Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

June 17, 2020

Limited Environmental Review and Finding of No Significant Impact

City of Columbus – Franklin County
Blueprint Linden GI - Oakland Park/Medina
Loan number: CS390274-0279

The attached Limited Environmental Review (LER) is for a stormwater management project in Columbus which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Revolving Loan Account (WPCLF) below-market interest rate revolving loan program. The LER describes the project, its costs, and expected environmental benefits. Making available this LER fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WPCLF program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. This project's relatively narrow scope and lack of environmental impacts qualifies it for the LER rather than a more comprehensive Environmental Assessment. More information can be obtained by calling or writing the person named at the end of the attached LER.

Upon issuance of this Finding of No Significant Impact (FNSI) determination, award of funds may proceed without further environmental review or public comment unless new information shows that environmental conditions of the proposed project have changed significantly.

Sincerely,

Jonathan Bernstein

Jonathan Bernstein, Assistant Chief
Division of Environmental and Financial Assistance

Attachment

LIMITED ENVIRONMENTAL REVIEW

Project Identification

Project: City of Columbus Blueprint Linden GI - Oakland Park/Medina

Applicant: Tracie Davies, Director
Columbus Department of Public Utilities
910 Dublin Road-4th Floor
Columbus, Ohio 43215

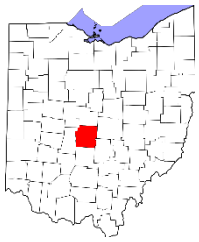

Figure 1. Franklin County

Loan Number: CS390274-0279

Project Summary

The City of Columbus in Franklin County (Figure 1) is requesting a $2,155,000 low-interest loan from the Water Pollution Control Loan Fund (WPCLF) to construct green infrastructure practices as part of an integrated plan to address sanitary sewer overflows and water-in-basement problems.

History & Existing Conditions

The City of Columbus submitted its wet weather management plan (WWMP) to Ohio EPA in 2005 to outline how the City planned to meet the compliance criteria established within their U.S. EPA consent decree. The WWMP contained strategies to address the sewer overflows within their sanitary sewer and combined sewer systems. This plan consisted of gray solutions only, including building 28 miles of sewer tunnels and upsizing, lining, and replacing pipes, among others. Due to the high cost of gray improvements, the City explored other alternatives. In 2012, with Ohio EPA approval, the Columbus Division of Sewerage and Drainage (DOSD) developed Blueprint Columbus as its integrated planning approach to study and incorporate green infrastructure (GI) technologies into the WWMP.

Blueprint Columbus consists of 17 study areas, each roughly 1,000 acres in size. Every study area is broken into four to five project areas. Blueprint Linden is one of those 17 study areas and is comprised of four separate and distinct project areas (Hudson/McGuffey, Oakland Park/Medina, Agler/Berrell, and Artane/Parkwood). Blueprint Linden is roughly bounded to the north by Oakland Park Avenue, Berrell Avenue and Parkwood Avenue to the east, East Hudson Street to the south, and McGuffey Road to the west (Figure 2).

Blueprint Linden's study area utility infrastructure is heavily taxed during wet weather events. With eight designed sewer relief (DSR) points over 850 acres (Figure 3), Linden is impacted by sanitary sewer overflows (SSO) on a regular basis. DSR 305 (at East Lakeview and Cleveland Avenue) is the epicenter of the City's s activity and activated nine times in 2012. Since 2005, there have been a total of 917 WIB complaints within the Linden area. DOSD maintenance staff has indicated that few WIB complaints are due to upstream manhole surcharges. Most complaints are attributed to localized blockages. Sewers in the Linden project area are regularly reported to contain heavy debris, grease, grit, and gravel, owing to the age of the Linden area infrastructure and inflow and infiltration (I/I).

Project Description

GI practices were sited and designed to offset the additional baseline flows and to provide water quality treatment for the system. The City standard for water quantity control requires the proposed scenario to provide equal or less total maximum flow and ponding depths than the existing scenario for a 5-year storm. The water quality standard for the project is to provide treatment to 20 percent of the water volume for the controllable project area over a typical year. The controllable project area includes the total area minus commercial parcels and areas that do not flow to the street. Using the water quality calculation, it was determined that approximately 0.723 acre-feet of GI would be required to provide treatment to 20 percent of the total controllable stormwater volume.

GI practices, including bioswales, bioretention basins, pervious pavement, filter strips, pervious sidewalks, bump out and bump in rain gardens, enhanced tree pits and modular suspended pavement systems, were reviewed with applicability to each potential GI site within the project area. Initial GI was sited, designed, and modeled in three levels. The first level (Regional) included three large GI bioretention basins proposed for the existing green space within Melrose Avenue and Dresden Street, Dresden Park, and Kenlawn Park (Figures 4, 5, 6). The next level (Tier 1) is made up of rights-of-way (ROW) rain gardens located in tributary areas near points of interest (POIs). The third level (Tier 2) included additional ROW GI areas throughout the project area (Figure 2).

