York Commons Park Project Fact Sheet



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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 existing open space within the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Park District, including York Commons Park. The creation of flood storage at York Commons Park would benefit many homes in the southwest portion of the City.

Project Details

Creating flood storage in the open space portions of York Commons Park would significantly reduce the risk of flooding in three of Southwest Elmhurst's flood-prone areas, specifically:

RETAINING WALL SOFTBALL STAIR ACCESS TO FIELDS RAMP ACCESS TO FIELDS SIDE SLOPE

Conceptual Solution

- Crescent Avenue
- Washington Street
- Swain Avenue and Vallette Street

Key Benefits and Facts

This project would provide flood-reduction benefits to 195 homes in a 100-year design storm event. Approximately 23 acre-feet of flood storage can be provided in York Commons Park. The conceptual project cost is \$3.2 million and construction timeline is estimated at approximately 18 months.

Project Description

The goal of this project is to provide a location to safely hold stormwater while maintaining 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 baseball and soccer fields.



Inundation Area

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 flood-prone areas and convey it into York Commons 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 west. This maintains the current drainage patterns and protects the homes located adjacent to York Commons Park.

Golden Meadows Park Project Fact Sheet



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FLOOD STORAGE

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

SOCCER



GOLDEN MEADOWS PARK SITE DEVELOPMENT PLAN

Inundation Areas

Brynhaven Subdivision XP-SWMM Simulated 100-Year Inundation Area



Madison Early Childhood Education Center Project Fact Sheet



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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 within the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Community Unit School District 205, including the open space area adjacent to the Madison Early Childhood Education Center. The creation of flood storage at this site would benefit many homes in the southwest portion of the City.



Conceptual Solution

Project Details

Creating flood storage in the open space area adjacent to the Madison Early Childhood Education Center would significantly reduce the risk of flooding for the Washington Street flood problem area in Southwest Elmhurst.

Key Benefits and Facts

This project would provide flood-reduction benefits to 63 homes in a 100-year design storm event. Approximately 5 acre-feet of flood storage can be provided in the open space area located at the south end of Madison Early Childhood Education Center site. The conceptual project cost is \$2.5 million 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 school site. As seen in the picture at the top, conceptual facility improvement plans were developed with the intent of creating flood storage while maintaining the existing soccer field in this location. To maximize playability of the fields, stormwater would not be diverted into the site unless the capacity of the existing storm sewer system is exceeded. Less frequent, non-flood causing events would not impact the site, as stormwater would bypass the area.



Inundation Area

During significant storm events, pipes would divert water away from flood-prone areas and convey it into the Madison Early Childhood Education Center site. The facility would be 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 west. This maintains the current drainage patterns in this area and protects the homes that are located adjacent to the school.

Bryan Middle School Project Fact Sheet



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 within the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Community Unit School District 205, including the open space area adjacent to Bryan Middle School. The creation of flood storage at the Bryan Middle School site would benefit many homes in the southwest portion of the City.

Project Details

Creating flood storage in the open space area adjacent to Bryan Middle School would significantly reduce the risk of flooding in two of Southwest Elmhurst's flood-prone areas, specifically:

- Saylor Avenue and Jackson Street
- Spring Road and Harrison Street

Key Benefits and Facts

This project would provide flood-reduction benefits to 121 homes in a 100-year design storm event. Approximately 17 acre-feet of flood storage can be provided at the Bryan Middle School site. The conceptual project cost is \$2.7 million and 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 school site. As seen in the picture at the top, conceptual facility improvement plans were developed with the intent of maintaining the existing softball fields. To maximize playability of the fields, stormwater would not be diverted into the site unless the capacity of the existing storm sewer system is exceeded. Less frequent, nonflood causing events would not impact the site, as stormwater would bypass the area.

Southwest Study Area XP-SWMM Simulated 100-Year Inundation Area

Inundation Area

During significant storm events, pipes would divert water away from flood-prone areas and convey it into the Bryan Middle School site. The facility would be 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 west. This maintains the current drainage patterns in this area and protects the homes located adjacent to the school.

