city of . . .
South Milwaukee
Proud Past ...
Promising Future

OFFICE OF THE CITY ENGINEER
(414) 768-8053
FAX (414) 768-8068

June 16, 2011

RE: PARKWAY DRIVE & 17TH AVENUE (RAWSON TO HEMLOCK)

Dear Property Owner or Interested party:

This letter is being sent to property owners along Parkway Drive, 17th Avenue, and connecting streets to update you on proposed improvements to the storm sewer and sanitary sewer systems, and other contemplated work in the area. In May, the Common Council approved the 2011-2012 Capital Improvement Plan which includes funds for utility and road work described below.

Storm Sewer:
For those of you who may not know, following the July 2010 storm, the City contracted with an engineering consultant, R.A. Smith National (RASN) to analyze the capacity of storm sewer systems to determine alternatives to reduce the risk of flooding. A relief storm sewer has been designed which will be constructed between 521 and 531 Parkway Drive, with a new outlet to Oak Creek Parkway, and will supplement the existing storm sewer system. This work will also require reprofiling of the road between Hemlock and Spruce for better storm water collection. On 17th Avenue, south of Oak Street a secondary (overland) drainage path is proposed in addition to the existing pipe system to reduce street flooding. Both of these improvements required permits from Milwaukee County, which the city recently received. Storm sewer work will include replacement of inlets at some locations to improve run-off collection. Although some property owners have had sanitary sewer backups through laterals, improved stormwater collection reduces inflow and infiltration to the sanitary system. Additionally, minor storm sewer projects are planned "up stream" where basements have been flooded, causing sanitary flows to increase at lower areas.

Sanitary Sewer:
Applied Technologies completed a sanitary sewer system capacity analysis for the Parkway Drive area, in addition to the Wastewater Department's video inspection of pipe and manholes. In general, the system has capacity for standard design flows. During severe wet weather events, the sanitary system is surcharged, causing back flow through some house laterals. The excess flow, or surcharging, is caused by many factors including: 1) groundwater infiltration to system at manholes, pipe joints, and laterals; 2) older homes with foundation drains connected to the sanitary system (no sump pumps); 3) illegal connection of sump pumps into sanitary floor drains or sinks; 4) basement flooding into floor drains/sanitary sewer. Like other cities, South Milwaukee is continuing to identify ways to reduce inflow and infiltration to the sanitary system. With WDNR permission, a sanitary relief pump station was constructed in 1999 to bypass sewage to Oak Creek during severe rain events, before it entered basements. Applied Technologies has recommended that this relief station, located east of 17th and south of Oak be upgraded to improve efficiency, and to reduce the chance of basement backups during large storm events. Although system modeling and inspection did not show significant "bottlenecks", we are designing some upgrades to improve sanitary system flow. Initial pipe work within roadway to upgrade the relief station will be constructed this year in anticipation of future relief station

upgrades, but major pump upgrades will need to be designed, budgeted and prioritized with other sanitary sewer projects throughout the City.

Watermain:
On Hemlock Court, between Parkway Drive and Poplar, utility work will include replacement of a cast iron main, where numerous breaks have been repaired.

Street Work:
The Capital Improvement budget also includes pavement rehabilitation on Parkway Drive and 17th Avenue from Rawson Avenue to Hemlock. This work will include "spot" replacement of defective curb and gutter, pavement removal, grading and new asphalt paving. Assuming the proposed underground utility work can be finalized and constructed in 2011, the street work can be completed prior to onset of winter conditions this year.

Summary:
Based on rainfall data, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) determined that the June 2008 and July 2010 storms had a 0.2% to1% probability (100 year to 500 year occurrence). These storms produced record flows at the Oak Creek USGS stream gauging station at 15th Avenue, based on 47 years of records. Unlimited capacity to the storm and sanitary systems cannot be cost effectively engineered. However, city officials understand the frustration of property owners with flood damages and are committed to identifying improvements which will reduce the chance of flooding and sanitary sewer backups.

Based on type of work, the projects will be funded through the storm water utility and general tax fund, without special assessments to abutting property owners.

An informational meeting has been scheduled for Monday, June 27, 2011 from 5:00 – 6:00 p.m. to address questions or comments that may not be addressed in this letter. The City Engineer and 4th District alderpersons David Bartoshevich and Erik Brooks plan to be present. Alternatively, please feel free to contact me at 414-762-2222 x136, or by email to vandercar@ci.south-milwaukee.wi.us if you have further questions or would like to meet with me individually to discuss the proposed work.

Following award of a construction contract, further correspondence will be sent with the contractor's schedule. Based on the time that has been required for analysis, design, permits, budgeting and plan preparations, I do not expect work to begin until late August.

Sincerely,

Kyle E. Vandercar

Kyle Vandercar P. E.
City Engineer
KV/jm