

GENERAL INFORMATION

Preparation Date: April 21, 2023 Project Title: Hidden Valley Bridge Replacement

Requesting T/LPA: Sandoval County Is there an approved Governing Body resolution for
(Applicant) this application
 YES NO PENDING If pending, date
expected May 17, 2023

Responsible Charge

Name: Roseanne M. Gomez Phone: 505-771-3315
Title: Assistant Director of Public Works Email: RGomez@sandovalcountynm.gov

PROJECT DESCRIPTION

Project Type (Check all that apply):

ROADWAY BRIDGE SAFETY PLANNING/DESIGN OTHER

If you chose "OTHER" please clarify here: Construction Management

Project Scope: To remove and replace the bridge at Hidden Valley Road in La Cueva. This bridge is in the planning
stages with our Engineer and during the floods in Jemez Springs it became an issue with the active loss of roadway embankment behind the abutment that could result in a
sudden cut by the stream behind the abutment resulting in a danger to motorists and the possible undermining of the abutment and a total bridge deck collapse.

Is the request to address a bridge on the NMDOT's Local Bridge Priority List for Replacement/Rehabilitation?
 NO YES If yes, please indicate bridge #: _____

Is the request to continue or advance a phase of a previous project?
 NO YES If yes, please indicate funding sources and scope of previous phase below.

Funding Source: Local Funding

Previous Phase Project Scope: Design

Completion Date of Previous Phase: March 28, 2023

Current Phase being requested: Construction/Replacement of Hidden Valley Bridge

Project Location

Route Number and/or Street Name: Hidden Valley Road in La Cueva, NM

Project Termini:

Beginning Mile point and/or intersection: Hwy 126-Heading South

Ending Mile point and/or intersection: Escondido Road

Total length of proposed project: .20

NOTE: A local government project that is located in full or in part within a department right-of-way or NHS route must be administered in accordance with the "Tribal/Local Public Agency Handbook".

A local government project that ties into, connects or crosses a department right-of-way or an NHS route, or when the project may have an effect on existing improvements within department rights-of-way, requires the approval of the department.

Is the project located in full or in part within a department right-of-way or NHS route?

NO YES If yes, the project must be administered in accordance with the Tribal/Local Public Agency Handbook and follow all requirements and procedures.

Does the project tie into, connect or cross a department right-of-way or an NHS route, or will the project have an effect on existing improvements within a NMDOT right-of-way? "Letter of Approval" from the NMDOT District Engineer?

NO YES If yes, a "Letter of Approval" is required from the NMDOT District Engineer.

Will the project impact known environmental and/or cultural resources?

NO YES If yes, please clarify _____

Is this project tied to any past or future federal funding?

NO YES If yes, please identify _____

NO YES Does the Local Entity intend to apply for Match Waiver Funding?

Project Phases to be included in request (Check all that apply):

PLANNING

PRELIMINARY ENGINEERING/DESIGN

CONSTRUCTION


CONSTRUCTION MANAGEMENT & TESTING

*RIGHT OF WAY ACQUISITION**

* Projects that are for ROW acquisition will need to follow NMDOT ROW acquisition requirements if the entity intends to utilize federal funding in any subsequent project phase.

PROJECT COSTS:

Column A (Not Phased)			Column B (Phased)
If project is not phased, complete column A only.			Total Phases No. (1, 2, 3, I, II, III, etc.):
If project is phased, list the amount of funding being currently requested in Column A and complete Column B.			The amount below represents the cost of the entire project and will be greater than Column A.
			Total Project Cost: \$
Percentage Estimates:			Phased projects are usually large and divided into parts or phases. Please clarify how the requested project funding relates to the total overall project. Identify future phases and estimated costs.
Total Local Match	5%	\$65,196.06	
Total State Share	95%	\$1,238,725.19	
Total cost	100%	\$1,303,921.25	

T/LPA REVIEW:					
By:	Date:	Recommended:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
NMDOT DISTRICT REVIEW:					
By:	Date:	Recommended:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

<p><u>NMDOT District comments.</u></p>
<p><u>NMDOT Environmental Bureau comments.</u></p>

Topics to discuss during all PFF meetings:

- Is this project included in any other planning documents? (Comprehensive Plan, ICIP, etc.)
- Does the T/LPA have the minimum match required for the project? If not, does the T/LPA intend to apply for a match waiver?
- Does the T/LPA have a good track record for responsible use/tracking of state funds? Have they met closeout deadlines? Have they successfully completed other state funded projects in a timely manner?
- Has the T/LPA had any issues with design/construction in the past?
- Does the T/LPA have major audit findings that would prevent them from being a responsible fiscal agent?

