NEBRASKA
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DEPARTMENT OF TRANSPORTATION

County Bridge Match Program Selected Proposals January 17, 2020

NACO District	Lead County	Bridge County	Structure Number	Local Bridge ID	Location	Cost Estimate	Estimated CBMP Funding
Southeast	Lancaster	Lancaster	C005545810	R-210	2.5S 3.1W OF BENNET at STREAM (R 210)	$320,000	$176,000
Southeast	Lancaster	Lancaster	C005516825	Y-181	2S 1W OF PANAMA at N FK BIG NEMAHA R(Y 181)	$320,000	$176,000
Southeast	Lancaster	Saline	C007604515P		1E 4.2N OF WILBER at STREAM	$275,000	$151,250
Southeast	Otoe	Otoe	C006602505		3.2E 1.8N BURR at LITTLE MUDDY CREEK	$258,041	$141,923
Southeast	Otoe	Otoe	C006612935		.5W 7.2N SYRACUSE at N FK LITTLE NEMAHA RIVER	$322,442	$177,343
Southeast	Otoe	Nemaha	C006411240		1.4S .5E OF PERU at STREAM	$169,372	$93,155
Southeast	Otoe	Nemaha	C006452135		.5W 3.4S OF JULIAN at HIGGINS BRANCH	$321,632	$176,898
Southeast	Otoe	Otoe	C006602715		1.5W 2.8S SYRACUSE at STREAM	$78,348	$43,091
Southeast	Otoe	Otoe	C006610920		2.4N PALMYRA at STREAM	$112,406	$61,823
Southeast	Otoe	Otoe	C006612925		.5W 2.6N SYRACUSE at BROWNELL CREEK	$74,883	$41,185
Southeast	Pawnee	Johnson	C004900615		2.5N 1.5W OF STERLING at STREAM	$129,537	$71,245
Southeast	Pawnee	Pawnee	C006702705	T1N R11E S17S	3W 4.4S OF PAWNEE CITY at STREAM	$73,150	$40,233
Southeast	Pawnee	Pawnee	C006710910	T2N R9E S35NW	2W 3.2S OF BURCHARD at STREAM	$73,150	$40,233
Southeast	Pawnee	Gage	C003406005	U-N-31-1	2W 7N OF LANHAM at SPRING CREEK	$46,240	$25,432
Southeast	Pawnee	Gage	C003407210	W-N-35-1	2S 4E OF ODELL at STREAM	$58,520	$32,186
Southeast	Pawnee	Gage	C003423320	O-E-34-1	1W 4.5S OF ROCKFORD at STREAM	$61,985	$34,092
Southeast	Saunders	Saunders	C007805335		.2W 1.6N OF YUTAN at UPPER CLEAR CREEK	$346,347	$127,633
Southeast	Saunders	Saunders	C007813530		1.2E .2S OF CEDAR BLUFFS at SILVER CREEK	$196,375	$72,367
Southeast	Saunders	Saunders	C007803605		8S 4.9W OF PRAGUE at STREAM	$80,640	$44,352
Northeast	Cedar	Cedar	C001415840		.5N OF LAUREL at PERRIN CREEK	$421,562	$200,000
Northeast	Colfax	Colfax	C001902705		2.5E OF SCHUYLER at SHELL CREEK	$998,527	$110,614
Northeast	Colfax	Colfax	C001902905		3.5E OF SCHUYLER at SHELL CREEK	$243,850	$74,176
Northeast	Colfax	Colfax	C001903535	A-2-1.5	3.7E .6N OF HOWELLS at STREAM	$50,000	$15,209
Northeast	Cuming	Cuming	C002002210		3S 3.7W OF WISNER at STREAM	$9,620	$5,291
Northeast	Cuming	Cuming	C002005210		13W US275 DODGE CL at STREAM	$9,620	$5,291
Northeast	Cuming	Cuming	C002010425		JCT N51/N9 5N 1.6W at STREAM	$9,620	$5,291
Northeast	Cuming	Cuming	C002013435		JCT US275/N9 2E at WILLOW CREEK	$9,620	$5,291
Northeast	Knox	Knox	C005401905P	97-10N7W6	8.1W .4S OF WINNETOON at STREAM	$250,902	$101,609
Northeast	Knox	Knox	C005405805	98-20W8	JCT N14/N59 12.8W at STREAM	$242,954	$98,391
Northeast	Madison	Madison	C005900515		6.5N 1W OF NEWMAN GROVE at STREAM	$119,880	$65,934
Northeast	Madison	Madison	C005900920		1.5N 1E OF NEWMAN GROVE at STREAM	$73,150	$40,233
Northeast	Madison	Madison	C005913210		2.5N 1W OF MADISON at STREAM	$91,080	$50,094
Northeast	Madison	Platte	C007112310	MBN 34-3	1.5NW OF MONROE at STREAM	$91,080	$50,094
Northeast	Wayne	Wayne	C009004310		2.5E 8.9S OF WAYNE at PLUM CREEK	$339,846	$174,349
Northeast	Wayne	Wayne	C009004315		2.5E 8.7S OF WAYNE at PLUM CREEK	$50,000	$25,651

NACO District	Lead County	Bridge County	Structure Number	Local Bridge ID	Location	Cost Estimate	Estimated CBMP Funding
Central	Howard	Howard	C004724805	3 B-3	3SE OF ST LIBORY at STREAM	$193,758	$97,006
Central	Howard	Howard	C004703005	21 X-10	1.5S 4W FARWELL at STREAM	$46,325	$23,193
Central	Howard	Howard	C004703205	19 V-4	2.5S 1.4W FARWELL at OAK CREEK	$159,394	$79,801
Central	Nuckolls	Adams	C000103020	J8-1	1395 E OREGON TRAIL RD. at PAWNEE CREEK	$387,857	$200,000
Central	Nuckolls	Nuckolls	C006524710		3.8N 3.3E OAK at S FK BIG SANDY CREEK	$295,109	$162,310
Central	Nuckolls	Nuckolls	M1710D2305		NELSON - PORTER @ 7TH at ELK CREEK	$50,000	$27,500
Central	Nuckolls	Nuckolls	C006500935		7W 9N OF SUPERIOR at STREAM	$63,988	$35,193
Central	Nuckolls	Nuckolls	C006513123		4E 1.5N NELSON at STREAM	$74,883	$41,185
Central	Phelps	Phelps	C006902405		11E OF BERTRAND at IRRIGATION CANAL	$150,000	$82,500
Central	Phelps	Phelps	C006903305		.8E 3.5N OF HOLDREGE at IRRIGATION CANAL	$150,000	$82,500
West Central	Furnas	Furnas	C003343820		5S 1E OF HOLLINGER at SAPPA CREEK	$95,885	$51,802
West Central	Furnas	Furnas	C003324440		2.5E 6S OF BEAVER at SAPPA CREEK	$95,885	$51,802
West Central	Furnas	Furnas	C003313905		6S OF BEAVER CITY at SAPPA CREEK	$92,885	$50,181
West Central	Furnas	Furnas	C003324320		1E OF BEAVER CITY at BEAVER CREEK	$85,545	$46,216
West Central	Hitchcock	Hitchcock	C004402305		9S 5W OF TRENTON at N FK DRIFTWOOD CREEK	$60,563	$33,310
West Central	Lincoln	Dawson	C002404605	27092501	2E 2N FARNAM at NORTH PLUM CREEK	$91,080	$50,094
West Central	Lincoln	Lincoln	C005632107		2E .4N OF SUTHERLAND at NORTH PLATTE CANAL	$78,480	$43,164
Panhandle	Cheyenne	Cheyenne	C001704103	170	7S SIDNEY at COW CREEK	$116,320	$63,976
Panhandle	Cheyenne	Cheyenne	C001702205	CR 42, 93-95	7N 2.3W BROWNSON at STREAM	$116,320	$63,976

APPLICATION FORM County Bridge Match Program 2020

Applying County	**Lancaster**	**Date of Application**	**12/5/2019**
Agency Name	Lancaster County	**Contact Person Title**	Highway Superintendent
Contact Person Name	Pamela Dingman	**Address Line 1**	444 Cherrycreek Rd Bldg C
E-mail	pdingman@lancaster.ne.gov	**Address Line 2**	Lincoln, NE
Phone Number	402-441-7681	**zip code**	68528
NACO District	**Southeast**		

Proposal Name / Location	Lancaster-Saline 2019, C005545810, C005516825, C007604515P
Multi-County Proposal	Yes
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C005545810	R-210	2.5S 3.1W OF BENNET at STREAM (R 210)	Lancaster	24.00	26.20	Steel Stringer/Multi-beam or Girder	Local
C005516825	Y-181	2S 1W OF PANAMA at N FK BIG NEMAHA R(Y 181)	Lancaster	32.00	24.70	Steel Stringer/Multi-beam or Girder	Local
C007604515P		1E 4.2N OF WILBER at STREAM	Saline	30.00	21.80	Steel Stringer/Multi-beam or Girder	Collector
<Enter SN here>							

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C005545810	No	No	36
C005516825	No	No	22
C007604515P	No	No	160

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C005545810	Replace	Concrete Box Culvert			Contract	$320,000	$176,000	Twin 10' x 10' CBC
C005516825	Replace	Concrete Box Culvert			Contract	$320,000	$176,000	Twin 10' x 10' CBC
C007604515P	Replace	Concrete Box Culvert			Contract	$275,000	$151,250	Twin 10' x 10' CBC
			* **Length and Width not required for Culverts.**		total	$915,000	$503,250	OK
			Please provide culvert size in comments.					

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Saline and Lancaster County are working together to submit this proposal to replace three deficient bridges using concrete box culverts (CBC) with 10-foot by 10-foot barrels. This proposal wil replace one structure in Saline County and two structures in Lancaster County. Bundling projects with another county can realize significant cost savings and efficiencies; historically, Saline ha taken advantage of the benefits of partnering with another county and now Lancaster County is looking forward to this opportunity.

Concrete box culverts are a cost-effective alternative for the replacement of short-span structurally deficient (SD) bridges in the State of Nebraska. Bundling more than one CBC of the same size into a single project is innovative and offers additional savings and efficiencies in design, letting, mobilization, construction, inspection, and construction management services. In addition to the three structures included in this proposal, Lancaster County plans to let two additional CBCs with 10-foot by 10-foot barrels to replace SD bridges that are currently closed; this should make the project even more attractive to a contractor. Proper concrete box culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure. Working across county lines will promote future cooperation and strengthen relationships.

Construction of this structure type is much safer and simpler for contractors to build and as such may be completed much more rapidly than stringer/girder and slab type designs; concrete box culvert construction is typically completed within 60 calendar days which minimizes the impact to local resident, agricultural and commercial traffic. Long-term cost savings over the lengthy service life of this structure type are realized in reduced maintenance costs due to the inherent simplicity and durability of the design type. The buried nature of the CBC allows modern agriculture equipment to pass with no guardrail or barriers to impede them. Additionally, the absence of the need for a rail system in favor of providing a recovery zone free of lateral obstructions not only results in reduced maintenance costs but also improves the safety of the travelling public.

Bundling/letting additional CBCs with the same 10-foot by 10-foot barrel size with the CBMP project will allow Lancaster County to take advantage of these efficiencies and remove additional SD bridges from the NBI.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Cost of concrete box culvert construction is a fraction of that of traditional stringer/girder and slab bridge type designs. It is anticipated that both counties in the bundling package will recognize savings in engineering and construction costs by awarding the contract to a single contractor with one set of contract documents. There are numerous contractors in the state who build concrete box culverts; this asset allows counties to have multiple bidders on projects like this ensuring the lowest possible price. Standardized design and construction practices also provide a significant cost and time savings to the owner. All of the proposed structures are concrete box culverts with 10-foot by 10-foot barrels, therefore the contractor will recognize savings in time and materials by utilizing the same forms from one box to the next. In addition, crews quickly become accustomed to how the forming, shoring and false work needs to be done and this greatly increases efficiency for the next CBC. Flexibility and efficiencies will be gained by the contractor having multiple sites in the same geographic area to allocate time, equipment, and other resources. Typical concrete box culvert construction is completed within 6 to 8 weeks which reduces construction costs and minimizes the duration of the closure and disruption to the travelling public; bridge construction can take twice as long.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Bridge to box design and construction can be utilized by all counties in Nebraska. Most counties have discovered that bundling projects can produce significant cost savings whether bundling within one county or in cooperation with another county. Bundling projects with identical box sizes in similar geographic areas is an innovation that will save time and material costs; bundling between counties allows efficiencies to be realized by not only partnering but by bundling more of the same size CBCs. A contractor can utilize the same forms from one box to the other. In addition, crews quickly become accustomed to how the forming, shoring and false work needs to be done and greatly increases efficiency for the second box culvert. CBCs can be designed much more rapidly than traditional bridge designs with Counties having the option of requesting LRFD compliant reinforced concrete box culvert plans designed and detailed by NDOT. A considerable number of streams in the eastern part of Nebraska are significantly degraded; replacing a bridge with a properly designed concrete box culvert can stabilize the streambed and adjacent banks upstream of the structure.