Implementation

The City of Columbus is requesting a $2,155,000 low-interest loan from the WPCLF to construct green infrastructure practices. Columbus qualifies for the standard low-interest loan rate of 1.12% which will save them $484,875 compared to the market rate, which is currently at 2.37%.

The median household income (MHI) of Columbus is $44,774. The projected average monthly residential user rate is $59.25 or $711/year which is 1.6% of the MHI and is considered affordable.

Public Participation

The City had public meetings with residents who will have GI in front of their houses. Construction barrels were placed at the proposed GI location to clearly mark the bump outs and solicited comments. All the rain gardens and bump outs that received concerns have been either removed or reduced in size.

The City had meetings with the design consultants to enhance the aesthetic aspects of the rain gardens, including replacing poured concrete walls with stone blocked walls and adding winter interest plants. The City is also working with residents to select their preferred plants.

All GI locations (bump outs and behind-the-curb) were spray painted and a yellow sign with contact info) was installed at GI locations.

There were four presentations to the North Linden Area Commission about this project during the design period. Information is also available on the City's Facebook neighborhood discussion forums.

The City will also hold pre-construction meetings, which provide another touch point with the community to manage expectations regarding schedules and impact of work.

Ohio EPA is not aware of any significant public concern about this project. Columbus has worked well with residents to address any preliminary concerns.

As part of its State Environmental Review Process, Ohio EPA's Division of Environmental and Financial Assistance (DEFA) will post this Limited Environmental Review (LER) and Finding of No Significant Impact to its web page located at http://epa.ohio.gov/defa/ofa.aspx.

Conclusion

The proposed project meets the project type criteria for a Limited Environmental Review (LER); namely, it is an action within an existing public wastewater collection system which involves improvements to stormwater infrastructure. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

Will have no significant environmental effect and will require no specific impact mitigation. Will have no effect on high-value environmental resources because work will be in previously disturbed areas in road rights-of-way and in residential areas that have been previously disturbed.

Is cost-effective because GI practices are an effective and less expensive way to address stormwater than gray infrastructure practices.

Is not a controversial action because the City is addressing a stormwater problem that must be addressed while working closely with the residents to make sure they are satisfied with the design of the project.

Does not create a new, or relocate an existing discharge to surface or ground waters, and will not result in substantial increases in the volume of discharge or the loading of pollutants from an existing source or from new facilities to receiving waters because this project does not include a new discharge point and will reduce the volume of stormwater discharge by assimilating some of the stormwater in GI practices.

Will not provide capacity to serve a population substantially greater than the existing population because this project deals with existing stormwater issues.