Additional topics to discuss during PFF meetings ONLY if project is on or intersects with an NMDOT or NHS route:

- Is the Tribal/Local Public Agency (T/LPA) familiar with the NMDOT T/LPA Handbook? Has the person in responsible charge attended one of the T/LPA Handbook trainings?
- Is the project within NMDOT ROW? If so, does the district support the project?
 - Are agreements necessary for maintenance and operations? (Lighting agreements, landscaping, etc.)
- The T/LPA must follow the NMDOT specifications as outlined in the "Specs for Highway and Bridge Construction" unless the appropriate NMDOT Design Center grants permission prior to design for the T/LPA to use other specs.

SANDOVAL COUNTY PUBLIC WORKS - HIDDEN VALLEY ROAD EMERGENCY BRIDGE REPLACEMENT						ENGINEERS ESTIMATE	
BID ITEM	SPEC	NO.	ITEM	Unit	QUANTITY	Unit Price	Amount
ROADWAY							
1	NMDOT	203000	UNCLASSIFIED EXCAVATION	C.Y.	50	\$ 150.00	\$ 7,500.00
2	NMDOT	203100	BORROW	C.Y.	200	\$ 175.00	\$ 35,000.00
3	NMDOT	207000	SUBGRADE PREPARATION	S.Y.	1000	\$ 25.00	\$ 25,000.00
4	NMDOT	303000	BASE COURSE	TON	350	\$ 80.00	\$ 28,000.00
5	NMDOT	407000	ASPHALT MATERIAL FOR TACK COAT	TON	1.00	\$ 1,500.00	\$ 1,500.00
6	NMDOT	408100	PRIME COAT MATERIAL	TON	1.00	\$ 1,500.00	\$ 1,500.00
7	NMDOT	417000	MISCELLANEOUS PAVING HMA/WMA PG64-22	TON	170	\$ 225.00	\$ 38,250.00
8	NMDOT	606001	SINGLE FACE W-BEAM GUARDRAIL	L.F.	225	\$ 80.00	\$ 18,000.00
9	NMDOT	606053	END TREATMENT W-BEAM END ANCHOR	EACH	4	\$ 2,250.00	\$ 9,000.00
10	NMDOT	632000	CLASS A SEEDING	ACRE	0.5	\$ 12,500.00	\$ 6,250.00
STRUCTURAL							
11	NMDOT	511030	STRUCTURAL CONCRETE, CLASS AA - ABUTMENTS BOTH ENDS, 4000 PSI	C.Y.	100	\$ 2,000.00	\$ 200,000.00
12	NMDOT	540060	REINFORCING BARS GRADE 60	LB	13150	\$ 8.00	\$ 105,200.00
13	CONTECH	SPECIAL	PREFABRICATED VEHICULAR STEEL BRIDGE, CIP	LS	1	\$ 350,000.00	\$ 350,000.00
DRAINAGE							
14	NMDOT	210002	MAJOR STRUCTURE EXCAVATION	C.Y.	125	\$ 150.00	\$ 18,750.00
15	NMDOT	210003	MAJOR STRUCTURE BACKFILL	C.Y.	180	\$ 275.00	\$ 49,500.00
16	NMDOT	602000	RIPRAP CLASS A	C.Y.	10	\$ 950.00	\$ 9,500.00
TRAFFIC CONTROL DEVICES							
17	NMDOT	701000	PANEL SIGNS	S.F.	53	\$ 90.00	\$ 4,770.00
18	NMDOT	701100	STEEL POST AND BASE POST FOR ALUMINUM PANEL SIGNS	L.F.	50	\$ 30.00	\$ 1,500.00
19	NMDOT	704700	HOT THERMOPLASTIC PAVEMENT MARKING 4"	L.F.	400	\$ 20.00	\$ 8,000.00
CONSTRUCTION TRAFFIC CONTROL							
20	NMDOT	618000/702810	TRAFFIC CONTROL MANAGEMENT & DEVICES	CAL-DAY	120	\$ 500.00	\$ 60,000.00
LUMP SUM ITEMS							
21	NMDOT	201000	CLEARING AND GRUBBING & PROTECTION OF PROJECT FROM WATER	LS	1	\$ 35,000.00	\$ 35,000.00
22	NMDOT	621000	MOBILIZATION	LS	1	\$ 95,000.00	\$ 95,000.00
23	NMDOT	601000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1	\$ 85,000.00	\$ 85,000.00
24	NMDOT	ALLOWANCE	TESTING	LS	1	\$ 35,000.00	\$ 35,000.00
SUBTOTAL BASE BID						\$ 1,227,220.00	
NMGR 6.2500%						\$ 76,701.25	
TOTAL BASE BID						\$ 1,303,921.25	



