

# NON-TRADITIONAL UTILITY COORDINATION on KYTC Projects

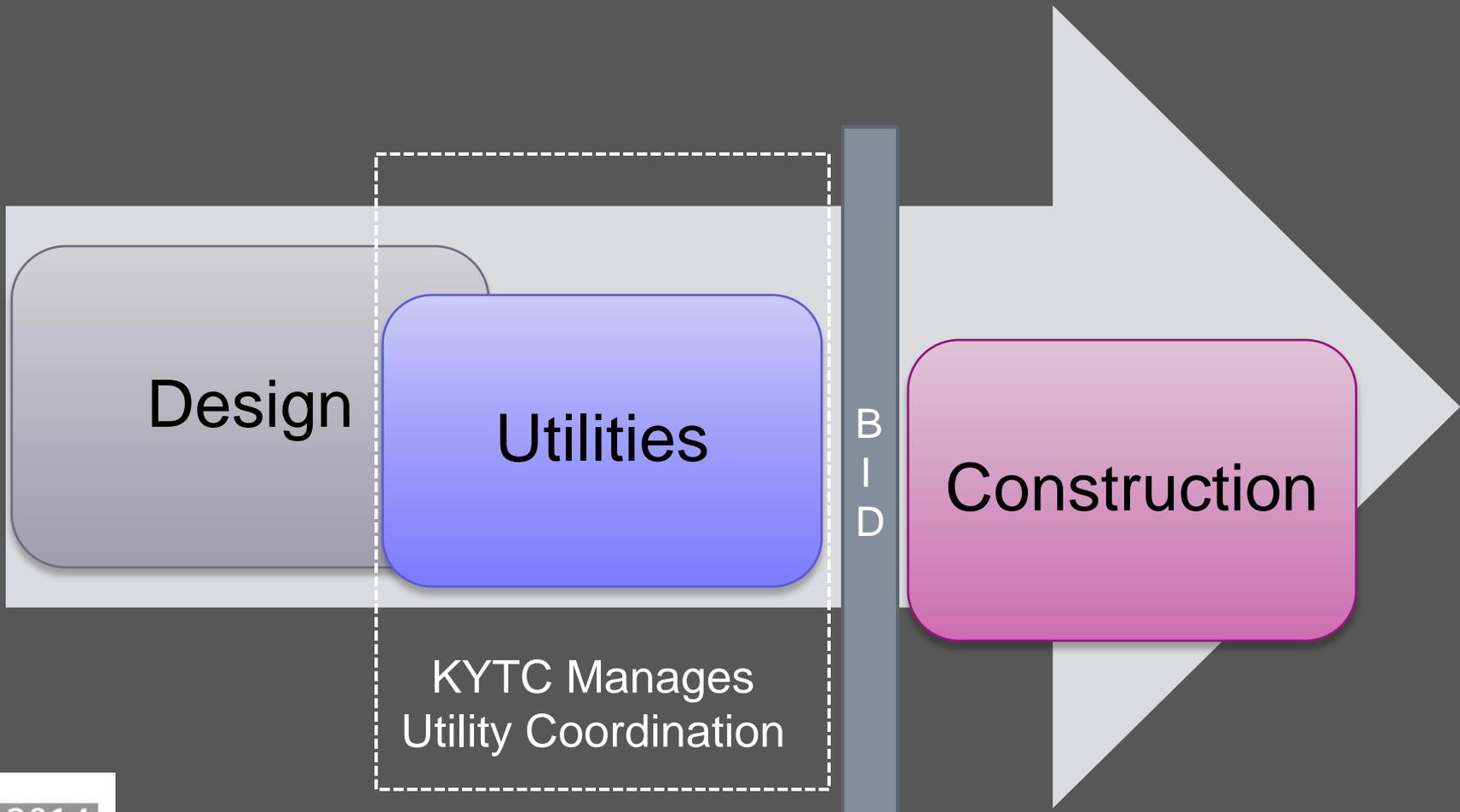
KYTC Partnering Conference  
September 9, 2014



