

H.013284

MRB South GBR:

LA 1 to LA 30 Connector

September 27, 2021

Project Progress Update to CARB-D



LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT | CAPITAL AREA ROAD AND BRIDGE DISTRICT



Project Team

➤ Prime Consultant:

- Atlas Technical Consultants, LLC

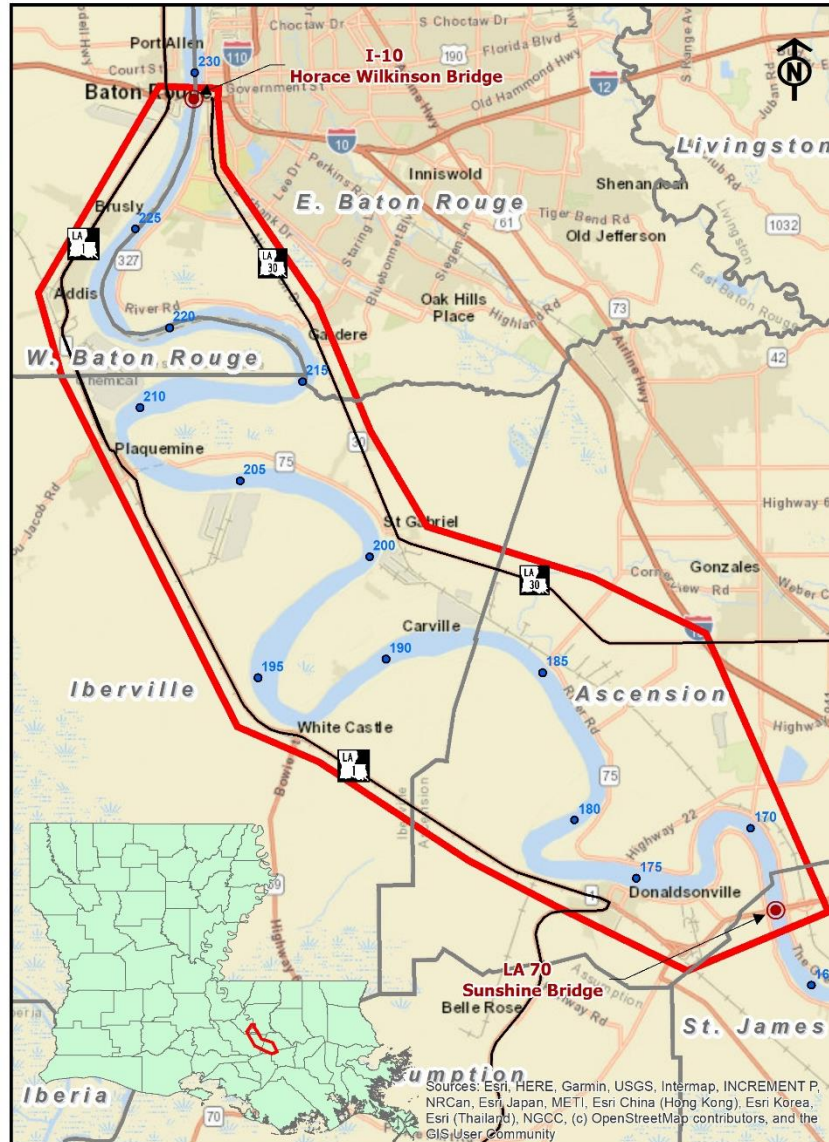
➤ Subconsultants:

- CDM Smith, Inc.
Travel Demand Model & Toll Analysis
- Neel-Schaffer, Inc.
Mesoscopic Model & Traffic Analysis
- INRO Consultants, Inc.
Mesoscopic Model Support
- Franklin Associates, LLC
Public Involvement
- FIGG Bridge Engineering, Inc.
Bridge Technical Concepts
- Shread-Kuyrkendall & Assoc., Inc.
Roadway Technical Concepts
- GIS Engineering, LLC
Navigational Considerations
- Providence Engineering & Environmental Group LLC
Environmental Inventory

