (Dump trucks – 1 point for every 30,000 miles).
- c. General Overall Condition – this category takes into consideration body condition, rust, interior condition, repairs, etc. A scale from 1 to 5 is utilized with “5” being the poorest. (It is recommended that any ranking above “3” will require repair estimates.)
- d. Types of Services – points are assigned as 1, 3, or 5 depending on type or use the vehicle had during most of its life. Example: A “5” would be assigned to vehicles that were utilized as field work vehicles as it is considered severe service, while a “1” would be assigned to a vehicle that was used as a staff car.
- e. Reliability of Vehicle – Points are assigned as a 1, 3, or 5 depending upon the frequency that the vehicle is in for repairs. A “5” will be assigned to a vehicle that is in for repairs two (2) or more times a month on average, while a “1” would be assigned if a vehicle was in for repairs every 3 months or less.
- f. Total Repair/Maintenance Costs – points are assigned 1,2,3,4, or 5 depending on the total cost factor. This figure includes all maintenance and repair costs, minus any costs associated with accident repairs. A “5” would be equal to 100% or more of the original purchase price while a “1” would be 20% of the original purchase price.
- g. Point Ranges for Replacement Consideration

Under 18 points	Condition I	=	Excellent
18 – 22 points	Condition II	=	Good
23 – 27 points	Condition III	=	Qualifies for Replacement
28 and above	Condition IV	=	Needs Immediate Consideration
	Condition V	=	Unsafe, obsolete, and functionally obsolete

h. Vehicle Replacement Criteria

Vehicle Type	Age Criteria	Usage Criteria
Administrative	5 years	75,000 – 100,000 miles
Pickup trucks	7 years	85,000 – 100,000 miles
Dump trucks, Diesel	7 – 10 years	150,000 – 250,000 miles / 8,000 – 10,000 hrs
Backhoes, Loaders	7 – 10 years	6,000 – 7,500 hrs

Motor Grader	7 – 10 years	8,000 – 10,000 hrs
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## 2. Replacement Schedule

The replacement schedule will be developed annually by the Department Directors and the Operation Supervisors for Fleet Maintenance Division and submitted to the Finance for upcoming Fiscal Year budget. The schedule will be evaluated according to budgetary limitations and recommendations and will be included in the annual budget process. The goal is to replace the vehicular fleet approximately every six (6) years on average, thus improving the overall condition of the fleet to a desirable level.

The replacement schedule may be altered if repairs in excess of \$500 are necessary for the vehicle. The vehicle needing repair may be moved to the first replacement slot based on evaluation of repair costs and book value. Such a change must be documented in writing to the Public Works Director and Chief Financial Officer. For additional information please see Section 18.7 Replacement Policy for replacement evaluation criteria.

Attachment 18-112: Vehicle-Equipment Replacement Evaluation Spreadsheet

<..\Chapter 18\18.7 & 18.8 Repl Policy - Repl Analysis\COPY of Vehicle- Eqp. Replacement Evaluation 2014-2015.xlsx>

Attachment 18-113: Equipment High Mileage Report

<..\Chapter 18\18.7 & 18.8 Repl Policy - Repl Analysis\Equipment High Mileage Report.pdf>

### **Replacement Analysis (APWA 18.8)**

To provide Wellington with reliable and dependable vehicles and equipment in good working order the replacement policy and cycles are reviewed periodically by the FMS. The Vehicle-Equipment Replacement Evaluation Spreadsheet and the Equipment High Mileage Report is part of this review process taking into consideration various criteria as noted within the evaluation spreadsheet and report.

Additionally, the FMS meets with the respective department supervisor and operator to ensure all the needs are met for the vehicle/equipment to be replaced or purchased. The FMS will research any additional criteria discussed and look at alternatives, if needed.

Please see Section 18.7 Replacement Policy for the following attachments:

Attachment 18-112: Vehicle-Equipment Replacement Evaluation Spreadsheet

Attachment 18-113: Equipment High Mileage Report

### **Equipment Utilization (AWPA 18.9)**

The FMS and each division supervisor or manager meets periodically or at minimum on an annual basis, during the budget process to discuss and ensure equipment use and appropriateness is useful and meets the needs of the division while continuing to meet all safety requirements.

The TPP Listing is the tool used to make sure each piece of equipment is reviewed and the Vehicle-Equipment Replacement Evaluation Spreadsheet is completed and reviewed.

Attachment 18-114: TPP Listing

[..\Chapter 18\18.9 Equipment Utilization\Copy of TPP - Public Works.xlsx](#)

Please see Section 18.7 Replacement Policy

Attachment 18-112: Vehicle-Equipment Replacement Evaluation Spreadsheet

### **Equipment Specifications (APWA 18.10)**

Wellington's Fleet Maintenance Supervisor (FMS) receives all requests for equipment. Upon receipt of the request he will confirm a meeting with the requesting department Supervisor and user of the equipment, if needed.

Upon meeting with the requesting department he will determine the acceptable specifications needed for the equipment. The Fleet Maintenance Supervisor will then take into consideration:

- Cost comparisons
- Maintenance
- Makes and Models
- Warranty
- Availability of parts and service
- Performance demonstrations
- Specifications that are available through various manufactures
- Approved contracts through state and/or local entities

Attachment 18-115: Florida Sheriffs Association Bid Specification Sheet

[..\Chapter 18\18.10 - 18.11 Eqp Specifications-Bid Reviews\Florida Sheriff's Association Specs.pdf](#)

Attachment 18-116: Vehicle Bid Specifications

[..\Chapter 18\18.10 - 18.11 Eqp Specifications-Bid Reviews\Vehicle bid specs .docx](#)

### **Specifications/Bid Reviews (APWA 18.11)**

Wellington's Fleet Maintenance Supervisor (FMS) performs an objective analysis on all equipment after meeting with the department and designated user/operator of any desired new equipment. Operator input is taken into consideration to assist in determining the suitability of the equipment for the intended use.

The FMS will take into consideration many factors when analyzing an equipment purchase. Even though at least three (3) quotes are needed for purchases under \$25,000 and a RFP and sealed bids for purchases over \$25,000, the FMS does not always subscribe to the "cheaper is better" theory. The FMS will take into consideration:

- Operational suitability
- Availability and cost of parts
- Warranty
- Cost

- Uniformity of Fleet

The FMS will then make a recommendation that best fit for the respective department and Wellington. For additional information, please see 18.10 Equipment Specifications

### **Equipment Manufacturer Warranty (APWA 18.12)**

All equipment manufacturer warranty information is entered into the SunGard Naviline Fleet Management software when purchased/received. This information is recorded on the “Select Equipment Warranty” page in SunGard Naviline Fleet Mgmt. Module. Warranty service is monitored as equipment is brought in for its regular scheduled maintenance service or repairs.

Warranties that are limited by mileage or time are all noted as well as warranties that are part of the bid process which will include parts, labor and travel. When a job order is entered into Naviline if there is any warranty information it will show up as warranty pending at the bottom of the job order.

All warranty information is monitored by the Fleet Maintenance Supervisor.  
Attachment 18-117: Select Equipment Warranty – SunGard Naviline Fleet Mgmt.  
[..\Chapter 18\18.12 Equipment Mft Warranty\Job order page-warranty info.pdf](#)

### **Parts Warranty Tracking (APWA 18.13)**

Parts warranties are tracked by utilizing the history service (transactions) records for the vehicle or equipment in SunGard Naviline Fleet Maintenance Module. If a part malfunctions mechanic will use the service history to determine if or when the part was replaced. Upon verification, invoice will be located in Laserfiche and vendor will be contacted for replacement. Replacement is then noted in a work order through the SunGard Naviline Fleet Maintenance Module for that particular unit (vehicle or equipment).

Attachment 18-118: Warranty Transaction Display – SunGard Naviline Fleet Mgmt.  
[..\Chapter 18\18.13 Parts Warranty Tracking\Warranty Transaction Display.pdf](#)  
Attachment 18-119: All Transactions Report - SunGard Naviline Fleet Mgmt.  
[..\Chapter 18\18.13 Parts Warranty Tracking\All Transactions Report.pdf](#)

### **Tools and Portable or Stationary Equipment Inventory (APWA 18.14)**

Wellington Finance/Purchasing Departments maintain accountability for all Tangible Personal Property (TPP) that has a life expectancy greater than one year, and a unit dollar value that is \$750 or greater. Wellington currently utilizes the HTE Asset Management II system for tracking the TPP assets.

During budget preparation a Master Inventory Listing of TPP is distributed to each department. The Department Supervisor (custodian) is responsible for verifying the location and assessing the physical condition of each asset.

The Fixed Assets Listing includes:

- Asset category description
- Asset ID
- Asset description

- Brand
- Date
- Purchase cost
- Previously deferred
- Estimated replacement cost (for year)
- Department
- Year deferred to

All TPP assets are issued a tag with an asset number which is physically affixed to the TPP asset.

Attachment 18-120: TPP Operating Procedures

<..\Chapter 18\18.14 Tools & Portable-Stat Equipment Inventory\TPP Operating Procedures.pdf>

Attachment 18-114: TPP Listing (Please see Section 18.9 Equipment Utilization)

<..\Chapter 18\18.14 Tools & Portable-Stat Equipment Inventory\TPP - Public Works.xlsx>

Attachment 18-121: Asset Tag

<..\Chapter 18\18.14 Tools & Portable-Stat Equipment Inventory\Asset tag.jpg>

### **Fleet Vehicle Inventory (APWA 18.15)**

Wellington's Fleet Maintenance Department's vehicle/equipment inventory is updated on a regular basis. This listing includes:

- Unit number
- Year of vehicle
- Model
- Description
- License number
- VIN and serial number
- Operator
- Department/Division

All other vehicle/equipment information is on Naviline and includes:

- Fixed Asset Number
- Acquisition Method
- Purchase Cost
- PO Number
- Date purchased and received
- Estimated life
- Replacement year and cost
- Salvage value
- Capitalized costs

Wellington does not maintain any leased vehicles in their fleet.

Attachment 18-122: Vehicle/Equipment Inventory Info – SunGard Naviline Fleet Mgmt.

<..\Chapter 18\18.15 Fleet Vehicle Inventory\Naviline Veh-Eqp Inventory Data Info.pdf>

Attachment 18-123: Vehicles and Equipment Inventory

[..\Chapter 18\18.15 Fleet Vehicle Inventory\Vehicles and Equipment Inventory.xlsx](#)

### **Fuels and Liquids Inventory (APWA 18.16)**

The fuel pumps are owned and maintained by the Village of Wellington. The card reader and fuel control equipment system (fuel dispensing system) is owned and maintained by Palm Beach County Fleet Management. The Village of Wellington maintains an Interlocal Agreement for the use of this fuel dispensing system. (Res. No. TR2014-23).

Each vehicle and equipment is assigned its own fuel usage card. Each month, Wellington receives a report of fuel consumption by vehicle/equipment, driver, quantity, type of fuel and mileage. This report is downloaded into Naviline and becomes part of Wellington's fuel Consumption and Cost Report.

Fuel deliveries are invoiced and recorded into Naviline as received by date and cost. Both Diesel and Unleaded fuel inventory are stored in 20,000 gallon underground tanks and are dispensed and monitored by the fuel dispensing system and Veeder Root Fuel Monitoring System. Fuel dispensing pumps are equipped with Stage I and Stage II vapor recovery. This Veeder Root Fuel Monitoring System monitors daily fuel quantities and levels and automatically prints a daily summary. This system also monitors any underground leaks. In the event of a leak, the system would shut down the pumps and sound an alarm.

Tanks and pumps are annually inspected by Florida Department of Environmental Protection and an annual leak detection test is performed on the underground fuel system and dispensers by an outside contractor.

Oil and lubricants metered through dispenser handles and recorded on work/job orders in SunGard Naviline.

Attachment 18-124: Palm Beach County Motor Pool Fuel Report

[..\Chapter 18\18.16 Fuels & Liquids Inventory\PBC Motor Pool Fuel Report.pdf](#)

Attachment 18-125: Monthly Fuel Summary

[..\Chapter 18\18.16 Fuels & Liquids Inventory\Copy of Fuel Summary 13-14.xlsx](#)

Attachment 18-126: Fluid Usage Report

[..\Chapter 18\18.16 Fuels & Liquids Inventory\Fluid Usage Report.pdf](#)

Attachment 18-127: Fuel Delivery Ticket

[..\Chapter 18\18.16 Fuels & Liquids Inventory\Fuel delivery ticket.pdf](#)

Attachment 18-128: Fuel Inventory Daily Print Ticket

[..\Chapter 18\18.16 Fuels & Liquids Inventory\Fuel inventory daily print out ticket.pdf](#)

Attachment 18-129: Res. No. TR2014-23 – Interlocal Agreement –Fuel Dispensing System

[..\Chapter 18\18.16 Fuels & Liquids Inventory\Fuel Reader Interlocal Agreement R2014-0775 1st Amendment.pdf](#)

Attachment 18-142: Monthly Fuel Inventory

[..\Chapter 18\18.16 Fuels & Liquids Inventory\Monthly Fuel Inventory.pdf](#)

Attachment 18-143: Special Fuels-Motor Fuel Tax Report

[..\Chapter 18\18.16 Fuels & Liquids Inventory\Special Fuels-Motor Fuel Tax Report.pdf](#)

Attachment 18-144: Vehicular Storage Tank Inspection Form

[..\Chapter 18\18.16 Fuels & Liquids Inventory\Veh Storage Tank Insp Form.pdf](#)

## **Parts Inventory (APWA 18.17)**

The Fleet Management Department tracks all parts through the Naviline system. The Maintenance by Department Report lists all equipment part types and show what parts are replaced or repaired on a piece of equipment. This includes all inventoried and non-inventoried parts that were changed through preventive and non-preventive maintenance. This includes:

- Issue Location
- Part number
- Equipment number
- Reference number
- Transaction date & time
- Job order number
- Unit cost
- Quantity
- Extended cost
- Total cost

Attachment 18-130: Maintenance by Department Report

[..\Chapter 18\18.17 Parts Inventory\Maintenance Report.pdf](#)

Attachment 18-119: All Transactions Report - SunGard Naviline Fleet Mgmt. (Please see Section 18.13 Parts Warranty Tracking)

## **Parts and Materials Disposal (APWA 18.18)**

### **Spills and Containerization**

#### **In the event of a fuel spill**

Initial response would be to protect people from injury, contain spill and take immediate actions to prevent further release, take any necessary steps to mitigate fire, explosion, or vapor hazards, reporting to the appropriate agencies, and protecting property from damage. Remove any remaining free product, check for soil or ground water contamination, and create a corrective plan to prevent future spills.

If the event clean-up is considered too large or hazardous for Wellington personnel to handle after following steps in the Spill Prevention, Response & Training Plan, then Wellington staff will contact:

SWS Environmental Services  
600 Grand Panama Blvd., Suite 200  
Panama City Beach, Fl. 32407  
Telephone #: 877-742-4215

Wellington has contracted (piggyback agreement) with SWS Environmental Services to perform emergency response services upon request from Wellington including but not limited to, the cleanup, removal and disposal of hazardous and non-hazardous material for Wellington.

### **Motor oil and fluids**

Motor oil, hydraulic oil, and transmission fluid are stored in 275 gallon tanks and are dispensed into vehicles or equipment through an air operated pump with a 50 ft. hose. Brake fluid and power steering fluid are stored in parts storage room in 1 qt. plastic bottles. Grease is stored 14.5 oz. plastic tubes.

Motor oil, hydraulic oil, transmission fluid, brake fluid and power steering fluid are drained into oil recovery container and then transferred into a 500 gallon double wall waste oil tank. All waste oil is sold generally on a quarterly basis.

### **Plastic containers**

All plastic containers are washed out in parts cleaner, dried with shop rags, bottoms cut out and placed in recycle bin.

### **Dirty shop rags**

Dirty shop rags are stored in a covered 30 gallon container and are picked up weekly by Unifirst Corp. 500 S.W. 13<sup>th</sup> Terrace Pompano Beach, Fl. 33069 – 954-783-6369

### **Freon Recovery System**

The Freon Recovery System is used on all vehicles and equipment. This system allows for Freon to be recovered, filter, and reused.

### **Used oil filters**

Used oil filters are drained into oil recovery drum and then transferred into a 55 gallon covered drum.

### **Oil spills**

In the event of an oil spill, steps are made immediately to contain oil absorbents and mats. Absorbents are also stored in a covered 55 gallon drum.

Waste oil, used oil filters, and absorbents are periodically picked up by Heritage-Crystal Clean. Eller Dr. Ft Lauderdale Fl. 33316

### **Parts, washers and Oil absorbents**

Parts washers (large parts, brake parts, carburetor) are serviced quarterly along with oil absorbent being picked up by Heritage-Crystal Clean. Eller Dr. Ft Lauderdale Fl. 33316

### **Anti-Freeze**

Anti-Freeze is stored in parts storage room. Anti-freeze is drained from vehicles into a recovery container and transferred into 300 gallon storage container and is periodically picked up by Heritage-Crystal Clean. Eller Dr. Ft Lauderdale Fl. 33316

### **Batteries**

Batteries are stored in parts storage room on a shelf. Used batteries are picked up when new batteries are delivered.

### **Tires**

New tires are stored in storage shed. Used tires are stored outside in the tire storage shed.

Used tires are periodically picked up by a recycling company. Tires that are too large for recycler are periodically taken to Solid Waste Authority of Palm Beach County PO box 24704 West Palm Beach, Fl. 33416 by one of our trucks.

### **Degreaser**

A biodegradable degreaser is used and stored in the Shops Parts Room. Degreaser is used at our wash rack to wash vehicles and equipment.\* (The wash rack is equipped with a grease trap that is monitored frequently) and drains into the Village's Waste Water Treatment Plant.

Attachment 18-145: Spill Prevention, Response & Training Plan

Attachment 18-146: Maintenance /Equipment Yard Practices & Inspections

### **Equipment Identification (APWA 18.19)**

All of Wellington's TPP (Tangible Personal Property) and Fixed Assets are recorded and labeled annually by the Finance Department. All TPP and Fixed Assets are assigned an asset number and decal.

Attachment 18-121: Asset Tag (Please see Section 18.14 Tools and Portable or Stationary Equipment Inventory)

Attachment 18-131: Purchasing Manual – Section 16: Materials Management & Property Control

Attachment 18-132: TPP-Asset Listing including equipment

[..\Chapter 18\18.19 Equipment ID\TPP-Asset Listing including equipment 1 of 2.pdf](#)

[..\Chapter 18\18.19 Equipment ID\TPP-Asset Listing including equipment 2 of 2 - Vehicles.pdf](#)

Attachment 18-133: TPP-Asset Listing – Vehicles

[..\Chapter 18\18.19 Equipment ID\TPP - Asset Listing - Vehicles.xlsx](#)

### **Safety and Condition Inspection and Records (APWA 18.20)**

Wellington is committed to promoting safe and responsible driving for all of its employees. All employees who operate a vehicle or equipment are subject to Wellington's Vehicle and Equipment policy.

It is Wellington's policy that all drivers "Complete all Preventative Maintenance Services required by the Fleet Maintenance Department in a timely manner as prescribed by the Public Works Procedure Manual. A Vehicle Maintenance Work Request (VMWR) should be submitted for all maintenance outside of routine maintenance".

Operators are responsible for daily safety and condition of their equipment or vehicle is required to complete a Daily Inspection Report on any vehicle or equipment they are using. This report covers all aspects of the vehicles or equipment safety areas. Any problems should be reported to either their Supervisor or Fleet Maintenance immediately.

This section is additionally covered along with attachments in Section 18.3:

Attachment 18-104: Operator's Daily Inspection Report

Attachment 18-105: Employee Manual, Village Vehicle Use, P. 11

Attachment 18-106: Vehicle & Equipment Policy

### **Equipment Monitoring (APWA 18.21)**

Through the use of the preventative maintenance process, budget reports (expenditure reports - fuel and maintenance expenses), monthly fuel reports, monthly performance measures and annual equipment evaluation each piece of equipment is monitored to identify excessive costs and/or interruption of service.

Attachment 18-134: Expenditures Year to Date 2014

[..\Chapter 18\18.21 Equipment Monitoring\Expenditure report 2014.pdf](#)

Attachment 18-135: Expenditures Year to Date 2015

[..\Chapter 18\18.21 Equipment Monitoring\Expenditure report 2015.pdf](#)

Attachment 18-136: Performance Measures 13-14 Public Works

[..\Chapter 18\18.21 Equipment Monitoring\Perf. Measures 13-14 Public Works.xlsx](#)

Please see Section 18.16: Fuels and Liquids Inventory for the following attachments:

Attachment 18-124: Palm Beach County Motor Pool Fuel Report

Attachment 18-125: Monthly Fuel Summary

### **Defect Reports (APWA 18.22)**

**It is the responsibility of the primary user to inspect their vehicle and/or equipment prior to usage on a daily basis and report any material or equipment defects immediately.**

Every employee who operates a vehicle or heavy equipment must complete an Operator's Daily Inspection Report on a daily basis prior to operation of vehicle or equipment and must be submitted to their respective supervisor or department head.

Operator's Daily Inspection Reports are kept by the respective department and made available to the FMS or his/her designee upon request. If a problem is noted the respective supervisor or department must contact the FMS immediately and report the problem/issue prior to operating the vehicle or equipment. FMS will determine whether vehicle or equipment is safe to operate or needs immediate repairs. (Employee Manual (P. 11) and Vehicle & Equipment Policy)

All vehicles and equipment are repaired and maintained by using a Vehicle Maintenance Work Request (VMWR). All employees are required to report any defects that they know of on the work request, even if they don't know the nature of the problem.

If the vehicle or equipment is in need of immediate repairs it will be repaired as soon as it is brought in.

All repairs are documented on the Vehicle Maintenance Work Request (VMWR) and the employee who requested the repairs or maintenance sign and date the mechanics copy of the work request. A copy is then given to the employee for their records.

Anyone who drives a vehicle is also required to perform a daily inspection of their vehicle to check for defects.

All repairs and defects are noted in the SunGard Naviline Fleet Maintenance Vehicle/Equipment Maintenance file.

Please see Section 18.3 Operator Inspection for the following attachments:

Attachment 18-104: Operator's Daily Inspection Report

Attachment 18-105: Employee Manual, Village Vehicle Use, P. 11

Attachment 18-106: Vehicle & Equipment Policy

Please Section 18.6 Preventative Maintenance Schedule for the following attachment:

Attachment 18-108: Vehicle Maintenance Work Request (VMWR)

### **Condition Assessment (APWA 18.23)**

The Fleet Maintenance Division is responsible for maintaining and repairing Wellington's vehicles and equipment. Condition of all Wellington fleet is noted throughout the preventative maintenance and repairs services and noted in the SunGard Naviline Fleet Mgmt. File Maintenance, through the annual Vehicle-Equipment Replacement Evaluation, and by following the Policy for Replacement and the Replacement Analysis. (This section is additionally covered in 18.7 and 18.8)

Please see Section 18.7 Replacement Policy for the following attachments:

Attachment 18-112: Vehicle-Equipment Replacement Evaluation Spreadsheet

Attachment 18-113: Equipment High Mileage Report

### **Storage Tanks (APWA 18.24)**

Both Diesel and Unleaded fuel inventory are stored in 20,000 gallon underground tanks and are dispensed and monitored by fuel dispensing system and Veeder Root Fuel Monitoring System. Fuel dispensing pumps are equipped with Stage I and Stage II vapor recovery. This Veeder Root Fuel Monitoring System monitors daily fuel quantities and levels and automatically prints a daily summary. This system also monitors any underground leaks. In the event of a leak, the system would shut down the pumps and sound an alarm. (As outlined in Chapter 18.16 Fuels and Liquid Recovery)

Propane is stored in a 1,000 gallon above-ground tank and is equipped with a manual level gauge that is checked on a daily basis for inventory control.

Wellington has an Interlocal agreement with Palm Beach County to lease a fuel dispensing system that records all fuel type usage. As part of this agreement Palm Beach County provides all parts and routine maintenance.

All tanks that are removed are tested to comply with PBC Dept. of Environmental Resources (ERM) and all state and local laws. A Closure Report must be completed to verify property is free from containments.

Unleaded and diesel storage tanks are tested annually by Glasgow Equipment Service for leaks and sensor testing. In addition, these tanks are licensed and annually inspected by Florida Department of Environmental Protection

Propane storage tank is inspected annually by the Department of Agriculture.

Installation and removal of all above and below ground tanks are regulated by Florida Administrative Codes 62-761.800 and 62-762.801.