# Non-Traditional Utility Coordination Agenda

- Traditional Approach
  - Recognizing a Need for a New Tool in the Toolbox
- Non-Traditional Utility Coordination Approaches
- Project Overviews
- Q/A and what's next

# Traditional Approach



# Recognizing a Need

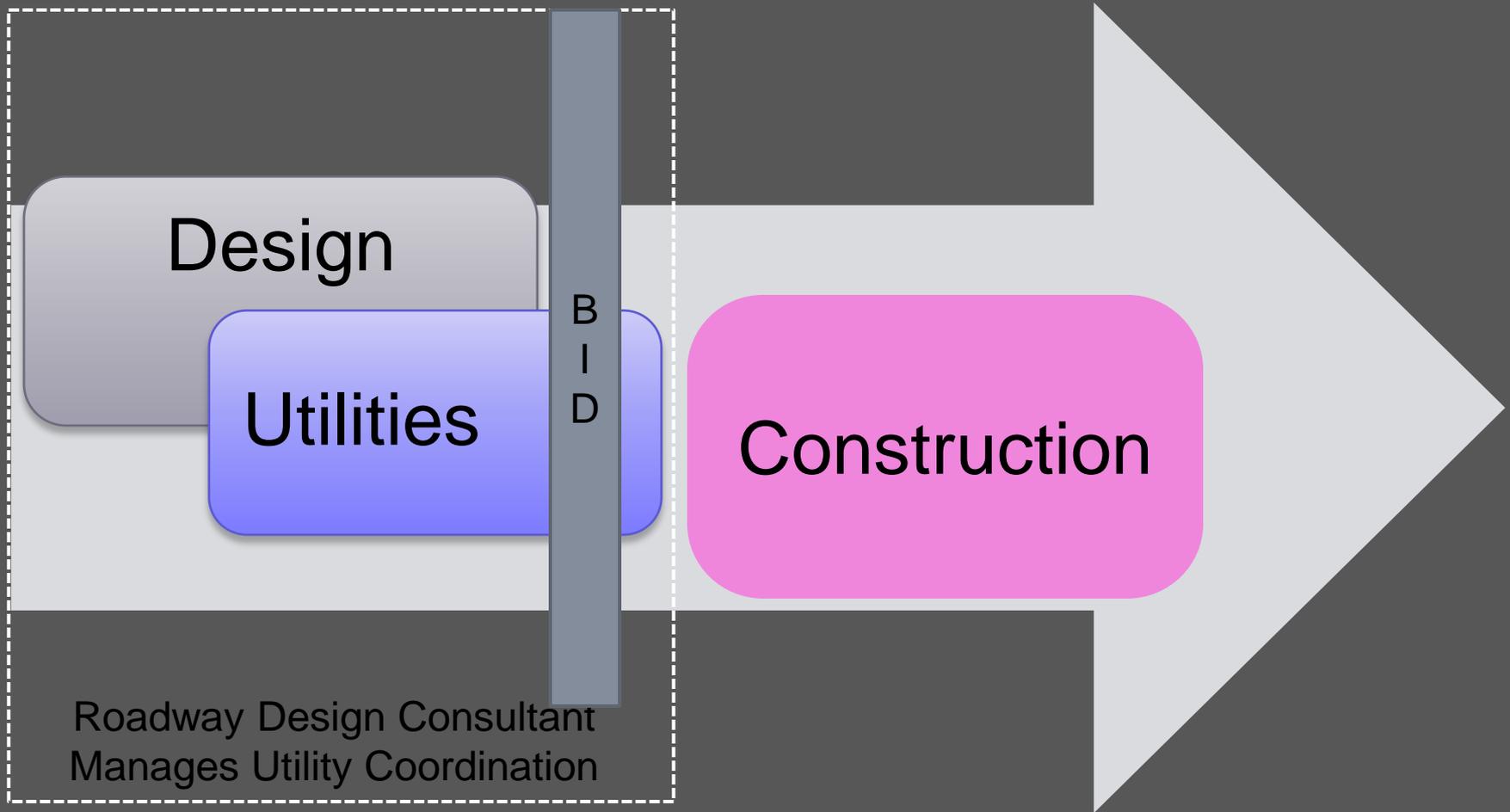
- Schedule
- Project Logistics
- Mitigation opportunities
- Efficiency
- In house staffing issues
  
