



BOARD OF SUPERVISORS AGENDA ITEM REPORT
AWARDS / CONTRACTS / GRANTS

Award Contract Grant

Requested Board Meeting Date: 11/21/2023

or Procurement Director Award:

* = Mandatory, information must be provided

***Contractor/Vendor Name/Grantor (DBA):**

Federal Highway Administration through Arizona Department of Transportation

***Project Title/Description:**

Off-System Bridge Program Grant-Ajo Wash Bridge Replacement

***Purpose:**

To design and construct selected alternative for the replacement of the existing Telera Street bridge over the Ajo Wash utilizing \$982,403 in federal funds and \$59,381 in local funds.

***Procurement Method:**

Not Applicable.

***Program Goals/Predicted Outcomes:**

To evaluate replacement alternatives for the Telera Street bridge over the Ajo Wash. Alternatives include replacement, removal, or access restriction. If analysis recommends replacement, the design and construction of a replacement structure (bridge, culvert) will advance.

***Public Benefit:**

Enhance public safety within County right-of-way.

***Metrics Available to Measure Performance:**

Project completion.

***Retroactive:**

No.

6m J approved
RM 11/2/23

THE APPLICABLE SECTION(S) BELOW MUST BE COMPLETED

Click or tap the boxes to enter text. If not applicable, indicate "N/A". Make sure to complete mandatory (*) fields

Contract / Award Information

Document Type: Department Code: Contract Number (i.e., 15-123):
Commencement Date: Termination Date: Prior Contract Number (Synergen/CMS):
Expense Amount \$ Revenue Amount: \$

*Funding Source(s) required:

Funding from General Fund? Yes No If Yes \$ %
Contract is fully or partially funded with Federal Funds? Yes No
If Yes, is the Contract to a vendor or subrecipient?
Were insurance or indemnity clauses modified? Yes No
If Yes, attach Risk's approval.
Vendor is using a Social Security Number? Yes No
If Yes, attach the required form per Administrative Procedure 22-10.

Amendment / Revised Award Information

Document Type: Department Code: Contract Number (i.e., 15-123):
Amendment No.: AMS Version No.:
Commencement Date: New Termination Date:
Prior Contract No. (Synergen/CMS):
Expense Revenue Increase Decrease
Amount This Amendment: \$

Is there revenue included? Yes No If Yes \$

*Funding Source(s) required:

Funding from General Fund? Yes No If Yes \$ %

Grant/Amendment Information (for grants acceptance and awards)

Award Amendment

Document Type: GTAW Department Code: TR Grant Number (i.e., 15-123): 24*068
Commencement Date: November 2023 Termination Date: December 2025 Amendment Number:
Match Amount: \$ 59,381 Revenue Amount: \$ 982,403

*All Funding Source(s) required: Federal Off-System Bridge (94.3%) and HURF (5.7%)

*Match funding from General Fund? Yes No If Yes \$ %

*Match funding from other sources? Yes No If Yes \$ 59,381 % 5.7

*Funding Source: HURF

*If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)?
Pass through ADOT

Contact: Eric Huettner (Administrative Contact: Angela Alvarez 724-5927)

Department: Transportation

Telephone: 520-724-2183

Department Director Signature: Kathryn Skinner Date: 11/3/2023
Deputy County Administrator Signature: Date: 11/3/2023
County Administrator Signature: Date: 11/3/2023



September 30, 2022

ADOT Local Public Agency Section
205 S. 17th Ave. Mail Drop EM11
Phoenix, AZ 85007

Re: Request for Local Government Project Initiation

Sponsoring Agency: Pima County

Project Name: Ajo Wash Bridge

Project Location: Telera Street in Ajo

COG/MPO TIP ID Number(s): 13.22

Funding Type: Off-System Bridge

To Whom It May Concern:

On behalf of the Pima County Department of Transportation, I am writing to request initiation of a local public agency project and assignment of a Federal project number and an ADOT project number for the above referenced project.

Attached is a copy of the current PAG Transportation Improvement Program page (Administrative Amendment #2022.034), highlighting all phases of the project. All phases of this project have been approved and programmed for federal funding in the amount of \$982,000 with a local contribution of \$59,357, for a total of \$1,041,357.

Attachments include:

- ADOT LPA Project Initiation Form
- Legible copy of the local MPO/COG TIP page, with project highlighted and all phases shown
- Project Assessment
- OSB Eligibility Letter
- ADOT Functional Classification Map
- Project Location Map that shows beginning and ending termini of the project

Please contact us if you have any questions regarding this request or require additional information. Thank you.

