

**Conceptual Planning Study**  
**US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard**  
**RPC Task A-1.18**

FOR  
The Regional Planning Commission for Jefferson, Orleans,  
Plaquemines, St. Bernard, St. Charles, St. John the Baptist,  
St. Tammany and Tangipahoa Parishes



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## **1 EXECUTIVE SUMMARY**

The expansion of Ochsner Medical Center on Jefferson Highway is anticipated to bring approximately 5,000 additional visitors and employees to the area each day. This increase in traffic along the Jefferson Highway corridor is anticipated to exacerbate the existing congestion issues experienced at the Causeway Boulevard – Jefferson Highway intersection. Traffic is expected to increase significantly from Causeway Boulevard southbound to Jefferson Highway eastbound during morning peak hours and from Jefferson Highway westbound to Causeway Boulevard northbound during evening peak hours. The existing J-turn configuration facilitates the movement of traffic from Jefferson Highway eastbound to Causeway Boulevard northbound.

DEI has been tasked with investigating the feasibility of various options to achieve two (2) primary project goals:

1. Improve traffic capacity and operational efficiency at the Causeway Boulevard – Jefferson Highway intersection, including consideration of connecting traffic from River Road
2. Improve access to Ochsner Medical Center, including its new facilities and future developments

As part of the evaluation, the following seven (7) concepts were preliminarily identified as potential options that should be investigated:

1. Expansion of the existing J-turn to appropriately accommodate two-way traffic
2. Modification of the striping, signage and phasing of the existing J-turn ramp such that it is one-way southbound in combination with a new northbound overpass of Jefferson Highway
3. Modification of the striping, signage and phasing of the existing at-grade intersection of the J-turn exit and Causeway Boulevard northbound to give greater favor to the westbound to northbound movement (making this the primary direction and having the J-turn eastbound to northbound movement yield)
4. Demolition of the existing J-turn and replacement with an improved facility or combination of the other options noted herein
5. Installation of a structure to move traffic from south to east directly (small fly over ramp)
6. Consideration of a southbound overpass of Jefferson Highway that would connect at-grade and then use surface improvements to transfer traffic from this point to an intersection at Jefferson Highway
7. Other alternatives developed in consultation with the PMC, including improved transit access

Variations of each of the seven (7) concepts preliminarily identified as potential options were developed. Seven (7) primary criteria were used to identify the most feasible, economic, and effective potential options:

1. Long-term impact to surrounding businesses and neighborhoods
2. Environmental impact
3. Short-term impact of construction
4. Improvement to southbound to eastbound movement (morning peak hours)
5. Improvement to westbound to northbound movement (evening peak hours)
6. Estimated probable construction cost
7. Anticipated construction time to completion

A baseline was created using an elimination method, which negated any option that severely underperformed according to one (1) or more evaluation criteria. Potential options that failed to meet or exceed the baseline were not included in this report. Fifteen (15) potential options were deemed promising enough to merit additional investigation. In consultation with the Project Management Committee (PMC), which consists of representatives from the Regional Planning Commission, Jefferson Parish, and LADOTD, five (5) of these options were selected for further refinement and review:

- 2A: reversal of the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new northbound overpass of Jefferson Highway, and creation of a designated exit lane onto Jefferson Highway
- 2B: reversal of the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new northbound overpass of Jefferson Highway, and utilization of a traffic signal at the exit onto Jefferson Highway
- 4A: construction of a Jefferson Highway overpass of Causeway Boulevard
- 7A: expansion of the existing J-turn to accommodate two-way traffic, construction of a new northbound overpass of Jefferson Highway, and creation of designated entrance and exit lanes at Jefferson Highway
- 7B: expansion of the existing J-turn to accommodate two-way traffic, construction of a new northbound overpass of Jefferson Highway, and utilization of a traffic signal at the exit onto Jefferson Highway

The five (5) options were ranked from one (1) to five (5) (most preferable to least preferable) according to each evaluation criterion. The rankings are displayed in Table 1 below.

**Table 1: Ranking of Options According to Evaluation Criteria**

Evaluation Criterion	Ranking				
	1	2	3	4	5
Long-term impact to surrounding businesses and neighborhoods	2B	7B	4A	2A	7A
Environmental impact	2B	2A	7B	7A	4A
Short-term impact of construction	2B	2A	7B	7A	4A
Improvement to southbound to eastbound movement (morning peak hours)	4A	7A	7B	2A	2B
Improvement to westbound to eastbound movement (evening peak hours)	4A	7A	7B	2A	2B
Estimated probable construction cost	2B	2A	7B	7A	4A
Anticipated construction time to completion	2B	2A	7B	7A	4A

Each of the five (5) options will improve both traffic flow through the Causeway Boulevard – Jefferson Highway intersection and access to Ochsner Medical Center; however, some options satisfy certain criteria better than others:

- 2B warrants consideration as a potential option if the following criteria are considered important: minimal impact on surrounding businesses and neighborhoods; minimal environmental impact; low estimated probable construction cost; and short anticipated construction time to completion.
- 4A warrants consideration as a potential option if the most effective solution to traffic congestion is desired, regardless of its performance according to other evaluation criteria.
- 7B warrants consideration as a potential option if a balance of cost and effectiveness is desired.

