

**MAYOR**  
**MARK F. KNIGGE**

**ADMINISTRATOR**  
**DANIEL E. QUICK**

# Village of Wauconda

**101 NORTH MAIN STREET**  
**WAUCONDA, IL 60084**  
**PHONE 847.526.9600**  
**FAX 847.526.8809**

**CLERK**  
**GINGER IRWIN**

**TRUSTEES**  
**PATRICK MURPHY**  
**LINCOLN F. KNIGHT**  
**JEAN MAYO**  
**ED LOCHMAYER**  
**JOHN F. BARBINI ED.D.**  
**PAM WAHL**

To: Dan Quick, Village Administrator

From: David Geary, Director of Public Works and Building and Zoning  
Jackie Soccorso, Director of Environmental Quality and Public Works Supt. of Admin.  
Alex Pryde, Public Works Superintendent of Operations  
Joe Schwarz, Fire Prevention Division Chief and Building Commissioner

Date: May 26, 2010

## **Public Works, Building and Zoning, and Environmental Quality Department Administrative Report for May 13<sup>th</sup> through May 26<sup>th</sup>, 2010**

### **Public Works**

#### **Public Service Open House**

The Department continued the tradition of the Open House – hosting the fourth annual event on Saturday, May 22<sup>nd</sup>. This year, the Police Department joined in on the event and it became known as the ‘Public Service’ Open House. We estimate that five hundred visitors came to the Public Works facility to learn about the many services offered by the two Departments. This year, our Department introduced some new activities. One was a bus tour to our Well 3 Water Plant, and the other was the J.U.L.I.E. Locate



Challenge, an activity where guests could test their skills with our locating equipment to trace a simulated underground utility and work their way to a “treasure”.



Four tours of the Water Reclamation Facility were given to residents. A total of sixty-three people participated in these tours. We were fortunate enough to again have support from Clarke Mosquito Control, the Solid Waste Agency of Lake County (SWALCO), the Village's Community Emergency Response Team (CERT), and sponsorships from the Village's Engineer and Attorney to provide refreshments and saplings for

visitors. This annual event was held in conjunction with National Public Works Week, and allows us to provide visitors with information about the many services Public Works is involved in on a daily basis.

**Street Division**

**Street Sweeping**

During this reporting period, street sweeping continued in the Village in the older parts of town-such as Bangs, W. Mill, Wilson, Maple, and Osage Streets. Over 15 yards of debris were collected from the roadways.

**Bangs Lake Weed Harvesting**

On May 5th, the aquatic plant harvester was launched on Bangs Lake for its annual weed harvesting. During the weeks of May 10<sup>th</sup> and 17<sup>th</sup>, the lake was closed or restricted, so no harvesting occurred during that time. Upon resumption of the cutting, it was noticed that the weeds in the lake are very thick. Heavy weeds occur when the weather is unseasonably warm -- as it has been over the past few weeks.

**Water Division**

**Well 4 Motor Failure**

On Thursday, May 13<sup>th</sup>, following the severe storms that passed through our area, a 50 horsepower high service pump motor at Well 4 failed due to burnt out electrical windings-possibly due to damage received during the storm. This motor turns a pump that delivers water from our softeners at 680 gallons per minute into our distribution system. Fortunately, this plant was designed with a back-up motor and pump, so the plant is still in use. On May 14th, we pulled the motor and delivered it to Krug Electric for rewinding. We expect to have the motor back the first week in June. We have asked Devery Engineering

to have an electrical inspector review this motor control circuit for adequate protection against such electrical failures in the future.

### **Well 3 Facility Maintenance**

In preparation for holding our first public tours of a drinking water facility, Water Division crews painted the floors with a professional epoxy coating system. The new coating made a smooth surface that will be more easily cleaned, and also makes for a very attractive facility. Most of the process piping was also repainted, as were the walls in the pump room.



### **Backflow Prevention Program**

Superintendent Soccorso met with representatives from a company specializing in the management of backflow prevention programs. The IEPA requires the Village to participate in this program under an unfunded mandate. Currently, the Village manages this program, however staff is researching how to manage of this program more efficiently.

