



**INDIANA**  
TRANSPORTATION TEAM

**CRAWFORDSVILLE DISTRICT**

# AGENDA

- **Registration/Networking 2:00 -3:00**
- **Welcome and Opening Remarks 3:00 -3:05**
  - 2023 ITT Committee Representatives
  - 2023 assignment: Decision-Making Timely Q&A
- **2023 Implementing Decision- Making Rights 3:05 -3:50**
  - Decision Rights Matrix
  - White Paper- Decision Process for Projects
  - Preconstruction key personnel form
  - Scenario 1
  - Scenario 2
- **Break/ Networking 3:50-4:00**
- **Round Table Topic Discussion 4:00 to 5:00**
  - Whitepaper feedback
- **Next Steps/ Closing 5:00**
- **Networking/ Happy Hour 5:00-6:00**

# Crawfordsville District ITT Committee

- **INDOT**

- Jay Harris
- Scott Chandler

- **ACEC**

- Gary Pohl
- Michelle Gottschalk

- **ICI**

- Brian Garrett
- Brian Kochersperger





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# **2023 ASSIGNMENT: DECISION-MAKING TIMELY Q&A**

**Goal:** Develop a Framework to formalize decision-making rights to address the challenges and delays associated with the process.

<b>L = Low priority level</b> <b>M = Medium priority level</b> <b>H = High priority level</b>			<b>CO cost Authority</b> <b>CO time Authority</b> <b>Decision time before escalation</b>			<b>Field Level</b> 50,000 0-1 days			<b>Field Management</b> <i>\$50,000</i> 10 Calendar days 1-5 days			<b>Area Management</b> \$250,000 50 Calendar days 5-10 days			<b>Executive</b> \$750,000 100 Calendar days			<b>Executive</b> \$2,000,000 + 200 + Calendar days			<b>External Resources</b>									
			INDOT HT/Inspector	Contractor Foreman	INDOT PS/Assistant PE	INDOT Project Engineer	Contractor Superintendent	Contractor Project Manager	INDOT Area Engineer	Contractor Project Manager		INDOT District Engineer/Director	Contractor Regional Manager		State Construction Engineer	Director of Construction Mgmt	Contractor Owner	INDOT Project Manager	Utility Coordinator	Designer of Record/PM	INDOT Materials Test Engineer	District Operations Engineer	INDOT District Traffic Engineer	INDOT Geotechnical Engineer	Local Public Agency					
Issue Type	Issue Specifics	Priority Level																												
Utility Conflict	Major utility located on site that is not on the plans	H				RIP	A	RA	AD						AD	ID					A	PAD	I				AD			
	Utility in conflict that was deemed to be clear	M				RIP	A	RA	AD						AD	ID					A	PAD	I				AD			
	Contractor refuses to dig within 2' of utility/IURC Dispute	M				PAD	RI		AD											A							A			
Design Error	Minor detail omitted from the plans/specs	L	RIP	A	D	RI	RIP	A	IPAD	RI	RIP	A	AD														A			
	Pay item omitted from the contract	H	RA	RA	RPD	RPD	AD	AD										A		ADIP							A			
	Quantity bust that leads to major item overrun	M				RIP	A	RA	AD	ID								A		I							A			
Change Order	Contractor submitted CO pricing with no backup info	M	RIP	A	D	RI	RIP	A	IPAD	RI	RIP	A	AD	RP													A			
	Contractor pricing exceeds unit average in INDOT database	M	RA	RA	RPD	RPD	AD	AD	IA	RP								A									A			
Traffic Related Items	Service Point - No power service available at detailed location	H	RIP	A	D	RI	RIP	A	IPAD	RI	RIP	A	AD						A					RI	RI		A			
	Contractor want to use alternate materials or methods	M	RA	RA	RPD	RPD	AD	AD	I									A		ADIP			RI	RI		A				
Geotechnical Issues	Areas of failure that won't pass testing requirements	M	RIP	A	D	RI	RIP	A	IPAD	RI	RIP	A	AD	RP					A		ADIP					RAID				
	Compacted agg. not meeting LWD testing requirements	M	RA	RA	RPD	RPD	AD	AD	AD	RP								A		ADIP					RAID					
	Soils not meeting DCP requirements	M	RIP	A	D	RI	RIP	A	IPAD	RI	RIP	A	AD	RP					A		ADIP				RAID					
	Proof roll failures - no clear direction on remedy in Geotechnical Report	M	RA	RA	RPD	RPD	AD	AD	AD	RP								A		ADIP					RAID					
	Piling overrunning planned quantity		RA	RA	RPD	RPD	AD	AD	AD	RP								A		ADIP					RAID	A				
Right of Way	Clearing not complete within allowable timeframe	H	RIP	A	D	RI	RIP	A	IPAD	RI	RIP	A	AD	RP		AD			AD								A			
	Parcels not available at time of letting	H	RA	RA	RPD	RPD	AD	AD	AD	RP		AD			AD			A		ADIP										
	Property owner issues - claim of promises made during buying	M	RIP	A	D	RI	RIP	A	IPAD	RI	RIP	A	AD	RP							ADIP					A				
	Construction limits exceed ROW	H	RA	RA	RPD	RPD	AD	AD	AD	RP								A		ADIP										



