

How Locals Take Control on Their Federal Aid Projects

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INDOT Seymour District
Construction Area Engineer

Utility Coordination – Construction Perspective

- Project Utility Coordinator should be involved from inception to conclusion of construction, not just to letting
 - LPA should include utility coordinator involvement during construction in consultant agreements
- Standard Specifications 105.06 states “Prior to letting the contract...the Department will endeavor to have all necessary adjustments of the public or private utility fixtures, pipelines, and other appurtenances within or adjacent to the limits of construction completed.”
 - Doesn't always happen
 - Things that will help to make it happen
 - Perform tree clearing operations outside of an INDOT contract
 - Perform tree clearing operations in a separate INDOT contract

Utility Coordination – Construction Perspective

- Contract Information Book
 - Required to identify each known utility and describe all known necessary work
 - Must include anticipated schedule for completion in the 107 RSP
 - Indicate what event starts the contractor’s timeline
- Contract prep document/time set
 - Utility work plans must be complete prior to requesting a time set from the area engineer
 - Submittal should include a Gantt chart for utility relocation

Vendor	Task	Preconstruction Activities	Notice	Relocation	January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	October 2022	November 2022
Total	Total Relocation	321	133	210											
Clearing	Clearing for Utilities	15		15											
Duke	Relocate Poles	120	60	60											
Smithville	Relocate w/ Duke Poles	21	14	10											
Comcast	Relocate w/ Duke Poles & Other Boring	30	7-14	30											
Zayo	Relocate w/ Duke Poles	30	30	5											
Duke	Remove Poles	-	-	10											
AT&T	Utility Relocation	15	15	60											
Centerpoint	Utility Relocation	90	TBD	20											

Downside of Not Moving Utilities Prior to Letting

- Standard Specifications 105.06 identifies Contractor's justification for compensation, time extensions, and/or acceleration costs
- Utility delays are excusable, compensable delays
 - Not the fault of the Contractor and are the fault or responsibility of the Department/LPA
 - 108.08 (b) specifically states "delays due to work that utilities or other third parties perform within the project limits"
- Utility Delay Impacts
 - Time
 - Increased impact to the travelling public
 - Money
 - Delay costs – labor, insurance, equipment, contractor field office costs, escalation
 - Acceleration costs – attempt to limit time extension

Utility Delay Costs

- All costs are “non-participating” or ineligible for Federal participation
 - Payment for items that are the responsibility of others, such as relocation of utilities within the right of way
 - Contract claim awards if transportation department is determined to be negligent
 - Example given – utility and right of way claims



Examples of Impact - Negative

- Delay on project could impact adjacent project ability to start on time
 - One road might be detour route for another
 - Conflicting Maintenance of Traffic
- Project consultant inspectors may become unavailable
- Payment of utility delay claims with 100% local work
 - Where do these funds come from?
 - Other planned projects?
 - Other departments in the local agency?
- Poor Public Perception

Actual Cases with Resolutions

- Case 1 – LPA contract – claim pending
 - 357 day time extension via change order plus 24 day time extension via claim
 - 62 additional closure days (compared to original 150 days in contract)
 - Change orders of \$115,000 plus \$330,000 via claim (all 100% local funding)



Actual Cases with Resolutions

- Case 2 – LPA contract
 - Settled in mediation
 - 275 day time extension to completion date
 - 200 day time extension to intermediate completion date
 - Liquidated damages waived
 - Contractor dropped claim for alleged inefficiencies
- Case 3 – INDOT contract
 - 43 day time extension to completion date
 - 123 day time extension to intermediate completion date
 - Liquidated damages waived
 - \$1.5 million in escalation costs (all 100% INDOT funding)

