

City of Naperville

Legislation Text

File #: 19-387, Version: 1

CITY COUNCIL AGENDA ITEM

ACTION REQUESTED:

Pass the ordinance establishing a weight restriction for the 5th Avenue Bridge over Cress Creek

<u>DEPARTMENT:</u> Transportation, Engineering and Development

SUBMITTED BY: Andy Hynes, Deputy City Engineer

BOARD/COMMISSION REVIEW:

N/A

BACKGROUND:

In early 2019, a structural engineering firm inspected the small bridge structure that carries 5th Avenue over Cress Creek (between Ogden Avenue and Royal St. George Drive). The bridge span is just less than 20 feet. See the attached map.

The bridge consultant's findings noted areas of spalling, exposure of reinforcement and cracks on various concrete support beams. In addition to the inspection, a bridge loading analysis was performed. This analysis has resulted in direction to post signage on the bridge identifying a weight limit of 25 tons.

DISCUSSION:

Based on the structural engineer's evaluation, the 5th Avenue Bridge's foundation is sound and can be reused. However, the bridge deck will need complete replacement. The estimated construction cost of this work is approximately \$200,000. Through the development of the upcoming Capital Improvement Program, staff will be requesting funding for engineering design of the deck replacement in 2020 with construction to follow in 2021.

A permanent ordinance is needed to enforce the weight limit of 25 tons, or 50,000 pounds, on the 5th Avenue Bridge until the structure is rehabilitated. Even with this weight restriction, the 5th Avenue Bridge is safe for use by pedestrians and vehicles. Passenger vehicles, school buses, and small trucks will not be affected by the weight limitation. The ordinance will prohibit use by heavier single unit and semi-trucks. Royal Saint George Drive will serve as an alternate route for heavier vehicles that would normally use the 5th Avenue Bridge. Per state statute (625 ILCS 5/15-101), fire apparatus, emergency vehicles, and snow removal equipment are exempt from this weight limit.

Naperville has implemented similar weight restrictions on other bridges as their condition deteriorated. The downtown Washington Street Bridge currently has a 15 ton weight limit (anticipated replacement in 2021). The previous Main Street Bridge, 75th Street Bridge (DuPage County), and Eagle Street Bridge all required weight limits or other restrictions in advance of their

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eventual replacement.

FISCAL IMPACT:

The weight restriction on the bridge will require more frequent inspections until rehabilitation work is completed. Engineering and construction for bridge improvements will be programmed in the upcoming Capital Improvement Program.