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# **IMPLEMENTING DECISION- MAKING RIGHTS**

## **Decision Making Process for Construction Management Personnel**

Construction projects are complex endeavors that involve a multitude of decisions at various stages, from planning and design to execution and delivery. These decisions significantly impact the project's outcome, including its cost, schedule, quality, and safety. In this white paper, we discuss the decision-making steps and tools that can help construction project managers and stakeholders make informed choices to achieve project success.

## 1. The Importance of Timely Decision-Making in Construction Projects

Effective decision-making at the lowest level of construction is critical for several reasons:

- 1. Budget Control:** Decisions impact project costs directly. Poor decisions can lead to cost overruns, while informed/timely choices can help optimize budgets.
- 2. Schedule Management:** Timely decisions keep projects on schedule. Delays due to indecision can result in missed deadlines. Decisions should be made at the lowest level to maintain the schedule.
- 3. Quality Assurance:** Decisions affect the quality of work and the final product. Well-informed choices lead to better quality outcomes.
- 4. Risk Management/Mitigation:** Proper and timely decision-making can mitigate risks and prevent accidents, delays, and legal issues.





## **2. Decision-Making Steps in Construction Project Management**

### **2.1 Define the Issue/Opportunity**

- Be proactive – Alert your counterpart of a potential issue that is foreseen early, preferably face to face even if details are not known or remain unclear.
- Follow -up and clearly communicate the issue or opportunity that requires a decision verbally and in writing.
- Offer solutions and potential consequences of those solutions.
- Define the project's objectives and limitations related to the decision (budget, schedule, etc.).

## **2.2 Gather and Review Information**

- Collect data and information relevant to the problem.
- Review relevant plans, specifications, and contract details.
- Consider historical project data, industry standards, and construction best practices when compiling information.

## **2.3 Reference the Decision-Making Matrix**

- Determine if the decision falls within your level of responsibility for making the decision.
- Escalate the decision to the appropriate tier within the time frame defined in the decision matrix.



## **2.4 Identify Stakeholder(s)**

- Identify stakeholders involved in or affected by the decision utilizing the decision matrix and decision tree.
- Understand the interests, concerns, and expectations of all stakeholders.
- Involve key stakeholders early to assist in refining the issue.

## **2.5 Generate Solution(s)**

- Generate potential solutions or alternatives to address the issue or opportunity.
- Include key stakeholders in the development of possible solutions.
- Encourage diverse viewpoints from internal and external team members when developing solutions.
- Keep project personnel at all levels aware of the possible solutions and remain receptive to suggestions for issue resolution.



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## **2.6 Evaluate Alternative Solution(s)**

- Use decision criteria (decision matrix, previous project experience, mentors) to assess each alternative.
- Consider factors like cost, schedule, quality, and risk.

## **2.7 Make the Decision**

- Select the solution that best supports project objectives and stakeholder interests.
- Document the decision-making process and reasoning.
- Make the rank or score alternatives based on these criteria.
- Make decision as the lowest level possible.

