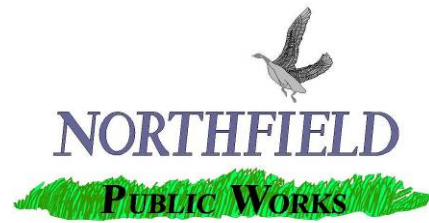


NORTHFIELD

PUBLIC WORKS

2005 Annual Report



Northfield Public Works Department

Staffing

Full-Time Employees

Michael Nystrand – Director of Public Works/Fire-Rescue Chief
Gale Dykas – Acting Assistant Director
Dave Zare – Field Supervisor
Richard Knudson – Field Supervisor
Phil Clarke – Equipment Operator
Pat Kunkel – Equipment Operator
Bill Wipperfurth – Equipment Operator
Eric Jordan – Equipment Operator
Matt Huebner – Equipment Operator (Hired 12/05)
Luke Albrecht – Equipment Operator (Hired 12/05)
Linda Jensen – Receptionist Public Works/Fire-Rescue

Part-Time Employees

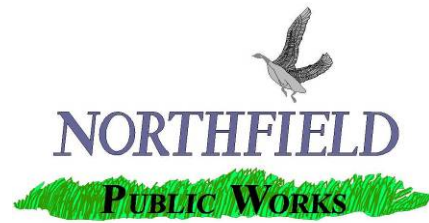
Ralph Ensign – Sign Division
Joe Bass – Laborer
Cathy Franz – Building Maintenance

Full-Time Fleet Maintenance Employees

Joe Mikulan – Fleet Manager
Dave Vido – Mechanic

Part-Time Fleet Maintenance Employees

John Rikje – Mechanic



Northfield Public Works Department 2004 Annual Report

Overall Purpose of the Department:

To provide a high level of service in the areas of maintenance and enhancements to the physical infrastructure of the Village of Northfield. This infrastructure is comprised of the streets, sidewalks, bridges, water mains, water valves, sanitary sewers, storm sewers, signage, capital equipment, vehicles and general landscaping for which the municipal administration is responsible.

Goals for Fiscal Year 2005-2006:

- Improve response time to the requests for service by our residents.
- To assure that our Village residents and commuters have safe and unobstructed travel on Village streets, especially during inclement weather.
- To enrich/enhance the aesthetic appearance and environmental quality of the Village.
- To ensure the fair and unbiased treatment of everyone who may request our service.
- To install computer upgrades, additions, and programs to enhance productivity and efficiency.
- To maintain and improve the employee safety program as needed.
- To maintain all vehicles and equipment in good working condition.
- To expand the village's infrastructure mapping capabilities through the use of GIS.

Department Overview

The employees of the Public Works Department are responsible for maintaining the Village's roads, water resources, sewers, parks and forestry and other various infrastructure projects. These projects are accomplished with eleven full-time and six part-time employees. Additionally, two to four part-time seasonal employees are added during the busier summer months between May and October. A full-time receptionist is also on hand at the front desk of the Public Works/Fire-Rescue facility and serves the needs of both Departments.

The Public Works Department hours of operation are between 7:00 AM to 5:00 PM Monday through Friday. Additionally, the Public Works Department provides an on-call employee who is available for duty twenty-four hours a day, seven days a week, three hundred and sixty-five days a year. This on-call employee responds to situations such as emergency sewer backups, low water pressure, water main breaks, residential water pipe breaks and flooding problems. Many of these full-time and part-time employees also function as Firefighters, Paramedics and Emergency Medical Technicians (EMT's). This multi-functional Department provides Village residents with a quick and efficient response capability to emergency fire and medical situations.

The basic structure of the Public Works Department is divided into six (6) Divisions: 1.) Streets and Sidewalks Division, 2.) Parks and Forestry Division, 3.) Signs Division, 4.) Vehicle and Equipment Maintenance Division, 5.) Water Division and 6.) Sewer Division.



Streets and Sidewalks Division

The Streets and sidewalks Division is responsible for the repair, maintenance and upgrading of the Village's streets, sidewalks and bridges.

<u>Streets within the Village</u>	<u>Lineal Feet</u>		<u>Miles</u>		<u>% of Total</u>	
	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>
Dedicated Village Streets	74,956	74,956	14.19	14.19	33.8%	33.8%
State Roads	60,430	60,430	11.45	11.45	27.2%	27.2%
County Roads	40,525	40,525	7.67	7.67	18.2%	18.2%
Private Roads	46,215	46,215	8.75	8.75	20.8%	20.8%
Total	222,126	222,126	42.06	42.06	100%	100%

<u>Other Through Ways</u>	<u>Square Feet</u>		<u>% of Total</u>	
	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>
Parking Lots/ Driveways	N/A	175,805	N/A	87.2%
Alleys	N/A	25,900	N/A	12.8%
Total	N/A	201,705	N/A	100%

<u>Sidewalks</u>	<u>Lineal Feet</u>		<u>Miles</u>		<u>% of Total</u>	
	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>
	97,964	97,964	18.55	18.55	100%	100%

Streets (Cont'd.)