Sincerely,

Nancy Cole, Director
Capitol Program Office
201 N Stone Ave, 5th Floor
Tucson, AZ, 85701
520-724-6312
Nancy.cole@pima.gov

Kathryn Skinner, P.E., Interim Director



OFF-SYSTEM BRIDGE (OSB) PROGRAM APPLICATION

OSB Funding is a set-aside of the Surface Transportation Block Grant (STBG) Program and must follow all federal-aid requirements

GENERAL PROJECT INFORMATION					
SPONSORING AGENCY: (AGENCY NAME & ADDRESS)	Pima County Department of Transportation	DATE SUBMITTED:	2/18/2022		
CONTACT NAME:	Stephen Wilson	TITLE:	Civil Engineering Manager		
EMAIL ADDRESS:	Stephen.Wilson@pima.gov	PHONE #:	(520) 724-5912		
PROJECT LOCATION	Bridge Name:	Ajo Wash Bridge			
	Bridge Structure #:	08258			
	Road Name:	Telera Street (in Ajo)			
	County:	Pima			
	COG/MPO/TMA:	PAG			
	ADOT District:	Southcentral			
	Starting Location:	55' South of existing bridge			
	Ending Location:	75' north of existing bridge			
	Length (to the 0.1 of a mile):	Less than 0.1 mile			
	# of Lanes (Before & After):	Before:	2	After:	2
BRIDGE IMPROVEMENT	<input type="checkbox"/> Rehabilitation <input checked="" type="checkbox"/> Replacement		Bridge Sufficiency Rating	34.90	
			Structurally Deficient?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
			Functionally Obsolete?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
PROJECT INCLUDED IN LOCAL CAPITAL IMPROVEMENT PLAN (CIP)				<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
FEDERAL FUNCTIONAL CLASSIFICATION – (LINK: FEDERAL FUNCTIONAL CLASSIFICATION MAPS):				Unclassified (Local Street)	
AVERAGE ANNUAL DAILY TRAFFIC (AADT) COUNT (LINK: AADT COUNTS):	200	DATE OF AADT COUNT:	2012		
Crash Data (5 Years):	None				
PROJECT WORK DESCRIPTION					
<p>Provide a brief work description that describes the work to be performed, existing and/or proposed conditions, its benefits and overall cost estimate.</p> <p>PROJECT WORK DESCRIPTION:</p> <p>Pima County DOT has in its' inventory an existing timber bridge crossing Ajo Wash that is located on Telera Street in the unincorporated community of Ajo. The timber structure was built in 1953 and is considered structurally deficient. The overall condition of the structure is poor and currently has a sufficiency rating of 34.9. The bridge has a posted weight limit of 10,000 LBS. The existing bridge has a clear span of 20'-0" and does not convey the 100-year storm under Telera Street which results in flooding of adjacent residential property and structures. Pima County DOT recommends that Ajo Wash Bridge (NBIS Structure No. 08258) on Telera Street in Ajo be replaced with a new structure. The proposed replacement structure is a Triple 10' x 4' x 35' Reinforced Concrete Box (RCB) culvert per ADOT Standard Plan 6.03. Replacement of the existing structure would alleviate flooding of private property as well as improve access to the surrounding residential neighborhood in Ajo. The overall cost of the project is estimated to be \$1,040,000.</p>					

COST ESTIMATE & PROJECT PROGRAMMING

		Total Project Estimated Cost (Include ADOT PDA Fee, Design, ROW, & Construction):	\$1,040,000
<input checked="" type="checkbox"/>	ADOT PROJECT DELIVERY ADMINISTRATION (PDA) FEE	Total ADOT Project Delivery Administration (PDA) Fee ((\$30,000 Non-CA/\$10,000 CA):	\$10,000
		Federal Share (94.3%) (Complete if using federal funds for PDA Fee)	\$9,430
		Local Match (5.7%) : (Complete if using federal funds for PDA Fee)	\$570
		Local 100% Local Funding: (Complete if using only local funds):	\$0
<input checked="" type="checkbox"/>	DESIGN	FY Program Year:	FY23
		Estimated Total Cost for Project Development	\$210,000
		Federal Share (94.3%)	\$198,030
		Local Match (5.7%) :	\$11,970
		Additional/100% Local Funding:	\$0
<input checked="" type="checkbox"/>	ROW	FY Program Year:	FY23
		Estimated Total Cost for Project ROW Acquisition:	\$60,000
		Federal Share (94.3%)	\$56,580
		Local Match (5.7%) :	\$3,420
		Additional/100% Local Funding:	\$0
<input checked="" type="checkbox"/>	CONSTRUCTION	FY Program Year:	FY24
		Estimated Total Cost for Project Construction (CE, CC, PDS):	\$760,000
		Federal Share (94.3%)	\$716,680
		Local Match (5.7%) :	\$43,320
		Additional/100% Local Funding:	\$0