Contact information

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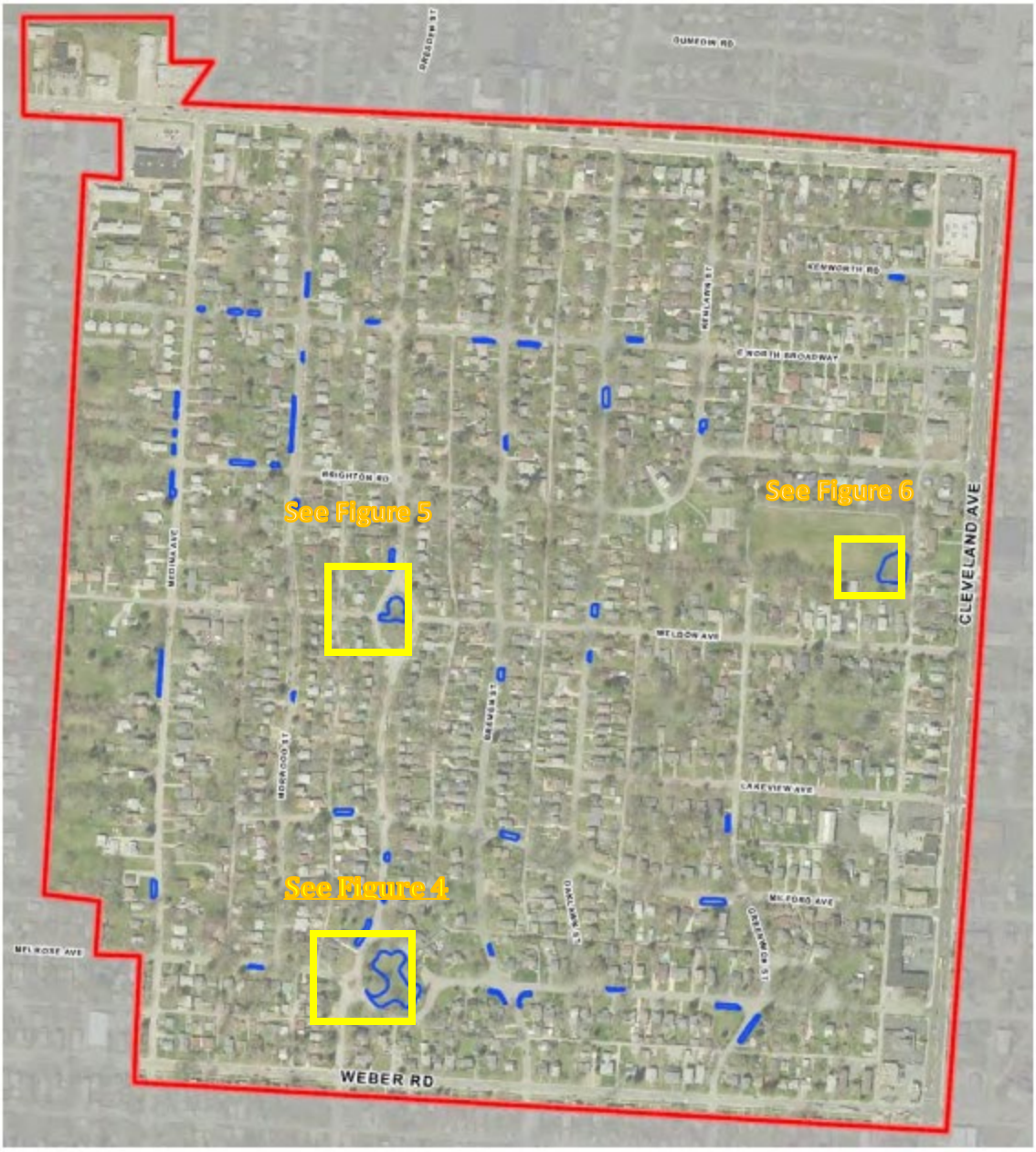

Figure 2. Location of green infrastructure practices (blue areas) and bioretention basins (yellow squares)

