



2023 APPLICATION FOR BRIDGE IMPROVEMENT GRANT (BIG) PE FUNDS or LOCAL FEDERAL BRIDGE REPLACEMENT or REMOVAL FUNDS

South Dakota Department of Transportation
SUBMIT APPLICATION TO: Colton.Stahl@state.sd.us

Identification	Bridge ID # <u>18-129-060</u> Owner <u>City of Mitchell</u> Location <u>2.1 miles W and 4.0 miles N of Mitchell, SD.</u>	Fed Functional Classification: <u>3630</u> Over: <u>Lake Mitchell Canal</u> Road/Street/Avenue Name: <u>Harmon Drive</u> BIG Score: <u>40.000</u> Mod. BIG Score: <u>N/A</u>
Program	Application for (check only one): <input type="checkbox"/> Federal Removal Project (Design & Construction) <input type="checkbox"/> Federal Replacement Project (Design & Construction) <input checked="" type="checkbox"/> Bridge Improvement Preliminary Engineering Grant (Survey & Hydraulics) <input type="checkbox"/> Both Federal Replacement Project & Bridge Improvement Preliminary Engineering Grant	
Grant (BIGs Only)	Total Project Amount \$ <u>85,800</u> = Requested Grant Amount \$ <u>68,640</u> + Local Match \$ <u>17,160</u> (20% minimum) If Higher Percent Used Show Here _____ %	
Eligibility (BIGs Only)	All Projects: (Attach separate sheet with explanation if any of the following are False) Structure serves multiple residences, farms, ranches or a multi-lot development? <input checked="" type="checkbox"/> True <input type="checkbox"/> False Structure is located on a Full Maintenance Road? <input checked="" type="checkbox"/> True <input type="checkbox"/> False Roadway does not terminate into a field entrance, driveway, single residence, farm, or ranch? <input checked="" type="checkbox"/> True <input type="checkbox"/> False Local Public Agency (LPA) is in full compliance with Federal and State NBIS requirements? <input checked="" type="checkbox"/> True <input type="checkbox"/> False County Applicant: Amount of County Wheel Tax per wheel for >6000 lb classification: _____ Is the structure listed in the Approved County 5-Year Plan <u>or</u> <input type="checkbox"/> Yes <input type="checkbox"/> No Revised Plan (Attach with signed standard resolution)? Has general maintenance been performed on the structure? (Must attach maintenance records.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Preliminary Engineering: Attach cost proposal (DOT cost plus fixed fee format for the requested work; maximum allowable fixed fee = 13%)	
Prioritization	Describe the economic importance of evaluating/replacing this bridge (attach additional sheets as needed): <u>This structure is on a primary route for local residences, mail routes, school routes, and emergency vehicles. The bridge condition is: Poor; and the functional class of the roadway is: 17 - Urban Major Collector.</u> <u>The City of Mitchell would like to proceed with the Preliminary Engineering for survey and hydraulic analysis and intends to pursue a future replacement grant.</u>	
LPA Authorization	_____ LPA Contact (print) <u>Joe Schroeder, Public Works Director</u> Contact email and phone number: <u>jschroeder@cityofmitchell.org</u> <u>605-995-8433</u> Attach resolution from Commission/Council authorizing application for grant(s).	

**BRIDGE IMPROVEMENT GRANT / LOCAL FEDERAL BRIDGE PROGRAMS
RESOLUTION AUTHORIZING SUBMISSION OF APPLICATIONS**

WHEREAS, City of Mitchell wishes to submit an application(s) for consideration of award for the Bridge Improvement Grant and/or Local Federal Bridge Programs:

STRUCTURE NUMBER(S) AND LOCATION(S):

Structure No. 18-129-060

Location: 2.1 miles W and 4.0 miles N of Mitchell, SD over Lake Mitchell Canal.

and WHEREAS, N/A certifies that the project(s) are listed in the county's Five-Year County Highway and Bridge Improvement Plan*;

and WHEREAS, City of Mitchell agrees to pay the **20 %** match on the Bridge Improvement Grant funds and/or 0.0% match on the Local Federal Bridge funds;

and WHEREAS, City of Mitchell hereby authorizes the Bridge Improvement Grant and Local Federal Bridge application(s) and any required funding commitments.

NOW THEREFORE BE IT RESOLVED:

That the South Dakota Department of Transportation be and hereby is requested to accept the attached Bridge Improvement Grant and/or Local Federal Bridge application(s).

Vote of Commissioners/Council: Yes _____ No _____

Dated at _____, SD, this _____ day of _____, _____.

ATTEST:

County Auditor/City Finance Officer

Chairman/Mayor

***NOTES:**

- not applicable for cities applying for the grant – simply mark 'NA'
- not applicable if applying for ONLY the Local Federal Bridge Program – simply mark 'NA'

Minimum required for Bridge Improvement Grant is 20%; must match percent shown on application.

