



Application

10356 - 2018 Bridges

10900 - County Road C (CSAH 23) Bridge No. 62519 Replacement

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted  
Submitted Date: 07/13/2018 10:55 AM

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## Primary Contact

**Name:\*** Joseph Frank Lux  
Salutation First Name Middle Name Last Name

**Title:** Senior Planner

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**Address:** 1425 Paul Kirkwold Drive

**\*** Arden Hills Minnesota 55112  
City State/Province Postal Code/Zip

**Phone:\*** 651-266-7114  
Phone Ext.

**Fax:** 651-266-7110

**What Grant Programs are you most interested in?** Regional Solicitation - Roadways Including Multimodal Elements

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## Organization Information

**Name:** RAMSEY COUNTY

**Jurisdictional Agency (if different):**

**Organization Type:**

County Government

**Organization Website:**

**Address:**

DEPT OF PUBLIC WORKS

1425 PAUL KIRKWOOD DR

\*

ARDEN HILLS

Minnesota

55112

City

State/Province

Postal Code/Zip

**County:**

Ramsey

**Phone:\***

651-266-7100

Ext.

**Fax:**

**PeopleSoft Vendor Number**

0000023983A30

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## Project Information

**Project Name**

County Road C (CSAH 23) Bridge No. 62519 Replacement

**Primary County where the Project is Located**

Ramsey

**Cities or Townships where the Project is Located:**

Roseville

**Jurisdictional Agency (If Different than the Applicant):**

Ramsey County

**Brief Project Description (Include location, road name/functional class, type of improvement, etc.)**

This project will replace Bridge no. 62519, which carries County Road C (CSAH 23) over the BNSF Railroad. Bridge No. 62519 was constructed in 1970 and now has a structural rating of 44.1. It is a fracture-critical structure, lacking redundancy to prevent its collapse in the event of the failure of a structural member. This project would retain still viable structural members and replace the failing deck and beams. The bridge piers would be evaluated and rehabilitated or replaced, as necessary. The design will add structural redundancy to eliminate the fracture-critical deficiency. County Road C is a Tier 1 Freight Route between CSAH 88 in Hennepin County and TH 51, approximately 1.25 miles west of Bridge No. 62519. Were it not for the load limits on this bridge, it would be possible for the route to connect I-35W and I-35E. In addition, the route provides a critical east-west bike and pedestrian route through the City of Roseville.

*(Limit 2,800 characters; approximately 400 words)*

**TIP Description Guidance (will be used in TIP if the project is selected for funding)**

County Road C (CSAH 23) Bridge No. 62519 Replacement

**Project Length (Miles)**

0.05

*to the nearest one-tenth of a mile*

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## Project Funding

**Are you applying for competitive funds from another source(s) to implement this project?**

No

**If yes, please identify the source(s)**

**Federal Amount**

\$5,609,716.00

**Match Amount**

\$1,402,429.00

*Minimum of 20% of project total*

**Project Total**

\$7,012,145.00

**Match Percentage**

20.0%

*Minimum of 20%*

*Compute the match percentage by dividing the match amount by the project total*

**Source of Match Funds**

CSAH and local funds

*A minimum of 20% of the total project cost must come from non-federal sources; additional match funds over the 20% minimum can come from other federal sources*

## Preferred Program Year

Select one: 2022

Select 2020 or 2021 for TDM projects only. For all other applications, select 2022 or 2023.

Additional Program Years: 2021

Select all years that are feasible if funding in an earlier year becomes available.

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## Project Information-Roadways

County, City, or Lead Agency	Ramsey County Public Works
Functional Class of Road	Class A Minor Arterial-Augmentor
Road System	CSAH
<i>TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET</i>	
Road/Route No.	23
<i>i.e., 53 for CSAH 53</i>	
Name of Road	County Road C
<i>Example; 1st ST., MAIN AVE</i>	
Zip Code where Majority of Work is Being Performed	55113
(Approximate) Begin Construction Date	05/10/2022
(Approximate) End Construction Date	10/28/2022
<b>TERMINI:(Termini listed must be within 0.3 miles of any work)</b>	
From: (Intersection or Address)	900 feet west of Victoria Street
To: (Intersection or Address)	675 feet west of Victoria Street
<i>DO NOT INCLUDE LEGAL DESCRIPTION</i>	
Or At	Bridge No. 62519 over BNSF RR
Primary Types of Work	Bridge Construction
<i>Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER, STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC.</i>	
<b>BRIDGE/CULVERT PROJECTS (IF APPLICABLE)</b>	
Old Bridge/Culvert No.:	62519
New Bridge/Culvert No.:	TBD
Structure is Over/Under (Bridge or culvert name):	BNSF RR

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## Requirements - All Projects

**All Projects**

*1. The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan (2015), the 2040 Regional Parks Policy Plan (2015), and the 2040 Water Resources Policy Plan (2015).*

**Check the box to indicate that the project meets this requirement. Yes**

*2. The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan goals, objectives, and strategies that relate to the project.*

Goal: Transportation System Stewardship (2.6)

Objectives: Operate regional transportation system to efficiently and cost-effectively connect people and freight to destinations

Strategies: A2

Goal: Safety and security (2.7)

Objectives: Reduce crashes and improve safety and security for all mods of passenger, travel and freight transport

Strategies: B6

List the goals, objectives, strategies, and associated pages:

Goal: Access to destinations (2.8)

Objectives: Increase availability of multi-modal travel options.

Strategies: C1, C2, C6, C9, C10, C12, C16

Goal: Healthy Environment (2.12)

Objectives: Increase availability and attractiveness of other travel-modes and promote connectivity between communities and amenities for people.

Strategies: E3, E6, E7

Goal: Leveraging transportation investments to guide land use (2.14)

Objectives: Focus regional growth in areas that support full range of multi-modal travel. Encourage local land use design to integrate highways, streets, transit, walking and bicycling.

Strategies: F3, F4, F5, F6, F7, F9

*3. The project or the transportation problem/need that the project addresses must be in a local planning or programming document. Reference the name of the appropriate comprehensive plan, regional/statewide plan, capital improvement program, corridor study document [studies on trunk highway must be approved by the Minnesota Department of Transportation and the Metropolitan Council], or other official plan or program of the applicant agency [includes Safe Routes to School Plans] that the project is included in and/or a transportation problem/need that the project addresses.*

**List the applicable documents and pages:**

## 2018-2022 Ramsey County Transportation Improvement Program (15)

*4. The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible.*

**Check the box to indicate that the project meets this requirement. Yes**

*5. Applicants that are not cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.*

**Check the box to indicate that the project meets this requirement. Yes**

*6. Applicants must not submit an application for the same project elements in more than one funding application category.*

**Check the box to indicate that the project meets this requirement. Yes**

*7. The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.*

**Roadway Expansion:** \$1,000,000 to \$7,000,000

**Roadway Reconstruction/ Modernization Modernization and Spot Mobility:** \$1,000,000 to \$7,000,000

**Traffic Management Technologies (Roadway System Management):** \$250,000 to \$7,000,000

**Bridges Rehabilitation/ Replacement:** \$1,000,000 to \$7,000,000

**Check the box to indicate that the project meets this requirement. Yes**

*8. The project must comply with the Americans with Disabilities Act (ADA).*

**Check the box to indicate that the project meets this requirement. Yes**

*9. In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have, or be substantially working towards, completing a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA.*

The applicant is a public agency that employs 50 or more people and has an adopted ADA transition plan that covers the public right of way/transportation.

Date plan adopted by governing body

The applicant is a public agency that employs 50 or more people and is currently working towards completing an ADA transition plan that covers the public rights of way/transportation. Yes

Date process started

Date of anticipated plan completion/adoption

The applicant is a public agency that employs fewer than 50 people and has a completed ADA self-evaluation that covers the public rights of way/transportation.

Date self-evaluation completed

The applicant is a public agency that employs fewer than 50 people and is working towards completing an ADA self-evaluation that covers the public rights of way/transportation.

Date process started

Date of anticipated plan completion/adoption

**(TDM Applicants Only) The applicant is not a public agency subject to the self-evaluation requirements in Title II of the ADA.**

*10. The project must be accessible and open to the general public.*

**Check the box to indicate that the project meets this requirement. Yes**

*11. The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, per FHWA direction established 8/27/2008 and updated 6/27/2017.*

**Check the box to indicate that the project meets this requirement. Yes**

*12. The project must represent a permanent improvement with independent utility. The term independent utility means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match. Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.*

**Check the box to indicate that the project meets this requirement. Yes**

*13. The project must not be a temporary construction project. A temporary construction project is defined as work that must be replaced within five years and is ineligible for funding. The project must also not be staged construction where the project will be replaced as part of future stages. Staged construction is eligible for funding as long as future stages build on, rather than replace, previous work.*

**Check the box to indicate that the project meets this requirement. Yes**

*14. The project applicant must send written notification regarding the proposed project to all affected state and local units of government prior to submitting the application.*

**Check the box to indicate that the project meets this requirement. Yes**

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## Roadways Including Multimodal Elements

*1. All roadway and bridge projects must be identified as a principal arterial (non-freeway facilities only) or A-minor arterial as shown on the latest TAB approved roadway functional classification map.*

**Check the box to indicate that the project meets this requirement. Yes**

### Roadway Expansion and Reconstruction/Modernization and Spot Mobility projects only:

*2. The project must be designed to meet 10-ton load limit standards.*

**Check the box to indicate that the project meets this requirement.**

### Bridge Rehabilitation/Replacement projects only:

3. Projects requiring a grade-separated crossing of a principal arterial freeway must be limited to the federal share of those project costs identified as local (non-MnDOT) cost responsibility using MnDOT's Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

**Check the box to indicate that the project meets this requirement. Yes**

4. The bridge must carry vehicular traffic. Bridges can carry traffic from multiple modes. However, bridges that are exclusively for bicycle or pedestrian traffic must apply under one of the Bicycle and Pedestrian Facilities application categories. Rail-only bridges are ineligible for funding.

