Illinois Department of Transportation

Innovative Project Delivery

October 15, 2024

SUBJECT: IL 4/15 Kaskaskia River Bridge Project - Written Determination

In accordance with the Innovations for Transportation Infrastructure Act (Act), the Bureau of Innovative Project Delivery (IPD) has conducted an analysis to determine the project delivery method deemed to be in the best interest of the State for the above captioned project.

The analysis included conducting a qualitative screening, a qualitative evaluation (Level 1), and quantitative evaluation (Level 2), and a preliminary risk assessment (Level 3). The analysis concluded that Construction Manager / General Contractor (CMGC) project delivery is in the best interest of the State.

The risks included in this Written Determination are preliminary and subject to change. A comprehensive risk assessment has been conducted separately and will be monitored and updated as the project progresses.

Bureau of Innovative Project Delivery

Written Determination

In accordance with the Innovations for Transportation Infrastructure Act (Act) and prior to commencing a procurement under the Act, the Bureau of Innovative Project Delivery (IPD) has conducted an analysis for the following project to determine the project delivery method deemed to be in the best interest of the State.

Project: **Illlinois 4/15 Kaskaskia River Bridge Replacement**

The project is described together with the stated project goals in ***Project Scoping Information Sheet***.

The project has been evaluated through the IPD Bureau's annual MYP gating process as described in Chapter 2 Project Identification and Screening and has been evaluated for readiness in accordance with Chapter 2.2 - Project Readiness and Selection Process of the IDOT Innovative Project Delivery Manual and Guidelines and has been found to be ready for CMGC, PDB, or DB procurement.

Through evaluation it is determined that it is in the best interest of the State to advance the Project using the following innovative project delivery method:

☑ CMGC ☐ Progressive Design-Build ☐ Design-Build

The following attachments are provided to support the analysis and results of this written determination:

- ☑ Project Scoping Information Sheet
- ☑ Qualitative Screening Form
- ☑ Level 1 Qualitative Evaluation Results
- ☑ Level 2 Quantitative Evaluation Results
- ☑ Level 3 Risk Assessment Worksheet
- ☑ Pre-Procurement Checklist

Project Scoping Information Sheet

The IPD Bureau will work with the Districts to populate the following form to document potential Candidate Project characteristics.

Additional items can be added to the bottom of the form to facilitate the Project candidacy determination.

This attachment can be referenced in the IDOT Innovative Project Delivery Manual and Guidelines, pg. 12.

IIllinois 4/15 Kaskaskia River Bridge Replacement
Route:
IL 4/15
Location:
Over the Kaskaskia River 0.2 mi East of Jct IL 4 in Fayetteville
Estimated Construction Cost:
$62,000,000
Estimated Construction Duration:
3 Years
Letting Date (as shown in the MYP assuming DBB delivery):
Jun-25
Source(s) of Project Funding (as shown in the MYP assuming DBB delivery):
Hwy-Inf-BFP-S & State match
Scope of Work – pavement, bridge, sound barriers, etc.:
Bridge replacement
Major Schedule Milestones (critical path elements that affect schedule or price):
Alignment and bridge span configuration for navigational span. Public support on alignment. The existing structure must remain open to traffic.
Major Project Stakeholders:
Village of Fayetteville, Village of St. Libory, US Army Corps of Engineers, US Coast Guard, IDNR, IEPA, Kaskaskia Regional Port District, Heartlands Conservancy, Emergency Services, School District
Major Obstacles (as applicable):
Public involvement, environmental resources (possible endangered species/wetlands, possible displacements), land acquisition, utility relocations

Illlinois 4/15 Kaskaskia River Bridge Replacement
With Right of Way, Utilities, and/or Environmental Approvals: Potential ROW acquisition Protection of the bike trail
During Construction Phase: Protection of the Kaskaskia River Keeping traffic open during construction
Main Identified Sources of Risk:
Environmental issues, permits (IDNR, US Army Corps of Engineers, IEPA, Coast Guard), revisions from concept to final and accounting for temporary construction works will require additional permit reviews
Brief Project Description:
Replacement of the structurally deficient bridge carrying Illinois 4/15 over the Kaskaskia River (SN 082-0077) near Fayetteville in St. Clair County.
Project Specific Goals (accelerating delivery, minimizing cost, maximizing life cycle)
Goal #1 Replace the existing structurally deficient structure. **Goal #2 -** Optimizing the design (best value considering costs and environmental/social issues) **Goal #3 -** Reduce the cost of maintenance since the bridge is nearing the end of its design life.

