

SUMMARY OF ENGINEERING RECOMMENDATIONS

“Kellogg Bridges” Project includes:

Construction of Kellogg Bridge No. 62649 at St. Peter Street
Construction of Kellogg Bridge No. 62650 at Market Street
Construction of Kellogg Bridge No. 62651 Near Market Street
Construction of all associated Approach Roadways

To Be Constructed under Project Nos.

S.P. 164-158-020
S.P. 164-158-021
S.A.P. 164-158-022

Minn. Project No. BRSTPM-BHSTPM 6214 (178)

Report Prepared 5-7-14
Public Hearing 6-18-14

PROJECT

The purpose of this project is to replace Eastbound Kellogg Boulevard Bridge No. 92978 at Market Street and Eastbound Kellogg Boulevard Bridge No. 92797 between St. Peter and Wabasha Streets with new bridge structures.

The two bridge projects have been combined into one City of Saint Paul construction project (B-1198).

EXISTING CONDITIONS

Existing Kellogg Bridge No. 92797 at Saint Peter Street has a sufficiency rating of 29.3 and is considered structurally deficient. Existing Kellogg Bridge No. 92798 at Market Street has a sufficiency rating of 48.6 and is structurally deficient and functionally obsolete. The bridges are both load posted for 28 tons for a straight truck and 36 tons for a tractor trailer combination vehicle.

These bridges have significant issues, including joint leakage, excessive deterioration of concrete girders, floor beams, and columns with exposed reinforcement steel. There is also continuing deterioration of the bluff below the bridges.

Kellogg Boulevard is essential to the vitality of downtown Saint Paul. It is a thoroughfare on the south side of downtown that connects west 7th Street on the west to Mounds boulevard on the east, and ultimately to 35E and 94. In between, Kellogg Boulevard connects to Wabasha Street and Robert Street, both of which provide crossing of the Mississippi river. Significant public

facilities such as Saint Paul City Hall, Xcel Energy Centre, and the Science Museum of Minnesota are serviced by Kellogg Boulevard.

PROPOSED IMPROVEMENTS

Existing Kellogg Bridge No. 92797 at St. Peter Street will be replaced by bridge no. 62649. The replacement bridge will be a concrete transverse slab span founded on spread footings. Existing Kellogg Bridge No. 92798 at Market Street will be replaced by Bridge no 62650 and Bridge no. 62651. Replacement bridge no. 62650 will be constructed as a concrete slab span supported on spread footings. Replacement bridge no. 62651 will be constructed as a prestressed concrete bridge founded on micro-pile foundations.

The roadway section will include two vehicular lanes in each direction, pedestrian sidewalks and accommodation for a future 12 foot wide bike track. The Kellogg Boulevard traffic signal at Wabasha Street will be reconstructed, and the existing lantern lighting will be replaced in kind.

PROPOSED ROW ACQUISITION

No permanent right of way acquisition is required under this bridge reconstruction project.

The construction of the Kellogg Bridges at Market Street will require that a permanent air-rights easement be acquired from Ramsey County. Ramsey County has agreed to grant this easement at no cost to the City of Saint Paul.

A temporary construction easement is required to construct the Kellogg Bridge at St. Peter Street.

The parcels are depicted on the drawings accompanying this report.

ALTERNATES

Kellogg Boulevard was widened in the 1930's to the current width. This widening was accomplished by extending the eastbound lanes at the top of bluff elevation towards the river with a series of bridge structures. As such, there are no viable alternatives to replacing these bridge structures if the current Kellogg Boulevard width and multi-modal capacity is to be maintained, or increased, in the future.

POSITIVE BENEFITS

Connections from the regional transportation system to the Entertainment District and the Downtown business district will remain viable.

Bridge maintenance and rehabilitation costs will be virtually eliminated for these existing 80 year old structures. Maintenance resources and time commitments that had previously been allocated to these structures will be appropriately reallocated to other structures once the existing structures are removed and replaced.

ADVERSE EFFECTS

There are no long-term adverse effects from this project.

Short-term adverse effects include temporary traffic congestion and detours. Traffic disruption will be minimized by a comprehensive traffic control plan and coordination with local businesses

Normal disruption typical of construction including dust, noise and access issues will occur during the course of the project.

TIME SCHEDULE

The project will be constructed in 2015. Exact timing and schedule of project will be coordinated with the other improvements in the area.

