

PUBLIC SERVICES AND INFRASTRUCTURE

Background

The Village has historically sought to maintain public services and infrastructure at a high standard of quality while maintaining fiscal responsibility. This Plan Element examines the following: public buildings, sanitary sewer system, sidewalk system, solid waste management, storm sewer system, street system, and the water system.

The Public Works Department includes the following divisions which are charged with the maintenance of the public infrastructure within the Village:

- ◆ Street & Bridge Division: responsible for the maintenance of street surfaces, road shoulders, curbs, alleys, sidewalks and bridges.
- ◆ Sanitation Division: responsible for the collection of refuse, yard waste and brush from all residential dwellings, except multi-family units larger than 3 units, on a twice weekly basis and the management of the compost center located at the Public Works Facility.
- ◆ Parks, Parkways, & Forestry Division: responsible for the maintenance and improvement of the Village of Lake Bluff park areas, parkways, parkway trees, and public building grounds. Village staff is responsible for mowing the grass and trimming of weeds for 50 acres of parkway.
- ◆ Street Lighting Division: responsible for the maintenance and improvement of the Village's gas and electric street lighting systems. The Village maintains all gas lamps in the Village and electric lights in the Industrial Park, Downtown Business District, the Belle Foret subdivision, and these streets: Campbell Court, Signe Court, Oak Ridge Court, and Wimbledon Court. All remaining electric lights in the Village are maintained by contractual arrangement with ComEd.
- ◆ Sewer Division: provides for the inspection, cleaning, repair, and maintenance of the Village of Lake Bluff's sanitary sewer collection system and the pumping stations which transport the sewage effluent to the North Shore Sanitary District treatment facilities. The Sewer Division is also responsible for the inspection, cleaning, repair, and maintenance of the Village's storm water collection system including manholes, catch basins, and the storm sewer utility system.

- ◆ Public Works Center Division: the Public Works Center/Facility is located at 640 Rockland Road and encompasses the garage buildings, office space, a lunchroom and locker room for Public Work employees, shelters the Village vehicles and equipment, and provides for the storage of automotive parts.

The Village Engineer coordinates all building and zoning activities and performs and/or coordinates all planning, surveying, design, and construction observation for all Village infrastructure improvements. Other duties include all site reviews for residential and commercial building projects within the Village relative to drainage and tree impacts, public property protection, and private and public water and sewer line installations.

Several large projects which have occurred over the last 15 years include:

- ◆ construction of the Public Safety Building.
- ◆ construction of a one million gallon elevated water tank.
- ◆ \$5 million of water main improvements.
- ◆ development of a compost facility.
- ◆ rehabilitation of the train station.
- ◆ construction of new bike paths, along green bay road route 176 and Sheridan road.

Inventory

Infrastructure

Public Buildings

Village public buildings include a Public Safety Building, several public works buildings located at the Public Works Facility and a historic Village Hall. The Public Safety Building was opened on June 4, 1988 and is home to the Village's Police and Fire Departments as well as a public meeting room.

BUILDING	STRUCTURE SIZE SQUARE FEET	DATE BUILT	FUNCTION(S)
Village Hall (45 E. Center Avenue)	3,524	1905	Administration/Village Board/Building, Zoning, Engineering
Public Safety Building (45 E. Center Avenue)		1987-88	
Police	5,800		Police/Dispatch/Garage
Fire	9,150		Fire/Garage
Common Area	<u>1,250</u>		Meeting Room/Restroom
TOTAL	16,200		
Public Works Facility (640 Rockland Road)			
Public Works Building	9,520		Vehicle Storage/Maintenance/Office
Metal Garage	1,800		Vehicle Storage
Metal Garage	684		Vehicle Storage
Masonry Building	<u>930</u>		Salt/Soil Storage
TOTAL	12,934		
Union Pacific Railroad Station* (550 Sheridan Rd.)	2,727	1904	Commuter Services
Lake Bluff Library** (123 E. Scranton)	7,770	1974	Library Services

*The Union Pacific Railroad Station is leased and maintained by the Village via an agreement with the Railroad.