Any application without the required attachment(s) will not be considered for funding.

- **ATTACH** a detailed scoping document that includes an alternative analysis, project background, scope of work, justification (system prioritization), schedule identifying critical milestones, and detailed cost estimates for Design and Construction phases. *Samples are available on the [ADOT LPA Section Website \(LINK\)](#), including the ADOT Cost Estimate Tool, Project Scoping Document Guidelines, and Sample Scoping Document based on the ADOT Pre-Design Section format.*
- **ATTACH** a Project Vicinity/Project Location Map
- **ATTACH** a copy of the FHWA Functional Classification Map
- **ATTACH** photographs

BRIDGE PARAMETERS

Provide the following bridge information:

- Overall Condition of the bridge (include items described in the bridge inspection report)
- Vertical Clearance
- Bridge Geometry (lanes, shoulders, clear roadway and other features)
- Load Carrying Capacity
- Age of Bridge
- Weight Restriction (if any)
- Detours if restrictions or service is impacted

The timber bridge on Telera Street in Ajo is in poor condition overall with a sufficiency rating of 34.90 as shown in the Structure Inventory and Appraisal. Below are items from the Bridge Inspection report dated November 21, 2019:

Overall Condition:

- The deck and superstructure both have "poor" NBI condition ratings.
- The structural evaluation received an "intolerable-correct" appraisal rating.
- The bridge was determined to be scour critical and received a "SC-unstable" appraisal rating
- Recommended repairs included repairing a failed wingwall and replacing the bridge deck and other misc. items.

Vertical Clearance:

- The waterway adequacy received a "tolerable" appraisal rating.
- The average waterway opening height was 2.53' in 2019. Sediment was observed in the streambed. Previous waterway opening height was measured at 3.25' in 1997.

Bridge Geometry:

- The bridge is a 2-lane, timber structure having a clear span length of 20' and an out-to-out deck width of 31'. The paved width on the bridge is 26.5'. Wood railings are attached to the outside of the stringers on either side of the structure. The abutment and wingwalls are made of masonry block.

Load Carrying Capacity:

- The method used for operating rating was 1 and the operating load rating factor was 9.
- The method used for inventory rating was 1 and the inventory load rating factor was 7.
- The current bridge posting is 10,000 LBS gross vehicle weight limit.

Age of Bridge:

- The age of the bridge is approximately 69 years old. The year built is shown as 1935 according to the NBI inventory, however, the construction drawing is dated 1953.

Weight Restriction:

- The bridge is currently posed at 10,000 LBS gross vehicle weight limit. According to the 2019 inspection report, overweight vehicles were observed driving over the structure during the inspection.

Detours:

- Vehicles exceeding the 10,000 LBS gross vehicle weight limit can use other local streets in the vicinity of the Telera Street.

AGENCY PRIORITIZATION

Describe the agencies top (up to three) priorities of off-system bridges in your inventory. Provide justification as to why the bridge project in this application is the top priority. (Refer to section of Priority Ranking of Candidate Bridges in the Off-System Bridge Program Guidelines.)

According to Pima County Department of Transportation Bridge Management System Priority Ranking, there are seven bridges meeting the criteria of the Off-System Bridge program that have a Sufficiency Ratings less than 40 and two structures less than 25. The table below lists the seven highest priority structures in Pima County's inventory.