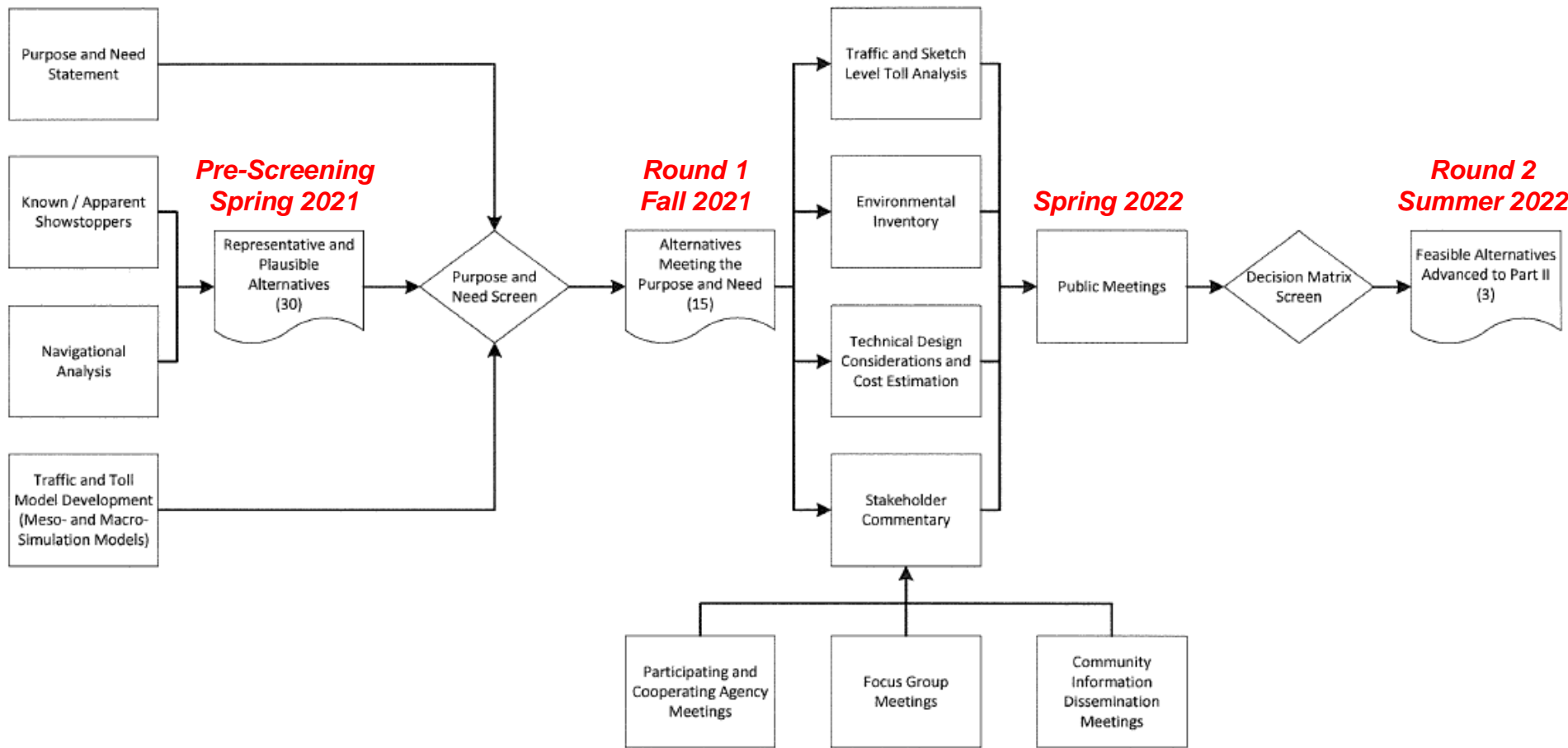
Project Overview

- Ultimate objective is to construct a new crossing of the Mississippi River in the Greater Baton Rouge Area
- **Part I: Enhanced Planning Study**
(July 2020 – Summer 2022)
- **Part II: Environmental Evaluation**
(Summer/Fall 2022 – Summer 2024)