Please see Section 18-16 Fuel and Liquids Inventory for the following attachment:

Attachment 18-129: Res. No. TR2014-23 – Interlocal Agreement –Fuel Dispensing System

Attachment 18-137: Tank Closure Report

[..\Chapter 18\18.24 Storage Tanks\Closure Report.pdf](#)

Attachment 18-138: Annual Tank Monitoring and Leak Detector Certificate

[..\Chapter 18\18.24 Storage Tanks\Annual Tank Monitoring & Leak Detection Certificate 2014.pdf](#)

Attachment 18-139: Storage Tank Fac. Annual Comp. Site Inspection – FDEP

[..\Chapter 18\18.24 Storage Tanks\Stg Tank Inspection Report 2014.pdf](#)

Attachment 18-140 Autogas Propane Facility Final Inspection – Dept. of Ag. And Cons. Affairs

[..\Chapter 18\18.24 Storage Tanks\Autogas propane Facility Inspection final 6-9-2014.pdf](#)

Attachment 18-141: F.A.C. Rules 62-762.801 and 62-761.800

[..\Chapter 18\18.24 Storage Tanks\FAC Rules - Storage Tanks.pdf](#)

### **Emergency Repairs and After Hour Repairs (APWA 18.25)**

If a vehicle/equipment is unable to be driven due to a break down operator or supervisor should contact Fleet Maintenance and a mechanic will come out to make repairs or to make arrangements to transport the vehicle/equipment to the Fleet Maintenance Shop for necessary repairs.

Personnel who encounter vehicle or equipment break down after hours or on the weekend will use the On Call/After Hours Contact list to report their issue. The Fleet Maintenance Supervisor will be notified of the issue and take appropriate steps deemed necessary to resolve the situation.

An "On Call/After Hours Contact" list is maintained by the Public Works Administrative Assistant (PWAA) for all departments and contains contact information for each. This list is

used to contact the proper employee/supervisor to respond should an emergency arise after hours and/or on weekends.

If the department supervisor assigns an employee to be “On Call” it is their responsibility to make certain the employee can perform emergency work for their department and knows when to contact the appropriate supervisor for further direction or consult. This contact list also includes supervisor and manager contact information.

PWAA periodically checks with each department for any updates to the "On Call/After Hours Contact" list and distributes it through email every six (6) months, unless changes or updates are made and at that time the list will be redistributed, accordingly.

During normal Village of Wellington business hours the appropriate supervisor is to be contacted should an emergency arise. Staff phone directory is posted on the Village Website. All employee contact information including office telephone numbers are listed through the Office Communicator.

Please see PWA Section: On Call/After Hours Emergency Information for the following attachments:

Attachment PWA-103: On Call/After Hours Contact

Attachment PWA-104: On Call/After Hours Contact Distribution List

### **Preventive Maintenance and Repairs Priorities (APWA 18.26)**

Fleet Maintenance has a preventive maintenance program designed to provide maximum safety, efficiency, and economy in the operation of the fleet and minimizes lost vehicle time caused by extensive repairs.

Preventative maintenance is one of the most important aspects of the Fleet Maintenance Division ensuring the safety, longevity, minimal downtime, and reduction in cost for all vehicle and equipment repairs.

All preventive maintenance and repairs are scheduled based on the equipment’s need to the operator and the division. The Fleet Maintenance Supervisor will review the schedule to ensure the shop availability, manpower and needed parts.

Vehicles in need of immediate repairs may be repaired when brought into the shop.

This section is further explained and addressed in Section 18.6 Preventative Maintenance Schedule and Section 18.6 Preventative Maintenance Schedule

### **Accident Reporting (18.27)**

Always Buckle – up. It is the law!

Any time an employee is involved in an accident on company time in a vehicle or equipment they must:

- Check, make sure you are okay, if not and you can: Call for help, CALL 911!
- Check to see if anyone else is injured. If anyone is hurt, summons medical assistance immediately!
- Contact the PBSO to respond and report on the accident when any vehicle (car, truck, heavy equipment, etc.) or outside source is involved.
- Request and receive a case number from the PBSO for future reference.
- Pictures should be taken prior to any contamination of the accident scene.
- **All** vehicle accidents will require mandatory operator drug/alcohol testing.
- Any time you are involved in an accident with damage to the vehicle it should be reported immediately to your Supervisor, as well as Fleet Maintenance Supervisor.
- Write down all details pertaining to the accident while they are fresh in your mind as you will have to fill out an Accident Report.
- Exchange information with the other driver(s), take pictures if possible and always make sure that you know where your insurance and registration cards are in the vehicle.

### **Mechanics Safety Procedures (18.28)**

Mechanics are expected to use supplied safety equipment for each specific job.

#### **When:**

- Welding- use all protective gear including helmet, gloves, and vest.
- Painting- work in a well-ventilated area, use a respirator and eye protection.
- Using a torch always use proper eye protection (cutting glasses), gloves, and leather vest. Always make sure there is nothing flammable around your work area.
- Operating vehicle lifts, always use safety locks when vehicle is in raised position.
- Operating a bench grinder or a hand held grinder always use a face shield, and gloves.
- Using the band saw or cut off saw always use the vise that the saw is equipped with. Never try to hold material with your hands.
- Never work on vehicles or with power tools while wearing loose clothing such as neckties, unbuttoned long sleeved shirts or anything hanging off of your clothing.

- When jacking up a vehicle, always find a solid level surface to put jack on, find a suitable area under the vehicle to lift it from. If you are not sure about where to place a jack under a vehicle see the owner's manual. Do not use a jack in a leaning position.
- When working on vehicle while jacked up or on jack stands make sure to put wheel chocks in front and behind tires that are still on the ground to prevent vehicle from rolling. Always try to work on level ground.
- When pushing on wrenches always use an opened palm to push on wrench to prevent cutting your knuckles or fingers.
- When working under vehicles wear clear safety glasses to prevent dirt, grease, oil, or any other foreign objects from falling into your eyes.
- To prevent fire, when working around gasoline or other flammable liquids never work with any heat source, or use a grinder or any other tools that might emit sparks.
- Mechanics are expected to use supplied safety equipment for each specific job.

### **Equipment Mechanics Additional Responsibilities**

- Operate diagnostic and repair equipment such as alignment machine, scanners, Freon recovery and charging unit, tire balancer, tire mounting machine, brake lathe, multi meter, vehicle lift, plasma cutter, hydraulic press, bead blaster, and welder.
- Diagnose and repair brakes, AC systems, air bag systems
- Complete work orders including all parts used to complete each repair
- Sign out parts and supplies used and assist with inventory
- Maintain and repair generators used as backup power for Administration and Public Works Facilities
- Use various hand tools and power tools (i.e.: hand drill, drill press, grinder, buffer spray gun, screwdrivers, porta-power, hydraulic & air operated jacks, and wrenches)
- Diagnose, repair, and tune up 2-stroke, 4-stroke gasoline and diesel engines
- Maintain and repair landscape maintenance equipment (i.e.: weed-eaters, chainsaws, leaf blowers, edgers, water pumps, pressure cleaners, generators, compactors and rollers)
- Maintain and clean Fleet Maintenance Facility
- Operate various pieces of heavy equipment in order to diagnose problems

### **Emergency Generators (18.29)**

Emergency generators are inspected on a monthly basis and processed through City Reporter Software. Schedule reminders are placed on the Fleet Maintenance Supervisor Outlook Calendar for these monthly inspections.

- PW Complex – Administration
- PW Complex – Fleet Maintenance
- PW Complex – (2) Portable Trailer Mounted Generators
- Park Maintenance Building
- Village Park Gym
- Village Hall
- Antenna Tower Site at WT Facility Grounds

Attachment 18-147: Sample of Generator Inspection Forms

[..\Chapter 18\18.28 Emergency Generators\Generators - Oct.pdf](#)

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## **Chapter 4**

# **Landscape Maintenance, Aquatics & Sportsfields, Neighborhood Parks, and Equestrian Trails**

### **APWA “Parks, Grounds and Forestry” Chapter 19**

#### **Landscape and Grounds Management (APWA 19.1)**

##### **Purpose**

The purpose of this policy is to ensure that Village landscapes are designed, constructed, and maintained in a manner that protects and enhances our area’s natural resources and public health; that Village landscapes are models of environmental stewardship in the eyes of the public; that the Village establishes a leadership role in developing both aesthetically pleasing and ecologically sensitive landscapes; and that there is a consistent standard of environmental stewardship observed by Village departments managing landscapes and other grounds.

##### **Definitions**

Integrated Pest Management: A pest management process that uses monitoring to determine pest injury levels and combines biological, cultural, physical, and chemical tools to minimize health, environmental and financial risks. The method uses the least toxic synthetic pesticides only as a last resort to controlling pests.

Sustainable Design, Construction, and Maintenance: Principles, materials and techniques that conserve natural resources and improve environmental quality throughout the life cycle of the landscape and its surrounding environment.

Landscape: Grounds that are actively managed such as parks, building grounds, and right of ways.

##### **Policy**

In planning, siting, designing, construction, and maintaining grounds and landscapes owned and managed by the Village, site objectives shall include management and maintenance practices that protect and enhance natural ecosystems. Village grounds designers, planners, managers, crews, and their contractors shall give priority to:

- Maximizing water use efficiency
- Practicing the principals of Integrated Pest Management, including the reduced use of pesticides

- Selecting and using products that minimize negative impacts on soil organisms and aquatic environments
- Designing new and renovating existing landscaped areas to suit the site conditions and with sustainable maintenance in mind. For example:
  - Using proper soil preparation and amendment;
  - Specifying weed-free soil amendments;
  - Using mulches to control weeds, conserve water, and build healthy, biotically rich soils;
  - Using site adapted and pest resistant plants: “the right plant for the right place”;
  - Grouping together plants with similar horticultural needs;
  - Retaining and using regionally native plant material where appropriate;
  - Controlling noxious weeds and invasive, non-native, plant species;
  - Planting for erosion and weed control;
  - Assessing whether landscapes can still meet the intended site use objectives while modifying the aesthetic standard and/or applying less maintenance; and
  - Matching maintenance standards to site objectives in the design stage.
- Restoring, creating, and protecting environmentally valuable areas such as wetlands and riparian, aquatic, wildlife, wooded and meadow habitats. Protection shall include avoiding developing these areas whenever feasible.
- Increasing the Village’s tree canopy. Trees contribute numerous environmental benefits including reducing the build-up of atmospheric carbon dioxide; absorbing atmospheric pollutants; and slowing the rate of precipitation, which allows increased infiltration and reduced run-off, slope stabilization, and wildlife habitat.
  - Village departments responsible for open space and public rights of way shall give priority to:
    - Significantly increasing the number of trees in rights or way and open spaces;
    - Replanting in parks and open spaces where trees are mature and nearing the end of their life cycle;
    - Working with community and neighborhood interest groups to involve them in planting and maintaining the urban forest.
  - Village departments managing construction projects shall give priority to incorporating in the construction design and existing, healthy, mature trees on the building site or, alternatively, to moving such trees.

### **Landscape Operations Overview**

The Landscape Operations Division is responsible for the maintenance and enhancement of landscaping around Village buildings and roadways. The Division also assists with enhancement projects and technical expertise of landscape issues in all Village parks. This work involves a multitude of tasks, including but not limited to tree planting and pruning, control of plant

destroying insect pests, fertilization, installation of new shrub beds, irrigation maintenance, oversight of contracted maintenance work (mowing/trimming) and cleaning of private properties declared a public nuisance.

### **Landscape General Responsibilities**

- Pruning of over 3,000 trees throughout the Village
- Maintenance of irrigation, which includes over 60 systems
- Fertilization of all landscaped areas
- Weed Control
- Control of plant destroying insect pests
- Mulching of beds
- Installation of annual flowers
- Supervision of the contractual mowing of approximately 120 miles of turf
- Participate in special events/programs

### **Tree Pruning**

- All Village -owned trees are trimmed as needed by Village staff; some large tasks are contracted out.
- Proper maintenance of traffic (MOT) and personal protective equipment (PPE) is required at all times.
- Pruning is conducted for specific needs of the individual tree. All work is performed according to ANSI A300 guidelines and under the general supervision of an International Society of Arboriculture Certified Arborist. Equipment typically used, but not limited to: bucket truck, chipper, chainsaws, pole saws and PPE (helmet, chaps, gloves, eye and ear protection).

### **Irrigation System Maintenance**

All irrigation systems are checked and serviced on a weekly basis. Issues evaluated and addressed include: broken pipes, broken heads, missing nozzles, proper rotation pattern, head depth, clogged nozzles, timer operation and pump operation. New systems are typically installed every year as well.

### **Fertilization Program**

All turf, shrubs and palm trees are fertilized every three months with a slow-release granular fertilizer containing 2% or less of phosphorus. Turf fertilizer is not applied in the root zone of palm trees, so as not to disrupt the balance of nitrogen vs. micronutrient input. Therefore, due to the abundance of palm trees in the Village's landscaped areas, a large amount of palm fertilizer (8-2-12 +4Mg) is used every year. Liquid fertilizer is also used as needed to address specific nutrient deficiencies.

## **Weed Control**

Weeds are manually removed or sprayed with a post emergent herbicide (ex: glyphosate). Pre-emergent herbicides are also used wherever feasible. Maintenance contractors are responsible for weed control in the areas they service. Village staff applies selective herbicides to turf to address weed invasion on an as needed basis, focusing on cooler months to lessen the possibility of turf damage.

## **Pesticide Application**

The Division employs integrated pest management principles in the control of insect pests in the landscape. Regular scouting and spot treatments are applied as needed to target plant destroying organisms. Certain plants and trees that have a high degree of susceptibility (ex: Alexander palms and Crotons) are treated with a systemic insecticide on a quarterly basis to protect them against damage. These systemic pesticides reduce the risk of incidental killing of beneficial insects and ensure that the plants remain healthy. Some of the commonly used insecticides include, but are not limited to: Imidacloprid, Dinotefuran, Bifenthrin and Orthene.

## **Mulching**

All shrub beds Villagewide are mulched twice per year to ensure proper weed control, moisture retention and a pleasing aesthetic appearance. Large areas are mulched by blow-in method using a contractor and smaller areas are completed by hand with Village staff using bagged mulch.

## **Annual Flower Program**

Annual flowers are installed at a minimum of twice per year to provide warm season and cool season color throughout the Village. High profile locations, including major thoroughfares, entryways and Village buildings are planted with flowers for the enjoyment of residents and visitors.

## **Contractual Maintenance Schedule**

Mowing: Turf is mowed 42 times annually. Areas are mowed approximately every 10 days in October through April and every 7 days from May through September.

Trimming of shrubs: All beds are trimmed once a month and are to remain free of weeds.

## **Special Events/Programs**

At certain times throughout the year, the Division participates in special events, such as the Village's Arbor/Earth Day Celebration and tree seedling giveaway typically scheduled in April. Additionally, there are periodic neighborhood enhancement projects, which improve the aesthetics of neighborhoods or address specific dilapidated properties.

### **Athletic and Ball Field Maintenance Procedures**

Circumstances beyond the control of the Village may impact field conditions. The Aquatics & Sportsfields Division (“Parks Maintenance”) reserves the right to prohibit play on any field that has been determined to be unsafe. The Division may also prohibit/suspend play on any field in a condition such that continued play would cause damage to the field of such magnitude that routine maintenance practices could not resolve the problem. Under these conditions, play would be suspended and staff would reevaluate fields at a later time.

Maintenance procedures to be followed in the daily maintenance of ball fields:

- On-site personnel will make visual inspections daily and the MWIII’s and ASM will conduct an in-depth inspection weekly. It is of the utmost importance that the safety and well-being of all facility users be ensured. All unsafe conditions and hazards will be given priority. Visual inspections should include identifying irrigation problems, turf diseases, etc. and must be forwarded to the Parks Supervisor for corrective measures.
- The clay must be moistened, if necessary, so that it can be maintained properly.
- Be sure to locate base anchors, pitcher’s rubbers and home plate before dragging to ensure that damage to equipment is avoided. Rubber anchor covers are to be in place.
- Ball field groomer must be kept one foot (1’) away from the edge of the grass. Outfield/infield border must be hand raked daily to remove clay pushed up onto the grass (lips). This procedure in particular has proven effective in preventing lip buildup, so it needs to be incorporated in daily infield maintenance.
- Base anchors are to be cleaned out and bases are to be installed. Bases are to rest even with clay surface.
- Only ½ inch of clay should be loose on the surface of the infield.
- Batters boxes on home plate and pitcher mound must be tamped daily. As soon as clay becomes powdery or sandy, it must be replaced with new clay, especially in trouble areas such as base path, home plate and pitcher’s mound.
- All rocks or other debris are to be removed from the field before dragging is completed.
- Fill in all holes or depressions in grass infield and outfields daily.

- Lay out base lines, foul lines and batters boxes, etc. with string lines and template.
- Stripe lines that are needed with field marking chalk. Paint foul lines with athletic field paint only.

The daily maintenance of athletic fields is extremely important procedure as incorrect daily field maintenance and field neglect can destroy a field within weeks. Correct care will result in a field that will have a year-round attractive and healthy turf and appearance.

- Mowing is performed when turf is dry. Sharp blades are a must every time turf areas are mowed. Parks staff mows in different directions to prevent wear patterns to reduce scalping.
- Mowing height – Bermuda grass fields are mowed at 1 inch twice a week in winter months and  $\frac{3}{4}$  of an inch three times during growing months. Bahia grass fields are mowed between 1  $\frac{1}{2}$  to 3 inches all year around.
- Aeration – Athletic fields which continually show symptoms of compaction are aerated four times a year and more frequently when necessary.
- Fertilization – Bahia grass fertilizer is applied three times a year. Bermuda grass fertilizer is applied every 2-3 months with a custom blend slow release fertilizer.
- Chemical Application – Chemicals are applied on an as-needed basis to control insects, fungus and weed infestation on athletic fields. Mole cricket bait granules are applied to the Bermuda grass and Bahia grass fields each year in the month of April, or as needed through the summer months.
- Soil Testing – Soil from designated fields is sent for analysis each year. This process is helpful in determining the type and amount of fertilizer needed. Soil samples will be taken in March of each year for the following year's budget.
- Top Dressing – Top dressing of athletic fields will be coordinated with aeration four times each year and as needed.

#### Yearly Athletic Field Maintenance:

Most of the procedures outlined for this section apply to administrative personnel directly involved with parks operations (Parks & Recreation Director, Assistant Director, Aquatics & Sportsfields Supervisor and Athletic Manager).

- Verticutting of all Bermuda grass will be done in the months of May, June, July and August once each year in two directions.

- Laser grading of infields of baseball and softball fields will be done in the month of December or July, once a year.

Sod replacement will be done each year on athletic fields on an as needed basis.

### **Tree Inventory (APWA 19.2)**

Wellington's tree inventory includes significant trees on public grounds and rights of way. Initial inventory was completed in 2012 and updated periodically with the most current one completed in 2014.

The tree inventory is updated periodically and trees are assessed by the Village's Arborist (Landscape Maintenance Supervisor) during daily operations as time permits or warranted.

The tree inventory is utilized to define areas for additional plantings, treatment of disease trees and schedule maintenance and/or necessary removals.

Village Arborist conducted a canopy cover analysis using the "i-Tree" software. Results indicated an approximate 10% current canopy cover in 2013. This is on the lower end of what is considered a normal percentage and is attributable to the large amount of horse pastures and golf courses in the Village. It is the viewpoint of staff not to fixate on numerical percent coverage, but rather to strive to plant trees in as many viable open spaces as possible. Priority is placed on areas where trees will provide the most environmental and aesthetic benefits to the public.

Attachment 19-101-A: 2012 Tree Inventory Map and Data Sheet

Attachment 19-101-B: 2014 Tree Inventory Map and Data Sheet

Attachment 19-101-C: "i-Tree" Canopy Cover Analysis [..\Chpt 19 Parks-Grds & Forestry\19.2 Tree Inventory\i-Tree Canopy Cover Analysis.pdf](#)

### **Regulations (APWA 19.3)**

Wellington has a variety of ordinances on record and contained with the Unified Land Development Code to include:

- Tree protection
- Tree protection standards
- Wetland management practices
- Federally listed species which have been identified as endangered
- Landscape design and standards
- Buffering-Use of native and drought resistant plants
- Energy conservation and sustainable design
- Preferred species
- Future land use
- Controlled plant species
- Special landscape regulations
- Incompatibility landscape buffer strips

- Littoral planting
- Pruning
- Median Strips

Wellington has, and will continue to, have an official "Tree Board" whose mission shall be to develop and administer a comprehensive community tree management program for the care of trees on public property and for developing and citing minimum standards for tree protection and maintenance on a community-wide basis.

Wellington has been a recipient of the Tree City USA award for the last 17 years and a recipient of the Growth Award for the last 8 years.

Attachment 19-102: Tree Protection Ordinance #2002-06 and #2004-11

[..\Chpt 19 Parks-Grds & Forestry\19.3 Regulations\Ord #2002-06..pdf](#)

[..\Chpt 19 Parks-Grds & Forestry\19.3 Regulations\Ord #2004-11.pdf](#)

[..\Chpt 19 Parks-Grds & Forestry\19.3 Regulations\Ord #2004-11 continued.pdf](#)

#### **Master Street Tree Plan (APWA 19.4)**

The mission of the Village of Wellington's Master Street Tree Plan is to provide the basis for a strong, yet judicious, tree planting program that provides shade and ambience for resident enjoyment and achieves a minimum of 30% canopy coverage by 2030.

#### **Goals**

- Increase the overall canopy cover in Wellington through planting of shade trees in sustainable locations. Attain 20% canopy coverage by the year 2020 and attain 30% canopy coverage by the year 2030.
- Encourage tree planting on private property through tree seedling giveaways and educational campaigns. (It is suggested to increase the size of seedlings offered to increase both public interest as well as chances of survival).
- Continue to inspect the Village's younger hardwood trees and employ structural pruning in order to encourage strong form.
- Budget for the completion of a professional tree inventory within the next 2 years.

Attachment 19-103: Wellington Master Street Tree Plan

Attachment 19-104: Tree Reference List [..\Chpt 19 Parks-Grds & Forestry\19.4 Master Street Tree Plan\Tree Reference List.docx](#)

#### **Planting and Pruning Program (APWA 19.5)**

The Village of Wellington's planting and pruning program contains standards that convey current philosophies and practices, while guiding future planning for the Village's green infrastructure. This document sets the basic framework for decisions affecting the Village's urban forest rather than specifying detailed work plans. The program relates to the

comprehensive urban forest, which is considered to be all landscaping, including trees, shrubs and groundcovers.

Regular maintenance pruning of existing trees, timely removal/mitigation of hazardous trees and judicious planting of new trees are all vital components of an active and well-rounded urban forestry program. Following proper established industry guidelines is necessary during all components of tree management. It is especially critical that pruning is conducted by trained personnel and conforms to professional standards established by the tree care industry to avoid improper cuts that may result in severe damage.

There are several other fundamental components that pertain to the management of the urban forest. These elements include proper species selection, watering efficiently, proper use of fertilizer and pesticides and providing benefits to wildlife. Some of these elements will be addressed in other sections.

### **Pruning Program**

Wellington recognizes the most current editions of the following benchmark standards for tree pruning:

1. American National Standards Institute (ANSI) A300 Pruning Standards
2. ANSI Z133.1 Safety Standards
3. ISA Best Management Practices: Tree Pruning

Under the direction of the ISA certified Village arborist, our experienced tree maintenance personnel and contractors apply these standards when engaged in pruning operations. Proper safety standards shall be followed on the job site at all times, including personal protective equipment, maintenance of traffic and work zone delineation.

Attachment 19-105: Planting and Pruning Program

[..\Chpt 19 Parks-Grds & Forestry\19.5 Planting & Pruning Program\Planting and Pruning Program.docx](#)

Attachment 19-106 Tree Planting Log

[..\Chpt 19 Parks-Grds & Forestry\19.5 Planting & Pruning Program\Tree Planting Log.xlsx](#)

### **Transplant (APWA 19.6)**

As outlined in Wellington's Tree Transplantation Guidelines.

Attachment 19-107 Tree Transplantation Guidelines

[..\Chpt 19 Parks-Grds & Forestry\19.6 Transplants\Tree Transplantation Guidelines.docx](#)

### **Disease and Insect Control in Trees (APWA 19.7)**

Insect infestations on trees are controlled on an as-needed basis. Currently whiteflies attack several of our tree species and staff applies systemic insecticides that work quickly to control the

infestation. Only one tree species (Alexander Palms) receives a preventative treatment, due to its high susceptibility and limitations relating to tree size and pesticide uptake.

The inflorescences (seed pods in flowering stage) are regularly removed from these palms to prevent the exposing foraging bees to any insecticide that may be contained in the pollen. Diseases, such as fungal afflictions, are treated according to their unique characteristics. Many fungus issues are very hard to cure or are completely incurable, thus resulting in tree removal.

### **Removal of Diseased and Hazardous Trees (APWA 19.8)**

Wellington's land development regulations 7.3.12.B for diseases, dead trees and dead limbs states that all landscaping shall be maintained free from disease, pests, weeds and litter and that maintenance shall be limited to periodic trimming to maintain healthy trees, removal of diseased limbs or foliage that present a hazard.

Wellington's Code of Ordinances 30-53(4) states that no vegetation on developed or underdeveloped property can create a danger to public health, safety or welfare.