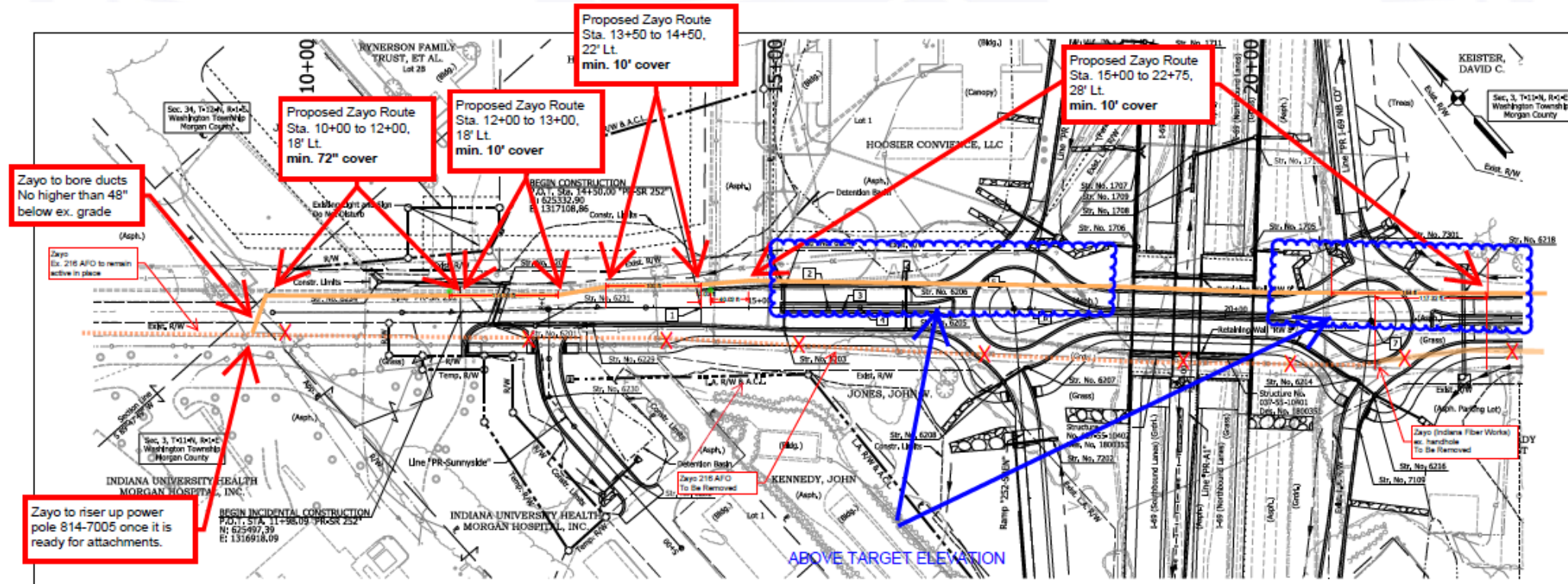
Examples of Impact - Positive

- Tree clearing outside of contract
 - Allows utility relocation efforts to start prior to letting
 - Utility RSP 107-R-169 can be updated up to one week prior to letting with up-to-date utility timeframes
 - Offset/eliminate non-participating change orders
- Cuts down on post letting construction time set
 - Lowers risk for contractors, who can start the job closer to letting
 - Will get more accurate pricing



Examples of Impact - Positive

- I-69 Finish Line - Contracts 1 & 2
 - Contract 1 cleared all trees for both contracts prior to contract 2 letting
 - Utilities began relocation prior to contract 2 letting
 - INDOT had a consultant inspector on site daily monitoring utility progress
 - Utilized GPS rovers, compared work plans to actual placement, identified conflicts with proposed construction plans, communicated daily/weekly with utility companies including on site contractors



Examples of Impact - Positive

- I-69 Finish Line - Contracts 1 & 2
 - Overall utility delay claim on contract 2 - \$85,000 on a \$164 million contract
 - Contract not yet complete
 - Minor redesign work occurred as a result of identified conflicts between the work plans and the proposed construction
 - Project opened on time, despite aggressive schedule
 - Promise kept to the public about the road closure time