### **Water Billing**

Superintendent Soccorso shares oversight of Water Billing with the Finance Department. She reviews water billing account adjustments to ensure they are completed properly, resolves water billing complaints, and evaluates residents' requests for reversal of late fees and/or red tag fees. Twenty-three such requests were reviewed during this reporting period.

### **Water Reclamation Division**

#### **Excess Flow Event**

On May 12<sup>th</sup> and 13<sup>th</sup>, the area received extremely heavy rainfall. A total of 3.09 inches of rain was recorded during a six hour period. (This was on top of the 1.04 inches that had fallen the day before.) As expected, this led to heavy flows at the treatment facility. Raw peak flows were estimated at 10.5 – 13.0 million gallons a day (MGD). For comparison, peak daily flows during dry weather periods are between 2.0 – 2.5 MGD. Reclamation facility staff responded to multiple SCADA alarms beginning at 4:00 a.m. on the 13<sup>th</sup>. Excess flow streams were put in service by 6:30 a.m. These operations lasted until approximately 3:00 p.m. During this time, the plant was able to keep up with this extraordinary influx and treat all discharge.

The following water reclamation projects were completed during the reporting period:

- On 5-12, stream sampling was conducted on Fiddle Creek. This meets the requirements of Special Condition #17 of IEPA NPDES permit. Six locations are sampled and analyzed before and after various points of receiving streams.
- On 5-13, a service technician from HI-TECH performed service on Vortex Grit Mixer. The mixer had been leaking oil and work was performed under the warranty period.

- On 5-14, Sievert Electric performed an annual inspection of all electric and manual hoists. A total of eight electric and manual hoists were inspected and maintained. There are some minor repairs that need to be completed on two of the hoists. That work is currently being scheduled.
- On 5-17, completed April 2010 DMR's. Monthly discharge reports were mailed to the IPEA and Lake Barrington. The meets the requirements of Special Condition #14 and the Intergovernmental Agreement with Lake Barrington.
- Five grease trap/triple basin inspections were completed during the reporting period. Inspections are completed to ensure that proper disposal of FOG (Fats, Oils, Grease) is occurring. This is completed to help ensure proper wastewater collection and treatment.
- On 5-21, Berryman Electric completed annual vibration tests on eight blowers. This includes six centrifugal and two positive displacement blowers. Hoffman Blower #1 was outside the allowable limits and will need the bearings replaced on the blower unit. We are waiting on a price quote. Continental blower #2 vibration sensors will need to be replaced.
- There were two off hour call outs. One included the alarms for heavy rain and flows. The second was a Digester high level alarm.
- Completed two weekly safety discussions. One topic on preventing heat stress and the second was good hygiene practices on the job.
- Clean and prepare for Public Service Open House. Work included miscellaneous painting, sweeping, mopping, and dusting. Landscaping on the grounds included weeding, planting flowers, removing and planting new bushes, spreading black dirt and seeding, and fertilizing. One load of scrap was loaded and hauled offsite.
- Complete weekly and monthly preventative maintenance package. This includes exercising, lubricating, oil changes and checking of equipment.

#### **Indicators for Water Reclamation (14 day reporting period)**

##### **Final Flow**

Total pumpage for period: 27,318,000 gallons

Design flow of treatment: 1,900,000 gallons per day

Design maximum flow of Treatment works: 6,000,000 gallons per day

Average flow for reporting period: 1,951,000 gallons per day

High flow reporting period: 5,083,000 gallons

Low flow reporting period: 1,291,000 gallons

##### **Performance Indicators for Water Produced**

Total pumpage for period: 16,084,000 gallons

Dependable capacity of water works @ 24 hrs/day: 3,470,070 gallons per day

Dependable capacity of water works @ 18 hrs/day: 2,548,470 gallons per day

Average daily pumpage for reporting period: 1,149,000 gallons per day

High day for reporting period: 1,543,000 gallons per day

Low flow for reporting period: 743,000 gallons per day

- JULIE locates: 72
- Daily check of water facility: 14
- Daily water supply operational tests conducted: 230
- Daily water distribution operation test conducted: 48
- Non-daily bacteriological samples collected: 7
- Repaired water meters: 1
- Installed water meters: 5
- High water bill investigations: 1
- Water quality inquiry: 1
- Red Tags delivered: 137
- Red Tag Notice shut-offs: 12