The Village Arborist periodically inspects trees on public grounds. Insect infestations or minor fungal afflictions are treated on an as-needed basis. However, any tree that is found with a major structural defect or terminal disease that will lead to eventual failure is removed in order to mitigate the potential hazard to the public. Typically, senior level staff in both Public Works and Planning and Zoning is notified of tree removals in case inquiries are received from the public. Additionally, photos are taken and saved for a short time in order to illustrate the condition that lead to the basis for removal. Lastly, replanting of trees is usually done soon after the removal of trees of significant size or amount. While trees are not always replanted in the same exact location, replacements are usually installed in the same general area.

Attachment 19-108: LDR 7.3.12B

[..\Chpt 19 Parks-Grds & Forestry\19.8 Removal of Diseased & Hazardous Trees\LDR 7.3.12.B.pdf](#)

Attachment 19-109: Code Ordinance 30-53(4)

[..\Chpt 19 Parks-Grds & Forestry\19.8 Removal of Diseased & Hazardous Trees\Code of Ord - Sec. 30 53. Nuisance declared. .docx](#)

### **Tree Removal (APWA 19.9)**

Please see Tree Removal Policy and LDR 7.3.12B. for:

Attachment 19-108: LDR 7.3.12B

Attachment 19-110: Tree Removal Policy

### **Turf Management (APWA 19.10)**

Mowing, fertilizing, and maintenance of turf are performed regularly. Cultural practices such as aeration, weed control and sodding are performed on an as needed basis in specialty areas including parks and athletic fields.

Mowing of common areas, including medians and neighborhood parks are on a schedule of 42 cuts a year, athletic fields are cut 2-3 times per week, equestrian trails and canal banks are cut 29 times per year.

Pesticides are applied to St. Augustine turf on an as-needed basis. Pests such as chinch bugs and grubs are spot-treated as soon as they are detected. Blanket treatments are avoided, as to reduce the incidental killing of beneficial insects. Since Wellington adheres to Integrated Pest Management protocols, regular scouting, proper mowing heights and proper irrigation output are essential factors in our pest control program.

Turf is maintained at 3.5" - 4", with 4" being preferred, as it reduces scalping of grass on uneven terrain. Fertilizer is applied to medians and common areas 3-4 times per year. An 8% nitrogen fertilizer is used, as it is enough to keep grass healthy, but does not push growth so vigorously as to increase pest problems or cause micronutrient deficiency issues in palm trees. Fungal issues typically appear in early Spring and late Fall and are treated as needed as well. Different cultural practices apply to athletic fields (Please see Turf Cultivation Management Practices for Wellington Athletic Fields).

Athletic fields are on a mow schedule of every 6 weeks. Repairs are done as needed with safety being the first priority.

The following contractors provide mowing services for the following locations:

Pro Lawn: Primary Roadways, Secondary Roadways, Canals and Rustic Ranches

Gardenscapes: Common Areas around buildings and facilities

Attachment 19-111: Turf Cultivation Management Practices for Wellington Athletic Fields  
<..\Chpt 19 Parks-Grds & Forestry\19.10 Turf Management\Turf Cultivation Mgmt Practices for Athletic Fields.pdf>

Attachment 19-112: Fertilization Schedule for Athletic Fields  
<..\Chpt 19 Parks-Grds & Forestry\19.10 Turf Management\Fertilization Schedule-Athletic Fields.pdf>

### **Mowing (APWA 19.11)**

During the summer months, we mow 2X/week, alternating directions between 6-12, 8-2, 10-4, and 3-9 (clock. This is dependent on growth habits and weather, a 3<sup>rd</sup> cut may be done, or a double-cut on a particular day. During the winter months, we mow 1X/week mowing in the same direction (each pass) every time to burn in the lines. Depending on growth habits, weather and wear, we may skip a mowing one week.

All athletic fields are maintained at a H.O.C. of 1 inch at present; the one exception is the Paspalum at the Wellington Amphitheater, which we are mowing at .5 inches and this is done with a walking reel mower. H.O.C. might be lowered when growing conditions are optimum, but for now these heights are "set in stone"

All RFP's for mowing contracts include frequency and height of cuts. Please see attached RFP Specifications and Turf Cultivation Management Practices for Wellington Athletic Fields. Please see Turf Management (APWA 19.10) for the following attachment:  
Attachment 19-111: Turf Cultivation Management Practices for Wellington Athletic Fields

Attachment 19-113: Landscape Services (Mowing) RFP  
[..\Chpt 19 Parks-Grds & Forestry\19.11 Mowing\Landscape \(Mowing\) Services RFP.pdf](..\Chpt 19 Parks-Grds & Forestry\19.11 Mowing\Landscape (Mowing) Services RFP.pdf)

### **Turf Inventory (APWA 19.12)**

Turf inventory of publicly owned grounds is compiled through a series of master and detail maps.

Attachment 19-114: Master & Detail Maps for Facilities, Primary, Secondary, Canal & Equestrian Trails and Field Inventory Maps  
<..\Chpt 19 Parks-Grds & Forestry\19.12 Turf Inventory>

### **Turf Inspection (APWA 19.13)**

Wellington uses the City Reporter Software and Inspections & Verification forms for the inspection of publicly owned grounds (turf). Grounds are inspected on cycles, each cycle being completed multiple times per year.

Inspection and maintenance of equestrian fences, trails and flashers are documented through SunGard Naviline Work Request Module. Equestrian trails are inspected on a monthly basis with equestrian fences and flashers inspected on a quarterly basis.

Attachment 19-115: Sample of General Turf Inspections (City Reporter)  
<..\Chpt 19 Parks-Grds & Forestry\19.13 Turf Inspections\Sample of Gen. Turf Inspections.pdf>

Attachment 19-116: Inspection & Verification Forms (including contractor invoices)  
<..\Chpt 19 Parks-Grds & Forestry\19.13 Turf Inspections\Inspection & Verifications Forms 1 of 6.pdf>

Attachment 19-130: SunGard Naviline Equestrian Trail, Fence, & Flasher Inspection Work Requests and Work Request Inquiry with Result Comments  
<..\Chpt 19 Parks-Grds & Forestry\19.13 Turf Inspections\Eq Trail,Fence&Flasher Inspection Work Requests.pdf>

### **Fertilization (APWA 19.14)**

All landscape areas around buildings and along roadways are fertilized with an 8-2-12 granular palm fertilizer containing micronutrients every 4 months. Research has proven that high nitrogen turf fertilizers can push palms into a Magnesium and Potassium deficiency. The roots of palms may extend up to 50 away from the trunk and they will absorb any fertilizer applied in that zone. Research has also shown that St. Augustine turf and shrubs perform very well receiving this fertilizer. Therefore, since most of the landscaped areas contain palm trees, this single product is utilized. This has yielding good results and also has simplified application

efforts.

Ballfields are fertilized with 18-0-18 coated with the pre-emergent herbicide dimension once a year and with 18-0-18 coated with the pre-emergent Ronstar or Barricade also once a year. Weed pressure in Florida is so great that you must use pre-emergent to limit weed populations to the point of manageability (controlled through herbicide spraying). Outside of the before mentioned fertilizer applications, we fertilize with 16-2-16 granular (slow release), Milorganite 6-2-0, and 21-0-0 (quick release) as needed. For example, during football season, the fields get 16-2-16 once a month and Milorganite 6-2-0 once a month, supplemented with 21-0-0 once a week to spark growth. This is an extreme example, as these football fields are used every night for a practice and every Saturday for a least 6 games/field; an average field would be fertilized 8x/year.

Note: we always fertilize after verticutting and/or aerification of a field. Also, we use a granular fertilizer from late March/early April until October/early November, depending on temperatures and we use a liquid fertilizer during the winter months to maximize plant uptake and minimize leaching of nitrogen and phosphorus.

Wellington complies with State Regulations on phosphorus level reduction.

Attachment 19-111: Turf Cultivation Management Practices for Wellington Athletic Fields  
[..\Chpt 19 Parks-Grds & Forestry\19.15 Disease, Insect & Weed Control\Turf Cultivation Mgmt Practices for Athletic Fields.pdf](#)

Attachment 19-112: Fertilization Schedule for Athletic Fields  
[..\Chpt 19 Parks-Grds & Forestry\19.15 Disease, Insect & Weed Control\Fertilization Schedule-Athletic Fields.pdf](#)

Attachment 19-113: Wellington's BMP Fertilizer Brochure  
[..\Chpt 19 Parks-Grds & Forestry\19.14 Fertilization\Wellington's BMP Fertilizer Brochure.pdf](#)

Attachment 19-114: FDACS – Florida Urban Turf Fertilizer Rule  
[..\Chpt 19 Parks-Grds & Forestry\19.14 Fertilization\FDACS-FL Urban Truf Fertilizer Rule.pdf](#)

### **Disease, Insect, and Weed Control in Turf (APWA 19.15)**

The Village follows an Integrated Pest Management approach to the control of insects, weeds and disease in turf. Notable key practices include the foliar application of a selective herbicide for broadleaf weed control, rather than granular. This reduces the chance for groundwater contamination as well as injury to shrubs/trees through the uptake of product in the root zone. Additionally, pre-emergent herbicides are used in conjunction with non-selective contact herbicides in mulched beds. This offers longer lasting control of weeds.

Please see Fertilization (APWA 19.14) for the following:

Attachment 19-111 Turf Cultivation Management Practices for Wellington Athletic Fields

Attachment 19-112: Fertilization Schedule for Athletic Fields

Attachment 19-115: Applicable Licenses (Employees and Contractors)

### **Irrigation System Design (APWA 19.16)**

The Village of Wellington maintains over 60 irrigation systems and employs six irrigation technicians. To complete irrigation installation projects, Wellington reaches out to independent contractors that specialize in the field, to design a system that fits with the landscape design and uses manufacturer products that are commonly used throughout the Village.

An irrigation plan is created based on the needs, costs, and landscape type as specifications for the installation, and may include provisions such as adjustability to the addition of grass or sod and wells that can be used as a backup system when reclaimed water is not available.

Attachment 19-117: Scope of Services for Greenview Shores Blvd. Irrigation Design & Irrigation Plan

<..\Chpt 19 Parks-Grds & Forestry\19.16 Irrigation System Design\Scope of Services -Greenview Shore Blvd. Irrg Design.pdf>

<..\Chpt 19 Parks-Grds & Forestry\19.16 Irrigation System Design\Greenview Shores Blvd. Irrigation Plan.pdf>

### **Irrigation System Maintenance (APWA 19.17)**

The Village of Wellington's Public Works Department has three separate divisions that have irrigation staff. Landscape Maintenance has six (6) full time technicians and one (1) part time technician, Aquatics & Sports Facilities Division has two (2) full time technicians and Neighborhood Parks has one (1) full time technician. These personnel work independently of each other under separate supervisors, however they can all be assembled to work on a large project, if needed.

Irrigation systems along roadways and around building grounds are typically checked for issues once every two weeks. (While crews are checking systems on a daily basis, it takes two weeks to make a full rotation). Large projects will result in a 3 week inspection cycle.

Typically irrigation systems are checked for the following issues:

- Broken or clogged heads
- Broken or leaking valves or pipes
- Pressure
- Correct spray arc
- Over-spray onto hardscape
- Sunken heads or short pop-ups
- Tilted heads
- Uneven coverage
- Spray blocked by vegetation

Landscape Maintenance maintains 64 separate irrigation systems, each with their own timers. The majority (approximately 70%) are Rainbird clocks. Toro Sentinel clocks make up the

remaining 30% of the timers. The Sentinel clock system gives the irrigation crew chief the ability to remotely program and control the timers (via computer).

The Village utilizes reclaimed water for irrigation for some of the systems, which make up approximately 40% of the total irrigation usage. The remaining water source includes both surface water and well water (in about equal proportions). Landscape Maintenance operates 57 pumps Villagewide of various sizes (from 1.5 HP-10HP). There are 19 large Hoover pumps spread across all of the divisions. Seven (7) of the Hoover pumps have the Flow Guard system, which is an automated electronic system with a transmitter that records water flow data and will shut the pump off when there is a large break. The Village has a maintenance agreement with the manufacturer, Hoover Pumps, for those that have the Flow Guard System. The remaining 12 Hoover pumps without Flow Guard are maintained and serviced by Village staff.

Attachment 19-118: Hoover Agreements for Pumps with Flow Guard System

<..\Chpt 19 Parks-Grds & Forestry\19.17 Irrigation System Maintenance\Hoover Pumping Service Agreements.pdf>

Attachment 19-119: Irrigation Maintenance & Inspection Logs

<..\Chpt 19 Parks-Grds & Forestry\19.17 Irrigation System Maintenance\Irrigation Maint. & Inspection Logs.pdf>

### **Fences (APWA 19.18)**

Wellington's Fence Maintenance Program is both a proactive and reactive program.

It is proactive through the daily maintenance of all parks and sports fields. All fencing is repaired or replaced when an issue is detected, reported or discovered through the inspection process or other notification (i.e.: resident call in, parks or field user, etc.).

The appropriate division supervisor assesses damages and determines whether it is cost effective to repair or if replacement is needed. Every effort is made to match fencing material, paint, and style.

Work orders are generated for fencing repairs when maintenance problems are reported by residents to Wellington's call center.

Equestrian fence inspections are completed every 120 days/4 months and documented through SunGard Naviline Work Request Module. Parks, playgrounds, and sports field fencing are inspected as part of the general inspection process and documented through City Reporter Application.

Attachment 19-120: SunGard Naviline – Equestrian Fence Inspection Work Request and Work Request Inquiry

<..\Chpt 19 Parks-Grds & Forestry\19.18 Fences\Eq Fence Inspection Work Request & WR Inquiry.pdf>

Attachment 19-121: Playground General Inspection Report  
<..\Chpt 19 Parks-Grds & Forestry\19.18 Fences\Playground Gen. Inspection Report.pdf>

### **Controlled Burns (APWA 19.19)**

Due to the highly urban setting in the Village of Wellington controlled burns are not conducted and are prohibited. Additionally, the Village does not have any natural communities (large wooded areas) that are dependent upon fire for ecological health.

All open burning permits for commercial, residential, and agricultural land clearing are approved and issued by Palm Beach County Fire and Rescue.

“Backyard burning is not permitted in Palm Beach County, therefore recreational fires are not permitted as a means of disposing of yard debris.

The [Division of Forestry](#) is responsible for the oversight of prescribed burns for habitat/ecosystem management and burning incidental to other continuous agricultural activities. This includes controlled burns by Wellington in what is called The Wellington Preserve (Section 24).

The following are relative links:

[https://www.municode.com/library/fl/palm\\_beach\\_county/codes/code\\_of\\_ordinances?nodeId=PABECOCO\\_CH12FIPRPR\\_ARTVOPBU](https://www.municode.com/library/fl/palm_beach_county/codes/code_of_ordinances?nodeId=PABECOCO_CH12FIPRPR_ARTVOPBU)

<http://www.freshfromflorida.com/Divisions-Offices/Florida-Forest-Service/Wildland-Fire/Prescribed-Fire>

Attachment 19-122: Palm Beach Burn Permit Policy & Municipal Code  
<..\Chpt 19 Parks-Grds & Forestry\19.19 Controlled Burns\PBC Burn Permit Policy & Municipal Code.pdf>

Attachment 19-123: Florida Forest Service Webpage Information on Prescribed Fire in Florida  
<..\Chpt 19 Parks-Grds & Forestry\19.19 Controlled Burns\FL Forest Service Webpage-Info on Prescribed Fires.pdf>

### **Playgrounds (APWA 19.20)**

Inadequate maintenance of equipment may result in injuries on playgrounds. Because the safety of playground equipment and its suitability for use depend on good inspection and maintenance, the manufacturer's maintenance instructions and recommended inspection schedules should be strictly followed. Wellington uses both the manufacturer's maintenance instructions and their Playground Maintenance Program.

Attachment 19-124: Wellington Playground Maintenance Program  
<..\Chpt 19 Parks-Grds & Forestry\19.20 Playground\Playground Maintenance Program.docx>

Attachment 19-125: Sample of Completed Playground Inspections

<..\Chpt 19 Parks-Grds & Forestry\19.20 Playground\Sample of completed Playground Inspection.pdf>

### **Recreation Amenities (APWA 19.21)**

The planning and design of recreational amenities are addressed through the Village of Wellington Comprehensive Plan, Recreation and Open Space Element as well as through local zoning and building codes.

Recreation Amenities consist of, but are not limited to: public restrooms, walkways, trails, seating and rest areas, signage in grounds, parks, and sports fields.

Maintenance of recreational grounds and amenities are recorded through City Reporter Application and documented through the general inspection reports.

Inspection and maintenance of equestrian fences, trails and flashers are documented through SunGard Naviline Work Request Module. Equestrian trails are inspected on a monthly basis with equestrian fences and flashers inspected on a quarterly basis. Please see Practice 19.13 Turf Inspections, Attachment 19-130: SunGard Naviline Equestrian Trail, Fence, & Flasher Inspection Work Requests and Work Request Inquiry with Result Comments

Attachment 19-126: Ordinance No. 99-1-Adoption of the Comprehensive Plan (including meeting minutes)

<..\Chpt 19 Parks-Grds & Forestry\19.21 Recreation Amenities\Village Ordinance #99-1 Adoption of Comprehensive Plan.pdf>

Attachment 19-127: Village of Wellington Comprehensive Plan Recreation and Open Space Element (including meeting minutes)

<..\Chpt 19 Parks-Grds & Forestry\19.21 Recreation Amenities\Village of Wellington Council Minutes -Adopting Comprehensive Plan .pdf>

<..\Chpt 19 Parks-Grds & Forestry\19.21 Recreation Amenities\Village of Wellington Council Minutes -Approving EAR.pdf>

Attachment 19-128: Park Amenities Matrix & Location Map

<..\Chpt 19 Parks-Grds & Forestry\19.21 Recreation Amenities\Park Amenities Matrix - updated 9.4.08-CAPRA.xls>

Attachment 19-129: Sample of General Inspection Reports (Climbers, Field & Open Space, General Playground, Pool, Restrooms, Slides, Spring Toys, and Swings)

<..\Chpt 19 Parks-Grds & Forestry\19.21 Recreation Amenities\Sample of General Inspections Reports.pdf>

### **Special Events**

Special events are organized by the Parks and Recreation Department and the Environmental Services and Neighborhood Parks Divisions are responsible for the set up and break down of all equipment and seating for these events. Seating requirements, tents, podiums etc. are communicated to the setup crews through the Parks and Recreation Department. The event

schedule and requirements changes yearly as events change, added or deleted. Major events require the ICS Command structure for execution. Environmental and Neighborhood Services assist with the following events:

1. The Easter Egg Hunt
2. Earth Day
3. Aquathon
4. September 11th Ceremony
5. Jeff Annas 5K Run
6. Peace Pole Ceremony
7. Howl at the Moon
8. Fall Festival
9. Horse Country 10 Miler
10. Community Fitness Run
11. Veterans Day Parade
12. Fishing Classic
13. Father/Daughter Dance
14. ACS Walk
15. Memorial Day Parade and Ceremony
16. 4th of July Celebration
17. Fire Festival
18. Long Course Swim Meet
19. Relay for Life

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## **Chapter 5 Solid Waste**

### **APWA Solid Waste Mgmt., Collections, Recycling and Reuse and Disposal, Chapters 20-23**

#### **Program Philosophy and Objectives**

There are many different approaches on how to manage a municipal solid waste program. In cases where collection services are provided by private firms under a municipal contract the range of oversight involvement runs from “do almost nothing” to being totally overbearing and unreasonable. In the former case the municipality is almost completely at the mercy of the private firm and in the latter poor service and litigation is often the result.

The Solid Waste Management Program implemented in the Village is aggressive in its demand for performance yet fair and reasonable in its application of standards and expectations.

Program objectives are based upon this philosophy of aggressive but reasonable contract administration.

#### **Program Objectives**

1. In coordination with the collection contractor provide timely and consistent levels of service to constituents,
2. With proactive customer service provide timely corrective action as needed,
3. Maintain thorough complaint request and resolution records to document performance,
4. Provide customer education on collection service requirements through the Village WEB site, service tags and other means,
5. Coordinate with Finance, the SWA and the Contractor monthly if possible but at least quarterly on residential units counts,
6. Provide timely and thoroughly documented monthly performance evaluations,
7. Provide accurate inventory control of universal containers by size, type (color) in stock, distributed, destroyed, etc. for audit purposes,
8. Ensure distribution of program information to all key program staff members,

9. Through program staff, support service administration and management commitment, continue to reduce Village facility waste generation and associated disposal costs by increasing effective diversion through recycling at Village facilities,
10. Establish a consistent monitoring program so as to measure results of staff diversion efforts,
11. Ensure open and frequent communication between staff members assigned with functions of the program.

## **Program Service Providers & Management Responsibilities**

### **Contracted and Permitted Services**

The Village Solid Waste Management Program is largely internalized except for the non-ad-valorem assessment and collection services. This is a viable approach for managing the program as long as the Solid Waste Supervisor knows all assigned tasks and personnel in order to address day to day issues that must be resolved. This allows continual development of institutional knowledge and minimizes the need for outside management assistance except for special services or in cases of emergency. Outside services will continue to be a part of the Village program on an as needed basis.

### **Solid Waste Authority of Palm Beach County (SWA)**

The SWA has, over the past decade, developed a very sophisticated electronic computerized program and data base for tracking, monitoring, and reporting on the quality of performance of collection service providers in the unincorporated area. Wellington has been a part of this system since the SWA created program. This electronic system is built on the countywide property code classification system used by the Property Appraiser which is the basis upon which the SWA prepares its annual non-ad-valorem assessment for both collection and disposal services. The SWA continues to provide to the Village, through an Interlocal agreement, the following solid waste program services:

1. Billing of the annual collection non-ad-valorem assessment,
2. Provides solid waste and recycling disposal services,
3. Can provide waste and recycling quantity reports,
4. Provide the annual residential credit letter to the Village for the collection contractor. This letter can be used to verify residential unit counts and projected tons of generated waste.

### **Palm Beach County Tax Collector (TC)**

Through an Interlocal Agreement the Tax Collector collects the annual collection non-ad-valorem assessment for the Village. Without this agreement the Village would not be able to collect the assessment and would have to use some other means for billing for solid waste and recycling collection services. The utility billing system is not adequate for billing throughout the Village.

### **Solid Waste and Recycling Collection Contractor**

The Solid Waste and Recycling Collection Contract for the Village is exclusive for the following services:

1. All residential solid waste and recycling collection,
2. All commercial solid waste collection,
3. All institutional and agricultural solid waste collection.

The contract does not include commercial recycling or construction roll-off collection service. This is a seven (7) year contract commencing October 1, 2008.

### **Construction Waste Collection Permitted Service Providers**

Village has chosen to maintain a competitive market for this service by establishing operational regulations, by permit agreement, for qualifying firms. Implementation began in April of 1999 thereafter only firms having received a Village permit to provide construction roll-off collection services are allowed to operate in the Village. Permits are to be issued annually to qualifying companies. The Solid Waste Supervisor is responsible for receiving applications, reviewing for completeness and issuing permits after approval by the Village Attorney and Village Manager or his designee. The Solid Waste Supervisor is responsible for delivering the original permit agreement to the Village Clerk and the permit fee to the Finance Department. The Building Division has responsibility for notification to contractors at the time of building permit issuance those permitted for this service.

The program will be evaluated annually for modifications. This will be done as part of the budgetary process.

### **Consulting Services**

The Village may use the services of consulting firms to assist with special projects, in emergencies or when special knowledge or experience is needed.

### **Management Responsibilities & Delegation of Decision Making**

The Solid Waste Management Program is one dedicated to the delivery of quality solid waste and recycling collection services to residential, commercial, institutional, agricultural and construction customers, while protecting and enhancing the Village's high standards for community appearance. Due to the diversity of customers, unique neighborhoods and the number of service providers required to meet customer needs all departments and most divisions of Village government are involved in some facet of ensuring delivery of quality services under this program.

Clear policy direction as to community expectations, strong management commitment to consistent quality of service and staff given the responsibility and authority to ensure delivery of quality service combined with close cooperation and coordination between involved parties should equate to satisfied customers.

### ***Policy Functions***

The Village Council directly represents all of the “Publics” in the Village and speaks on their behalf by setting government policy through rules, regulations, plans and procedures which are supposed to reflect the standards and expectations of the community.

The Council established the Solid Waste Management Program for the benefit of Village constituents. Council decisions have determined the following:

1. The Village will provide for solid waste and recycling collection service through competitive procurement.
2. The contract for collection services establishes the quality of performance expected by the community and determines certain customer responsibilities.
3. Council established the level and method of collection services to be provided.
4. Several Ordinances approved establish community standards over trash piles, garbage can storage and set-out requirements as well as on-site control of construction waste and litter control.
5. Approved a permit program for construction waste collection that maintains a competitive market.
6. Adopts the Solid Waste Enterprise Fund Budget including rates and fees for service.
7. These policies or community expectations would not be realized without Village management implementing the approved programs and providing monitoring, reporting, tracking, education and compliance, as needed and required.