COST ESTIMATE

Construction	\$7,843,000
Design Engineering and Inspection	<u>\$1,960,000</u>
PROJECT TOTAL	\$9,804,000

ESTIMATED FINANCING

Federal BIR	\$4,145,000
State Bridge bonds	\$3,308,000
MSA	\$4,261,000
CIB	<u>\$ 90,000</u>
PROJECT TOTAL	\$9,804,000

SOURCE OF ADDITIONAL INFORMATION

For additional information, contact the Project Engineer, Brent Christensen, at (651)266-6182.

SUMMARY AND RECOMMENDATION

The Department of Public Works believes that this is a critical project, and the Engineering Recommendation is for approval of the project and financing.

Respectfully submitted,



Brent Christensen, PE
Public Works Bridge Division



Figure 1. Existing Kellogg Boulevard Bridges Nos. 92797 and 92798

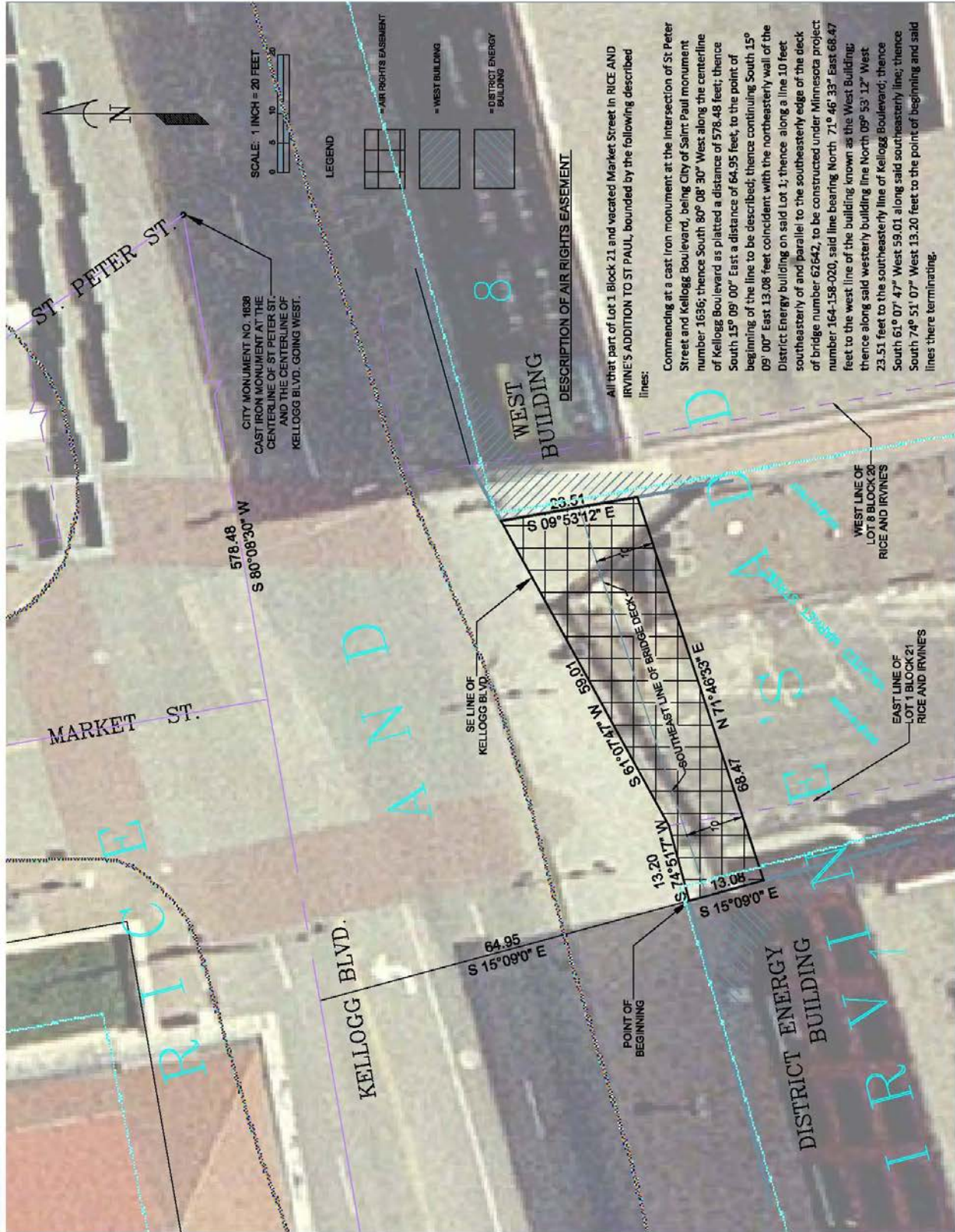


Figure 2. Air Rights Easement for Kellogg Blvd. Bridge @ Market

TEMPORARY CONSTRUCTION EASEMENT

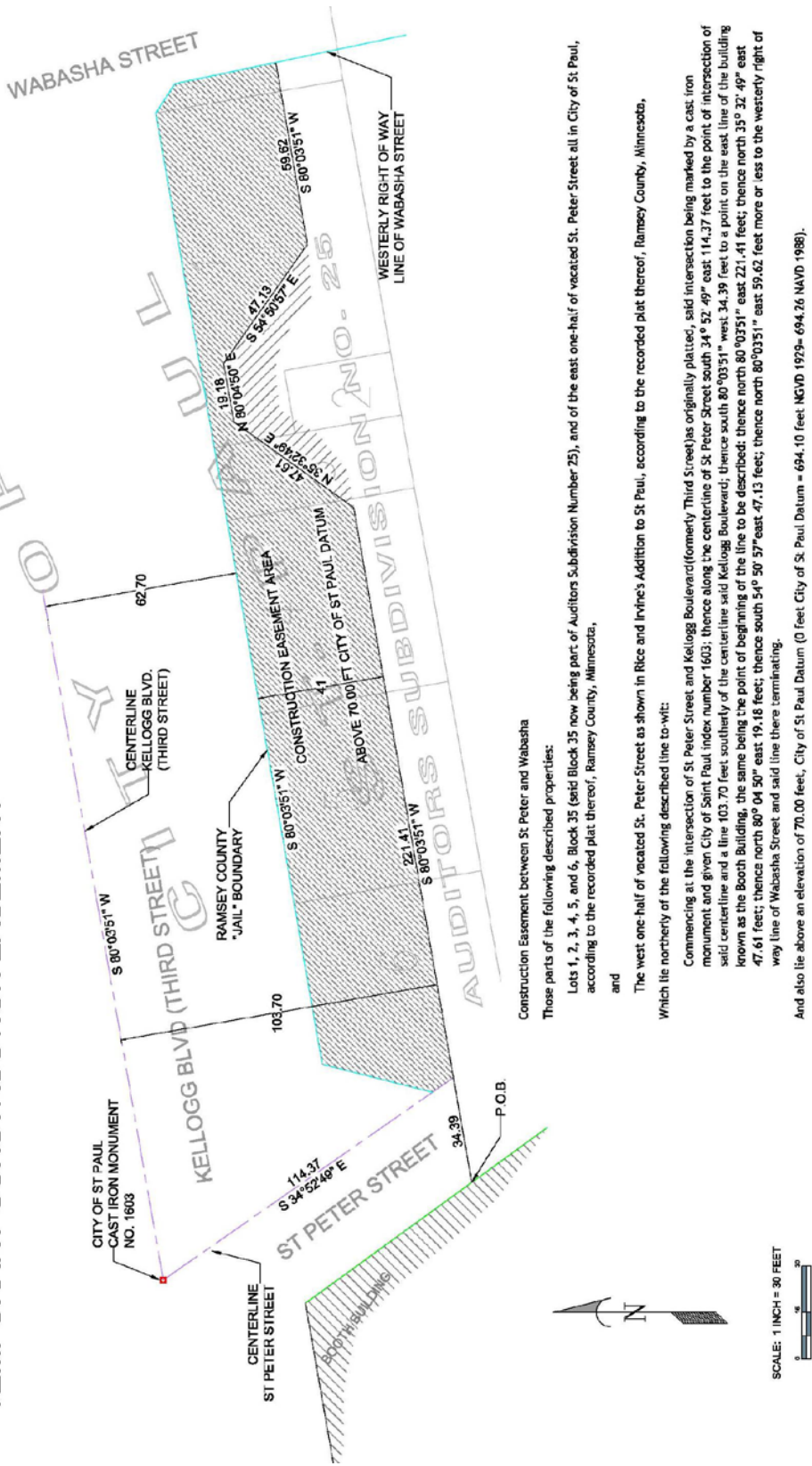


Figure 3. Temporary Construction Easement for Kellogg Blvd. Bridge @ St. Peter