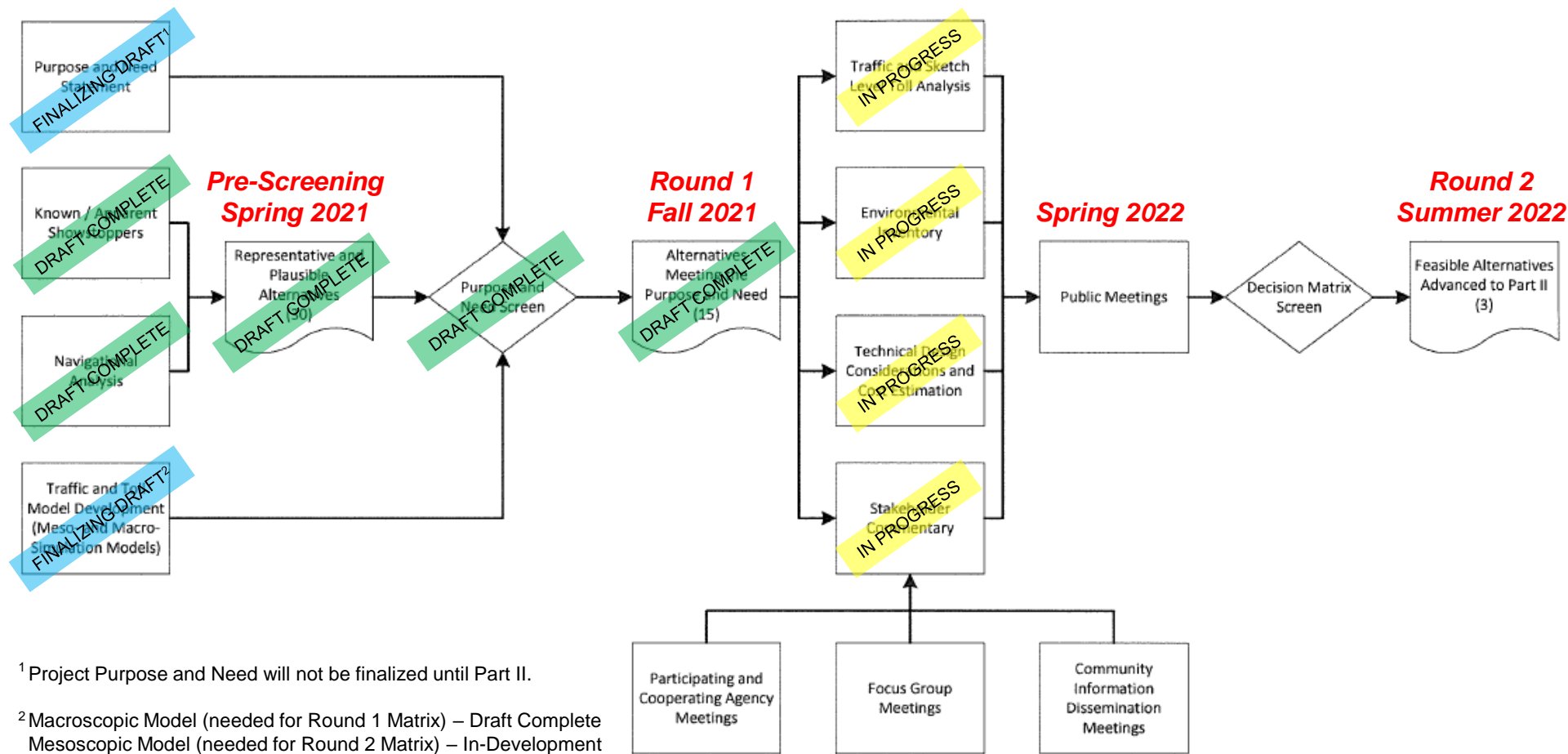
Study Area



Project Workflow (Part I)



Project Workflow (Part I)



¹ Project Purpose and Need will not be finalized until Part II.

² Macroscopic Model (needed for Round 1 Matrix) – Draft Complete
 Mesoscopic Model (needed for Round 2 Matrix) – In-Development

Screening Methodology

- Pre-Screening (Complete)
 - Plausible and Reasonable Alternatives
 - 32 Alternatives Identified
- Round 1 Screening (Complete)
 - Avoid Highly Sensitive Resources