The process of bundling and collaboration between counties can easily be shared, and Lancaster and Saline County will gladly share our experiences with any interested county. A derivative of the cooperation between counties will likely be education, through the exchange of ideas that occurs throughout the process. Counties will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

Concrete box culverts have a low initial cost and are extremely durable with a useful service life expectancy of 100 years and beyond, exceeding that of traditional stringer/girder and slab bridge design types. CBCs have an outstanding history of low maintenance costs while considerable resources are expended to complete the required maintenance activities on deficient bridges. The lack of width restriction provided by a CBC with the proper clear zone would reduce the need to repair bridge rail and signs damaged by over-width equipment. The recovery zone is free of lateral obstructions and results in reduced maintenance costs associated with impact damage to the guardrail. The lack of guardrail on a CBC also facilitates the ease of mowing and snow plow operations. Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert. The buried nature of the design type reduces exposure to vehicular collision and de-icing chemicals and provides for improved distribution of the live loads applied to the structure, contributing to the ease of their preservation. CBCs are more readily repaired and lengthened than other bridge type structures. Maintenance activities are often of a nature that can be accomplished with County forces rather than the need to acquire outside contract services.

Additionally, the CBC can be utilized to control a degraded stream with significant benefits to upstream structures in the basin. Maintenance and/or replacement of these upstream structures can be minimized or eliminated due to the positive effects of stream stabilization. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year; this proposal will remove three SD bridges from our inventories. Replacing the bridges with CBCs increases the safety of the travelling public as it creates a horizontal clear zone free of lateral obstructions. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Lancaster/Saline Counties, and the State of Nebraska:

Lancaster County C005545810 (R-210): This bridge/roadway is closed and is not being utilized as a mail and bus route. This closure also results in an adverse effect on emergency services as it causes some minor out-of-the-way travel. This structure is in the vicinity of Wagontrain Lake and when closed affects recreation travel. When in service, this structure is also utilized for rural local, residential and agricultural operation/equipment traffic. Once replaced, it will be returned to service. The detour route for the structure is 3.25 miles.

Lancaster County C005516825 (Y-181): This bridge/roadway is closed and is not being utilized as a mail and bus route. The closure also results in an adverse effect on emergency services as it causes some minor out-of-the-way travel. When in service, the structure is also utilized for rural local, residential and agricultural operation/equipment traffic. Once replaced, it will be returned to service. The detour route for the structure is 3.4 miles.

Saline County C007604515P (L-26-C-4): This structure is a 30-foot steel girder bridge with a 21.8-foot clear width. The bridge is on County Road 2350; CR 2350 connects Crete and Wilber and has a relatively high traffic count. Saline County is also replacing Structures C007604520P and C007604530P soon. Replacing all three of these structures in Saline County will make CR 2350 a much safer route.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

86% **percent complete**

When your application is complete and you are ready to submit it for review go to:
http://dot.nebraska.gov/projects/tia/bridge-match/
Follow the instructions on the website for uploading this application and supporting documentation.

If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Otoe**	**Date of Application**	**11/28/2019**
Agency Name	**Otoe County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Jon Brinkman**	**Address Line 1**	**0**
E-mail	**roadswest@otoe.nacone.org**	**Address Line 2**	**Nebraska City, NE**
Phone Number	**(402) 873-9586**	**zip code**	**68410**
NACO District	**Southeast**		

Proposal Name / Location	CBMP2019 - C006602505, C006612935, C006411240, C006452135
Multi-County Proposal	Yes
Proposal Priority Number	2

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C006602505		3.2E 1.8N BURR at LITTLE MUDDY CREEK	Otoe	50.00	14.10	Steel Stringer/Multi-beam or Girder	Local
C006612935		.5W 7.2N SYRACUSE at N FK LITTLE NEMAHA RIVER	Otoe	71.00	14.00	Steel Truss - Thru	Local
C006411240		1.4S .5E OF PERU at STREAM	Nemaha	47.00	17.50	Steel Stringer/Multi-beam or Girder	Local
C006452135		.5W 3.4S OF JULIAN at HIGGINS BRANCH	Nemaha	32.00	17.80	Steel Stringer/Multi-beam or Girder	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C006602505	No	No	25
C006612935	No	No	50
C006411240	No	No	15
C006452135	No	No	25

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C006602505	Replace	Concrete Box Culvert			Contract	$258,041	$141,923	2-14'x14'x44' CBC
C006612935	Replace	Concrete Box Culvert			Contract	$322,442	$177,343	3-14'x14'x44' CBC
C006411240	Replace	Concrete Box Culvert			Contract	$169,372	$93,155	1-12'x12'x54' CBC
C006452135	Replace	Concrete Box Culvert			Contract	$321,632	$176,898	3-14'x14'x44' CBC
			* **Length and Width not required for Culverts.**		total	$1,071,487	$589,319	OK
			Please provide culvert size in comments.					

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Concrete box culverts are a cost-effective alternative for the replacement of deficient bridges in the State of Nebraska.
The design and construction process is streamlined with the utilization of standard plan and construction practices. An experienced pool of contractors active in Nebraska results in a competitive environment, reducing replacement structure construction cost to counties.
Typical concrete box culvert construction is completed within 60 calendar days which minimizes the impact to local resident, agricultural and commercial traffic.
Historically, concrete box culvert maintenance activities and costs are minor in comparison to other replacement structures.
Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to local and regional agricultural and commodity transportation. A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper box culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.
This proposal is being submitted by multiple counties, in a cooperative effort to streamline the design, bid, and build process through project bundling. Innovative, because counties have not actively reached across established map lines in the name of cooperation and efficiency. Additionally, it is presumed that bundled project bids will result in lower pricing due to their regional nature.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Concrete box culverts are cost effective and an efficiently constructed alternative to an expensive bridge replacement.
Standardized design and construction practices provide a significant cost and time savings to the owner.
Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span, expected beyond 100 years, in costs associated with general maintenance and repair.
It is anticipated that each county in the bundling package will recognize savings in engineering and construction costs by awarding the contract to a single contractor with one set of contract documents. Flexibility is gained by the contractor by having multiple sites in the same geographic area to allocate time, equipment, and other resources.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Box culvert standardization of design and construction can be utilized by all Counties in Nebraska. The process of collaboration can easily be shared and is available to all Counties. A derivative of the cooperation between counties will likely be education, through the exchange of ideas that will occur throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of concrete box culvert replacement structures provides significant long-term maintenance cost savings.
The structure is considered extremely durable and expected to require minimal maintenance over its expected use, beyond 100 years.
The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged. Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.
If the concrete box culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.
The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities, agricultural and commerce related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Otoe/Nemaha Counties, and the State of Nebraska:

C006602505:
The structure/roadway is utilized as an emergency services route.
The detour route length is 7.5 miles to un-restricted traffic. This is considered excessive.
The structure/roadway is primarily utilized for local, commercial and agricultural operation "farm to market" traffic.

C006612935:
The structure/roadway is closed to traffic.
The detour length is 4 miles to un-restricted traffic.
The structure/roadway is primarily utilized for local, commercial and agricultural operation "farm to market" traffic.

C006411240:
The structure/roadway is currently utilized as a mail route.
The structure/roadway is currently utilized as an emergency services route, and is the only access to the area.
The detour length for this structure is 7 miles (2 miles of which are minimum maintenance); considered excessive.
The structure is utilized primarily by local agricultural producers.
Access to several sections of high production farm ground would be forced onto several miles of minimum maintenance roads if the bridge was closed. Access to the area is already limited

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

85% **percent complete**

When your application is complete and you are ready to submit it for review go to:
http://dot.nebraska.gov/projects/tia/bridge-match/
Follow the instructions on the website for uploading this application and supporting documentation.

If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Otoe**	**Date of Application**	**11/28/2019**
Agency Name	**Otoe County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Jon Brinkman**	**Address Line 1**	**0**
E-mail	**roadswest@otoe.nacone.org**	**Address Line 2**	**Nebraska City, NE**
Phone Number	**(402) 873-9586**	**zip code**	**68410**
NACO District	**Southeast**		

Proposal Name / Location	CBMP2019 - C006602715, C006610920, C006612925
Multi-County Proposal	No
Proposal Priority Number	3

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C006602715		1.5W 2.8S SYRACUSE at STREAM	Otoe	28.00	14.00	Steel Stringer/Multi-beam or Girder	Local
C006610920		2.4N PALMYRA at STREAM	Otoe	32.00	16.00	Steel Stringer/Multi-beam or Girder	Local
C006612925		.5W 2.6N SYRACUSE at BROWNELL CREEK	Otoe	32.00	15.80	Steel Stringer/Multi-beam or Girder	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C006602715	No	No	40
C006610920	No	No	100
C006612925	No	No	50

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C006602715	Replace	Culvert Pipes			Contract	$78,348	$43,091	3-96"x46' CMPs
C006610920	Replace	Culvert Pipes			Contract	$112,406	$61,823	2-120"x64' CMPs
C006612925	Replace	Culvert Pipes			Contract	$74,883	$41,185	3-96"x42' CMPs
			* **Length and Width not required for Culverts.**		total	$265,636	$146,099	OK
			Please provide culvert size in comments.					

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Corrugated metal culvert pipes are a cost-effective replacement alternative for deficient bridges in the State of Nebraska.
The design and construction process is streamlined with the utilization of standard plan and construction practices.
Local culvert suppliers are available and competitive, often resulting in cheaper material prices to the County.
Culvert construction will be completed by County forces, an innovative approach that reduces cost and utilizes the local County assets.
Typical culvert pipe construction can be completed within 1-2 weeks which minimizes the impact to local resident, agricultural and commercial traffic.
Corrugated metal culvert pipe's primary innovation is the simplicity of their design and construction. Metal culvert pipes, with prefabricated headwall & turndowns are quickly and easily installed by most experienced road crews. Additional innovations include; the use of standardized sheet pile and cable tie-back retaining systems, relative ease of transporting and off-loading materials, utilization of 3 x 1 and 5 x 1 corrugation (resulting in stronger culverts and a reduction in wall thickness) and inlet and outlet aprons (scour reduction.)
Historically, culvert maintenance activities and costs are minor in comparison to other replacement structures. Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to regional agricultural and commodity transportation.
A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.
The replacement's required size may remove the structure from the bridge inventory.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Corrugated metal culvert pipes are a cost effective and efficiently constructed alternative to an expensive bridge replacement.
Standardized design and construction practices provide a significant cost and time savings to the owner.
Culvert construction will be completed by County forces resulting in a considerable cost and time savings.
Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span (50-75 years) in costs associated with general maintenance and repair.
Culvert pipe replacement structures are generally simpler and relatively inexpensive when compared to box culverts or bridges. Typical culvert pipe construction (including removal of the existing structure) can be completed within 1-2 weeks resulting in lower direct project costs (overall) and minimizes the impact to local resident, agricultural and commercial traffic.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
It is anticipated that each county in the bundling package will recognize savings in engineering and construction costs. Design fees for a standard culvert crossing is significantly less costly than a traditional bridge or concrete box culvert. The bidding of a "materials, only" bundled project reduces the monetary and time costs associated with the contracting process.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Corrugated metal culvert pipe standardization of design and construction can be utilized by all Counties in Nebraska.
The process of collaboration between Counties can easily be shared and is available to all Counties. A derivative of the cooperation between counties will likely be education, through the exchange of ideas that will occur throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects. Successful results are easily conveyed to other Counties, culvert pipes provide a time-saving, quality product at low cost.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of corrugated metal culvert replacement structures provides significant long-term maintenance cost savings.
Properly sized corrugated metal culvert pipes are considered durable and expected to require minimal maintenance over their expected service life of 50-75 years.
The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged.
Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.
If the culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs' of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Otoe County, and the State of Nebraska:

C006602715:
The structure/roadway is currently utilized as a bus, mail, and emergency services route.
The detour length for this structure is 4 miles to un-restricted traffic; considered excessive for the area.
The structure is heavily utilized by local agricultural operations.
Replacement of the structure will provide continuity between Road J and N (collector routes.)

C006610920:
The structure/roadway is currently utilized as a bus, mail, and emergency services route; it is the only access to the area.
The detour length for this structure is 4 miles to restricted traffic; considered excessive, longer for for un-restricted traffic.
The structure is heavily utilized by a commercial gas company (Northern Natural Gas), and traffic to Eagle Raceway.
This structure/roadway is heavily utilized and significant to the local economy. Replacement will have a significant positive impact to the community.

C006612925:
The structure/roadway is currently utilized as a bus, mail, and emergency services route; it is the only access to the area.
The detour length for this structure is 6 miles; considered excessive for the area.
The structure is utilized by several commercial companies (Mueller Trenching, Midwest infrastructure) and many agricultural operations in the area.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

86% **percent complete**

When your application is complete and you are ready to submit it for review go to:
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Follow the instructions on the website for uploading this application and supporting documentation.