**Check the box to indicate that the project meets this requirement. Yes**

5. The length of the bridge must equal or exceed 20 feet.

**Check the box to indicate that the project meets this requirement. Yes**

6. The bridge must have a sufficiency rating less than 80 for rehabilitation projects and less than 50 for replacement projects. Additionally, the bridge must also be classified as structurally deficient or functionally obsolete.

**Check the box to indicate that the project meets this requirement. Yes**

**Roadway Expansion, Reconstruction/Modernization and Spot Mobility, and Bridge Rehabilitation/Replacement projects only:**

7. All roadway projects that involve the construction of a new/expanded interchange or new interchange ramps must have approval by the Metropolitan Council/MnDOT Interchange Planning Review Committee prior to application submittal. Please contact Michael Corbett at MnDOT (Michael.J.Corbett@state.mn.us or 651-234-7793) to determine whether your project needs to go through this process.

**Check the box to indicate that the project meets this requirement. Yes**

## Requirements - Roadways Including Multimodal Elements

### Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$284,007.50
Removals (approx. 5% of total cost)	\$284,007.50
Roadway (grading, borrow, etc.)	\$0.00
Roadway (aggregates and paving)	\$0.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$0.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$0.00
Traffic Control	\$195,965.00
Striping	\$0.00
Signing	\$0.00
Lighting	\$0.00

Turf - Erosion & Landscaping	\$0.00
Bridge	\$5,680,150.00
Retaining Walls	\$0.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$0.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$568,015.00
Other Roadway Elements	\$0.00
<b>Totals</b>	<b>\$7,012,145.00</b>

### Specific Bicycle and Pedestrian Elements

<b>CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES</b>	<b>Cost</b>
Path/Trail Construction	\$0.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$0.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00
Pedestrian-scale Lighting	\$0.00
Streetscaping	\$0.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$0.00
Other Bicycle and Pedestrian Elements	\$0.00
<b>Totals</b>	<b>\$0.00</b>

### Specific Transit and TDM Elements

<b>CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES</b>	<b>Cost</b>
Fixed Guideway Elements	\$0.00
Stations, Stops, and Terminals	\$0.00
Support Facilities	\$0.00

Transit Systems (e.g. communications, signals, controls, fare collection, etc.)	\$0.00
Vehicles	\$0.00
Contingencies	\$0.00
Right-of-Way	\$0.00
Other Transit and TDM Elements	\$0.00
<b>Totals</b>	<b>\$0.00</b>

### Transit Operating Costs

Number of Platform hours	0
Cost Per Platform hour (full loaded Cost)	\$0.00
<b>Subtotal</b>	<b>\$0.00</b>
Other Costs - Administration, Overhead, etc.	\$0.00

### Totals

Total Cost	\$7,012,145.00
Construction Cost Total	\$7,012,145.00
Transit Operating Cost Total	\$0.00

### Measure A: Distance to the nearest parallel bridge

*RESPONSE:*

Location of nearest parallel bridge crossing: N/A

Distance from one end of proposed project to nearest parallel crossing (that is an A-minor arterial or principal arterial) and then back to the other side of the proposed project (calculated by Council Staff): 0

**Explanation:**

Due to the curvilinear alignment of both the BNSF railroad and County Road C, necessitated by the presence of nearby lakes and wetlands, there are no parallel, grade-separated crossings of the railroad. This bridge is necessitated by the railroad being located in a ravine at this location and allows the railroad to be located at more optimal locations east and west of Bridge 62519. There are perpendicular crossings at I-35W, approximately 2.38 miles west and at Rice Street (CSAH 49), approximately 1.98 miles northeast.

(Limit 2,800 characters; approximately 400 words)

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## Measure B: Project Location Relative to Jobs, Manufacturing, and Education

Existing Employment within 1 Mile:	6782
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	276
Existing Post-Secondary Students within 1 Mile:	0
Upload Map	1529346237546_Regional Economy Map.pdf

Please upload attachment in PDF form.

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## Measure C: Regional Truck Corridor Tiers

RESPONSE (Select one for your project, based on the Regional Truck Corridor Study):

The project is located on either a Tier 1, Tier 2, or Tier 3 corridor:

(65 Points)

The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor: Yes

(10 Points)

The project is not located on a Tier 1, Tier 2, or Tier 3 corridor:

(0 Points)

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## Measure A: Current Daily Person Throughput

Location	between Lexington Avenue and Victoria Street
Current AADT Volume	10900.0
Existing Transit Routes on the Project:	223
Upload "Transit Connections" map	1529346644625_Transit Map.pdf

Please upload attachment in PDF form.

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## Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	14170.0

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## Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume	Yes
If checked, METC Staff will provide Forecast (2040) ADT volume	11100

OR

Identify the approved county or city travel demand model to determine forecast (2040) ADT volume

Forecast (2040) ADT volume

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## Measure A: Connection to disadvantaged populations and projects benefits, impacts, and mitigation

Select one:

**Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50):**

*(up to 100% of maximum score)*

**Project located in Area of Concentrated Poverty:**

*(up to 80% of maximum score )*

**Projects census tracts are above the regional average for population in poverty or population of color:**

*(up to 60% of maximum score )*

**Project located in a census tract that is below the regional average for population in poverty or populations of color or includes children, people with disabilities, or the elderly:** Yes

*(up to 40% of maximum score )*

*1.(0 to 3 points) A successful project is one that has actively engaged low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits.*

*Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.*

**Response:**

Though the project is in an area that is below the regional average for populations in poverty or of color, it is adjacent to a large senior living facility. It is also immediately adjacent to Roseville's Central Park, a 225 acre park complex with multi-use trails, ballfields, a fishing pier, playgrounds, multiple picnic areas, the Frank Rog Ampitheater, which hosts multiple concerts and other events, the Harriet Alexander Nature Center, and the Muriel Sahlin Arboreteum. Adjacent to Central Park and County Road C, northwest of the bridge is Roseville's Civic Center, which includes City Hall, public safety facilities, the John Rose Oval skating center, Roseville Arena, and the adjacent Howard Johnson Park, which has tennis courts, a ballfield, and playground. This project will provide improved sidewalks and trails, as well as removing an impediment to motor vehicles.

*(Limit 1,400 characters; approximately 200 words)*

*2.(0 to 7 points) Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.*

**Response:**

Reconstructing the deficient bridge will afford greater access to the destinations listed above and the activities therein. County Road C is a contiguous route between I-35W and I-35E, with connections west into Hennepin County and east to Washington County. The necessary load limits currently in place on this bridge limit its usefulness as a transit route and limit its connectivity with disadvantaged populations. Removing this impediment will provide transportation options to all with destinations along the route.

*(Limit 2,800 characters; approximately 400 words)*

3. (-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

Below is a list of negative impacts. Note that this is not an exhaustive list.

Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.

Increased noise.

Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.

Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.

Increased speed and/or cut-through traffic.

Removed or diminished safe bicycle access.

Inclusion of some other barrier to access to jobs and other destinations.

Displacement of residents and businesses.

Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.

Other

During construction, there will be delays to those using the bridge and trail closures and full closure of County Road C may be necessary for time.

Diversion to other routes may occur, though alternate arterial routes are present. After construction, truck traffic, which has been constrained by the load limits on the bridge, may increase. As a follow-up project, Ramsey County and the City of Roseville are exploring a four-lane to three-lane conversion of County Road C to the east and traffic control improvements at the adjacent Victoria Street intersection.

**Response:**

*(Limit 2,800 characters; approximately 400 words)*

**Upload Map**

1529350103765\_Socio Economic Map.pdf

## Measure B: Affordable Housing

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score	Housing Score Multiplied by Segment percent
Roseville	0.02	1.0	70.0	70.0

## Total Project Length

Total Project Length (as entered in the "Project Information" form) 0.05

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### Affordable Housing Scoring

Total Project Length (Miles) or Population 0.02

Total Housing Score 70.0

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### Affordable Housing Scoring

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#### Measure A: Bridge Condition

Bridge Sufficiency Rating 44.1

Upload Structure Inventory Report 1529350342515\_Bridge Inventory Report 6-18-18.pdf

*Please upload attachment in PDF form.*

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#### Measure B: Load-Posting

Load Posted (Check box if the bridge is load-posted): Yes

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#### Measure A: Multimodal Elements and Existing Connections

Response:

County Road C is included as an existing route in the Regional Bikeway Plan and in the Ramsey County Pedestrian and Bike Plan. The route is adjacent to and provides non-motorized access to Roseville's Central Park. There is an existing ten-foot trail on the north side that is constrained by the five-foot sidewalk on the bridge, which will be replaced with ten-foot sidewalks on each side of the bride. County Road C is being studied for conversion from a four-lane to a three-lane section from Lexington Avenue, west of Bridge 62519, to Rice Street to the east, which will provide on-road bike facilities in addition to the existing off-road trail. This conversion would be done as part of a paving project to be coordinated with the bridge construction.

*(Limit 2,800 characters; approximately 400 words)*

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## Transit Projects Not Requiring Construction

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

[Check Here if Your Transit Project Does Not Require Construction](#)

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## Measure A: Risk Assessment - Construction Projects

### 1)Layout (30 Percent of Points)

Layout should include proposed geometrics and existing and proposed right-of-way boundaries.

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

100%

#### Attach Layout

Please upload attachment in PDF form.

Layout completed but not approved by all jurisdictions. A PDF of the layout must be attached to receive points. Yes

50%

#### Attach Layout

Please upload attachment in PDF form.

Layout has not been started

0%

Anticipated date or date of completion

### 2)Review of Section 106 Historic Resources (20 Percent of Points)

No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge Yes

100%

There are historical/archeological properties present but determination of no historic properties affected is anticipated.