 - Incorporate Travel Demand Information
 - Incorporate Technical Bridge Considerations
 - 17 Alternatives Retained
- Public Meetings
- Round 2 Screening
 - Identify Most Feasible Alternatives

Round 1 Screening

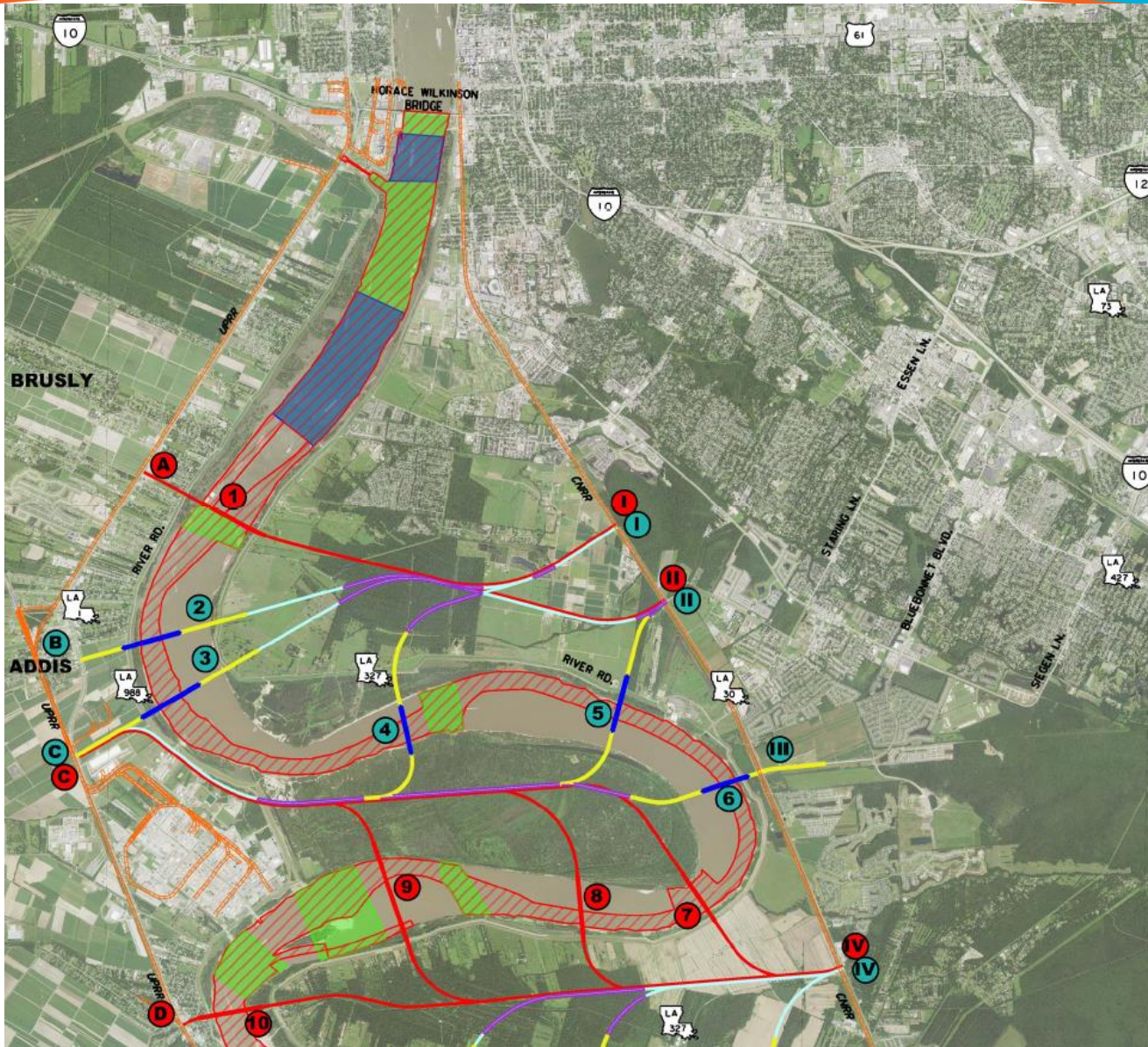
- Avoid Highly Sensitive Resources
 - Known Section 4(f) Properties
 - Protected Species Critical Habitat
- Incorporate Travel Demand Information
 - MRB Travel Demand (ADT and VHT)
 - I-10 Congestion Relief (VHT)
 - LA 1 Congestion Relief (VHT)
- Bridge Constraints