Estimated Engineering Cost
Brosz Engineering, Inc.
BIG Project for Structure Number: 18-129-060
City of Mitchell
Retainer Agreement Number: 410761

Direct Labor Salary Cost:	Estimated Hours	Hourly Rate	Estimated Cost
Doug Wessel - Sr. Engineer I	60	\$64.78	\$3,886.80
Eric Prunty - Sr. Engineer I	20	\$52.78	\$1,055.60
Scott Schweitzer - Sr. Engineer II	240	\$50.14	\$12,033.60
Bruce Wilsey - Sr. Engineer Tech I	120	\$36.94	\$4,432.80
Jess Ellingson - Sr. Engineer Tech II	50	\$33.78	\$1,689.00
Steve Zimmer - Reg. Land Surveyor	50	\$41.17	\$2,058.50
Eric Kor - Surveyor I	45	\$29.03	\$1,306.35
Total Direct Labor Cost	585		\$26,462.65

Labor Overhead Cost: 186.35% \$49,313.15

Fixed Fee - Max. Allowable for Structure Hyd/Survey 13.00% \$9,850.85

Capital Cost of Money 0.626% \$165.66

Direct Expenses:

Mileage	0	\$0.00	\$0.00
Meals (Per Diem)	0	\$0.00	\$0.00
Lodging	0	\$0.00	\$0.00
Photocopies	0	\$0.00	\$0.00
Postage	0	\$0.00	\$0.00
Miscellaneous	1	\$7.69	\$7.69
Total Direct Expenses			\$7.69

Subsurface Investigation (if contracting out) \$0.00

Total Cost for Application **\$85,800.00**

* INFO ONLY IF SDDOT TO DO - NOT part of the cap & State pays match (NO bill to local) *

Estimate for Subsurface Investigation (Min. of \$5,500 assuming a box will be selected / Min. of \$11,500 assuming a 1-span bridge OR \$15,000 assuming a multi-span bridge will be selected.) \$11,500.00

Brosz Engineering 2022 Rates - SDDOT

Name	40 Hr/Wk	45 Hr/Wk	50 Hr/Wk
Doug Wessel - Sr. Engineer I	\$ 64.78	\$ 64.78	\$ 64.78
Eric Prunty - Sr. Engineer I	\$ 50.00	\$ 52.78	\$ 55.00
Scott Schweitzer - Sr. Engineer II	\$ 47.50	\$ 50.14	\$ 52.25
Bruce Wilsey - Sr. Engineer Tech I	\$ 35.00	\$ 36.94	\$ 38.50
Jess Ellingson - Sr. Engineer Tech II	\$ 32.00	\$ 33.78	\$ 35.20
Steve Zimmer - Reg. Land Surveyor	\$ 39.00	\$ 41.17	\$ 42.90
Eric Kor - Surveyor I	\$ 27.50	\$ 29.03	\$ 30.25

Bridge Improvement Grant (BIG) Ranking Score

Ref: 2023 Bridge Improvement Grant (BIG) Procedure, dated 05/26/2022

County/City:	City of Mitchell	County:	No	Prepared on:	06/29/2022
Structure:	18-129-060	City:	Yes		

Eligible for Replacement (Section IV, Part D, Paragraph 2; page 14 of 26)

1. Condition Rating of 4 or less for Deck, Substructure, Superstructure, or Culvert:

Deck =	6	Not Eligible
Superstructure =	7	Not Eligible
Substructure =	4	Eligible
Culvert =	N/A	Not Eligible

**Only required for
Rehabilitation or
Replacement Grants**

VI. Ranking Criteria (100 points total maximum)

Ranking Points

1. Bridge Condition (50 points maximum)

a. Posting (28 points maximum)

As defined by the NBI Item 70. (See Table VI-1, page 16 of 26)

Actual Load Posting at Structure =	12-20	
Bridge Inventory Code =	0	

	28
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b. Substructure Condition (6 points maximum)

As defined by the NBI Item 60. (See Table VI-2, page 17 of 26)

Substructure Condition Rating =	4	
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	2
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c. Superstructure Condition (6 points maximum)

As defined by the NBI Item 59. (See Table VI-2, page 17 of 26)

Superstructure Condition Rating =	7	
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	0
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d. Culvert Condition (12 points maximum)

As defined by the NBI Item 62.

Ranking Points awarded at 2 times the value shown in Table VI-2, page 17 of 26.

Culvert Condition Rating =	N/A	
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e. Fracture Critical (5 points or zero points)

Ranking Points awarded if structure is determine to be Fracture Critical.

Fracture Critical Structure (Yes or No) =	No	
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	0
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f. Scour Critical (5 points or zero points)

Ranking Points awarded if structure is determine to be Scour Critical.

Scour Rating =	U	
Scour Critical Structure (Yes or No) =	Yes	

	5
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Bridge Improvement Grant (BIG) Ranking Score

Ref: 2023 Bridge Improvement Grant (BIG) Procedure, dated 05/26/2022

County: **City of Mitchell**
 Structure: **18-129-060**

VI. Ranking Criteria (100 points total maximum) (Cont.)

Ranking Points (Cont.)

2. User Impact (20 points maximum)

User Impact (On-System) = (ADT x Detour Length (miles)) / 350
 User Impact (Off-System) = (ADT x Detour Length (miles)) / 100

Average Daily Traffic (ADT) = **350**
 Detour Length (miles) = **1**
 On-System or Off-System (On or Off) = **On**
 Formula Denominator = 350
 Ranking Points = 1.00

1.00

3. Local Planning (30 points maximum for Counties / 20 points maximum for Cities)

a. Wheel Tax (10 points maximum) (See Table VI-3, page 18 of 26)
 Ranking Points = Actual \$ Amount x 2

County Assessment/Wheel = **\$0.00** /wheel
 Ranking Points = 0.00

0.00

b. Bid Ready (10 points or zero points)
 - Project is ready for SDDOT review
 (Final review plans, certifications, and permits submitted with application)

Project Bid Ready (Yes or No) = **No**

0

c. LPA Financial Commitment (10 points maximum)
 Additional points for any increased local match beyond required 20%.
 As shown in See Table VI-4, page 18 of 26).

LPA Share (%) = **20** %
 Ranking Points = 0.00

0.00

Total Score = **36.000**

County Score = N/A
City Score = 40.000