

# 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

Gale L. Jamison, Assistant City Engineer

Bradley M. Bennett, Civil Engineer

**DATE:** November 21, 2007

**RE:** Illegal Sewer Connection Policy Discussion (Revisions Highlighted in Yellow)

## **Introduction**

The purpose of this memo is to review the City's policy on illegal sewer connections to the City's Storm Sewer System. The memo will also examine potential alternatives to the City's existing policy on illegal connections in an attempt to ease the financial burden and more equitably distribute the cost for property owners that have to reroute their illegal connections to a sanitary sewer.

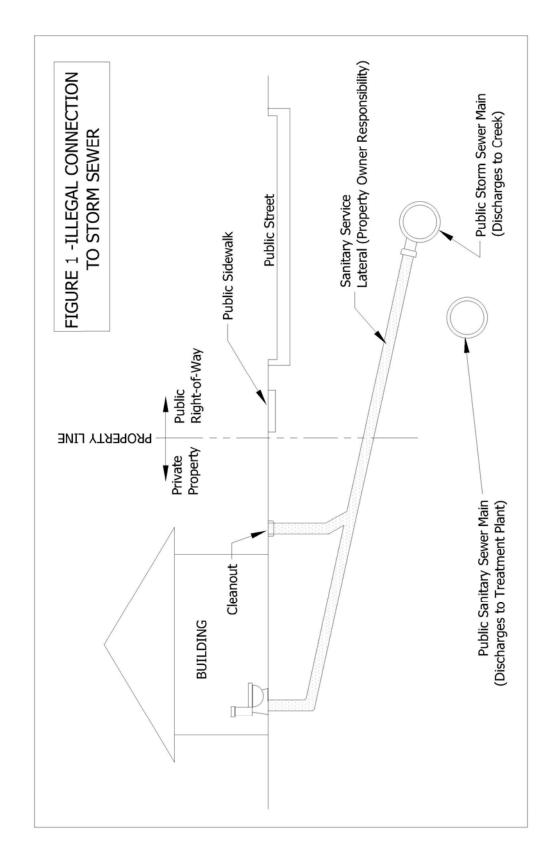
### **Recommended Action**

Public Works staff supports adoption of the illegal connection reimbursement alternative where the City would participate in a percentage of the cost to eliminate the illegal connection. Staff also supports increasing the percentage of the illegal connection reimbursement rather than implementing an interest rate subsidy program. The illegal connection reimbursement program would be implemented immediately and would be retroactive until January 1<sup>st</sup> 2006. Funds from the sewer repair budget would be utilized to finance the reimbursement program until the sewer benefit tax is increased in 2008.

## **Background and Facts**

An illegal sewer connection is the discharge of pollutants or non-storm water materials into a storm sewer system via a pipe or other direct connection. Illegal connections include sanitary sewer service laterals (entire residence's plumbing fixtures) tying into the storm sewer and basement plumbing fixtures (washing machine, toilet, sink, or shower) discharging into the floor drain or sump pump which then discharges into the storm sewer. As a result of these illegal connections, contaminated wastewater enters the City storm sewer system then is discharged directly into local streams and creeks without receiving treatment from a wastewater treatment plant. Illegal connections may be intentional or unknown to the property owner. In some cases the illegal connection has existed since the home was originally constructed and was pre-existing to the current owner.

An illegal connection of a sanitary sewer service lateral is depicted in Figure 1.



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Illegal connections to the storm sewer system are prohibited under Section 24-45 Paragraph (b) of the City Code. Paragraph (b) item 1 states that "the construction, use, maintenance or continued existence of illegal connections to the storm drain system are prohibited". Item 4 of Paragraph (b) requires that "improper connections shall be discontinued or redirected to a sanitary sewer within fourteen (14) calendar days from receipt of notification of the violation from the Public Works Director".

The City's present policy regarding illegal sanitary sewer connections is that the property owner is responsible for the total cost of eliminating the illegal connection. Section 24-38 Paragraph (c) of the City Code for the City's policy on sewer service laterals states that "all costs and expenses incident to the installation, connection, repair, and maintenance of the building sewer shall be borne by the owner, and for such purposes, the owner is granted permission to excavate in the public right of way subject to the regulations of the director of public works".