ADT – Average Daily Traffic | VHT – Vehicle Hours Traveled

Round 1 Screening

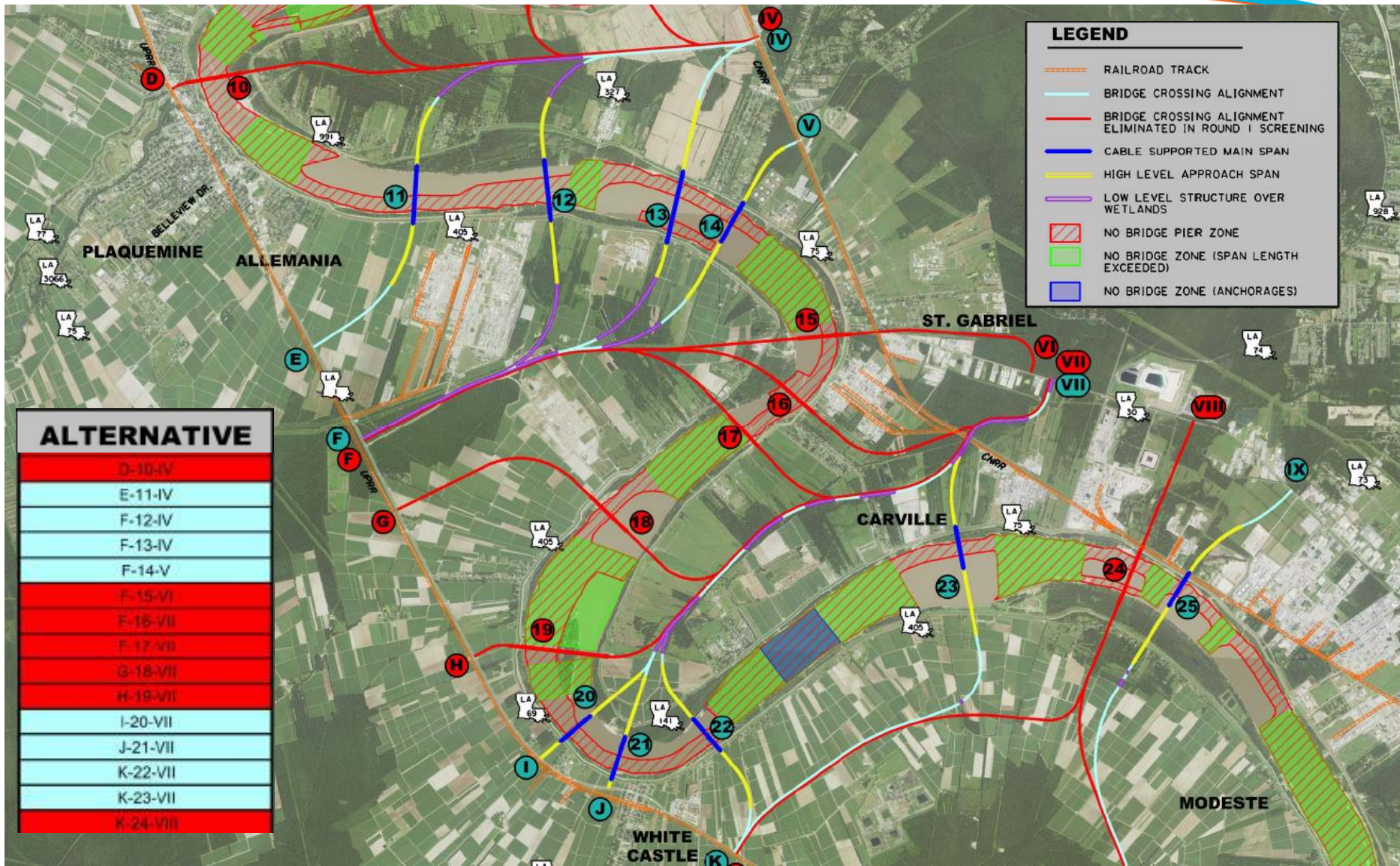
MACROSCOPIC (TRAVEL DEMAND) MODEL

ALTERNATIVE	KNOWN SECTION 4(F) PROPERTIES	PROTECTED SPECIES CRITICAL HABITAT	MRB TRAVEL DEMAND		I-10 CONGESTION RELIEF	LA 1 CONGESTION RELIEF	BRIDGE CONSTRAINTS
			ADT	VHT	VHT	VHT	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
...							



ALTERNATIVE	
A-1-I	
A-1-II	
B-2-I	
B-2-II	
C-3-I	
C-3-II	
C-4-I	
C-5-II	
C-6-III	
C-7-IV	
C-8-IV	
C-9-IV	
D-10-IV	

LEGEND	
	RAILROAD TRACK
	BRIDGE CROSSING ALIGNMENT
	BRIDGE CROSSING ALIGNMENT ELIMINATED IN ROUND I SCREENING
	CABLE SUPPORTED MAIN SPAN
	HIGH LEVEL APPROACH SPAN
	LOW LEVEL STRUCTURE OVER WETLANDS
	NO BRIDGE PIER ZONE
	NO BRIDGE ZONE (SPAN LENGTH EXCEEDED)
	NO BRIDGE ZONE (ANCHORAGES)

