

ITEM # 30
DATE: 07-28-15

COUNCIL ACTION FORM

SUBJECT: 6TH STREET BRIDGE OVER SQUAW CREEK

BACKGROUND:

The Capital Improvements Plan (CIP) includes a program for necessary repairs recommended by the Iowa Department of Transportation's (IDOT) biennial bridge inspections report. In both 2010 and 2012, these bridge inspections both recommended replacement of the 6th Street Bridge over Squaw Creek due to its condition. A feasibility study in 2009 also recommended replacement. The replacement of the bridge was placed in the CIP as a multi-year project to allow time for study, design, procurement of grants, and construction. A design alternatives study was completed and the style of bridge and aesthetic treatments were approved by City Council in 2013. (See Attachment) On May 13, 2014, City Council approved an agreement with the IDOT for the City Highway Bridge Program providing 80% reimbursement of eligible items up to \$1,000,000.

This project involves removal of the existing bridge structure and placement of a new concrete beam bridge. Aesthetic treatments including form liners on the concrete bridge rails, pedestrian path lighting, colored concrete sealer, and ornamental handrail, as selected by the City Council, have all been included in the project. The project will also reconstruct the approach pavement from the west to meet the new bridge geometry and to the east extending approximately 300 feet. The new bridge configuration will allow for multimodal use of the facility including sidewalks and shared use path connections across Squaw Creek. Staff has worked with Iowa State University, Parks and Recreation, and the neighborhoods to minimize the disruption from the bridge reconstruction. Pedestrian and bicycles detours are planned through Brookside Park during construction. A tentative construction schedule of bridge demolition in the fall of 2015 and bridge substructure work through the winter of 2015/16 will allow the project to be completed and reopened to traffic before the fall semester of Iowa State University in 2016.

Plans and specifications have been completed by WHKS, Inc with a construction estimate of \$2,530,660 for the structural bridge work and \$599,958 for the associated reconstruction of 6th Street west and east of the bridge. Engineering and contract administration are estimated to be \$170,000 for the bridge replacement and \$60,000 for the 6th Street reconstruction work bringing overall costs to \$2,700,660 for the bridge and \$659,958 for the 6th Street work. **Combined overall project costs are estimated at \$3,360,618.**

Because project funding includes state monies, the contract must follow IDOT processes. It is anticipate that the project will be let by IDOT on September 15, 2015.

Funding for this project is programmed in the amount of \$1,000,000 from IDOT City Highway Bridge funds, \$2,320,000 from General Obligation Bonds, and \$50,000 in Shared Use Path Maintenance funds, bringing **total project funding to \$3,370,000.**

It is important to note that the East Lincoln Way Bridge repair project is also programmed in FY 2015/16 the expectation that \$300,000 of the \$2,320,000 noted above in General Obligation Bonds would be available. The East Lincoln Way Bridge planned improvements include minor maintenance activities incorporating joint repair and painting. With the current condition of the 6th Street Bridge, the \$300,000 appears to be necessary to fund the 6th Street Bridge project because of increasing construction costs. Thus the East Lincoln Way Bridge work may need to be reprioritized in future CIP years. The work involved with this bridge is not due to safety concerns and, therefore, are not critical at this time.

ALTERNATIVES:

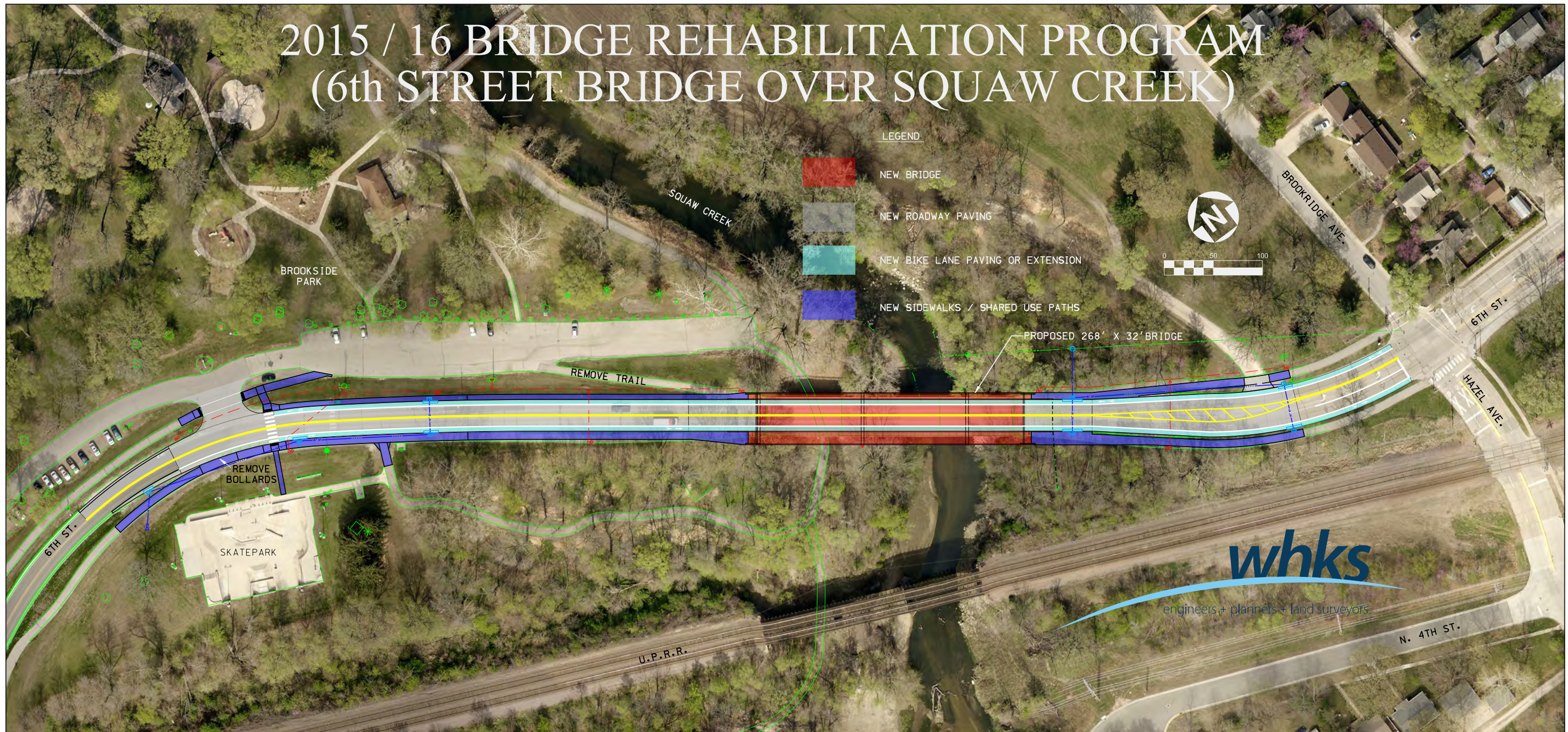
1. Approve plans and specifications for the 6th Street Bridge over Squaw Creek Project and establish September 15, 2015, as the date of letting and September 22, 2015, as the date for report of bids.
2. Do not proceed with the project at this time.

