



**CITY OF URBANA, ILLINOIS  
DEPARTMENT OF PUBLIC WORKS**

**ENGINEERING DIVISION**

**MEMORANDUM**

**TO: Mayor Laurel L. Prussing and Members of the City Council**  
**FROM: William R. Gray, Public Works Director**  
**Bradley M. Bennett, Civil Engineer**  
**DATE: January 12, 2009**  
**RE: Vine Street Lift Station Rehabilitation Project**

The storm water pumps at the Vine Street Lift Station were last replaced in 1986 and have reached the end of their 20 year design life. The pump impellers are worn and as a result have reduced the hydraulic capacity of the pumps. Standing water accumulates under the viaduct when rainfall exceeds one half inch per hour.

The pump station structure has experienced significant deterioration as shown on the attached pictures. The concrete around the door, retaining walls, and top of the structure have spalled with broken concrete and reinforcing steel (rebar) visible. Most of the interior hatches, HVAC equipment, lighting, and instrumentation/control are extremely corroded due to the high humidity present inside the pump station. Additionally the electricians have difficulty locating parts for the 20-year old control panel and motor control center. Lead paint and mold present inside the pump station present a safety hazard to Public Works staff that maintain the station. The open discharge flume creates a drowning hazard should a child or other individual enter the discharge flume while the pumps are operating.

The exterior of the station is also a visual eyesore for traffic utilizing Vine Street to access Urbana's downtown.

The pump station rehabilitation project includes the following items:

1. New submersible pumps on a rail system that can be lifted out from the wet well from outside of the pump station. This will make it easier to maintain or repair the pumps.
2. New pump control panel and motor control center mounted outside the pump station to replace the 20-year old existing electronics.
3. Removal of corroded metal hatches, lighting fixtures, HVAC equipment, conduit, mold, lead paint, and control equipment inside of the pump station.
4. Demolition of existing door, overhang, existing pump station roof, top 2 to 3-ft of station walls and retaining walls.

5. The discharge flume will be covered with a combination of metal grating and cast-in-place concrete panel to reduce the public safety threat of an accidental drowning in the flume.
6. Retaining walls and landscaping similar to those east of the underpass will be installed in front of the pump station to create more aesthetic appearance to motorists. A wooden privacy fence will also be constructed to screen the control panel from Vine Street.
6. A 36-inch diameter check-valve will be installed inside the storm sewer on the west side of Vine Street to prevent the Boneyard Creek from back flowing into the underpass.

The initial engineer's estimate for the rehabilitation project was \$200,000 and the 2008-2009 budget line item for this project was based on that estimate. However, the initial engineer's estimate did not include any costs for covering the discharge flume, retaining walls, landscaping, privacy fence, and the 36-inch diameter check valve. Additionally, a structural engineer was retained to review and approve the project drawings and specifications. These additional items resulted in the estimated project costs to be \$240,000.

### **Fiscal Impact**

The Public Works Department requests approval of a budget amendment ordinance of \$40,000 for the Vine Street Lift Station Rehabilitation Project. A copy of the budget amendment ordinance is attached.

There is \$40,000 available from the Tax Increment Financing District 2 Downtown Improvement budget line item that can be used to fund the project.

### **Recommendations**

It is recommended that an Ordinance Revising the Annual Budget Ordinance (Vine Street Lift Station Improvement) be approved.

### Vine Street Lift Station Photos

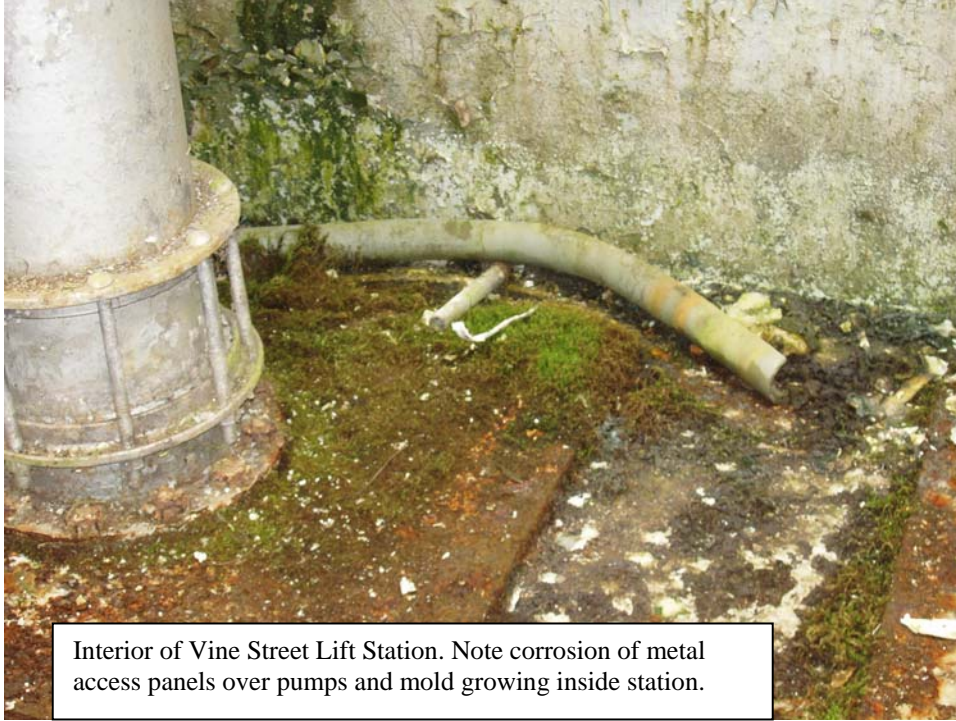


Front of Vine Street Lift Station facing Vine Street. Note deteriorated door, overhang, and retaining walls. Rehabilitation would remove retaining walls, door, and overhang and fill the area with dirt to hide face of lift station. Access would be through the roof.