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Conceptual Solution

Elmhurst Quarry Project Fact Sheet



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. One of these open spaces identified in the comprehensive flood plan was the Elmhurst Quarry, which is currently used as a flood control reservoir for Salt Creek. The proposed project would benefit many homes in the Walnut/Evergreen/Myrtle flood problem area, which is located adjacent to the quarry in the northwest corner of the City.





Conceptual Solution

Project Details

Creating compensatory flood storage in the Elmhurst Quarry in conjunction with the construction of relief sewers would significantly reduce the risk of flooding for the homes in the Walnut/Evergreen/Myrtle flood problem area in Elmhurst.

Key Benefits and Facts

This project would provide flood-reduction benefits to the 52 homes that would currently flood during a 100-year design storm event (76 homes were shown to be impacted by the April 2013 storm event). The conceptual project cost for the construction of the relief sewer/compensatory storage is \$4.97 million and the construction timeline is estimated between 12 and 18 months.

Project Description

The goal of this project is to provide a location to safely hold stormwater during extreme rainfall events. The proposed project involves the construction of a relief sewer that extends from the lowlying areas in the Walnut/Evergreen/Myrtle study area to the Elmhurst Quarry. During significant storm events, the stormwater would be safely held in the quarry instead of the streets in the surrounding neighborhood.

Since the Elmhurst Quarry is a regional flood control reservoir for Salt Creek that provides flood-reduction benefits to many communities, compensatory storage may be required to offset the increased stormwater volume being sent to the quarry. Approximately 20 acre-feet of compensatory flood storage can be created by excavating the western lobe of the quarry, which was used in the past as a landfill for clean construction debris.

Since every drop of water sent to the quarry must eventually be pumped out, stormwater from less frequent, non-flood causing events would drain through the existing storm sewer system directly to Salt Creek. During significant storm events, pipes would divert water away from the flood-prone areas and convey it directly into the Elmhurst Quarry.



April 2013 Inundation Area



Western Lobe – Elmhurst Quarry

New Stormwater Policies

Maximum Impervious Surface for Residentially Owned Properties

Establishes new guidelines for maximum allowable impervious surface allowances according to lot size. Also incorporates requirements for stormwater storage volumes for any lot that exceeds the impervious surface coverage.

New Single Family Home Stormwater Management Policy

The purpose is to provide stormwater storage volume to offset the increase in stormwater runoff volume that may result from redeveloped property. Stormwater storage is calculated using the maximum impervious lot coverage. (unless determined necessary to avoid structural damage to the home or adjacent homes).

Existing Residential Stormwater Management Policy

The purpose is to provide storage volume to offset the increase in stormwater runoff volume that results from improvements that increase impervious coverage of a residential property. The proposed policy will no longer allow the direct connection of sump pumps and downspouts to the storm sewer (unless determined necessary to avoid structural damage to the home or adjacent homes).

Residential Stormwater Management Incentive Policy

The purpose is to encourage property owners who are proposing redevelopment/additional impervious improvements to provide additional stormwater management above the required storage volume, calculated using the New Home and Existing Home Stormwater Management policies. Also applies to existing homeowners who are not increasing impervious area but want to add stormwater management systems to assist with existing drainage issues or to simply incorporate best stormwater management practices.

Storm Sewer Extension Program (Restructured Rear Yard Drain Program)

Updated process which allows the city to review all direct storm sewer connection requests inside and outside the storm sewer extension program. Provides flexibility and financial incentives to encourage and implement best management practices and reducedirect connections to the City storm sewer.

City Owned Public Surface Parking Lots Policy

Allows the City to evaluate and incorporate stormwater management technologies and practices prior to resurfacing and/or major maintenance efforts of City owned parking lots.



Bryan Middle School (Gravel Lot) Project Fact Sheet

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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 open spaces within the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Community Unit School District 205, including the existing gravel lot located south of Bryan Middle School. The gravel lot is currently used by the school district as a maintenance/equipment storage area. The creation of flood storage at the Bryan Middle School gravel lot would benefit many homes in the southwest portion of the City.