Qualitative Screening Form

Candidate Projects will typically exhibit the innovative delivery characteristics identified in the table below. For the initial screening during the MYP process, the District will populate each characteristic with a Yes or No only. If the project is considered for further development, the IPD Bureau and the District will collaboratively rate each characteristic applicable to a Candidate Project, provide a rating from 1 to 3 for how well the proposed project could benefit from any of the innovative delivery method characteristics compared to a traditional delivery method.

Rating Scale:
1 - Minimal benefits
2 - Moderate benefits
3 - Significant benefits

Provide any commentary that may be beneficial for reviewers in the comment's column. All questions must be answered.

This attachment can be referenced in the IDOT Innovative Project Delivery Manual and Guidelines, pg. 12.

IIllinois 4/15 Kaskaskia River Bridge Replacement			
Characteristic	**Initial Assessment (Yes / No)**	**Rating**	**Comments**
Expedites or "fast tracks" construction for accelerated delivery	Yes	3	
Uses of innovative design and construction techniques	Yes	3	
Is of sufficient size and complexity to effectively leverage private-sector innovation and expertise. Rating can apply to single project or bundled projects.	Yes	3	
Accelerates delivery by expediting utility relocations allowing flexibility to design for utility avoidance during construction	No	1	
Expedites contract award	Yes	3	

Illlinois 4/15 Kaskaskia River Bridge Replacement			
Characteristic	**Initial Assessment (Yes / No)**	**Rating**	**Comments**
Exploits market conditions and increase competition from potential bidders	Yes	3	
Total Score		**16**	**Good candidate**

Level 1 Results

The delivery method with the highest score indicates the recommended delivery method as a result of the Level 1 Assessment.

Illlinois 4/15 Kaskaskia River Bridge Replacement			
DBB	**CMGC**	**PDB**	**DB**
43	67	62	54

Level 2 Results

The delivery method with the highest score indicates the recommended delivery method as a result of the Level 2 Assessment.

Illlinois 4/15 Kaskaskia River Bridge Replacement				
Factor	**Weight**	**CMGC**	**PDB**	**DB**
Project Cost	50%	44	44	33
Delivery Schedule	10%	8	8	6
Technical	30%	27	26	20
Procurement Delivery	10%	10	9	8
Total Score		**89**	**87**	**67**

Level 3 Risk Assessment Worksheet

Instructions

1. Provide a number for the risk
2. Provide a name for the risk
3. Assign a risk category for the risk
4. Provide a brief description of the risk
5. Select a probability rating that the risk will occur (1 - Low, 2 - Medium, 3 - High)
6. Select a rating for the likely consequence if the risk does occur (1 - Low, 2 - Medium, 3 - High)
7. The spreadsheet will calculate an impact rating
8. Select the preferred allocation of the risk (owner, contractor, third-party or shared)
9. Document how the project team intends to mitigate the risk impact
10. Add any notes from risk discussions
11. At the end rows can be unhidden or hidden to add/subtract rows as necessary

This attachment can be referenced in the IDOT Innovative Project Delivery Manual and Guidelines, pg. 16.