If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Pawnee**	**Date of Application**	**11/28/2019**
Agency Name	**Pawnee County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Chris Rauner**	**Address Line 1**	**PO Box 65**
E-mail	**clerk@pawnee.nacone.org**	**Address Line 2**	**Pawnee, NE**
Phone Number	**(402) 852-2981**	**zip code**	**68420**
NACO District	**Southeast**		

Proposal Name / Location	CBMP2019 - C004900615, C006702705, C006710910, C003406005, C003407210, C003423320
Multi-County Proposal	Yes
Proposal Priority Number	2

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C004900615		2.5N 1.5W OF STERLING at STREAM	Johnson	50.00	15.90	Steel Stringer/Multi-beam or Girder	Local
C006702705	T1N R11E S17S	3W 4.4S OF PAWNEE CITY at STREAM	Pawnee	32.00	16.20	Steel Stringer/Multi-beam or Girder	Local
C006710910	T2N R9E S35NW	2W 3.2S OF BURCHARD at STREAM	Pawnee	24.00	18.00	Steel Stringer/Multi-beam or Girder	Local
C003406005	U-N-31-1	2W 7N OF LANHAM at SPRING CREEK	Gage	30.00	15.80	Steel Stringer/Multi-beam or Girder	Local
C003407210	W-N-35-1	2S 4E OF ODELL at STREAM	Gage	36.00	15.60	Steel Truss - Thru	Local
C003423320	O-E-34-1	1W 4.5S OF ROCKFORD at STREAM	Gage	32.00	15.80	Steel Truss - Thru	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C004900615	No	No	45
C006702705	No	No	25
C006710910	No	No	15
C003406005	No	No	40
C003407210	No	No	35
C003423320	No	No	15

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C004900615	Replace	Culvert Pipes			Contract	$129,537	$71,245	3-120"x46' CMPs
C006702705	Replace	Culvert Pipes			Contract	$73,150	$40,233	3-96"x40' CMPS
C006710910	Replace	Culvert Pipes			Contract	$73,150	$40,233	3-96"x40' CMPS
C003406005	Replace	Culvert Pipes			Contract	$46,240	$25,432	2-84"x40' CMPs
C003407210	Replace	Culvert Pipes			Contract	$58,520	$32,186	2-96"x48' CMPs
C003423320	Replace	Culvert Pipes			Contract	$61,985	$34,092	2-96"x54' CMPs
			* **Length and Width not required for Culverts. Please provide culvert size in comments.**		total	$442,582	$243,421	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Corrugated metal culvert pipes are a cost-effective replacement alternative for deficient bridges in the State of Nebraska.
The design and construction process is streamlined with the utilization of standard plan and construction practices.
Local culvert suppliers are available and competitive, often resulting in cheaper material prices to the County.
Culvert construction will be completed by County forces, an innovative approach that reduces cost and utilizes the local County assets.
Typical culvert pipe construction can be completed within 1-2 weeks which minimizes the impact to local resident, agricultural and commercial traffic.
Corrugated metal culvert pipe's primary innovation is the simplicity of their design and construction. Metal culvert pipes, with prefabricated headwall & turndowns are quickly and easily installed by most experienced road crews. Additional innovations include; the use of standardized sheet pile and cable tie-back retaining systems, relative ease of transporting and off-loading materials, utilization of 3 x 1 and 5 x 1 corrugation (resulting in stronger culverts and a reduction in wall thickness) and inlet and outlet aprons (scour reduction.)
Historically, culvert maintenance activities and costs are minor in comparison to other replacement structures. Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to regional agricultural and commodity transportation.
A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.
The replacement's required size may remove the structure from the bridge inventory.
This proposal is being submitted by multiple counties, in a cooperative effort to streamline the design, bid, and build process through project bundling. Innovative, because counties have not actively reached across established map lines in the name of cooperation and efficiency.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Corrugated metal culvert pipes are a cost effective and efficiently constructed alternative to an expensive bridge replacement.
Standardized design and construction practices provide a significant cost and time savings to the owner.
Culvert construction will be completed by County forces resulting in a considerable cost and time savings.
Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span (50-75 years) in costs associated with general maintenance and repair.
Culvert pipe replacement structures are generally simpler and relatively inexpensive when compared to box culverts or bridges. Typical culvert pipe construction (including removal of the existing structure) can be completed within 1-2 weeks resulting in lower direct project costs (overall) and minimizes the impact to local resident, agricultural and commercial traffic.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
It is anticipated that each county in the bundling package will recognize savings in engineering and construction costs. Design fees for a standard culvert crossing are significantly less costly than a traditional bridge or concrete box culvert. The bidding of a "materials, only" bundled project reduces the monetary and time costs associated with the contracting process.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Corrugated metal culvert pipe standardization of design and construction can be utilized by all Counties in Nebraska.
The process of collaboration between Counties can easily be shared and is available to all Counties. A derivative of the cooperation between counties will likely be education, through the exchange of ideas that will occur throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects. Successful results are easily conveyed to other Counties, culvert pipes provide a time-saving, quality product at low cost.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of corrugated metal culvert replacement structures provides significant long-term maintenance cost savings.
Properly sized corrugated metal culvert pipes are considered durable and expected to require minimal maintenance over their expected service life of 50-75 years.
The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged.
Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.
If the culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs' of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Johnson/Pawnee/Gage Counties, and the State of Nebraska:

C004900615:
The detour route for this structure is 6 miles for restricted traffic (low tonnage structures); considered excessive for the area.
The structure is utilized primarily by local agricultural operations in the area; provides access for several landowners.

C006702705:
The structure/roadway is utilized as an emergency service routes and is the only access to a single family residence during wet conditions.
The detour requires the use of un-improved roads.
The structure is heavily utilized by local agricultural operations.
The project is the only access to the single family residence and will isolate them without replacement of the structure.

C006710910:
The structure/roadway is currently used as an emergency service route and is the only access point north in the local area.
The detour requires the use of un-improved roads.
The structure is heavily utilized by local agricultural operations.
The structure is used as a major "farm to market" route for local farmers and provides access to farmland, for the property owner to the north.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

84% **percent complete**

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Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Saunders**	**Date of Application**	**11/28/2019**
Agency Name	**Saunders County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Steve Mika**	**Address Line 1**	**426 N Broadway**
E-mail	**smika@co.saunders.ne.us**	**Address Line 2**	**Wahoo, NE**
Phone Number	**(402) 443-8124**	**zip code**	**68066**
NACO District	**Southeast**		

Proposal Name / Location	CBMP2019 - C007805335, C007813530
Multi-County Proposal	No
Proposal Priority Number	2

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C007805335		.2W 1.6N OF YUTAN at UPPER CLEAR CREEK	Saunders	84.00	20.20	Steel Truss - Thru	Local
C007813530		1.2E .2S OF CEDAR BLUFFS at SILVER CREEK	Saunders	41.00	24.10	Steel Truss - Thru	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C007805335	No	No	30
C007813530	No	No	30

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C007805335	Replace	Concrete Box Culvert			Contract	$346,347	$127,633	3-14'x14'x42' CBC
C007813530	Replace	Concrete Box Culvert			Contract	$196,375	$72,367	3-12'x8'x42' CBC
			* **Length and Width not required for Culverts. Please provide culvert size in comments.**		total	$542,722	$200,000	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Concrete box culverts are a cost-effective alternative for the replacement of deficient bridges in the State of Nebraska.
The design and construction process is streamlined with the utilization of standard plan and construction practices. An experienced pool of contractors active in Nebraska results in a competitive environment, reducing replacement structure construction cost to counties.
Typical concrete box culvert construction is completed within 60 calendar days which minimizes the impact to local resident, agricultural and commercial traffic.
Historically, concrete box culvert maintenance activities and costs are minor in comparison to other replacement structures.
Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to local and regional agricultural and commodity transportation.
A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper box culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Concrete box culverts are cost effective and an efficiently constructed alternative to an expensive bridge replacement.
Standardized design and construction practices provide a significant cost and time savings to the owner.
Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span, expected beyond 100 years, in costs associated with general maintenance and repair.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Box culverts standardization of design and construction can be utilized by all Counties in Nebraska.
The process of collaboration can easily be shared and is available to all Counties.
A derivative of the cooperation between counties will likely be education, through the exchange of ideas that will occur throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of concrete box culvert replacement structures provides significant long-term maintenance cost savings. The structure is considered extremely durable and expected to require minimal maintenance over its expected use, beyond 100 years. The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged. Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.

If the concrete box culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.

The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs' of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities, agricultural and commerce related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Saunders County and the State of Nebraska:

C007805335:
The structure/roadway is utilized as a bus, mail, and emergency services route.
The detour for this structure is 4 miles for restricted traffic; considered excessive for emergency services and an inconvenience for other traffic, especially agricultural.
The replacement of the structure would provide continuity throughout Saunders County.
The structure is considered "necessary" to the area agricultural and commercial businesses.
The structure is used by commercial and substantial agricultural traffic and is a “farm to market” route.

C007813530:
The structure/roadway are currently used as bus and emergency service routes.
The detour for this structure is 4 miles and is considered excessive. The route would require the use of restricted structures.
The structure provides a "farm to market" route for local producers to the village of Cedar Bluffs.
Replacement of the structure would provide continuity to other recently completed projects in the area.
It is considered "necessary" to local traffic. It provides required access to Highway 109.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

87% **percent complete**

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Jodi Gibson
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jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Saunders**	**Date of Application**	**11/28/2019**
Agency Name	Saunders County	**Contact Person Title**	Highway Superintendent
Contact Person Name	Steve Mika	**Address Line 1**	426 N Broadway
E-mail	smika@co.saunders.ne.us	**Address Line 2**	Wahoo, NE
Phone Number	(402) 443-8124	**zip code**	68066
NACO District	**Southeast**		

Proposal Name / Location	CBMP2019-C007803605
Multi-County Proposal	No
Proposal Priority Number	3

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C007803605		8S 4.9W OF PRAGUE at STREAM	Saunders	25.00	20.20	Wood or Timber Stringer/Multi-beam or Girder	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C007803605	No	No	40

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C007803605	Replace	Culvert Pipes			Contract	$80,640	$44,352	3-96"x40' Round Equivilant CMPs
			* Length and Width not required for Culverts. Please provide culvert size in comments.		total	$80,640	$44,352	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Corrugated metal culvert pipes are a cost-effective replacement alternative for deficient bridges in the State of Nebraska.
The design and construction process is streamlined with the utilization of standard plan and construction practices.
Local culvert suppliers are available and competitive, often resulting in cheaper material prices to the County.
Culvert construction will be completed by County forces, an innovative approach that reduces cost and utilizes the local County assets.
Typical culvert pipe construction can be completed within 1-2 weeks which minimizes the impact to local resident, agricultural and commercial traffic.
Corrugated metal culvert pipe's primary innovation is the simplicity of their design and construction. Metal culvert pipes, with prefabricated headwall & turndowns are quickly and easily installed by most experienced road crews. Additional innovations include; the use of standardized sheet pile and cable tie-back retaining systems, relative ease of transporting and off-loading materials, utilization of 3 x 1 and 5 x 1 corrugation (resulting in stronger culverts and a reduction in wall thickness) and inlet and outlet aprons (scour reduction.)
Historically, culvert maintenance activities and costs are minor in comparison to other replacement structures. Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to regional agricultural and commodity transportation.
A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.
The replacement's required size may remove the structure from the bridge inventory.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Corrugated metal culvert pipes are a cost effective and efficiently constructed alternative to an expensive bridge replacement.
Standardized design and construction practices provide a significant cost and time savings to the owner.
Culvert construction will be completed by County forces resulting in a considerable cost and time savings.
Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span (50-75 years) in costs associated with general maintenance and repair.
Culvert pipe replacement structures are generally simpler and relatively inexpensive when compared to box culverts or bridges. Typical culvert pipe construction (including removal of the existing structure) can be completed within 1-2 weeks resulting in lower direct project costs (overall) and minimizes the impact to local resident, agricultural and commercial traffic.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
It is anticipated that each county in the bundling package will recognize savings in engineering and construction costs. Design fees for a standard culvert crossing is significantly less costly than a traditional bridge or concrete box culvert. The bidding of a "materials, only" bundled project reduces the monetary and time costs associated with the contracting process.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Corrugated metal culvert pipe standardization of design and construction can be utilized by all Counties in Nebraska.
The process of collaboration between Counties can easily be shared and is available to all Counties. A derivative of the cooperation between counties will likely be education, through the exchange of ideas that will occur throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects. Successful results are easily conveyed to other Counties, culvert pipes provide a time-saving, quality product at low cost.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of corrugated metal culvert replacement structures provides significant long-term maintenance cost savings.
Properly sized corrugated metal culvert pipes are considered durable and expected to require minimal maintenance over their expected service life of 50-75 years.
The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged.
Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.
If the culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs' of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Saunders County, and the State of Nebraska:

C007803605:
The structure/roadway is utilized as a bus, mail, and emergency services route.
The detour for this structure is 4 miles for restricted traffic; considered excessive for emergency services and an inconvenience for other traffic, especially agricultural.
The replacement of the structure would provide continuity throughout Saunders County.
The structure is considered "necessary" to the area agricultural and commercial businesses.
The structure is used by commercial and substantial agricultural traffic and is a “farm to market” route.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

90% **percent complete**

When your application is complete and you are ready to submit it for review go to:
http://dot.nebraska.gov/projects/tia/bridge-match/
Follow the instructions on the website for uploading this application and supporting documentation.