### **Village Management Functions**

The Village Manager implements the policies of the Council through his key professional staff all of whom are responsible to some degree with overseeing the Village Solid Waste Management Program. Based upon current organizational assignments and tasks to be performed under this program the following reflects the management team for the program:

- Village Manager
- Director of Community Services
- Director of Administrative and Financial Services
- Director of Operations
- Village Clerk
- Village Attorney

### **Department of Operations**

Provides day to day oversight of collection contractor services and performance; provides customer service reporting function; direct interface with the collection contractor; universal container procurement, distribution and inventory control, performance reporting, construction waste hauler permitting, coordination with other departments as required.

### **Department of Administration and Financial Services**

Provides procurement services, receives, verifies and distributes contractor performance bonds and insurance; monthly updates residential unit counts from new certificate of occupancy, verifies and pays contractor invoices less any penalties, quarterly receives and verifies contractor franchise fees, annually prepares the enterprise fund budget for the Council.

### **Department of Community Services**

Provides code compliance, certificate of occupancy monthly reports, collects fees for construction waste generation and collection/disposal service fees not included in the non-ad-valorem assessment.

### **Office of Village Clerk**

Retains all original contracts and documents; receives, reviews and submits the Council approved non-ad-valorem collection roll to the SWA and prepares the annual full cost of service advertisement to be published in the newspaper.

### **Office of Village Attorney**

Provides legal support as needed to the program.

### **Organizational Assignments and Responsibilities**

As previously recognized responsibilities for various components of the Solid Waste Management Program are distributed throughout the Village organizational structure. This distribution of assignments has not materially changed since the first contract award in 1998. Although principle responsibility for collection contract administration is now in the Department of Operations it was originally in the Department of Administration and Financial Services. These two departments are responsible for the majority of program assignments this making communication and cooperation essential to program success.

This section of the manual will discuss each departmental assignment for the Solid Waste Management Program and the details of each task. The following charts I – IV summarize assigned tasks.

### **Department of Operations: Public Works**

This department is responsible for the majority of the Solid Waste Management Program assignments and responsibilities. Specifically, overall administration of the of the solid waste and recycling collection contract, the permitting of construction roll-off services, storm event debris removal, processing and disposal as well as coordination of all activities related to the following assignments:

#### **Solid Waste Supervisor**

1. Acts as the Contract Administrator

2. Receives, reviews and processes roll-off permit applications
3. Directs one employee who delivers containers and bins as well as repairs damaged containers. Field checks complaints and resolution of complaints
4. Provides oversight of contractors daily operations
5. Coordinates with the contractors collection supervisor
6. Prepared the monthly contractor performance evaluation and provides copies to finance and the contractor
7. Assists in review and discussions of contract revisions
8. Coordinates unit and tonnage data inputs from the SWA
9. Verifies annual disposal assessment bills from the SWA
10. Reviews annual residential credit letter from the SWA and assists in reconciliation with finance and the contractor
11. Orders and maintains universal container inventory
12. Assures timely submittal of contractor reports and tracks data
13. Assists with preparation of annual fund budget
14. Review and process program invoices for payment
15. Notifies contractor of annexations
16. Field checks route neighborhoods daily
17. Follow up with contractor on complaints
18. Coordinates event needs with collection contractor
19. Performs route audits periodically
20. Reviews development plans to ensure adequate collection equipment turning radii, dumpster capacity and access
21. In the event of a major storm assumes responsibility for debris removal, processing and disposal

### **Customer Service**

1. Receive customer calls: record complaints and requests, distribute work orders to the solid waste supervisor and collection supervisor
2. Track calls and produce monthly report for the performance evaluation prepared by the solid waste supervisor

### **Purchasing**

1. Provide procurement services for universal containers
2. Provide procurement services for contract collection services
3. Issue purchase orders as required in support of the Program
4. Receive and verify bonds and insurance annually from the contractor and others as required
5. Ensure the Clerk receives the originals of official contract documents and distribute copies to others as required

### **Financial**

1. Prepare the annual enterprise fund budget for Council
2. Prepare the annual Trim Notice, collection and disposal rate resolutions

3. Receive and evaluate the contractors annual audit
4. Receive the quarterly contractor financial reports and verify franchise fees
5. Receive and account for non-ad-valorem assessment income
6. Receive and account for monthly fees received from new construction permits (waste fees), collection and disposal fees from new residential units
7. Receive monthly Performance from the SW Supervisor and deduct penalties from contractor payments. Track obeisance
8. Maintain annual audit of universal containers purchased, in use and destroyed by type, color and size
9. Assist the Clerk in preparation of the annual full cost accounting advertisement
10. Pay and account for other budgeted and approved expenses of the program
11. Receive and account for additional container lease fees
12. Receive and account for construction roll-off permit fees
13. Receive and account for any Grant or sponsorship fees
14. Track residential units from new C.O.s or demolitions, periodically reconcile unit counts with the SWA. Monthly reconcile with collection contractor on invoices. Coordinate monthly unit counts with solid waste supervisor

### **Code Compliance**

Assists program with compliance of set-out and trash piles

### **GIS**

1. Provides mapping support
2. Can assist with unit count verification

### **Building**

1. Collects waste generation fees on new construction permits
2. Collects collection and disposal fees on new residential units
3. Provides report monthly to the SWA, finance and solid waste supervisor
4. Provides list of permitted roll off service firms to building contractor

### **Village Clerk**

1. Provides notice of annexations to the SWA and solid waste supervisor
2. Maintains files on all official contracts, agreements, resolutions and related documents
3. Publisher/Editor for
  - Public Notices
  - News letters
  - News releases
  - Maintains the Village web site
  - Annual report
4. Verify annual non-ad-valorem assessment roll
5. Transmits rate and corrections to roll to the County

6. Publish annual full cost accounting advertisement

**Village Attorney**

1. Reviews all official documents
2. Assists with contract procurement and negotiation
3. Assists with contract dispute resolution
4. Provides other assistance as required

Please see Solid Waste Policy & Procedure Binder for additional information.

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## **Chapter 6 Roads**

### **APWA “Street Maintenance and Street Cleaning” Chapters 24-25 APWA “Traffic Operations” Chapter 33**

Roads and streets provide safe and effective transportation to the public and are one of the major ways in which the public evaluates the performance and professionalism of the governmental agency tasked with the responsibility of road and street maintenance.

As our community has increased so has the volume of traffic on our roadways. Although our community is fairly young in comparison with some of our surrounding communities, a major portion of our roads are carrying volumes far in excess of their designed capacities. We are therefore faced with both the maintenance and the upgrading of these facilities to meet the present traffic conditions.

Correct road and street maintenance is more than patching problems with asphalt. Proper road and street maintenance is knowing how to recognize that a problem exists, the cause of the problem, then choosing the right maintenance method, materials and equipment to correct the problem as soon as possible.

#### **Street Maintenance (APWA Chapter 24)**

#### **Coordination with Transportation Planning (APWA 24.1)**

The following Roadway Maintenance procedure coordinates the planning of operations and maintenance for Wellington streets and defines the functional classification of the types of roads, the procedure for coordinating street maintenance activities, and how to address various repair and operating issues with the road infrastructure.

Village roads are maintained using annual milling and resurfacing contracts that are established through purchasing departments, which generally have two year expirations with an optional one (1) year renewal clause.

#### **Roadway Functional Classification**

##### Type I – Arterial

Arterial roadways connect population centers and economic activity with each other and or State or Municipal road systems

Occur at reasonably regular intervals to collect traffic from roads of lesser volume

##### Type II – Collector

Carry relatively heavy corridor traffic movements, present or potential

Collector roadways occur at reasonably regular intervals to collect traffic from local roads

Channel it into the arterial road system.

Serve population centers not feasibly serviced by arterial routes.

#### Type III – Local Road

Type III roads are through roads with the primary purpose of abutting properties  
Provide for minor volumes of through traffic.

#### Type IV – Local Road

Type IV roads consist of cul-de-sac legs and short and/or dead end road sections serving the immediate area.

#### Type V – Private Road

Private roads are roads that have not been dedicated to the Village and/or provide private access to property

These roads are not maintained by public funds.

#### **Shellrock Roadways (Unpaved)**

Shellrock shall be placed upon Village shellrock roadways on an as-needed basis. This is the base of the application process; however, a field inspection, weather, and traffic loads will determine if the road will need to receive an application. The overall conditions of the existing base material and traffic volumes are considered in determining if an application is needed. Grading Operators also will inform the Roads Supervisor of shellrock needs and conditions.

#### Application:

- Shellrock shall be 2” minus material from local quarries
- Type II collector roadways shall have a minimum width of twenty-three (23) feet
- Type III local roadways shall have minimum width of twenty-one (21) feet
- Shellrock shall be applied a minimum depth of six (6) inches
- Any rock over two inches that are on the surface shall be removed

#### Maintenance of Shellrock Roadways

- Shellrock roads are to be graded no less than once a week and grader operator(s) record daily activities and road conditions in the Grader Log (notebook).
- After severe weather all shellrock roads are to be inspected for washouts and potholes and areas that are determined to be safety hazard will be repaired immediately
- Shellrock that conforms to the 2” minus material shall be kept on site at the Village Storage Facility on 120<sup>th</sup> Ave to make repairs to damaged roadways

### **Roadway Overlay**

Roads are evaluated to determine which roads are to be resurfaced. The Asphalt Institute rating form shall be used to score roadways that are being considered for overlay. It is our intention to overlay eight (8) miles annually or as much as much as the budget will allow. Sidewalks will also be inspected along with the roadways that are being assessed.

### **Asphalt Repair**

It is Wellington’s Policy that all Asphalt Repair and Pavement Cut Restoration adhere to the following guidelines:

- Potholes are repaired using the following priority: safety concern, location and then aesthetics.
- All work is done to preserve the integrity of the road surface, maintain a safe roadway and a high quality of aesthetics.
- Potholes that cause a safety hazard are addressed immediately with the use of hot mix asphalt. If it is raining or there is no access to an asphalt plant, then cold patch will be used.
- Supply of cold patch is maintained at all times for use in an emergency situation.
- Proper traffic control will be placed to protect the public and workers by MOT certified DOT trained personnel.
- Potholes will be milled or cut out approx.; 6 to 8 inches wider than the existing cavity. The base compacted, and then tacked including edges. The Hot Mix Asphalt (HMA) is placed and compacted to a smooth and uniform surface.
- Upon completion of the pothole repair, the delivery ticket must reflect where the material was used. The total amount (tons) of material used is then entered into the Supervisor’s Outlook calendar in order to track total tonnage used on a monthly basis for recording this information in Performance Measures Spreadsheet.
- Edge of roads (shoulders) will have recycled asphalt millings to stabilize and shore-up low or rutted edges.

### **Radius Treatments**

Radius treatment installations are located on major thoroughfares or arterial collectors where safety concerns dictate. If problem areas are identified on roadways other than the above-mentioned that create a safety hazard, radius treatments may be installed.

### **Radius Treatment Standards**

- Treatment shall encompass the entire radius and shall be at least 1' (one foot) wide.
- Base shall be 6" of compacted shellrock or lime rock. A 1½" asphalt base shall be placed and compacted over the base material. 4 inches of hot mix asphalt placed in 2 or 3 lifts may be substituted for 6 inch road rock base.
- The raised portion is then installed. The raised portion shall not exceed 2½" in height and be spaced on 3' (three foot) center.
- The raised portion shall be painted white with reflective beads.
- Residents are encouraged to explore the use of 12" round by 4" high curb treatments on radiuses, provided they are not within 2' of the edge of the roadway, prior to requesting the asphalt radius treatments.

### **Pedestrian Pathways**

There are over 28 miles of asphalt pathways in the Village. Every effort shall be made to ensure that the pathways are safe and traversable by the public.

- Repairs, removal and replacement of pathways are scheduled as needed.
- Edges where the asphalt is to be removed shall be maintained to allow easy access by pedestrians and cyclists.
- Potholes in the pathways shall be repaired within 48 hours, when possible. All areas are to be repaired as in the roadway.

### **Sidewalk Inspections**

Sidewalk inspections are scheduled upon notification of a repair needed and/or during routine maintenance. Upon notification (resident call, observed during routine maintenance, etc.) of a repair that is needed an inspection of the entire neighborhood will be completed and all necessary repairs that may pose a safety hazard will be addressed.

- Meter readers report damaged areas that are observed
- Residents notify the Village of areas of concern
- Village staff doing routine maintenance in neighborhoods
- Trash pick-up crews along thoroughfares

## **Sidewalk Maintenance**

Over time sidewalks are damaged from weathering, tree roots, and regular use. Wellington's sidewalk maintenance program ensures that repairs and reconstruction of damaged sidewalks are addressed in a timely manner to provide well-maintained, high quality sidewalks at a reasonable cost.

All public sidewalks are inventoried and assessed for repair needs every five years. The inventory may be completed by force labor or subcontractor. Survey results will identify defects, services needed for repair, obstructions, dimensions of the area (square footage) and if water meter box will need to be replaced.

Once identified, inventory results will be prioritized according to the level of defect or repair needed and will be scheduled for repair in a timely manner.

Any citizen complaint reported will be given first consideration for improvement or repair if the reporting proves to be a safety or access issue.

## **Concrete**

- Prior to any work on the sidewalks an A-Frame is placed at the beginning of the project to alert residents that may be affected by the repair.
- Concrete sidewalks are repaired using either pre-mixed concrete or Ready-mix truck delivered concrete.
- Cost effectiveness will determine use of Ready-mix or pre-mixed concrete in areas requiring excess of two-yards of concrete.
- Damaged or unsafe walkways shall be barricaded with cones to help prevent any accidents.
- The Utilities Department is notified of any water meters located in the pathway. Utilities Department is responsible for relocation of meter. Public Works follows up and re-installs section of pathway.
- The pathway is to be removed in section no less than 4' in length.
- Concrete shall be 2500 psi or greater.
- The pathway shall be 4" thick and driveways shall be 6" thick.
- Sections of pathways lifted due to tree roots will be removed and roots are cut and removed. Pathway is re-installed. If same location requires additional repair, tree removal may be necessary.
- Repaired pathway surfaces shall have a smooth and uniform surface. When pathway is stable it shall have a light broom finish to prevent the pathway from being slick.

- Pathways shall not be constructed of paver bricks, stamped concrete, or painted, stained or altered in any way from the construction methods described above. Pathways that have such materials are to be removed and replaced at the homeowner's expense, to bring the pathway into compliance

## **Swales**

Swales are areas that are typically located between the pathway and the edge of pavement. This area is usually lower than the walk and the edge of pavement. The swale is to provide a conduit for water to travel from the roadway to the drainage system.

Over time the grass grows, accumulates and ultimately obstructs this conduit and causes water to remain in the swale for extended periods of time. Should the water remain longer than seventy-two (72) hours after a substantial rain, the swale may need to be repaired. This time period is only used as a guide. If the Village has received a substantial amount of rain for an extended period of time, water may remain longer than this time period.

- Driveways not installed correctly that cause the swale not to drain properly are the responsibility of the homeowner to take the appropriate action to correct the situation.
- All repairs and/or correction and maintenance of swale will be the homeowner's responsibility.
- Prior to any work the resident must receive proper permitting from the Public Works Department
- Home owner will be responsible to replace or repair any irrigation or landscaping located in Village right-of-ways, unless the Village had assumed the maintenance responsibilities beforehand.
- Homeowner must use the One Call System, to be called forty-eight (48) hours prior to any digging, as required by law.
- Depending on the depth of the cut, the center of the swale may be the only area removed. When depth of the cut exceeds 4 inches, the entire swale will be removed, graded to proper elevation and sod installed. It is the homeowner's responsibility to maintain and irrigate the sod to insure that it will prosper.

## **Street Signs**

- Street signs shall conform and be constructed to meet the criteria as stated in the Manual on Uniform Traffic Control Devices (M.U.T.C.D.).
- The Village Engineer and Director of Public Works make speed limit recommendations. Recommendations are forwarded to the Village Council for approval.
- Children at Play, Slow Children at Play or similar signs shall not be installed on Village Roadways.

- No Parking signs shall only be used where parking in such location could cause an accident or unsafe condition. No Parking signs are not to be used to protect the aesthetics of the road shoulders.
- All requests for additional sign(s) are to be in writing, which must contain the desired location and approval of residents affected by the sign location.
- The Village will then determine if the installation of the requested sign(s) are needed or required. It should be noted that approval by the residents where signs are placed does not apply to signs that are required in order to meet the standards in the M.U.T.C.D. Manual.
- All street signage shall follow the general specifications of Palm Beach County's Typical for Pavement Markings, Signing and Geometrics.
- All sign material used in the making of signage shall be High Intensity Prismatic
- Inventory will be conducted as to the replacement of signs, sign posts, and sleeves. All information shall be recorded in the work order system. (See attachment "B")

### **Roadside and Memorial Markers**

Please see Traffic Policy and Procedures Manual Section, Roadside and Memorial Markers (APWA 33.30), Page 104

### **Street Lighting**

Street lights shall be installed and the specific design criteria outlined in the policy adopted through Resolution No. R2007-37.

The Village leases streetlights from Florida Power and Light (FPL) by an agreement signed May 1, 1983. FPL does not charge for the installation of the lights, but charges a monthly usage fee for the pole, fixture, wiring and electric use. FPL is responsible for all installation, maintenance and replacement of streetlights.

Streetlights paid from Village assessments must be located within the Village and on public right-of-ways, public easements or Village owned property.

1. Street light criteria, whenever possible:
  - A light will be placed as close as possible to each intersection.
  - Lights should be visible from one to the next.
  - A light will be placed at the opening or interior of each cul-de-sac.
  - All lights must be within easements and locations approved by FPL.
2. In residential areas "coolie hat" style fixtures are to be used.

3. On major thoroughfares “cobra head” style fixtures will be used.

Periodically a night shift is scheduled to complete a field check of street light outages that are then reported to FPL for repair.

Attachment 24-114: Street Light Field Checks and Reporting Information

[..\Chapter 24 Street Maintenance\24.1\Street Light Field Checks & Reporting Info.pdf](#)

## **Litter Control Program**

### **Trash Carts**

- 45.65 miles of litter collection along public streets, roadways, and rights-of-way within our jurisdiction and maintained by Public Works Department, Roads Division.
- Two (2) full-time employees utilizing utility carts with Slow Moving Vehicle sign on the back along with strobe flashing lights.
- Employees are instructed to use trash pick-up sticks for any and all hazardous materials/items.
- Employees wear Type II Safety Vests, gloves and eye protection.
- The frequency of collection is on a daily basis (Monday thru Thursday).
- Routes are shown on the Trash Cart Route Map.
- Litter and volume collected is documented on the Weekly Trash Removal Report.
- Weekly Trash Removal Reports are summarized for fiscal year on the Trash Report Log.
- All collected litter is properly disposed of at the Public Works Complex through our contracted hauler, Waste Management.

### **Adopt-a-Street**

- Resolution No. R97-46 of the Village Council established the Adopt-A-Street Program outlining procedure, agreement and application to be used. This program continues to be part of the Litter Control Program and is monitored and tracked on a continual basis.

### **Street Sweeping**

- Sweeping is to be done on a daily basis following pre-determined sweeper routes, but due to Florida weather conditions sweeper operations may be changed or modified to meet these conditions.
- Sweeping operations are normally conducted Monday through Thursday from 7:00am until 5:00pm or as needed (after storms, spills, etc.).

- Major intersections are swept bi-monthly between the hours of 2:00am and 5:00am when traffic is at a minimum. This schedule can change according to weather conditions.
- The Village has determined that the streets shall be swept as depicted on the Street Sweeper Route Map. Deviation from these routes shall be determined by the Public Works Director, Infrastructure Manager and/or Roads Supervisor.

Please see Chapter 6, Planning (APWA 25.1 Planning for details of the Litter Control Program).

### **Street and Highway Facility Inventory (APWA 24.2)**

Wellington's street inventory is documented and maintained in ArcGIS. Street lights and traffic lights are not owned nor maintained by the Village of Wellington. Public street lights in Wellington are leased from FPL, which includes all maintenance, repairs and/or replacements. (Please see Practice 24.1 ... Street Lighting) Traffic control devices (traffic lights) are owned, operated and maintained by Palm Beach County. Trees within the right of way along public streets are documented through the

Street light outages, issues or service requests are reported to FPL. Instructions for reporting a street light outage/issue is outlined in the Street Light Outage Reporting Procedure. Traffic Light outages, issues or service request are reported to Palm Beach County Traffic Control. Instructions for reporting a traffic light outage/issue is outlined in the Traffic Light Outage Reporting Procedure.

A pilot program for a Facilities and Infrastructure Condition Assessment (FICA) was conducted that utilizes GIS technology to track maintenance standards of facilities and infrastructure. This project entails cataloging locations, types and conditions of roadways, signage, buildings, grounds, curbing, sidewalks, lighting, trees, storm manholes, storm catch basins, storm outfalls, storm pipes, other manholes, life stations, fire hydrants, water valves, other valves, horse trails, trailheads, guard rails, and Village maintained fencing by using high-accuracy Global Positioning System. At this time due to budgetary constraints no further development of this program is scheduled.

Attachment 24-100: Street Inventory Data and Map

[..\Chapter 24 Street Maintenance\24.2 Street Inventory\Street Inventory December 2014.pdf](#)

[..\Chapter 24 Street Maintenance\24.2 Street Inventory\Public Streets Inventory Map.pdf](#)

Attachment 24-101: Street Light Inventory Data and Map

[..\Chapter 24 Street Maintenance\24.2 Street Inventory\Street Light Inventory December 2014.pdf](#)

[..\Chapter 24 Street Maintenance\24.2 Street Inventory\Street Light Inventory Location Map 2014.pdf](#)

Attachment 24-102: Traffic Control Signals & Electronic Devices Inventory Map including Data

[..\Chapter 24 Street Maintenance\24.2 Street Inventory\Traffic Control Signals&Ele. Devices Inventory Map.pdf](#)

Attachment 24-103: Street Light Outage Reporting Procedure

[..\Chapter 24 Street Maintenance\24.2 Street Inventory\Street Light Outage Reporting Procedure.docx](#)

Attachment 24-104: Traffic Light Outage Reporting Procedure

<..\Chapter 24 Street Maintenance\24.2 Street Inventory\Traffic Light Outage Reporting Procedure.docx>

Attachment 24-105: FICA Pilot Program & Summary and Water Structures Map (Data Clip)

<..\Chapter 24 Street Maintenance\24.2 Street Inventory\FICA-Pilot Program.pdf>

<..\Chapter 24 Street Maintenance\24.2 Street Inventory\FICA Summary.jpg>

[..\Chapter 24 Street Maintenance\24.2 Street Inventory\FICA\\_waterstructures\\_types.jpg](..\Chapter 24 Street Maintenance\24.2 Street Inventory\FICA_waterstructures_types.jpg)

### **Street Infrastructure Condition (APWA 24.3)**

Approximately a third of the Village of Wellington's roadway system is assessed on an annual basis with 100 % assessed every three (3) years.

Prior to 2014 condition assessments were recorded on the Asphalt Pavement Rating Form and data would then be entered into the GIS database. Beginning 2014 the Roads Division began utilizing the Ersi Collector Application through the use of iPads where condition assessments are uploaded into the Ersi GIS Server.

It is the Village's policy to maintain at least 80% of its roadway system at a good or better condition. Resurfacing is scheduled when the condition of a roadway approaches an unacceptable level. The Wellington roadway overlay program is based on an annual inspections and condition assessment.

Attachment 24-106: Asphalt Pavement Rating Form

<..\Chapter 24 Street Maintenance\24.3 Street Infrastructure Condition\Asphalt Pavement Rating Form.xls>

Attachment 24-107: Sample of Completed 2013 Condition Assessments

<..\Chapter 24 Street Maintenance\24.3 Street Infrastructure Condition\Sample of Completed 2013 Condition Assessments.pdf>

Attachment 24-108: Sample of Completed 2014 Condition Assessments and Map

<..\Chapter 24 Street Maintenance\24.3 Street Infrastructure Condition\Sample of Completed 2014 Condition Assessments.pdf>

Attachment 24-109: Assessment Map 2012-2014

<..\Chapter 24 Street Maintenance\24.3 Street Infrastructure Condition\Assessment Map 2012-2014.pdf>

### **Pavement Management System (APWA 24.4)**

Wellington utilizes asphalt pavement condition assessments (Practice 24.3) to determine pavements and surface conditions. The Public Work Director, Infrastructure Manager and Roads Supervisor generally meet after annual assessment have been completed and prior to budget preparation cycle (January/February) to review condition assessments taking into consideration multiple contributing factors, such as, but not limited to: traffic patterns, age, environmental distresses, etc. If warranted, a decision is made to hire a consultant for appropriate testing.

All the above is taken into consideration and reviewed to determine the annual resurfacing schedule.

## **Preventive Maintenance (APWA 24.5)**

### **Asphalt Repair & Maintenance**

- Potholes are repaired using the following priority: safety concern, location and then aesthetics.
- Potholes that cause a safety hazard are addressed immediately with the use of hot mix asphalt. If it is raining or there is no access to an asphalt plant, then cold patch will be used. A supply of cold patch is maintained at all times for use in an emergency situation.
- All work is done to preserve the integrity of the road surface, maintain a safe roadway, and a high quality of aesthetics.