MANAGER'S RECOMMENDED ACTION:

The 6th Street Bridge has been identified as a critical piece of infrastructure that is in need of replacement. By approving this project, the replacement can begin this fall with the intent of completion in the summer of 2016.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.

2015 / 16 BRIDGE REHABILITATION PROGRAM (6th STREET BRIDGE OVER SQUAW CREEK)

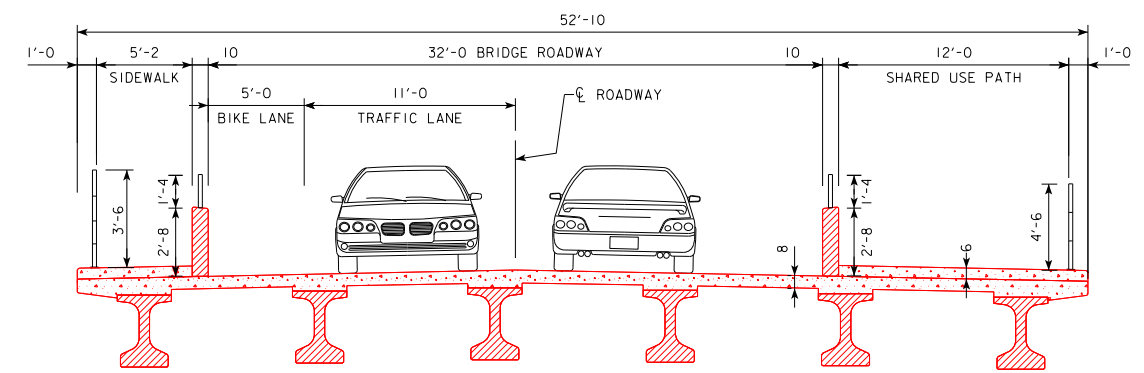


whks
engineers + planners + land surveyors

PROJECT FEATURES

1. REPLACE EXISTING 3-SPAN, 250' X 26' FRACTURE CRITICAL STEEL GIRDER BRIDGE WITH 268' X 32' PPCB BRIDGE.
2. BRIDGE AESTHETIC ENHANCEMENTS INCLUDE CONCRETE TEXTURE AND COLOR SEALER ON BRIDGE RAILS, ORNAMENTAL METAL PEDESTRIAN RAILINGS, LED LIGHTING INCORPORATED INTO BRIDGE RAILS, AND UNDERDECK LIGHTING OVER SHARED-USE PATH.
3. REPLACE ROADWAY APPROACHES AND PAVEMENT TO JUST WEST OF THE BROOKSIDE PARK ENTRANCE.
4. INSTALL BIKE LANES FROM BROOKSIDE PARK ENTRANCE TO THE BIKE LANES ON 6TH ST. AT HAZEL AVE. FOR A CONTINUOUS CONNECTION TO GRAND AVE., PROVIDE CLEARANCE BETWEEN MOTORISTS AND PEDESTRIANS, AND GIVE A DESIRED OPTION FOR BICYCLISTS.
5. IMPROVE CONNECTIONS OF SHARED USE PATHS AND SIDEWALKS.
 - RELOCATE CROSSWALK AT BROOKSIDE PARK ENTRANCE AND INSTALL PEDESTRIAN ACTIVATED RECTANGULAR RAPID FLASHING BEACONS (RRFB's) ON CROSSWALK SIGNS TO IMPROVE PEDESTRIAN SAFETY.
 - COMPLY WITH THE AMERICAN WITH DISABILITIES ACT(ADA) FOR SIDEWALKS AND SHARED USE PATHS INCLUDING SLOPE COMPLIANCE, DETECTABLE WARNINGS, AND ACCESSIBLE ROUTES.
 - PROVIDE PROTECTED SIDEWALK AND SHARED-USE PATH ON THE BRIDGE.
6. ENHANCE PUBLIC ACCESSIBILITY AND PERCEPTION OF THE BROOKSIDE PARK AREA.

BRIDGE CROSS SECTION



LOOKING EAST