SANDOVAL COUNTY
 PO BOX 40
 BERNALILLO, NM 87004

PURCHASE ORDER

PO #: 23003232
DATE: 04/05/2023
REQUEST #: REQ69009

VENDOR #: 04308

ISSUED TO: HUITT-ZOLLARS
 5430 LBJ FREEWAY
 SUITE 1500
 DALLAS, TX 75240-

SHIP TO: PUBLIC WORKS
 2708 IRIS ROAD NE
 RIO RANCHO, NM 87144

ITEM	UNITS DESCRIPTION	PRICE	GL ACCOUNT NUMBER	AMOUNT
1	0 Engineering Proposal for Hidden Valley Road, Engineering Proposal for Bridge Replacement and Road Re-Construction on Hidden Valley Road in Jemez Springs, NM Per Agreement #2021040458	0.00	2010-06-027-45916	68,522.69

By _____

SUBTOTAL:	68,522.69
TOTAL TAX:	0.00
SHIPPING:	0.00
TOTAL	68,522.69

1. Original invoice plus one copy must be sent to: Sandoval County.
2. Payment may be expected within 30 days of receipt of goods, unless otherwise stated.
3. C.O.D. shipment will not be accepted.
4. Purchase order numbers must appear on all shipping containers, packaging slips and invoices. Failure to comply with the above request may delay payment.
5. All goods are to be shipped F.O.B. Destination unless otherwise stated.
6. All materials and services are subject to approval based on the description on the face of the purchase order or appendages thereof. Substitutions are not permitted without written approval of the Requesting Department. Material not approved will be returned at no cost to Sandoval County.
7. All goods and equipment must meet or exceed all necessary city, state, and federal standards and regulations.
8. Vendor or manufacturer bears risk of loss or damage until property received and/or installed.
9. Seller acknowledges that buyer is an equal opportunity employer. Seller will comply with all equal opportunity laws and regulations that are applicable to it as a supplier of the buyer.

Additional Purchase Order terms are as follows:

3.5.1 Acceptance: (a) a Sandoval County Purchase Order (PO) constitutes an agreement between the contracting party/vendor and Sandoval County government, and not any one individual or department within Sandoval County. (b) Under New Mexico law, Sandoval County Board of Commissioners possess the exclusive authority entering into and deciding all legal transactions for the County. Sandoval County Board of Commissioners has designated Finance Department Director and the Director's designee, the Chief Procurement Officer, to govern all terms and conditions of each and every Sandoval County Purchase Order. (c) Vendors must always obtain a Purchase Order prior to providing any service or product to the County. Failure to do so could result in nonpayment.