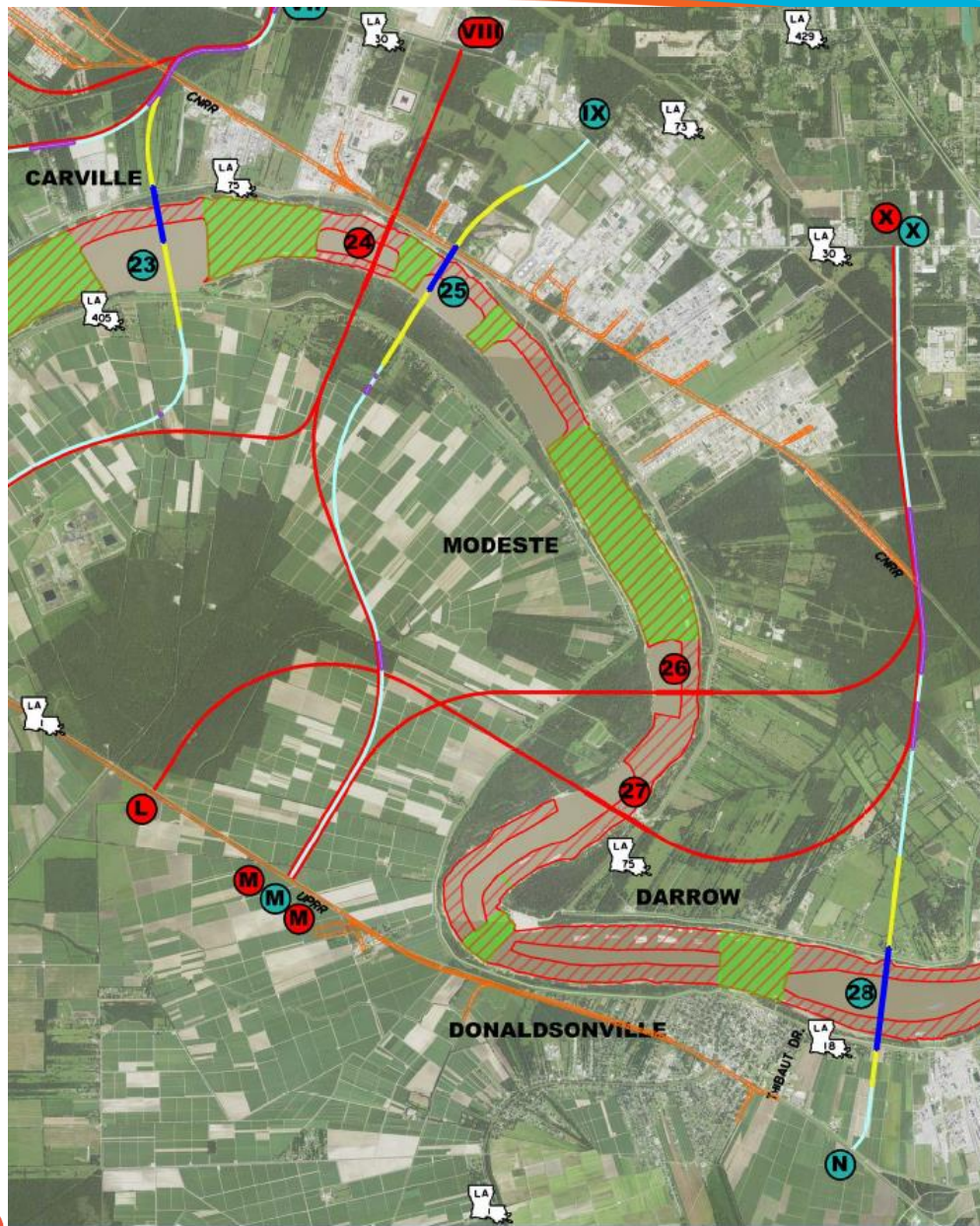


LEGEND

- RAILROAD TRACK
- BRIDGE CROSSING ALIGNMENT
- BRIDGE CROSSING ALIGNMENT ELIMINATED IN ROUND 1 SCREENING
- CABLE SUPPORTED MAIN SPAN
- HIGH LEVEL APPROACH SPAN
- LOW LEVEL STRUCTURE OVER WETLANDS
- NO BRIDGE PIER ZONE
- NO BRIDGE ZONE (SPAN LENGTH EXCEEDED)
- NO BRIDGE ZONE (ANCHORAGES)

ALTERNATIVE

D-10-IV
E-11-IV
F-12-IV
F-13-IV
F-14-V
F-15-VI
F-16-VII
F-17-VII
G-18-VII
H-19-VII
I-20-VII
J-21-VII
K-22-VII
K-23-VII
K-24-VIII



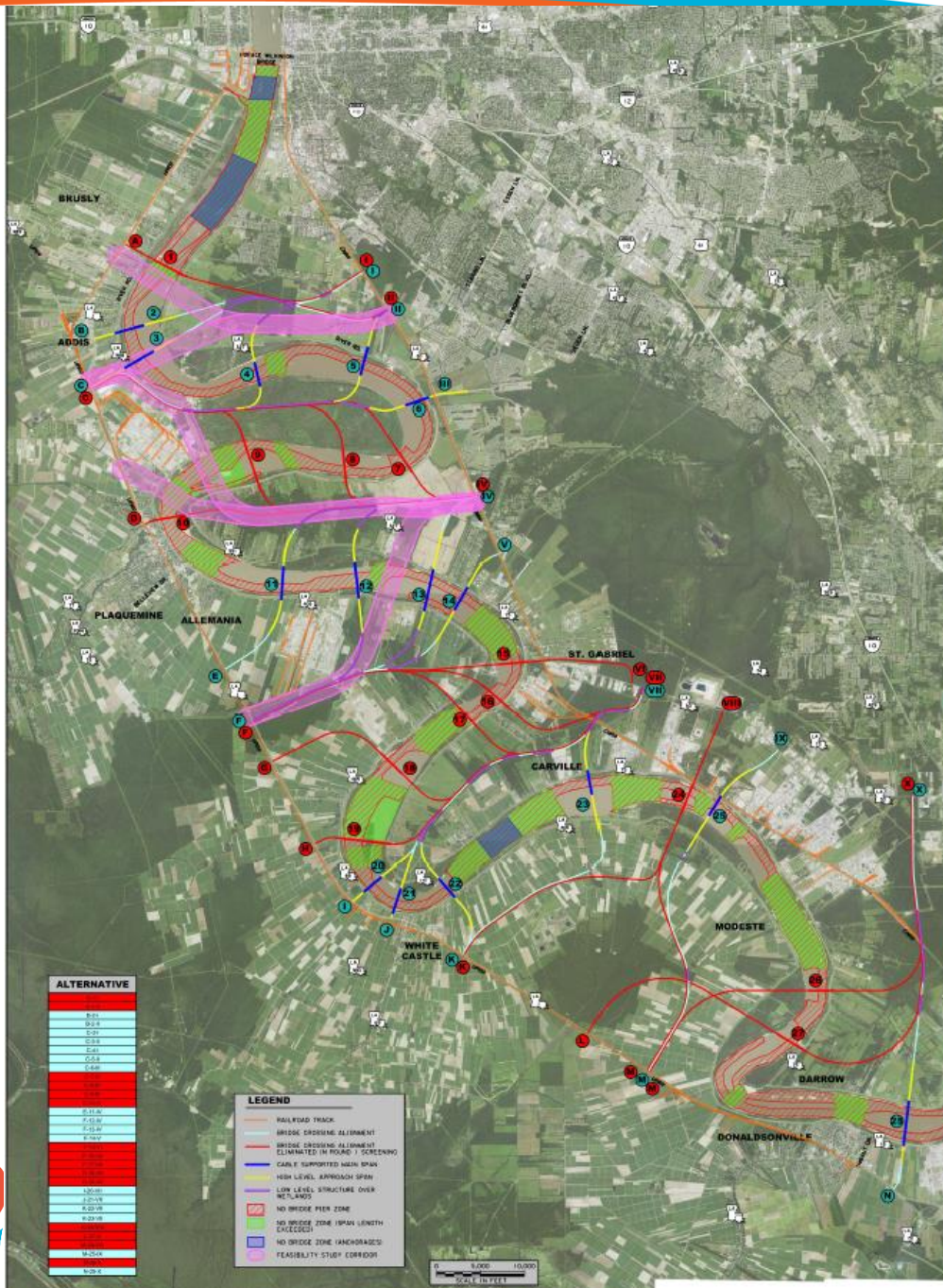
ALTERNATIVE	
	L-27-X
	M-24-VIII
	M-25-IX
	M-26-X
	N-28-X