The cost of eliminating a sanitary sewer service illegal connection is dependant on the laterals depth, length, and surface type that the lateral is located under (asphalt street pavement, concrete sidewalk or driveway, grassed yard, etc.) Illegal connections located under street pavements are typically the most expensive with costs that can exceed \$5,000.

The City of Champaign presently reimburses the property owner 50% of the cost up to \$1,500 for the elimination of an illegal connection or up to \$2,500 if the illegal connection occurs under a brick street. Champaign's policy does not cover basement plumbing fixtures illegally connected to sump pumps or floor drains that discharge into the storm sewer.

Between 2004 and 2007 the City has only identified three sanitary sewer service illegal lateral connections to the storm sewer system. These include 804 South McCullough, 903 South Anderson Street, and 1102 Eastern Drive. Typically only one or two illegal connections are identified in a year.

The Engineering Division recommends that basement plumbing fixtures (toilet, shower, sink, or washing machine) connected to floor drains or sump pumps that discharge to the storm sewer continue to be prohibited from discharging to a public storm sewer and that the cost of compliance continue to be the resident owner's responsibility. Basement plumbing fixtures can be disconnected and eliminated as an alternative to connecting them to the sanitary sewer. Also illegal basement plumbing connections only require plumbing work within the basement.

A sanitary sewer service lateral drains all the plumbing fixtures for a residence so it must be connected to the sanitary sewer. Sanitary sewer service lateral illegal connections require construction work outside the residence and potentially under a City street or sidewalk.

## **Alternatives**

# 1. Illegal Connection Reimbursement Alternative

City would participate in the cost to the property owner to reroute the illegal connection of their sanitary sewer service lateral into the City's sanitary sewer system.

#### 2. No Action Alternative

No modifications to current City policy on sanitary sewer service lateral illegal connections. Property owners are responsible for the entire cost of eliminating an illegal connection.

### **Discussion of Alternatives**

<u>Alternative 1</u> would reimburse property owners for the cost of rerouting their illegal sanitary sewer service lateral connection into the City sanitary sewer. The reimbursement would cover fifty percent of the actual expenses for work performed up to a maximum cost limit of \$4,000. Alternative 1 would require a revision to current City ordinance and policy on illegal connections to the Storm Sewer.

## a. Advantages

 Property owners with illegal sanitary sewer service lateral connections to the City storm sewer system would not have to pay the entire cost of eliminating the illegal connection. Property owner and City would split cost.

#### b. Disadvantages

- City bears a portion of the expense to eliminate the illegal connection.
- Sewer Benefit Tax would have to be increased by an average of 40 cents a year for a property owner that uses 7,000 gallons of water per month to cover the expense of the 50% reimbursement program for illegal sanitary sewer connections. It is estimated that two illegal connection repairs occur on average per year. The annual fiscal impact would be \$8,000 for the 50% reimbursement program.
- Requires additional staff time for Engineering Division to manage illegal connection reimbursement program.
- Property owner must track construction costs and submit bills to the City for reimbursement.

<u>Alternative 2</u> would not modify current City policy on illegal connections. The property owner would be responsible for properly connecting their sanitary sewer service lateral to the City sanitary sewer system.

- a. Advantages
  - No decrease in sewer repair budget.
  - No additional staff or equipment is required.
- b. <u>Disadvantages</u>
  - Property owners bear expense of eliminating illegal connections.

## **Discussion of Interest Subsidy Program**

The Public Works staff evaluated implementing an interest rate subsidy program to assist property owners with reducing the interest rate that they would have to pay of percentage for their illegal connection. The interest rate subsidy program would function by the City buying down the interest rate for a loan that the property owner would take out to complete the sewer lateral repair. Public Works staff are concerned about the following items related to interest rate subsidy program:

- Interest rate subsidy program would only be available for costs associated with pavement removal and replacement due to the lateral repair. Most property owners will want to finance the entire cost of the repair.
- If the interest rate subsidy program is expanded to cover the entire cost of the lateral repair it will create an equity issue for property owners with back lot and side lot sewers. Property owners with lateral under street pavement would receive low interest loans for repairs while those with back lot or side lots would not. Expanding the interest rate subsidy program to cover all sewer lateral repairs would substantially increase costs and require a larger increase in the Sewer Benefit Tax.

In lieu of an interest rate subsidy, it is suggested that an increase in the percentage of the City reimbursement on illegal connection costs be implemented as an alternative to the low interest subsidy program.