

MAYOR
MARK F. KNIGGE

ADMINISTRATOR
DANIEL E. QUICK



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: June 9, 2010

**Public Works, Building and Zoning, and Environmental Quality Department
Administrative Report for May 27th through June 9th, 2010**

Public Works

Street Division

Road Repairs

During winter months, Public Works personnel address water breaks, some of which are located beneath asphalt surfaces. In certain situations, to properly access the pipes, the asphalt must be cut away and removed. After the breaks are addressed, since re-paving cannot be completed during cold weather, temporary repairs are made. During this reporting period, these repairs were made permanent with the addition of new asphalt. Repairs were performed on South Main Street, North Main Street, East Route 176 and to the parking lot at Liberty Plaza. Eight tons of asphalt were required to make these repairs.

Memorial Day Parade

Wauconda hosts the largest Memorial Day parade in the county. In preparation for the influx of visitors to Main Street and Memorial Park, the Street Department pruned and elevated five mature trees over the road and sidewalk along South Main Street. Ten large and fifteen small trees were pruned at Memorial Park as well. Immediately before and after the parade, staff cleaned the street and sidewalks, emptied the trash cans, and moved and set up/took down barricades. The Public Works Department also had an entry in the parade, a float honoring our fifth grade Arbor Day Poster Contest winners.

Bangs Lake Weed Harvesting

Aquatic weed harvesting continued on the lake. For safety reasons, during high winds and rain events, the harvester does not go out on the lake. From June 1st – 7th, 34 cubic yards of weeds were removed and taken to Midwest Organics for 'recycling' – being used as a major ingredient in the compost made on site.

Arborist Activity/Emerald Ash Borer

The Village Arborist started the second year of treatments on all Village owned ash trees to combat against the Emerald Ash Borer. Approximately 700 trees were treated through the program. We are currently closely following the news and developments from the discovery of the Emerald Ash Borers in nearby Round Lake.

Water Division

Water Office Moved

The Water Division moved its operations into the front office in the building (the same office as the billing clerk). With this move, we plan to increase the efficiency of interaction between the Water Division and the billing clerk, who performs multiple tasks for personnel; and to create a more productive work environment for the Superintendent of Administration / Director of Environmental Quality, who formerly occupied the space.

505 Lake Court 4" Service Valve Repair

On May 27th, we received a call reporting water spraying out of a cover labeled "Water". Upon arrival at the scene, Lake Court was found flooding faster than the storm sewer could receive the water. By taking residual pressure readings, the flow was determined to be well over 1,000 GPM. The water main was shut down and repaired. It was discovered that a 4" service valve had blown apart due to corrosion of the bolts holding it together. Only 3 of the 6 bolts holding the bonnet to the valve body were even found on site (shown below). This type of corrosion is normal in this situation where an epoxy-coated valve with steel hardware is installed in ground with corrosive soil. Because these newer valves with intact epoxy-coating do not corrode, the normal path left for a corrosion to occur is at the hardware, as it did. We replaced the bolts and nuts with corrosion resistant stainless steel, which the Village now specifies for underground installation. Because the valve was located underground between a gas main and electric street light cables, the vac truck was invaluable in excavating these tight quarters quickly and without damage to the other utilities.



Corroded Valve Bolts



Tight Quarters Excavated by Vac Truck

Chlorinator Training

On June 2nd, the Water Division held in-house training at the Well 4 water plant on the operation of our gas chlorination feed systems. The training involved using a malfunctioning gas regulator as a training tool to serve as an example of what to look for.

Water Reclamation Division

The following items were completed during this reporting period:

- Secondary Clarifier #2 was taken out of service. The tank was pumped down and cleaned. This clarifier was not returning sludge properly. During the annual inspection last year, it was noted that the arm was not plumbed correctly. At that time, the top seal was replaced. The seal was working properly and had no gap for sludge removal. This was little concern last year since the tank was taken out of service due the new plant meeting all NPDES parameters. The problem came to light again when the clarifier was put back into service a few weeks ago due to the extremely heavy rains and high flows that were experienced. Contractors have been solicited to fix the clarifier.
- All toxicity tests were conducted and passed for the May 2010 sampling period. This completed the fourth sampling and testing parameters part of NPDES permit. All four rounds of sampling passed. Results were submitted to the IEPA.