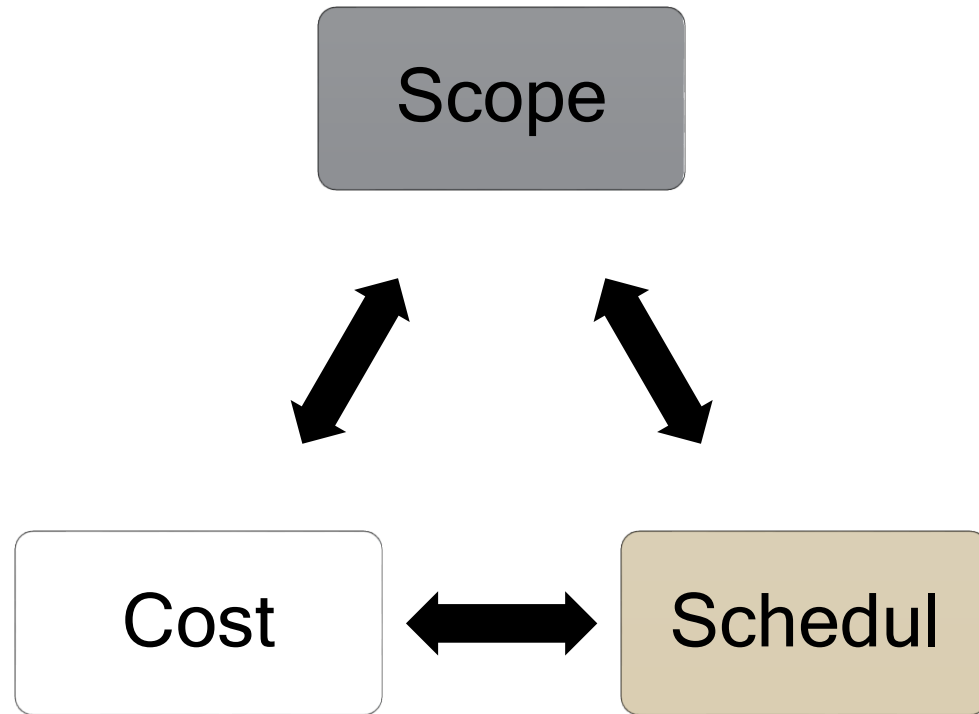


Utility Relocation Inspection & LPA Certification Process

Kathy Eaton-McKalip
Director, Local Programs
Indiana Department of Transportation

BEST PRACTICES FOR LOCAL PROJECT MANAGEMENT

Best Practice #1 - Triple Constraint



- Scope, Cost, and Schedule are all project constraints
- Each constraint is related to the other - can't change one without impacting the others
- Need to manage each independently and collectively for project success

Scope

- Identify Problem
 - Why does this roadway, intersection, or corridor need to be addressed?
- Discover Root Cause
 - What is contributing to the issue of this facility?
- Identify Appropriate Solution
 - What is the best approach to addressing the root cause of the issue?

Road Safety Audit Report: CR100N

*Steuben County,
Indiana*

October 2018

NORTH BAKER ROAD ABBREVIATED ENGINEERING STUDY

STEUBEN COUNTY, INDIANA
NOVEMBER 2013



Conducted By:
STEUBEN COUNTY HIGHWAY DEPARTMENT
Jennifer L. Sharkey, PE

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**Best Practice:
Conduct a Feasibility Study,
Engineering Study, or Road Safety Audit**

Schedule

- Identify “schedule busters” and provide contingency for delays
 - Right-of-way condemnation
 - Historic properties
 - Environmentally-sensitive areas
 - Construction phasing
 - Utility relocation
 - Etc.

**Best Practice:
Conduct a Red Flag Survey/Investigation**

Cost


- Prepare realistic cost estimates
 - INDOT bid tabs
 - Informational review by consultant/contractor/neighboring community
 - Review market trends
 - Review past projects
- Considerations
 - Fiscal years (state fiscal year vs. local fiscal year)
 - Matching funds availability

**Best Practice:
Solicit peer/external review of cost estimate**

Best Practice #2 – Consultant Management

- Request progress reports from consultants
- Provide quarterly report drafts to consultant for review before submitting to INDOT
- Track invoices, payments, and reimbursements

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PROJECT STATUS AT A GLANCE
Final Plans Development

Green = On track; Yellow = Caution; Red = Attention

STEUBEN COUNTY BRIDGE #17

Hanselman Road over Pigeon Creek
March 2020 Progress Report

Date: 10 March 2020
To: Ms. Jen Sharkey, Steuben County Engineer
From: Brandon Arnold, P.E., USI Consultants, Inc.

Des. No.: NA
Letting Date: TBD
Construction Cost Estimate: \$658 K (prelim)

Key Project Information

DETAILS

SCHEDULE & WORK COMPLETED SUMMARY

Next Milestone Submittal:	Final Plans
Anticipated Submittal Date:	Q2 2020

WORK COMPLETED LAST MONTH

Continued work on final bridge design

WORK TO BE COMPLETED THIS MONTH

Final bridge design – continue development

UTILITY STATUS

Utility Company:	Reimbursable	Relocation Required	Current Coordination Stage	Work Plan Approved
Frontier	N	Y	Work Plan Review	
Steuben County REMC	N	Y	Work Plan Review	

PERMIT STATUS

Agency and Permit Type:	Submitted Date:	Approval Date:
IDEM 401	7/24/2019	8/1/2019
USACE 404	7/24/2019	9/17/2019

County Surveyor – Legal Drain – No permit required per Mr. Larry Gilbert on December 21, 2018

ENVIRONMENTAL DOCUMENT STATUS

None

R/W STATUS

Right of Entries secured on August 12th and 13th 2019.

SCOPE CHANGES

None

ACTION ITEMS NEEDED FROM LPA

Provide tentative schedule for final plans due date and advertisement. This will aid in utility work plan coordination.