LEGEND	
	RAILROAD TRACK
	BRIDGE CROSSING ALIGNMENT
	BRIDGE CROSSING ALIGNMENT ELIMINATED IN ROUND 1 SCREENING
	CABLE SUPPORTED MAIN SPAN
	HIGH LEVEL APPROACH SPAN
	LOW LEVEL STRUCTURE OVER WETLANDS
	NO BRIDGE PIER ZONE
	NO BRIDGE ZONE (SPAN LENGTH EXCEEDED)
	NO BRIDGE ZONE (ANCHORAGES)

Round 1 Screening Summary

15 Alts
Eliminated

17 Remain
for Round 2



LEGEND

- RAILROAD TRACK
- BRIDGE CROSSING ALIGNMENT
- BRIDGE CROSSING ALIGNMENT ELIMINATED IN ROUND 1 SCREENING
- CABLE SUPPORTED MAIN SPAN
- HIGH LEVEL APPROACH SPAN
- LOW LEVEL STRUCTURE OVER WETLANDS
- NO BRIDGE PIER ZONE
- NO BRIDGE ZONE (SPAN LENGTH EXCEEDED)
- NO BRIDGE ZONE (ANCHORAGES)
- FEASIBILITY STUDY CORRIDOR

MRB SOUTH GBR: LA 1 TO LA 30 CONNECTOR (SPN H.013284)
ROUND 1 CORRIDOR ALTERNATIVE SCREENING TABLE

ALTERNATIVE	BRIDGE CONSTRAINTS	MRB TRAVEL DEMAND		I-10 CONGESTION RELIEF	LA 1 CONGESTION RELIEF	KNOWN SECTION 4(f) RESOURCE	PROTECTED SPECIES CRITICAL HABITAT
		ADT	VHT	VHT	VHT		
A-1-I	UN	M	M	H	L	No	No
A-1-II ^{FS-1}	UN	M	M	M	L	No	No
B-2-I	A	M	M	H	M	No	No
B-2-II	A	M	M	H	M	No	No
C-3-I	A	H	M	H	M	No	No
C-3-II ^{FS-2}	A	H	H	H	M	No	No
C-4-I	A	M	H	H	H	No	No
C-5-II	A	H	H	H	H	No	No
C-6-III	A	H	H	H	H	No	No
C-7-IV	A	L	H	M	M	No	No
C-8-IV	A	L	H	M	M	No	No
C-9-IV ^{FS-4}	UN	L	H	M	M	No	No
D-10-IV ^{FS-5}	A	H	M	M	H	Yes	No
E-11-IV	A	H	M	M	H	No	No
F-12-IV ^{FS-3}	A	M	M	M	H	No	No
F-13-IV ^{FS-3}	A	H	H	M	H	No	No
F-14-V	A	M	M	M	H	No	No
F-15-VI	A	L	M	M	M	No	No
F-16-VII	A	L	M	M	M	No	No
F-17-VII	A	L	L	L	M	No	No
G-18-VII	A	L	M	L	M	No	No
H-19-VII	UN	M	L	M	L	No	No
I-20-VII	A	M	L	M	M	No	No
J-21-VII	A	M	L	M	M	No	No
K-22-VII	A	M	L	M	M	No	No
K-23-VII	A	M	L	M	M	No	No
K-24-VIII	A	M	L	L	L	Yes	No
L-27-X	A	L	L	L	L	No	No
M-24-VIII	A	M	M	L	L	Yes	No
M-25-IX	A	M	M	L	L	No	No
M-26-X	A	M	M	L	L	Yes	No
N-28-X	A	H	M	L	M	No	No

TABLE NOTES:

FS-0 Represents one of the five corridors from the Feasibility Study

Highlights: Green = most benefit, Yellow = moderate benefit, Red = least benefit

Blue cross-hatched alternatives screened out due to unacceptable bridge span length

Pink cross-hatched alternatives screened out due to low ADT

Purple cross-hatched alternatives screened out due to potential Section 4(f) resource impact

Bridge Constraints

UN= Unacceptable - main, side or approach span length exceeds reasonable lengths (up to: 2,000 ft main span, 1,200 ft main side span, 500 ft approach span) or impacts the levee system

A = Acceptable - span lengths are reasonable with no impacts to the levee system

MRB Travel Demand (all MRB, I-10, LA 1, and LA 30 are Year 2042 traffic):

Average Daily Traffic (ADT)	Vehicle Hours of Travel (VHT)
Low (L) = 24,200-29,900	("-" is a reduction):
Moderate (M) = 30,000-35,400	L = <-0.90%
High (H) = >35,500	M = -0.91% to -1.19%
	H = -1.20% to -1.74%