**The Library is included as a fixed asset of the Village but title is held by the Library District under the administration of the Library Board, separate from the Village.

Sanitary Sewer System

The treatment of sanitary sewage is provided to the Village by the North Shore Sanitary District, a special service district with boundaries that are generally defined by the Wisconsin state line, the Tri-state Tollway, and the southern limits of the City of Highland Park. The Village owns and maintains the sanitary sewer collection system which consists of approximately 32 miles of gravity lines, 6 sewage pumping stations and 1

mile of force main. The Village recently completed a comprehensive inventory of the older portions of the sanitary sewer system. This inventory utilized video equipment to examine the condition of 120,000 feet sanitary sewer. The information developed will be used to create a capital repair and replacement schedule based on need, as well as to create a database of service line connections.

Sanitary sewage from all properties west of Green Bay Road is collected in gravity sewer lines owned by the Village and flows to a large trunk sewer which runs roughly parallel with the East Skokie Drainage Ditch. The trunk sewer is owned by the North Shore Sanitary District and carries the sewage by gravity to the District's Clavey Road plant.

Sanitary sewage for all Village properties east of Green Bay Road is transported out of the Village via a large force main owned by the North Shore Sanitary District. This force main is located along East Prospect Avenue and along Illinois Route 176. The force main continues west beyond the Village limits and connects to a large North Shore Sanitary District trunk sewer at Arcadia Drive and Route 176. This trunk sewer roughly parallels the middle fork of the North Branch of the Chicago River, eventually transporting the sewage to the Clavey Road Treatment Plant in Highland Park.

The North Shore Sanitary District owns and maintains one sewage pumping station within the Village. The station is located on the Lake Michigan shore line at East Prospect Avenue extended. This station serves as a local collection point for all sanitary sewage which is collected from Village properties located east of Sheridan Road and from the East Terrace area of the Village.

Approximately 50 homes within the Village are on septic systems. These homes are located mainly north of East Blodgett Avenue and east of Sheridan Road.

Sanitary Sewer System Statistics	
Miles	32 Miles
Village Sewage Pump Stations	6
Homes on Septic (approx.)	50

Source: Village Engineering Department

Sidewalk System

Sidewalk systems are a major component of the Village's infrastructure system and serve to provide a means for safer pedestrian movement than would otherwise be available via the Village's street system. The Village owns and maintains an extensive system of pedestrian walks. Most of the walks throughout the Village are constructed of concrete.

In 1995 the Village awarded a \$350,000 construction contract for the purpose of upgrading the quality of the concrete sidewalks throughout the Village.

Sidewalk System Statistics	
Lineal Feet (concrete sidewalks)	104,000

Source: Village Engineering Department

Solid Waste Management

The Village's Public Works Department provides sanitation services and is responsible for the collection of refuse, yardwaste and brush from all residential dwellings (approximately 2,000), other than multi-family structures with more than 3 units. Refuse is collected twice a week with household waste sent to a landfill outside of the Village. Yard waste is composted at the Village's compost facility at the Public Works Facility, operated by the Village since 1990. The weekly curbside recycling program is provided by an outside contractor. In order to close the municipal landfill, in FY 1994-95 the Village filed an application to certify the closure of the Village's two landfills in compliance with the Environmental Protection Agency (EPA) and made site improvements as part of its closure plan.

Collection Statistics	
Households Served	2,000
Household Waste Collected 1994/95	6,500 cubic yards
Yard Waste Collected 1994/95	2,917 cubic yards
Recyclables Collected 1994/95	1,163,000 lbs.

Source: Village Public Works Department

Storm Sewer System

Most of the Village's developed residential areas are served by Village maintained storm sewers. Those west of Green Bay Road generally drain to the East Skokie Drainage Ditch. Storm sewer lines east of Green Bay Road drain to Lake Michigan primarily through the Village's ravine system.