Illlinois 4/15 Kaskaskia River Bridge Replacement

1	2	3	4	5	6	7	8	9	10
RISK NUMBER	RISK NAME	RISK CATEGORY	RISK DESCRIPTION	PROBABILITY	CONSEQUENCE	IMPACT	RISK ALLOCATION	RESPONSE PLAN	NOTES
1	Maintenance of Traffic (MOT) - Construction Staging and Equipment Impacts	Construction	The CMGC Contractor is unable to keep the bridge open and maintain access to and from each side of the River and under the bridge for recreation.					IDOT, EOR, and CMGC Contractor should work closely and collaboratively to develop the construction phasing plan and determine what MOT stages areas are necessary and when to build the project in a safe and timely manner. After assessing and agreeing on MOT needs define the requirements in the contract documents.	
2	Agricultural Industry	Environmental	The existing bridge is a critical route for agriculture/ farming throughout the year.					Contractually restrict CMGC to maintaining a minimum of 20' width on the bridge.	
3	Archaeological	Environmental	This region of Illinois has substantial risk of archaeological sites due to nearby sites from Chickasaw, Kickapoo-Mascouten, Piankashaw and/or other tribes.					Perform substantial due diligence pre-procurement and during procurement phase with EOR to de-risk archaeological risks prior to procurement of CMGC	

Illinois 4/15 Kaskaskia River Bridge Replacement

1	2	3	4	5	6	7	8	9	10
RISK NUMBER	RISK NAME	RISK CATEGORY	RISK DESCRIPTION	PROBABILITY	CONSEQUENCE	IMPACT	RISK ALLOCATION	RESPONSE PLAN	NOTES
4	Scope Definition	Procurement and Contracting	Scope of Work is less restrictive to allow for the CMGC Contractor to propose alternatives and the means and methods and alternate equipment, maybe better equipment, available at cheaper cost or works better or more reliably.					Review construction means and methods and equipment types and uses with potential proposers during pre-procurement phase.	
5	Identifying and Securing Necessary Right of Way	Right of Way	Delays identifying and securing necessary right-of-way, and/or unable to sequence the work to proceed with project in sync with the right-of-way acquisition schedule.					Advance project design to better define ROW needs. Develop timeline for the acquisition process upon defining needs. Engage early with CMGC Contractor to agree on appropriate means and methods and determine any temporary/permanent easement needs.	
6									
7									
8									
9									
10									

Pre-Procurement Checklist

A pre-procurement checklist is recommended for every project. The checklist below contains the typical items necessary to ensure a project is ready for procurement. A project-specific checklist should be developed to capture all items completed or in progress prior to commencing with the procurement process.

This attachment can be referenced in the IDOT Innovative Project Delivery Manual and Guidelines, pg. 17.

Illlinois 4/15 Kaskaskia River Bridge Replacement		
	Item	**Comments**
☑	Project Scoping and Refinement	In progress
☑	Project Development Schedule	The anticipated project milestones for the design and construction work are TBD as this project is still in Phase I.
☑	Environmental Status	The Phase I study and NEPA document are in progress.
☑	Cost Estimate	The preliminary cost estimate is $62m. This will be updated as the project progresses.
☑	Right-of-way Status (No. Parcels Required)	The number of parcels is yet to be determined. This is has been identified as a project risk with an action plan to address
☑	Utility Status (List Each)	Not started.
☑	Geotechnical Investigations	Not started.
☐	Third-Party Stakeholders - Rail - Aviation Facilities - Affected Third Parties - Other Affected Third Parties	The project is using a public involvement program referred to as Context Sensitive Solutions to identify stakeholders and solicite their input in the project development. A Community Advisory Group (CAG) has been formed consisting of: Thirteen parties representing Fayetteville residents, Mascoutah residents, Freeburg School District, St. Clair County Farm Bureau, Fayetteville businesses, St. Libory school district, Village of St. Libory, St. Libory Fire District, Mascoutah Fire District, and local commuters.
☑	Required Permits (List Each)	The required permits will be identified during the Phase I study.
☑	Risk Assessment	The initial risk assessment was conducted in June 2024. The identified risks will be either by mitigated or managed throughout the project development.

Illlinois 4/15 Kaskaskia River Bridge Replacement		
	Item	**Comments**
☑	Public Outreach Status	Public outreach is currently in progress. The project is using a public involvement program referred to as Context Sensitive Solutions to identify stakeholders and solicite their input in the project development.