NBI #	Bridge Name	Road Name	Proposed Scope	Sufficiency Rating	Condition	Functionally Obsolete (F) Structurally Deficient (S)	Priority
8475	Jones Wash Br.	Mile Wide Rd	Replacement	21.1	Poor	S	7
8474	Brawley Wash Br.	Mile Wide Rd	Replacement	21.6	Poor	S	8
8301	Medium Wash Br.	Medera Canyon Rd	Replacement	26.0	Poor	S	4
8259	Blanco Wash Br.*	Silverbell Rd	Replacement	31.3	Fair	F,S	1
8302	Florida Cyn. Wash Br.	Medera Canyon Rd	Replacement	33.0	Poor	S	5
8258	Ajo Wash Bridge	Telera St	Replacement	34.9	Poor	S	3
8318	Mission Rd OP*	Mission Rd	Rehabilitation	36.9	Poor	S	2

* Currently programmed

The two highest priority structures are currently programmed for either replacement or rehabilitation using OSB funding. Replacing the Ajo Wash Bridge is PCDOT's next priority due to the overall condition of the bridge as documented in the November, 2019 Structure Inventory and Appraisal and Inspection Report and flooding issues caused by inadequate conveyance of flows. The functional classification of Telera Street is shown incorrectly on the Structure Inventory and Appraisal as being "On System". Telera Street is a "Local" roadway not a "Major Collector" as coded in the Structure Inventory and Appraisal and therefore, eligible for OSB program funds. With this application, PCDOT requests the functional classification of Telera Street be corrected in the NBIS list of structures to "Off System".

The two bridges on Mile Wide Road have lower sufficiency ratings than the Ajo Wash Bridge; however, replacing structures on roadways with lower AADT's does not meet the objectives of PCDOT's bridge program. Currently, Mile Wide Road at the Brawley Wash Bridge has an ADT of 114 vpd while Mile Wide Road at the Jones Wash Bridge has an ADT of 64 vpd according to counts done by PCDOT in 2019. Both of these AADT's are slightly less than the AADT on Telera Street of 200 vpd. More importantly, the flooding issues at the Ajo Wash Bridge and the poor overall condition of the structure were the reasons for prioritizing the Ajo Wash Bridge above the Jones Wash Bridge and the Brawley Wash Bridges. The 2019 Inspection Report documented there were vehicles observed crossing the Ajo Wash Bridge that were over the posted weight limit of 10,000 LBS. This is a safety issue which is a top priority of the Off-System Program and is why PCDOT has prioritized the replacement of the Ajo Wash Bridge.

This project is considered to be an ideal candidate for replacement to improve safety, alleviate flooding and eliminate load restrictions. Pima County does not currently have funding to replace the bridge structure.

OPERATIONAL IMPROVEMENT

How will this bridge project improve the agency's operations?

Are there other operational improvements? If so, what are they and how will this project improve them?

Topics to consider addressing in application:

- Effect on lifecycle
- Maintenance and Repair tasks and frequency
- Annual maintenance and repair costs

Due to the poor condition of the Ajo Wash Bridge, the structure requires higher maintenance and inspection frequencies than other bridges in Pima County. Structural deficiencies are well documented in the Structural Inventory and Appraisal and Inspection Report done by ADOT in October, 2021 and Bridge Load Rating Reports done in 2014 and 2017. The Ajo Wash Bridge was recommended for posting a 5 TON load limit in 1986.

Pima County DOT's maintenance records for the Ajo Wash Bridge date back to the early 1960's. In general, the timber bridge built in 1953 has performed well but the structure has reached the end of its lifecycle. There are numerous maintenance requests on file that address structural issues with the timber superstructure. Maintenance efforts include repairs to the wood deck (patching holes) and replacing timbers due to dry rot. More recently, non-critical maintenance items have been deferred knowing that replacement of the structure was needed.

Replacing the Ajo Wash Bridge will reduce PCDOT's Maintenance efforts. The project would reduce ADOT inspection efforts and bridge load rating efforts in the future will be eliminated. Annualized maintenance efforts and repair costs are estimated to be approximately in the \$8,000 to \$10,000 range.

The proposed replacement structure would allow the roadway to be opened to legal loadings.

COMMUNITY IMPACTS

How important is this bridge crossing and access to the community?

Topics to consider addressing in this application:

- *Emergency Access*
- *Local Business and Industry Access*
- *Educational Access*
- *Other areas important to the community*

Telera Street is a local roadway that runs north-south in the community of Ajo. It is part of the existing street grid network in Ajo that provides access to residential neighborhoods located north and south of Solano Ave (State Route 85). The AADT for Telera Street was 200 vpd in 2012. The current AADT not known however, it is assumed to be relatively unchanged.