- Completed sampling on four residential and three commercial sites for industrial local limits sampling and testing. This study is needed for reevaluation of the local limits ordinance. Sampling and testing was also completed on the raw, final, and sludge for the study.
- Completed two safety sessions. Topics included flammable liquid safety and procedures to follow in case of fire.
- There were a total of three UV lamps that were replaced during this reporting period. All bulbs were passed the 12,000 warranty/life expectancy hours. All bulbs had in excess of 15,000 run time hours.

Indicators for Water Reclamation (14 day reporting period)

Final Flow

Total pumpage for period: 20,321,000 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: 1,452,000 gallons per day

High flow reporting period: 2,637,000 gallons

Low flow reporting period: 1,163,000 gallons

Performance Indicators for Water Produced

Total pumpage for period: 17,220,000 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: 1,230,000 gallons per day

High day for reporting period: 1,783,000 gallons per day

Low flow for reporting period: 956,000 gallons per day

- JULIE locates: 71
- Daily check of water facility: 14
- Daily water supply operational tests conducted: 211
- Daily water distribution operation test conducted: 75
- Non-daily bacteriological samples collected: 8
- Non-daily chemical samples collected: 1
- Repaired water meters: 7
- Installed water meters: 3
- High water bill investigations: 5
- Water quality inquiry: 2
- Penalty posted: 273
- Final readings: 19
- Backflow 2nd notice: 5
- Backflow 3rd notice: 3

Building and Zoning

Building Department:

Website update

Staff has been working on updating the Building and Zoning Department section of the Village website. The page layout has been changed to present the information in a cleaner and more organized format. Updated information has been added to the site to allow residents access to details about specific projects. More information will be added to the site as new forms and flyers are developed.

- Site Inspections:

- 1260 Karl Court/Elevator
- 426 Farmhill Circle/Patio
- 1759 Napa Suwe /Deck
- 1767 Apple Valley Dr./ Deck
- 2836 Fieldbrook Ave. /Fence/Drainage
- 218 George St. /Driveway
- 1709 Napa Suwe Drive/ Fence
- 1205/1215 Karl Ct./Alterations to Fire Alarm system
- Meetings:
 - Public Works/Building & Zoning Strategic/Planning goals
 - Homer Tree Annexation
 - 1050 N. Rand Road/ Zoning review
 - 635 Lake Shore Blvd. /Pier

Inspections Completed:

- 28 building permit inspections
- 21 Residential Dwelling Inspections

Permit Desk Processed:

- 27 new building permits for total revenue of \$4,417
- 15 new Real Estate Dwelling Inspection Applications for total revenue of \$1,125
- 6 electric and 4 plumbing inspections by sub-contractors for total administrative revenue of \$500
- 68 garage sale permits have been processed since April 1, 2010

Zoning Services

Rolf C. Campbell and Associates (RCCA) continues to work with Village staff on various planning and zoning questions including referrals and reviews with Village staff on potential economic development opportunities. Recent inquiries have been related to an auto body shop, a pier located in Bangs Lake, a possible recycling center, and questions concerning the regulations for keeping livestock and the use of wind turbines within the Village. RCCA staff reviewed:

- updates to the Village Map for boundaries of adjacent Villages and the Village's Boundary Agreements,
- potential updates to the Village's 2007 Comprehensive Plan,
- planned improvements to the intersection of Route 176 and Fairfield Road, and
- updates to the Village's Sign Regulations.

Zoning Administration Services – Specific Applications

26950-80 Rt. 12-Homer Tree Service

Staff reviewed the preliminary site plans and related documented for this project. Staff met with and completed follow up to the meeting with Village staff and a representative for the Applicant.