100%

Historic/archeological property impacted; determination of no adverse effect anticipated

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

Unsure if there are any historic/archaeological properties in the project area.

0%

Project is located on an identified historic bridge

### 3)Right-of-Way (30 Percent of Points)

Right-of-way, permanent or temporary easements either not required or all have been acquired Yes

100%

Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete

50%

Right-of-way, permanent or temporary easements required, parcels identified

25%

Right-of-way, permanent or temporary easements required, parcels not all identified

0%

Anticipated date or date of acquisition

### 4)Railroad Involvement (20 Percent of Points)

No railroad involvement on project or railroad Right-of-Way agreement is executed (include signature page, if applicable)

100%

#### Signature Page

Please upload attachment in PDF form.

Railroad Right-of-Way Agreement required; negotiations have begun Yes

50%

Railroad Right-of-Way Agreement required; negotiations have not begun.

0%

Anticipated date or date of executed Agreement

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## Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	\$7,012,145.00
Enter Amount of the Noise Walls:	\$0.00
Total Project Cost subtract the amount of the noise walls:	\$7,012,145.00
Points Awarded in Previous Criteria	
Cost Effectiveness	\$0.00

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## Other Attachments



Bridge Deck Condition Photo

177 KB

<b>File Name</b>	<b>Description</b>	<b>File Size</b>
BRIDGE 62519 ESTIMATE.xlsx	Engineer's Estimate	11 KB
Bridge Inventory Report 6-18-18.pdf	Bridge 62519 Inventory Report	107 KB
BRIDGE62519ESTIMATE.pdf	Engineer Estimate PDF	66 KB
CoRdCBRoverBNSFRR18_LocationMap.pdf	Project Location Map	817 KB
Existing Conditions Photo.pdf	Existing conditions photo	327 KB

# Regional Economy

Bridges Project: County Road C, Bridge No. 62519 Replacement | Map ID: 1529338871047

## Results

### WITHIN ONE MI of project:

Postsecondary Students: 0

### Totals by City:

#### Arden Hills

Population: 847

Employment: 869

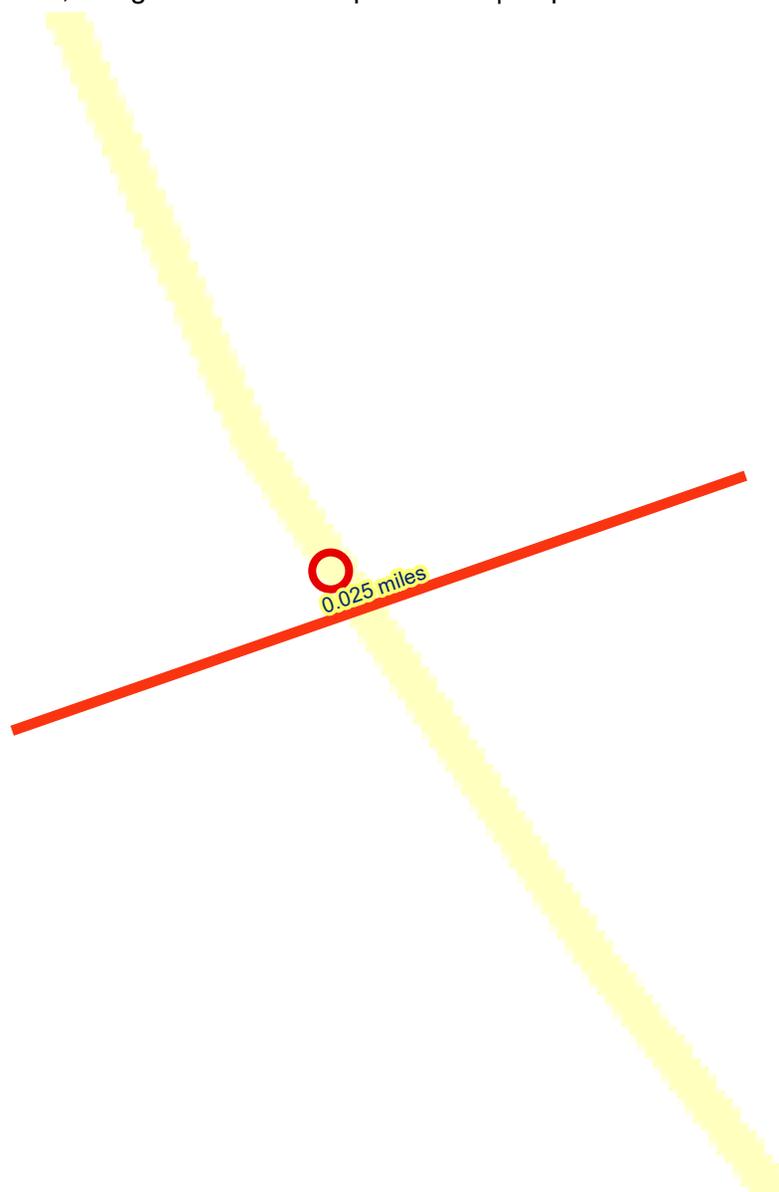
Mfg and Dist Employment: 32

#### Roseville

Population: 18118

Employment: 5913

Mfg and Dist Employment: 244



NCompass Technologies

-  Project Points
-  Manufacturing/Distribution Centers
-  Project
-  Job Concentration Centers



Created: 6/18/2018  
LandscapeRSA5



For complete disclaimer of accuracy, please visit  
<http://giswebsite.metc.state.mn.us/gisitenew/notice.aspx>



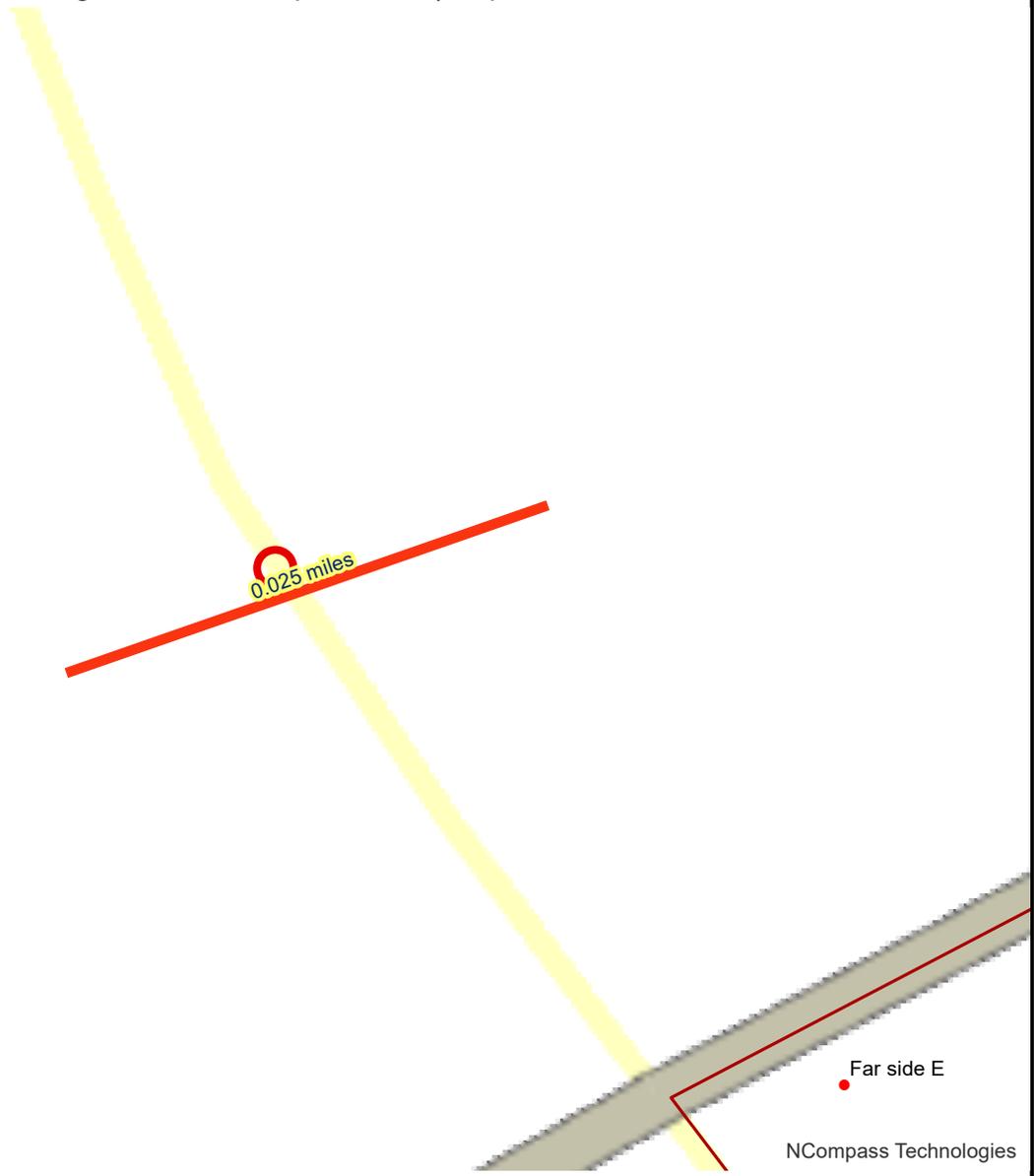
# Transit Connections

Bridges Project: County Road C, Bridge No. 62519 Replacement | Map ID: 1529338871047

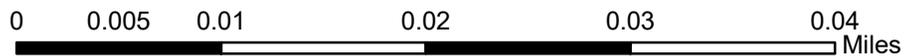
## Results

Transit with a Direct Connection to project:  
223

*\*indicates Planned Alignments*



- Project Points
- Active Stop
- Project
- Transit Routes



Created: 6/18/2018  
LandscapeRSA3



For complete disclaimer of accuracy, please visit  
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>