## **2.8 Implement the Decision**

- Develop an action plan to execute the chosen alternative.
- Assign necessary resources and responsibilities.
- Communicate the decision to stakeholders.

## **2.9 Monitor and Review**

- Continuously assess the implementation of the decision.
- Adjust as needed to ensure the desired outcome/effectiveness of the decision chosen.
- Keep stakeholders informed of progress.

### 3. Challenges in Construction Decision-Making

1. **Incomplete Information:** Lack of data and communication can hinder informed decision-making and adversely affect the time it takes to reach resolution.
2. **Complex Stakeholder Relationships:** Differing interests among stakeholders can complicate decisions. Effective communication and conflict resolution are essential.
  - Work to build trust among the team members throughout the project.
  - Keep communication open and honest at all times.
    1. **External Factors:** Changes in regulations, economic conditions, and unexpected events can disrupt decisions. Maintain flexibility and adaptability.
  - INDOT communicates much of this information through their website, memorandums, and other means. Review INDOT communications frequently to remain up to date.
    1. **Project Uncertainty:** Construction projects often involve unpredictable market factors. Develop contingency plans to address unforeseen challenges.

## 4. Conclusion

In construction project management, decisions play a pivotal role in determining project success. Following a structured decision-making process, using appropriate tools and techniques, and being aware of common challenges are essential for making informed and effective decisions. By prioritizing sound decision-making, construction professionals can improve project outcomes, control costs, and enhance stakeholder satisfaction.



## Preconstruction Key Personnel Form

Title	Name	Email Address	Phone Number	Affiliation
<b>Field Management Level</b>				
INDOT PE/PS				
Contractor Superintendent				
Contractor Project Manager				
<b>Area Management Level</b>				
INDOT Area Engineer				
INDOT Office Area Engineer				
Contractor Project Manager				
<b>District Management Level</b>				
INDOT District Director				
Contractor Regional Manager				
<b>Executive Management Level</b>				
INDOT State Construction Engineer				
INDOT Director of Const. Mgmt.				
Contractor Ownership Rep.				
<b>External Resources</b>				
INDOT Project Manager				
INDOT/Consultant Utility Coord.				
Designer of Record				
INDOT Materials/Test Engineer				
INDOT Traffic Engineer				
INDOT Geotechnical Engineer				
Local Public Agency Rep.				





## Scenario 1:

Contract R-98765 is a street reconstruction project in the small town of Calderville. The plans call for new storm sewers as part of the project. Utility coordination was top notch by the design firm but it is found that a small natural gas service line conflicts with one of the new curb inlets. The inspector and foreman gather information and determine the line and the inlet only conflict by 6 inches. It appears the gas company didn't quite move it enough. They let the Project Engineer/Supervisor and the Superintendent know all the information. Discuss and propose potential solutions to efficiently and effectively resolve the issue.

## Scenario 2:

Contract B-12345 is a bridge replacement project on SR 55 in a rural area. The road is closed, and traffic detoured via local state roads. There were multiple bidders all submitting bids very close to each other all just under the Engineers Estimate. The successful low bidder was Bridge Brothers Builders (BBB). At the Pre-Construction conference, BBB makes it known there was an error in the plans. The plans called for 14 x 89 steel H pile. But the geotechnical report indicates that 14-inch steel pipe piles are the recommended alternative based on the borings. Discuss the process for resolving the issue.



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Break

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# ROUND TABLE TOPICS FOR DISCUSSION

1. At which step is the process most likely to stall or hit a roadblock and what can we do to avoid that?”
2. In what ways can the Decision Process for Construction Projects whitepaper be improved?
3. Identify additions/clarifications you would recommend for improving the matrix.
4. Any other suggestions for the Crawfordsville District ITT



## Crawfordsville ITT- Decision Making Timely Q&A

- **Feedback:**

- Discuss/review/comment in groups today
- Send additional comments to a committee member

- **Next Steps:**

- Finalize Guidance documents
- Present at the December 21, 2023, Statewide Shindig
- Learn how to make the decisions at lowest level, build trust and hold each other accountable

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THANK YOU