Figure 3. Location of DSRs in the project area

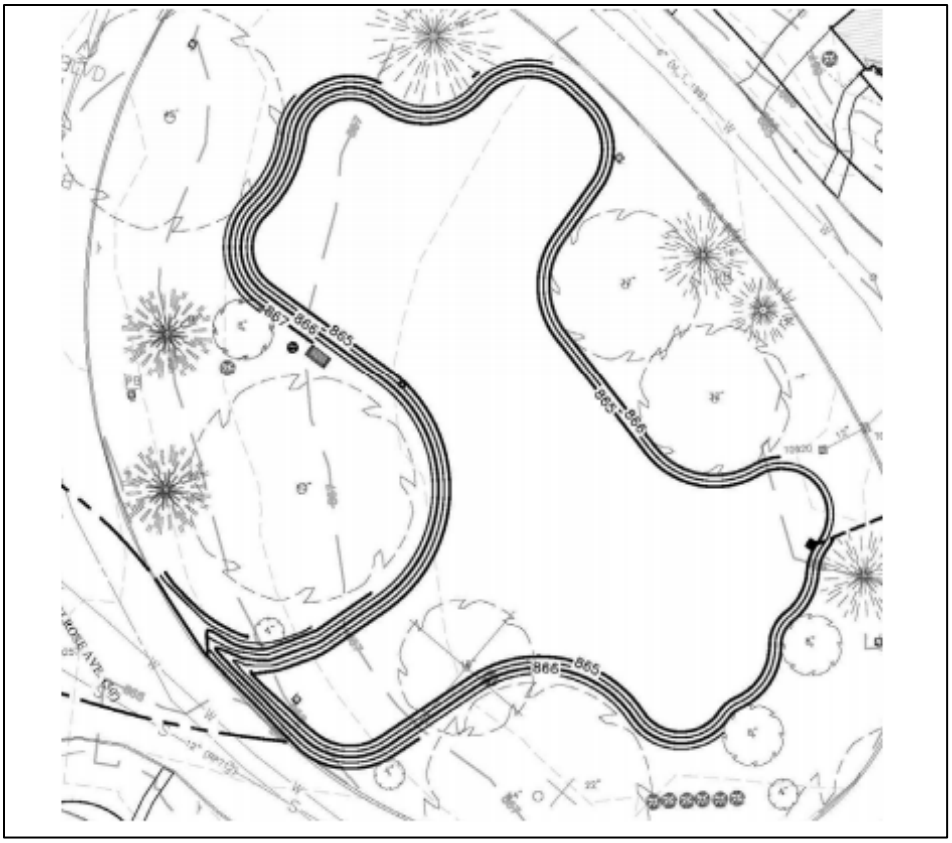

Figure 4. Melrose Avenue and Dresden Street Regional Bioretention Basin

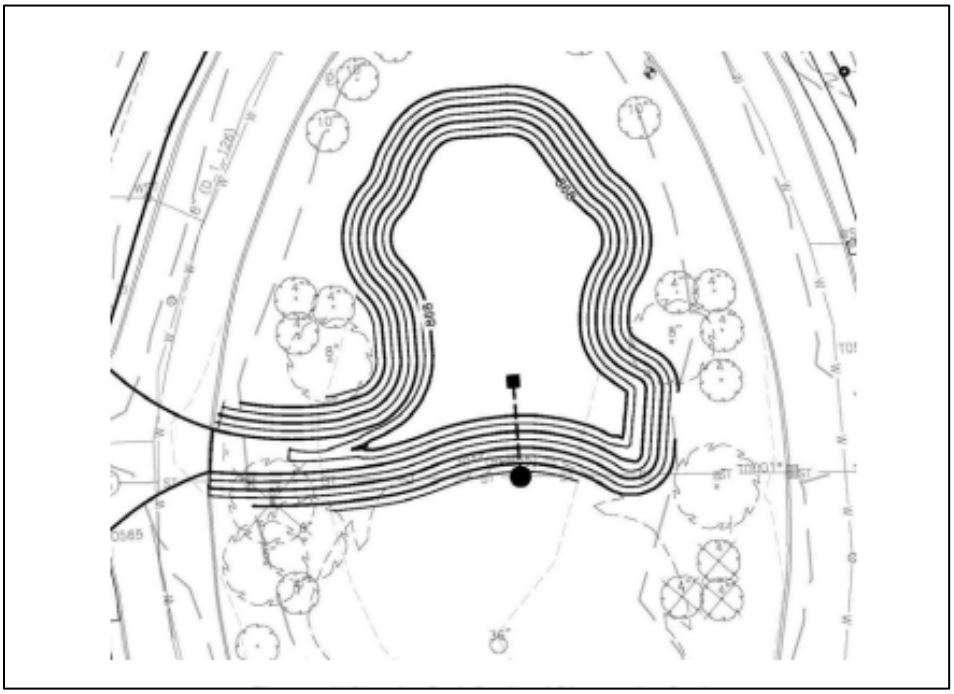

Figure 5. Dresden Park Bioretention Basin

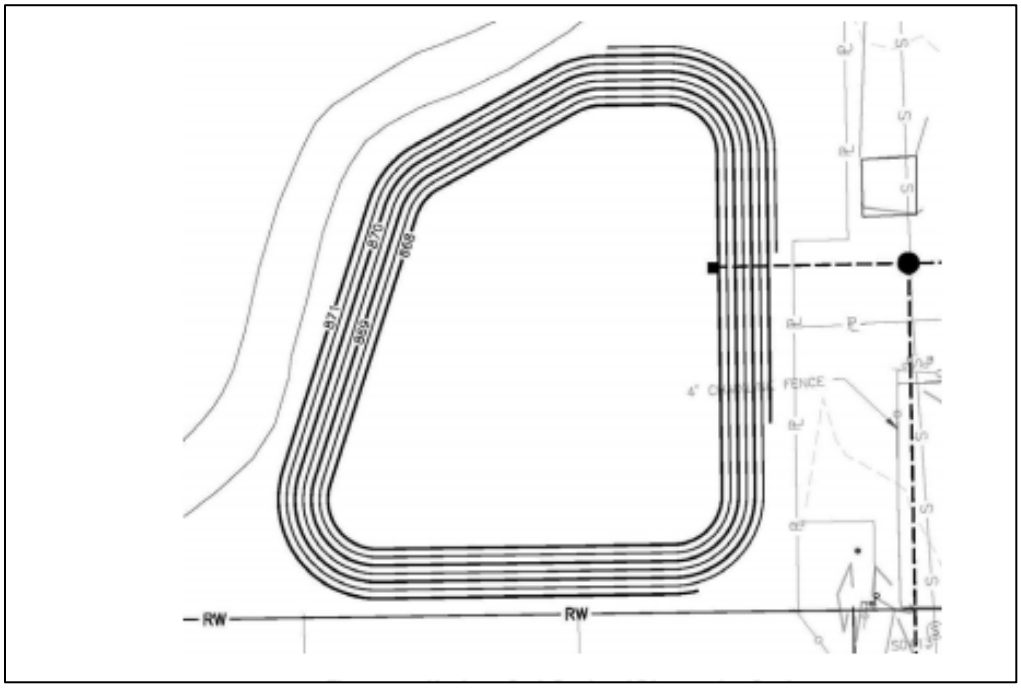

Figure 6. Kenlawn Park Regional Bioretention Basin