If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Cedar**	**Date of Application**	**11/28/2019**
Agency Name	Cedar County	**Contact Person Title**	Highway Superintendent
Contact Person Name	Carla Schmidt	**Address Line 1**	PO Box 816
E-mail	ccroads@hartel.net	**Address Line 2**	Hartington, NE
Phone Number	(402) 254-7309	**zip code**	68739
NACO District	**Northeast**		

Proposal Name / Location	CBMP2019-C001415840
Multi-County Proposal	No
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C001415840		.5N OF LAUREL at PERRIN CREEK	Cedar	41.00	20.80	Steel Girder and Floorbeam System	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C001415840	No	No	120

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C001415840	Replace	Precast Deck Panels	100.73	28.00	Contract	$421,562	$200,000	3-Span Deck Slab
			* **Length and Width not required for Culverts. Please provide culvert size in comments.**		total	$421,562	$200,000	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Pre-cast deck panel bridges are a quickly constructed, cost-effective replacement alternative for deficient bridges in the State of Nebraska.
The design, fabrication, and construction process is streamlined with the utilization of standard plan and construction practices with typical bridge construction completed within 6 weeks.
An experienced pool of contractors active in Nebraska results in a competitive environment, reducing replacement structure cost to Counties.
The fabrication of the combination driving surface/structural beam at an off-site location reduces construction time significantly. There are currently a number of local suppliers that can produce the deck slab units which can easily be installed by most experienced bridge crews. Contractor innovation of the construction process continues to reduce the required time and material expenditures, reducing overall cost to the owner.
Pre-cast concrete deck slab units provide additional benefits regarding permitting and design. Bridge submergence is common and acceptable on the rural county roadways of Nebraska. Low superstructure height reduces the road grading requirements and environmental impacts are minimized by reducing or eliminating channel modification. Permitting requirements are minimized, accordingly.
This project may utilize an innovative, new pre-cast segmental panel back-wall/wing-wall design in lieu of standard sheet pile construction. The new design technique will allow contractors the ability to fabricate the panels "in-house" and eliminate the sheet pile requirements for deck slab bridges. A time/cost saving is anticipated with refinement of the process.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Pre-cast deck slab bridges are typically significantly less costly than traditional cast in place or girder bridges, with cost savings of in the order of 20-25%.
The counties of Nebraska rarely use de-icing agents therefore steel sheet pile abutments are often utilized as a quick, economical alternative to reinforced concrete. The lack of field cast concrete, which requires curing and is susceptible to weather delay reduces replacement structure installation time.
In general, heavy equipment requirements are minimized, as most construction can be performed with smaller equipment.
Installation time is typically in 6-weeks or less, which is typically half the time of traditional bridges. This results in lower overall cost and a reduction of impacts to the traveling, agricultural, and commodity community.
Additional savings are realized throughout the bridges' anticipated life-span, expected beyond 75 years, in costs associated with general maintenance and repair.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Pre-cast deck slab bridge design and construction is a standardized process in the State of Nebraska, information regarding the process can easily be shared and repeated within other Counties.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The structure is considered extremely durable and expected to require minimal maintenance over its expected use beyond 75 years.
The County expends considerable resources to complete the required maintenance activities on deficient bridges including the replacement and repair of timber/concrete decks, abutment back wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will reduce or eliminate many of these costs of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Cedar County and the State of Nebraska:

C001415840:
The structure/roadway is utilized as a bus, mail and emergency services route for the City of Laurel and Cedar County.
The detour is 5-6 miles for un-restricted traffic and is considered excessive for the area.
The structure is utilized primarily for agricultural operations and local traffic. It is heavily utilized by a fertilizer plant to the east; and grain transport for Agrex (large grain elevator) to the west. Agricultural operations utilize the roadway as a "farm to market" route. The roadway/structure is at the north edge of Laurel - there is significant economic activity in the area.
The structure/roadway provides continuity for the local agricultural producers into Laurel; and Nebraska Highway 15.
The structure is considered extremely "necessary" to the area and residents. Replacement will improve agricultural traffic access to the market. The outdated structure is currently posted at 10 tons. Larger agricultural equipment requires a new structure which would enhance the County's ability to provide adequate roads for the safety of local residents.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

100% **percent complete**

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If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Colfax**	**Date of Application**	**11/28/2019**
Agency Name	**Colfax County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Mark Arps**	**Address Line 1**	**466 Rd 10**
E-mail	**marps@colfaxne.com**	**Address Line 2**	**Schuyler, NE**
Phone Number	**(402) 352-3031**	**zip code**	**68661**
NACO District	**Northeast**		

Proposal Name / Location	CBMP2019 - C001902705, C001902905, C001903535
Multi-County Proposal	No
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C001902705		2.5E OF SCHUYLER at SHELL CREEK	Colfax	81.00	20.00	Steel Other	Local
C001902905		3.5E OF SCHUYLER at SHELL CREEK	Colfax	79.00	20.00	Steel Other	Local
C001903535	A-2-1.5	3.7E .6N OF HOWELLS at STREAM	Colfax	32.00	16.30	Steel Stringer/Multi-beam or Girder	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C001902705	No	No	30
C001902905	No	No	25
C001903535	No	No	60

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C001902705	Replace	Concrete Slab	170.00	28.00	Contract	$998,527	$110,614	4-Span
C001902905	Remove	Not Applicable	0.00	0.00	Contract	$243,850	$74,176	Remove from Inventory
C001903535	Remove	Other	0.00	0.00	Contract	$50,000	$15,209	Remove from Inventory
			* **Length and Width not required for Culverts.**		total	$1,292,377	$199,999	OK
			Please provide culvert size in comments.					

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Continuous concrete slab bridges are a cost-effective alternative for the replacement of deficient bridges in the State of Nebraska. The design and construction process is streamlined with the utilization of standard plan and construction practices with typical bridge construction completed within 120 calendar days.
The experienced pool of contractors active in Nebraska results in a competitive environment, reducing replacement structure cost to counties. Contractor innovation of the construction process continues to reduce the required time and material expenditures, reducing overall cost to the owner.
Bridge submergence is acceptable and common on the rural county roadways of Nebraska. The structure is considered extremely durable and expected to require minimal maintenance over its expected use-beyond 75 years.
In addition to the replacement projects, Colfax County is proposing removal of Structures C001902905 and C001903535 from the traveled way and NBIS structurally deficient list.
The bridge replacement is part of a coordinated effort by the County, Natural Resource District and local landowners to improve Shell Creek channel conveyance and reduce the City of Schuyler and immediate area's flooding potential. Significant channel cleanout has already been completed to the west of the project. To the east, channel cleanout and a new railroad bridge design and construction is anticipated in the near future.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Continuous concrete slab bridges are a cost effective and efficiently constructed alternative to other more expensive bridge replacement types. Standardized design and construction practices provide a significant cost and time savings to the owner.
Additional savings are realized throughout the bridges' anticipated life-span, expected beyond 75 years, in costs associated with general maintenance and repair.
The bridges are normally installed within 120 calendar days or less, which results in less impact to the traveling, agricultural, and commodity traffic of the area.
Removal of Structures C001902905 and C001903535 from the inventory will result in a considerable cost and time savings to the County and State. Replacement structure construction, maintenance, mowing, snow removal, rating and inspection activities will not be necessary.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

The continuous concrete slab bridge design and construction is a standardized process in the State of Nebraska, information regarding the process can easily be shared and repeated within other Counties.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The structure is considered extremely durable and expected to require minimal maintenance over its expected use beyond 75 years. The County expends considerable resources to complete the required maintenance activities on deficient bridges including the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs of time, material and labor. Removal of Structures C001902905 and C001903535 from the inventory will eliminate the maintenance requirements for each bridge, saving a considerable amount of expenditures in the long term.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Colfax County and the State of Nebraska:

C001902705:
The structure/roadway is not utilized as a bus or emergency services route.
The detour for this structure is 7 miles through Schuyler, NE.
The structure is used by commercial traffic. Specifically, there is a sand and gravel company in the area that uses the structure daily. Union Pacific Railroad also uses the structure to gain access to railroad crossings for maintenance purposes.
The replacement of the structure provides continuity across Colfax County, by connecting to other recently completed projects in the area.
The structure is considered "necessary" to the area, as it provides access for multiple commercial and agricultural operations, as well as the local public.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

100% **percent complete**

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If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Cuming**	**Date of Application**	**11/28/2019**
Agency Name	**Cuming County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Chris Howser**	**Address Line 1**	**200 S Lincoln Rm 202**
E-mail	**chowser@cumingcounty.ne.gov**	**Address Line 2**	**West Point, NE**
Phone Number	**(402) 380-2582**	**zip code**	**68788**
NACO District	**Northeast**		

Proposal Name / Location	CBMP2019 - C002002210, C002005210, C002010425, C002013435
Multi-County Proposal	No
Proposal Priority Number	2

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C002002210		3S 3.7W OF WISNER at STREAM	Cuming	25.00	28.60	Steel Stringer/Multi-beam or Girder	Local
C002005210		13W US275 DODGE CL at STREAM	Cuming	30.00	28.70	Steel Stringer/Multi-beam or Girder	Local
C002010425		JCT N51/N9 5N 1.6W at STREAM	Cuming	30.00	28.80	Steel Stringer/Multi-beam or Girder	Other Arterial
C002013435		JCT US275/N9 2E at WILLOW CREEK	Cuming	25.00	28.60	Steel Stringer/Multi-beam or Girder	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C002002210	No	No	30
C002005210	No	No	50
C002010425	No	No	70
C002013435	No	No	75

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C002002210	Rehab	Not Applicable			Contract	$9,620	$5,291	Bracing
C002005210	Rehab	Not Applicable			Contract	$9,620	$5,291	Bracing
C002010425	Rehab	Not Applicable			Contract	$9,620	$5,291	Bracing
C002013435	Rehab	Not Applicable			Contract	$9,620	$5,291	Bracing
			* Length and Width not required for Culverts. Please provide culvert size in comments.		total	$38,480	$21,164	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

The intent of the proposal is to remove several bridges from the structurally deficient list by performing only the rehabilitation work required. The bridge bracing will be contracted and will require minimal material and construction costs. The rehabilitation components will be pre-fabricated and assembled on-site. Road closure, due to construction activities will be kept to a minimum. These design modifications will prolong the useful life of the existing structures that are, otherwise in acceptable condition.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

The required modifications (bracing) will improve the structural evaluation, which will remove each structure from the Structurally Deficient list. The existing structures are considered to be in satisfactory condition, otherwise making replacement at this time unnecessary. The proposed modifications' design, material, construction and time costs are significantly less that those required for a replacement structure. Bridge "out of service" time is minimized, reducing the impacts to the local community.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)
Describe how the innovation can be shared and used by other Counties.
The bracing design and construction methods utilized can easily be shared. Standardized plans can be modified for site specific requirements for use in all Counties.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The required bracing will provide additional stability to the structure, reducing wear that will necessitate repair. The modifications will extend the life of the existing bridges and replacement should not be required well into the future. The proposal will require minimum expenditure of time, cost, material and construction to extend the life, and provide use-able existing bridges to the local agricultural and commodity community.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Cuming County and the State of Nebraska:

C002002210:
The detour for the structure is 4 miles to un-restricted traffic.
The structure/roadway functions as a farm to market route to CO-OP's in Wisner and Pilger, Nebraska.

C002005210:
The structure is currently utilized as a bus route.
The detour route length is 4 miles to un-restricted traffic.
The structure is heavily traveled by local hog and agricultural operations in the area.
The structure functions as a "farm to market" route between the cities of Dodge and Howells.

C002010425:
The detour length is 4 miles to un-restricted traffic.
The structure/roadway is heavily utilized by local agricultural operations transporting commodities to the Pender CO-OP .
The structure functions as a main "farm to market" route to the city of Pender.

C002013435:

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

77% **percent complete**

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Follow the instructions on the website for uploading this application and supporting documentation.

If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Knox**	**Date of Application**	**11/28/2019**
Agency Name	**Knox County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Kevin Barta**	**Address Line 1**	**PO Box 85**
E-mail	**knoxhwysupt@gpcom.net**	**Address Line 2**	**Center, NE**
Phone Number	**(402) 288-5610**	**zip code**	**68724**
NACO District	**Northeast**		

Proposal Name / Location	CBMP2019 - C005401905P, C005405805
Multi-County Proposal	No
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C005401905P	97-10N7W6	8.1W .4S OF WINNETOON at STREAM	Knox	72.00	15.80	Steel Truss - Deck	Local
C005405805	98-20W8	JCT N14/N59 12.8W at STREAM	Knox	32.00	26.40	Steel Stringer/Multi-beam or Girder	Other Arterial

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C005401905P	No	No	15
C005405805	No	No	395

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C005401905P	Replace	Concrete Box Culvert			Contract	$250,902	$101,609	3-12'x12'x42' CBC
C005405805	Replace	Concrete Box Culvert			Contract	$242,954	$98,391	3-12'x9'x52' CBC
			* **Length and Width not required for Culverts. Please provide culvert size in comments.**		total	$493,856	$200,000	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Concrete box culverts are a cost-effective alternative for the replacement of deficient bridges in the State of Nebraska.
The design and construction process is streamlined with the utilization of standard plan and construction practices. An experienced pool of contractors active in Nebraska results in a competitive environment, reducing replacement structure construction cost to counties.
Typical concrete box culvert construction is completed within 60 calendar days which minimizes the impact to local resident, agricultural and commercial traffic.
Historically, concrete box culvert maintenance activities and costs are minor in comparison to other replacement structures.
Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to local and regional agricultural and commodity transportation.
A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper box culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Concrete box culverts are cost effective and an efficiently constructed alternative to an expensive bridge replacement.
Standardized design and construction practices provide a significant cost and time savings to the owner.
Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span, expected beyond 100 years, in costs associated with general maintenance and repair.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Box culverts standardization of design and construction can be utilized by all Counties in Nebraska.
The process of collaboration can easily be shared and is available to all Counties.
A derivative of the cooperation between counties will likely be education, through the exchange of ideas that will occur throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of concrete box culvert replacement structures provides significant long-term maintenance cost savings. The structure is considered extremely durable and expected to require minimal maintenance over its expected use, beyond 100 years. The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged. Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.