- New Tool:
  - Incorporate the use of outside services to perform utility coordination as needed

# Non-Traditional Approaches

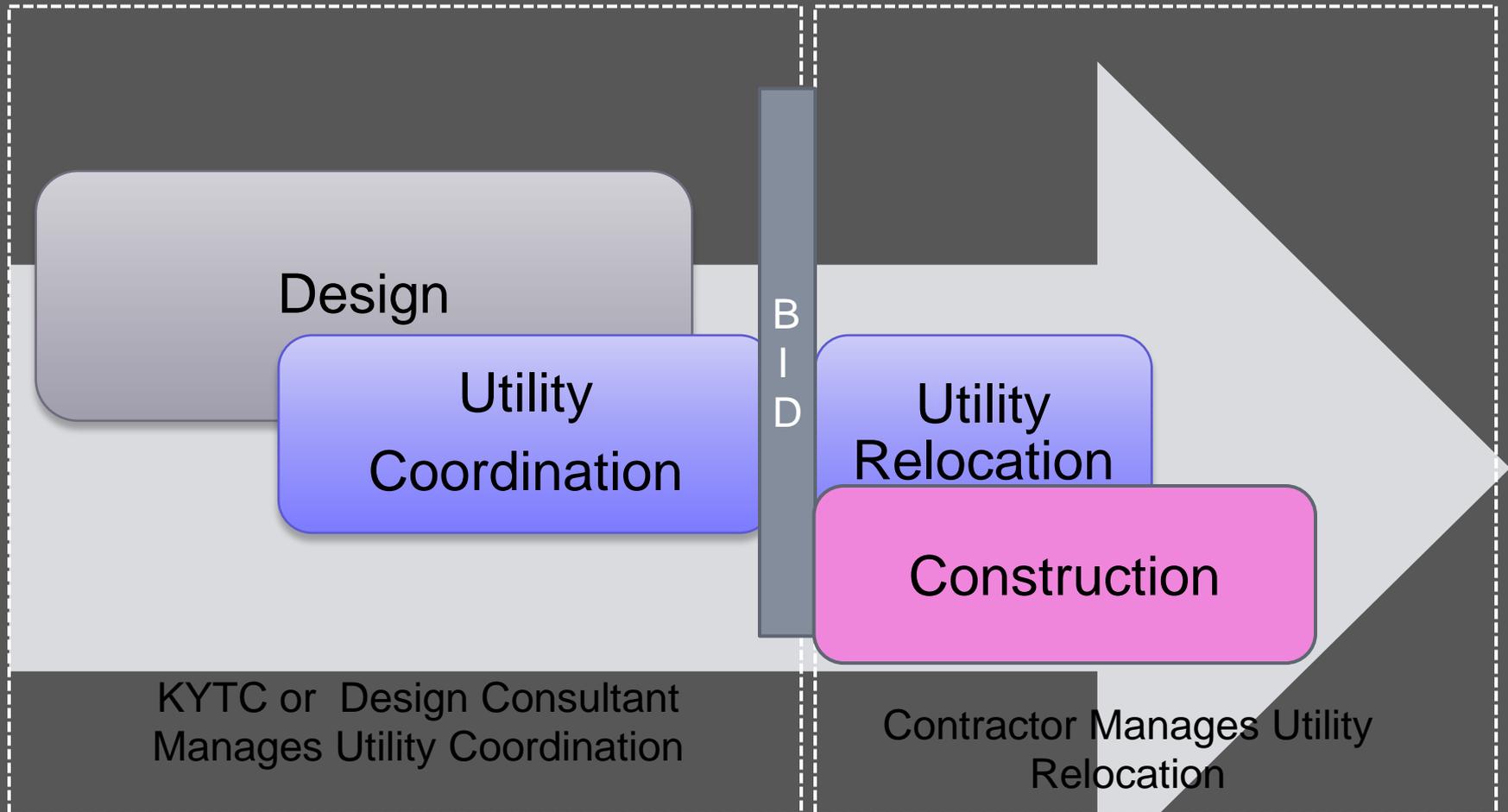


<b>Project Development Approach</b>	Design Consultant manages Utility Coordination in Design Phase
<b>Project Delivery Approach</b>	Contractor manages Utility Relocation Coordination in Construction Phase with KYTC and/or Consultant overview
<b>Design Build</b>	Contractor and DBT manages Utility Coordination from beginning to end of project