NCompass Technologies

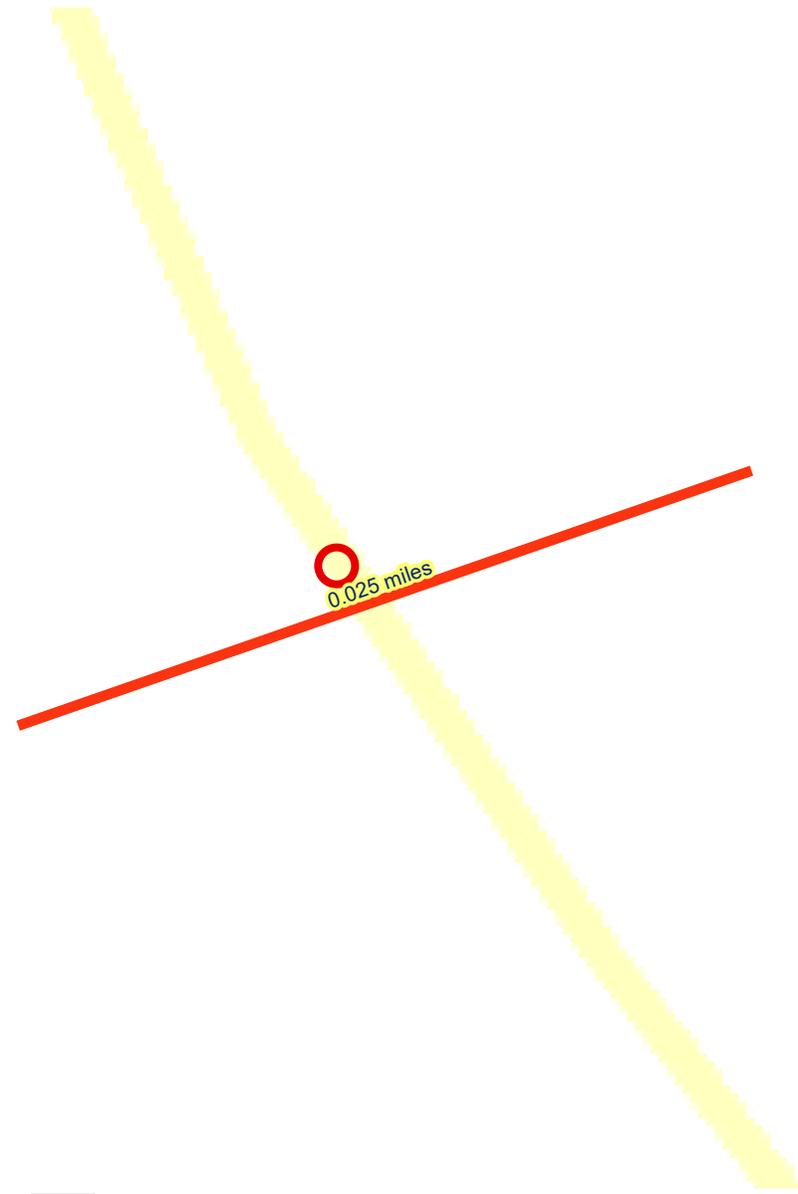


# Socio-Economic Conditions

Bridges Project: County Road C, Bridge No. 62519 Replacement | Map ID: 1529338871047

## Results

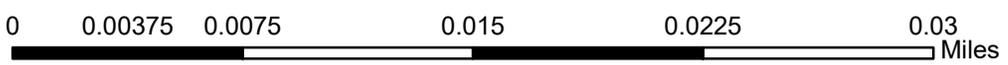
Project located in a census tract that is below the regional average for population in poverty or populations of color, or includes children, people with disabilities, or the elderly:  
(0 to 12 Points)



NCompass Technologies

-  Project Points
-  Project
-  Area of Concentrated Poverty > 50% residents of color

-  Area of Concentrated Poverty
-  Above reg'l avg conc of race/poverty



Created: 6/18/2018  
LandscapeRSA2



For complete disclaimer of accuracy, please visit <http://giswebsite.metc.state.mn.us/gisitenew/notice.aspx>



# MINNESOTA STRUCTURE INVENTORY REPORT

**Bridge ID: 62519    CSAH 23(CR C) over BNSF RR**

Date: 06/18/2018

+ GENERAL +	+ ROADWAY +	+ INSPECTION +
Agency Br. No.	Bridge Match ID (TIS) 1	Deficient Status S.D.
District METRO Maint. Area	Roadway O/U Key 1-ON	Sufficiency Rating 44.1
County 62 - RAMSEY	Route Sys/Nbr CSAH 23	Last Inspection Date 11-01-2017
City ROSEVILLE	Road Name CSAH 23	Inspection Frequency 12
Township	National Highway System N	Inspector Name RAMSEY COUNTY
Desc. Loc. 0.1 MI W OF JCT CSAH 52	Roadway Function MAINLINE	Status P-LOAD POSTED
Sect., Twp., Range 11 - 029N - 23W	Roadway Type 2 WAY TRAF	<b>+ NBI CONDITION RATINGS +</b>
Latitude 45d 01m 11.94s	Control Section (TH Only)	Deck 35 % UNSOUND 4
Longitude 93d 08m 26.94s	Ref. Point	Superstructure 5
Custodian COUNTY	Date Opened to Traffic 01-01-1974	Substructure 6
Owner COUNTY	Detour Length 1 mi.	Channel N
Inspection By RAMSEY COUNTY	Lanes 4 Lanes ON Bridge	Culvert N
Year Built 1970	ADT (YEAR) 8,864 (2008)	<b>+ NBI APPRAISAL RATINGS +</b>
MN Year Remodeled	HCADT	Structure Evaluation 4
FHWA Year Reconstructed	Functional Class. URB/MINOR ART	Deck Geometry 2
Bridge Plan Location COUNTY	<b>+ RDWY DIMENSIONS +</b>	Underclearances 3
Potential ABC N.A.	If Divided NB-EB SB-WE	Waterway Adequacy N
	Roadway Width 24.0 ft 24.0 ft	Approach Alignment 5
<b>+ STRUCTURE +</b>	Vertical Clearance	<b>+ SAFETY FEATURES +</b>
Service On HWY;PED	Max. Vert. Clear.	Bridge Railing 1-MEETS STANDARDS
Service Under RAILROAD	Horizontal Clear. 23.9 ft 23.9 ft	GR Transition 1-MEETS STANDARDS
Main Span Type PRESTR BM SPAN	Lateral Clr. - Lt/Rt	Appr. Guardrail 1-MEETS STANDARDS
Main Span Detail	Appr. Surface Width 52.0 ft	GR Termini 1-MEETS STANDARDS
Appr. Span Type	Bridge Roadway Width 48.0 ft	<b>+ IN DEPTH INSP. +</b>
Appr. Span Detail	Median Width on Bridge 4.0 ft	Frac. Critical N
Skew 56R	<b>+ MISC. BRIDGE DATA +</b>	Underwater N
Culvert Type	Structure Flared NO	Pinned Asbly. N
Barrel Length	Parallel Structure NONE	<b>+ WATERWAY +</b>
Number of Spans	Field Conn. ID	Drainage Area
MAIN: 3 APPR: 0 TOTAL: 3	Cantilever ID	Waterway Opening
Main Span Length 72.0 ft	Foundations	Navigation Control NOT APPL
Structure Length 224.9 ft	Abut. CONC - FTG PILE	Pier Protection
Deck Width 64.7 ft	Pier CONC - FTG PILE	Nav. Vert./Horz. Clr.
Deck Material C-I-P CONCRETE	Historic Status NOT ELIGIBLE	Nav. Vert. Lift Bridge Clear.
Wear Surf Type MONOLITHIC CONC	On - Off System ON	MN Scour Code A-NON WATERWAY
Wear Surf Install Year	<b>+ PAINT +</b>	Scour Evaluation Year
Wear Course/Fill Depth	Year Painted Pct. Unsound	<b>+ CAPACITY RATINGS +</b>
Deck Membrane NONE	Painted Area	Design Load HS 20
Deck Rebars NONE	Primer Type	Operating Rating HS 19.80
Deck Rebars Install Year	Finish Type	Inventory Rating HS 11.80
Structure Area 14,551 sq ft	<b>+ BRIDGE SIGNS +</b>	Posting VEH: 36 SEMI: 40 DBL: 40
Roadway Area 10,796 sq ft	Posted Load VEHICLE & SEMI	Rating Date 05-14-2012
Sidewalk Width - L/R 5.0 ft 5.0 ft	Traffic NOT REQUIRED	Overweight Permit Codes
Curb Height - L/R 0.75 ft 0.75 ft	Horizontal NOT REQUIRED	A: N B: N C: N
Rail Codes - L/R 15 15	Vertical NOT APPLICABLE	

06/18/2018

# MINNESOTA BRIDGE INSPECTION REPORT

Inspected by: RAMSEY COUNTY

## BRIDGE 62519 CSAH 23(CR C) OVER BNSF RR

INSP. DATE: 11-01-2017

County: RAMSEY	Location: 0.1 MI W OF JCT CSAH 52	Length: 224.9 ft
City: ROSEVILLE	Route: CSAH 23 Ref. Pt.: 003+00.300	Deck Width: 64.7 ft
Township:	Control Section: Maint. Area:	Rdwy. Area / Pct. Unsnd: 10,796 sq ft 35 %
Section: 11 Township: 029N Range: 23W	Local Agency Bridge Nbr:	Paint Area / Pct. Unsnd:
Span Type: PRESTR BM SPAN		Culvert : N/A
NBI Deck: 4 Super: 5 Sub: 6 Chan: N Culv: N	Open, Posted, Closed: LOAD POSTED	Postings: 36 - 40 - 40
Appraisal Ratings - Approach: 5 Waterway: N	MN Scour Code: A-NON WATERWAY	Def. Stat: S.D. Suff. Rate: 44.1
Required Bridge Signs - Load Posting: VEHICLE & SEMI	Traffic: NOT REQUIRED	
Horizontal: NOT REQUIRED	Vertical: NOT APPLICABLE	

ELEM NBR	ELEMENT NAME	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
800	CRITICAL DEFS OR SAFETY HAZARDS	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	1	0	0	0

Notes: NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION.

