

URBANA & CHAMPAIGN SANITARY DISTRICT
2ND ST. PUMP STATION PUBLIC HEARING
Thursday, January 8, 2015 - 10:00 a.m.

1. Call of Meeting to Order

2. Presenting of the Preliminary Environmental Impact Determination (PEID)

Urbana & Champaign Sanitary District, Urbana, Illinois intends to upgrade their sanitary collection system with a new 2nd St. Pump Station and Force Main and South 1st St. Pump Station upgrades. The proposed financing of the project is through the Illinois Water Pollution Control Revolving Loan Program. As a condition of the proposed funding, a Project Summary and Preliminary Environmental Impact Determination (PEID) has been prepared and is available for viewing and comment.

The PEID report can be viewed at the Urbana & Champaign Sanitary District office, 1100 E. University Ave., Urbana, IL. 61803 during normal business hours, as well as Fehr Graham, 304 N. Neil St., Champaign, IL. 61824.

A Public Hearing regarding the PEID report will be held on Thursday, January 8, 2015, 10:00 a.m. at the Urbana & Champaign Sanitary District, Station R Boardroom, 1000 E. University Ave., Urbana, IL. 61802.

Public comments regarding the PEID report can be directed to the Urbana & Champaign Sanitary District Clerk or directly to Donna Bornhoff at Infrastructure Financial Assistance Section, Illinois EPA, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, IL. 62794-9276.

3. Opportunity for Public Comment

4. Adjournment

Station R Boardroom, NE Plant, 1100 E. University Ave., Urbana



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

Project Summary and Preliminary Environmental Impacts Determination

Date: DEC 12 2014

Loan Applicant: Urbana & Champaign Sanitary District, IEPA Loan Project Number: L175293

To all interested persons:

Section 365.530 of the Illinois Procedures for Issuing Loans From the Water Pollution Control Loan Program requires that the Illinois Environmental Protection Agency (IEPA) conduct an assessment of the environmental impacts of proposed wastewater projects to be funded with loans. This review is carried out in conjunction with the State's review of the applicant's facilities plan. Prior to final approval of the plan, the public's comments are sought regarding environmental impacts of the proposed project.

The IEPA has reviewed the facilities plan and has determined the project to be technically sound and cost-effective. Unless new information gained from the public causes a reconsideration, the Agency will approve the facilities plan at the close of the public comment period.

The applicant will make the attached Project Summary and Preliminary Environmental Impacts Determination (PEID) available for public inspection and must conduct a hearing within 60 days of receipt on both the PEID and project planning, providing advertisement of the hearing at least 10 days in advance. A comment period of at least 10 days shall be provided after the hearing date in which written comments may be provided to the loan applicant or directly to the IEPA contact person identified in the attached document. Upon final approval of this plan, the project priority score may be modified to reflect new information provided in the planning in accordance with the provisions of Sections 366.105, 366.106, and 366.107 of the Procedures and Requirements for Determining Loan Priorities for Municipal Wastewater Treatment Works. The project described in the facilities plan is classified as Service Continuation – Sewer Rehabilitation under the Illinois Project Priority System.

For information purposes only, a copy of this document is being provided to your local newspaper of record.

Your interest and participation in this process are appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Bingenheimer".

Gary Bingenheimer, Acting Manager
Infrastructure Financial Assistance Section
Bureau of Water