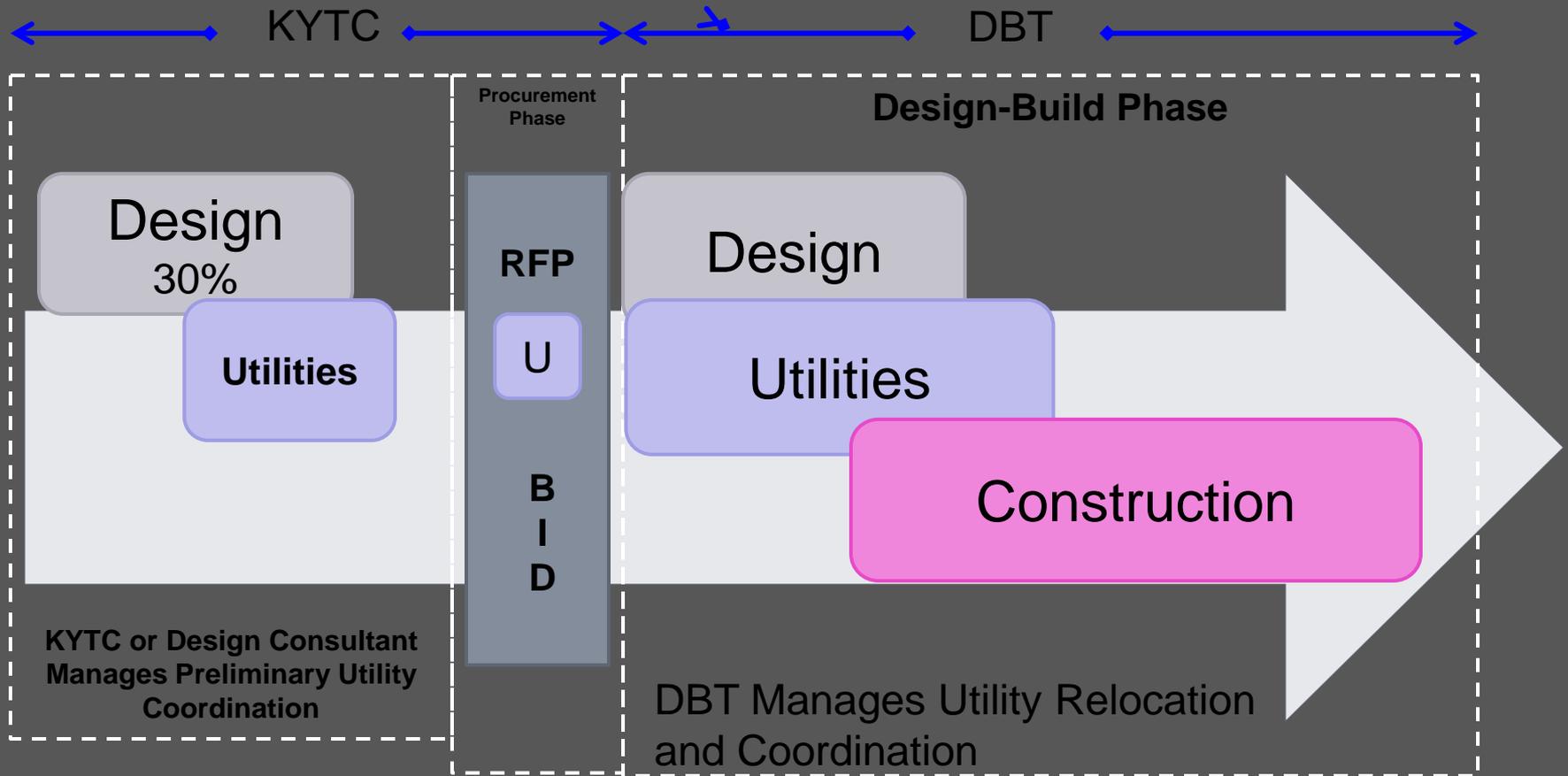
# Project Development Approach



# Project Delivery Approach



# Design Build Approach

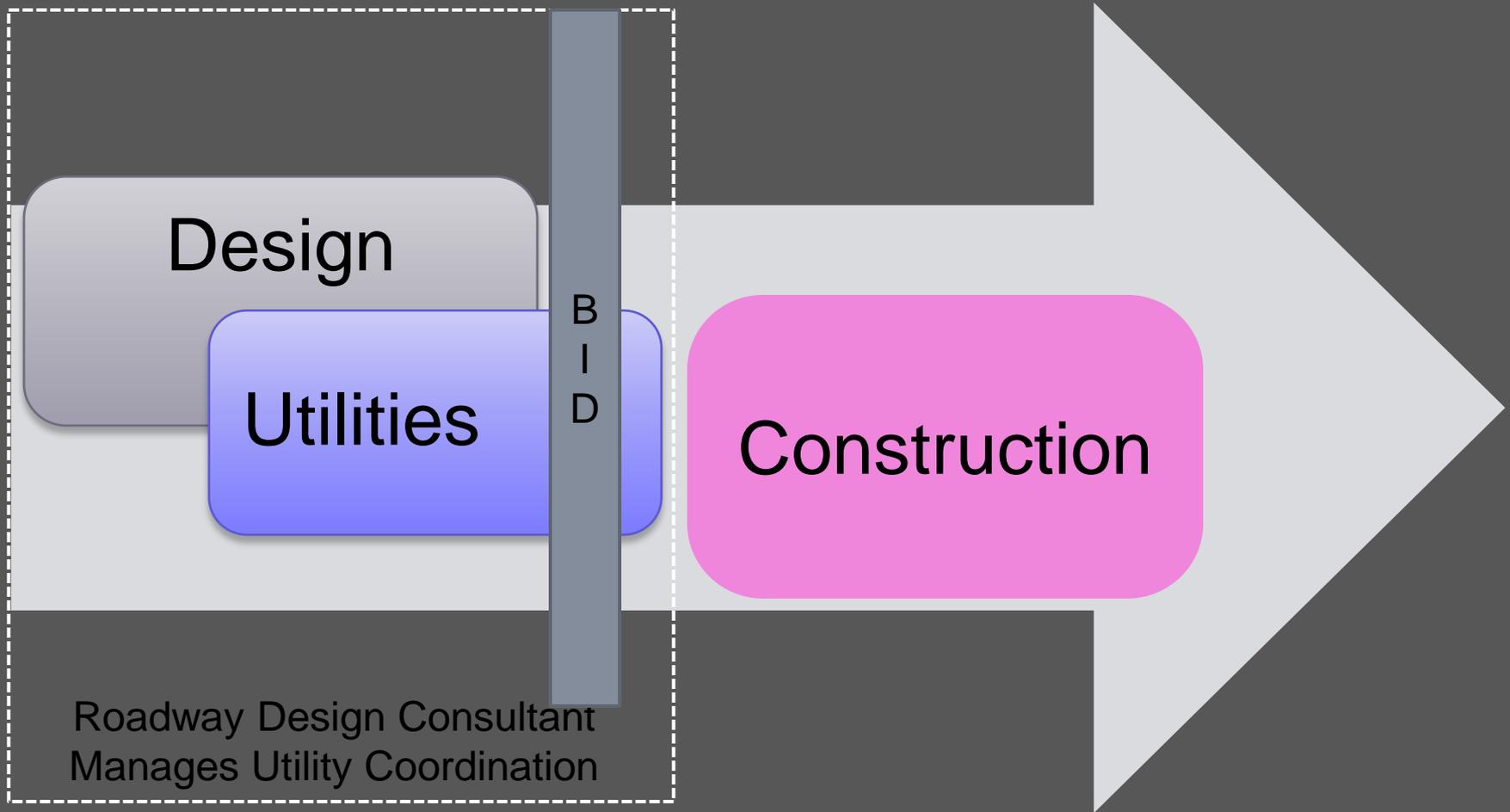


# Project Development Approach

## Ohio River Bridges Project

Entity	Preliminary Utility Coordination	Conflict Identification	Final Utility Coordination	Relocation Construction Oversight
KYTC	Participates	Participates	Participates	Leads
KYTC Consultant	Leads	Leads	Leads	Not Involved
Contractors Consultant	Not Involved	Not Involved	Not Involved	Not Involved

# Project Development Approach



# Project Development Approach

## Consultant Scope Items

- Existing data collection
- 3-D utilities model
- Coordination with Utilities
- Subsurface Verification
- Coordination with Roadway Designers
- Cost determination
- Right of Way needs and layout
- Critical Schedule needs
- Data sharing

# Project Development Approach

## Ohio River Bridges Project

### *Benefits*

#### Schedule

- Early Coordination
- Right of Way and easement needs
- Utility Relocations can start early

#### Costs

- Utility conflicts identified early and a detailed cost estimate prepared.
- Cost of relocations are positively impacted