### **Shellrock Roadways**

- Shellrock shall be placed upon Village shellrock roadways on a seven-year cycle. This is the base of the application process; however, a field inspection is needed to determine if the road will need to receive an application prior to installation.
- The overall conditions of the existing base material and traffic volumes are considered in determining if an application is needed.

### **Maintenance of Shellrock Roadways**

- Shellrock roads are graded and/or dragged at least two (2) times a week, weather permitting.

### **Radius Treatments and Standards**

- Radius treatment installations are located on major thoroughfares or arterial collectors where safety concerns dictate. If problem areas are identified on roadways other than the above-mentioned that create a safety-hazard, radius treatments may be installed.

### **Pedestrian Pathways**

- There are over 28 miles of asphalt pathways in the Village. Every effort shall be made to ensure that the pathways are safe and traversable by the public.

### **Sidewalks**

- Sidewalk inspections are scheduled when division is notified and during routine maintenance. Should an area be called in for repair, the crew will perform an inspection of the entire neighborhood and repair all areas that pose a safety hazard.

### **Roadway Overlay**

- Roads are evaluated to determine which roads are to be resurfaced. The Asphalt Institute rating form shall be used to score roadways that are being considered for overlay. It is our intention to overlay eight miles annually, or as much as the budget will allow.

### **Swales**

- Swale maintenance is addressed in VOW Ordinance #2003-11 that provides adjacent property owners with the responsibility for regulations pertaining to the maintenance of swales, easements and landscaping portions of rights of way.
- Capital Improvement Project - Swale Maintenance is part of the overall drainage and flood control improvement program that addresses swales on major thoroughfares. The Swale Maintenance CIP is managed by Surface Water Management.

Attachment 24-111: Grading & Drag Schedule

<..\Chapter 24 Street Maintenance\24.5 Preventive Maint\Roads - Drag and Grader Schedule.xlsx>

Attachment 24-112: Swale Ordinance No. 2003-11

<..\Chapter 24 Street Maintenance\24.5 Preventive Maint\Swale Ord. No. 2003-11.pdf>

Attachment 24-113: Budget Information – Drainage & Flood Control Improvement Program – CIP Swale Maintenance and Swale Maintenance Map

<..\Chapter 24 Street Maintenance\24.5 Preventive Maint\CIP Budget -Swale Maintenance .pdf>

### **Operations and Maintenance Responsibility (APWA 24.6)**

Responsibility for the operation and maintenance of streets and related facilities are established through the budget process and business plans for each department and division. Although all departments and divisions work together when needed, the delineation of duties is reflected with resource allocation within each department's budget.

Attachment 24-115: VOW Budget – Business Plan for PW Roads Division

<..\Chapter 24 Street Maintenance\24.6 Operations & Maint Responsibility\VOW Budget - Business Plan for Roads.pdf>

Attachment 24-116: VOW FY 2014/2015 Roads Budget Summary

<..\Chapter 24 Street Maintenance\24.6 Operations & Maint Responsibility\FY 14-15 Roads Budget Summary.pdf>

### **Operations and Maintenance Coordination (APWA 24.7)**

Operations and maintenance activities for streets and related facilities are coordinated with all other departments, divisions, agencies and outside organizations that may be affected.

All resurfacing and maintenance of roadways is communicated to the public and affected departments and divisions in a number of ways including:

- Administrative Transmittal
- Inter-Departmental Memos/emails to affected department(2)
- Electronic Message Boards
- A-Frame Sign Boards
- Notice to Residents

Parades and special events are coordinated with Palm Beach County Sheriff's Office (PBSO) and Palm Beach County Fire Rescue through the permitting process and any special instructions or requests go through the Executive Office Manager, Village Manager's Office via telephone or email.

Attachment 24-117: Sample of Approved Administrative Transmittal

[..\Chapter 24 Street Maintenance\24.7Operations & Maint Coordination\Sample of Approved AT.pdf](#)

Attachment 24-118: Picture of Electronic Message Board

[..\Chapter 24 Street Maintenance\24.7Operations & Maint Coordination\Message Board Picture.pdf](#)

Attachment 24-119: Sample of Notice to Residents – Paving Project

[..\Chapter 24 Street Maintenance\24.7Operations & Maint Coordination\Sample of Notice to Residents-Resurfacing Project.docx](#)

### **Operations and Maintenance Procedures and Standards (APWA 24.8)**

Operation and maintenance activities are established and outlined as follows and as outline in the Traffic Operations Policy & Procedures:

#### **Roadway Functional Classification**

##### Type I – Arterial

Arterial roadways connect population centers and economic activity with each other and or State or Municipal road systems

Occur at reasonably regular intervals to collect traffic from roads of lesser volume

##### Type II – Collector

Carry relatively heavy corridor traffic movements, present or potential

Collector roadways occur at reasonably regular intervals to collect traffic from local roads

Channel it into the arterial road system.

Serve population centers not feasibly serviced by arterial routes.

### Type III – Local Road

Type III roads are through roads with the primary purpose of abutting properties  
Provide for minor volumes of through traffic.

### Type IV – Local Road

Type IV roads consist of cul-de-sac legs and short and/or dead end road sections serving the immediate area.

### Type V – Private Road

Private roads are roads that have not been dedicated to the Village and/or provide private access to property. These roads are not maintained by public funds.

### **Shellrock Roadways**

Shellrock shall be placed upon Village shellrock roadways on an as-needed basis. This is the base of the application process; however, a field inspection, weather, and traffic loads will determine if the road will need to receive an application. The overall conditions of the existing base material and traffic volumes are considered in determining if an application is needed. Grading Operators also will inform the Roads Supervisor of shellrock needs and conditions.

#### Application:

- Shellrock shall be 2” minus material from local quarries
- Type II collector roadways shall have a minimum width of twenty-three (23) feet
- Type III local roadways shall have minimum width of twenty-one (21) feet
- Shellrock shall be applied a minimum depth of six (6) inches
- Any rock over two inches that are on the surface shall be removed

#### Maintenance of Shellrock Roadways

- Shellrock roads are to be graded no less than once a week and grader operator(s) record daily activities and road conditions in the Grader Log (notebook).
- After severe weather all shellrock roads are to be inspected for washouts and potholes and areas that are determined to be safety hazard will be repaired immediately
- Shellrock that conforms to the 2” minus material shall be kept on site at the Village Storage Facility on 120<sup>th</sup> Ave to make repairs to damaged roadways

## **Roadway Overlay**

Roads are evaluated to determine which roads are to be resurfaced. The Asphalt Institute rating form shall be used to score roadways that are being considered for overlay. It is our intention to overlay eight (8) miles annually or as much as much as the budget will allow. Sidewalks will also be inspected along with the roadways that are being assessed.

## **Asphalt Repair**

It is Wellington's Policy that all Asphalt Repair and Pavement Cut Restoration adhere to the following guidelines:

- Potholes are repaired using the following priority: safety concern, location and then aesthetics.
- All work is done to preserve the integrity of the road surface, maintain a safe roadway and a high quality of aesthetics.
- Potholes that cause a safety hazard are addressed immediately with the use of hot mix asphalt. If it is raining or there is no access to an asphalt plant, then cold patch will be used.
- Supply of cold patch is maintained at all times for use in an emergency situation.
- Proper traffic control will be placed to protect the public and workers by MOT certified DOT trained personnel.
- Potholes will be milled or cut out approx.; 6 to 8 inches wider than the existing cavity. The base compacted, and then tacked including edges. The Hot Mix Asphalt (HMA) is placed and compacted to a smooth and uniform surface.
- Upon completion of the pothole repair, the delivery ticket must reflect where the material was used. The total amount (tons) of material used is then entered into the Supervisor's Outlook calendar in order to track total tonnage used on a monthly basis for recording this information in Performance Measures Spreadsheet.
- Edge of roads (shoulders) will have recycled asphalt millings to stabilize and shore-up low or rutted edges.

## **Radius Treatments**

Radius treatment installations are located on major thoroughfares or arterial collectors where safety concerns dictate. If problem areas are identified on roadways other than the above-mentioned that create a safety hazard, radius treatments may be installed.

## **Radius Treatment Standards**

- Treatment shall encompass the entire radius and shall be at least 1' (one foot) wide.

- Base shall be 6" of compacted shellrock or lime rock. A 1½" asphalt base shall be placed and compacted over the base material. 4 inches of hot mix asphalt placed in 2 or 3 lifts may be substituted for 6 inch road rock base.
- The raised portion is then installed. The raised portion shall not exceed 2½" in height and be spaced on 3' (three foot) center.
- The raised portion shall be painted white with reflective beads.
- Residents are encouraged to explore the use of 12" round by 4" high curb treatments on radiuses, provided they are not within 2' of the edge of the roadway, prior to requesting the asphalt radius treatments.

### **Pedestrian Pathways**

There are over 28 miles of asphalt pathways in the Village. Every effort shall be made to ensure that the pathways are safe and traversable by the public.

- Repairs, removal and replacement of pathways are scheduled as needed.
- Edges where the asphalt is to be removed shall be maintained to allow easy access by pedestrians and cyclists.
- Potholes in the pathways shall be repaired within 48 hours, when possible. All areas are to be repaired as in the roadway.

### **Sidewalk Inspections**

Sidewalk inspections are scheduled upon notification of a repair needed and/or during routine maintenance. Upon notification (resident call, observed during routine maintenance, etc.) of a repair that is needed an inspection of the entire neighborhood will be completed and all necessary repairs that may pose a safety hazard will be addressed.

- Meter readers report damaged areas that are observed
- Residents notify the Village of areas of concern
- Village staff doing routine maintenance in neighborhoods
- Trash pick-up crews along thoroughfares

### **Sidewalk Maintenance**

Over time sidewalks are damaged from weathering, tree roots, and regular use. Wellington's sidewalk maintenance program ensures that repairs and reconstruction of damaged sidewalks are addressed in a timely manner to provide well-maintained, high quality sidewalks at a reasonable cost.

All public sidewalks are inventoried and assessed for repair needs every five years. The inventory may be completed by force labor or subcontractor. Survey results will identify defects, services needed for repair, obstructions, dimensions of the area (square footage) and if water meter box will need to be replaced.

Once identified, inventory results will be prioritized according to the level of defect or repair needed and will be scheduled for repair in a timely manner.

Any citizen complaint reported will be given first consideration for improvement or repair if the reporting proves to be a safety or access issue.

### **Concrete**

- Prior to any work on the sidewalks an A-Frame is placed at the beginning of the project to alert residents that may be affected by the repair.
- Concrete sidewalks are repaired using either pre-mixed concrete or Ready-mix truck delivered concrete.
- Cost effectiveness will determine use of Ready-mix or pre-mixed concrete in areas requiring excess of two-yards of concrete.
- Damaged or unsafe walkways shall be barricaded with cones to help prevent any accidents.
- The Utilities Department is notified of any water meters located in the pathway. Utilities Department is responsible for relocation of meter. Public Works follows up and re-installs section of pathway.
- The pathway is to be removed in section no less than 4' in length.
- Concrete shall be 2500 psi or greater.
- The pathway shall be 4" thick and driveways shall be 6" thick.
- Sections of pathways lifted due to tree roots will be removed and roots are cut and removed. Pathway is re-installed. If same location requires additional repair, tree removal may be necessary.
- Repaired pathway surfaces shall have a smooth and uniform surface. When pathway is stable it shall have a light broom finish to prevent the pathway from being slick.
- Pathways shall not be constructed of paver bricks, stamped concrete, or painted, stained or altered in any way from the construction methods described above. Pathways that have such materials are to be removed and replaced at the homeowner's expense, to bring the pathway into compliance

### **Swales**

Swales are areas that are typically located between the pathway and the edge of pavement. This area is usually lower than the walk and the edge of pavement. The swale is to provide a conduit for water to travel from the roadway to the drainage system.

Over time the grass grows, accumulates and ultimately obstructs this conduit and causes water to remain in the swale for extended periods of time. Should the water remain longer than seventy-two (72) hours after a substantial rain, the swale may need to be repaired. This time period is only used as a guide. If the Village has received a substantial amount of rain for an extended period of time, water may remain longer than this time period.

- Driveways not installed correctly that cause the swale not to drain properly are the responsibility of the homeowner to take the appropriate action to correct the situation.
- All repairs and/or correction and maintenance of swale will be the homeowner's responsibility.
- Prior to any work the resident must receive proper permitting from the Public Works Department
- Home owner will be responsible to replace or repair any irrigation or landscaping located in Village right-of-ways, unless the Village had assumed the maintenance responsibilities beforehand.
- Homeowner must use the One Call System, to be called forty-eight (48) hours prior to any digging, as required by law.
- Depending on the depth of the cut, the center of the swale may be the only area removed. When depth of the cut exceeds 4 inches, the entire swale will be removed, graded to proper elevation and sod installed. It is the homeowner's responsibility to maintain and irrigate the sod to insure that it will prosper.

### **Street Signs**

- Street signs shall conform and be constructed to meet the criteria as stated in the Manual on Uniform Traffic Control Devices (M.U.T.C.D.).
- The Village Engineer and Director of Public Works make speed limit recommendations. Recommendations are forwarded to the Village Council for approval.
- Children at Play, Slow Children at Play or similar signs shall not be installed on Village Roadways.
- No Parking signs shall only be used where parking in such location could cause an accident or unsafe condition. No Parking signs are not to be used to protect the aesthetics of the road shoulders.
- All requests for additional sign(s) are to be in writing, which must contain the desired location and approval of residents affected by the sign location.

- The Village will then determine if the installation of the requested sign(s) are needed or required. It should be noted that approval by the residents where signs are placed does not apply to signs that are required in order to meet the standards in the M.U.T.C.D. Manual.
- All street signage shall follow the general specifications of Palm Beach County's Typical for Pavement Markings, Signing and Geometrics.
- All sign material used in the making of signage shall be High Intensity Prismatic
- Inventory will be conducted as to the replacement of signs, sign posts, and sleeves. All information shall be recorded in the work order system. (See attachment "B")

## **Litter Control Program**

### **Trash Carts**

- 45.65 miles of litter collection along public streets, roadways, and rights-of-way within our jurisdiction and maintained by Public Works Department, Roads Division.
- Two (2) full-time employees utilizing utility carts with Slow Moving Vehicle sign on the back along with strobe flashing lights.
- Employees are instructed to use trash pick-up sticks for any and all hazardous materials/items.
- Employees wear Type II Safety Vests, gloves and eye protection.
- The frequency of collection is on a daily basis (Monday thru Thursday).
- Routes are shown on the Trash Cart Route Map.
- Litter and volume collected is documented on the Weekly Trash Removal Report.
- Weekly Trash Removal Reports are summarized for fiscal year on the Trash Report Log.
- All collected litter is properly disposed of at the Public Works Complex through our contracted hauler, Waste Management.

### **Adopt-a-Street**

- Resolution No. R97-46 of the Village Council established the Adopt-A-Street Program outlining procedure, agreement and application to be used. This program continues to be part of the Litter Control Program and is monitored and tracked on a continual basis.

### **Street Sweeping**

- Sweeping is to be done on a daily basis following pre-determined sweeper routes, but due to Florida weather conditions sweeper operations may be changed or modified to meet these conditions.

- Sweeping operations are normally conducted Monday through Thursday from 7:00am until 5:00pm or as needed (after storms, spills, etc.).
- Major intersections are swept bi-monthly between the hours of 2:00am and 5:00am when traffic is at a minimum. This schedule can change according to weather conditions.
- The Village has determined that the streets shall be swept as depicted on the Street Sweeper Route Map. Deviation from these routes shall be determined by the Public Works Director, Infrastructure Manager and/or Roads Supervisor.

Please see Chapter 6, Planning (APWA 25.1 Planning for details of the Litter Control Program).

Attachment 24-120: Traffic and Operation Policy & Procedures

[..\Chapter 24 Street Maintenance\24.8 Ops & Maint Procedures & Standards\Traffic Operation Policy & Procedures Manual.docx](#)

### **Operations and Maintenance Inspection (APWA 24.9)**

Approximately a third of the Village of Wellington's roadway system is assessed (inspected) on an annual basis with 100 % assessed every three (3) years (Please Section/Practice 24.3 for additional details and attachments).

Before resurfacing a road a consultant is hired to complete an evaluation (geotechnical report) of road base and sub base material. This evaluation identifies stability, settling and integration of the existing road material and is used to determine if alternate processes are needed in resurfacing a roadway.

All public sidewalks are inventoried and assessed for repair needs every five years. The inventory may be completed by force labor or subcontractor. Survey results will identify defects, services needed for repair, obstructions, dimensions of the area (square footage) and if water meter box will need to be replaced.

Once identified, inventory results will be prioritized according to the level of defect or repair needed and will be scheduled for repair in a timely manner.

Attachment 24-121: Geotechnical Report – Wellington Trace Resurfacing Project

[..\Chapter 24 Street Maintenance\24.9 Operations & Maint Inspection\Geotechnical Report - Wellington Trace Resurfacing Project.pdf](#)

Attachment 24-122: Public Sidewalk Inventory & Maintenance Log (Binder)

[..\Chapter 24 Street Maintenance\24.9 Operations & Maint Inspection\Public Sidewalk Inventory & Maintenance Log.xlsx](#)

### **Work Crew Records (APWA 24.10)**

Wellington uses SunGard Naviline Work Request Module to record work requests and job orders. This information serves as a record for repair history along with various daily report information.

Attachment 24-123: Work Request Procedures

<..\Chapter 24 Street Maintenance\24.10 Work Crew Records\Work Request Procedures.doc>

Attachment 24-124: Completed Work Request

### **Material Conservation (APWA 24.11)**

Wellington's 2012 Conservation Element was adopted to protect and preserve the functions and values of its resources. The Conservation Element includes instructions on conserving water resources, soil, energy, and gasoline, recycling paper and metal waste, and the application of reusable resources when possible and cost-efficient. Additionally, Wellington stores millings from paving jobs at the Public Works storage site, which are reusable for shoulders on roadways. The Village is looking for similar byproducts that could be recovered and reused. This results in cheaper operating and purchasing costs, as well as diminished production of waste and pollution.

Attachment 24-125: Wellington's Conservation Element

<..\Chapter 24 Street Maintenance\24.11 Material Conservation\Conservation Element 2012.doc>

Attachment 24-126: Asphalt Millings Recycling Agenda Summary & Location Picture

<..\Chapter 24 Street Maintenance\24.11 Material Conservation\Asphalt Milling Recycling Agenda Summary & Location Picture.pdf>

### **Pavement Cut Restoration (APWA 24.12)**

#### **Asphalt Repair**

It is Wellington's Policy that all Asphalt Repair and Pavement Cut Restoration adhere to the following guidelines:

- Potholes are repaired using the following priority: safety concern, location and then aesthetics.
- All work is done to preserve the integrity of the road surface, maintain a safe roadway and a high quality of aesthetics.
- Potholes that cause a safety hazard are addressed immediately with the use of hot mix asphalt. If it is raining or there is no access to an asphalt plant, then cold patch will be used.
- Supply of cold patch is maintained at all times for use in an emergency situation.
- Proper traffic control will be placed to protect the public and workers by MOT certified DOT trained personnel.
- Potholes will be milled or cut out approx.; 6 to 8 inches wider than the existing cavity. The base compacted, and then tacked including edges. The Hot Mix Asphalt (HMA) is placed and compacted to a smooth and uniform surface.
- Upon completion of the pothole repair, the delivery ticket must reflect where the material was used. The total amount (tons) of material used is then entered into the Supervisor's Outlook calendar in order to track total tonnage used on a monthly basis for recording this information in Performance Measures Spreadsheet.

- Edge of roads (shoulders) will have recycled asphalt millings to stabilize and shore-up low or rutted edges.

### **Guardrails and Impact Attenuators (APWA 24.13)**

All Guardrail and Attenuator maintenance repair and installation work is contracted out to Southeast Attenuators. They are a local vendor who specializes in this type of work and Wellington's contract was a piggyback with Palm Beach County.

Attachment 24-127: Agenda Item – Authorize to Utilize PBC Contract with Southeast Attenuators, Inc.

<..\Chapter 24 Street Maintenance\24.13 Guardrails & Impact Attenuators\VOW Agenda Item - Authorizing Use of PBC Contract.pdf>

Attachment 24-128: Annual PB County Guardrail Contract

<..\Chapter 24 Street Maintenance\24.13 Guardrails & Impact Attenuators\PBC Contract Guardrail Contract.pdf>

### **Catch Basins and Inlets (APWA 24.14)**

Wellington ensures storm drains are clean on a regular basis as part of the Trash Removal Routes and documented on the Storm Drain Inspection and Maintenance Record and Inlet, Catch Basin & Grate Log.

Additionally, inlets, catch basins and culverts are part of the Surface Water Management Infrastructure Program and documented through the Major Canal Crossing and Culvert Database, and Neighborhood Infrastructure Inspection & Maintenance Log.

Attachment 24-129: Sample of completed Storm Drain Inspection and Maintenance Record

<..\Chapter 24 Street Maintenance\24.14 Catch Basins & Inlets\Sample of Storm Drain Insp & Maint Records.pdf>

Attachment 24-130: Storm Drain Inspection & Maintenance Log

<..\Chapter 24 Street Maintenance\24.14 Catch Basins & Inlets\Storm Drain Inspection & Maintenance Log.xlsx>

Attachment 27-113: Major Canal Crossing & Culvert Database

<..\Chapter 24 Street Maintenance\24.14 Catch Basins & Inlets\Major Canal Crossings & Culverts database.xlsx>

Attachment 27-114: Neighborhood Infrastructure Inspection & Maintenance Log

<..\Chapter 24 Street Maintenance\24.14 Catch Basins & Inlets\Neighborhood Infrastructure Insp-Maint.xlsx>

### **Curb, Gutters, and Sidewalks (APWA 24.15)**

#### **Sidewalk Inspection and Maintenance**

The sidewalk replacement/trip hazard program is administered in two ways. The first being an immediate sidewalk inspection and the second being an inspection maintenance program.

Immediate sidewalk inspections are scheduled when the Roads division is notified and/or during routine maintenance. Upon notification (resident call, observed during routine maintenance, etc.) of a repair that is needed an inspection of the entire neighborhood will be completed and all necessary repairs that may pose a safety hazard will be addressed. Ways of notification include:

- Meter readers report damaged areas that are observed
- Residents notify the Village of areas of concern
- Village staff doing routine maintenance in neighborhoods
- Trash pick-up crews along thoroughfares

Over time sidewalks are damaged from weathering, tree roots, and regular use. Wellington's sidewalk maintenance program ensures that repairs and reconstruction of damaged sidewalks are addressed in a timely manner to provide well-maintained, high quality sidewalks at a reasonable cost.

All public sidewalks are inventoried and assessed for repair needs every five years. The inventory may be completed by force labor or subcontractor. Survey results will identify defects, services needed for repair, obstructions, dimensions of the area (square footage) and if water meter box will need to be replaced.

Once identified, inventory results will be prioritized according to the level of defect or repair needed and will be scheduled for repair in a timely manner.

Any citizen complaint reported will be given first consideration for improvement or repair if the reporting proves to be a safety or access issue.

The Roads Department repairs and replaces small sections of sidewalks. All curb and gutter work is contacted out to one of 5 contractors that Wellington uses for such work.

Attachment 24-122: Public Sidewalk Inventory & Maintenance Log (Binder)

Attachment 24-131: Sidewalk Maintenance Program

[..\Chapter 24 Street Maintenance\24.15 Curbs, Gutters & Sidewalks\Sidewalk Maintenance Program.docx](#)

### **Graffiti Removal from Public Infrastructure (APWA 24.16)**

Under Section 36.22 of Wellington's municipal codes, in dealing with property maintenance standards, all buildings must be free of discoloration, which includes graffiti. Additionally, the State of Florida has adopted Section 806.13 of the Florida Statutes, which deals with damage to property, including graffiti. A person who has performed a violation related to the placement of graffiti is required to pay a fine, perform at least 40 hours of community service, and, if possible, at least 100 hours of community service involving the removal of graffiti. The Village has reviewed laws regarding graffiti eradication, and taken note of how different county and municipal governments have addressed the issue.

Upon notification of an incident of graffiti on public infrastructure the Roads Division will inspect the area and determine course for removal. Crew is dispatched for graffiti removal utilizing the Graffiti Removal Guidelines and will always try to select a method of removal that is that most environmentally friendly. Graffiti incident is recorded and tracked in the Graffiti Incident and Removal Log.

Attachment 24-132: Graffiti Removal Guidelines

[..\Chapter 24 Street Maintenance\24.16 Graffiti Removal from Public Infrastructure\Graffiti Removal Guidelines.docx](#)

Attachment 24-133: Graffiti Incident and Removal Log

[..\Chapter 24 Street Maintenance\24.16 Graffiti Removal from Public Infrastructure\Graffiti Incident & Removal Log.xlsx](#)

## **Street Cleaning (APWA Chapter 25)**

### **Planning (APWA 25.1)**

Wellington's Litter Control Program has three components: Trash Carts, Adopt-A- Street Program and Street Sweeping.

