

**CITY OF PEORIA, ARIZONA  
COUNCIL COMMUNICATION**

cc: BR  
Amend No. \_\_\_\_\_

Date Prepared: February 13, 2009

Council Meeting Date: February 17, 2009

**TO:** Carl Swenson, City Manager  
**FROM:** Stephen L. Bontrager, Utilities Director   
**PREPARED BY:** Shawn Kreuzwiesner, Utilities Engineering Manager   
**SUBJECT:** Emergency Sewer Repairs - 91<sup>st</sup> and Northern Intersection

**RECOMMENDATION:**

Discussion and possible action to (a) authorize the expenditure of funds in an amount not to exceed \$1,203,435 utilizing Job Order Contract ACON46108 with Quest Civil Constructors for emergency sewer line repairs at the intersection of 91<sup>st</sup> Avenue and Northern Avenue; and (b) authorize a budget transfer in the amount of \$853,988 from the Water contingency account to the Wastewater fund capital account for Northern Avenue and 95<sup>th</sup> Avenue Trunk Sewer Rehabilitation, Capital Improvement Project UT00167.

**SUMMARY:**

An evaluation of the 36-inch and 24-inch diameter sewer lines on Northern Avenue from 99<sup>th</sup> to 83<sup>rd</sup> Avenues and on 95<sup>th</sup> Avenue from Northern to Peoria Avenues has identified a number of deficiencies. A video inspection of the 36-inch sewer line in the intersection of 91<sup>st</sup> and Northern Avenues identified a missing section of pipe located in the northeast corner of the intersection due to severe deterioration. Due to the loss of the pipe, some of the soil collapsed, creating a cavity. A subsequent video inspection of the sewer line identified a second section of missing pipe located near the center of the intersection that also had a cavity in the soil.

Staff had steel plates installed on the pavement above the sewer line to preclude a road collapse and installed traffic controls at the intersection to limit the speed of vehicles in the area. Staff also made contact with Quest Civil Ventures, one of City's existing Job Order Contractors, to start discussing repair strategies.

On the evening of Thursday, February 5, 2009, a void underneath the pavement at the northeast corner of the intersection collapsed, causing a blockage of the 36-inch sewer line. This blockage backed up sewer flows in a 24-inch sewer line running east on Northern Avenue and a 12-inch sewer line running north on 91<sup>st</sup> Avenue. City staff

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- Consent Agenda
- Carry Over to Date: \_\_\_\_\_
- Approved
- Unfinished Business (Date heard previous: \_\_\_\_\_)
- New Business

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Action Date: \_\_\_\_\_

worked with contractors through the night to limit the backup in the sewer lines and to get an emergency pump bypass installed.

On Wednesday, February 12, 2009, the installation of a temporary pump bypass was completed to divert sewer flows around the collapsed section of pipe, allowing repairs to be completed. The repairs consisted of installing a cured-in-place liner to replace the deteriorated pipe and filling the voids in the soil with grout to prevent settlement of the roadway. This repair method minimizes the excavation required, reduces the repair time, and is less expensive than trenching the intersection.

Along with the missing pipe segments at the intersection of 91<sup>st</sup> and Northern Avenues, the recently completed video inspection identified that the section of 36-inch sewer line immediately west of the intersection has deteriorated to a degree that another area could collapse. Accordingly, this section of sewer line is also being repaired as part of this emergency work to ensure the safety of the area

This past month video inspections have identified that the deterioration in the 36-inch sewer line is accelerating. One section of the line, located on the east side of the Loop 101, has recently broken and is partially obstructing flow the pipe. Due to this new information, staff is recommending that we expedite the repairs to the remaining sections of the Northern Avenue 36-inch sewer line for 91<sup>st</sup> to 99<sup>th</sup> Avenues. The following table summarized the phase approach to completing the repairs. In the near future, staff will request additional funding for the remainder of the sewer repairs between 91<sup>st</sup> Avenue, west of the 101.

	<b>SCOPE</b>	<b>SCHEDULE</b>	<b>COST</b>
Phase 1	157- feet of 36/24-inch sewer in the intersection of 91 <sup>st</sup> and Northern Ave	Ongoing to be completed by Feb. 28 <sup>th</sup>	\$649,980
Phase 2	737-feet on Northern Ave, west of 91 <sup>st</sup> /Northern Intersection	Ongoing to be completed by Feb. 28 <sup>th</sup>	\$553,455
<b>Subtotal Phase 1 &amp; 2</b>			<b>\$1,203,435</b>

**FISCAL NOTE:**

In order to complete these repairs, staff is requesting that \$853,988 be moved forward from the FY2010 Capital Improvement Plan (CIP) to the current FY2009 CIP for Project UT00167, Northern Avenue and 95<sup>th</sup> Avenue Trunk Sewer Rehabilitation. A transfer in the amount of \$853,988 from water contingency 2050-2050-57000 to Wastewater Operating Capital account 2400-2550-543003-CIPWW-UT00167.