## Identification

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBI Structure</td>
<td>#52-375-296</td>
</tr>
<tr>
<td>Owner</td>
<td>City of Rapid City</td>
</tr>
<tr>
<td>Location</td>
<td>San Marco Boulevard, 0.1 mi. south of its intersection w/ S. Canon Road</td>
</tr>
<tr>
<td>Preliminary Engineering</td>
<td>Completed by Local OR Completed by BIG Grant PCN ______</td>
</tr>
</tbody>
</table>

**To be included with this program**

## Eligibility

- Bridge is on the National Bridge Inventory?
- Bridge overall condition is rated as Poor? (Per list of eligible structures as provided by SDDOT)
- Local Government currently has funds or ability to obtain funds to provide an 18.05% match on all eligible costs?
- Local Government currently has funds or ability to obtain funds to cover all in-eligible costs?
- Bridge site currently has access and no issues with initiating field survey work?
- Bridge site has adequate right of way or there are no concerns with acquiring adequate right of way?
- Structure serves multiple residences, farms, ranches or a multi-lot development?
- Structure is located on a Full Maintenance Road?
- Roadway does not terminate into a field entrance, driveway, single residence, farm, or ranch?
- Local Public Agency (LPA) is in full compliance with Federal and State NBIS requirements?
- General maintenance been performed on the structure?

## Work Description

The existing structure is a 60' wide x 32' long precast concrete flat slab 2-span bridge and was constructed in 1977 and is located in a residential neighborhood on a local street. Per the 2019 annual bridge inspection report, the structure is posted at 50% of legal loads. The modified BIG score for this structure is 39.1, as scored by City staff. The repairs necessary to increase the load limit are numerous and it would be cost prohibitive for a major rehabilitation project; therefore, the City of Rapid City plans to replace the existing structure with a reinforced concrete box culvert (RCBC). During the design phase, FEMA revised flood plain information will be evaluated to determine the ultimate RCBC size, but for cost estimating purposes, a double 16'x4’ RCBC was assumed.

Work will include the removal of the existing structure, including the existing sidewalk, pedestrian rails, impacted water main and existing street adjacent to the structure. Street and water main replacements will be limited to the area of impact resulting from the existing structure removal and subsequent replacement. The potential need for inlets or curb cuts to accommodate street drainage will be evaluated because the structure is located in a sag vertical curve. The channel will be impacted during construction and will be remediated to its pre-construction condition with the appropriate erosion control measures (i.e. blanket, rip rap, seeding, etc). This structure is located approximately 900 feet north of Pinedale Elementary School, therefore it receives heavy pedestrian traffic, especially during the school year. Because of its proximity to a school, the sidewalk and pedestrian rails will be replaced and shall be ADA compliant. The adjacent road is a 30.34’ wide roadway which will be reconstructed to meet the City’s criteria. The anticipated street section will match the existing width and be 5” asphalt on 6” base course and include curb and gutter. An existing 8” ductile iron water main crosses beneath the structure. Street and water main replacements will be limited to the area of impact resulting from the existing structure removal and subsequent replacement. The City of Rapid City received Highway Infrastructure Program Funds in 2019 in the amount of $164,124.96 (DOT authorization date of 8/29/19). These funds have a 3 year timeline attached to them and it is the intent of the City to utilize these funds for the City match portion for this application. Any additional funds will be supplemented by the City’s Capital Improvement Plan (CIP) budget. Estimated costs for this project are Design = $95,000* (this includes $5,000 of water main design costs that are not eligible costs); Construction = $625,000* (this includes $35,000 of water main replacement costs that are not eligible participating costs); Construction Administration = $60,000. Total estimated cost = $780,000* (this includes $40,000 of ineligible water main costs.) The ineligible water main costs have been removed from the attached program resolution estimate.

## Contact Information

- **LPA Authorization**: Sara Odden (print)
- **Contact email and phone number**: sara.odden@rcgov.org / 605.394.4154

Attach resolution from Commission/Council authorizing application for grant.
WHEREAS, City of Rapid City desires the replacement of the bridge hereinafter described:

STRUCTURE NUMBER AND LOCATION: Structure #52-375-296
Located on San Marco Boulevard, 0.1 miles south of its intersection with South Canyon Road

LIST OF CURRENT LANDOWNERS ADJACENT TO THE PROJECT (NAMES & ADDRESSES):
1. Paul Weber Trust
   4934 Pierre St
   Rapid City, SD 57702
2. Clayton & Renee Butcher
   309 San Marco Blvd
   Rapid City, SD 57702
3. Lee & Ruth Geiger
   304 San Marco Blvd
   Rapid City, SD 57702
4. Daniel & Kirby Anderson
   318 San Marco Blvd
   Rapid City, SD 57702
5. City of Rapid City
   300 Sixth St
   Rapid City, SD 57701

AND WHEREAS, City of Rapid City is obligated and hereby agrees to provide proper maintenance as required by the Federal Highway Act as amended and supplemented thereto for project after construction is completed and to regulate or cause to be regulated the installation of utility facilities within the limits of the right-of-way of the proposed project in accordance with State and Federal requirements.

AND WHEREAS, City of Rapid City is obligated and hereby agrees to reimburse the State for all costs not reimbursable with Bridge Replacement Funds.

AND WHEREAS, the bridge is in need of replacement for the following reasons:
1. The condition rating is poor.
2. The bridge is not located on a County or Township designated No Maintenance or Minimum Maintenance Road.
3. The bridge is located on a Federal Aid Route, a school bus route, a mail route, a field to farm to market route, a lake or recreation access route, or other (please specify).
4. The load carrying capacity of the existing bridge can be improved to carry legal loads by rehabilitation of the existing bridge.

NOW THEREFORE BE IT RESOLVED:

That the South Dakota Department of Transportation be and hereby is authorized and requested to program for construction, in accordance with the “Local Roads Plan” and the State’s “Standard Specifications for Roads and Bridges,” the bridge replacement project at the above described location. Items to be handled by State forces with Federal Participation will include hydraulic study review, foundations investigation (if necessary), plan reviews, and construction administration.

Estimated Cost of Project Including Engineering: $740,000.00
Federal Share (81.95%): $606,430.00
Local Share (18.05%): $133,570.00

Vote of Commissioners/Council: Yes No

Dated at Rapid City, SD, this day of , .

ATTEST:

County Auditor/City Finance Officer Chairman/Mayor