GB:DWB:Tm14112501

Project Summary and Environmental Assessment

Project Identification

Urbana & Champaign Sanitary District
P.O. Box 669
Urbana, Illinois 61803-0669

Champaign County

Existing Conditions / Project Justification

The proposed project area is located near the junction of Interstate Routes 57 and 72 in central Champaign County. The Urbana & Champaign Sanitary District (UCSD, or District) provides wastewater treatment service for the City of Champaign, the City of Urbana, the Village of Savoy, the University of Illinois campus, the Village of Bondville and several unincorporated subdivisions. The District collection system includes over 87 miles of interceptor mains, 26 pump stations with two drainage systems. This area is served by two drainage systems with treatment provided by the original Northeast Wastewater Treatment Plant (NEP) and the Southwest Water Treatment Plant (SWP) that was constructed in 1970. A population of 76,672 with additional 44,520 University of Illinois students is served by the NEP and 59,356 people are served by the SWP. The NEP, rated at 17.3 million gallons per day (MGD) Daily Average Flow (DAF) and 34.6 MGD Daily Maximum Flow (DMF) with an additional 22.75 MGD excess flow capacity, utilizes primary clarification, activated sludge, biological trickling filter, secondary clarification, nitrification towers, tertiary filtration, seasonal disinfection, sludge process, and excess flow treatment with discharge into the Saline Branch Drainage Ditch, tributary to the Vermillion River. This treatment plant services all of Urbana, the University of Illinois campus, as well as northern, eastern and downtown Champaign. The SWP, rated at 7.98 MGD DAF and 17.25 MGD DMF with excess flow capacity of an additional 28.63 MGD, incorporates activated sludge with biological phosphorous removal, clarification, nitrification towers, tertiary filtration and excess flow treatment with discharge into the Copper Slough, tributary to the Kaskaskia River. The SWP services the Village of Savoy; the Village of Bondville; and the south and western areas of the City of Champaign.

The Northeast service area extends beyond its natural drainage area as this was the only treatment plant prior to 1970 with several interceptors being extended to accommodate growth over time. During rain events, these interceptors, currently tributary to the NEP, are flowing near capacity. Sanitary sewer overflows have occurred, predominantly near the NEP where the interceptors are the most loaded, flattest sloped, and shallowest, leading to an Illinois Environmental Protection Agency (IEPA) Compliance Commitment Agreement pursuant to Violation Notice W-2013-50110 for the 1956 Interceptor (year built). Within this area, north Champaign, downtown Champaign and the campus area have all experienced large growth and changes to density in the form of high-rise office and residential building. Several additional high rise developments are currently in planning now throughout the campus area. Three interceptors, generally flowing from west to east, converge near 2nd Street and Springfield Avenue. A fourth interceptor is about ¼ mile away with a crossover pipe that will allow diversion of wastewater into this same set of three interceptors. A relief sewer system to reduce the number of Sanitary Sewer Overflows (SSO) from the 1956 interceptor and address long-term interceptor capacity concerns has been proposed. Please see the attached map for project location.

Discussion of Alternatives

Taking no action is not an option due to the Compliance Commitment Agreement with the IEPA. Sanitary Sewer Overflows would likely become more frequent and planned developments could face the possibility of being denied for connection as capacity would become limited. Four options to address these issues were analyzed.

Option 1 proposes a comprehensive solution to construct a pump station at 2nd Street and Springfield Avenue to redirect flows to the SW service area system. This pumping station provides the advantage of having flow control and variable pumping available, as well as shallower transport main. The 2nd Street Pump Station, sized at a maximum 6 MGD, would have controlled connections from each of the three interceptors, giving the District control over flow into the pump station as well as SCADA-based interlocks to prevent overloading of the South 1st Street Pump Station or anything downstream. The existing South 1st Street Pump Station has been determined to be the best available receiving sewer for any redirected flows from the NE service area. The construction of a 20-inch diameter force main and gravity sewer to adequately meet the hydraulics of the approximately 15,000 feet route between the proposed 2nd Street Pump Station and the existing South 1st Street Pump Station will be necessary. This pump station has the capacity to handle the additional flow but the pumps will need to be upgraded to handle 8 MGD. The redirected flow will then be treated at the SWP which has adequate capacity to handle the increased flow.

Option 2 involves the construction of a new 27-inch interceptor that would run parallel to the existing four interceptors or a smaller, piecemeal solution that could relieve the parts of interceptor system. While this plan could relieve some of the flow from the existing four interceptor sewers, it would not directly reduce the sewer overflow issues in the 1956 interceptor or address added capacity issues for peak flow at the NEP. Construction of a new interceptor sewer within the developed, urban route of the University campus and Urbana would be difficult and expensive. Additionally, the new interceptor would also send more peak flow to the NEP faster than the current system, making it increasingly difficult to move the flow through the plant without upsetting the processes.