3.5.2 Changes: The Chief Procurement Officer may, at any time, in writing direct or authorize vendor to make changes or modifications within the general scope of an issued Purchase Order. The Chief Procurement Officer possess exclusive authority to make legally binding changes to services requested, funds owed, or any other change to the original conditions and terms of a Sandoval County PO. Without the Chief Procurement Officer's written authority and directions, Sandoval County shall not pay for any modification(s) of a Purchase Order. The Chief Procurement Officer, or their designee, will contact the Department Director or Elected Official in writing of any changes made to a purchase order.

3.5.3 Termination: Sandoval County reserves the right to terminate this Purchase Order with respect to undelivered goods or unperformed services at any time and for any reason, including but not limited to convenience and/or lack of funding. Such termination shall be by written notice, through electronic methods or U.S. Mail.

March 28, 2023

Mr. David Martinez
Sandoval County Roads Manager
Sandoval County Public Works

RE: Proposal for (On-Call Engineering), Bridge Replacement & Road Reconstruction – Hidden Valley Rd at Jemez Spring, NM

Dear David;

We appreciate the opportunity to provide you this professional surveying and civil engineering services proposal for design of the Hidden Valley Road bridge crossing of the San Antonio Creek and the reconstruction for about 0.2 miles of Hidden Valley Road west of NM-126 in Jemez Spring, NM. Our proposal is based on the following assumptions and conditions:

Assumptions/Conditions:

- Existing bridge crossing of Hidden valley road requires replacing
- Project limits are from 50-feet west of NM-126 to Escondido Point Road.
- Bridge As-Built plans will be available from the NMDOT
- Existing driveways, culverts, and other private appurtenances are to remain in place with new paving
- The County will provide any available as-builts for Hidden Valley Road.
- This work will require a Nationwide Permit coverage from the Army Corps of Engineers. Nationwide Permits require both archeological & biological surveys; accordingly, our scope includes both.
- This proposal does not include platting services.
- Public meetings are not required and Sandoval County will obtain NMDOT Certifications as necessary.
- This proposal does not include landscape designs or architectural designs. This proposal does not include any EPA Section 402 Storm Water Pollution Prevention Plan (SWPPP) preparation or Maintenance/Inspections.
- Construction Phase Services are NOT included with this proposal, but may be added if Sandoval County requires assistance during construction.

SCOPE OF WORK – BASIC SERVICES

Engineering Services

- 1. Topographical Survey**
 - Obtain topographical survey at the project location for use in design
- 2. Geotechnical Investigation**
 - Obtain geotechnical investigation at the project location for use in design
- 3. Archeological & Biological Survey**
 - Provide archeological and biological survey at the project for use in obtaining Army Corps permit approval.
- 4. Pre-Final Design – Preliminary Estimates, 60% Planset & Specifications**
 - Prepare a preliminary estimate for alternatives, including bridge and non-bridge designs. Provide 60% plans, estimate, & specifications as needed for NMDOT & Sandoval County review and comment

- 5. **Final Design – 100% Planset & Specifications**
 - Incorporate NMDOT & Sandoval County comments & finalize Plans, Estimate, & Specifications

- 6. **Army Corps Permit - Nationwide**
 - Obtain Army Corps permit approval for project.


BASIC SERVICES FEE

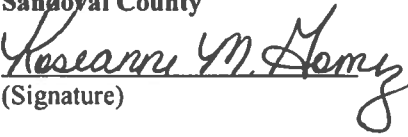
We will perform the above engineering scope of services for the following lump sum fees:

Topographical Survey	\$ 6,345.00
Geotechnical Investigation	\$ 7,500.00
Archeological & Biological Survey	\$ 8,640.00
Pre-Final Design – 60% Planset & Specifications	\$ 28,320.00
Final Design – 100% Planset & Specifications	\$ 10,920.00
Army Corps Permit – Nationwide Permit	\$ 1,980.00
<hr/>	
Subtotal Project(Excluding NMGRT)	\$ 63,705.00
NMGRT 7.5625%	\$ 4,817.69
 TOTAL PROJECT(Including NMGRT)	 \$ 68,522.69

AUTHORIZATION:

Should this proposal meet with your approval and acceptance, please sign and return to our office by facsimile at 505-892-5141. We will schedule the above services as soon as we receive your authorization. If you have any questions, please call.