CONSULTANT NAME
PROJECT - Prelim. Eng. and RW Eng.

Contract Date: 11/4/2019
Des No. 1802918
Account MVH: 1173-533-3000.66 PE & RW Eng/Services 10%
Account Federal Grant: 8128-000-3000.01 90%
Reimbursement Federal Grant: 8128-000-6201 Federal
PE Contract Amount: \$507,515.00 \$456,763.50 Federal Amount PO
Supplemental No. 1: \$8,700.00 2/16/2021

Payment Application No.	Invoice No.	Invoice Date	Amount	10% Local	90% Federal	PE Amount Remaining (Total)	Check Date	Check #	Federal Reimbursement - PE		
									Sent to INDOT	Received from INDOT	Amount
1	97909	3/31/2020	\$30,315.00	\$3,031.50	\$27,283.50	\$477,200.00	5/4/2020	152188	6/4/2020	6/16/2020	\$27,283.50
2	98007	4/30/2020	\$12,760.00	\$1,276.00	\$11,484.00	\$464,440.00	6/1/2020	152569	7/7/2020	7/27/2020	\$11,484.00
3	98059	5/29/2020	\$43,025.00	\$4,302.50	\$38,722.50	\$421,415.00	7/6/2020	153028	8/5/2020	8/24/2020	\$38,722.50
4	98093	6/26/2020	\$24,070.00	\$2,407.00	\$21,663.00	\$397,345.00		153388	9/22/2020	10/6/2020	\$21,663.00
5	98202	7/31/2020	\$14,525.00	\$1,452.50	\$13,072.50	\$382,820.00	9/8/2020	153752	10/14/2020	10/26/2020	\$13,072.50
6	98265	8/28/2020	\$6,365.00	\$636.50	\$5,728.50	\$376,455.00	10/5/2020	154162	1/4/2021	1/25/2021	\$5,728.50
7	98317	10/2/2020	\$11,650.00	\$1,165.00	\$10,485.00	\$364,805.00	11/2/2020	154465	1/4/2021	1/25/2021	\$10,485.00
8	98383	10/30/2020	\$7,325.00	\$732.50	\$6,592.50	\$357,480.00	12/7/2020	154981	2/2/2021		\$6,592.50
9	98456	11/25/2020	\$7,260.00	\$726.00	\$6,534.00	\$350,220.00	12/31/2020	155244	2/2/2021		\$6,534.00
10	98608	12/30/2020	\$12,035.00	\$1,203.50	\$10,831.50	\$338,185.00					\$10,831.50
11	98696	1/29/2021	\$2,045.00	\$204.50	\$1,840.50	\$336,140.00					\$1,840.50

Claim Voucher Split		
MVH	Federal Grant	Total
\$3,031.50	\$27,283.50	\$30,315.00
\$1,276.00	\$11,484.00	\$12,760.00
\$4,302.50	\$38,722.50	\$43,025.00
\$2,407.00	\$21,663.00	\$24,070.00
\$1,452.50	\$13,072.50	\$14,525.00
\$636.50	\$5,728.50	\$6,365.00
\$1,165.00	\$10,485.00	\$11,650.00
\$732.50	\$6,592.50	\$7,325.00
\$726.00	\$6,534.00	\$7,260.00
\$1,203.50	\$10,831.50	\$12,035.00
\$204.50	\$1,840.50	\$2,045.00

\$128,439.00 2020 paid to consultants

2020 reimbursement \$112,225.50

Benefits of tracking information independently of Auditor or Clerk-Treasurer/Controller:

- Checks and balance
- Assist with grant auditing reports
 - Especially since funds paid out don't always equal reimbursements received
- Essential project information is in one place
 - As ERC, you will get the questions from the consultant, INDOT, or SBOA



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YOU are the Employee of Responsible Charge (ERC) and are responsible for ALL aspects of a federal-aid project!

Best Practice #3 – Project Documents

Prepare Project Binder for each Project Phase

Preliminary Engineering (PE)

- RFP Process & Consultant Selection
- Copy of signed Contracts & Agreements
- Design Exceptions
- INDOT Quarterly Reports & Consultant Progress Reports
- Environmental Documents (may need separate binder)
- Utility Coordination Documents (may need separate binder)

Right-of-Way (ROW)

- Assurance Letter
- Correspondences
- ROW Certification Letter

Construction & Inspection (CN & CE)

- Bid documents
- Contractor selection
- Pre-con meeting notes
- Progress meeting notes
- Change Orders

Financial

- Invoices
- Reimbursements

THANK YOU

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