<u>Bridges</u>	<u>Feet</u>		<u>% of Total</u>	
	<u>2004</u>	<u>2005</u>	<u>2003</u>	<u>2005</u>
Old Willow Bridge	67	67	27.5	27.5
Pedestrian Bridge	132	132	54.3	54.3
Sunset Drive Bridge	22	22	9.1	9.1
Meadowbrook Dr.	22	22	9.1	9.1
Total	243	243	100%	100%

<u>Service Measures</u>	<u>2004</u>	<u>2005</u>
Miles of Street Plowed	1556	1935
Miles of Street Salted	893	1765
Miles of Private Road Plowed	13	21
Miles of Sidewalk Swept	24	21
Sq. Feet of Sidewalk Replaced	3,925	5,942.5
Feet of Pavement Markings Painted	3,279	0
Village Roads (crack sealed)	24	0
Village Roads Paved	0	0
Traffic Standards Painted	0	0
Lineal Feet of Curb Replaced	0	74



Parks and Forestry Division

This Division is responsible for the general appearance of the Village, with respect to landscaping. These responsibilities include those areas that are owned by the Village, such as the Village Hall, the Public Works Building, Post Office, Library, roadway medians, parkways and Central and Farwell Parks. Additionally, there are miscellaneous landscape activities which include preparing flower boxes, unloading and storing of flowers for the Garden Club, watering flowers and trees, the annual tree program and the shower of flowers.

<u>Service Measures</u>	<u>2004</u>	<u>2005</u>
Parkway Trees Removed	21	17
Private Tree Removal (Dead or Diseased)	N/A	N/A
Trees Trimmed (Village)	278	150
Trees Planted	55	120
Bushes Planted	0	0
Trees Sprayed	25	30
Acres of Grass Cut	89	80
Acres of Median Cut	24	20



Sign Division

This Division is responsible for the installation and maintenance of street, warning and regulatory signs. Other responsibilities include the installation and removal of community event signs and the repair of damaged or vandalized barricades, which are used in the day-to-day operations of the Public Works Department.

<u>Service Measures</u>	<u>2004</u>	<u>2005</u>
Temporary Public Notice Signs	38	68
Signs Stolen	2	0
Signs Damaged	4	8
Signs Requested	81	85
New Signs Installed	34	32
New Posts Installed	14	21



Vehicle and Equipment Maintenance Division

This Division is responsible for the total maintenance of Village owned vehicles and equipment. The mechanics insure that the Village's equipment is fully operational, 24 hours a day, 365 days a year. This equipment includes vehicles from not only the Public Works Department, but also from the Police Department, Fire-Rescue and Administrative Departments. This Division also is responsible for ordering and maintaining an adequate supply of repair parts and diagnostic equipment. Additional responsibilities include overseeing the Village's fuel supply, maintenance of the emergency generators at Village Hall, the Fire-Rescue facility and the Water Reservoir. Also writing product specifications; for the purchase of new vehicles and equipment, troubleshooting and maintenance scheduling.

<u>Service Measures</u>	<u>2004</u>	<u>2005</u>
Tune Ups	43	39
Brake Jobs	42	44
Transmissions Serviced	37	41
Replace Belts	35	33
Replaced Tires	66	71
Preventive Maintenance & Oil Changes	309	302
Road Calls	12	10
Immediate Repairs	887	912



Water Division

The main function of this Division is to provide safe drinking water to the residents of the Village of Northfield. It also maintains adequate pressures and flows in the water system during normal and emergency fire fighting conditions. The Water Division must meet specific guidelines established by such agencies as the Environmental Protection Agency (EPA), Illinois Department of Transportation – Division of Water Resources (IDOT) and the Illinois Environmental Protection Agency (IEPA). Some of the major responsibilities of this Division include: the repair of broken water mains and valves, maintenance of a million gallon reservoir (Kraft), Mickey Lane pump station (interconnect between the Village's of Glenview and Northfield), fire hydrant upkeep, meter readings (including daily master meter readings to assure accurate billing from the Village of Winnetka), monthly water samples for EPA approval, preventive maintenance of equipment and the installation of new water mains within the Village.

<u>Type of Equipment</u>	<u>Quantity</u>	
	<u>2004</u>	<u>2005</u>
Valves*	479	536
Fire Hydrants*	551	554

* - This number includes 21 water valves and 12 fire hydrants at the Kraft Foods site.