#### **Trash Carts**

- 45.65 miles of litter collection along public streets, roadways, and rights-of-way within our jurisdiction and maintained by Public Works Department, Roads Division.
- Two (2) full-time employees utilizing utility carts with Slow Moving Vehicle sign on the back along with strobe flashing lights.
- Employees are instructed to use trash pick-up sticks for any and all hazardous materials/items.
- Employees wear Type II Safety Vests, gloves and eye protection.
- The frequency of collection is on a daily basis (Monday thru Thursday)
- Routes are shown on the Trash Cart Route Map (attached).
- Litter and volume collected is documented on the Weekly Trash Removal Report (attached).
- Weekly Trash Removal Reports are summarized for fiscal year on the Trash Report Log (attached).
- All collected litter is properly disposed of at the Public Works Complex through our contracted hauler, Waste Management.

#### **Adopt-a-Street**

- Resolution No. R97-46 of the Village Council established the Adopt-A-Street Program outlining procedure, agreement and application to be used. This program continues to be part

of the Litter Control Program and is monitored and tracked on a continual basis. Please see Resolution No. R97-46 and supporting documentation.

### **Street Sweeping**

- Sweeping is to be done on a daily basis following pre-determined sweeper routes, but due to Florida weather conditions sweeper operations may be changed or modified to meet these conditions.
- Sweeping operations are normally conducted Monday through Thursday from 7:00am until 5:00pm or as needed (after storms, spills, etc.).
- Major intersections are swept bi-monthly between the hours of 2:00am and 5:00am when traffic is at a minimum. This schedule can change according to weather conditions.
- The Village has determined that the streets shall be swept as depicted on the Street Sweeper Route Map. Deviation from these routes shall be determined by the Public Works Director, Infrastructure Manager and/or Roads Supervisor.

Attachment 25-100: Trash Cart Route Map

[..\Chapter 25 Street Cleaning\25.1 Planning\TrashCart\\_2015 Map.pdf](#)

Attachment 25-101: Weekly Trash Removal Report

[..\Chapter 25 Street Cleaning\25.1 Planning\Weekly Trash Removal Report.pdf](#)

Attachment 25-102: Trash Report Log

[..\Chapter 25 Street Cleaning\25.1 Planning\Trash Report Log.pdf](#)

Attachment 25-103: Resolution No. R97-46 (Adopt-A-Street) and supporting documentation

[..\Chapter 25 Street Cleaning\25.1 Planning\Res No 97-46 \(Adopt A Street\) & Supporting Documentation.pdf](#)

Attachment 25-104: Street Sweeping Plan

[..\Chapter 25 Street Cleaning\25.1 Planning\Street Sweeping Plan.docx](#)

Attachment 25-105: Street Sweeping Route Map

[..\Chapter 25 Street Cleaning\25.1 Planning\StreetSweeper\\_2015 Map.pdf](#)

### **Environmental Compliance (APWA 25.2)**

Wellington follows the recommendations of the Florida Department of Environmental Protection's Guidance for the Management of Street Sweepings, Catch Basin Sediments and Stormwater System Sediments.

The Street Sweeping plan echoes this guidance and all street sweepings are transported by Waste Management.

Please see Planning (APWA 25.1) for the following attachment:

Attachment 25-104: Street Sweeping Plan

### **Debris, Leaf and Litter Collection (APWA 25.3)**

Methods of collecting street/road debris are outline and addressed in Wellington's Litter Control Program, which includes: Trash Carts, Adopt-A- Street Program and Street Sweeping and outlined in Planning (APWA 25.1 with associated attachments), Page 89.

Please see Planning (APWA 25.1) and the following attachments:

Attachment 25-100: Trash Cart Route Map

Attachment 25-101: Weekly Trash Removal Report

Attachment 25-102: Trash Report Log

Attachment 25-103: Resolution No. R97-46 (Adopt-A-Street) and supporting documentation

Attachment 25-104: Street Sweeping Plan

Attachment 25-105: Street Sweeping Route Map

### **Routing (APWA 25.4)**

Through observation and experience the routing plans were developed for both the Street Sweeper and Trash Carts. These plans can be deviated from with approval from the Roads Supervisor, Infrastructure Manager and/or Public Works Director.

Several things can cause a change in routes, such as, community needs, Village sponsored events, emergencies and periodically resident's requests.

Please see Planning (APWA 25.1) and the following attachments:

Attachment 25-100: Trash Cart Route Map

Attachment 25-105: Street Sweeping Route Map

Attachment 25-106: Previous Street Sweeper & Trash Cart Maps

[..\Chapter 25 Street Cleaning\25.4 Routing\Street Sweeper Route Map Previous.pdf](#)

[..\Chapter 25 Street Cleaning\25.4 Routing\Trash Cart Route Map Previous.pdf](#)

### **Scheduling (APWA 25.5)**

Wellington's street sweeping schedule is part of the street sweeping plan. Street sweeping and trash carts are routed to cause no or as little interruption as possible to our residents.

Both the street sweeping route map and trash cart route map have schedules notes and can also be found by our residents on our web site. This is to inform them of where street sweeping and trash pick-up will be conducted on any given day.

Please see Planning (APWA 25.1) and the following attachments:

Attachment 25-100: Trash Cart Route Map

Attachment 25-105: Street Sweeping Route Map

### **Litter Control Program (Litter Control APWA 25.6)**

#### **Trash Carts**

- 45.65 miles of litter collection along public streets, roadways, and rights-of-way within our jurisdiction and maintained by Public Works Department, Roads Division.

- Two (2) full-time employees utilizing utility carts with Slow Moving Vehicle sign on the back along with strobe flashing lights.
- Employees are instructed to use trash pick-up sticks for any and all hazardous materials/items.
- Employees wear Type II Safety Vests, gloves and eye protection.
- The frequency of collection is on a daily basis (Monday thru Thursday).
- Routes are shown on the Trash Cart Route Map.
- Litter and volume collected is documented on the Weekly Trash Removal Report.
- Weekly Trash Removal Reports are summarized for fiscal year on the Trash Report Log.
- All collected litter is properly disposed of at the Public Works Complex through our contracted hauler, Waste Management.

### **Adopt-a-Street**

- Resolution No. R97-46 of the Village Council established the Adopt-A-Street Program outlining procedure, agreement and application to be used. This program continues to be part of the Litter Control Program and is monitored and tracked on a continual basis.

### **Street Sweeping**

- Sweeping is to be done on a daily basis following pre-determined sweeper routes, but due to Florida weather conditions sweeper operations may be changed or modified to meet these conditions.
- Sweeping operations are normally conducted Monday through Thursday from 7:00am until 5:00pm or as needed (after storms, spills, etc.).
- Major intersections are swept bi-monthly between the hours of 2:00am and 5:00am when traffic is at a minimum. This schedule can change according to weather conditions.
- The Village has determined that the streets shall be swept as depicted on the Street Sweeper Route Map. Deviation from these routes shall be determined by the Public Works Director, Infrastructure Manager and/or Roads Supervisor.

Please see Chapter 6, Planning (APWA 25.1 Planning for details of the Litter Control Program)

*In addition, Section 46-1 of the Village of Wellington Code of Ordinances states that "No person shall deposit, release, throw or dump into or on any public property, lakes, canals, water bodies or any adjacent, attendant or contiguous right-of-way thereto, or any other public property located within the village, any filth, dirt, garbage, trash, refuse or other deleterious material.". Section 46-42*

*also states that "No person shall deposit waste material within the village on public or private property except in a receptacle intended for said waste. Littering shall include, but not be limited to, thrown, dropped, cast, spilled or blown waste.", both of which enact anti-littering laws.*

### **Storage Receptacles (APWA 25.7)**

Although Wellington does not have any street-side storage receptacles for litter due to a non-urban environment. We do however use uniform receptacles in all public areas such as the amphitheater, aquatics center, Village hall and all neighborhood parks.

The Solid Waste Department utilizes uniform recycling containers in public places and parks. All curbside garbage containers are supplied to our residents at no charge and they can chose from either 35 or 95 gallon totters. Vegetation containers are also supplied and available only available in 95 gallon totter. Residential recycling containers are 18 gallon bins in blue and yellow, due to a dual stream system. Commercial recycling containers are 95 gallon totters. This adds a uniform look to Solid Waste collection.

### **Dead Animal Pickup (APWA 25.8)**

It is Wellington's policy to follow Palm Beach County's Ordinance 98-22 Section 4-20 for the disposal of bodies of dead animals, which states that "upon the death of such animal, shall immediately dispose of the carcass by burning, burying at least 2 feet below the surface of the ground, or other authorized method of disposal.

Upon receiving notification of a dead animal on public property a work order is processed and the Roads Supervisor is notified and he/she dispatches the appropriate personnel to pick up and dispose the animal is an authorized method following PB Co. Ord. 98-11, Section 4-20.

Attachment 25-107: Palm Beach County's Ordinance 98-22 Section 4-20  
[..\Chapter 25 Street Cleaning\25.8\Palm Beach County Ordinance 98-22 Section 4-20.pdf](#)

### **Traffic Policy and Procedures Manual and (APWA 33.1) Traffic Control Devices (APWA 33.2)**

Wellington adheres to and has adopted Florida Chapter 316 (Florida Uniform Traffic control Law), Wellington also adheres to the 2009 edition of the Manual of Uniform traffic Control Devices (MUTCD) and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001. The Wellington Public Works Department follows these established and uniform guidelines as criteria for the installation and removal of all traffic control devices. Traffic operation's policy and procedures are outlined in the Village of Wellington, Roads Division Traffic Operations Policy & Procedures Manual.

Attachment 24-120: Traffic and Operations Policy & Procedures  
[..\Chapter 33 Traffic Operations\33.1 Traffic Policy & Procedures\Traffic Operation Policy & Procedures Manual.docx](#)

Attachment 33-100: VOW Resolution No. R2004-123 –Roadside Memorial Markers Policy

### **Traffic Control Device Installation (APWA 33.3)**

Traffic Control Device installation in the Village of Wellington requires a study by the Village of Wellington's Engineering Department of all proposed locations for traffic control device installations. Evaluations include, but are not limited to, examination of proposed location, traffic volumes, traffic speed and movement, accident records etc. The Village Engineer or his/her designee analyzes the data and makes a final decision on the appropriate traffic control device and location of that device, excluding traffic lights and school zone speed limit signs.

### **Requesting Installation of Control Devices (APWA 33.4)**

All resident requests for a traffic control device(s) to help resolve traffic control problems are the responsibility of the Village of Wellington's Engineering Department. The Engineering Department reviews the request and determines if additional information is needed.

The Engineering Department then assesses the situation to determine the best approach to resolve the request, which may include a traffic study, which they may oversee, if needed. The results of the traffic study and field inspection will be reviewed with the Village Engineer to determine the best course of action for a particular situation.

Wellington's Engineering Department utilizes a common sense approach to placement of traffic control devices. The Engineering Department believes that their priority is to keep traffic flowing to the best advantage and that *Regulatory and warning signs should be used conservatively because these signs, if used to excess, tend to lose their effectiveness.* The Engineering Department will only use signs where justified by engineering judgment or studies, as provided in Section 1A.09 of the MUTCD 2009 Edition.

If the device is warranted and funds are available within the current fiscal budget, the Engineering Department will initiate the manufacture and installation of the device through the Roads Department. If the device is warranted, but funds are not available in the current fiscal budget for installation, the Roads Supervisor will include the cost of the device in the next fiscal budget. Findings of the request are reported to the Public Works Director.

The Engineering Department will contact the resident with determination and status of the request.

### **Traffic Signs (APWA 33.5)**

Per Village of Wellington's Ordinance NO. 2002-18, Adoption of the Florida Uniform Traffic Control Law, the Village of Wellington has adopted Florida State Statute 316, and by inference, the Manual on Uniform Control Devices (MUTCD) 2009 Edition and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001.

Wellington implements sign standards included in the Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001 along with the standards in the MUTCD to

comply with uniform size, color, letter and sign height, retro- reflectivity, and insure signs are effective during all hours of the day.

Wellingtons Road Department sign shop follows the Manual on Uniform Control Devices (MUTCD) 2009 Edition and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001.

The Public Works Road Department policy is to replace all regulatory signs in a 3 to 5 year cycle and to replace immediately any regulatory signs that are damaged or missing.

Attachment 24-120: Traffic and Operations Policy & Procedures (Traffic Signs & Advisory Speed Limit Signs) [..\Chapter 33 Traffic Operations\33.5 Traffic Signs & 33.8 Advisory Speed Limit Signs\Traffic and Operations Policy & Procedures \(Traffic Signs & Advisory Speed Limit Signs\).pdf](#)

Attachment 33-101: VOW Ordinance No. R2002-18 – Motor Vehicles and Traffic [..\Chapter 33 Traffic Operations\33.5 Traffic Signs & 33.8 Advisory Speed Limit Signs\Ord No. 2002-18 Motor Vehicles\\_Traffic.pdf](#)

### **Sign Installation Policy (APWA 33.6)**

Wellington’s policy adheres to Florida Chapter 316 (Florida Uniform Traffic control Law), Wellington also adheres to the 2009 edition of the Manual of Uniform traffic Control Devices (MUTCD) and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001. The Wellington Public Works Department follows these established and uniform guidelines as criteria for the installation and removal of all traffic control devices.

Attachment 24-120: Traffic and Operations Policy & Procedures (Sign Installation) [..\Chapter 33 Traffic Operations\33.6 Sign Installation Policy\Traffic & Operations Policy & Procedures Manual -Sign Installation Policy.docx](#)

### **Statutory Speed Limits on Roadways (APWA 33.7)**

Florida Statute Chapter 316.189 authorizes that municipalities may set speed zones altering the speed limit after investigation determines such change is reasonable and conforms to criteria established by the Florida Department of Transportation. Both the Manual on Uniform Traffic Control Devices (MUTCD) and Speed for Highways, Roads and Streets in Florida (FDOT Manual #750-010-002) use the 85 percentile speeds as the basic factor for establishing speed limits.

Wellington's Engineering Department retained a traffic engineer consultant, Pinder Troutman Consulting, Inc. to conduct a speed study of the roadway system in Wellington. The purpose of this study was to examine if the posted speed limits needed to be modified. All roadways in Wellington are posted with speed limit signs and neighborhood roads are to be 25 mph unless otherwise posted.

Attachment 33-102: Speed Study (Pinder Troutman Consulting, Inc.)

### **Advisory Speed Limit Signs (APWA 33.8)**

It is Wellington's policy that all Advisory Speed Sign are incorporated into or as a supplement to a warning sign. Except in an emergency or when conditions are temporary, an Advisory Speed Sign or plaque shall not be installed until the advisory speed has been determined by an engineering study. Any Advisory Speed Sign or plaque and mounting adhere to the 2009 edition of the Manual of Uniform traffic Control Devices (MUTCD) and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001.

Attachment 24-120: Traffic and Operations Policy & Procedures (Advisory Speed Limit Signs)  
[..\Chapter 33 Traffic Operations\33.8\Traffic & Operations Policy & Procedure Manual \(Advisory Speed Limit Signs\).docx](#)

### **Street Name Signs (APWA 33.9)**

It is the Policy of Wellington's Public Works Department to manufacture and install Identification/Street name signs for public streets and intersections. This is done in accordance with the guidelines set forth in the 2009 edition of the Manual of Uniform traffic Control Devices (MUTCD) and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001.

The Public Works Department manufactures, installs and maintains post mounted signs. Mast arm mounted signs are installed and maintained by Palm Beach County Division of Traffic Operations.

If a Street Name sign is in need of repair or replacement during normal business hours a Customer Service Representative will issue a work order. If the sign is missing or grossly vandalized, the Roads Department Supervisor will be called for immediate replacement or repair. All signs are being bar coded for future reference of GIS mapping of locations. All private subdivisions and developments manufacture and install their own identification/street name signs through a private contractor, developer or Home Owners Association. The signs, materials, placement and installation must meet the Village standards per the Village Engineer.

Attachment 24-120: Traffic and Operations Policy & Procedures (Street Sign Names)  
[..\Chapter 33 Traffic Operations\33.9\Traffic & Operations Policy & Procedure Manual \(Street Sign Names\).docx](#)

### **Sign Visibility (APWA 33.10)**

It is Wellington's policy to instruct all Roads and Landscape Maintenance Departments to observe and remove any obstructions from tree branches, vegetation or any other obstructions they encounter during their normal workday. All Roads employees have been instructed to remove any obstructions encountered during routine maintenance or replacement of signs.

All resident obstruction notifications called into Customer Service are entered as a work order and sent to the Roads Supervisor.

Attachment 24-120: Traffic and Operations Policy & Procedures (Sign Visibility)  
[..\Chapter 33 Traffic Operations\33.10\Traffic & Operations Policy & Procedure Manual \(Sign Visibility\).docx](#)

### **School Pedestrian Crossings (APWA 33.11)**

Wellington's Public Works Department policy is to install and maintain all school warning devices and stripping on a 3-5 year basis or as requested by Wellington's Engineering Department and the School Board of Palm Beach County.

Wellington's Public Works Department's serves a maintenance role for School Pedestrian Crossings. The Engineering Department and the School Board of Palm Beach County are the lead agencies for the use and placement of school pedestrian and crossing signs.

Wellington's Public Works Department policy to adhere to School Zone Pedestrian Crossings as described in Section 316.1895 and 316.0745 of the Florida Statutes. Traffic control devices also comply with the FDOT design standards and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-00.

Attachment 24-120: Traffic and Operations Policy & Procedures (School Pedestrian Crossing)  
[..\Chapter 33 Traffic Operations\33.11\Traffic & Operations Policy & Procedure Manual \(School Pedestrian Crossing\).docx](#)

### **School Zone Speed Limits (APWA 33.12)**

Wellington's Public Works Department policy to adhere to School Zone Speed Regulations as described in Section 316.1895 and 316.0745 of the Florida Statutes. Traffic control devices also comply with the FDOT design standards and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001

Public Works requires the Principal and/or the Sheriff's Department Crossing Guard Supervisor of each school with an established school zone to advise School Zone Hours and to verify the exact times a school requires the reduction of speed limits in the morning and afternoon.

Attachment 24-120: Traffic and Operations Policy & Procedures (School Zone Speed Limits)  
[..\Chapter 33 Traffic Operations\33.12\Traffic & Operations Policy & Procedure Manual \(School Zone Speed Limits\).docx](#)

### **Special Signs (APWA 33.13)**

Wellington's Road Department sign shop follows the Manual on Uniform Control Devices (MUTCD) 2009 Edition and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001 in the installation of all special signs.

Attachment 24-120: Traffic and Operations Policy & Procedures (Special Signs)  
[..\Chapter 33 Traffic Operations\33.13\Traffic and Operations Policy & Procedures \(Special Signs\).docx](..\Chapter 33 Traffic Operations\33.13\Traffic and Operations Policy & Procedures (Special Signs).docx)

### **Alley Stop Signs (APWA 33.14)**

Although there are no alley ways in Wellington it would be Wellington's policy to treat an alley as a private road or driveway and to give the right-of-way to the through street. Vehicles exiting the alley would yield to vehicles on the public roadway.

All alley sign placement would adhere to the Manual on Uniform Control Devices (MUTCD) 2009 Edition and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001.

### **Yield Signs (APWA 33.15)**

Wellington's Engineering Department is the lead agency in the placement of all yield signs in Wellington. The Roads Department manufactures and installs yield signs according to Engineering's request for placement.

All yield signs placement in Wellington are mandated by the Engineering Department. It is Wellington's Public Works policy to place yield signs in accordance with the MUTCD standards and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001, for the application, design and placement.

Attachment 33-103: Florida Statute 316.123  
<..\Chapter 33 Traffic Operations\33.15\Florida Statute 316.123.docx>

### **Railroad Crossing Signs and Markings (APWA 33.16)**

At the present time Wellington does not have any railroad crossings within Village limits. If the need should ever arrive for the placement of railroad crossing markings it would be Wellington's policy to adhere to Section 8B.03 through 8B.05 of the 2009 MUTCD Manual.

Attachment 33-104: Section 8B.03 through 8B.05 of the 2009 MUTCD Manual  
<..\Chapter 33 Traffic Operations\33.16\Section 8B.03 through 8B.05 of the 2009 MUTCD Manual.pdf>

Attachment 33-105: Map of Florida Railway System  
<..\Chapter 33 Traffic Operations\33.16\Florida Railway System.png>

### **Pavement Markings (APWA 33.17), Pedestrian and School Crosswalk Pavement Markings (APWA 33.18) and Stop Line Pavement Markings (APWA 33.19)**

It is Wellington's Public Works Department policy to adhere to Section 3B.18 of the MUTCD standards and Palm Beach County Typical for Pavement Markings, Signing and Geometrics No.

T-P-10-001, for the application, design and placement of all Pedestrian and School Crosswalk and Pavement Markings

Wellington's policy is that all crosswalks will be European Crosswalks as described in Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001. All crosswalk markings will be applied with thermoplastic with reflective beads for permanent markings and white traffic paint with reflective beads for temporary markings. All pavement markings are installed with FDOT approved paint and thermoplastic designed for Florida climates.

Attachment 24-120: Traffic and Operations Policy & Procedures (Pavement Markings)  
[..\Chapter 33 Traffic Operations\33.17, 33.18 & 33.19... Markings\Traffic & Operations Policy & Procedure Manual \(Pavement Markings\).docx](#)

### **Installation of New Signals (APWA 33.20)**

As stated in Wellington Ordinance No. 2002-18 and Wellington Code of Ordinances Section 62-5 "Authority to install traffic control devices and signals"

The Village engineer is authorized to install, remove, or modify traffic control devices and signals to regulate vehicular, bicycle, and pedestrian traffic on the streets and public ways in the village which are determined to be necessary or desirable for safe traffic control.

Through our Interlocal Agreement with Palm Beach County in 1996 (R96-2032) to provide several public services within the Village, all signals will be installed and maintained by PBC Traffic Division.

All installations of traffic control devices and signals by the Village and PBC shall comply with the Manual on Uniform Traffic Control Devices and specifications of the State Department of Transportation.

Attachment 33-101: VOW Ordinance No. R2002-18 – Motor Vehicles and Traffic  
[..\Chapter 33 Traffic Operations\33.20 Installation of New Signals\Ord No. 2002-18 Motor Vehicles Traffic.pdf](#)

Attachment 33-106: Section 65-5 Authority to install traffic control devices and signals  
[..\Chapter 33 Traffic Operations\33.20 Installation of New Signals\Section 62-5 Auth To Install Traffic Control Devices & Signals.pdf](#)

### **Temporary Stop Signs for Signal Outage (APWA 33.21)**

In the event a traffic signal should fail during normal hours, the Roads Department would notify Palm Beach County's Traffic Division to repair the signal and Palm Beach Sheriff's Office Wellington substation. The Roads Department would then place stop signs at the affected signal, making it a Four (4) Way Stop, which is subject to FL Statute 316.123.

The Roads Department has coordinated with the PBSO for the response to traffic signal outages

by placing barrier stop signs at their facility in the event there should be a signal outage during non-working hours. PBSO would also notify the Palm Beach County's Traffic Division to have the signal repaired. On site traffic control would be needed by PBSO on major intersection outages.

Attachment 33-103: Florida Statute 316.123

[..\Chapter 33 Traffic Operations\33.21\Florida Statute 316.123.docx](#)

### **Traffic Signal Timing (APWA 33.22)**

Wellington entered into an Interlocal Agreement with Palm Beach County in 1996 (R96-2032) to provide several public services within the Village, and to document ownership and maintenance responsibilities for public roads within the municipal boundaries of the Village.

Through this agreement PBC agrees to retain traffic engineering responsibilities within the municipal boundaries for all signalized intersections and school flashers. The Village shall have no duties or obligations whatsoever with regard to repair or maintenance of traffic control devices covered under the terms of this agreement.

Attachment 33-107: Interlocal Agreement with Palm Beach County in 1996 (R96-2032)

[..\Chapter 33 Traffic Operations\33.22\Interlocal Agreement -PBC 1196 \(R-96-2032\).pdf](#)

### **Truck Routes (APWA 33.23)**

Wellington Ordinance *Ord. No. 2005-10* Sec. 54-91 Vehicles Over Six Wheels states that “It is unlawful to operate or permit to be operated any vehicle, or combination of vehicles and trailers, driving on over six wheels upon any village road whenever said road is posted with signs prohibiting said operation, except as hereinafter provided.”

The notice of restriction shall be posted at conspicuous places at the terminal points of the section of road to which the restriction applies, and at appropriate crossroads of and junctions with the section of road to which the restriction applies in such a way as to provide reasonable notice of the restriction.

