

REQUEST FOR COUNCIL ACTION

SUBJECT: 2015 Storm Drainage Master Plan Adoption

SUMMARY: City Staff has been working with Hansen Allen and Luce, Inc. to prepare an updated Storm Drainage Master Plan. This document will serve as the basis for preparation of the Storm Drainage Capital Facility Plan. The Draft Plan was presented to the Public at an Open House with positive comments for adoption.

FISCAL AND/OR

ASSET IMPACT: The report addresses recommended future Storm Drainage projects which will impact the Storm Drainage budget.

STAFF RECOMMENDATION:

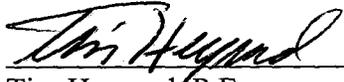
Staff recommends the City Council adopt the 2015 Storm Drainage Master Plan.

MOTION RECOMMENDED:

I move to adopt Resolution 15-203 to adopt the 2015 Storm Drainage Master Plan and have staff prepare an updated Capital Facility Plan.

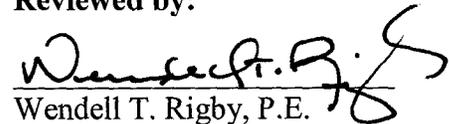
Roll Call vote required.

Prepared by:



Tim Heyrend, P.E.
Utilities Engineer

Reviewed by:



Wendell T. Rigby, P.E.
Director of Public Works

Reviewed as to Legal Sufficiency:



Darien Alcorn
Acting City Attorney

Recommended by:



Mark R. Palesh
City Manager

BACKGROUND DISCUSSION:

The Storm Drainage Master Plan (Master Plan) was last updated in 2007, which included the assessment and recommendations for future detention basins, pipelines, road culverts, system modeling, and a capital projects list. Since that time, the City contracted with Hansen Allen and Luce to complete a new Storm Drainage Master Plan.

The new Master Plan uses more robust modeling software to evaluate every inlet, channel, and pipeline in the City's infrastructure, and to determine deficiencies and propose solutions. Standard rainfall curves over a 10-year and 100-year storm probability were used in the model to estimate stormwater flows. The City's operations and engineering staff provided input on any problem areas within the City, which areas are included in the deficiencies list.

The Master Plan identified 50 separate deficiencies in the drainage system as shown in Table 4-1. These deficiencies include areas of flooding, pipes that are under capacity to carry the storm, detention ponds that are undersized, areas where additional piping or basins are needed. Future growth and development necessitates new piping and basins that are impact fee related.

The Capital Improvement Plan (CIP) is shown in Chapter 5, Table 5-1 and Figure 5-1. The CIP identified 78 separate projects to correct the deficiencies of the storm drainage system. The CIP table includes a breakdown of which projects are eligible for user fees and the percentage of the project cost which is eligible for impact fee reimbursement. Cost estimates are based on unit construction costs indices (ENR 2015), the engineer's experience, and communication with suppliers and construction data references. The total cost for the Storm Drainage System improvements is \$44,339,000 of which \$21,709,000 is eligible for impact fee reimbursement.

The City held a public open house on October 13th to discuss the proposed Master Plan. The comments received commended the City for the manner in which they are operating the system, and indicated a location where a home is currently being flooded at 6876 S 3235 W. The residents were relieved that a new pipeline is under construction across from Constitution Park and that the new 7000 South pipeline is proceeding this year. Residents asked about the user fee for stormwater and understood that the fee needs to increase for the needed infrastructure.

A hard copy of the Storm Drainage Master Plan is available for your review at the City Clerk's office or digitally on the Global drive G:\Free Space\Council PPT Presentations\WJ Storm Drainage Master Plan.

THE CITY OF WEST JORDAN, UTAH
A Municipal Corporation

RESOLUTION NO. 15-203

A RESOLUTION REQUESTING THE CITY COUNCIL REVIEW THE DRAFT FINAL STORM
DRAINAGE MASTER PLAN

Whereas, the City of West Jordan has received the 2015 Storm Drainage Master Plan from Hansen Allen and Luce, Inc.; and

Whereas, the City desires the City Council to adopt the 2015 Storm Drainage Master Plan; and

Whereas, a public open house was held on October 13th at City Hall and no adverse comments were received on the 2015 Storm Drainage Master Plan, and

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF WEST JORDAN, UTAH:

To adopt the 2015 Storm Drainage Master Plan.

Adopted by the City Council of West Jordan, Utah, this 4th day of November 2015.

Kim V. Rolfe
Mayor

ATTEST:

MELANIE S. BRIGGS
City Recorder

Voting by the City Council	"AYE"	"NAY"
Jeff Haaga	_____	_____
Judy Hansen	_____	_____
Chris McConnehey	_____	_____
Chad Nichols	_____	_____
Sophie Rice	_____	_____
Ben Southworth	_____	_____
Mayor Kim V. Rolfe	_____	_____