Interior of Vine Street Lift Station. Note peeling lead paint.

### Vine Street Lift Station Photos

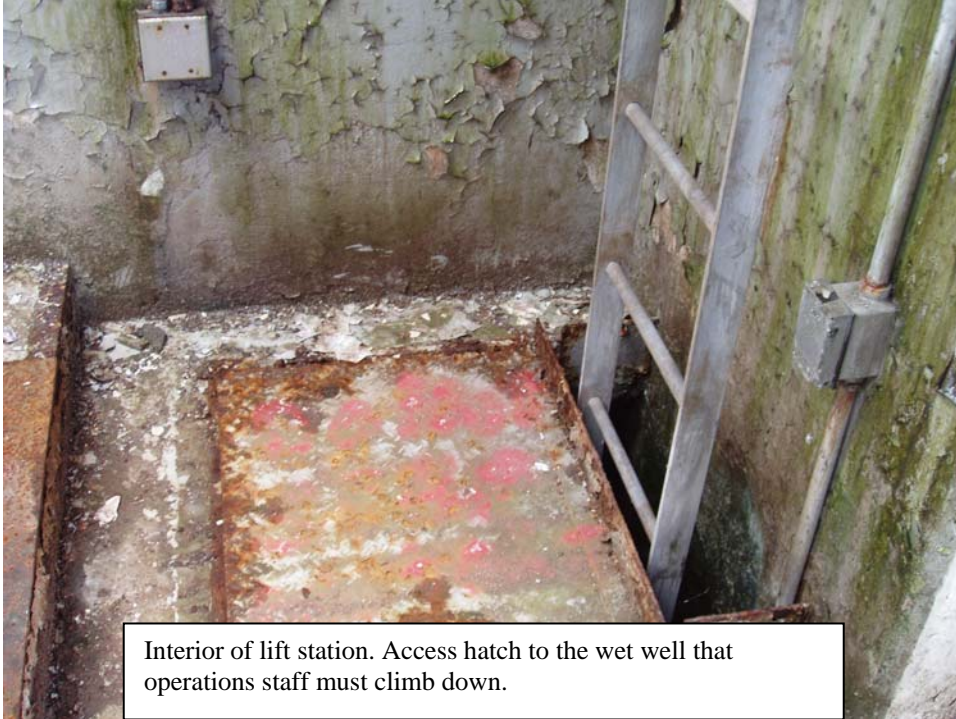


Interior of Vine Street Lift Station. Note corrosion of metal access panels over pumps and mold growing inside station.



Exterior south side of Vine Street Lift Station. Note the spalled concrete and exposed rebar.

### Vine Street Lift Station Photos



Interior of lift station. Access hatch to the wet well that operations staff must climb down.



Open discharge flume that is potential drowning hazard to public.

**ORDINANCE NO. 2009-01-001**

**AN ORDINANCE  
REVISING THE ANNUAL BUDGET ORDINANCE  
(Vine Street Lift Station Improvement)**

WHEREAS, the Annual Budget Ordinance of and for the City of Urbana, Champaign County, Illinois, for the fiscal year beginning July 1, 2008, and ending June 30, 2009, (the "Annual Budget Ordinance") has been duly adopted according to sections 8-2-9.1 et seq. of the Illinois Municipal Code (the "Municipal Code") and Division 2, entitled "Budget", of Article VI, entitled "Finances and Purchases", of Chapter 2, entitled "Administration", of the Code of Ordinances, City of Urbana, Illinois (the "City Code"); and

WHEREAS, the City Council of the said City of Urbana finds it necessary to revise said Annual Budget Ordinance by deleting, adding to, changing or creating sub-classes within object classes and object classes themselves; and

WHEREAS, funds are available to effectuate the purpose of such revision; and

WHEREAS, such revision is not one that may be made by the Budget Director under the authority so delegated to the Budget Director pursuant to section 8-2-9.6 of the Municipal Code and section 2-133 of the City Code.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF URBANA, ILLINOIS, as follows:

Section 1. That the Annual Budget be and the same is hereby revised to provide as follows:

FUND:	Tax Increment Financing District 2	
INCREASE EXPENSE:	Vine Street Lift Station	\$40,000
REDUCE EXPENSE:	Downtown Improvements	\$40,000

Section 2. This Ordinance shall be effective immediately upon passage and approval and shall not be published.

Section 3. This Ordinance is hereby passed by the affirmative vote of two-thirds of the members of the corporate authorities then holding office, the "ayes" and "nays" being called at a regular meeting of said Council.

PASSED by the City Council this \_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_.

AYES:

NAYS:

ABSTAINED:

\_\_\_\_\_  
Phyllis D. Clark, City Clerk

APPROVED by the Mayor this \_\_\_\_\_ day of \_\_\_\_\_,  
\_\_\_\_\_.

\_\_\_\_\_  
Laurel Lunt Prussing, Mayor