12	REINFORCED CONCRETE DECK	11-01-2017	14,551 SF	13,096	0	1,455	0
		11-02-2016	14,551 SF	13,096	0	1,455	0

Notes:

[2015-2017] major delamination along east/north facia (1' - 2' wide).  
 [2014-2017] There is major delamination 4.0' X 4.0' w/exposed rebar on the SW corner between girders #1 & #2.  
 [2014-2017] There is major delamination 2.0' X 2.0' on the SW corner between girders #2 & #3.  
 [2014-2017] There are 2 major delaminations 1.0' X 1.0' & 1.0' X 6.0' w/exposed rebar on the NE corner under railing.  
 [2013-2017] Span #1 has 90 LF of moderate longitudinal & transverse cracking with efflorescence & corrosion predominately between girders #1 & #2. Also some spalling and delamination present between girders #1 & #2.  
 [2013-2017] Span #2 has 110 LF of moderate transverse cracking with efflorescence.  
 [2013-2017] Span #3 has 50 LF of moderate transverse cracking with efflorescence.  
 [2013-2017] Numerous moderate transverse cracking w/efflorescence & evidence of corrosion throughout.  
 [2012-2017] There is some delamination, minor cracking, corrosion & efflorescence on north side under railing.  
 [2008-2017] There is major delamination 2.5' X 2.0' on the south side under railing above #1 column.  
 [2007-2017] There is some cracking & corrosion with efflorescence along centerline joint due to failure of centerline expansion joint material.

510 WEARING SURFACE	11-01-2017	10,796 SF	5,557	2,000	3,239	0
	11-02-2016	10,796 SF	7,557	0	3,239	0

Notes: Top of Concrete Deck with Uncoated Rebar Notes:

[2015-2017] The westbound deck has 350' of longitudinal, transverse & diagonal cracking.  
 [2013-2017] Some delamination near pier #1 at southern side of deck.  
 [2013-2017] Deck predominately on the south side are patched by Ramsey County Maintenance on an annual basis, but numerous bituminous patches are letting loose in a variety of locations.  
 [2007-2017] There is some exposed re-bar with corrosion on the south side when the patches let loose.  
 [2006-2017] The north side has some bit. patching at the west end + a few other areas of bit. patching. The north side deck has moderate transverse and diagonal cracking with moderate to major spalls.  
 [2001-2017] Delamination is prevalent on south side of bridge with numerous moderate size cracks.  
 [2015] Deck has been patched with bituminous but remains in poor condition.  
 [2013] The eastbound deck was evaluated by the City of St. Paul bridge dept. and recommended replacing the deck. Over 30% of the eastbound deck is in need of repair. Also determined that the entire deck should be replaced.

810	CONC WEAR SURF-CRACKING SEALING	11-01-2017	879 LF	0	879	0	0
		11-02-2016	879 LF	0	879	0	0

Notes: [2016-2017] The Eastbound deck has 529' of longitudinal, transverse & diagonal cracking.  
 [2014-2017] The westbound deck has 350' of longitudinal, transverse & diagonal cracking.  
 [2013-2015] There are numerous unsealed severe cracks and density on the eastbound deck. There are numerous unsealed moderate size cracks & density on the westbound deck.  
 [2007-2015] There is moderate cracking on the north side of deck and moderate to severe cracking on the south side.

301	POURED SEAL JOINT	11-01-2017	449 LF	0	112	169	168
		11-02-2016	449 LF	0	112	169	168

Notes: [2017] bituminous patching along joints EB.  
 [2013-2017] Moderate deterioration is present above piers. Joints need to be resealed. 75% in condition state #3.  
 [2013-2017] Centerline joint has major adhesion and cohesion failure. Cork filler @ centerline joint is letting loose.

330	METAL BRIDGE RAILING	11-01-2017	456 LF	0	436	20	0
		11-02-2016	456 LF	0	436	20	0
Notes: South Railing [2016-2017] Railing has paint failure and surface corrosion. North Railing [2017] North railing has 4' chain link fence installed on it [2016-2017] Railing has paint failure and surface corrosion. [2014-2017] There is moderate collision damage on top metal rail between post #9 & #10. [2015] moved from element 331 to 333 combination material railing. (concrete & metal)							
515	STEEL PROTECTIVE COATING	11-01-2017	570 SF	0	545	25	0
		11-02-2016	570 SF	0	545	25	0
Notes: South Railing [2016-2017] Railing has paint failure and surface corrosion. North Railing [2017] North railing has 4' chain link fence installed on it [2016-2017] Railing has paint failure and surface corrosion. [2014-2017] There is moderate collision damage on top metal rail between post #9 & #10. [2016] 454 LF of 2.25' high railing 1.25' X 456' = 570 SF.							
331	REINFORCED CONC BRIDGE RAILING	11-01-2017	456 LF	0	228	0	228
		11-02-2016	456 LF	0	228	0	228
Notes: South Railing [2016-2017] There is major spall w/ exposed re-bar & corrosion on concrete railing between posts #29-#36. Post #36 has severe delamination with section loss. [2013-2017] Cable near post #29 has been severed. [2005-2017] On the south side there is moderate cracking with moderate corrosion to post #9, #11, #12, #16, #17, #19, #20, #24, #26, #27 & #28. [2007-2017] There is a 6" major spall at bottom of concrete railing @ post #25 on the south side. [2008-2015] There is major delamination w/ exposed re-bar & corrosion on concrete railing between posts #29-#36. Post #36 has severe delamination with section loss. North Railing [2014-2017] There is a 1' delamination in post #11, & #25 [2014-2017] There is moderate collision damage on top metal rail between post #9 & #10. [2007-2017] There is damage to metal railing at the SW corner (bent outward). There is 1' area of spall with exposed re-bar & corrosion at the north side on post #17. [2005-2017] There is moderate cracking w/corrosion to support posts on the north side on concrete post #1, #5, #12, #15, #17, #21, #24, #28, #31, #32, #33, #35, #36 & #38. [2007-2017] There is a 6" spall w/ exposed re-bar & corrosion on concrete railing above post #32. [2011-2017] Cable broken due to corrosion of cable with severe section loss @ #14 post. [2016] Migrator assumed concrete/metal combination type rail. [2015] moved from element 331 to 333 combination material railing. (concrete & metal)							
822	BITUMINOUS APPROACH ROADWAY	11-01-2017	2 EA	0	2	0	0
		11-02-2016	2 EA	0	2	0	0
Notes: [2013-2017] Both bituminous approaches have moderate settlement with cracking. West side had a mill & overlay in 2007.							
205	REINFORCED CONCRETE COLUMN	11-01-2017	12 EA	0	12	0	0
		11-02-2016	12 EA	0	12	0	0
Notes: [2009-2017] Moderate spalls on all columns are present, but no exposure of reinforcement.							
215	REINFORCED CONCRETE ABUTMENT	11-01-2017	309 LF	0	209	100	0
		11-02-2016	309 LF	0	209	100	0
Notes: West Abutment: [2014-2017] There is a major spall on the SW corner w/exposed rebar on the parapet wall. [2014-2017] There is water sitting on the bearing seat on the NW corner & along the entire east bearing seat. [2012-2017] There are numerous moderate horizontal and vertical cracking with corrosion & efflorescence present. [2013-2017] Moderate deterioration at the SW corner approximately 15 LF. Also on the backwall off abutment there is a moderate diagonal crack and a 5' moderate vertical crack. [2013-2017] There is a 1' major spall at girder #4. Between girders #5 & #6 there is 1' major spall w/exposed rebar & corrosion. East Abutment: [2017] 2' X 6' & 2' X 2' delamination at the NE corner back wall [2012-2017] At the SE corner there is a 4" spall with exposed rebar & corrosion. [2013-2017] There are numerous vertical cracks w/efflorescence & corrosion on east abutment. Also some cracking on backwall. [2009-2017] There is a 6" major spall at NE corner of east abutment. Some build up of debris at girder #4.							

[2009-2017] 60% condition 2 & 40% condition 3

Wingwall notes: [2016-2017] minor faint failure on wing walls.

[2014-2017] There is a 2' moderate crack in the top southwest corner of NE wingwall.

[2013-2017] There are minor to moderate spalls on top of all wingwalls.

[2013-2017] NE WW has two minor vertical cracks full height.

[2013-2017] There is a minor 6' horizontal crack at the SE wingwall.

[2013-2017] There are minor to moderate horizontal & vertical cracks present on the NW & SW wingwalls.