If the concrete box culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.

The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs' of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities, agricultural and commerce related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Knox County and the State of Nebraska:

C005401905P:
The structure/roadway is an emergency services route. Replacement of the structure will save emergency services time by providing a direct route into the area.
The detour for the structure is 9.5 miles. This is considered excessive.
The structure/roadway is utilized by local farmers. The structure provides a "farm to market" route for local agricultural operations. Currently it cannot be utilized to the full extent due to the width/weight restrictions of the bridge.
The bridge is considered "necessary" to the local area. Excessive detour lengths create an additional expense for local farmers.
The structure is an Army surplus "Bailey Bridge" and is considered historical. The fracture critical bridge would be easy to dismantle and could be utilized by the community for a park bridge.
The village of Verdigre is currently looking for such a structure to replace small culverts in a small village park.

C005405805:
The structure/roadway is utilized as a bus and as an emergency services route.
The detour route length is 4 miles with no restrictions.
The roadway is a paved "Other Arterial" route between O'Neill and Creighton with high Average Daily Traffic (ADT). Heavy truck traffic utilizes the roadway as a shortcut.
The structure/roadway was previously a State Highway; turned over to County maintenance.
There is significant agricultural/economic activity in the general area that utilizes the paved roadway and structure as a "farm to market" route.
This bridge replacement project is very important to the economic success of the area. The roadway is one of the highest ADT roads and is a primary route within, and through, Knox County.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

87% **percent complete**

When your application is complete and you are ready to submit it for review go to:
http://dot.nebraska.gov/projects/tia/bridge-match/
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If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Madison**	**Date of Application**	**11/28/2019**
Agency Name	**Madison County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Richard Johnson**	**Address Line 1**	**707 Michigan Ave**
E-mail	**rcj@cableone.net**	**Address Line 2**	**Norfolk, NE**
Phone Number	**(402) 371-1255**	**zip code**	**68701**
NACO District	**Northeast**		

Proposal Name / Location	CBMP2019 - C005900515, C005900920, C005913210, C007112310
Multi-County Proposal	Yes
Proposal Priority Number	2

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C005900515		6.5N 1W OF NEWMAN GROVE at STREAM	Madison	33.00	20.00	Wood or Timber Stringer/Multi-beam or Girder	Local
C005900920		1.5N 1E OF NEWMAN GROVE at STREAM	Madison	33.00	18.20	Wood or Timber Stringer/Multi-beam or Girder	Local
C005913210		2.5N 1W OF MADISON at STREAM	Madison	24.00	20.20	Wood or Timber Stringer/Multi-beam or Girder	Local
C007112310	MBN 34-3	1.5NW OF MONROE at STREAM	Platte	40.00	30.00	Steel Stringer/Multi-beam or Girder	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C005900515	No	No	25
C005900920	No	No	30
C005913210	No	No	25
C007112310	No	No	10

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C005900515	Replace	Culvert Pipes			County Forces	$119,880	$65,934	3-120"x40' CMPs
C005900920	Replace	Culvert Pipes			County Forces	$73,150	$40,233	3-96"x40' CMPs
C005913210	Replace	Culvert Pipes			County Forces	$91,080	$50,094	3-108"x40' CMPs
C007112310	Replace	Culvert Pipes			County Forces	$91,080	$50,094	3-108"x40' CMPs
			* **Length and Width not required for Culverts.**		total	$375,190	$206,355	OK
			Please provide culvert size in comments.					

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Corrugated metal culvert pipes are a cost-effective replacement alternative for deficient bridges in the State of Nebraska.
The design and construction process is streamlined with the utilization of standard plan and construction practices.
Local culvert suppliers are available and competitive, often resulting in cheaper material prices to the County.
Culvert construction will be completed by County forces, an innovative approach that reduces cost and utilizes the local County assets.
Typical culvert pipe construction can be completed within 1-2 weeks which minimizes the impact to local resident, agricultural and commercial traffic.
Corrugated metal culvert pipe's primary innovation is the simplicity of their design and construction. Metal culvert pipes, with prefabricated headwall & turndowns are quickly and easily installed by most experienced road crews. Additional innovations include; the use of standardized sheet pile and cable tie-back retaining systems, relative ease of transporting and off-loading materials, utilization of 3 x 1 and 5 x 1 corrugation (resulting in stronger culverts and a reduction in wall thickness) and inlet and outlet aprons (scour reduction.)
Historically, culvert maintenance activities and costs are minor in comparison to other replacement structures. Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to regional agricultural and commodity transportation.
A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.
The replacement's required size may remove the structure from the bridge inventory.
This proposal is being submitted by multiple counties, in a cooperative effort to streamline the design, bid, and build process through project bundling. Innovative, because counties have not actively reached across established map lines in the name of cooperation and efficiency.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Corrugated metal culvert pipes are a cost effective and efficiently constructed alternative to an expensive bridge replacement.
Standardized design and construction practices provide a significant cost and time savings to the owner.
Culvert construction will be completed by County forces resulting in a considerable cost and time savings.
Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span (50-75 years) in costs associated with general maintenance and repair.
Culvert pipe replacement structures are generally simpler and relatively inexpensive when compared to box culverts or bridges. Typical culvert pipe construction (including removal of the existing structure) can be completed within 1-2 weeks resulting in lower direct project costs (overall) and minimizes the impact to local resident, agricultural and commercial traffic.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
It is anticipated that each county in the bundling package will recognize savings in engineering and construction costs. Design fees for a standard culvert crossing are significantly less costly than a traditional bridge or concrete box culvert. The bidding of a "materials, only" bundled project reduces the monetary and time costs associated with the contracting process.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Corrugated metal culvert pipe standardization of design and construction can be utilized by all Counties in Nebraska.
The process of collaboration between Counties can easily be shared and is available to all Counties. A derivative of the cooperation between counties will likely be education, through the exchange of ideas that will occur throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects. Successful results are easily conveyed to other Counties, culvert pipes provide a time-saving, quality product at low cost.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of corrugated metal culvert replacement structures provides significant long-term maintenance cost savings.
Properly sized corrugated metal culvert pipes are considered durable and expected to require minimal maintenance over their expected service life of 50-75 years.
The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged.
Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.
If the culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs' of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Madison/Platte Counties, and the State of Nebraska:

C005900515:
The detour route length is 4 miles for un-restricted traffic.
The structure/roadway is utilized for rural local, residential, commercial and agricultural operation/equipment traffic.
A large grain storage facility is located 3 miles east of the structure.

C005900920:
The detour for the structure is 4 miles to un-restricted traffic.
Local agricultural operations use the structure frequently as a "farm to market" route, a FAS route approximately 3/4 mile south of the structure.
A local landfill is located app. 2 miles south and 1/2 mile west of the structure.

C005913210:
The detour for the structure is 4 miles to un-restricted traffic.
Completion of the project would allow truck traffic to Agrex from the west; bypassiong the City of Madison and reducing congestion and wear of city streets.
Local agricultural operations utilize the structure frequently as a "farm to market" route, and for access to a local grain elevator (Agrex facility is located 1/2 mile east and 1.5 miles north.)

C007112310:

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

85% **percent complete**

When your application is complete and you are ready to submit it for review go to:
http://dot.nebraska.gov/projects/tia/bridge-match/
Follow the instructions on the website for uploading this application and supporting documentation.

If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Wayne**	**Date of Application**	**11/28/2019**
Agency Name	**Wayne County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Mark Casey**	**Address Line 1**	**510 Pearl St**
E-mail	**roads@wayne.nacone.org**	**Address Line 2**	**Wayne, NE**
Phone Number	**(402) 375-1153**	**zip code**	**68787**
NACO District	**Northeast**		

Proposal Name / Location	CBMP2019 - C009004310, C009004315, C009004320
Multi-County Proposal	No
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C009004310		2.5E 8.9S OF WAYNE at PLUM CREEK	Wayne	30.00	16.00	Steel Stringer/Multi-beam or Girder	Local
C009004315		2.5E 8.7S OF WAYNE at PLUM CREEK	Wayne	61.00	16.10	Steel Stringer/Multi-beam or Girder	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C009004310	No	No	25
C009004315	No	No	25

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C009004310	Replace	Concrete Box Culvert			Contract	$339,846	$174,349	3-12'x12'x54' CBC
C009004315	Remove	Not Applicable	0.00	0.00	Contract	$50,000	$25,651	Remove from Inventory.
			* **Length and Width not required for Culverts. Please provide culvert size in comments.**		total	$389,846	$200,000	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Concrete box culverts are a cost-effective alternative for the replacement of deficient bridges in the State of Nebraska. The design and construction process is streamlined with the utilization of standard plan and construction practices. An experienced pool of contractors active in Nebraska results in a competitive environment, reducing replacement structure construction cost to counties. Typical concrete box culvert construction is completed within 60 calendar days which minimizes the impact to local resident, agricultural and commercial traffic.
Historically, concrete box culvert maintenance activities and costs are minor in comparison to other replacement structures.
Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to local and regional agricultural and commodity transportation.
A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper box culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.
The project is considered innovative by replacing structure C0090004310 and relocating the roadway which eliminates structure C009004315 and non-eligible structure C009004320 from the traveled way and NBIS structurally deficient list.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Concrete box culverts are cost effective and an efficiently constructed alternative to an expensive bridge replacement. Standardized design and construction practices provide a significant cost and time savings to the owner. Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span, expected beyond 100 years, in costs associated with general maintenance and repair.
Removal of structures C009004315 and C009004320 from the inventory will result in a considerable cost and time savings to the County and State. Replacement structure construction, maintenance, mowing, snow removal, rating and inspection activities will no longer be necessary.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)
Describe how the innovation can be shared and used by other Counties.
Box culverts standardization of design and construction can be utilized by all Counties in Nebraska.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of concrete box culvert replacement structures provides significant long-term maintenance cost savings. The structure is considered extremely durable and expected to require minimal maintenance over its expected use, beyond 100 years. The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged. Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.

If the concrete box culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.

The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs' of time, material and labor.

Removal of structures C009004315 and C009004320 from the NBIS inventory will eliminate the maintenance requirements for the bridges, saving a considerable amount of expenditures in the long term.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities, agricultural and commerce related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Wayne County and the State of Nebraska:

C009004310:
The roadway and structure are currently not utilized as a bus route, but has been in recent years. It would likely be used again, but current bridge postings limits usage. It is utilized as a mail route.
The roadway and structure are part of an emergency service route. Residents are served by Wisner Fire and Rescue from the south. Currently, they are cut off from emergency services due to current bridge posting limitations. Replacement of this structure would eliminate this problem.
The current detour length for heavier loads is 5 miles. Considered excessive.
The roadway and structure is important to local agriculture operations in the area, for both Wayne and Cuming Counties.
Replacement of the structure would improve harvest traffic, grain, livestock, and waste transport, as well as normal residential traffic.
Several large cattle feedlots are within a 5 mile radius of the structure, this includes supporting/associated grain, feed, and hay operations.
The structure is considered "necessary" to local traffic, several weight-restricted structures in the area cause in-efficient traffic flow. The project will significantly improve access to farmland, feedlots, and residents.
Several recently completed projects in the immediate area, and within the same drainage, will be utilized with greater frequency following the bridge replacement/roadway relocation.
This project represents the second step in a larger plan to replace/eliminate several structurally deficient bridges in the general area, in order to improve access, traffic flow, safety, and the development of ag/livestock feeding operations in the area. As a result of 2015 tornado damage, one large feedlot located less than 2 miles from the project opted not to rebuild in the same location. Wayne County believes that this decision was in part, due to outdated infrastructure in the area.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

94% **percent complete**

When your application is complete and you are ready to submit it for review go to:
http://dot.nebraska.gov/projects/tia/bridge-match/
Follow the instructions on the website for uploading this application and supporting documentation.

