



Superior Street Reconstruction



Project Fact Sheet (Public Meeting #1) - “State of the Street”

General Information

Length of Proposed Project (6th Ave W to 4th Ave E, ie. 10 blocks): approx. 4,800-ft (0.90 miles)
Average Length of a City Block: approx. 480-ft
Right-of-Way Width (face of building to face of building): 80-ft
Vertical Elevation: varies between elev. 625 (1st Ave East) and elev. 645 (6th Ave W & 4th Ave E)
Lake Superior Elevation: 600-ft (above sea level)
Street Width (face of curb to face of curb): varies from 46-ft to 60-ft+ (due to pullouts and parking)
Driving Lane Width: 11-ft typical (one lane each direction)
Average Daily Vehicle Traffic: 11,000 vehicles per day (Superior Street); Speed Limit: 30 mph
Number of Parking Spaces on Superior Street (on-street): approx. 216 spaces (parallel or diagonal)
Project Corridor Users: pedestrians, motorists, transit riders, cyclists and people with disabilities accessing workplaces, homes, businesses, shopping, sports and entertainment venues, restaurants, lodging, outdoor recreation areas and tourism destinations.

Superior Street Construction Phases & History

- 1900s/1930s Various surfacing projects along Superior Street combining layers of asphalt, concrete and sandstone bricks.
- 1950s/1960s Gateway Urban Renewal/Redevelopment Project
Superior Street 4th Ave West to Mesaba Ave (Bowery)
- 1984-1987 I-35 Extension and Lake Avenue Ramp Construction
- 1984-1987 Downtown Renaissance Phase I & II, Street Improvement Streetscape
3.75 million bricks placed along 1st Street, Superior Street & Michigan Street
1.5 million bricks placed along Superior Street alone (335,230 Sq Ft)
Total Construction Cost: \$18.5 million (\$7.5 million for Superior Street)
- 1993 Streetscape Rehabilitation/Maintenance Project
Total Construction cost: \$1,037,000
- 2005 & 2006 General Repairs / Maintenance
Total Construction Cost: \$102,000
- 2013 Superior Street Bituminous Paving
Ongoing Maintenance Costs

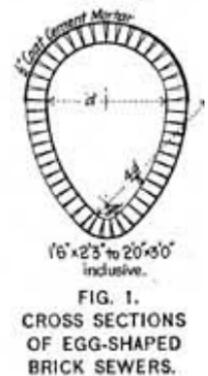
Street Utilities

Water

The City of Duluth's 125-yr old, 16-inch Cast Iron water main runs the entire length of Superior Street. The main was installed in 1887 in a period where Duluth's population skyrocketed from only 3,000 to 30,000 people in the span of just a decade. In general the main is located 12-ft to 15-ft south of the centerline of Superior Street and its depth varies up to 9-ft below the street. For the most part buildings along Superior Street are connected to the water main by 6-inch and 8-inch service lines running between the main and the buildings. The project intends to remove/replace the existing water system.

Sanitary Sewer

The City of Duluth's sanitary main on Superior Street was installed in 1886 and consists of egg-shaped brick sewer. The egg-shape design was provided when the sanitary and storm sewer systems were combined in a single system. Low daily sanitary flows were accommodated by the narrower trough at the bottom of the pipe. When larger rain storms occurred, the surge was accommodated in the wider, upper sections of the pipe. Storm and sanitary sewers are no longer shared. Egg-shaped sewers are more difficult to inspect and maintain and are less efficient than circular pipes for carrying sanitary flows alone. In general, the sanitary main is located 12-ft to 15-ft north of centerline at depths up to 15-ft below the street. Buildings on the north side of Superior Street are connected to the sanitary main in Superior Street whereas buildings on the south side of Superior street are connected to the main in Michigan Street. The project intends to rehabilitate the existing sanitary system using a cured-in-place liner.



Storm Sewer

The City's storm water infrastructure in Superior Street varies in age, size, configuration and material type. The existing storm sewer system is notable for the fact that Superior Street lacks a roadway subdrain system. Installing roadway subdrains is a standard, modern construction practice that keeps the roadway base free of moisture and limits damage to the street due to seasonal freezing and thawing. The project intends to remove/replace the existing storm system and install roadway subdrains that will connect to the storm sewer.

Other Utilities

Numerous private utilities occupy the Superior Street corridor and include high voltage power, fiber optic, and telecommunications. The status of these utilities will be determined during the preliminary design phase and the project team will meet with each utility owner to encourage maintenance or upgrades so that such activities will occur prior to or during the planned street work and minimize the potential for utility work in the new street after the project is completed. At a minimum, these utilities will be encountered and worked around during construction and some replacement or relocation may be necessary. The City's steam infrastructure also runs along Superior Street and consists of steel pipe encased in concrete ducts. The City's gas infrastructure intersects Superior Street along the avenues.