Option 3 proposes to construct a 20-inch interceptor parallel to the 1956 interceptor. While this would relieve the 1956 interceptor, it would not provide relief or extra capacity for the other 3 interceptors. Additionally, a relief interceptor would also send more peak flow to the NEP faster than the current system, making it increasingly difficult to move the flow through the plant without upsetting the processes.

Option 4 would construct an interceptor at the far west upstream end of the 1956 interceptor. A new pump station and 12-inch force main near the southeast corner of the Kraft facility could pump the 1.0 MGD west to an existing 27-inch interceptor which is tributary to the SWP. While this option is a good alternative for the district to pursue as necessary to divert service area flow, a larger volume of flow, collectively out of the four campus area interceptors, is needed to both relieve the system and provide long-term relief for the high density growth.

Long-term, it is best to send increased flow to the SWP. Expansion of the NEP would be cost and space prohibitive while there is ample land available at the SWP for future needs. After analyzing all options, the District believes that Option 1, consisting of a relief sewer and new 2nd street pump station, best fits their immediate and long-term needs.

Environmental Issues Relating To Alternative Selection

This project is expected to have a positive affect on the water quality due to the elimination of SSOs. Normal levels of construction related noise, dust, and equipment emissions are expected. All construction site activities will follow a storm water management plan using best available methods for reducing erosion and runoff from the construction site. Environmental impacts should be minimal due to the urban nature of this project.

Consultation with the Illinois Department of Natural Resources indicated that while protected resources may be in the vicinity of the proposed project, it was concluded that adverse effects are unlikely. Neither disturbance to any endangered or threatened species of plants or animals nor impairment to natural areas or wetlands is anticipated.

This project should have no effect on any historic, architectural or archaeological resources and review by the Illinois Historic Preservation Agency has been requested.

Proposed Project

The project consists of the following: the construction of the 2nd Street Pump Station, rated at 6 MGD with 3 pumps rated at 3 MGD each; the installation of approximately 8,000 linear (l.f.) feet of 20-inch force main and 7,000 l.f. of 27-inch sanitary sewer; and the upgrade of the South 1st Street Pump Station with three pumps each rated at 3.5 MGD.

Please see below for a breakdown of project costs:

Projected Costs

Construction	\$ 6,654,000
Design Engineering	\$ 457,463
Construction Engineering	\$ 457,463
Contingency	\$ 665,399
Total	\$ 8,234,325