# **Building and Zoning**

## **Building Department**

### **Onsite Inspections:**

1495 Sutton / Deck review	1892 Applewood Ln. Patio/Deck /erosion sediment
465 N. Main Street/ Deck Review	1520 Dogwood Dr./Patio Review
505 Bonner Road / Building Final	103 Maple / Fence
360 Larkdale Row Patio/Pond	1254 Waterstone/ Deck
421 Foster Ave Driveway/ Fence	325 Old Country Way/ Shed
2575 Portage Ave. / Deck	2794 Sweat Clover Way/Patio
2542 Bluewater Dr. / Patio	2755 Cedar Creek / Fence
2545 Bluewater Dr./ Deck	2757 Cedar Creek /Fence
2256 Trailside Ln Driveway/Landscaping	809 Edgewater Lane/ Property hazard complaint
Slyce - 123 N. Main Street/ Architectural/Environmental Quality Control	

### **Meetings/Projects:**

- Wauconda Community Bank/1120 Dato Lane - Vacancy Meeting
- IDOT permit for Dairy Queen should be issued soon. Construction is still in progress.
- Code enforcement strategies meeting with village staff .

### **Inspectors Completed:**

- 48 building permit inspections
- 12 Residential Dwelling Inspections
- 2 complaint investigations and follow-up

### **Permit Desk Processed:**

- 38 new building permits including 5 single family homes and 1 addition for total revenue of \$65,882
- 10 new Real Estate Dwelling Inspection Applications for total revenue of \$750
- 14 electric and 9 plumbing inspections by sub-contractors for total admin revenue of \$1,150
- Prepared 4 FOIA requests

### **Zoning Services**

Rolf C. Campbell and Associates (RCCA) continues to work with Village staff on various planning and zoning questions and potential economic development opportunities. RCCA reviewed annexations and potential areas of annexation and boundary agreements. RCCA also prepared draft timelines for tasks associated with the Village's Strategic Plan.

### **Zoning Administration Services – Specific Applications**

421 Liberty St.--RCCA staff prepared for and attended the May 20<sup>th</sup> continued Public Hearing. After attendance, RCCA prepared the draft findings of fact report which was distributed to Village staff for review and comment.

26950-80 Rt. 12-Homer Tree Service – RCCA received preliminary site plans related for this project and coordinated the distribution of the information to Village staff and other Village consultants. A meeting was held with neighboring property owners and coordinated scheduling of a Village staff/Village consultants review meeting.

## **Environmental Quality**

### **Wauconda Sand and Gravel Landfill-NPL Site**

During the heavy rain that fell on May 13, the landfill experienced high leachate flows. As a result, the leachate was diverted to the onsite holding tank, as opposed to being directly discharged to the Village's sanitary sewer system. The holding tank had sufficient capacity to hold this leachate until it could be slowly fed back into the system and discharged to the sanitary sewer system slowly over the next day.

### **Rain Barrel/Composter Sale**

For the second year in a row, the Village partnered with the Lake County Soil and Water Conservation District to offer Rain Barrels and Composters for sale to residents. A total of 27 rain barrels and 5 tumbling composters (along with various attachments) were sold and distributed during the Public Service Open House. This represents a 50% reduction over last year's sales. The sale is done as a service to residents, and does not receive any revenue from the sale.

### **Lake Level**

During the reporting period, the water level of the lake increased from +1.50 inches to +13.50 inches, and then fell to its current level of +8.00 inches. Due to high water level in the lake, a "no wake" restriction was imposed on May 14 and the lake was then closed to all motorized boating activity on May 15. The lake re-opened with a "no wake" restriction on May 20. The "no wake" restriction was lifted on May 23. The lake will continue to be monitored closely to ensure that the outlet remains unblocked and water exits freely, to reduce the likelihood of flooding. In addition, the Broberg Marsh culvert located on Lake Shore Blvd is being monitored on a daily basis. This area must remain clear of debris and free flowing in order to ensure proper drainage.