#### Other

- KYTC staff coordination is reduced
- Accurate Plans

# Project Development Approach

## Ohio River Bridges Project *Challenges*

### Schedule

- Utilities may resist approach

### Cost

- Coordination cost may be higher

### Other

- Roadway plans still changing

# Project Delivery Approach

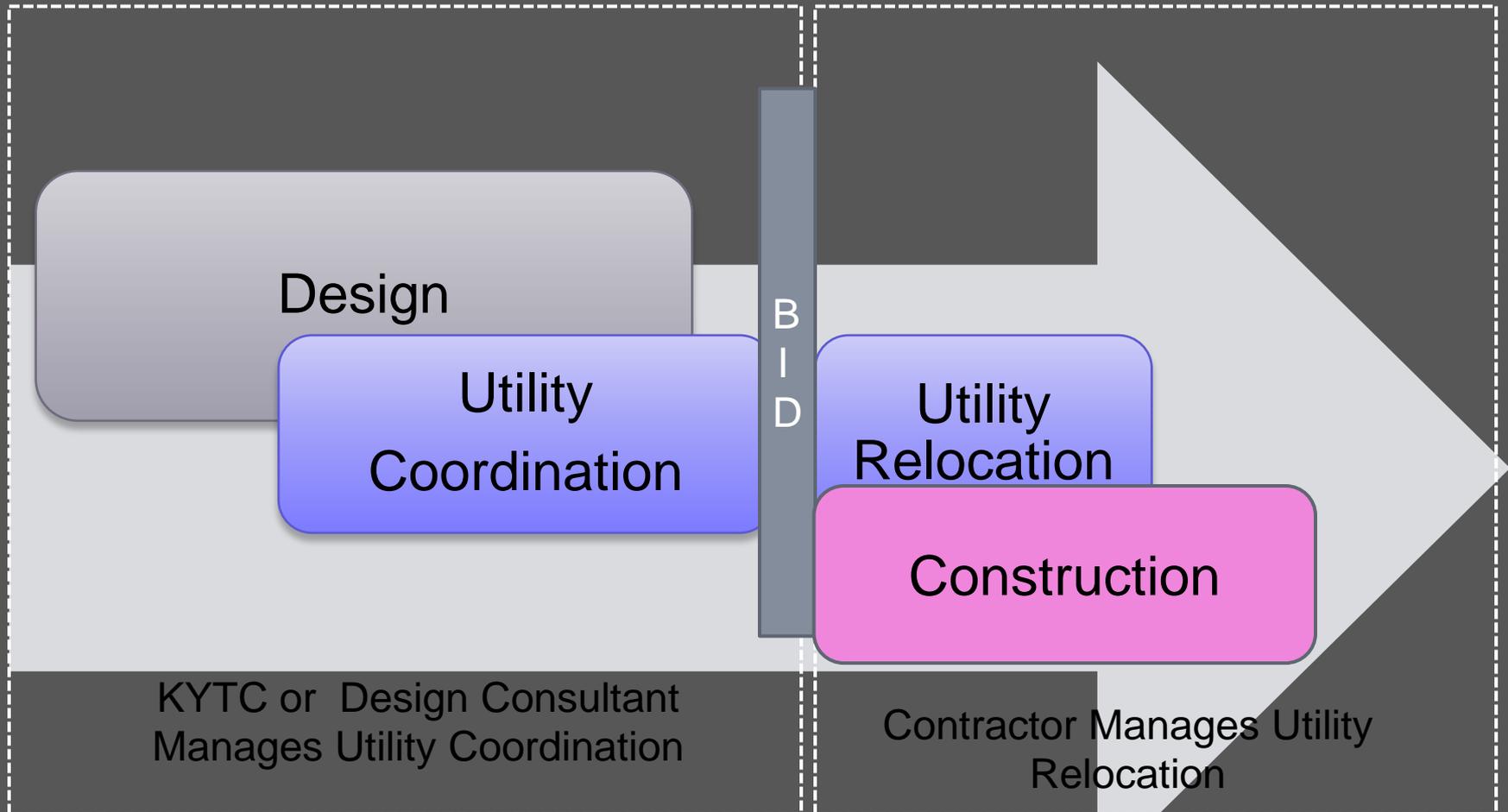
## KY 61 Sections 1&2, Bullitt County

Entity	Preliminary Utility Coordination	Conflict Identification	Final Utility Coordination	Relocation Construction Oversight
KYTC	Leads	Leads	Leads	Participates
KYTC Consultant	Not Involved	Leads*	Leads**	Not Involved
Contractors Consultant	Not Involved	Not Involved	Participates	Leads

\*KYTC Consultant lead in the end, KYTC lead for most of the project

\*\*Consultant lead final effort to collect information only plans, and PS&E

# Project Delivery Approach



# Project Delivery Approach

## Consultant Scope Items

- Create Utility Agreements
- Coordinate Utilities relocation and necessary Meetings
- Create PS&E
- Create Information Only Plans
- Develop Construction Notes
- Finalize Cost Estimate for relocations
- Define right of way impacts
- Utility Adjustments manager