[2016] Added 50 LF to abutment quantity to account for wingwalls SE 7', SW 22', NE 24' & NW 7'

234	REINFORCED CONCRETE PIER CAP	11-01-2017	130 LF	0	130	0	0
		11-02-2016	130 LF	0	130	0	0
Notes: [2009-2017] West concrete cap has minor deterioration.							
[2003-2017] Minor spalls and deterioration are present to the east concrete cap.							
[1995-2017] Graffiti on underside on pier.							
[2015] changed quantity from 495 LF to 130 LF per 2015 Compliance Report from MNDOT							
109	PRESTRESSED CONC GIRDER OR BEAM	11-01-2017	1,368 LF	0	1,368	0	0
		11-02-2016	1,368 LF	0	1,368	0	0
Notes: [1995-2017] SE & NW corner outside girder plug out.							
[2003-2017] There is evidence of corrosion @ pre-stressed girder ends. No cracking present.							
311	EXPANSION BEARING	11-01-2017	30 EA	0	18	12	0
		11-02-2016	30 EA	0	18	0	12
Notes: [2015-2017] bearings @ abutments have severe corrosion, all 12 in condition state 3.							
[2008-2017] There is heavy- severe corrosion of west end expansion bearings with some loss of section.							
[2007-2017] Corrosion is developing above pier columns.							
[2008-2014] There is moderate corrosion of east end expansion bearings.							
[2014] Changed from 36 expansion bearings to 30 expansion bearings with 6 fixed bearings on west pier.							
[2003] Recommend replacing the bearings due to severe corrosion.							
313	FIXED BEARING	11-01-2017	6 EA	0	6	0	0
		11-02-2016	6 EA	0	6	0	0
Notes: [2014-2017] There is moderate corrosion on the fixed bearings.							
[2014] There are 6 fixed bearings that were moved from expansion bearings (element # 311). The fixed bearings are located on the east girders of the west pier.							
855	SECONDARY MEMBERS (SUPER)	11-01-2017	40 EA	0	40	0	0
		11-02-2016	40 EA	0	40	0	0
Notes: [2007-2017] Concrete diaphragms are in place. Some corrosion present at the bottom of diaphragms.							
883	CONCRETE SHEAR CRACKING	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	1	0	0	0
Notes: [2017] No presence of shear cracking on concrete elements.							
Pay particular attention to the concrete pier caps and prestressed concrete beams.							
890	LOAD PST OR VERTICAL CLR SIGNING	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	0	0	1	0
Notes: [2014-2017] Load posting signs are in place.							
[2013] Need load posting R12-5 signs installed at bridge and nearest intersection both sides.							
891	OTHER BRIDGE SIGNING	11-01-2017	1 EA	0	0	1	0
Notes: [2007-2017] Missing object marker sign at NW corner and at SE corner.							
892	SLOPES & SLOPE PROTECTION	11-01-2017	1 EA	0	1	0	0
		11-02-2016	1 EA	0	1	0	0
Notes: [2008-2017] There is movement and settlement of slope pavement both ends (3" gap & settlement) near abut. Slope pavement both sides require sealing.							
[2012-2017] West slope pavement has some movement near the west side columns. Some washout of material near the base of column #2 & #3. Also minor- moderate transverse cracking.							
[2011-2017] East slope pavement has a major spall on east side slope paving between #4 & #5 girders. Also minor- moderate transverse cracking.							
893	GUARDRAIL	11-01-2017	1 EA	0	1	0	0
		11-02-2016	1 EA	0	1	0	0
Notes: [2013-2017] Moderate damage @ SW, NW & SE corners.							
Twisted end treatment at all corners							
894	DECK & APPROACH DRAINAGE	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	1	0	0	0

Notes: [2003-2017] Drainage system is functioning properly.  
 [2016] Water drains to the gutter then off both directions off the bridge

895	SIDEWALK, CURB, & MEDIAN	11-01-2017	1 EA	0	0	0	1
		11-02-2016	1 EA	0	0	0	1

Notes: [2014-2017] Sidewalk on north side of bridge has been ramped with bituminous.  
 [2013-2017] Both ends have settlement at median.  
 [2007-2017] Curb & sidewalk on the south side of the bridge has severe spalling. Also some minor cracking on both sides.  
 [2007-2013] Severe settlement of sidewalk @ bridge both ends on the north side.

899	MISCELLANEOUS ITEMS	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	1	0	0	0

Notes: [2016-2017] Metal on south side rusting at abutment.  
 [2015-2017] Steel conduit for utilities repaired in 2007. Conduit runs east - west on the south side & north side.  
 [2016] There is concrete struts between the columns

900	PROTECTED SPECIES	11-01-2017	1 EA	0	1	0	0
		11-02-2016	1 EA	1	0	0	0

Notes: [2016-2017] No protected species found living on this structure.

General [2017] Bridge safety inspection was conducted by Brian Essler & Dan Bodelson on 11/01/2017.  
 Notes: [2016] Bridge safety inspection was conducted by Brian Essler, Dan Bodelson & Rob Gaetz on 11/02/2016.  
 [2015] Bridge safety inspection was conducted by Brian Essler & Dan Bodelson on 11/05/2015.  
 [2014] Bridge safety inspection was conducted by B. Wieman, B Essler, D. Bodelson & R Bussiere on 11/25/2014.  
 [2013] Bridge safety inspection was conducted by B. Wieman and D. Bodelson on 11/27/2013.  
 2012 Bridge safety inspection was conducted by B. Wieman and D. Bodelson on 11/16/2012.  
 [2012] The eastbound deck was evaluated by the City of St. Paul bridge dept. and recommended replacing the deck. Over 30% of the eastbound deck is in need of repair. Also determined that the entire deck should be replaced.  
 2011 Bridge safety inspection was conducted by B. Wieman and D. Bodelson on 11/15/2011.  
 2010 Bridge safety inspection was completed by B. Wieman, B. Essler & D. Bodelson 12/09/2010.  
 2009 Bridge safety inspection was completed by B. Wieman on 8/25/2009.  
 2008 Bridge safety inspection was completed by B. Paine & B. Wieman 10/01/2008.  
 2008-2011 Deck in need of rehabilitation.  
 2007 Bridge safety inspection was completed by B. Wieman & B. Essler 8/14/2007.  
 Bridge safety inspection was completed by Bret Wieman 10/09/2006.

Deck: [4] Concrete deck has extensive delamination & spalling.

Brdg [1] Vehicular railings meet current standards.

Railings:

Transitions: [1] Guardrail transitions meet current standards.

Appr [1] Approach guardrail meets current standards.

Guardrail:

Appr Guardrail [1] Guardrail terminations meet current standards.

Terminal :

Superstructure: [5] Deck has extensive cracking, leaching & spalling.

Substructure: [6] Abutments have moderate deterioration.

Channel: [N] CSAH # 23 over BNSF RR

Culvert: [N] CSAH # 23 over BNSF RR

Waterway [N] CSAH # 23 over BNSF RR

Adeq:

Appr Roadway [5] Minor 3-5 MPH reduction required.

Alignment:

## MINNESOTA STRUCTURE INVENTORY REPORT

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Date: 06/18/2018

+ GENERAL +	+ ROADWAY +	+ INSPECTION +
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Rail Codes - L/R 15 15	Vertical NOT APPLICABLE	

06/18/2018

# MINNESOTA BRIDGE INSPECTION REPORT

Inspected by: RAMSEY COUNTY

## BRIDGE 62519 CSAH 23(CR C) OVER BNSF RR

INSP. DATE: 11-01-2017

County: RAMSEY	Location: 0.1 MI W OF JCT CSAH 52	Length: 224.9 ft
City: ROSEVILLE	Route: CSAH 23 Ref. Pt.: 003+00.300	Deck Width: 64.7 ft
Township:	Control Section: Maint. Area:	Rdwy. Area / Pct. Unsnd: 10,796 sq ft 35 %
Section: 11 Township: 029N Range: 23W	Local Agency Bridge Nbr:	Paint Area / Pct. Unsnd:
Span Type: PRESTR BM SPAN		Culvert : N/A
NBI Deck: 4 Super: 5 Sub: 6 Chan: N Culv: N	Open, Posted, Closed: LOAD POSTED	Postings: 36 - 40 - 40
Appraisal Ratings - Approach: 5 Waterway: N	MN Scour Code: A-NON WATERWAY	Def. Stat: S.D. Suff. Rate: 44.1
Required Bridge Signs - Load Posting: VEHICLE & SEMI	Traffic: NOT REQUIRED	
Horizontal: NOT REQUIRED	Vertical: NOT APPLICABLE	

ELEM NBR	ELEMENT NAME	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
800	CRITICAL DEFS OR SAFETY HAZARDS	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	1	0	0	0

Notes: NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION.

12	REINFORCED CONCRETE DECK	11-01-2017	14,551 SF	13,096	0	1,455	0
		11-02-2016	14,551 SF	13,096	0	1,455	0

Notes:

[2015-2017] major delamination along east/north facia (1' - 2' wide).  
 [2014-2017] There is major delamination 4.0' X 4.0' w/exposed rebar on the SW corner between girders #1 & #2.  
 [2014-2017] There is major delamination 2.0' X 2.0' on the SW corner between girders #2 & #3.  
 [2014-2017] There are 2 major delaminations 1.0' X 1.0' & 1.0' X 6.0' w/exposed rebar on the NE corner under railing.  
 [2013-2017] Span #1 has 90 LF of moderate longitudinal & transverse cracking with efflorescence & corrosion predominately between girders #1 & #2. Also some spalling and delamination present between girders #1 & #2.  
 [2013-2017] Span #2 has 110 LF of moderate transverse cracking with efflorescence.  
 [2013-2017] Span #3 has 50 LF of moderate transverse cracking with efflorescence.  
 [2013-2017] Numerous moderate transverse cracking w/efflorescence & evidence of corrosion throughout.  
 [2012-2017] There is some delamination, minor cracking, corrosion & efflorescence on north side under railing.  
 [2008-2017] There is major delamination 2.5' X 2.0' on the south side under railing above #1 column.  
 [2007-2017] There is some cracking & corrosion with efflorescence along centerline joint due to failure of centerline expansion joint material.