I-10 Congestion Relief

("-" is a reduction):
VHT
L = -1.52% to -3.39%
M = -3.40% to -4.99%
H = >-5.00%

LA 1 Congestion Relief

("-" is a reduction):
VHT
L = -4.60% to -7.89%
M = -7.90% to -12.04%
H = >-12.05%

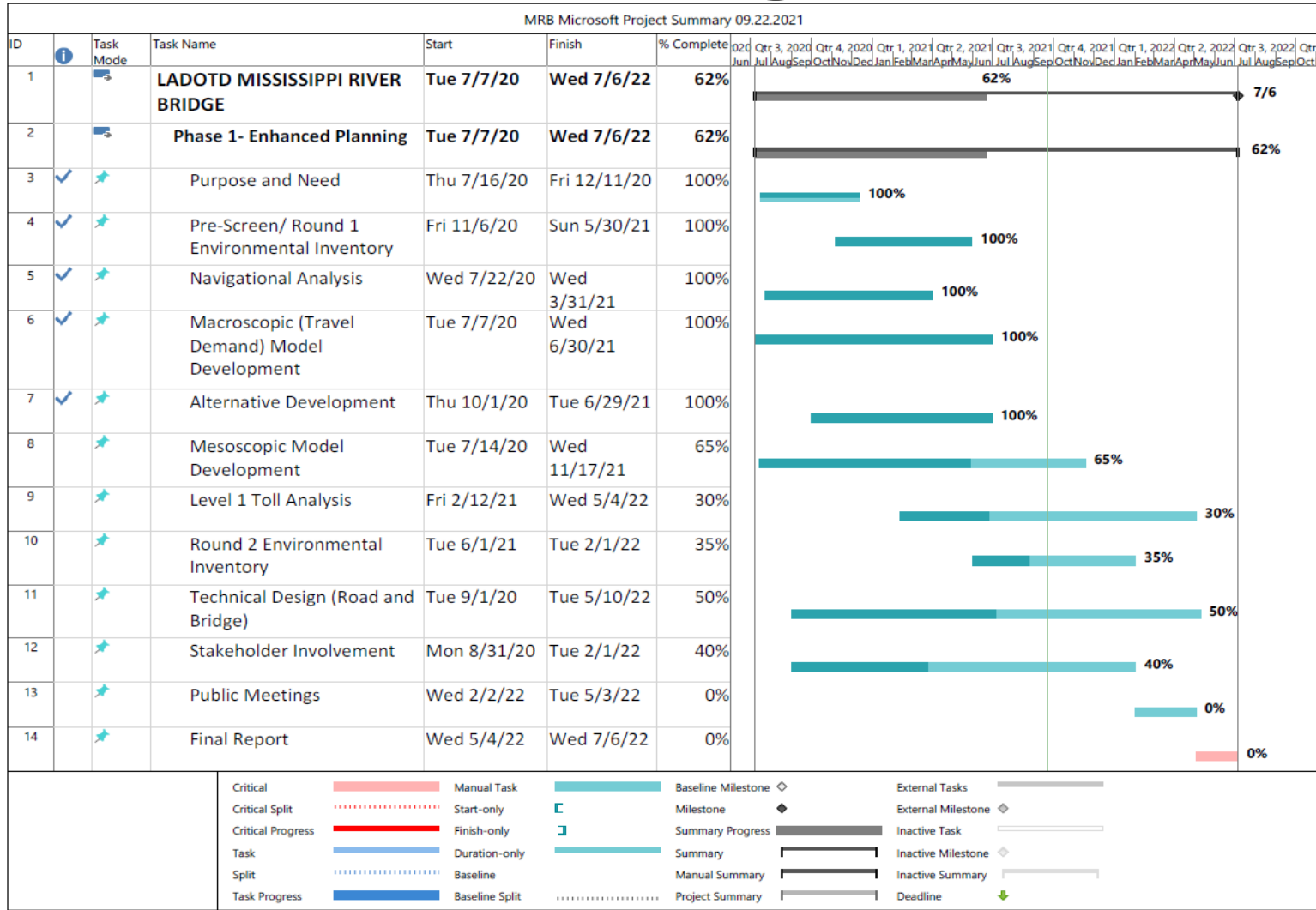
Known Section 4(f) Resources and Protected Species Critical Habitat

No = No Impact Known
Yes = Potentially Impacted

Public Involvement

- Agency and Stakeholder Meetings
 - Iberville Parish and West Baton Rouge Parish
 - CRISIS Presentation
 - East Iberville Community Advisory Panel
 - On-Going as Needed
- Public Meetings
 - Spring 2022
- Project Informational Website
 - <https://www.mrbsouth.com>

Overall Progress (Part I)



➤ 62% Work Completed

➤ 58% Time Elapsed

➤ 45% Funds Dispersed

Looking Ahead...

For 4th Quarter CARB-D Meeting:

- Continue working on Round 2 Screening Criteria
 - Ongoing Modeling and Analyses
- Preparation for Public Meetings

Thank You!