Attachment 24-120: Traffic and Operations Policy & Procedures (Truck Routes)

[..\Chapter 33 Traffic Operations\33.23 Truck Routes\Traffic and Operations Policy & Procedures \(Truck Routes\).docx](#)

### **Bike Paths (APWA 33.24)**

The Village adheres to the Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways and the FDOT Manual Vol 1, Chapter 8. Provisions for bicycle traffic are incorporated in the original highway design. All new highways, other than limited access highways, are designed and constructed under the assumption that they will be used by bicyclists. Also available are shared use paths, which are facilities usually on exclusive right of way, with minimal cross flow by motor vehicles, and can include the following:

- Bicyclists
- Inline skaters
- Roller skates
- Skateboarders
- Wheelchair users
- Pedestrians

Attachment 33-108: FDOT Manual, Volume1, Chapter 8

[..\Chapter 33 Traffic Operations\33.24\FDOT Manual, Vol1, Chapter 8.pdf](#)

Attachment 24-120: Traffic Operations Policy and Procedures Manual (Bike Paths)

[..\Chapter 33 Traffic Operations\33.24\Traffic and Operations Policy & Procedures \(Bike Paths\).docx](#)

### **Bus Stops (APWA 33.25)**

Palm Tran requires that Wellington's Engineering Department adheres to their Transit Design Manual for:

- Transit Service Standards
- Transit Access
- Pedestrian Access
- Bicycle Access
- Infrastructure
- Coordination with FDOT and Palm Beach County

Bus Stops locations are agreed upon by Palm Tran of Palm Beach County and Wellington's Village Engineer.

### **Temporary Street Closings (APWA 33.26)**

It is Wellington's Public Works Department policy to only temporarily close Village streets for a Village sanctioned event or emergency. All street closures should be done in accordance with accepted standards as outlined in the MUTCD and Maintenance of Traffic (MOT).

Streets in Wellington will only be closed for the following reasons:

- **Emergency Closure**
- **Residential Block Parties**
- **Parades and Special Events**

Anyone seeking street closures must follow all application procedures required by the Village.

Attachment 24-120: Traffic Operations Policy and Procedures Manual (Temporary Street Closings)

[..\Chapter 33 Traffic Operations\33.26\Traffic and Operations Policy & Procedures \(Temporary Street Closings\).docx](#)

### **One-Way Streets (APWA 33.27)**

The Public Works Roads Department's policy for one-way street designation is through a traffic study and decision by the Engineering Department to designate a road as a one-way street. Once completed and approved by the Village Manager necessary planning would begin following Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001 and Section 3B. 16 of the MUTCD Manual for installation of needed signs and specified markings.

Attachment 24-120: Traffic Operations Policy and Procedures Manual (One-Way Streets)  
[..\Chapter 33 Traffic Operations\33.27\Traffic and Operations Policy & Procedures \(One-Way Streets\).docx](#)

### **Traffic Calming (APWA 33.28)**

Village of Wellington Council adopted Resolution No. R2007-36 Policy for the installation of Speed Humps on certain types of residential streets as a traffic control measures within the Village of Wellington.

Wellington recognizes that properly placed and designed speed humps are an effective tool for reducing vehicular speeds and discouraging cut through traffic on residential streets. Requests for speed humps shall be directed in writing to the Village Manager for approval subject to review and recommendations from the Village Engineer and the Public Works Director.

To be eligible for consideration, a roadway must meet the following criteria:

- To ensure timely response of emergency vehicles, no speed humps shall be permitted on designated arterial or collector streets.
- An eligible street must be a designated local street with a projected average daily traffic count not to exceed 2,500 vehicles per day at the time of full development of the area.
- No speed humps shall be installed on any street with a current vehicle count of less than 500 per day
- The installation of speed humps shall be viewed as a last step in a comprehensive plan for reducing vehicle speeds and for discouraging cut through traffic movements in a residential area.

Prior to the installation of any speed humps, a resolution approving the proposed speed hump location(s) on public or private roads shall be approved by the Village Council  
Village of Wellington Council adopted Resolution No. R2007-36 Policy for the installation of Speed Hump.

Attachment 33-109: VOW Resolution No. R2007-36 (Speed Hump Policy)  
[..\Chapter 33 Traffic Operations\33.28\VOW Resolution No. R2007-36.pdf](#)

### **Streetlights (APWA 33.29)**

Wellington recognizes that properly placed and designed street lights are an effective tool for improving safety and aesthetics. The Public Works policy for street light installation, repair and maintenance, as well as reporting outages may be installed in residential areas if all of the following conditions are met:

- The proposed location is at an intersection curve or not closer than 300 feet to an existing street light
- A petition shall be provided to the Village with signatures from two thirds(2/3)of the residents living within 300 feet of the proposed street light location measured along the affected street supporting the installation of street lights Where applicable the petition shall also be endorsed by an officially incorporated homeowners association for the subdivision
- The Village shall assume responsibility and cost associated with engineering review and in-house approval and coordination to ensure that the proposed street lights are located in compliance with this policy and are installed properly This does not prevent petitioning residents from securing at their expense additional professional services from a licensed engineer to provide supplemental information in support of the proposal
- Prior to the installation of the approved street lights the petitioning residents shall pay the Village 50% of the cost for any conduit required by Florida Power and Light to be installed for the street lights to be installed Any funds left over at the completion of the project shall be returned to the petitioning group This policy does not apply to the Equestrian Preserve Area which has a policy of no street lights to maintain the rural character of the area not including arterial or collector streets.

All street light outages or malfunctions are reported to Florida Power & Light (FP&L) by phone (800- 4outage) or online. If a resident reports an outage, the resident is directed to call FP&L directly. Please see Practice 24.1 Coordination with Transportation Planning for additional information.

### **Roadside Memorials (APWA 33.30)**

In order to increase public awareness of roadway safety, it is Wellington's policy to allow placement of memorial markers within certain Wellington road right-of-ways to memorialize people who have died as a result of a vehicle related crash.

Although Wellington encourages an alternate means of memorial such as the placement and dedication of a tree within a Village park, roadside memorial markers will be limited to arterial and collector roads, excluding residential frontage.

Applications for memorial markers are to be submitted to the Public Works Director along with a \$25.00 fee. Once approved, a sign request for a memorial marker will be issued to the Roads Department.

All memorial markers shall meet the criteria outlined in Wellington's memorial marker policy and FDOT's Highway Safety Memorial Marker Program.

Village of Wellington Council adopted Resolution No. R2004-123 Roadside Memorial Markers Policy.

Attachment 33-100: VOW Resolution No. R2004-123 –Roadside Memorial Markers Policy  
[..\Chapter 33 Traffic Operations\33.30\VOW Resolution No. R2004-123 –Roadside Memorial Markers Policy.pdf](#)

### **Roundabouts (APWA 33.31)**

Wellington’s Engineering Department decides where roundabouts will be constructed in the Village. The Engineering Department determines roundabout placement by using the criteria outlined in the Florida Department of Transportation’s Florida Roundabout Guide. After final approval from Engineering a Request for Proposal (RFP) is issued and the roundabout is constructed complete with signage and stripping by the awarded contractor.

Wellington’s Public Works Roads Division’s involvement in roundabouts is limited to re-stripping and sign maintenance after the Engineering Department signs off on the project. It is the Roads Department’s policy to adhere to Palm Beach County Typical for Pavement Markings, Signing and Geometrics No. T-P-10-001, Sections B.43-.45. of the MUTCD Manual and the FDOT’s Florida Roundabout Guide for re-stripping and maintenance of signage.

### **Inventory (APWA 33.32)**

Wellington regularly updates and keeps inventory on the street lights and signs throughout the Village. Traffic signs are maintained by the Roads division, who follow the Uniform Traffic Control Devices.

Street lights and traffic lights are not owned nor maintained by the Village of Wellington. Public street lights in Wellington are leased from FPL, which includes all maintenance, repairs and/or replacements. (Please see Practice 24.1 ... Street Lighting)

Traffic control devices (traffic lights) are owned, operated and maintained by Palm Beach County. Street light outages, issues or service requests are reported to FPL. Instructions for reporting a street light outage/issue are outlined in the Street Light Outage Reporting Procedure. Traffic Light outages, issues or service request are reported to Palm Beach County Traffic Control.

Attachment 24-101: Street Light Inventory Data and Map

[..\Chapter 33 Traffic Operations\33.32\Street Light Inventory December 2014.pdf](#)

[..\Chapter 33 Traffic Operations\33.32\Street Light Inventory Location Map 2014.pdf](#)

Attachment 24-102: Traffic Control Signals & Electronic Devices Inventory Map including Data

[..\Chapter 33 Traffic Operations\33.32\Traffic Control Signals&Ele. Devices Inventory Map.pdf](#)

Attachment 33-110: Traffic Sign Inventory Map

[..\Chapter 33 Traffic Operations\33.32\TrafficSigns Inventory.pdf](#)



## **Chapter 7**

# **Surface Water Management**

### **APWA “Stormwater and Flood Management” Chapter 27**

Wellington owns and maintains its vast storm water drainage system. With state of the art drainage infrastructure, Wellington’s pump stations and control structures ensure the community water levels are carefully controlled. This is an ongoing operation and equipment must be kept in top condition.

The Surface Water Management Department is responsible for the maintenance of 91.4 miles of canals, 362.45 acres of lakes, catch basins and 8 pump stations.

#### **Stormwater and Flood Management Service Levels (APWA 27.1)**

The Wellington Comprehensive Plan (April 2012) Infrastructure Element provides a written description of goals, objectives, and policies for storm water management. The storm water management system complies with requirements of South Florida Water Management District, National Pollutant Discharge Elimination System (NPDES) and is consistent with Wellington’s Best Management Practice Manual.

Wellington enforces land development code provisions that set water quality and quantity standards. At a minimum, the code requires: one inch of on-site drainage detention, post-development runoff equal to or less than pre-development runoff, erosion control, a minimum percentage of pervious open space, maintenance of swales, and minimum drainage level-of-service standards. These requirements are consistent with applicable standards promulgated by the South Florida Water Management District and the Florida Department of Environmental Protection.

Wellington’s 1978 Surface Water Management Permit from South Florida Water Management District established building and roadway protection levels. All finished floor elevations are required to be at or above the 100-year, 3-day (14.9 inches of rainfall) storm event and roadways are required to have a minimum flood protection from 3-year, 1-day event (5 inches of rainfall). Computer simulations of Wellington’s surface water management system in 2005 indicated that Wellington roadways have a minimum flood protection from 5-year, 1-day (6 inches of rainfall) and that buildings have protection above the 100-year, 3-day storm event. Wellington’s permit criteria and Best Management Practice Manual (2010) address both storm water quantity and quality policies.

Attachment 27-100: Resolution No. AC2011-10 Water Control Plan

[..\Chapter 27\27.1 Stormwater&Flood Mgmt Svc Levels\Resolution AC2011-10 Water Control Plan 2010.pdf](#)

Attachment 27-101: Comprehensive Plan/Infrastructure Element Document

[..\Chapter 27\27.1 Stormwater&Flood Mgmt Svc Levels\Infrast. Element document 1 of 2.pdf](#)

[..\Chapter 27\27.1 Stormwater&Flood Mgmt Svc Levels\Infrast. Element document 2 of 2.pdf](#)

Attachment 27-102: SFWMD Blanket Surface Water Permit (Originally issued in 1978)

[..\Chapter 27\27.1 Stormwater&Flood Mgmt Svc Levels\SFWMD Blanket SW Permit.pdf](#)

## **Operation Plan (APWA 27.2)**

The Wellington Comprehensive Plan (April 2012) Infrastructure Element provides a written description of goals, objectives, and policies for storm water management. The storm water management system complies with requirements of South Florida Water Management District, National Pollutant Discharge Elimination System (NPDES) and is consistent with Wellington's Best Management Practice Manual.

Wellington enforces land development code provisions that set water quality and quantity standards. At a minimum, the code requires: one inch of on-site drainage detention, post-development runoff equal to or less than pre-development runoff, erosion control, a minimum percentage of pervious open space, maintenance of swales, and minimum drainage level-of-service standards. These requirements are consistent with applicable standards promulgated by the South Florida Water Management District and the Florida Department of Environmental Protection.

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As part of Wellington's Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Wellington maintains a complete inventory of its entire storm water management system, conducts and documents the required inspections at regular intervals, and maintains records of the maintenance activities. Staffing and financial resources are included in the annual budget for these programs. Standard operating protocols and procedures are documented for all structural controls including: swales, detentions systems (lakes), conveyance canals, canal sediment traps, pump stations, weirs, pipe system (length, size, and inlets/catch basins), preserves, and outfall structures. The frequency of inspection, percentage inspected annually, number of maintenance activities, and percent maintained is included in the annual MS4 reports to the Florida Department of Environmental Protection.

The storm water management program describes inspection, maintenance and cleaning programs to ensure that facilities are operable during storm events.

Attachment 27-103: 2010/2011 NPDES Annual Report with SOPs, Inspection form, legal authority, MS4 Inventory

[..Chapter 27\27.2 Operation Plan](#)

**Floodplain and Floodway Management (APWA 27.3)**

*Wellington's Planning, Zoning and Building Department is the lead department for Floodplain and Floodway Management.*

Wellington uses the results of the current set of Flood Insurance Rate Maps and its accompanying Flood Insurance Study to guide compliance and site planning.

It is the purpose of the Village of Wellington's Flood Damage Prevention Ordinance to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities.
- Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- Control the alteration of natural floodplains, storm water channels, and natural protective barriers that are involved in the accommodation of floodwaters.
- Control filling, grading, dredging, and other development which may increase erosion or flood damage.
- Prevent or regulate the construction of flood barriers which may unnaturally divert floodwaters or which may increase flood hazards to other lands.

Additional information regarding Floodplain and Floodway Management for the Village of Wellington can be found on the:

Village Website: <http://wellingtonfl.gov/access-wellington/flood/drainage-system-maintenance.html>

Municode link to Village of Wellington's Flood Damage Prevention Ordinance  
[https://www.municode.com/library/fl/wellington/codes/code\\_of\\_ordinances?nodeId=PTIICOOR\\_CH18BUBURE\\_ARTIIIFLDAPR](https://www.municode.com/library/fl/wellington/codes/code_of_ordinances?nodeId=PTIICOOR_CH18BUBURE_ARTIIIFLDAPR)

Program for Public Information, Community Rating System  
[..27.3 Floodplain & Floodway Mgmt\PPI Wellington 2014-4-15 Final.pdf](#)

Flood Control in Palm Beach County is dependent on a complex, integrated system of canals, waterways and flood control devices operated by the South Florida Water Management District,

20 drainage districts, and thousands of privately owned canals, retention/detention lakes and ponds.

The county's drainage system is designed to handle excess surface water in three (3) stages. The "neighborhood or tertiary drainage systems" (made up of community lakes, ponds, street and yard drainage grates or culverts, ditches and canals) flow into the "local or secondary drainage system"(made up canals, structures, pumping stations and storage areas) and then into the "primary flood control system" (consisting of South Florida Water Management District canals and natural waterways and rivers), ultimately reaching the Atlantic Ocean.

Public Works' Surface Water Management division maintains the drainage system conveyance or storm water capacity through various maintenance activities to ensure flood preparedness.

Maintenance activities, most commonly include ongoing monitoring, debris and sediment removal, and the correction of problem sites and damaged systems by field crews. The Village of Wellington has ongoing programs for structural and permanent changes to channels or basins (e.g. enlargement of openings, installation of grates to catch debris, installation of hard bank protection, construction of new retention basins, etc.) to reduce flooding and maintenance problems. In addition, several inspection activities are routinely done to ensure conveyance system is working properly.

- Pump Station inspection and maintenance
- Control Structure inspection and maintenance
- Exfiltration Trench inspections
- Major and Neighborhood culvert inspection, maintenance and replacement, when warranted
- Debris removal from pump station trash rakes, canals, storm drains (inlets), street cleaning, and street debris clean-up (trash carts).
- Proactive Illicit Discharge/Dumping inspections
- Right of Way Clearing
- Aquatic Weed Control

Attachment 27-104: Flood Information Brochure

[..\Chapter 27\27.3 Floodplain & Floodway Mgmt\Flood Information Brochure.pdf](#)

Attachment 27-105: Program for Public Information (PPI)/Community Rating System (CRS) Program

[..\Chapter 27\27.3 Floodplain & Floodway Mgmt\PPI Wellington 2014-4-15 Final.pdf](#)

Attachment 27-106: Wellington's Flood Damage Prevention Ordinance

[..\Chapter 27\27.3 Floodplain & Floodway Mgmt\Flood Damage Prev Ordinance.pdf](#)

### **Water Quality Goals (APWA 27.4)**

Wellington's Stormwater management system complies with the requirements of South Florida Water Management District Permit, MS4 NPDES Permit, and the 1994 Everglades Protection

Act. Wellington's Comprehensive Plan (April 2012 Infrastructure Element) and Best Management Practice Manual (August 2010) identify the water quality goals and policies. Wellington requires new and redevelopment projects to meet the regulatory requirements of SFWMD, Florida Department of Environment Protection for Sediment and Erosion Controls, and Wellington Best Management Practice Manual. This includes one inch of onsite detention and erosion control. Since, 1999, Wellington has implemented various programs to reduce the nutrient loading (primarily targeting phosphorous) into the regional water management system. These programs included water quality sampling, storm water quality modeling, Best Management Practice Ordinance No. 2004-34 covering management of (1) livestock waste and (2) fertilizer, re-plumbing of Wellington's surface water management system, installation and maintenance of sediment traps in the canals, construction of a 365-acre wetland march/water quality treatment are (The Wellington Preserve-Section 24), mechanical harvesting of the vegetation in the surface water management system prior to discharge into the Regional system, and public education.

Throughout the past decade, the Village has also conducted an extensive water quality monitoring program. Based on this significant body of data, it has been concluded that the restructuring of the storm water system in Basin A and Basin B combined with the *Best Management Practices* and regular compliance monitoring have resulted in significant reductions of phosphorus being discharged to the regional storm water system. Most significantly, the elimination of direct discharges to the Loxahatchee Wildlife Refuge has contributed indirectly to "nutrient levels showing marked decline in 2008 reported by South Florida Water Management District. While the same 45 report states that there "are no specific TP requirements established (in Non-ECP Basins- Acme/Wellington) at the point of discharge from these basins", both the Village and SFWMD staff have agreed that "target" TP discharge levels should be in the range of 50ppb. Results contained in this report clearly demonstrate that average discharges to the regional system have met or exceeded these target goals. The Village of Wellington is currently in the process of developing a second phase of BMP requirements designed to further reduce nutrient discharges. Combined with the completion and operation of the Section 24 Project, the Village anticipates further water quality improvements beyond those achieved thus far.

The Village remains committed to the continued enforcement of both the current Best Management Practices and to BMP Phase II requirements as they are developed and approved.

The attached report summarizes storm Water Quality testing conducted by the Village of Wellington. In addition, the report provides information on the adopted Best Management Practices (BMP's) and the construction of the Section 24 Stormwater Project. This Report also summarizes the effectiveness of the actions taken to date.

Attachment 27-107: Water Quality Report 2009

[..\Chapter 27\27.4 Water Qlty Goals\2009 Water Quality Report-Final.pdf](#)

Attachment 27-108: Water Quality Report 2010

[..\Chapter 27\27.4 Water Qlty Goals\2011 Surface Water Quality Report \(Final\) 09-2011.pdf](#)

## **Fish Kills**

The Public Works Department responds to calls from the public regarding fish kills.

When a report is received regarding a fish kill, the Surface Water Management Supervisor responds immediately to the reported location and reviews and records the weather conditions and the applicators daily report of herbicide treatment.

Possible causes are determined during the investigation. There are two categories used to determine cause depletion of oxygen or change of water temperature. The oxygen depletion may due to no rainfall or too much rainfall, decaying aquatic vegetation.

Once the cause has been determined the Surface Water Management Supervisor calls the Florida Wildlife Conservation Commission at 561-625-5122 and reports the findings.

### **System In-Flow of Polluted Runoff (APWA 27.5)**

Wellington is in compliance with the Federal Clean Water act. As noted in Section 27.2 Wellington has an MS4 NPDES permit and an associated Stormwater Management Program. Included in this program are an annual inventory and an inspection program of High Risk Facilities. More information is contained in the attached MS4 2nd Year report and Stormwater Management Program. None of the inspections of the few High Risk Facilities within Wellington have shown any sign of discharge of any pollutant.

Please see Operation Plan (APWA 27.2) for following attachment:  
Attachment 27-109: 2011/2012 NPDES Annual Report

### **Allowable Non Stormwater Discharge into System (APWA 27.6)**

Wellington complies with the Clean Water Act and the MS4 NPDES permit. Ordinance No. 97-24 covers this item, as well as prohibiting illicit discharges, spills, dumping, enforcement, penalties, inspection and monitoring.

Attachment 27-110: VOW Ordinance No. 97-24 (prohibiting illicit discharges, spills, dumping, enforcement, penalties, inspection and monitoring)

[..\Chapter 27\27.6 Allowable Non Stormwtr Dischg into System\Ordinance No. 97-24 \(prohibiting illicit discharges\).pdf](#)

### **Watershed Stormwater Drainage Master Plan (APWA 27.7)**

There are three Chapter 298 F.S. special districts within Wellington. These special districts provide the canal conveyance system that receives storm water runoff from adjacent lands and discharges it into the regional water management system. The operation and maintenance of these conveyance canals are the responsibility of the special district and have been permitted by the South Florida Water Management District.

The principle special district (Acme Improvement District) covers over 75% of the storm water/canal conveyance system serving Wellington. Acme is a dependent district which means

its board of supervisors is Wellington's Council and its storm water system is Wellington's system. A computer model and an inventory of the entire Wellington surface water management system (100+ miles of interconnected lakes and canals, over 100 culverts, 8 water control structures, and 8 pump stations) and the contributing adjacent lands was completed in 2002. Updates occurred in 2005, 2006, and 2008 as a result of upgrades, constructed improvements, planned improvements, and operational changes to the system. Computer simulations were performed for three storm events (10, 25, and 100 year) to calculate the peak stages in the canals, system recovery time, and level of flood protection. The model was calibrated and has been verified to be highly accurate as attested by performance of the storm water system during Tropical Storm Fay (2008) and Tropical Storm Isaac (2012). The computer model is continually being used to address drainage system needs, provide community flood protection benefits (stage and duration), and establish and prioritize a list of planned improvements for Acme's Water Control Plan.

Pursuant to Florida Statutes (298.225) Wellington is required to update Acme's Water Control Plan every five years. Acme's 2010 Water Control Plan was approved by Wellington's Council on June 28, 2011, Resolution No. AC 2011-06. This Water Control Plan is equivalent to a Stormwater Master Plan. The Plan includes a description of the responsibilities and powers of the District, identifies the legal boundaries, describes the future land uses and facilities (storm water, utilities, roadways, parks and recreational,) within the District, provides a description of environmental and water quality programs, financing options and projects (storm water, roadway, recreational) for the future and assessment of benefits (drainage, roadway, and recreational).

Please see Stormwater and Flood Management Service Levels (APWA 27.1) and attachments.

### **Infrastructure Inventory (APWA 27.8)**

Wellington storm water facilities are outlined on the Acme Improvement District Water Control Plan. The location of all the facilities is identified on a map and information on the inventory is included in a table. This table includes information on the pump stations (capacity, number of pumps, control structures, function, and operational schedule) and culverts (number, size, type, length, and invert elevation). All facilities are inspected and maintained. Frequency of the inspections and documentation of the maintenance activities are contained in the records and annual reporting requirements for Wellington's MS4 Stormwater Management Program as noted in response to Section 27.2 above.

Attachment 27-111: Pump Stations, Water Control Structures, and Culverts Location Map  
[..\Chapter 27\27.8 Infrastructure Inventory\Pump Station, Water Control Structure & Culvert Inventory Map.pdf](#)

Attachment 27-112: Pump Station Data Sheets  
[..\Chapter 27\27.8 Infrastructure Inventory\Pump Station Data.xlsx](#)

Attachment 27-113: Major Canal Crossings/Culverts Database & Map  
[..\Chapter 27\27.8 Infrastructure Inventory\Major Canal Crossings & Culverts database.xlsx](#)

[..\Chapter 27\27.8 Infrastructure Inventory\Master Culvert Maintenance Map.pdf](#)

Attachment 27-114: Neighborhood Infrastructure Inspection & Maintenance Log & Map

[..\Chapter 27\27.8 Infrastructure Inventory\Neighborhood Infrastructure Insp-Maint.xlsx](#)

[..\Chapter 27\27.8 Infrastructure Inventory\Neighborhood Culvert Maintenance Map.pdf](#)

### **Infrastructure Condition (APWA 27.9)**

All of Wellington's storm water management facilities are inspected and maintained. The number of inspections and maintenance activity is reported annually with the MS4 NPDES report and corresponding detailed documented. Written standard inspection and operating procedures have been developed for all the storm water facilities. All major components of the storm water management system are in excellent condition (pumps, canals, culverts).

Please see Infrastructure Inventory (APWA 27.19) and attachment maps.

Attachment 27-115: NPDES Annual Report 2013-2014 (Page 1 & 2 as final report too large to download but available for review) with samples of the maintenance & inspection work orders, records &/or logs

[..\Chapter 27\27.9 Infrastructure Condition\Year 4 2013-2014 NPDES Annual Report Page 1&2.pdf](#)

### **Stormwater Design (APWA 27.10)**

The purpose of the Permit Criteria and Best Management Practices Manual for Works in the Village of Wellington is to set forth the surface water management design criteria and Best Management Practices (BMP's) for proposed and redeveloped projects within the Village of Wellington (VOW) with the purpose of minimizing adverse impacts to existing development and to reduce the levels of phosphorus presently being discharged into the Everglades Protection Area (EPA).