Storm Sewer System Statistics	
Miles	26 Miles
Acres of Flood Plain	Map Available

Source: Village Engineering Department

Street System

The Village Street system is maintained by Village Public Works Department crews. The Village also has areas where homes are accessed by private roads, with multiple homeowners having deeded access.

See "Transportation" for the Transportation Map detailing the Village owned streets designated as arterial and collector streets. The Transportation Map also details proposed sidewalks and bike paths.

Street System Statistics	
Miles	27

Source: Village Engineering Department

Water System

Virtually all developed areas within the Village are served by the Village's municipal water system with the exception of the northeast quadrant which is served by wells. Until 1991 potable water was supplied from the City of Lake Forest. On April 1, 1991 the Village began receiving water from the Central Lake County Joint Action Water Agency (JAWA), at rates below those available from the City of Lake Forest. JAWA was organized in 1986, its members include: Lake Bluff, Round Lake Beach, Round Lake Heights, Round Lake, Round Lake Park, Mundelein, Vernon Hills, Grayslake, Wildwood, Libertyville, Knollwood, Roundout, Gurnee, and the Lake County Department of Public Works.

JAWA operates a \$40 million water filtration plant located in the Village on the east side of Route 176 opposite the Lake Bluff Golf Course with a current (1996) rated capacity of 38 million gallons per day. JAWA also operates a \$10 million raw water pumping station located in the Village on

the Lake Michigan shoreline at the east end of E. Blodgett Avenue. The Village owns and maintains a one million gallon storage tank located at the Public Works Facility on Route 176.

JAWA STATISTICS	
Service Population	120,000
Water Filtration Capacity JAWA	38 MGD
Raw Water Intake	60 MGD 3,000 Feet Into Lake Michigan
Water Transmission Pipeline	32 Miles
Lake Bluff's Allocation of Capacity	2.09 MGD

Source: JAWA and the Village Engineering Department

VILLAGE WATER SYSTEM STATISTICS	
Miles of Water Main	35 Miles
Average Daily Pumpage	610,000 Gallons/Day
Number of Metered Accounts	1,981
Storage Tank Capacity	1 Million Gallons
Fire Plugs	Approx. 430

Public Services and Infrastructure - Goal, Objectives and Policies

GOAL: Provide and maintain quality public services and infrastructure.

Objective - Sanitary Sewer System

PS1. Maintain the sanitary sewer system within the Village to ensure the public health.

Policies - Sanitary Sewer System

- PS1-1. Develop and maintain an inventory of the Village sanitary sewer system.
- PS1-2. Maintain existing lines to prevent service interruptions and backups. Create a replacement schedule for obsolete sanitary sewer lines.
- PS1-3. Extend sanitary sewer services to underserved areas as development or subdivision takes place. Develop specific guidelines detailing when sanitary sewer systems are to be brought into an area to service development.
- PS1-4. Encourage the elimination of septic systems.
- PS1-5. Provide reliable power sources to pumping stations.
- PS1-6. Provide gravity systems where possible.
- PS1-7. Eliminate the odor problems caused by the North Shore Sanitary District pumping station along the shore of Lake Michigan.

<p>Objective - Sidewalk System</p> <p>PS2. Maintain and expand the sidewalk system where appropriate and as desired by Village residents.</p> <p><i>See "Transportation" for objectives and policies relating to new bike paths, sidewalks and pedestrian access.</i></p>	<p>Policies - Sidewalk System</p> <p>PS2-1. Develop and maintain an inventory of the Village side walk system.</p> <p>PS2-2. Rehabilitate the sidewalk system throughout the Village, to provide curb cuts to permit efficient and safe travel.</p> <p>PS2-3. Develop measures to improve the safety and appearance of the sidewalk along the north side of Scranton Avenue west of the train station.</p>
<p>Objective - Solid Waste Management</p> <p>PS3. Maintain a solid waste management system that ensures the public health and welfare.</p>	<p>Policies - Solid Waste Management</p> <p>PS3-1. Provide appropriate refuse collection through hauler license requirements or direct Village service provision.</p> <p>PS3-2. Support and coordinate residential curbside recycling and yard waste collection services for Village residents and the drop-off facility for Village property owners.</p> <p>PS3-3. Continue participation as a member of the Solid Waste Agency of Lake County (SWALCO) to provide regional coordination of solid waste management services and policies.</p>