510 WEARING SURFACE	11-01-2017	10,796 SF	5,557	2,000	3,239	0
	11-02-2016	10,796 SF	7,557	0	3,239	0

Notes: Top of Concrete Deck with Uncoated Rebar Notes:

[2015-2017] The westbound deck has 350' of longitudinal, transverse & diagonal cracking.  
 [2013-2017] Some delamination near pier #1 at southern side of deck.  
 [2013-2017] Deck predominately on the south side are patched by Ramsey County Maintenance on an annual basis, but numerous bituminous patches are letting loose in a variety of locations.  
 [2007-2017] There is some exposed re-bar with corrosion on the south side when the patches let loose.  
 [2006-2017] The north side has some bit. patching at the west end + a few other areas of bit. patching. The north side deck has moderate transverse and diagonal cracking with moderate to major spalls.  
 [2001-2017] Delamination is prevalent on south side of bridge with numerous moderate size cracks.  
 [2015] Deck has been patched with bituminous but remains in poor condition.  
 [2013] The eastbound deck was evaluated by the City of St. Paul bridge dept. and recommended replacing the deck. Over 30% of the eastbound deck is in need of repair. Also determined that the entire deck should be replaced.

810	CONC WEAR SURF-CRACKING SEALING	11-01-2017	879 LF	0	879	0	0
		11-02-2016	879 LF	0	879	0	0

Notes: [2016-2017] The Eastbound deck has 529' of longitudinal, transverse & diagonal cracking.  
 [2014-2017] The westbound deck has 350' of longitudinal, transverse & diagonal cracking.  
 [2013-2015] There are numerous unsealed severe cracks and density on the eastbound deck. There are numerous unsealed moderate size cracks & density on the westbound deck.  
 [2007-2015] There is moderate cracking on the north side of deck and moderate to severe cracking on the south side.

301	POURED SEAL JOINT	11-01-2017	449 LF	0	112	169	168
		11-02-2016	449 LF	0	112	169	168

Notes: [2017] bituminous patching along joints EB.  
 [2013-2017] Moderate deterioration is present above piers. Joints need to be resealed. 75% in condition state #3.  
 [2013-2017] Centerline joint has major adhesion and cohesion failure. Cork filler @ centerline joint is letting loose.

330	METAL BRIDGE RAILING	11-01-2017	456 LF	0	436	20	0
		11-02-2016	456 LF	0	436	20	0
Notes: South Railing [2016-2017] Railing has paint failure and surface corrosion. North Railing [2017] North railing has 4' chain link fence installed on it [2016-2017] Railing has paint failure and surface corrosion. [2014-2017] There is moderate collision damage on top metal rail between post #9 & #10. [2015] moved from element 331 to 333 combination material railing. (concrete & metal)							
515	STEEL PROTECTIVE COATING	11-01-2017	570 SF	0	545	25	0
		11-02-2016	570 SF	0	545	25	0
Notes: South Railing [2016-2017] Railing has paint failure and surface corrosion. North Railing [2017] North railing has 4' chain link fence installed on it [2016-2017] Railing has paint failure and surface corrosion. [2014-2017] There is moderate collision damage on top metal rail between post #9 & #10. [2016] 454 LF of 2.25' high railing 1.25' X 456' = 570 SF.							
331	REINFORCED CONC BRIDGE RAILING	11-01-2017	456 LF	0	228	0	228
		11-02-2016	456 LF	0	228	0	228
Notes: South Railing [2016-2017] There is major spall w/ exposed re-bar & corrosion on concrete railing between posts #29-#36. Post #36 has severe delamination with section loss. [2013-2017] Cable near post #29 has been severed. [2005-2017] On the south side there is moderate cracking with moderate corrosion to post #9, #11, #12, #16, #17, #19, #20, #24, #26, #27 & #28. [2007-2017] There is a 6" major spall at bottom of concrete railing @ post #25 on the south side. [2008-2015] There is major delamination w/ exposed re-bar & corrosion on concrete railing between posts #29-#36. Post #36 has severe delamination with section loss. North Railing [2014-2017] There is a 1' delamination in post #11, & #25 [2014-2017] There is moderate collision damage on top metal rail between post #9 & #10. [2007-2017] There is damage to metal railing at the SW corner (bent outward). There is 1' area of spall with exposed re-bar & corrosion at the north side on post #17. [2005-2017] There is moderate cracking w/corrosion to support posts on the north side on concrete post #1, #5, #12, #15, #17, #21, #24, #28, #31, #32, #33, #35, #36 & #38. [2007-2017] There is a 6" spall w/ exposed re-bar & corrosion on concrete railing above post #32. [2011-2017] Cable broken due to corrosion of cable with severe section loss @ #14 post. [2016] Migrator assumed concrete/metal combination type rail. [2015] moved from element 331 to 333 combination material railing. (concrete & metal)							
822	BITUMINOUS APPROACH ROADWAY	11-01-2017	2 EA	0	2	0	0
		11-02-2016	2 EA	0	2	0	0
Notes: [2013-2017] Both bituminous approaches have moderate settlement with cracking. West side had a mill & overlay in 2007.							
205	REINFORCED CONCRETE COLUMN	11-01-2017	12 EA	0	12	0	0
		11-02-2016	12 EA	0	12	0	0
Notes: [2009-2017] Moderate spalls on all columns are present, but no exposure of reinforcement.							
215	REINFORCED CONCRETE ABUTMENT	11-01-2017	309 LF	0	209	100	0
		11-02-2016	309 LF	0	209	100	0
Notes: West Abutment: [2014-2017] There is a major spall on the SW corner w/exposed rebar on the parapet wall. [2014-2017] There is water sitting on the bearing seat on the NW corner & along the entire east bearing seat. [2012-2017] There are numerous moderate horizontal and vertical cracking with corrosion & efflorescence present. [2013-2017] Moderate deterioration at the SW corner approximately 15 LF. Also on the backwall off abutment there is a moderate diagonal crack and a 5' moderate vertical crack. [2013-2017] There is a 1' major spall at girder #4. Between girders #5 & #6 there is 1' major spall w/exposed rebar & corrosion. East Abutment: [2017] 2' X 6' & 2' X 2' delamination at the NE corner back wall [2012-2017] At the SE corner there is a 4" spall with exposed rebar & corrosion. [2013-2017] There are numerous vertical cracks w/efflorescence & corrosion on east abutment. Also some cracking on backwall. [2009-2017] There is a 6" major spall at NE corner of east abutment. Some build up of debris at girder #4.							

[2009-2017] 60% condition 2 & 40% condition 3

Wingwall notes: [2016-2017] minor faint failure on wing walls.

[2014-2017] There is a 2' moderate crack in the top southwest corner of NE wingwall.

[2013-2017] There are minor to moderate spalls on top of all wingwalls.

[2013-2017] NE WW has two minor vertical cracks full height.

[2013-2017] There is a minor 6' horizontal crack at the SE wingwall.

[2013-2017] There are minor to moderate horizontal & vertical cracks present on the NW & SW wingwalls.

[2016] Added 50 LF to abutment quantity to account for wingwalls SE 7', SW 22', NE 24' & NW 7'

234	REINFORCED CONCRETE PIER CAP	11-01-2017	130 LF	0	130	0	0
		11-02-2016	130 LF	0	130	0	0
Notes: [2009-2017] West concrete cap has minor deterioration.							
[2003-2017] Minor spalls and deterioration are present to the east concrete cap.							
[1995-2017] Graffiti on underside on pier.							
[2015] changed quantity from 495 LF to 130 LF per 2015 Compliance Report from MNDOT							
109	PRESTRESSED CONC GIRDER OR BEAM	11-01-2017	1,368 LF	0	1,368	0	0
		11-02-2016	1,368 LF	0	1,368	0	0
Notes: [1995-2017] SE & NW corner outside girder plug out.							
[2003-2017] There is evidence of corrosion @ pre-stressed girder ends. No cracking present.							
311	EXPANSION BEARING	11-01-2017	30 EA	0	18	12	0
		11-02-2016	30 EA	0	18	0	12
Notes: [2015-2017] bearings @ abutments have severe corrosion, all 12 in condition state 3.							
[2008-2017] There is heavy- severe corrosion of west end expansion bearings with some loss of section.							
[2007-2017] Corrosion is developing above pier columns.							
[2008-2014] There is moderate corrosion of east end expansion bearings.							
[2014] Changed from 36 expansion bearings to 30 expansion bearings with 6 fixed bearings on west pier.							
[2003] Recommend replacing the bearings due to severe corrosion.							
313	FIXED BEARING	11-01-2017	6 EA	0	6	0	0
		11-02-2016	6 EA	0	6	0	0
Notes: [2014-2017] There is moderate corrosion on the fixed bearings.							
[2014] There are 6 fixed bearings that were moved from expansion bearings (element # 311). The fixed bearings are located on the east girders of the west pier.							
855	SECONDARY MEMBERS (SUPER)	11-01-2017	40 EA	0	40	0	0
		11-02-2016	40 EA	0	40	0	0
Notes: [2007-2017] Concrete diaphragms are in place. Some corrosion present at the bottom of diaphragms.							
883	CONCRETE SHEAR CRACKING	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	1	0	0	0
Notes: [2017] No presence of shear cracking on concrete elements.							
Pay particular attention to the concrete pier caps and prestressed concrete beams.							
890	LOAD PST OR VERTICAL CLR SIGNING	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	0	0	1	0
Notes: [2014-2017] Load posting signs are in place.							
[2013] Need load posting R12-5 signs installed at bridge and nearest intersection both sides.							
891	OTHER BRIDGE SIGNING	11-01-2017	1 EA	0	0	1	0
Notes: [2007-2017] Missing object marker sign at NW corner and at SE corner.							
892	SLOPES & SLOPE PROTECTION	11-01-2017	1 EA	0	1	0	0
		11-02-2016	1 EA	0	1	0	0
Notes: [2008-2017] There is movement and settlement of slope pavement both ends (3" gap & settlement) near abut. Slope pavement both sides require sealing.							
[2012-2017] West slope pavement has some movement near the west side columns. Some washout of material near the base of column #2 & #3. Also minor- moderate transverse cracking.							
[2011-2017] East slope pavement has a major spall on east side slope paving between #4 & #5 girders. Also minor- moderate transverse cracking.							
893	GUARDRAIL	11-01-2017	1 EA	0	1	0	0
		11-02-2016	1 EA	0	1	0	0
Notes: [2013-2017] Moderate damage @ SW, NW & SE corners.							
Twisted end treatment at all corners							
894	DECK & APPROACH DRAINAGE	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	1	0	0	0

Notes: [2003-2017] Drainage system is functioning properly.  
 [2016] Water drains to the gutter then off both directions off the bridge

895	SIDEWALK, CURB, & MEDIAN	11-01-2017	1 EA	0	0	0	1
		11-02-2016	1 EA	0	0	0	1

Notes: [2014-2017] Sidewalk on north side of bridge has been ramped with bituminous.  
 [2013-2017] Both ends have settlement at median.  
 [2007-2017] Curb & sidewalk on the south side of the bridge has severe spalling. Also some minor cracking on both sides.  
 [2007-2013] Severe settlement of sidewalk @ bridge both ends on the north side.