Conceptual Solution

Project Details

Creating flood storage in the open space area adjacent to Bryan Middle School would significantly reduce the risk of flooding in two of Southwest Elmhurst's flood-prone areas, specifically:

- Saylor Avenue and Jackson Street
- Spring Road and Harrison Street

Key Benefits and Facts

This project would provide flood-reduction benefits to 121 homes in a 100-year design storm event. Approximately 23 acre-feet of flood storage can be provided at the Bryan Middle School gravel lot site. The conceptual project cost is \$4.4 million and construction timeline is estimated to be approximately one year.

Project Description

The goal of this project is to provide a location to safely hold stormwater during severe storm events. As seen in the picture at the top, conceptual facility improvement plans were developed to maximize the potential flood storage volume that can be provided on the site. Because there are no recreational uses for the site, the objective is to provide the maximum volume of flood storage in this location. Since the site will be excavated below the elevations of the existing storm sewer system, a pump station will be required to dewater this area following a storm event.



Inundation Area

To ensure that pumping costs are kept at a minimum, stormwater would not be diverted into the site unless the capacity of the existing storm sewer system is exceeded. Stormwater during the less frequent, non-flood causing events would bypass this site. During significant storm events, pipes would divert water away from flood-prone areas and convey it into the proposed flood storage site. The facility would be designed to completely fill for the 100-year design storm event; stormwater would be held temporarily at the site and then be pumped out to the existing storm sewer system following the storm. For storm events that exceed a 100-year frequency, an emergency overland flow route will be constructed that passes excess flows to the west. This maintains the current drainage patterns in this area and protects the homes located adjacent to the site.

Crestview Park Project Fact Sheet

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 open spaces within the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Park District, including Crestview Park. The creation of flood storage at Crestview Park would benefit many homes that experience flooding in the adjacent neighborhoods.

Project Details

Creating flood storage in the open space area of Crestview Park in conjunction with the construction of relief sewers would significantly reduce the risk of flooding for the flood problem areas in the neighborhoods located south of the park.

Key Benefits and Facts

This project would provide flood-reduction benefits to the 15 homes (2 homes in north study area, 13 homes in south study area) that would currently flood during a 100-year design storm event. Approximately 1 acre-feet of flood storage can be created in the western portion of Crestview Park (north study area), and approximately 4 acre-feet can be created in the eastern portion of the park (south study area). The conceptual project costs for the north and south study areas are \$0.3 million and \$4.0 million, with estimated construction timelines of six months and one year, respectively.

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. Based on the concept-level drainage improvements shown at the top, conceptual facility improvement plans will be developed with the intent of maintaining the existing baseball fields located on the eastern portion of Crestview Park.

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 and/or overland flow routes would divert water away from the flood-prone areas and convey it into the flood storage areas in Crestview Park. The facilities would be 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. The total 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 to maintain the current drainage pattern in this area and to protect adjacent homes from flooding.

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Conceptual Solution (North Study Area)



Conceptual Solution (South Study Area)



April 2013 Inundation Area



East End Park Project Fact Sheet

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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 open spaces within the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Park District, including East End Park. The creation of flood storage at East End Park would benefit many homes in the Geneva Avenue flood problem area, which is located immediately west of the park.



Conceptual Solution

Project Details

Creating flood storage in the open space area of East End Park in conjunction with the construction of relief sewers would significantly reduce the risk of flooding for the homes in the Geneva Avenue flood problem area in Elmhurst.

Key Benefits and Facts

This project would provide flood-reduction benefits to the 9 homes in the Geneva Avenue study area that would currently flood during a 100-year design storm event. Approximately 4 acre-feet of additional flood storage can be provided in the western portion of East End Park, which is currently used as baseball fields. The conceptual project cost is \$1.9 million and the construction timeline is estimated at approximately one year.

Project Description

The goal of this project is to reconfigure a portion of East End Park to provide a location to safely hold stormwater and also maintain the existing recreational uses of the site. As seen in the picture at the top, conceptual facility improvement plans were developed with the intent of improving two of the three existing baseball fields and also adding a soccer field in this location. The facilities will also be enhanced with improvements to the off-street parking area located along Third Street.