Due to the posted weight limit of 10,000 LBS for the Ajo Wash Bridge, many vehicles cannot cross the bridge. This includes school buses, garbage trucks and emergency response vehicles such as fire and medical. Replacement of the Ajo Wash Bridge would provide greater safety to the community by allowing for emergency vehicles to traverse across which is currently not allowed. According to the 2019 inspection report, overweight vehicles were observed driving over the structure during the inspection.

The hydraulic conveyance of the existing bridge structure is inadequate. The hydraulic conveyance is limited by the 15" depth of the timber stringers which only provides about 2.5' - 3' and the span of the structure of 20'. Storm water runoff overtops Telera Street which results in flooding of adjacent homes in the vicinity of the existing bridge.

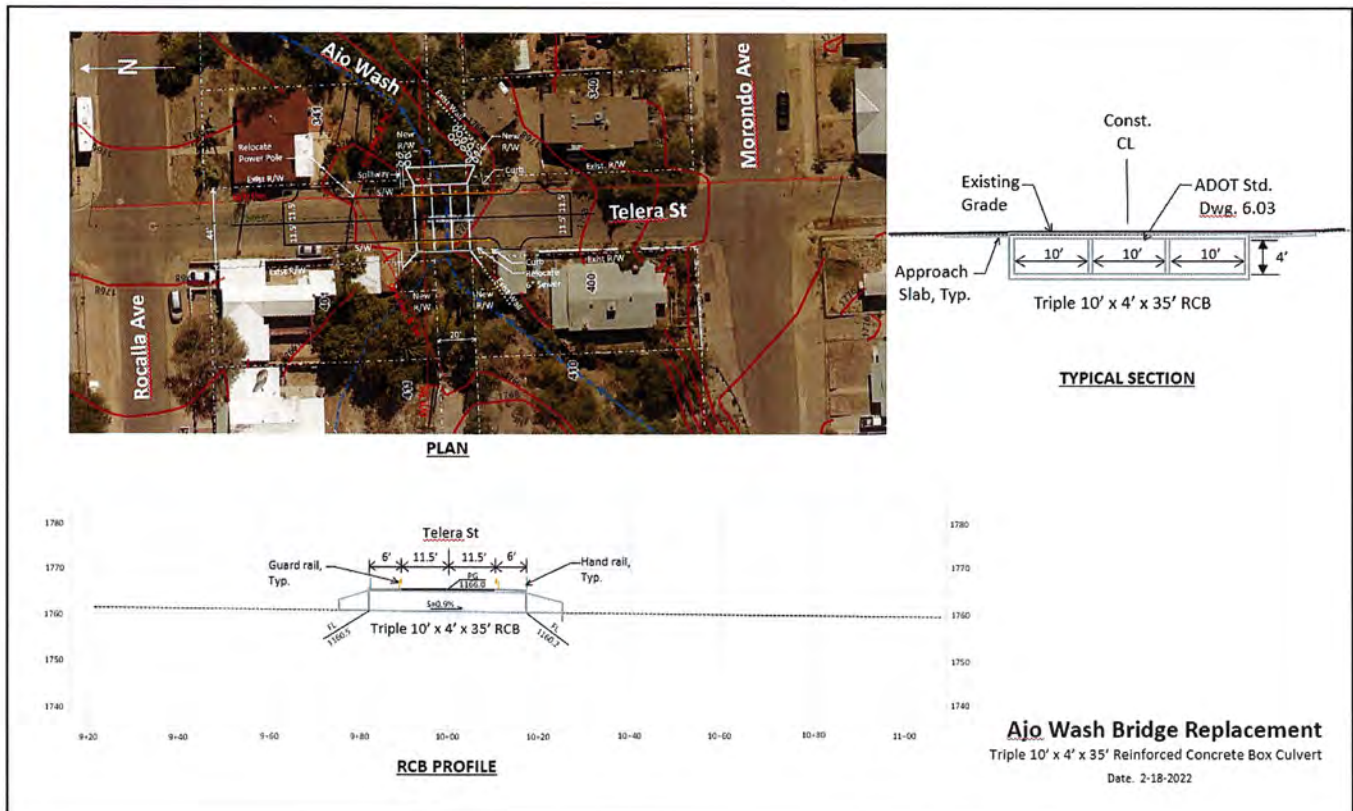
OTHER

This is an opportunity to add project-specific items or unique issues that are not addressed in another category.