Implementation

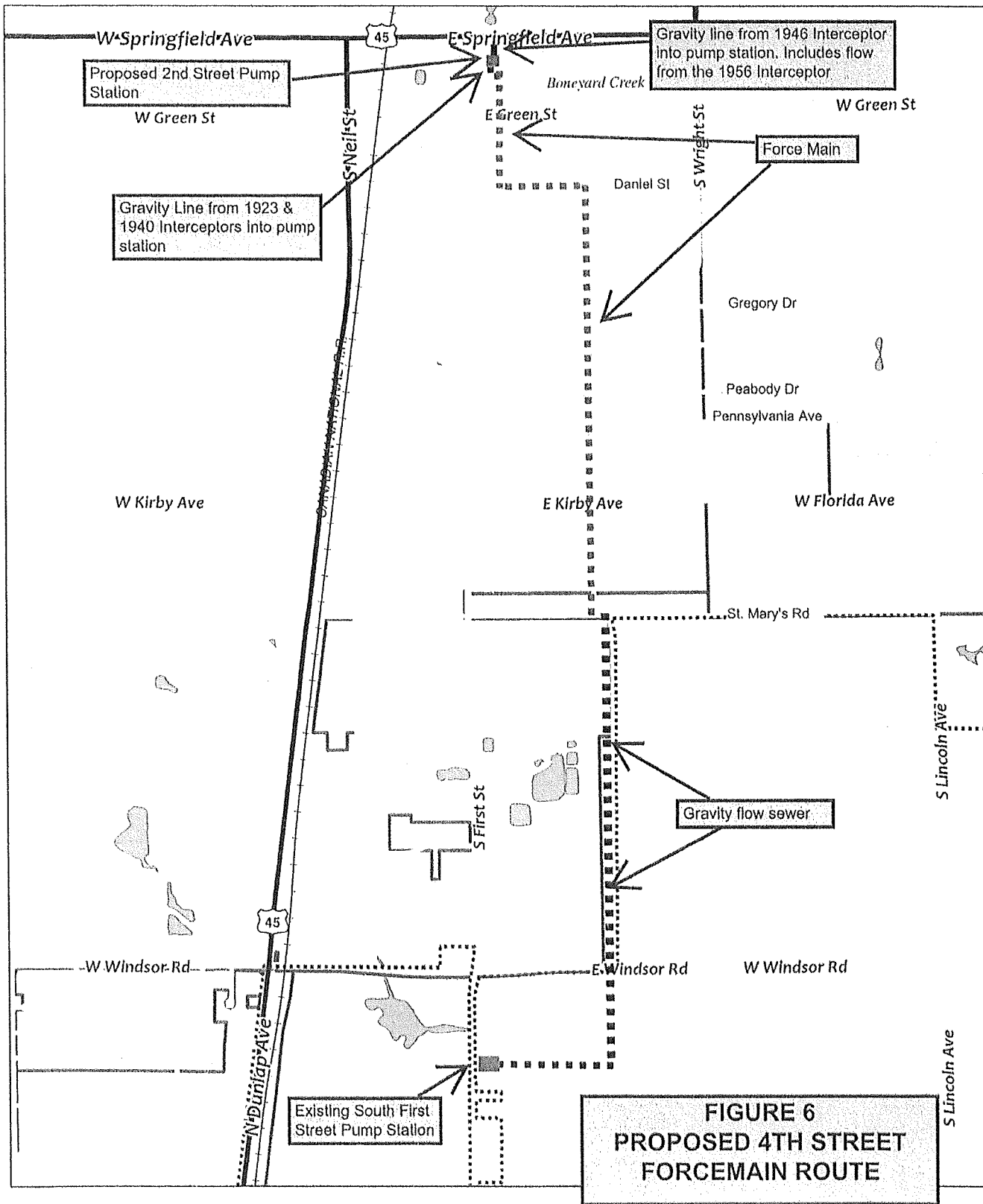
It is necessary that on-campus construction of sewers generally be limited to the summer window of May 20th to August 20th; therefore, the proposed 2nd Street Pump Station project is scheduled for initiation of construction in May of 2015 with final project close out November 2016. The District proposes to fund this project with a \$8,234,325 loan through the Illinois Environmental Protection Agency (IEPA) Loan Program. For a 20-year loan of \$8,234,325, at the current interest rate of 2.21%, an annual loan repayment of approximately \$511,621 would be required. Repayment revenue will be generated from user fees. The existing monthly user charge, based on average monthly water usage of 8 units or 5,984 gallons per customer, is \$22.22 that includes a city sewer charge and a billing fee. An annual rate adjustment of 3% is already in place for both May 1, 2015 and May 1, 2016. This would produce a monthly average user fee of \$22.63 for the typical customer in 2015. No further increase has been proposed to fund this project specifically. The average annual user charge of \$271.56 is approximately 0.60% of the annual median household income (MHI) of \$45,088 for Champaign County. This average annual user fee is well within the Agency guidelines of 2% of MHI for affordability. The Agency has determined that the proposed project appears to be an appropriate means to reduce SSOs and address long-term interceptor capacity concerns.

Public Participation

Public comments are invited on this proposed project.

For further information contact:

Donna Bornhoff, Project Manager
Illinois Environmental Protection Agency
Infrastructure Financial Assistance Section
Bureau of Water
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
217/782-2027

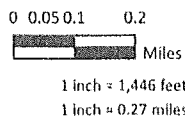


**FIGURE 6
PROPOSED 4TH STREET
FORCEMAIN ROUTE**

DISCLAIMER:

This map was prepared by the Champaign County GIS Consortium (CGISC) using the best available data. This map and its underlying data is intended to be used as a general index to land related information and is not intended for detailed, site-specific analysis. CGISC does not warrant or guarantee the accuracy of this information for any purpose.

For questions regarding GIS data, information about CGISC, or to report a mapping error, please contact CGISC at: 217-819-3555.



Map Provided by:
The Champaign County GIS Consortium (CGISC)