Inundation Area

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 East End Park.

Under existing conditions, East End Park acts like a flood storage area during significant storm events, and the proposed improvements would increase the flood storage capacity for this facility. This portion of 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. The total period of inundation on the playing fields would be less than 24 hours.

Jackson Elementary School Project Fact Sheet



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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 existing open space within the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Community Unit School District 205, including the open space area adjacent to Jackson Elementary School. The creation of flood storage at the Jackson Elementary School site would benefit many homes in the southwest portion of the City.



Conceptual Solution

Project Details

Creating flood storage in the open space area adjacent to Jackson Elementary School would significantly reduce the risk of flooding the Saylor Avenue/Jackson Street flood-prone area in Southwest Elmhurst. The provided flood storage volume can be increased even further if the proposed flood storage area is expanded onto the open space area of the Christ United Methodist Church property, which is adjacent to Jackson Elementary School.

Key Benefits and Facts

This project would provide flood-reduction benefits to 104 homes in a 100-year design storm event. Approximately 3 acre-feet of flood storage can be provided in the open space of the Jackson Elementary School site. When the project is combined with the open space area of the adjacent Christ United Methodist Church property, a total flood storage volume of 5 acre-feet can be provided. The conceptual project cost is \$0.7 million (includes flood storage on both Jackson Elementary School and Christ United Methodist Church properties) 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 school site. As seen in the picture at the top, conceptual facility improvement plans were developed with the intent of maintaining the existing soccer fields at the school site.



Inundation Area

To maximize playability of the fields, stormwater would not be diverted into the site unless the street ponding along Jackson Street becomes so severe that it overtops the sidewalk and enters the flood storage area. Less frequent, non-flood causing events would not impact the site, as stormwater would bypass the area. Stormwater would be held temporarily at the site and then drain out by gravity to the existing storm sewer system, with a total inundation period of less than 24 hours.

Larch Avenue/I-290 & York Street Project Fact Sheet

ATHURS'

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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. One of the open areas identified in the comprehensive flood plan involves the existing detention basins located at the intersection of York Street and I-290. Expanding the capacity of these basins would benefit several homes along Larch Avenue and Addison Avenue and also reduce the roadway flooding that occurs along York Street at I-290.

Project Details

Creating additional flood storage in the existing detention basins located at the intersection of York Street and I-290, in conjunction with the construction of relief sewers, would significantly reduce the risk of flooding for homes along Larch Avenue and Addison Avenue. Additionally, the expansion of the flood storage area would reduce the roadway flooding that makes York Street impassable during severe storm events.

Key Benefits and Facts

This project would provide flood-reduction benefits to 3 homes as well as reduce roadway flooding along York Street in a 100-year design storm event. Approximately 7 acre-feet of additional flood storage can be created in the existing detention basins at a conceptual cost of \$2.0 million (\$0.67 million for York St. only for 6 acre-feet); the construction timeline is estimated at approximately one year.

Project Description

The existing detention basins located at the intersection of York Street and I-290 have an approximately 10-year capacity. For storm events that exceed a 10-year frequency, the detention basins will overflow, resulting in significant roadway flooding and road closures in this location.

The goal of this project is to improve the function of the existing drainage system by increasing both the capacity of the existing pipe system and the capacity of the existing detention basin. Conveyance improvements, in conjunction with the creation of additional flood storage volume, would provide valuable flood-reductions benefits to the Larch Avenue and York Street flood problem areas. Relief sewers would be constructed that extend from the low areas of Larch Avenue and Addison Avenue to the detention basins located at York Street/I-290. An additional 7 acre-feet of flood storage can be provided in these detention basins through deeper excavation and modifications to the side slopes of the facilities. The expansion in storage volume will mitigate the flooding experienced along Larch Avenue and Addison Avenue, and will also reduce the roadway flooding that occurs along York Street/I-290. The proposed project will provide a 100-year level of flood protection for both of these study areas.