If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2020

Applying County	**Howard**	**Date of Application**	**12/5/2019**
Agency Name	**Howard County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Janet Thomsen**	**Address Line 1**	**408 Elm St.**
E-mail	**roads@howard.nacone.org**	**Address Line 2**	**St Paul, NE**
Phone Number	**(308) 754-5364**	**zip code**	**68873**
NACO District	**Central**		

Proposal Name / Location	Howard County 2019
Multi-County Proposal	No
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C004724805	3 B-3	3SE OF ST LIBORY at STREAM	Howard	30.00	24.00	Steel Stringer/Multi-beam or Girder	Local
C004703005	21 X-10	1.5S 4W FARWELL at STREAM	Howard	50.00	24.20	Steel Stringer/Multi-beam or Girder	Collector
C004703205	19 V-4	2.5S 1.4W FARWELL at OAK CREEK	Howard	51.00	21.20	Steel Girder and Floorbeam System	Local
<Enter SN here>							

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C004724805	No	No	102
C004703005	No	No	272
C004703205	No	No	42

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C004724805	Replace	Steel Girder	32.00	24.00	Contract	$193,758	$97,006	Replace with bridge
C004703005	Rehab	Other	50.00	24.20	Contract	$46,325	$23,193	Rehab with additional bent
C004703205	Rehab	Other	51.00	26.00	Contract	$159,394	$79,801	Rehab superstructure
					total	$399,477	$200,000	OK

*** Length and Width not required for Culverts.**
Please provide culvert size in comments.

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Howard County typically contracts out to replace bridges with bridges. By rehabbing two of the structurally-deficient bridges, these bridges will be brought up to load limits above the legal road limit, with minimum expense.
Rehabbing structurally-deficient bridges also appears to be innovative – past County Bridge Match Program projects indicate most counties are replacing structurally-deficient bridges with culverts and bridges. Rehabbing two of the bridges will result in costs of less than half of new bridges. With the rehab of two bridges and replacement of the third bridge, load limits on all three bridges will exceed the legal load limit, effectively allowing unlimited use of the bridges.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Howard County proposes to save time and reduce costs by rehabbing two structurally-deficient bridges. Further cost savings is realized by bundling the rehabbed bridges with one bridge replacement. Significant savings would be realized with this proposal.

Bridge C004703205 will have the 21-foot wide deck replaced with a 26-foot deck. Additionally, minor substructure work will be done, replacing one or two pilings. The estimated cost to rehab this bridge is $150,594. This is just under half of the cost of replacing the bridge, which is estimated to be at least $225,000. If this bridge was replaced, a relaxation of standards would also be necessary. If the relaxation of standards was not granted, the road approach would have to be re-aligned; work for this is estimated to be at least $75,000.

Bridge C004703005 will have an additional bent added to the bridge, creating a two-span bridge. This will raise the load limit to above the legal load limit. The estimated cost to rehab this bridge is $46,624, a substantial savings from the estimated $180,000 for a new bridge.

However, not all bridges can be rehabbed to bring the bridge above legal load limts. Bridge C004724805 would be replaced. The existing bridge is 30 feet by 24 feet with the new bridge planned to be 32 feet by 24 feet. An estimated replacement cost for this bridge is $193,758. The final load rating on this bridge will also be above the required posting limits. This bridge is located in a portion of Howard County with many roads nearby, allowing the traveling public easily-accessed detour routes, saving time and frustration. Additionally, multiple opportunities to detour allow traffic patterns to spread out, reducing wear on any particular road, keeping maintenance costs lowered.

Bundling the projects will also save on advertising and bidding documents. Since these projects will be bundled, the contractor will see savings in time and cost.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

While none of the proposed rehab or new structures are new innovations, Howard County is willing to share any knowledge gained. Construction methods and time saving ideas can be easily shared. Standardized plans can be modified for site-specific requirements for use in all counties. Successful results are easily networked to other counties.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

Howard County is like most rural counties in Nebraska and the Midwest – it is very dependent upon agriculture and the associated economies. Agricultural equipment continues to increase in size, weight, and frequency of travel.
Bridge C004703005 is located on a collector route, with an ADT of 272. The other two bridges, C004703205 and C004724805, are located on local roads. ADT's are 42 and 102, respectively. Additionally, all three bridges are on mail and school bus routes.
By rehabbing and replacing the three bridges, traffic on the roads will be able to travel freely, without any restrictions. With the increased load ratings, public safety will be increased by allowing large farm equipment to use the most direct routes possible - reducing the amount of time the equipment is on the road.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

Howard County has 133 bridges more than 20 feet in length. There are an additional 100 bridges under 20 feet in length in the county. Of the 133 bridges, 13 bridges were structurally-deficient at the initiation of the County Bridge Match Program. While 10 percent of Howard County's bridges being structurally-deficient may not seem like a large percentage, Howard County is dedicated to resolving the structurally-deficient bridges, whether through rehab, replacement, or removal. Howard County has already dealt with four of the bridges – one bridge was replaced at Howard County's expense, just prior to the CBMP announcement; two bridges will be replaced with culverts through the 2017 CBMP; and another bridge will be removed through the 2017 CBMP. The work on the latter three bridges will be done with County forces.

Half of the bridges in Howard County are at least 40 years old. A full 25 percent of the bridges in Howard County are at least 50 years old. Thus, many bridges may need to be replaced in a very short amount of time.

By rehabbing two of the bridges, Howard County can bring the bridges' load ratings to greater than legal load road weights with the least amount of expense possible. Rehabbing the two bridges is estimated to cost $197,018, less than half the cost of new bridges. The savings on these bridges can be used towards Howard County's share of replacing the remaining bridge in this proposal or toward maintenance, repair, or replacement of other bridges in the county.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

100% **percent complete**

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If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Nuckolls**	**Date of Application**	**11/28/2019**
Agency Name	Nuckolls County	**Contact Person Title**	Highway Superintendent
Contact Person Name	Gary Warren	**Address Line 1**	251 S Park
E-mail	nuckollscoroads@windstream.net	**Address Line 2**	Nelson, NE
Phone Number	(402) 225-4121	**zip code**	68961
NACO District	**Central**		

Proposal Name / Location	CBMP2019 - C000103020, C006524710, M1710D2305
Multi-County Proposal	Yes
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C000103020	J8-1	1395 E OREGON TRAIL RD. at PAWNEE CREEK	Adams	52.00	20.10	Wood or Timber Stringer/Multi-beam or Girder	Local
C006524710		3.8N 3.3E OAK at S FK BIG SANDY CREEK	Nuckolls	32.00	20.30	Steel Stringer/Multi-beam or Girder	Local
M1710D2305		NELSON - PORTER @ 7TH at ELK CREEK	Nuckolls	95.00	15.30	Steel Truss - Thru	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C000103020	No	No	35
C006524710	No	No	70
M1710D2305	No	No	100

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C000103020	Replace	Precast Deck Panels	91.54	28.52	Contract	$387,857	$200,000	
C006524710	Replace	Precast Deck Panels	60.70	28.00	Contract	$295,109	$162,310	
M1710D2305	Remove	Not Applicable	0.00	0.00	Contract	$50,000	$27,500	Remove from Inventory
			* **Length and Width not required for Culverts.**		total	$732,966	$389,810	OK
			Please provide culvert size in comments.					

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Pre-cast deck panel bridges are a quickly constructed, cost-effective replacement alternative for deficient bridges in the State of Nebraska.
The design, fabrication, and construction process is streamlined with the utilization of standard plan and construction practices with typical bridge construction completed within 6 weeks.
An experienced pool of contractors active in Nebraska results in a competitive environment, reducing replacement structure cost to Counties.
The fabrication of the combination driving surface/structural beam at an off-site location reduces construction time significantly. There are currently a number of local suppliers that can produce the deck slab units which can easily be installed by most experienced bridge crews. Contractor innovation of the construction process continues to reduce the required time and material expenditures, reducing overall cost to the owner.
Pre-cast concrete deck slab units provide additional benefits regarding permitting and design. Bridge submergence is common and acceptable on the rural county roadways of Nebraska. Low superstructure height reduces the road grading requirements and environmental impacts are minimized by reducing or eliminating channel modification. Permitting requirements are minimized, accordingly.
This proposal is being submitted by multiple counties, in a cooperative effort to streamline the design, bid, and build process through project bundling. Innovative, because counties have not actively reached across established map lines in the name of cooperation and efficiency. Additionally, it is presumed that bundled project bids will result in lower pricing due to their regional nature.
In addition to the replacement project, Nuckolls County is proposing removal of Structure M1710D2305 from the traveled way and NBIS structurally deficient list.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Pre-cast deck slab bridges are typically significantly less costly than traditional cast in place or girder bridges, with cost savings of in the order of 20-25%.
The counties of Nebraska rarely use de-icing agents therefore steel sheet pile abutments are often utilized as a quick, economical alternative to reinforced concrete. The lack of field cast concrete, which requires curing and is susceptible to weather delay reduces replacement structure installation time.
In general, heavy equipment requirements are minimized, as most construction can be performed with smaller equipment.
Installation time is typically in 6-weeks or less, which is typically half the time of traditional bridges. This results in lower overall cost and a reduction of impacts to the traveling, agricultural, and commodity community.
Additional savings are realized throughout the bridges' anticipated life-span, expected beyond 75 years, in costs associated with general maintenance and repair.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Pre-cast deck slab bridge design and construction is a standardized process in the State of Nebraska, information regarding the process can easily be shared and repeated within other Counties.
A derivative of the cooperation between counties will likely be education, through the exchange of ideas that occurs throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The structure is considered extremely durable and expected to require minimal maintenance over its expected use beyond 75 years. The County expends considerable resources to complete the required maintenance activities on deficient bridges including the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will reduce or eliminate many of these costs of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Adams/Nuckolls County and the State of Nebraska:

C000103020:
This structure/roadway is not currently utilized as a mail or bus route.
The detour route length is 3 miles for un-restricted traffic, and is considered excessive for the area.
The structure/roadway is utilized for local, commercial, and significant rural agricultural production traffic.
The structure is considered “necessary” to local agricultural traffic.

C006524710:
The structure/roadway is utilized as a bus and mail route.
The structure/roadway is on a "farm to market" route (high traffic volumes during planting and harvesting) and is primarily utilized to haul commodities to local elevator's & beyond.
There is significant economic activity in the general area that utilizes the roadway/structure including; Ag production & on-farm grain handling facilities.
The county has expended considerable time and monetary resources to maintain the existing bridge and the bridge's condition and width still does not provide acceptable passage for current agricultural related equipment and activities.

M1710D2305:
The structure/roadway is permanently closed.
The structure is considered an "eye-sore" to the City of Nelson.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

100% **percent complete**

When your application is complete and you are ready to submit it for review go to:
http://dot.nebraska.gov/projects/tia/bridge-match/
Follow the instructions on the website for uploading this application and supporting documentation.

If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Nuckolls**	**Date of Application**	**11/28/2019**
Agency Name	**Nuckolls County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Gary Warren**	**Address Line 1**	**251 S Park**
E-mail	**nuckollscoroads@windstream.net**	**Address Line 2**	**Nelson, NE**
Phone Number	**(402) 225-4121**	**zip code**	**68961**
NACO District	**Central**		

Proposal Name / Location	CBMP2019 - C006500935, C006513123
Multi-County Proposal	No
Proposal Priority Number	2

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C006500935		7W 9N OF SUPERIOR at STREAM	Nuckolls	28.00	26.30	Wood or Timber Stringer/Multi-beam or Girder	Local
C006513123		4E 1.5N NELSON at STREAM	Nuckolls	29.00	26.10	Wood or Timber Stringer/Multi-beam or Girder	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C006500935	No	No	35
C006513123	No	No	30

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C006500935	Replace	Culvert Pipes			County Forces	$63,988	$35,193	3-84"x42' CMPs
C006513123	Replace	Culvert Pipes			County Forces	$74,883	$41,185	3-96"x42' CMPs
			* **Length and Width not required for Culverts. Please provide culvert size in comments.**		total	$138,871	$76,378	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Corrugated metal culvert pipes are a cost-effective replacement alternative for deficient bridges in the State of Nebraska.
The design and construction process is streamlined with the utilization of standard plan and construction practices.
Local culvert suppliers are available and competitive, often resulting in cheaper material prices to the County.
Culvert construction will be completed by County forces, an innovative approach that reduces cost and utilizes the local County assets.
Typical culvert pipe construction can be completed within 1-2 weeks which minimizes the impact to local resident, agricultural and commercial traffic.
Corrugated metal culvert pipe's primary innovation is the simplicity of their design and construction. Metal culvert pipes, with prefabricated headwall & turndowns are quickly and easily installed by most experienced road crews. Additional innovations include; the use of standardized sheet pile and cable tie-back retaining systems, relative ease of transporting and off-loading materials, utilization of 3 x 1 and 5 x 1 corrugation (resulting in stronger culverts and a reduction in wall thickness) and inlet and outlet aprons (scour reduction.)
Historically, culvert maintenance activities and costs are minor in comparison to other replacement structures. Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to regional agricultural and commodity transportation.
A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.
The replacement's required size may remove the structure from the bridge inventory.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Corrugated metal culvert pipes are a cost effective and efficiently constructed alternative to an expensive bridge replacement.
Standardized design and construction practices provide a significant cost and time savings to the owner.
Culvert construction will be completed by County forces resulting in a considerable cost and time savings.
Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span (50-75 years) in costs associated with general maintenance and repair.
Culvert pipe replacement structures are generally simpler and relatively inexpensive when compared to box culverts or bridges. Typical culvert pipe construction (including removal of the existing structure) can be completed within 1-2 weeks resulting in lower direct project costs (overall) and minimizes the impact to local resident, agricultural and commercial traffic.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
It is anticipated that each county in the bundling package will recognize savings in engineering and construction costs. Design fees for a standard culvert crossing is significantly less costly than a traditional bridge or concrete box culvert. The bidding of a "materials, only" bundled project reduces the monetary and time costs associated with the contracting process.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Corrugated metal culvert pipe standardization of design and construction can be utilized by all Counties in Nebraska.
The process of collaboration between Counties can easily be shared and is available to all Counties. A derivative of the cooperation between counties will likely be education, through the exchange of ideas that will occur throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects. Successful results are easily conveyed to other Counties, culvert pipes provide a time-saving, quality product at low cost.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of corrugated metal culvert replacement structures provides significant long-term maintenance cost savings.
Properly sized corrugated metal culvert pipes are considered durable and expected to require minimal maintenance over their expected service life of 50-75 years.
The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged.
Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.
If the culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs' of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Nuckolls County, and the State of Nebraska:

C006500935:
The structure/roadway is currently utilized as a mail and emergency services route.
The detour length is 3 miles to un-restricted traffic; considered excessive for the area.
The structure is utilized by local, commercial, agricultural production and on-farm handling facility traffic.

