DEPARTMENT OF COMMUNITY DEVELOPMENT SERVICES



Planning Division

memorandum

то:	Bruce K. Walden, Chief Administrative Officer			
FROM:	William R. Gray, P.E., Public Works Director/City Engineer Elizabeth H. Tyler, AICP, Community Development Director			
DATE:	September 15, 2005			
SUBJECT:	Scottswood Area Stormwater Improvement Project			

Introduction

The Scottswood Area Stormwater Improvement Project is a cooperative project involving seven governmental agencies, including the City of Urbana, Urbana Township, the Urbana Township Road District, the Urbana School District, the Urbana Park District, Champaign County, and the St. Joseph Drainage District No.3. This project will create multiple benefits for the residents of Southeast Urbana and the Scottswood Subdivisions. These benefits include improved storm water drainage, reductions in localized flooding, new recreational opportunities, and additional green space.

Funding for the approximately two million dollar project is being provided in the form of substantial grants as well as property owner assessments by the drainage district. As the owner assessment rolls are nearing finalization, it is important that the public be fully informed about the project. In order to provide this awareness, a public information packet has been prepared by staff of the Urbana Park District (copy attached), local media have been contacted, and a special neighborhood meeting is being held on September 28, 2005 at Prairie School (6:00 to 8:00 p.m.). The purpose of this memorandum is to provide a summary of information on the project to the Mayor and Councilmembers.

Background

The Scottswood Subdivisions were developed beginning in the early 1960s, before current engineering practices for control of storm drainage were required. This area includes approximately 1,300 residents and 440 homes, the majority of which are located outside the City limits of the City of Urbana (see attached watershed location map). The subdivisions experience recurring drainage problems, including street flooding, storm and sanitary sewer backups, debris deposition, and standing water with the accompanying problems of odor and mosquitoes. These

problems have negatively impacted the neighborhood by causing property damage of approximately \$50,000 annually and decreasing overall property values.

At the June 1998 Champaign County Board Environment and Land Use Committee meeting, Scottswood Subdivisions residents reported surface flooding problems in their subdivisions, especially following a storm event in May 1998. As a result of this meeting, in October 1998, a neighborhood meeting with intergovernmental participation was held for Scottswood Subdivisions residents. Agencies involved were Urbana Township, the City of Urbana, and the Champaign County Regional Planning Commission. As a result of this meeting and the outlined intergovernmental cooperation, the County agreed to apply for a Community Development Assistance Program (CDAP) grant from the Department of Commerce and Economic Opportunity to fund a drainage study for the Scottswood Subdivisions area. The Champaign County Regional Planning Commission prepared the grant application and the City of Urbana agreed to fund the local matching portion of the grant with "in-kind" services.

In April 1999, a CDAP grant was awarded to the County for the preparation of the drainage study. The City of Urbana served as the project engineer and the Champaign County Regional Planning Commission provided planning and grant management services. The purpose of this study was to obtain background information that would identify the magnitude of the flooding problem and develop a set of alternatives that would best improve flooding conditions within Scottswood Subdivisions. The study also identified financing mechanisms to fund construction.

In August 2000, Scottswood Subdivisions residents were presented with the preliminary findings of the drainage study. Extensive flooding was verified, and it was determined that the storm sewer system was undersized and in need of maintenance. Residents in attendance were supportive of future grant applications to address the drainage issues within the subdivisions. The Scottswood Subdivision Drainage Study (Engineering Analysis and Design Report), prepared by the City of Urbana and the Champaign County Regional Planning Commission, was issued on September 29, 2000. The study identified the factors that contribute to surface flooding in the Scottswood Subdivisions and presented alternate means of addressing the surface flooding problems. The recommendations of the study were the following: improvements including a 12 acre-foot detention basin, a 48-inch-diameter outlet storm sewer, various inlet improvements, and surface swale improvements.

In October 2001, Urbana Township applied for a Design Engineering CDAP grant to implement the recommendations and help address the flooding problems. The \$100,000 grant was awarded in March 2002. The local engineering firm of Berns, Clancy and Associates was hired and began design work to implement the recommendations resulting from the study.

The Urbana Park District purchased the Smith/Strube property west of Scottswood Subdivisions and north of Prairie School in 2003, with the purpose of developing a community park with multiple recreational uses. This park is now known as Weaver Park. The Urbana Park District became one of the participants in the project and agreed to accommodate an area for storm water management within the park. The Park District also desired to integrate the storm water

management area and surrounding grading to coordinate with their master plan for the park (copy attached). This design was revised to allow the detention area within Weaver Park to be a "wetland" area. In addition, a drainage swale within the park was added to help drain the area directly north of the park across Main Street. This area currently drains to a low area within the park and then to Elm Street within Scottswood Subdivisions. The swale will direct the water to the proposed "wetland" within the park. The storm water management capacity was increased two acre-feet to provide detention for the adjacent Champaign County Nursing Home, which increased the required basin size to 14 acre-feet.