Conceptual Solution



Inundation Areas

York/I-290 Study Area XP-SWMM Simulated 100-Year Inundation Area

Southwest Elmhurst Wet Weather Control Facility

What is the Wet Weather Control Facility (WWCF)?

The wet weather control facility (WWCF) has three components: 1) a re-designed lift station at Saylor and Jackson with large capacity pumps (in addition to the existing pumps), 2) an 18" wet-weather force main, and 3) a two-million gallon storage tank at the Water Reclamation Facility. **Completion Date of Fall 2015.**

How is it designed to work?

During normal conditions, the smaller (dry weather) pumps at the Saylor and Jackson Lift Station convey flow through the 10" force main (recently replaced) to the interceptor sewer on McKinley Avenue. During large storm events, these pumps will shut down and allow the high-capacity pumps to take over and pump the flow directly to the Water Reclamation Facility. If the storm is so large that the treatment plant reaches capacity, up to two million gallons of the flow from the Saylor and Jackson Basin will be pumped into the storage tank.

Completion 2014 When the Week water of the second of the

What is a wet-weather force main (WWFM)?

A force main is a sewer pipe that conveys pumped wastewater

from a lift station to a higher elevation. Force mains flow full and under pressure when pumps are in operation. A wet-weather force main (WWFM) is one that only operates during storm events when sewer flows increase beyond the capacity of routine pumping operations. The WWFM currently under construction is a component of the southwest Elmhurst wet-weather control facility (WWCF).

Who will benefit from the WWFM and WWCF?

The Saylor and Jackson Lift Station Basin is comprised of approximately 660 homes, and the addition of the wet-weather force main and larger pumps will greatly reduce the risk of sanitary sewer backups for these homes by increasing the amount of flow that the lift station can pump away from the basin during large storms. At present, the lift station pumps all flow to the intersection of Saylor and McKinley Avenue. Once the WWCF and WWFM are in operation, the lift station will no longer need to pump to this location during large storm events, which will also reduce the risk of backups for homes tributary to the McKinley Avenue interceptor, an area of approximately 1,700 homes.

Where will the construction take place?

East of Salt Creek, construction is along Saylor, Adams Street between Saylor and Berkley Avenue, and Berkley between Adams and Madison Street. It will continue west on Madison, extending beyond the end of the street to Salt Creek. The construction will continue west of Salt Creek, mostly through wooded or cleared areas, and will run north to the Elmhurst Water Reclamation Facility.

How will the construction impact traffic?

Construction along Adams Street will include pavement resurfacing of the full street and will result in temporary road closures this fall. Detour routes will be posted during the temporary closures. Construction on Berkley and Madison (spring 2015) will require disturbance to the roadway and may result in road closures.

How will construction impact areas near Salt Creek?

Trenchless construction methods will be utilized wherever possible to minimize disturbance to the Salt Creek ecosystem, and the construction will not disturb the creek itself. There will be minimal clearing of vegetation on the east side of the creek that will be necessary for construction and should impact an area of less than one thousand square feet. Once construction is completed, vegetation will be restored, as will any disturbance to the Salt Creek Trail. Construction on the west side of the creek will involve little or no clearing of vegetation, and a large area which had previously been cleared will, in conjunction with this project, be restored to its natural, riparian state following construction.

Will the noise wake me up in the morning or keep me up at night?

Construction crews may not start work earlier than 7 a.m. and may not work past 6 p.m.



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<u>City</u> of Elmhurst

Wild Meadows Trace Project Fact Sheet



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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.



Conceptual Solution

The most cost-effective solution identified to reduce flooding is the creation of flood storage in existing open spaces throughout the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Park District, including Wild Meadows Trace. The creation of flood storage at this facility would benefit several homes in the Seminole Avenue/Cottage Hill Avenue study area.

Project Details

Creating flood storage in the open space area of Wild Meadows Trace would significantly reduce the risk of flooding for the Seminole Avenue/Cottage Hill Avenue flood problem area.