Objective - Storm Sewer System

PS4. Maintain and expand the storm sewer system to properly manage the Village's storm-water needs.

Policies - Storm Sewer System

- PS4-1. Develop and maintain an inventory of the Village storm sewer system.
- PS4-2. Discourage the development of a large scale water retention/detention facility in the Village.
- PS4-3. Maintain the condition of the East Skokie Drainage Ditch.

Objective - Street System

PS5. Maintain the street system within the Village to appropriately service the needs of the residents.

See "Transportation" for objectives and policies relating to new vehicle access and congestion.

Policies - Street System

- PS5-1. Develop and maintain an inventory of the street system within the Village.
- PS5-2. Maintain and upgrade streets and roadways throughout the Village through comprehensive capital project scheduling. Develop comprehensive, multi-year capital improvement plans utilizing public input, traffic data, repair and replacement costs and equity as criteria to prioritize projects.
- PS5-3. Improve and maintain the landscape design at the following locations: along Route 176, Green Bay Road, and Sheridan Road. Work with the State of Illinois to improve the landscaping of the intersections of Route 43 and Route 176, and Route 41 and Route 176.
- PS5-4. Repair, install, or improve curbs and gutters to alleviate drainage problems and allow for emergency vehicle movement at the following locations: along Route 176, Green Bay Road, and Sheridan Road.

PS5. Continued

- PS5-5. Examine control of the portions of Sheridan Road, Green Bay Road (north of Route 176), and Route 176 located within the Village.

- PS5-6. Pursue realignment of the intersection/interchange of Route 41 and Route 176 in a manner which will benefit the Village, considering the following:
 - a) Resist placement of any cloverleaf intersection which may adversely impact Lake Bluff businesses.
 - b) Facilitate pedestrian access in any redesign of the interchange.
 - c) Review the inclusion of the Union Pacific freight line into the redesign of the intersection. Develop a plan to route pedestrians and automobile traffic either under or over train tracks. See policies LUI-9, LU5-4, AD1-4, AD2-8, ED2-1, and TR3-2.

- PS5-7. Discourage the creation of new private roads.

Objective - Village Buildings and Grounds

PS6. Provide public buildings and grounds to support the efficient delivery of public services.

- Policies - Village Buildings and Grounds**
- PS6-1. Develop and maintain an inventory of Village buildings and grounds.

 - PS6-2. Retain the existing size of the Public Works Facility parcel to provide areas for future expansion.

 - PS6-3. Complete and maintain compliance with the Americans With Disabilities Act for all public buildings. Ensure the architectural compatibility of any improvements.

 - PS6-4. Consider the development of public restrooms to serve the bike path.

Objective - Water Distribution System
PS7. Maintain and expand the water system within the Village.

Policies - Water Distribution System
PS7-1. Develop and maintain an inventory of the Village water system.
PS7-2. Pursue opportunities to loop the water system where appropriate.
PS7-3. Extend the water system to underserved areas as development or subdivision takes place. Develop specific guidelines detailing when the Village water system is to be brought into an area to service new development.
PS7-4. Identify and eliminate/replace obsolete water mains throughout the Village.
PS7-5. Maintain and monitor existing emergency connections to the City of Lake Forest. Pursue an emergency connection with Great Lakes Naval Base upon extension of water system to the northeast quadrant of the Village.
PS7-6. Develop and maintain required fire flow standards, as necessary to protect and improve the Village's ISO rating.