As the project proceeded through the design phase, some of the drainage study recommendations were revised. Sunny Estates Subdivision, which is bordered by Scottswood Subdivisions and Washington Street, was planned with a 12-inch-diameter storm sewer. The Scottswood Subdivisions project includes extension of this 12-inch diameter storm sewer to provide an outlet for a part of the storm sewer system within the subdivisions. The drainage study recommended a surface swale to provide an outlet for the Ennis Lane drainage. This proved to be infeasible to construct and the design was changed to a storm sewer through backyards and along Macarthur Drive, to outlet at the ditch northeast of Sunny Estates Subdivisions.

Phase 1 of the Scottswood Subdivisions Drainage Improvements Project includes construction of approximately 3,000 lineal feet of 48-inch diameter and 30-inch diameter storm sewer, 1,100 lineal feet of 12-inch diameter under drain, manholes, pavement restoration, earthwork, and other improvements (See attached "Exhibit 1" for locations). Phase 1 also includes the "wetland" storm water management basin outlet and storm sewer that connects to the St. Joseph Drainage District #3 interceptor sewer south of Washington Street.

Phase 2 of the Scottswood Subdivisions Drainage Improvements Project includes a 14 acre-foot "wetland" storm water management basin to be located in Weaver Park, approximately 1,300 lineal feet of 10-inch diameter under drain and drainage swale within Weaver Park, approximately 900 feet of 12-inch diameter storm sewer, approximately 1,100 feet of 12-inch diameter to 24-inch diameter storm sewer, storm inlet improvements to five (5) intersections, and manholes, pavement restoration, earthwork, and other improvements (See attached "Exhibit 1" for locations).

Fiscal Impacts

Construction costs for the estimated \$2,055,000 project total costs will be paid from the grant funds from the Department of Commerce and Economic Opportunity and through a benefit assessment by the St. Joseph Drainage District #3.

In addition to the previously awarded planning and drainage study grants (totaling \$125,000) and in-kind contributions, a CDAP grant was awarded in May 2004 for \$350,000 for Phase 1 construction of drainage improvements in the Scottswood Subdivisions area. Another CDAP grant of an additional \$395,430 was received in July 2005 for construction of Phase 2 of the Drainage Improvements Project. Grant totals from DCEO towards this project total more than

\$870,000. These grants were obtained through the expertise of grant preparers at the Regional Planning Commission and with the assistance of DCEO regional staff.

The project includes an assessment to be levied by the Saint Joseph Drainage District No. 3 on properties within the area benefited by the Improvement Project. A summary of the properties within City Limits proposed to be assessed is as follows:

Area	Number of	Lots/Acres	Proposed	Total Proposed		
	Parcels		Assessment	Assessment		
North of Main Street						
Single Family	16	Lots	\$2,200 per lot	\$35,200		
Multi-Family	1	Lots	\$2,200 per lot	\$2,200		
South of Washington Street and East of Smith Road						
Undeveloped	1	Lots	\$1,100 per lot	\$1,100		
Multi-Family	1	4.8 acres	\$26,300 total	\$26,300		
Multi-Family	3	10.7 acres	\$23,500 total	\$23,500		
South of Washington Street and West of Smith Road						
Single Family	128	Lots	\$800 per lot	\$102,400		
Commercial	2	Lots	\$2,300 per lot	\$4,600		
Total Assessments to Parcels Within the City of Urbana				\$297,400		

Additionally, the City will be assessed \$4,500 for three City owned properties within the Project Area. The Public Works Department has also agreed to operate and maintain the 48-inch storm sewer installed in Phase 1 of the Improvements Project.

It is possible that the City's CDBG funds may be used to offset the assessment of single-family residents within the assessment area who are also located within the City's target area. This potential will be reviewed as part of the City's 2006-2007 Annual Action Plan.

Residential property owners benefiting from the project will pay their assessments at a modest amount over an extended period of time. The assessment amount will be well within the payment tolerance levels indicated through surveys of the affected residents. This investment will be more than made up for in reduced flooding, reduced insurance costs, and improved property values.

Recommendation

City planning and engineering staff recommend that the City Council support the Scottswood Area Stormwater Improvement Project. This project is a unique example of many agencies working together to create improved living conditions in a previously neglected area of the community, while also providing for shared drainage facilities for county and park district lands. The "wet prairie" detention basin will be designed in such a way that it will benefit all members of the community by providing environmental education and recreational amenities. This project is also a good example of agencies working together with the State of Illinois to obtain and leverage grants to achieve project results while minimizing the burden upon the local property owner.

Prepared by:

Brad Bennett, Civil Engineer

Attachments:

Scottswood Project Watershed Boundary Exhibit 1, Scottswood Subdivision Drainage Improvement Project Weaver Park Master Plan Scottswood Area Stormwater Improvement Project (Public Information Packet)

