

**FACILITIES PLANNING AREA (FPA)
MAP AMENDMENT APPLICATION**

**For the Proposed
SCHOOL DISTRICT #56 – WADSWORTH BUILDING
GURNEE SCHOOL DISTRICT #56
WADSWORTH, ILLINOIS**

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GHA Project Number 4369.600

**FPA MAP AMENDMENT NARRATIVE
PROPOSED SCHOOL DISTRICT #56 –
WADSWORTH BUILDING
GURNEE SCHOOL DISTRICT #56
WADSWORTH, ILLINOIS**850 Forest Edge Drive, Vernon Hills, IL 60061
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Gurnee School District #56 owns approximately 70.8-acres in Wadsworth, IL. The Gurnee School District is proposing to develop a new grade school for approximately 600-students on the site. This development will allow for the demolition of the existing Gurnee Grade School on at 940 Kilbourne Road, which is well below the 100-Year Base Flood Elevation of the Des Plaines River.

The site is bound by the Cambridge at Heatherstone Subdivision (Cambridge Subdivision) to the east, Wadsworth Road, to the south, the Chicago and Northwestern Railway to the west, and unimproved agricultural land to the north. The site street address is 13688 West Wadsworth Road.

The site is in the headwaters of the Newport Drainage Ditch and is currently used for agricultural, row crops. According to a wetland delineation completed by Gewalt Hamilton Associates (GHA), there are 3 wetlands and 3 farmed wetlands on the site. We anticipate that two of the wetlands and all the farmed wetlands are Isolated Waters of Lake County and that the wetland around the Newport Drainage Ditch is a Water of the US. There is also floodplain and floodway on the site, as shown on the maps in Tab 6. There are two houses located at the southwest corner of the property that are proposed to remain during the development.

The proposed improvements include a new Grade School (approximately 80,000 square feet), parking lot, hardscape play area, and green play areas on the northern 1/3 of the site, with an access road from Wadsworth Road to the building. The proposed improvements will include approximately 6-acres of impervious surface. The remainder of the site, which is currently used for crop production (approximately 40 acres), will be graded to remove the row crops and stabilized with an upland prairie, native grass seed mix.

The proposed site improvements also include 10,000 square feet of permeable pavers in the parking lot, a wetland detention basin with native plantings, vegetated bioswales, two rain gardens, and approximately 500-feet of streambank stabilization. These “green improvements” are being proposed for several reasons. Three of those reasons include: minimizing adverse impacts to the development of the site, addressing downstream water quality issues, and creating a site that is educational to the students and visitors to the site. This facility will serve as an educational tool to teach on the importance of environmental sustainability and how sustainability can be achieved.

GHA anticipates these improvements will have a significant impact and reduction of the sediment load, phosphorous load, and nitrogen load leaving the site.

EXISTING FACILITIES PLANNING AREA CONDITIONS

The site is currently located within the Lake County Public Works Northeast Lake FPA, and the nearest sanitary sewer facilities in this FPA, available for a service connection, are at the Old Mill Creek Wastewater Treatment Plant (WWTP). The Old Mill Creek WWTP is on Ancona Avenue, east of Hunt Club Road, which is approximately 4-miles west and south of the site. From the intersection of I-94 and Wadsworth Road, the Old Mill Creek WWTP is approximately ½-mile west and 1-mile south.

A connection to this sewer system would be cost prohibitive to the development of the school on this site due to the enormous amount of offsite improvements required. As outlined in the FPA Amendment Application, it is our opinion that it would cost approximately \$3,000,000 to make this connection.

PROPOSED FACILITIES PLANNING AREA CONDITIONS

As shown on the attached FPA maps, this site is on the border of the Lake County Public Works Northeast Lake FPA and the North Shore Sanitary District FPA. We propose to amend the FPA Boundaries of these two districts so the site will be included in the North Shore Sanitary District FPA.

With approval of this amendment, we propose to connect the Gurnee Grade School sanitary sewer service to the existing sanitary sewer facilities located in the Cambridge Subdivision. We propose to construct a gravity sanitary sewer and connect upstream of the existing lift station, located northeast of the site. This connection would involve construction of approximately 800-feet of sanitary sewer pipe. It is our opinion this connection option would cost approximately \$80,000.

We have contacted the Lake County Public Works Department and the North Shore Sanitary District regarding this development, and both entities support the FPA Map Amendment. The Lake County Public Works Department has given us their verbal support; however, they cannot put their support in writing until after their Public Works Committee meeting in January 2011. The North Shore Sanitary District has also given us their verbal support of this map amendment. However, the North Shore Sanitary District cannot put their support in writing until they receive written support from the Lake County Public Works Department. We anticipate we will receive both letters of support by the end of January 2011 and will forward those letters to the Chicago Metropolitan Agency for Planning upon receipt.

The Village of Beach Park owns and operates the sanitary sewer in the Cambridge Subdivision. The Village of Beach Park Public Works Committee, met on December 13, 2010 to discuss the proposed sanitary sewer connection. The Public Works Committee is in favor of this connection.

The sanitary sewer system in the Cambridge Subdivision is tributary to the Waukegan Sewage Treatment Plant, located at 325 East Dahringer Road in Waukegan. The treatment plant is approximately 5.5-miles southeast of the site. The effluent from the Waukegan Sewage Treatment Plant is pumped west to the Des Plaines River and outlets near the intersection of Kilbourne Road and North Skokie Highway (IL-41).

The section of the Des Plaines River that receives the effluent discharge from the Waukegan Sewage Treatment Plant is identified as Segment IL_G-07 in the Illinois EPA's 2008 Water Quality Report. Segment IL_G-07 of the Des Plaines River appears in the 303(d) List in this report. The IEPA is not supporting this segment for aquatic life, fish consumption, or primary contact. The segment was not assessed for secondary contact of aesthetic quality. The Report lists the possible causes for impairment as: chloride, dissolved oxygen, pH, phosphorous (total), mercury, polychlorinated biphenyls (PCB's), and fecal coliform. According to the Illinois State Water Survey (February 2003 revision), the North Shore Sanitary District (Waukegan) has a 7Q10 of 14.7 cfs.

Reporting information and the Facility Plan for the Waukegan Sewage Treatment Plant is located in Tab 10 of this report. As shown, the treatment plant has adequate capacity to treat the proposed flows from this development. No improvements are proposed to the Waukegan Sewage Treatment Plant.

PROPOSED SANITARY SEWER

We are proposing a sanitary sewer service that is owned and maintained by the Gurnee School District, within the property limits, and owned and maintained by the Village of Beach Park on the Cambridge Subdivision property. The Village of Beach Park has existing utility easement rights to the land areas that the proposed sanitary sewer will be constructed on.

The anticipated sanitary sewer loading for the school is 42 P.E. As this is a grade school, the vast majority of wastewater flows from this site will be generated between the hours of 8 AM and 5 PM, over 180 calendar days per year. It is our opinion that this is a low density, low impact use for this property, and is much less than that loading that could occur if this site was developed for residential use.

The design and construction of the school's sanitary sewer service will be in accordance with the Illinois EPA's Pollution Control Board's "Illinois Recommended Standards for Sewage Works." The proposed sanitary sewer service design will need to be approved by the Village of Wadsworth, Village of Beach Park, North Shore Sanitary District, and the Illinois EPA prior to construction. As the proposed Population Equivalent (P.E.) is 42, a permit will be needed from the Illinois EPA for construction of the sanitary sewer service.

It is our opinion that this FPA Map Amendment is in accordance with local and state plans and policies and will be beneficial to the development of a new Public Grade School in the area.