<u>Water Meters</u>	<u>Quantity</u>	
	<u>2004</u>	<u>2005</u>
5/8"	529	520
3/4"	642	636
1"	579	598
1-1/4"	2	5
1-1/2"	191	180
2"	28	42
3"	14	17
4"	2	3
6"	1	1
Total Water Meters	1,988	2,002

<u>Service Measures</u>	<u>2003</u>	<u>2005</u>
Number of Valves Operated	0	0
Gallons of Water Pumped (Millions)	338	424
Fire Hydrants Maintained	551	554
Fire Hydrants Winterized	551	554
Fire Hydrants Pumped	183	117
Fire Hydrants Pumped and Anti-Freeze	105	98
Fire Hydrant Flow Tested	551	0?
Water Meters Read	8,592	
Water Samples Taken	82	104
Water Main Breaks Repaired	11	20?
J.U.L.I.E Utility Locates (Hours)	1,286	?
Contractor Inspections (Hours)**	1,398	?

** - Number does not include the inspections conducted by the Comm. Development/Building Department.

<u>Water Mains</u>	<u>Feet</u>		<u>Miles</u>		<u>% of Total</u>	
<i>Cast Iron With Lead Joints</i>	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>
Greater than 60 Years Old	40,972	45,250	8.17	8.57	18.20%	19.03%
40-60 Years Old	43,084	39,864	7.85	7.55	17.40%	16.77%
20-40 Years Old	10,930	9874	1.97	1.87	4.40%	4.15%
Less than 20 Years Old	0	0	0	0	0%	0%
<i>All Other Types</i>						
	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>
Greater than 60 Years Old	10,454	12,778	2.19	2.42	4.86%	5.44%
40-60 Years Old	22,229	25,291	4.51	4.79	10.00%	10.64%
20-40 Years Old	53,698	53,698	10.17	10.17	22.60%	22.59%
Less than 20 Years Old	56,338	50,925	10.14	9.65	22.54%	21.43
Total	237,680	237,680	45	45	100%	100%



Sewer Division

This Division has two primary objectives. The first objective is the safe removal of sanitary waste from the Village of Northfield, while meeting or exceeding the strict guidelines of regulatory agencies like the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) and the Illinois Environmental Protection Agency (IEPA) National Pollutant Discharge Elimination System (NPDES). Some of the major responsibilities of this Division include the implementation of the Village's Sanitary Sewer Evaluation Study (SSES) program, mandated by the MWRDGC and the IEPA. Also, the Division works to alleviate sewerage backups and performs main line repairs. Future mandates by regulatory agencies will require that the Village's existing sanitary sewer maintenance program be updated to include additional programs such as regular televising, root cutting, and the cleaning and repair of sewer lines.

The second objective of the Division is the safe and efficient removal of storm water from the Village's streets, sidewalks and residential areas. The majority of the Village's storm system consists of ditch and surface drainage. However, the Village does have approximately 11 miles of underground storm sewers that range from six inch PVC to forty-two inch reinforced concrete pipe. The Public Works Department is responsible for the maintenance of the underground system, as well as the surface system. Maintenance of the Village's storm system includes the cleaning of debris from ditches, culverts and catch basins, as well as the repair of collapsed storm sewer lines and the installation of new, more efficient, storm sewers.

<u>Sanitary Sewers</u>	<u>Feet</u>		<u>Miles</u>		<u>% of Total</u>	
	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>
4"	676	676	0.13	0.13	.41%	.40%
6"	1,536	1,536	.29	.29	.91%	.90%
8"	116,298	117,429	22.03	22.24	68.93%	69%
10"	24,527	24,878	4.65	4.71	14.55%	14.61%
12"	14,122	14,122	2.67	2.67	8.35%	8.28%
15"	4,337	4,337	0.82	0.82	2.57%	2.54%
18"	1,830	1,830	0.35	0.35	1.10%	1.09%
21"	3,438	3,438	0.65	0.65	2.03%	2.02%
24"	1,949	1,949	0.37	0.37	1.15%	1.15%
Total	168,567	170,185	31.96	32.23	100%	100%

<u>Service Measures</u>	<u>2004</u>	<u>2005</u>
Miles of Sanitary Sewer Maintained	31.93	32.76
Manholes Maintained	807	817
Lift Stations Maintained	3	3
Relief Sewers Maintained	4	4
Feet of Sewers Jetted	15,000	28,208
Feet of Sewers Root Cut	1,000	0
Feet of Root Treatment	4,280	3,687
Feet of Sewer Televising	4,118	23,208
<u>Sanitary Sewer Complaints</u>		
<u>Village Responsibilities</u>	18	17
<u>Resident Responsibilities</u>	6	9
Storm Sewer/Flood Complaints	12	7
Miles of Storm Sewer Maintained	19	0
Miles of Storm Sewer Maintained	12.8	12.8
Miles of Ditch Maintained	2.9	2.9

Summary of Sewer Facilities

<u>Type of Sewer Facility</u>	<u>Number of Units</u>	
	<u>2004</u>	<u>2005</u>
Manhole	807	817
Relief Sewer	4	4
Lift Station	3	3