C006513123:
The structure/roadway is currently utilized as a bus, mail, and emergency services route.
The detour length is 3 miles to un-restricted traffic; considered excessive for the area.
The structure is utilized by local, commercial, agricultural production and on-farm handling facility traffic.

Both of these structures area considered "necessary" to the local residents. Replacement will improve the safety of the public and agricultural traffic of the area.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

87% **percent complete**

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402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2019

Applying County	**Phelps**	**Date of Application**	**12/2/2019**
Agency Name	**Phelps County Department of Roads**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Bobby Hamilton**	**Address Line 1**	**1305 2nd St**
E-mail	pcbobby37@yahoo.com	**Address Line 2**	**Holdrege, NE**
Phone Number	**308-995-8485**	**zip code**	**68949**
NACO District	**Central**		

Proposal Name / Location	CBC Sites
Multi-County Proposal	No
Proposal Priority Number	2

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C006902405		9E 2.5N	Phelps	80.00	26.30	Steel Stringer/Multi-beam or Girder	Collector
C006903305		.8E 3.5N OF HOLDREGE at IRRIGATION CANAL	Phelps	70.00	21.00	Steel Stringer/Multi-beam or Girder	Local
<Enter SN here>							

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C006902405	No	No	160
C006903305	No	No	40

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C006902405	Replace	Concrete Box Culvert	40.00	40.00	Contract	$150,000	$82,500	Triple 10'x12', over CNPPD Canal on 738 Rd
C006903305	Replace	Concrete Box Culvert	40.00	40.00	Contract	$150,000	$82,500	Triple 10"x12', over CNPPD Canal on P Rd
			* **Length and Width not required for Culverts.**		total	$300,000	$165,000	OK
			Please provide culvert size in comments.					

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

The replacement of both structures C006902405 and C006903305 will be bundled and bid so a single contractor will have the chance to bid both projects. We have multiple contractors within a 50 mile radius of Phelps County that specialize in building concrete box culverts which ensures that we receive a competitive, quality bid from a reputable company. Replacing the old bridges with new design concrete box culverts will ensure longer structure life, heavier load tolerance and safer and wider roadways without the use of guard rails. The new all concrete structures with no steel or wood exposed to the elements prove to be a longer life structure on canals that are filled with water most of the year. The 2 structures listed are within 5 miles of each other which should generate a lower more competitive bid when considering location, mobilization, and ease of construction. Another fact is that both structures are sitting over the same irrigation canal system (CNPPD Main Canal) which has a controlled water flow that can allow us to replace the existing longer bridge structures with a much shorter, less expensive concrete box culvert. There are several concrete box culverts in place below and above both of the proposed structures on this canal system that perform adequately. Upon completion of construction of the new conrete box culverts, Phelps County will use it's own forces to supply backfill, complete regrading of the roads, supply aggregate, and install necessary signage to finish the project and reopen the roads. The initial inspection of these structures will be performed by our in house inspector John Olson prior to opening.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

The following items describe ways that explain how Phelps County can save time and money by replacing the two structurally deficient bridges listed with two new concret box culverts. The first cost saving item is that since both of these structures are on an irrigation canal system with controlled water flows, you can replace the longer existing bridges with new structures half the length of the old structures which accounts for lower construction and material costs and future lower maintenance costs. The new concrete box culverts are designed wide enough to eliminate the initial cost and continued maintenance of guard rail. The smaller structures should also take less time to build which saves time and money. Also, with both projects sitting on the CNPPD Main Canal system, the county will have access to fill dirt located a short distance from both structures. Another time and cost saving measure is that Phelps County will use it's own forces to provide dirt/backfill for the project and complete most all of the road regrading and signage installation which will eliminate the primary contractor from having to hire sub-contractors to complete tasks that the primary contractor is not equipped to perform. Another cost saving item is that the engineering firm we hire can take advantage of NDOT furnishing concrete box culvert design plans to local public agencies which in turn save Phelps County money. We also take advantage of in house engineering provided by CNPPD by furnishing hydraulic analysis to our consulting engineer at no cost thus saving the county money. We have several contractors within a short driving distance that provide us with competitive bids, fast high quality service and guaranteed product performance at very reasonable cost.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Phelps County prides itself in using innovative ideas to replace their old and structrually deficient bridges by utilizing partnerships with landowners, NDOT, and Public Utilities such as CNPPD. By working with NDOT and Central Irrigation's engineers we gain valuable tools and resources at little to no cost to Phelps County, to supply information to our locally paid consultants which helps design structures that best fit the irrigation canal and the county roads. This saves the county engineering costs and results in being able to replace an 80 ft. bridge with a 30' concrete box culvert. The concrete box culverts we have been installing are a "design build" plan furnished by NDOT which will be used to construct both structures that we are considering replacing, which also saves time and cost for engineering. The Central Main Irrigation Canal that both of these structures cross has the same amount of controlled water flow so both designs will be basically the same. By replacing these old weight restricted structures with new concrete box culverts we can utilize any new advanced technology in modern design to build a structure that is stronger and more durable, and lower maintenance with a longer life expectancy than a normal bridge, while saving money which can be used towards replacing other structurally deficient strutures currently on our bridge inventory.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

Both of the structurally deficient bridges in this proposal are to be replaced with concrete box culverts. Concrete box culverts provide a long life, low maintenance structure that provides for maximum load weights and adequate drainage whild allowing us to utilize the maximum road width without the use of costly railings and extra signage. Unlike the old bridges in place, the new concrete box culverts have no exterior steel or wood members exposed to irrigation water and weather elements that can decay, rust and deteriorate costing money to repair. There is no trash in the irrigation canal so there is no danger of plugging the barrels or damaging the divider walls from debris. Central Irrigation uses their forces to routinely maintain and remove silt from the channel floor which will help keep the new structures working at full capacity. Concrete box culverts are also easier to inspect which saves time and money and lowers inspection cost. The road surface will be dirt and gravel over both new structures which will be graded on a routine basis and the object markers will be set out to the ends of thes structures so traffic will not be as likely to damage them.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

Phelps County has an economy that is primarily based on agriculture. As in other counties the farmers, feedlot operators and feed based operations in Phelps County rely on the county road system to transport crops, livestock, feed and fertilizer, from business to farm and farm to market. Phelps County has approximately 100 miles of paved roads, 800 miles of dirt/gravel roads, and 80 bridges over 20' in lenth that cross irrigation canals and waterways experiencing normal to heavy traffic on a daily basis. The maintenance of the road system in Phelps County comes at a high cost to all taxpayers in the county and at the end of the day there isn't enough money to address every need. Many of the bridges in Phelps County are reaching the end of their life cycle and in the near future will either need major upgrades or total replacement. The 2 structures in this proposal C006902405 and C006903305 are just two of seven structurally deficient bridges left in Phelps County. By replacing both of these structures with concrete box culverts we will be upgrading 25% of our structurally deficient bridges on inventory while making both of these canal crossings safer for the traveling public. It will also remove weight limit restrictions at both of these crossings allowing trucks and large farm equipment unrestricted use of the roads over both new structures. Both structures in this proposal serve as crossings for school bus and mail routes and have farm dwellings and large feedlots that use the roads daily. If this proposal is accepted and Phelps County receives the 55% state matching funds for both bridges, it can allow the county the possibility of freeing up local tax dollars to address needs of some of the other aging bridges in our county. Each and every bridge in Phelps County provides an equally important vital link in keeping traffic flowing and maintainining safe roads for the traveling public.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

100% **percent complete**

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Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2020

Applying County	**Furnas**	**Date of Application**	**12/1/2019**
Agency Name	**Furnas County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Lance Harter**	**Address Line 1**	**P.O. Box 1209**
E-mail	**lharter@oakcreekengineering.com**	**Address Line 2**	**Kearney, NE**
Phone Number	**(308) 455-1152**	**zip code**	**68848**
NACO District	**West Central**		

Proposal Name / Location	Culvert Pipe Sites
Multi-County Proposal	No
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C003343820		5S 1E OF HOLLINGER at SAPPA CREEK	Furnas	42.00	16.30	Steel Truss - Thru	Local
C003324440		2.5E 6S OF BEAVER at SAPPA CREEK	Furnas	35.00	18.10	Wood or Timber Stringer/Multi-beam or Girder	Local
C003313905		6S OF BEAVER CITY at SAPPA CREEK	Furnas	77.00	16.00	Steel Truss - Thru	Local
C003324320		1E OF BEAVER CITY at BEAVER CREEK	Furnas	68.00	24.50	Wood or Timber Stringer/Multi-beam or Girder	Local
<Enter SN here>							

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C003343820	No	No	20
C003324440	No	No	10
C003313905	No	No	10
C003324320	No	No	20

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C003343820	Replace	Culvert Pipes	0.00	0.00	County Forces	$95,885	$52,000	H&H Pending: Twin 144"
C003324440	Replace	Culvert Pipes	0.00	0.00	County Forces	$95,885	$52,000	H&H Pending: Twin 144"
C003313905	Replace	Culvert Pipes	0.00	0.00	County Forces	$92,885	$51,000	H&H Pending: Twin 132"
C003324320	Replace	Culvert Pipes	0.00	0.00	County Forces	$85,545	$45,000	H&H Pending: Twin 108"
			* **Length and Width not required for Culverts. Please provide culvert size in comments.**		total	$370,200	$200,000	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

This proposal combines replacement of four (4) structurally deficient bridges. Structure No. C003343820 (43820), C003324440 (24440), C003313905 (13905) and C003324320 (24320).

All four (4) structures are on roads classified as Local. The proposed structures will be designed to eliminate obstacles within the horizontal clear zone and meet adequate return flow periods for road overtopping.

All sites will be culvert pipe type structures with toe walls and sheet pile wings. By fabricating this culvert structure with headwalls and toewalls, scour potential has effectively been eliminated Headwalls also reduce the footprint of the structure by reducing required pipe length. This generally eliminates the need for right-of-way acquisition and accommodates existing fence lines. The proposed structure will be constructed within existing right-of-way.

Significant cost savings will be realized by bundling all the sites in to one bid for suppliers. Bid documents will provide for a phased delivery schedule over one year so the materila order would not overload the market.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Culvert pipe manufactured headwalls have been used by Furnas County for several other bridge replacement projects. These structure types have been designed to effectively meet roadway overtop expectations and have not required any routine maintenance. Several suppliers are readily available and have previous experience with fabrication of these structures. County Forces have successfully installed these structures with current crew. Specialized equipment (crane and/or long reach backhoe) is only needed for a few days during construction, but is readily available locally.

Headwall installation reduces the footprint of the structure and allows for construction within existing right-of-way, resulting in cost and significant time savings since acquisition will not be needed.

By bundling four sites together, material cost will be reduced by competitive bidding.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Several suppliers are readily available and have previous experience with fabrication of bridge materials and culvert pipe structures. County Forces generally have the equipment needed to remove existing bridges and install culvert pipe structures with current crew.

Culvert structures can be properly designed to eliminate the need for approach guardrail, which eliminates guardrail maintenance needs and the large expense for installation.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

Culvert type structures require little to no maintenance throughout material lifespan. Culvert materials will meet NDOT Specifications for thickness and lifespan will be maximized.

43820 and 13905 are fracture critical bridges. Cost savings will be realized by no longer needing to complete the expensive, rigorous inspections.