Sincerely,
HUITT-ZOLLARS, INC.

Robert Demeule, PE
Vice President & Project Manager

Accepted and Approved for
Sandoval County

(Signature)

Roseanne M. Gomez
(Name)

Assistant Director of Public Works
(Title)

3-28-2023
(Date)

4/18/23

Mr. David Martinez
Sandoval County Roads Manager
Sandoval County Public Works

RE: Hidden Valley Rd at Jemez Spring, NM – Condition Assessment 4/14/23

Dear David;

On 4/14/23 Huitt-Zollars made a site visit to Hidden Valley Road bridge crossing of San Antonio Creek in La Cueva, NM. The purpose of the site visit was to investigate new sinkholes behind the east abutment and to assess the overall condition and safety of the bridge crossing for the travelling public.

During the course of the site assessment, informal interviews were conducted with several local residents and the adjacent business owners.

At the time of our site visit the available freeboard at the bridge center was approximately 3', residents informed us that recent flows had almost reached the bottom chord of the bridge structure, and there was high-water mark evidence along the adjacent overbanks to support this. From our onsite observations and the spread of flood water at the inlet control, flow conditions suggest that the bridge is hydraulically undersized for the current flows.

The sinkhole is approximately 10' east of the eastern abutment, and appears to be approximately 3-4' in depth and 4-6' across the northern (westbound) lane. The amount of voided earthen material is approximately 36 cubic feet.

The sinkhole is currently bridged by a steel plate installed by Sandoval County Public Works, and at the time of our site visit was cordoned off by traffic control devices, the east-bound lane was open to traffic.

The upstream approach to the bridge crossing has experienced significant sloughing of the upstream bank area at the east abutment. In addition to the sinkhole within the roadway, there are significant voids adjacent to the 4'x4' timber posts supporting the barbed wire fence, the bridge side-dam has fallen due to the sloughing, and the entire upstream bank on the north-east side is unstable and deteriorating quickly.

Our summation of the upstream condition is that there is an active flow path behind the abutment causing erosion of subgrade material behind the abutment, causing bank erosion, and removal of roadbed materials.

The downstream bank area behind the eastern abutment was then investigated to support this summation and to investigate the west-bound lane stability. A test-hole was hand dug behind the eastern abutment approximately 2' behind the abutment and approximately 1.5' above the flowing stream surface elevation. This test hole revealed liquified subgrade material with observable fluid movement and active permeability. This bank area displayed significantly increased moisture content on the earthen bank area to a height of approximately 3.5', none of the other abutment bank areas displayed similar moisture content.

From these field observations, we report the following findings:

- Significantly high flood flows have caused significantly high inlet-controlled headwaters on the upstream side of the bridge.
- There is a resulting active flowpath behind the eastern abutment, causing bank degradation, sinkholes, and loss of subgrade roadway embankment behind the abutment.
- The upstream bank of the eastern abutment is actively sloughing and is significantly unstable.

As a result of this field investigation and these findings, we recommend that this bridge is closed due to safety concerns to the travelling public. The active loss of roadway embankment behind the abutment could result in a sudden cut by the stream behind the abutment, resulting in a danger to motorists and the possible undermining of the abutment and a total bridge deck collapse.

Due to the design/structure of the existing bridge, and the active subgrade erosion, we recommend a bridge replacement rather than attempting to redesign a bridge crossing utilizing the existing infrastructure. After flooding has abated, excavation of the abutment and possible temporary backfill may be possible, but we do not recommend this as a permanent solution.

Please advise if you require any additional information at this time, site photographs with descriptions are on the following page.

Sincerely,
HUITT-ZOLLARS, INC.



Robert Demeule, PE
Vice President & Project Manager

PHOTO 1 – UPSTREAM SLOUGHING



PHOTO 2 – SUBGRADE EROSION UNDERNEATH STEEL PLATE



PHOTO 3 – ACTIVE FLOW THROUGH LIQUEFIED SUBGRADE MATERIAL BEHIND ABUTMENT



PHOTO 3 – INLET CONTROL UPSTREAM