# Project Delivery Approach

KY 61 Sections 1&2, Bullitt County

*Benefits*

## Schedule

- Project Timeline achieved

## Costs

- Cost Efficiencies  
– One contractor

## Other

- KYTC staff coordination is reduced
- Information Only Plans provided

# Project Delivery Approach

KY 61 Sections 1&2, Bullitt County  
*Challenges*

## Schedule

- Utilities may not cooperate

## Cost

- Risk can be elevated if Plans are not clear

## Other

- Utility plans are not final

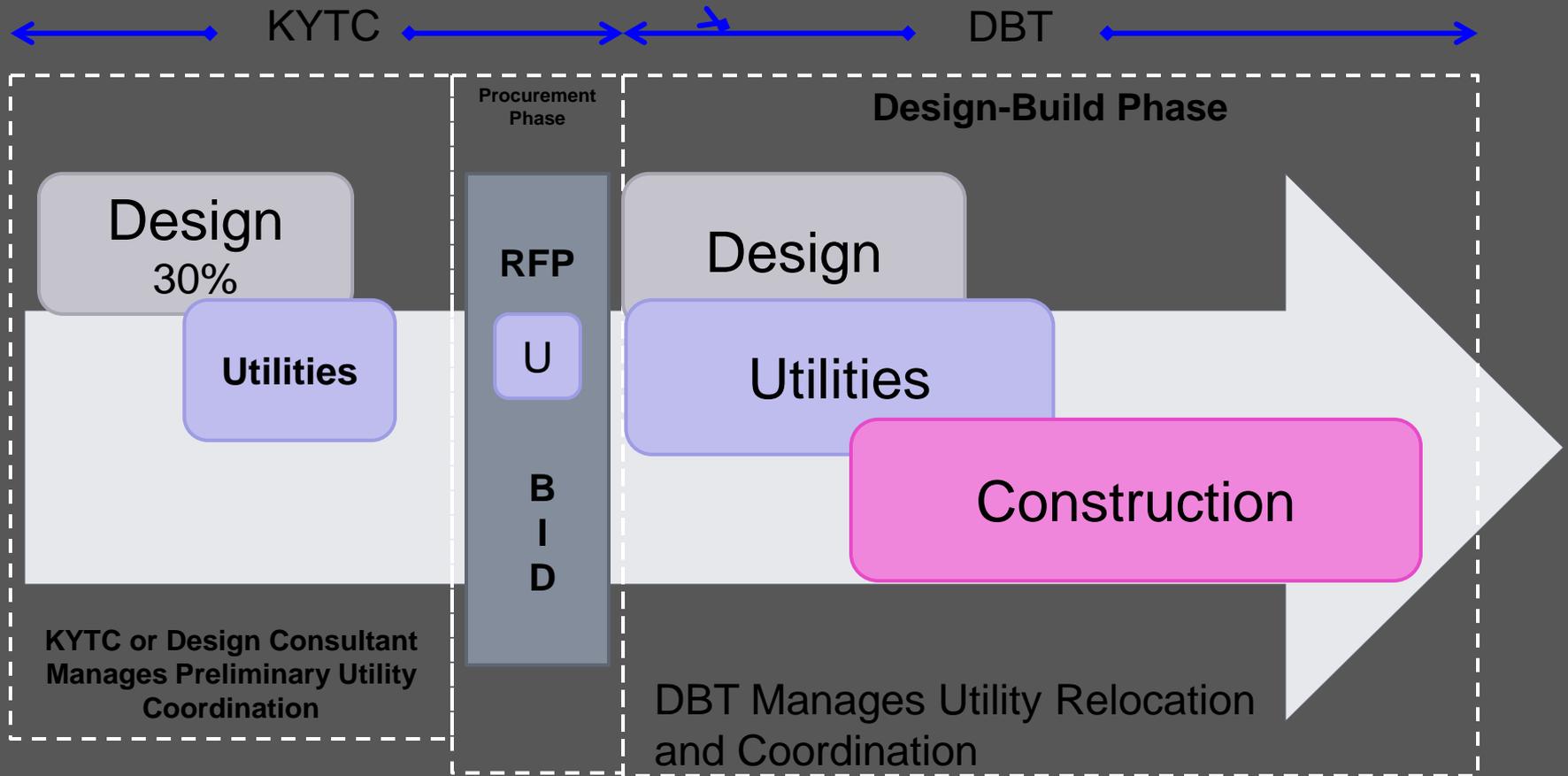
# Design Build Approach

KY 914, Pulaski County

Entity	Preliminary Utility Coordination	Conflict Identification	Final Utility Coordination	Relocation Construction Oversight
KYTC	Participates	Participates	Participates	Participates
KYTC Consultant	Participates*	Participates*	Participates*	Not Involved
Design Build Team	Leads	Leads	Leads	Leads

\*KYTC or KYTC Consultant can sometimes lead from the beginning

# Design Build Approach



# Design Build Approach

## Consultant Scope Items

- Create Utility Agreements
- Coordinate Utilities relocation
- Create PS&E
- Create Information Only Plans
- Develop Construction Notes
- Finalize Cost Estimate for relocations
- Define right of way impacts
- Utility Adjustments manager

# Design Build Approach

KY 914, Pulaski County

## *Benefits*

### Schedule

- Decreases project delivery duration

### Costs

- Are defined as portion of the lump sum fee of the DBT

### Other

- KYTC staff coordination is reduced
- Risk transferred to the Contractor

# Design Build Approach

KY 914, Pulaski County

## *Challenges*

### Schedule

- Right of Way/easement needs can still impact schedule

### Cost

- Typically lump sum not keep cost
- Payment procedure are conducted by DBT
- Utilities 100% reimbursable

### Other

- Depending on DBT for agreements and coordination

# What's Next?

- We need feedback
- Evaluate performance of existing efforts
- Improve on process with current efforts