



Project Background

Following the widespread flooding that was experienced during the storm events of June and July 2010, and April 2013, Christopher B. Burke Engineering, Ltd. (CBBEL) was hired to develop a comprehensive flood plan for the City of Elmhurst (City). As part of the comprehensive flood plan, thirteen (13) flood-prone areas throughout the City were studied to determine proposed drainage improvements to alleviate the flooding in those areas.

The most cost-effective solution identified to reduce flooding is the creation of flood storage in open spaces throughout the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Park District, including Golden Meadows Park. The creation of flood storage at Golden Meadows Park would benefit many homes in the Pine Street/Avon Avenue and Brynhaven Subdivision flood problem areas of the City.

Project Details

Creating flood storage in the open space area of Golden Meadows Park in conjunction with the construction of relief sewers would significantly reduce the risk of flooding for the homes in the Pine Street/Avon Avenue and Brynhaven Subdivision flood problem areas in Elmhurst.

Key Benefits and Facts

This project would provide flood-reduction benefits to the 22 homes (20 homes from Pine Street/Avon Avenue and 2 homes from Brynhaven Subdivision) that would currently flood during a 100-year design storm event. Approximately 14 acre-feet of flood storage can be provided in the eastern lobe of Golden Meadows Park, which is currently used as a soccer field. A total storage volume of 22 acre-feet would be required in the park to benefit the Brynhaven area. The conceptual project cost is \$3.4 million (\$1.0M additional for Brynhaven improvements) and the construction timeline is estimated at approximately one year.

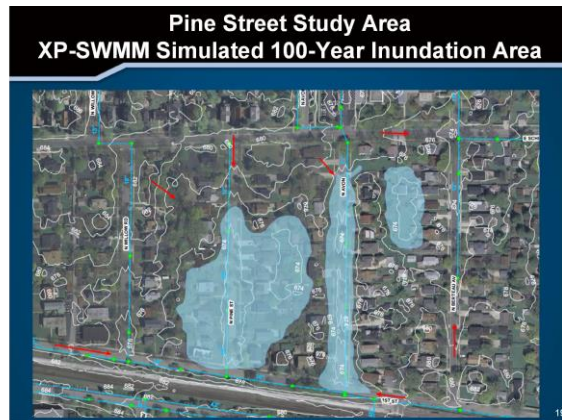
Project Description

The goal of this project is to provide a location to safely hold stormwater while maintaining the existing recreational uses of the park. As seen in the picture at the top, conceptual facility improvement plans were developed with the intent of maintaining the existing soccer fields in the eastern lobe of Golden Meadows Park. The existing site will also be enhanced with improvements to the parking lot area at the south end of Hampshire Avenue.

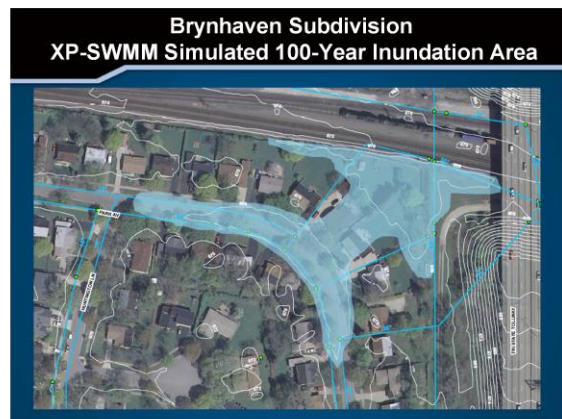
To maximize playability of the fields, stormwater would not be diverted into the park unless the capacity of the existing storm sewer system is exceeded. Less frequent, non-flood causing events would not impact the park, as stormwater would bypass the area. During significant storm events, pipes would divert water away from the flood-prone areas and convey it into Golden Meadows Park. The park is designed to completely fill for the 100-year design storm event; stormwater would be held temporarily at the site and then drain by gravity to the existing storm sewer system. Period of inundation would be less than 24 hours. For storm events that exceed a 100-year frequency, an emergency overland flow route will be constructed that passes excess flows to the east. This maintains the current drainage patterns and protects the homes located adjacent to Golden Meadows Park.



Conceptual Solution



Inundation Areas



Inundation Areas