Also to provide information, procedures and design guidelines/requirements in order to obtain approvals to connect, place structures in or across, or make use of lands or facilities of the VOW.

Attachment 27-116: VOW Ordinance No. 2010-14 Permit Criteria and Best Management Practices Manual

[..\Chapter 27\27.10 Stormwater Design\VOW Ordinance No. 2010-14-Permit Criteria & BMP Manual.pdf](#)

### **Stormwater System Improvement (APWA 27.11)**

Funding and listing of storm water projects are contained in the Acme Water Control Plan. This plan is updated every five years.

Please see Stormwater & Flood Management Service Level, Attachment 27-100: Resolution No. AC2011-10 Water Control Plan

### **Sediment and Erosion Control (APWA 27.12)**

All land development and redevelopment activities require a permit from Wellington. All projects are required to have sediment and erosion control. Projects of one acre or more are required to have coverage under the Florida Department of Environmental Protection NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Sites. This permit coverage requires completion of a Stormwater Pollution Prevention Plan.

**Link to the Florida Department of Environmental Protection NPDES Generic Permit:**

<W:\Programs\NON-CIP\NPDES\NPDES\NPDESPERMIT MS42011.pdf>

Attachment 27-117: Florida Department of Environmental Protection NPDES Generic Permit: - Wellington NPDES Permit

<..\Chapter 27\27.12 Sediment & Erosion Control>

### **Stormwater Flood Warning Systems (APWA 27.13)**

Wellington's storm water pump stations are monitored during a rain event. Recent improvements made to the stations include: installing new pumps and back-up generators, adding telemetry in order to monitor pump discharge and water elevations, and installation of automatic controllers. The controllers were installed to allow the pumps to be turned on once the water level reaches a particular elevation. These controllers work around the clock and will activate as soon as water levels change. The drainage systems are maintained on a regularly scheduled basis to reduce pollutants, prevent clogging, restore sediment trap capacity and ensure the system is functioning properly to minimize the potential of flooding.

Wellington staff has established excellent communication with SFWMD operations staff. SFWMD monitors the weather and provides notification to Wellington on any severe weather patterns. Wellington staff coordinates with SFWMD staff for pre-storm lowering of canal levels to prepare for any severe weather (tropical storms, hurricanes, high intense rainfall events).

For rain events producing one or more inches, Surface Water staff proceeds with the following:

- Essential employees are notified and some may be placed on standby
- Workers are expected to work in assigned work areas
- Debris is removed at control structures and storm drains
- Water levels are recorded and reported in 30 minute intervals
- Status of control structures and storm drains is reported (current conditions, i.e.: light, moderate or heavy rain, road flooding).
- Supervisors constantly monitor the current water levels and the soil saturation condition.
- Each employee is responsible for preparing their vehicle with tools needed for a rain event.

Attachment 27-117-A: Drainage System Maintenance Standard Operating Procedure

<..\Chapter 27\27.13 Stormwater Flood Warning Systems\Drainage Sys Maint-SOP.pdf>

Attachment 27-118: Palm Beach County Flood Warning System

### **Infrastructure Inspection (APWA 27.14)**

Every year Wellington submits to FDEP an annual report form for its MS4 NPDES Permit Compliance (Rule 62-64.600.2, FAC)

Inspections and Maintenance is a portion of the report to the DEP and it includes:

- Total number of Structures
- Number of Inspections
- Percentage Inspected
- Number of Maintenance Activities
- Percentage Maintained
- Documentation/Record
- Entity Performing the Activity
- Comments

The inspections include:

- Grass treatment swales (miles)
- Dry detention systems
- Wet detention systems
- Stormwater pump stations
- Major storm water outfalls
- Weirs or other control structures
- MS4 pipes/culverts (miles)
- Inlets/catch basins/grates
- Conveyance canals (miles)

Work orders are issued to Surface Water Division for the following tasks to be performed:

- Control Structure Inspections
- Generator Test Runs
- Debris and/or Trash Removal

Logs are completed for Release Detection, General Inspection of Pump Stations and Storm Drainage Inspection and Maintenance

### Inspection and Maintenance Activities

#### Pump Stations Routine Daily Inspection Activities

1. Rainfall data and water levels reading are collected at each pump station.

2. Every Monday and Friday all pump station engines are test run to ensure readiness for emergency operation.
3. An observation inspection is conducted of the interior of each pump station prior to any engine start up. Fuel lines, oil line and water levels are also checked. Exterior of pump station is checked for floating debris or anything that may impede discharging performance.
4. Repairs are made on an as needed basis.

Canal Bank Mowing is addressed through the Village of Wellington Landscape Maintenance Contract.

#### Storm Drain Maintenance

1. Work is logged as work is performed in each subdivision and street.
2. Each subdivision will have a catch basin inventory.
3. Each basin has a flow direction painted in blue.
4. Each street is measured from catch basin to catch basin in order to determine underground pipe length.
5. Upon completing basin and pipe cleaning, crew inspects overall condition of basins and pipes and notes any repairs needed.

#### Pump Station Maintenance and Data Collection during non-pumping event

1. Record water levels on Water Level Form
2. Record rain fall accruals on Rain Gauge Reading form
3. Complete Grass Cutting Work Order
4. Complete Structure Debris &/or Trash Removal Work Order
5. Complete Generator Check Work Order
6. Complete Control Structure Inspection Work Order (bi-yearly)
7. Complete Release Detection Record and Inspection Checklist (monthly)

#### Culvert/Coffer Dam Installations

1. Area of installation is measured and marked with surveying stakes and painted orange at all corners indicating area of backfilling needed.
2. Measure forty (40) feet greater than the length of the culvert. The Cofferdam will exceed the minimum height of 2 feet above the normal water elevation
3. An additional 150 feet should be established from referenced points indicating the turbidity screen locations. Upon completing all the measuring, the screen will be in place.
4. Monitoring of the back filling process is necessary.
5. All fill will be placed and pushed in a manner where the sludge or silt can be removed once the culvert has been installed.
6. Once length and height criteria have been met, the grading of project shall allow for drainage during the installation of the well points.

#### Dewatering System Layout

1. Confirm all measurements, make corrections if needed.
2. Place centerline stake at each end of the Cofferdam indicating the center of the canal.
3. Mark and square up the area where the header pipe is to be installed. The existing canal configuration is used as a guide.
4. Heavy equipment is used to aid with the installation of the header pipe as needed prior to set up. Pump discharge needs to be determined.
5. Well points are installed every two (2) feet on the ends of the header pipe and four (4) feet after, unless ground water indicates all points to be on two (2) foot centers. The actual amount of points to be used for each pipe project needs to be determined.
6. Complete the connections to the discharge pump connect swing arm joints.
7. Activate the pump and check each swing arm joint for air leaks.
8. Reinstall safety fence and barricades before leaving work site.
9. All tools and equipment shall be parked or placed in a manner to prevent theft.
10. Service equipment at the end of the day, checking all fuel, oil and coolant levels. The heavy equipment shall be maintained according to schedule outlined by the manufacture.
11. The well point pump shall operate a minimum of 10 hours prior to excavation.

12. Vacuum gauge shall have a range of 12 to 18 psi during and startup of pump. If psi does not register between 12 to 18 psi, check entire system for air leaks. Supervisor should be contacted if no leaks are found.

### Installation

1. Safety meeting is conducted with all personnel assigned to project. The meeting shall cover personal, trenching, lifting and heavy equipment safety along with heat exhaustion awareness.
2. Each employee is assigned work duties with detailed instruction on how and when to perform the assigned duties.
3. Trench sloping will not exceed less than a 1 to 1 slope. Any depth exceeding three (3) feet shall have a ladder in place to allow entry and exit.
4. All personnel entering the trench shall receive prior authorization.
5. No machinery will be operated without approval from Supervisor or Maintenance Worker III when personnel are in the trench.
6. No AM/FM radios or cell phones uses are allowed during the project. Only Village of Wellington radios.
7. A ten (10) foot safe zone will be maintained for all excavated material from the top of the trench.
8. Continuous inspection of the trench for safety, regarding slumping of the trench walls, water intrusion and equipment proximity.
9. Use a transit level to establish grades and check for consistency throughout the excavation.

### Back Filling

1. Back filling the trench shall be in one-foot increments
2. Each foot of back fill shall be compacted until desired grade is achieved.
3. No heavy equipment is authorizes to cross the culvert until the compacted grade is achieved.
4. All safety barriers shall be maintained until project is finalized.

### Canal Excavation

The Village owns and operates an excavator. This machine is used primarily for maintenance of canal elevations. This machine must be positioned on flat and level ground for operation.

Door hangers advises the homeowners that crews will be in the area within approximately two weeks collecting data on the depth of the canal, marking the right-of-way and drainage easements and inspecting the underground piping and right-of-way for any obstructions.

#### Data Collection

1. Work order is issued to crew to initiate data collection
2. Crew identifies drainage easement and right-of-ways from a plat map
3. Staking and flagging of all easements and right-of-ways is completed
4. All trees, shrubs and fencing is logged and marked with orange ribbon
5. All lots adjacent to the canal will be included in the survey along with a cross section of the canal
6. Supervisor receives collected data within 7 working days for review and inspects area with staff
7. Supervisor submits report to Director of Public Works containing all data collected in the field along with a cost estimate and procedure used to complete restoration of canal

#### Excavating

1. Call for Locates before any work is attempted: 1-800-432-4770
2. Set right-of-way stakes
3. Flag irrigation lines
4. Stake out fall pipes
5. Receive Locate clearance
6. Stake out work area (20')
7. Bench down area within 20' boundary
8. Bench down 3' above water level
9. Benched down should be flat
10. Excavate to desired elevation
11. Grade excavated fill, rebuilding slope

12. Finish grade slope
13. Load excess fill into dump truck
14. Replace sod

#### Aquatic Weed Control

The Village of Wellington is responsible for maintaining and control of the vegetation in the canals and lakes.

The maintenance process requires the use of herbicide treatment, which is applied by an outside service vendor. This vendor works within the Village boundaries with a two-person crew and responds to complaints on a daily basis and completes a Daily Treatment Report. The crew works a 40hour scheduled service week. Boats and trucks equipped with spray units are utilized in the spraying.

An Aquatic Plant Management Permit is required and is renewed every three (3) years

#### Illegal Dumping

The Public Works Department responds to any information regarding illegal dumping within the Village of Wellington. Hazardous illegal dumping is reported to the Palm Beach County Sheriff's Office at 561-688-3000.

Deputy will conduct an investigation and will supply a copy of the report to the Public Works Department. All illegal dumping incidents are prosecuted to the fullest extent.

If it is determined that the dumping involves chemicals the Deputy will contact the Hazard Control Division of Sheriff's Office. The responsibility of the clean-up is determined during the investigation and an outside company may be retained for these services, if deemed necessary.

See 27.2 Operation Plan, Attachment 27-103: 2010/2011 NPDES Annual Report with SOPs, Inspection form, legal authority, MS4 Inventory

Attachment 27-103-A: 2010/2011 NPDES Annual Report (Sample of Inspection Records)

#### **Conveyance, Storage, and BMP Operations (APWA 27.15)**

This subsection is addressed above in responses to items: Operation Plan (APWA 27.2), Water Quality Goals (APWA 27.4), Watershed Stormwater Drainage Master Plan (APWA 27.7), Infrastructure Inventory (APWA 27.8), Infrastructure Condition (APWA 27.9), Stormwater System Improvement (APWA 27.11), and Infrastructure Inspection (APWA 27.14)

#### **Private Owner Operations and Maintenance (APWA 27.16)**

In 2010, the Village of Wellington's Council amended Article 8 "Subdivisions, Platting, and Required Improvements", Chapter 24 "Storm Water Management" of Wellington's land

development regulations by enacting a new section 8.24.9 “Adoption of Permit Criteria and Best Management Practices Manual for Works in Wellington”. This ordinance adopts a permit criteria and best management practices manual for works in Wellington, which insures that all necessary information is obtained for the proper issuance of land development permits within Wellington.

See Stormwater Design (APWA 27-10), Attachment 27-116: VOW Ordinance No. 2010-14 Permit Criteria and Best Management Practices Manual

### **Private Facility Inspection (APWA 27.17)**

The Village of Wellington has in place a Construction Site Stormwater Inspection process in place, which complies with NPDES and CGP standards. The inspection checks for adequate erosion and sediment control measures, proper silt fence installation, stabilization of disturbed areas, protection of receiving waters, preservation of wetland and conservation areas, and containment and clean-up of pollutants. In the event of a violation in any of these areas, enforcement will be applied, in the form of a verbal warning to the contractor, a Notice of Violation, or a Stop Work order, based on the severity of the violation(s). This inspection form includes the project name, location, property owner, permit number, and receiving body of water for future reference.

Attachment 27-119: Construction Site Stormwater Inspection Form

[..\Chapter 27\27.10 Stormwater Design\VOW Ordinance No. 2010-14-Permit Criteria & BMP Manual.pdf](#)

### **Pollution Prevention Plans (APWA 27.18)**

The purpose of these best management practices (BMPs) is to comply with Policy 1.2.12 of the Conservation Element of the Village Comprehensive Plan and to comply with the conditions of the Joint Cooperation Agreement between the Village and the South Florida Water Management District which requires the Village to implement a compliance-based pollution prevention program designed to reduce nutrient discharges, specifically phosphorus, from its surface water system into the Everglades Protection Area. The BMP Program is designed to reduce, abate, and prevent, directly and indirectly, phosphorus discharges to the surface water system within the Village of Wellington.

Attachment 27-120: Wellington’s Pollution Prevention Plan BMPs are located in Wellington’s Code of Ordinances Sec.30-151. Thru Sec.30-155

[..\Chapter 27\27.18 Pollution Prevention Plans\ARTICLE V. STORMWATER QUALITY MANAGEMENT.docx](#)

### **Public Education (APWA 27.19)**

Wellington is unique due to the fact that there are three (3) Chapter 298 F.S. drainage districts within the Village. These are the Lake Worth Drainage District, the Acme Improvement District and the Pine Tree Water Control District. The Acme Improvement District is a “dependent” district and Village staff act as staff for the Acme Improvement District.

This lends itself to a wealth of educational information for businesses and residents. All three districts maintain very educational websites along with websites that address storm water quality by the South Florida Water Management District, Palm Beach County and Wellington.

Wellington's educational program uses many resources including BMP brochures on such topics as Fertilizer information which contains information on Phosphorus requirements per the Everglades Forever Act and Chapter 576, Florida Statutes. Save The Swales which addresses storm water runoff. Good Horse Sense which addresses:

- Preventing Soil Erosion
- Pasture Management
- Mud Control
- Manure Management
- Weed Management
- Stormwater Management
- Disconnecting Water Bodies

Under an inter-local agreement with Lead permittee Northern Palm Beach County Improvement District (NPBCID) for Municipal Separate Storm Sewer Systems (MS4) in Palm Beach County (PBC), permittees have taken a cooperative approach to National Pollutant Discharge Elimination System (NPDES) Permit compliance by jointly conducting several permit activities and collectively developing a number of tools used to carry out the permit programs.

Public Education is one of those joint activities with each listed on the PBC NPDES website:  
<http://pbco-npdes.org/publicEducation.asp?menu=JointMenu>

In addition, Wellington's storm water educational program also utilizes media releases, Wellington television and radio alerts and the Code Red system.

Attachment 27-121: Wellington Website and BMP Brochures

[..\Chapter 27\27.19 Public Education\VOW Website - BMP Page Info.pdf](#)

[..\Chapter 27\27.19 Public Education\VOW BMP brochure Fertilizer.pdf](#)

[..\Chapter 27\27.19 Public Education\VOW BMP brochure SaveSwales.pdf](#)

Attachment 27-122: PBC NPDES Website page and Municipal Stormwater Systems Group Brochures

[..\Chapter 27\27.19 Public Education\PBC NPDES website-joint public education activities.pdf](#)

Attachment 27-123: SFWMD Website page

[..\Chapter 27\27.19 Public Education\SFWMD website info.pdf](#)



## **Chapter 8 Environmental Services**

### **APWA “Vector Control” Chapter 28**

The Environmental Services Division was established to help ensure that all residents of Wellington are provided with a clean, safe, and ecologically-sound environment. Environmental Services provides Mosquito Control and Vector Control services throughout Wellington.

#### **Vector Control**

##### **IPM Policy**

The Village of Wellington will commit to Integrated Pest Management (IPM) principles and practices and incorporate them into all landscape maintenance and building maintenance work. This policy will apply to work by contractors hired by Wellington as well as work done by Village employees.

##### **IPM Defined**

Integrated Pest Management (IPM) is a problem-solving approach to landscape and building management designed to prevent and control undesirable insects and rodents. IPM relies on the use of site-specific information about environmental conditions and the dynamics of human characteristics and activities, and pest biology and behavior to prevent, resist and control pests that interfere with the purpose and use of a particular site. When a pest has exceeded a predetermined threshold at a particular site, all appropriate pest control strategies are employed including modifying the habitat, modifying maintenance practices, modifying user behavior, and, if all else fails, using pesticides as a last resort, and only within specific guidelines for least-toxic selection and use.

##### **Pests Defined**

Pests are undesirable insects and rodents. Common pests in buildings are ants, lice, cockroaches, termites, mice and other rodents that thrive when food and other conditions are available. They can create hygiene and safety problems and cause damage to building structures and, if nothing else, cause a nuisance.

##### **IPM Goals**

The goal of Wellington’s Integrated Pest Management Policy is to promote the health, safety, quality and sustainability of public buildings and landscapes and maximize the enjoyment and use of public buildings and grounds for functional, recreational (both active and passive) and ornamental purposes. This policy will:

1. Reduce use of pesticides through common sense principles of IPM to the point of no pesticide use, whenever possible and practical.
2. Provide healthy, high-quality and sustainable buildings, parks and public open spaces.
3. Prevent the contamination of buildings, soil, air, and water and protect people (especially children and other vulnerable populations), animals and beneficial plants and insects from toxic exposures.
4. Provide a model of responsible stewardship of environmental and community resources

## **Population Identification**

The Village of Wellington's Integrated Pest Management Policy relies on the use of site-specific information about environmental conditions and the dynamics of human characteristics and activities in the area to identify and control pests that inhabit a particular site. The Village performs routine inspections of public buildings and grounds to accurately identify the type of pest, and uses species specific strategies to control their population levels. After an inspection, a Pest Control Inspection Log is filled out, indicating the location of the inspection, the type of problem, the severity of the problem, a description of the environment and nearby plant condition, and any action taken.

Primarily, the Village must deal with mosquito issues, and the most common functions used by the Village's mosquito surveillance program are the New Jersey Light Trap and LRCs (Landing Rate Counts). One is to provide a historical record of mosquito abundance and species presence in an area. Historical data show fluctuations on a year to year basis as well as fluctuations over the span of one season. This type of information can be used to document the impact of mosquito control activities and provide the justification for additional control efforts in an area. Light trap records are especially useful for program budgeting.

The second function of the New Jersey Light Trap in the Village mosquito surveillance programs is to provide rapid information on mosquito abundance and species composition for planning and directing day-to-day mosquito control activities. In this function, the data acquired by the New Jersey Light Trap are used to 1) determine or to help the need, the timing, and/or the location of pesticide applications, and to monitor the results of those pesticide applications, 2) to help determine the cause of repeated mosquito complaints in a given area, and 3) as a supplement or backup to more expedient surveillance techniques such as landing or bite counts.

In the event of an unexpected outbreak of vectors, such as rodents, the Village has a number of contractors they can contact for outside assistance.

## **Attachment 28-100: Sample of Pest Control Inspection Log**

### **Green Pest Management (GPM)**

The IMP Coordinator will follow strict GPM techniques, if the use of pesticide spray is found necessary to use it will be applied using ultra low dose (ULD) as the overuse of pesticides can be adverse to a good pest control program. Gels, baits, monitors and traps will be used to control pests in the building while minimizing the unnecessary use of pesticides. When these methods

are used in conjunction with a property maintained environment it can prevent pests from entering the building, is found to be more effective and less intrusive to employees and visitors.

### **Alternative Pest Control Methods**

#### **Sanitation**

No other non-chemical measure can have a more beneficial effect than sanitation. It is the elimination of pest harborages, water, and food sources so as to inhibit the survival of pests and requires the cooperation of individuals who are normally the ones who provide the sanitary measures. To be effective in the use of other pest management procedures it is first necessary to insure that sanitation is addressed.

#### **Baiting**

Gel baits will be standard treatment for trapping small insects in and around the building. The small containers will be placed in dark concealed spaces where pests are living. Paste or gels will be applied in infected areas by using small dabs around the immediate area.

#### **Trapping**

The trapping method will be used to control the rodent population in and around buildings. All devices will be concealed and out of general view. Trapping devices will be checked on a regular basis.

#### **Monitoring**

Monitoring is an extremely valuable element of our IMP program. Monitoring involves using insect and/or rodent traps to identify locations and extent of pest populations. This will help the IMP Coordinator identify where problems area are in and or around the building. Traps will be inspected on a regular basis.

#### **Chemical use**

The decision to use chemical control methods will ONLY be used in and around the building when all the above methods have failed to keep the pest population from approaching damaging levels.

#### **Record Keeping**

After each building site inspection the IMP Coordinator will complete an inspection and pest sighting report. Pest site logs are placed in critical areas (such as in break rooms) throughout the Village to help alert the IMP Coordinator to a pest problem before the problem increases. Based upon the information contained in the logs, and after a thorough inspection by the IMP Coordinator, a decision is made as to how to address any particular pest problem.

## **Notification**

The IMP Coordinator will perform monthly inspections and treatments using Eco PCO ACU Contact Insecticide if necessary in order to maintain control of any pests and to prevent infestations. If at any time an infestation problem is observed and there is a need for the use of pesticide, the IMP Coordinator will send an email notification to all the occupants of the building 72 hours prior to the pesticide application. The notice will include a thorough explanation of the Integrated Pest Management system and will provide a list and information about the least toxic pesticides, gels or traps that may be used in the building. If there is an emergency situation in which occupants of the building are in imminent danger from stinging insects such as wasps or bees, the IMP Coordinator may use tactics necessary to mitigate the concern without the 72 hour notification.

Copies of labels and Material Safety Data Sheets will be provided for all products used onsite.

This program will be overseen, and treatment recommendations will be provided by the Department Supervisor.

## **Mosquito Control**

Wellington's Environmental and Neighborhood Services maintains the following licenses for mosquito and vector control:

- Department of Agriculture And Consumer Affairs (GHP)
- State of Florida (Public Health and Pest Control Spraying)

These licenses are kept current by and monitored by the Environmental and Neighborhood Services Supervisor.

The State of Florida Department of Public Health requires all license holders to complete 16 CEU's over a four year period.

## **Adult Mosquito Surveillance**

Five permanently positioned light traps collect mosquitoes seven days a week. These collections are examined twice a week to determine the types and numbers of mosquitoes collected.

All decisions to control mosquitoes are based on these surveillance results (For mosquito trap locations see appendix "A")

## **Control of Breeding Sites**

Through careful inspection of breeding sites and timely applications of larvicides, a targeted site can see a 90% control rate.

## **Types of Control**

### ***Mosquito Fish***

Mosquito Fish are one of the most effective natural methods of controlling mosquitoes. They are small (1 to 2 inch) freshwater fish that eat mosquito larvae. A single Mosquito Fish can eat hundreds of mosquito larvae per day. Mosquito Fish are ideal for controlling mosquito larvae in backyard ponds, birdbaths, animal troughs, unused swimming pools, and other standing water sources.

### ***Mosquito Dunks***

Mosquito Dunks float on the water and will keep working for 30 days or longer under typical conditions. While floating, they slowly release a long term, biological mosquito larvicide at the water's surface. This larvicide then gradually settles in the water where it is eaten by mosquito larvae growing there. Mosquito Dunks can be used in all types of standing water sites where mosquitos grow larvae

### **Barrier Treatments**

Barrier treatments are an application of insecticide using handheld equipment to spray plants and other mosquito resting areas around the edges of a property

Adulticiding is accomplished by means of a truck-mounted ULV (ultra-low volume) machine that emits an insecticide. The chemical is sprayed at high pressure creating a spray that is called ultra-low volume or ULV. This is beneficial because the droplets of chemical are very small and this allows the droplets to stay in the air longer and increase the droplets chance of hitting its target, a mosquito.

A Geoflow system guides the driver on a pre-recorded route while the fogger applies chemical at a constant rate varying the flow in proportion to the speed of the truck. This prevents spraying of non- target areas or accidental double application of chemical. GIS along with a software system allows for the tracking of routes that the truck has sprayed. (Reference the Guidance System to Navigate the ULV Maze)

\*\* See Vector Control Binder and Florida Mosquito Control Handbook for specifics standard operating procedures.

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