The Ajo Wash Bridge is located in a residential neighborhood. There have been many unpermitted encroachments into the floodway over the years within the limits of the proposed bridge replacement project. These encroachments include deck areas, storage sheds, covered parking, retaining walls and embankments, apartments and other miscellaneous obstructions. The project will require coordination with adjacent private property owners to accommodate the wingwalls of the proposed triple 10' x 4' x 35' reinforced box culvert. New right-of-way and temporary construction easements are anticipated. Removal of portions of existing retaining walls and concrete decks will be required. Pima County Real Property Division will coordinate project impacts with adjacent home owners. Any modifications required to private property improvements will either be done by the contractor within the limits of the new right-of-way/TCE or as a cost to cure during the design phase.

The proposed replacement structure, a triple 10' x 4' x 35' reinforced box culvert, will greatly increase hydraulic conveyance at Telera Street. The existing bridge has a 20' clear span which does not convey 100 year flows in Ajo Wash without overtopping. Preliminary analysis shows the additional conveyance provided by the triple 10' x 4' x 35' reinforced box culvert will alleviate both the depth and frequency of flooding. The additional width of the new structure can be best accommodated by widening to the north of the existing structure.

Below is a conceptual layout of the proposed triple 10' x 4' x 35' reinforced box culvert.



DEVELOPMENT CONSIDERATIONS

Projects that have identified challenges and risks to delivery will encounter fewer hurdles and allow for a project to have fewer complications and provide the best opportunity for a project to be delivered on time and within budget.

<p>CHALLENGES/RISKS TO DELIVERY AND CONSTRUCTION OF PROJECT</p>	<p>Please describe any challenges that may impact the scope, schedule, budget and/or delivery of this project.</p>	<p>Maintenance and protection of traffic would be minimal due to the anticipated closure of Telera Street except for local traffic for residences. This should not be an issue for the community due to other nearby available routes.</p>
<p>ENVIRONMENTAL</p>	<p>Are there any potential environmental impacts or challenges of the project that you can foresee?</p> <p><i>(e.g. endangered species, cultural resources, hazardous materials sites, Section 4(f) properties, Title VI populations, significant community opposition, wetlands that would be affected, etc.)</i></p>	<p>This project will comply with the National Environmental Policy Act (NEPA) to determine the effects to the environment, consultations and coordination and any mitigations necessary for impacts caused by project. The majority of the proposed work is limited to the Ajo Wash Bridge structure. Most of the ground has been previously disturbed. There will be tree removals necessary at the bridge, therefore Migratory Bird Treaty Act mitigations will apply to this project. Nest surveys will be required if vegetation removals are done during the breeding season between March 1st and August 31st. Potential impacts to biological resources will be addressed in a Biological Evaluation Short Form prepared for the project. Testing for asbestos in existing concrete will be included in the Preliminary Initial Site Assessment (PISA) prepared for the project. There are no known wetlands or riparian areas affected, no known cultural resources impacted, no 4(f) or 6(f) resources impacted and no known noise or air quality issues at the project site.</p>
<p>RIGHT-OF-WAY (ROW)</p>	<p>Please describe any ROW items associated with this project.</p> <p><i>(e.g. Will ROW be required? How much ROW? Is the State Land Department involved? Consider Right of Way requirements associated with Traffic Control/Detour Requirements; Access, Construction Area Needs and on-going Maintenance Requirements.</i></p>	<p>The width of right-of-way for Telera Street is 44'. This project would require new right-of-way from four private properties (approximately 1,000 sq. ft. total). The new right-of-way would be required for the wingwalls and rip-rap for the proposed triple 10' x 4' x 35' RCB. Temporary construction easements will be needed from adjacent properties. Any modifications required to private property improvements will either be done by the contractor within the limits of the new right-of-way/TCE or as a cost to cure during the design phase.</p>
<p>UTILITIES & RAILROAD</p>	<p>Please describe any Utilities and/or Railroad items associated with this project.</p> <p><i>(e.g. Will the project include/require any utility relocation(s) by the project sponsor? What utilities may be impacted? Are there prior rights? If Yes, please explain.)</i></p>	<p><u>Electrical</u> There is one power pole that will need to be relocated and associated overhead electrical lines and telephone and TV cable lines. Prior rights are not anticipated.</p> <p><u>Sewer and Water</u> A 6" diameter sewer line is currently attached to the west side of the existing timber bridge. The sewer line will require relocation due to the project. Prior rights are not anticipated. There are no known water lines within the project limits.</p> <p><u>Railroad</u> The closest railroad is approximately 1200' away and is not impacted by the project.</p>