# **APPENDIX III – Topography and Infrastructure**

# Regional Topography

The Mohawk Valley is a lowland province. The western portion of Glenville is dominated by Glenville Hill to the south of West Glenville Road and by a rolling farm landscape to the north. Glenville Hill towers above the landscape with an elevation of approximately 1100 feet. The Mohawk River flows at elevations between 210-240 feet above sea level and runs parallel to the ridgeline of Glenville Hill. This ridgeline forms a major watershed boundary related to both the river and the Schenectady Aquifer. Creeks flow in the ravines and hollows of the south side of the hills and accent the area's natural beauty and serenity. One of the better-known ravines, Wolf Hollow, was created by a fault in the earth's crust and is marked by 200-foot high faces of rock.

The slopes of Glenville Hill are most pronounced along the River, dropping quickly to elevations as low as 300 feet. The drop is steepest near the Verf Kill, and in Chaughtanoonda Creek in Wolf Hollow. The majority of slopes greater than 15% are located south of West Glenville Road and west of Sacandaga Road.

Traveling east of Sacandaga Road, the terrain is less extreme, with elevations ranging from 250-550 feet above sea level. However, the elevations are relatively constant around 350-400 feet. Saratoga Road (Route 50) is the primary north-south route through eastern Glenville and has a high elevation of 360 feet near Lake Hill Road.

## Study Area Topography

The Town Center study area has a rolling topography with elevation levels ranging from a low of just below 300 feet to a high of 410 feet. Elevation changes occur at different intervals throughout the Town Center Study Area.

Within the Town Center are three sections of land that rise to elevations equal to or higher than 400 feet, producing significant views of the surrounding landscape. All of the high elevations are located east of Route 50. West of St. Anthony's Cemetery is an elevated parcel of land that crosses slightly north and south of Glenridge Road. This elevated parcel produces significant views to the west and along Route 50.

The highpoint in the Town Center is at an elevation of 410 feet and located at 24 Glenridge Road, the Town-owned 4-acre property just east of the Schenectady County Library/Municipal Center Campus, formerly known as the Sutherland Home. The third area with an elevation of 400 feet is located in the southeast corner of the study area.

## Town-Wide Sanitary Sewer

Until very recently, sanitary sewer service within the Town of Glenville was primarily limited to four small geographic areas including a portion of the hamlet of Alplaus, a portion of the Woodhaven Subdivision, the Industrial Parks and the Navy Depot, and pockets of residential areas immediately north, south, and west of the Village of Scotia.

In February 2002, a portion of a new \$7+ million sewer system came on-line along Freemans Bridge Road. The system services numerous commercial properties and roughly 200 acres of vacant land located approximately 2 miles south of the Town Center study area. Known as Sewer District #9, this project will also serve Maple Avenue and significant segments of Route 50 and Glenridge Road including portions located within the Town Center.

# TOWN OF GLENVILLE

#### Study Area Sanitary Sewer

Sewer District #9 is now operational on both Route 50 and Glenridge Road within the Town Center. All properties within the Town Center now have access to the new sewer system. It may take up to a year before all the existing structures are hooked into the system.

Sewer District #9 generates approximately 157,000 gallons of effluent per day, with the capacity to process 2.6 million gallons per day. This sewer district's wastewater is treated at the City of Schenectady Treatment Plant on Anthony Street. The Town's system ties into Schenectady's system via a new sewer main that is attached to and below Freemans Bridge.

#### Town Water System

The Town's Municipal Water system serves approximately 6,000 parcels within Glenville. All water is pumped from two existing well fields located within the Town of Glenville on the Schenectady Aquifer. The first well field, which services parts of the Towns of Clifton Park, Ballston, and Charlton, is located off Van Buren Road, just north of the Exit 26 Bridge. The second well field, located off Vley Road, serves the Village of Scotia and a few adjacent neighborhoods in the Town of Glenville, which has a separate water system. In Glenville, the service area remains primarily east of Sacandaga Road, where the majority of development within the Town has occurred. Residents of western Glenville are primarily served through private wells that generally yield less than five gallons per minute. Yields of 5 to 20 gallons per minute can be found in some areas.

Water District 11 was established in 1963 and includes Glenville Water Districts No. 4, 5, 7,9 and 10 that were annexed prior to 1990, as well as numerous extensions that have external water service west and north of the "mother" district. Water District 11 receives its water from the Glenville well field. Three wells located here supply an average of 2 million gallons per day of water to approximately 12,000 Glenville residents and 4,000 residents of southern Saratoga County.

The well field designated to the Village of Scotia serves Glenville Water Districts No. 2, 3, 8 and 12. This well field sits on a 12-acre parcel of land. Water from this well field is pumped to an underground storage tank located near Spring Road and gravity-fed to users.

Both well sites in the Town of Glenville have been identified as critical wellhead protection areas within the aquifer protection zone. There is potential at both sites for possible groundwater contamination from nearby industrial, rail and mining operations. Due to potential problems, two other groundwater preservation areas have been identified as alternate well sites for public water supply. The first is an 80-acre site on the Mohawk River, near Barge Canal Lock 8. The second site is located downstream from the Boston and Maine Railroad Bridge, west of Lock 9 on the Mohawk River.

## Study Area Water System

The water lines in the Town Center study area are located along Route 50, Glenridge Road, and Van Buren Road. The Town can pump and distribute roughly 4 million gallons per day, which is double the year-round daily average. During the summer, the Town occasionally runs to capacity. There is room for commercial expansion within the Town Center, but the Town will have to upgrade its transmission and storage facilities if it wishes to attract significant new development. An expansion project is set to commence in 2003.

## Storm Sewer

A storm sewer system currently exists in the Town and no plans for an expansion of the system is currently in place.