

The City of Portsmouth Mound Park CDBG Sidewalk, Fire Hydrant, Rain Garden, and Sewer Project Portsmouth, Ohio

Project Description:

In 2011, The City of Portsmouth obtained a CDBG to revitalize The Mound Park Area. The sidewalks and handicap ramps in this area were not only becoming a hazard to the community but a liability to the city. Along with the sidewalks and ramps, the Mound Park Area was experiencing excessive ponding during prolonged rain events. Howerton Engineering & Surveying evaluated the current site and spoke with city officials to develop a plan to alleviate the drainage issues as well as improve the way of life for the community.

Phase 1:

First phase was to obtain all the necessary field data to evaluate the current conditions in order to best address them. A full topographic survey of the area was performed to review the current infrastructures as the terrain for drainage analysis. The next step was to evaluate the current sidewalks and ramps to determine their current conditions and to develop a ranking of which would be replaced.

Phase 2:

In order to properly drain the surface water from that area, two catch basins were installed on opposite sides of Hutchins Street. Over 250 LF of 18" ADS N-12 storm pipe along with a new manhole was designed to tie the proposed storm water structures into the existing storm sewer system. A Rain Garden was also designed to be placed in the park to catch the surface water from Grant & Hutchins Street. A Rain Garden was designed to tie into the existing storm sewer by designing over 70 LF of ADS N-12 storm pipe along with 2 new manholes. The Rain Garden, or Bio-Retention area, is a manmade way to keep stormwater from running down the street into storm drains, taking toxins with it into our lakes, streams, and rivers. A Rain Garden captures and absorbs stormwater, and removes toxins in the stormwater runoff.

The chosen sidewalks and ramps were then designed based on Ohio Department of Transportation Standards. Using 2011 AutoCAD Civil 3D, a terrain surface was created of the existing surface. The ramps were then designed based off the existing terrain to meet ODOT standard for slope percentages. The ramps were all individually designed and in places of severe deterioration new curb and gutter was installed along the corner and up to 20' past the proposed ramp. Three new fire hydrants were installed in the area based off recommendations from the city's water and fire department.

Phase 3:

The final phase of this project included: construction bidding assistance, construction administration, and construction inspection. Howerton Engineering & Surveying prepared the construction bidding package including: the bid advertisement, bid form, requirements from The C.D.C. of Ohio, requirements to perform work for The City of Portsmouth, as well as performing the post bidding review and analysis. As part of the project, construction meetings were frequently held to resolve any conflicts that may occur, check the status of the project, and discuss the next steps of construction. Howerton Engineering & Surveying provided a residential project inspector to be present on site during all aspects of construction. His duties were to ensure the project's contractor followed the plans as they were designed along with documenting daily activity in his report and with construction photos.

Client/Location

The City of Portsmouth
728 2nd Street
Portsmouth, OH 45662
740-354-8807

Client Reference

Sam Sutherland
City Manager
City of Portsmouth
740-354-8807

Project Status

Complete

Dates of Service

Design – 2011
Construction - 2011

Special Features

- Site Design
- Utility Location
- Construction Services
- Utility Design
- Project Coordination
- CDBG
- Construction Inspection
- Rain Garden Design
- ADA Ramps
- Stormwater Design
- ADA Sidewalk Design

**HOWERTON
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