899	MISCELLANEOUS ITEMS	11-01-2017	1 EA	1	0	0	0
		11-02-2016	1 EA	1	0	0	0

Notes: [2016-2017] Metal on south side rusting at abutment.  
 [2015-2017] Steel conduit for utilities repaired in 2007. Conduit runs east - west on the south side & north side.  
 [2016] There is concrete struts between the columns

900	PROTECTED SPECIES	11-01-2017	1 EA	0	1	0	0
		11-02-2016	1 EA	1	0	0	0

Notes: [2016-2017] No protected species found living on this structure.

General [2017] Bridge safety inspection was conducted by Brian Essler & Dan Bodelson on 11/01/2017.  
 Notes: [2016] Bridge safety inspection was conducted by Brian Essler, Dan Bodelson & Rob Gaetz on 11/02/2016.  
 [2015] Bridge safety inspection was conducted by Brian Essler & Dan Bodelson on 11/05/2015.  
 [2014] Bridge safety inspection was conducted by B. Wieman, B Essler, D. Bodelson & R Bussiere on 11/25/2014.  
 [2013] Bridge safety inspection was conducted by B. Wieman and D. Bodelson on 11/27/2013.  
 2012 Bridge safety inspection was conducted by B. Wieman and D. Bodelson on 11/16/2012.  
 [2012] The eastbound deck was evaluated by the City of St. Paul bridge dept. and recommended replacing the deck. Over 30% of the eastbound deck is in need of repair. Also determined that the entire deck should be replaced.  
 2011 Bridge safety inspection was conducted by B. Wieman and D. Bodelson on 11/15/2011.  
 2010 Bridge safety inspection was completed by B. Wieman, B. Essler & D. Bodelson 12/09/2010.  
 2009 Bridge safety inspection was completed by B. Wieman on 8/25/2009.  
 2008 Bridge safety inspection was completed by B. Paine & B. Wieman 10/01/2008.  
 2008-2011 Deck in need of rehabilitation.  
 2007 Bridge safety inspection was completed by B. Wieman & B. Essler 8/14/2007.  
 Bridge safety inspection was completed by Bret Wieman 10/09/2006.

Deck: [4] Concrete deck has extensive delamination & spalling.

Brdg [1] Vehicular railings meet current standards.

Railings:

Transitions: [1] Guardrail transitions meet current standards.

Appr [1] Approach guardrail meets current standards.

Guardrail:

Appr Guardrail [1] Guardrail terminations meet current standards.

Terminal :

Superstructure: [5] Deck has extensive cracking, leaching & spalling.

Substructure: [6] Abutments have moderate deterioration.

Channel: [N] CSAH # 23 over BNSF RR

Culvert: [N] CSAH # 23 over BNSF RR

Waterway [N] CSAH # 23 over BNSF RR

Adeq:

Appr Roadway [5] Minor 3-5 MPH reduction required.

Alignment:

ENGINEERS ESTIMATE BRIDGE 62519

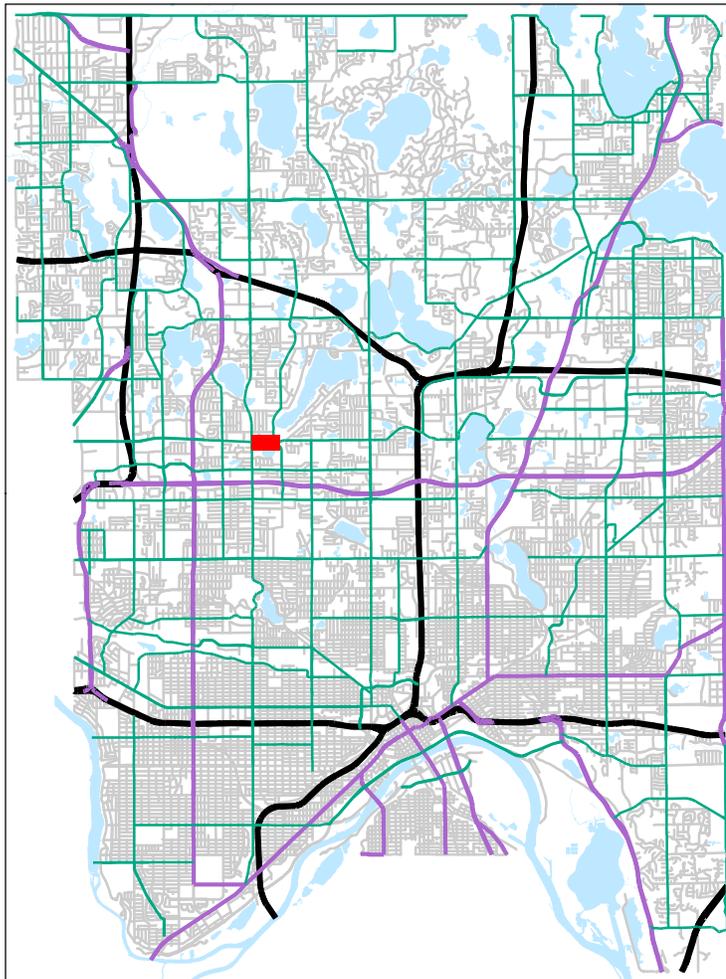
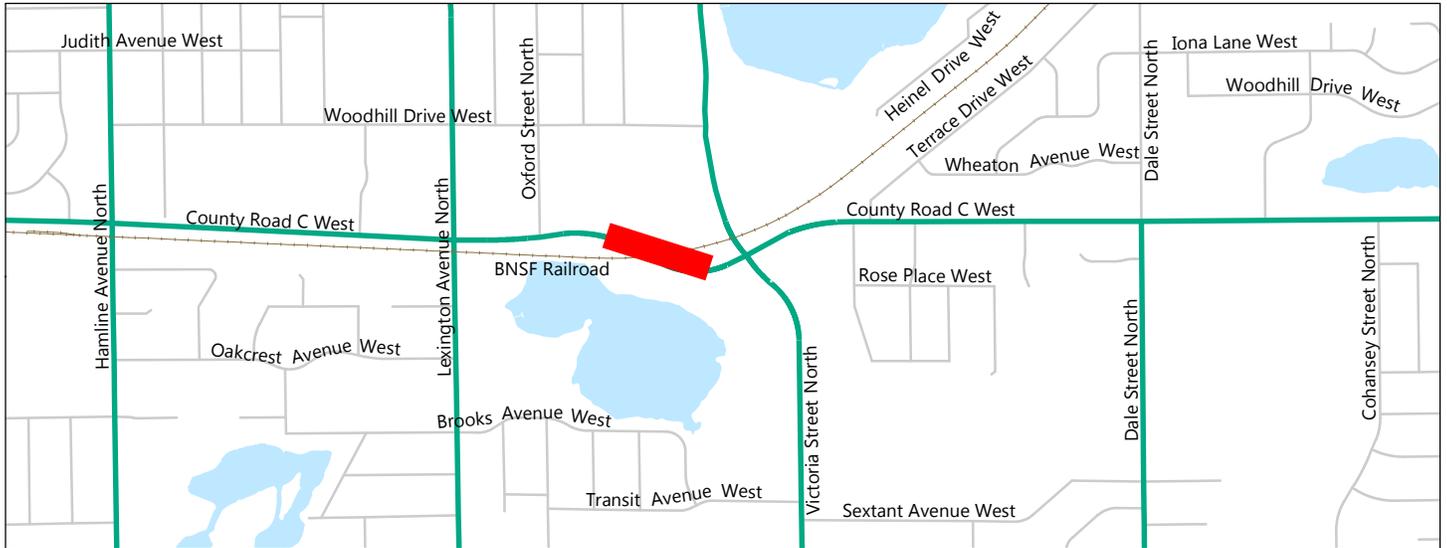
ITEM	UNIT	TOTAL ESTIMATED QUANTITY
BRIDGE NO. 62519 REMOVAL	LUMP SUM	1
BRIDGE No. 62519 REPLACEMENT	SQFT	16,229
ROADWAY (COUNTY ROAD C)	EACH	1
TRAFFIC CONTROL	LUMP SUM	1
MOBILIZATION (5%)	LUMP SUM	1
CONTINGENCY (10%)	LUMP SUM	1
TOTAL		

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UNIT PRICE	AMOUNT
\$284,007.50	\$284,007.50
\$ 350.00	\$5,680,150.00
TBD	\$0.00
\$ 195,965.00	\$195,965.00
\$284,007.50	\$284,007.50
\$ 568,015.00	\$568,015.00
	\$7,012,145.00

# County Road C (23) Bridge over BNSF RR

Map Produced 6/12/2018 by Ramsey County Public Works



- Interstate
- US & MN Highway
- County Road
- Municipal Street
- Project Location



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