Key Benefits and Facts

This project would provide flood-reduction benefits to 4 homes in a 100-year design storm event. Approximately 3 acre-feet of flood storage can be provided in the open space area of Wild Meadows Trace adjacent to the Illinois Prairie Path. The conceptual project cost is \$0.42 million and the construction timeline is estimated at approximately six months.

Project Description

The goal of this project is to provide a location to safely hold stormwater without disrupting the existing recreational uses of the site. As seen in the picture at the top, conceptual facility improvement plans were developed with the intent of maintaining the existing open space area of the park, but would include a new bike path connection and the area would also be enhanced with several newly planted trees.



Inundation Area

To minimize the impacts on the usability of the site, stormwater would not be diverted into the site unless the street ponding along Seminole Avenue becomes so severe that it overtops the curb and enters the proposed flood storage area to the south. Less frequent, non-flood causing events would not impact the site, as stormwater would bypass the area and drain to the existing storm sewer system. For more significant storm events, stormwater would be held temporarily at the site and then drain out by gravity to the existing storm sewer system, with a total inundation period of less than 24 hours.

Project Background

York Community High School Project Fact Sheet



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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 Community Unit School District 205, including the open space areas adjacent to York Community High School. The creation of flood storage in this location would benefit many homes in the adjacent neighborhoods (Collegeview) that experience flooding during significant storm events.



Conceptual Solution

Project Details

The creation of flood storage in the open space areas adjacent to York Community High School in conjunction with the construction of relief sewers would significantly reduce the risk of flooding for the homes in the Collegeview flood problem area in Elmhurst.

Key Benefits and Facts

This project would provide flood-reduction benefits to the 17 homes that would currently flood during a 100-year design storm event (17 homes were also shown to be impacted by the April 2013 storm event). The conceptual project cost for the construction of the relief sewer/flood storage is \$3.34 million and the construction timeline is estimated between 12 and 18 months.

Project Description

The goal of this project is to provide a location to safely hold stormwater while maintaining the existing recreational uses of the school site. Based on the concept-level drainage improvements shown at the top, conceptual facility improvement plans will be developed with the intent of maintaining the existing soccer field/track and field facilities on these sites.



April 2013 Inundation Area

During significant storm events, pipes would divert water away from the flood-prone areas and convey it into the flood storage areas on the York Community High School property. The facilities would be 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. The total 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 west. This maintains the current drainage patterns in this area and protects the buildings on the school property from flooding.

Yorkfield Subdivision Project Fact Sheet



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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 drainage for Yorkfield Subdivision is directed toward the existing detention basin located south of Harrison Street. By increasing the storage capacity of the existing detention basin, it would benefit several homes in this area.



Conceptual Solution

Project Details

Creating additional flood storage in the existing detention basin located south of Harrison Street, in conjunction with the construction of a relief sewer, would significantly reduce the risk of flooding for homes in Yorkfield Subdivision.

Key Benefits and Facts

This project would provide flood-reduction benefits to 11 homes in a 100year design storm event. Approximately 5 acre-feet of additional flood storage can be created in the existing detention basin at a conceptual cost of \$2.1 million; the construction timeline is estimated at approximately six months.

Project Description

The existing detention basin is a dry-bottomed facility with a capacity of approximately 8 acre-feet. During small storm events, a 1-cfs capacity pump station is utilized to drain the detention basin but during more significant storm events when the level of the basin rises, an overflow grate structure drains the basin by gravity to the pipe network to the south.



Inundation Area

The goal of this project is to improve the function of the existing drainage system by increasing both the capacity of the existing pipe system and the capacity of the existing detention basin. The proposed project involves the construction of a 36-inch diameter relief sewer from the low spot on Yorkfield Avenue to the Harrison Street detention basin. By replacing portions of the detention basin side slopes with retaining walls and excavating deeper, the storage volume of the facility can be increased by approximately 5 acre-feet. Since the existing detention basin relies on a pump station for dewatering, the deeper excavation will not change the outlet configuration of the facility. These improvements provide a 100-year level of protection for the homes within Yorkfield Subdivision.