Approach guardrail is not needed therefore maintenance costs are eliminated.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

All structures are on Local Roads with an agricultural surrounding. Detouring of agricultural equipment occurs due to the reduced load carrying capacity of the existing bridges. Legally loaded vehicles are restricted from crossing due to the following postings:

43820 10/16/20
24440 9/14/19
13905 13/21/27
24320 5/8/11

Furnas County is unable to keep up with repairs and replacement since it has a small tax base. Funding needs must be sought in order to improve the roadway system and keep safe travel for the public.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

100% **percent complete**

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jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2019

Applying County	**Hitchcock**	**Date of Application**	**11/29/2019**
Agency Name	**Hitchcock County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Phillip Dixon**	**Address Line 1**	**31085 280th Rd**
E-mail	dixonphillip11@gmail.com	**Address Line 2**	**Pleasanton, NE**
Phone Number	**(308) 388-3471**	**zip code**	**68866**
NACO District	**West Central**		

Proposal Name / Location	Culvert Structure
Multi-County Proposal	No
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C004402305		9S 5W OF TRENTON at N FK DRIFTWOOD CREEK	Hitchcock	29.00	20.00	Wood or Timber Stringer/Multi-beam or Girder	Local
<Enter SN here>							

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C004402305	No	No	17

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C004402305	Replace with non-bridge size	Culvert Pipes	0.00	0.00	County Forces	$60,563	$33,309	
			* Length and Width not required for Culverts. Please provide culvert size in comments.		total	$60,563	$33,309	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

This proposal removes a structurally deficient bridge and replaces it with a non-bridge sized culvert structure.

02305 is on a Local Road but only sees flows when rain events occur. The proposed structure will be designed to eliminate obstacles within the horizontal clear zone and provide an acceptable return flow period for road overtopping.

By fabricating this culvert structure with headwalls and toewalls, scour potential has effectively been eliminated. Headwalls also reduce the footprint of the structure by reducing required pipe lengths. This generally eliminates the need for right-of-way acquisition and accommodates existing fence lines. The proposed structure will be constructed within existing right-of-way.

Since the bridges will be replaced by County Forces, value will be added to the projects since County Forces are not for profit.

USACE Nationwide 14 Corp Permit are anticipated; no wetland mitigation will be required.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Culvert pipe with manufactured headwalls have been used by Hitchcock County for several other bridge replacement projects. These structure types have been designed to effectively meet roadway overtop expectations and have not required any routine maintenance. Several suppliers are readily available and have previous experience with fabrication of these structures. County Forces have successfully installed these structures with current crew and without needing to purchase specialized equipment.

Headwall installation reduces the footprint of the structure and allows for construction within existing right-of-way, resulting in cost and significant time savings since acquisition will not be needed.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)
Describe how the innovation can be shared and used by other Counties.
Several suppliers are readily available and have previous experience with fabrication of culvert pipe structures. County Forces generally have the equipment needed to install these structures with current crew.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

Culvert type structures require little to no maintenance throughout material lifespan. Culvert materials will meet NDOT Specifications for thickness and lifespan will be maximized since the streams only flow when rain events occur. Headwall and toe wall materials will be the same gauge as the culvert pipe material in order to extend the lifespan of the structure.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

02305 has an agricultural surrounding. Detouring of agricultural equipment occurs due to the reduced load carrying capacity of the existing bridge. Legally loaded vehicles are restricted from crossing due to the 8 ton load posting. This structure is currently on the County 1 year road plan for replacement.

Hitchcock County has a significant amount of agricultural traffic, and the equipment is getting larger in size and weight. The structure in this proposal is undersized for today's agricultural traffic demand. This proposal is significant because it will allow agricultural traffic to take the shortest route possible to their destination with another restricting bridge being replaced. The detouring is inconvenient and adds to the cost of traveling for the public, and safety becomes an issue if someone is unwilling to detour the bridge with a load higher than what is posted on the structure. Detour route is 12 miles.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

100% **percent complete**

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If you have questions or difficulties please contact:
Jodi Gibson
402-479-4337
jodi.gibson@nebraska.gov

Thank you for your work on behalf of Nebraska's bridges!

APPLICATION FORM County Bridge Match Program 2018

Applying County	**Lincoln**	**Date of Application**	**11/28/2019**
Agency Name	**Lincoln County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Carla O'Dell**	**Address Line 1**	**2010 Rodeo Rd**
E-mail	**odellcj@co.lincoln.ne.us**	**Address Line 2**	**North Platte, NE**
Phone Number	**(308) 534-4008**	**zip code**	**69101**
NACO District	**West Central**		

Proposal Name / Location	CBMP2019 - C002404605, C005632107
Multi-County Proposal	Yes
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C002404605	27092501	2E 2N FARNAM at NORTH PLUM CREEK	Dawson	26.00	24.10	Wood or Timber Stringer/Multi-beam or Girder	Local
C005632107		2E .4N OF SUTHERLAND at NORTH PLATTE CANAL	Lincoln	28.00	28.00	Steel Stringer/Multi-beam or Girder	Local

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C002404605	No	No	5
C005632107	No	No	100

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C002404605	Replace	Culvert Pipes			County Forces	$91,080	$50,094	3-108"x40' CMPs
C005632107	Replace	Culvert Pipes			County Forces	$78,480	$43,164	3-78"x40' Round Equiv. CMPs
			* **Length and Width not required for Culverts.**		total	$169,560	$93,258	OK
			Please provide culvert size in comments.					

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

Corrugated metal culvert pipes are a cost-effective replacement alternative for deficient bridges in the State of Nebraska.
The design and construction process is streamlined with the utilization of standard plan and construction practices.
Local culvert suppliers are available and competitive, often resulting in cheaper material prices to the County.
Culvert construction will be completed by County forces, an innovative approach that reduces cost and utilizes the local County assets.
Typical culvert pipe construction can be completed within 1-2 weeks which minimizes the impact to local resident, agricultural and commercial traffic.
Corrugated metal culvert pipe's primary innovation is the simplicity of their design and construction. Metal culvert pipes, with prefabricated headwall & turndowns are quickly and easily installed by most experienced road crews. Additional innovations include; the use of standardized sheet pile and cable tie-back retaining systems, relative ease of transporting and off-loading materials, utilization of 3 x 1 and 5 x 1 corrugation (resulting in stronger culverts and a reduction in wall thickness) and inlet and outlet aprons (scour reduction.)
Historically, culvert maintenance activities and costs are minor in comparison to other replacement structures. Load and/or equipment restricting guardrail is typically not required which is particularly beneficial to regional agricultural and commodity transportation.
A considerable number of streams in the eastern part of Nebraska are significantly degraded. Proper culvert design is often utilized to stabilize the streambed and adjacent banks upstream of the structure.
The replacement's required size may remove the structure from the bridge inventory.
This proposal is being submitted by multiple counties, in a cooperative effort to streamline the design, bid, and build process through project bundling. Innovative, because counties have not actively reached across established map lines in the name of cooperation and efficiency.

Criteria 2 – Cost or time savings (0-5 points)

Identify aspects of this proposal that saves time and reduces costs.

Corrugated metal culvert pipes are a cost effective and efficiently constructed alternative to an expensive bridge replacement.
Standardized design and construction practices provide a significant cost and time savings to the owner.
Culvert construction will be completed by County forces resulting in a considerable cost and time savings.
Guardrail is typically not required, therefore no material, construction, or maintenance costs for guardrail are associated with the project.
Additional savings are realized throughout the culvert's anticipated life-span (50-75 years) in costs associated with general maintenance and repair.
Culvert pipe replacement structures are generally simpler and relatively inexpensive when compared to box culverts or bridges. Typical culvert pipe construction (including removal of the existing structure) can be completed within 1-2 weeks resulting in lower direct project costs (overall) and minimizes the impact to local resident, agricultural and commercial traffic.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
It is anticipated that each county in the bundling package will recognize savings in engineering and construction costs. Design fees for a standard culvert crossing are significantly less costly than a traditional bridge or concrete box culvert. The bidding of a "materials, only" bundled project reduces the monetary and time costs associated with the contracting process.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

Corrugated metal culvert pipe standardization of design and construction can be utilized by all Counties in Nebraska.
The process of collaboration between Counties can easily be shared and is available to all Counties. A derivative of the cooperation between counties will likely be education, through the exchange of ideas that will occur throughout the process. The engaged entities will discuss and implement what has/hasn't been efficient or successful and incorporate those "lessons learned" into future replacement projects. Successful results are easily conveyed to other Counties, culvert pipes provide a time-saving, quality product at low cost.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The use of corrugated metal culvert replacement structures provides significant long-term maintenance cost savings.
Properly sized corrugated metal culvert pipes are considered durable and expected to require minimal maintenance over their expected service life of 50-75 years.
The lack of guardrail facilitates the ease of mowing and snow plow operations. There are no costs associated with guardrail maintenance, if damaged.
Maintenance activities and costs associated with deck repair are non-existent over the life of the culvert.
If the culvert is utilized to control a degraded stream, there are significant benefits to upstream structures in the basin. Maintenance and/or replacement of these structures can be minimized or eliminated due to the positive effects of stream stabilization.
Removal of a structure from the bridge inventory would save time and costs associated with general management and inspection.
The County expends considerable resources to complete the required maintenance activities on deficient bridges. Normal operations include the replacement and repair of timber/concrete decks, abutment back-wall, pile, wing, stringer, and guardrail. Additional costs are associated with bank stabilization (scouring) and the backfill of roadway settlement. Replacement with this type of structure will eliminate many of these costs' of time, material and labor.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

In general, each stream crossing is significant to the local individuals, communities and agricultural related activities occurring in rural Nebraska. The width and weight restrictions of structurally deficient bridges may limit the required access to property and create an inconvenience to the residents of the area who utilize them daily, or during agriculturally related "heavy traffic" times of the year. Additionally, these rural roadways may function as a vital route for localized traffic between the smaller communities of the area. Specifically, this project provides the following functions to the local individuals, Dawson/Lincoln Counties, and the State of Nebraska:

C002404605:
The detour route length is 4 miles for un-restricted traffic.
The structure/roadway is utilized for rural local, residential, commercial and agricultural operation/equipment traffic.
The structure/roadway is necessary to local traffic of the area.

C005632107:
The structure/roadway is used as a bus/emergency services route.
The detour for the structure is 3 miles for un-restricted traffic.
Local agricultural operations utilize the structure for agricultural operations and as a "farm to market" route.
The structure is necessary to the local traffic of the area.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

Submittal Instructions:

87% **percent complete**

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APPLICATION FORM County Bridge Match Program 2019

Applying County	**Cheyenne**	**Date of Application**	**11/18/2019**
Agency Name	**Cheyenne County**	**Contact Person Title**	**Highway Superintendent**
Contact Person Name	**Douglas Hart**	**Address Line 1**	**Box 262**
E-mail	dhart@cheyennecounty.net	**Address Line 2**	**Sidney, NE**
Phone Number	**308-254-4294**	**zip code**	**69162**
NACO District	**Panhandle**		

Proposal Name / Location	C001704103 / 111,6-8; C001702205 / 42,93-95
Multi-County Proposal	No
Proposal Priority Number	1

Instructions
required input
changes allowed
locked - no input

Structure Information

NBI Structure Number	Local Name	Location	County	Existing Length (ft)	Existing Total Width (ft)	Existing Type	State Classification
C001704103	170	7S SIDNEY at COW CREEK	Cheyenne	31.00	24.50	Wood or Timber Stringer/Multi-beam or Girder	Local
C001702205	CR 42, 93-95	7N 2.3W BROWNSON at STREAM	Cheyenne	31.00	24.00	Wood or Timber Stringer/Multi-beam or Girder	Local
<Enter SN here>							

Eligibility

NBI Structure Number	Min. Maintenance Road (yes/no)	Advertised for Construction bids?	Average Daily Traffic
C001704103	No	No	20
C001702205	No	No	7

Proposal Construction Details

NBI Structure Number	Proposed Action	Proposed Structure Type	Proposed Length (ft)*	Proposed Total Width (ft)*	Workforce	Total Estimated Bridge Cost	Anticipated Reimbursement from CBMP	Comment
C001704103	Replace	Precast Deck Panels	25.00	28.50	Contract	$116,320	$63,976	
C001702205	Replace	Precast Deck Panels	25.00	28.50	Contract	$116,320	$63,976	add optional information
			* Length and Width not required for Culverts. Please provide culvert size in comments.		total	$232,640	$127,952	OK

Criteria 1 - Innovation (0-20 points)

Describe what is innovative about this proposal.

We will be using a precast deck that will be a faster build and simular design with a single span for multiple bridges.

Criteria 2 – Cost or time savings (0-5 points)
Identify aspects of this proposal that saves time and reduces costs.
These single span structures will be closed for a shorter amount of time, with backfilling and road work done by our own forces will reduce the construction cost.

Criteria 3 – Sustainability or transferability of innovation (0-10 points)

Describe how the innovation can be shared and used by other Counties.

These simple structures can be used in most locations where a series of culverts are not feasible.

Criteria 4 – Long Term Maintenance Savings (0-5 points)

Describe how this proposal promotes savings of long term maintenance costs.

The structures will have a less demanding maintenance schedule compaired to the wood bridges that are being replaced.

Criteria 5 – Project Significance (0-20 points)

Describe what makes this proposal significant to your county.

The first bridge was going to be replaced with a non-bridge length CMP structure that included 2-72" pipe. After the hydraulic study was done and looking at the other structures up and downstream on this dry creed bed, it was determined that a larger structure would likely be a better choice to prevent the loss of the smaller structure in a heavy local rain event. These are the last two bridges in Cheyenne County that are on the structurally deficient list.

Criteria 6 – Needs (0-20 points)

Calculated by scoring committee based on the counties SD bridges.

Criteria 7 – Equity (0-20 points)

Determined by scoring committee based on the number of projects awarded to the county.

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