Ochsner Medical Center is continually expanding and the construction of many of its new facilities is concluding; however, subsequent additions are expected to further increase the average daily traffic (ADT) at the Causeway Boulevard – Jefferson Highway intersection. Construction of 7B in two (2) phases is a potential option to be considered that would address short-term needs with Phase One (1) while maintaining the opportunity to complete additional improvements at a later date with Phase Two (2):

1. Phase One (1): reversal of the direction of the existing J-turn from one-way northbound to one-way southbound in conjunction with construction of a new northbound overpass of Jefferson Highway
  - Provides a potential solution to both morning peak and evening peak traffic congestion

- Least expected impact to the surrounding area of each of the five (5) options
  - Lowest estimated probable construction cost of each of the five (5) options
  - Shortest anticipated construction time to completion of each of the five (5) options
2. Phase Two (2): expansion of the existing J-turn
- Restores the current J-turn function to allow eastbound to northbound movement
  - Minimal additional impact to the surrounding area
  - Completion of both phases improves all major directions of traffic movement

Phased construction of Option 7B provides a balance of viability, economy, and effectiveness and has the potential to satisfy both short-term and long-term traffic congestion goals at the Causeway Boulevard – Jefferson Highway intersection.

## 2 INTRODUCTION

The expansion of Ochsner Medical Center on Jefferson Highway is anticipated to bring approximately 5,000 additional visitors and employees to the area each day. This increase in traffic along the Jefferson Highway corridor is anticipated to exacerbate the existing congestion issues experienced at the Causeway Boulevard – Jefferson Highway intersection. Figures 1 and 2 show the general location and an aerial of the existing intersection, respectively.

Traffic is expected to increase significantly from Causeway Boulevard southbound to Jefferson Highway eastbound during morning peak hours and from Jefferson Highway westbound to Causeway Boulevard northbound during evening peak hours. The existing J-turn configuration facilitates the movement of traffic from Jefferson Highway eastbound to Causeway Boulevard northbound. DEI has been tasked with investigating the feasibility of various options to achieve two (2) primary project goals:

1. Improve traffic capacity and operational efficiency at the Causeway Boulevard – Jefferson Highway intersection, including consideration of connecting traffic from River Road
2. Improve access to Ochsner Medical Center, including its new facilities and future developments

As part of the evaluation the following seven (7) concepts were preliminarily identified as potential options that should be investigated:

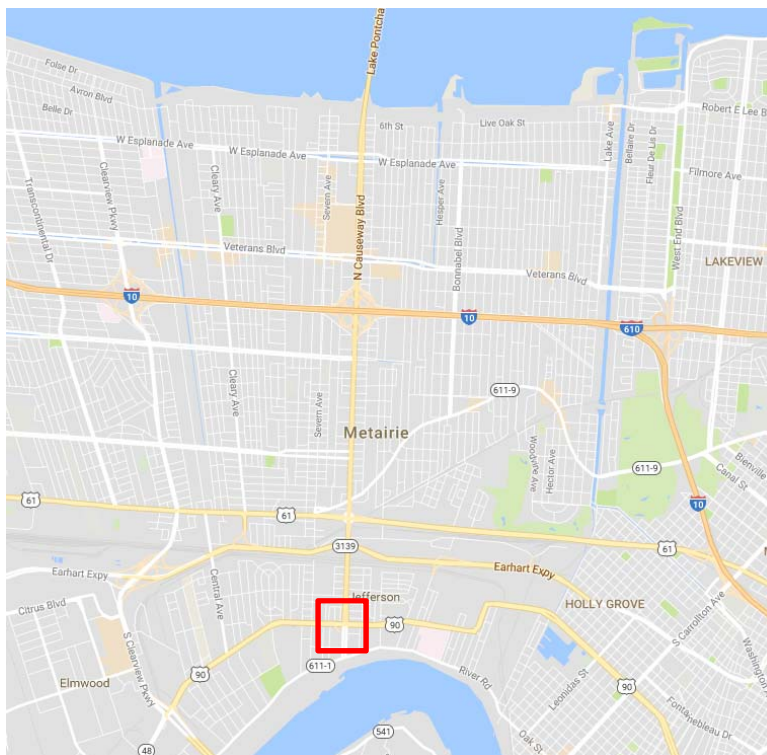
1. Expansion of the existing J-turn to appropriately accommodate two-way traffic
2. Modification of the striping, signage and phasing of the existing J-turn ramp such that it is one-way southbound in combination with a new northbound overpass of Jefferson Highway
3. Modification of the striping, signage and phasing of the existing at-grade intersection of the J-turn exit and Causeway Boulevard northbound to give greater favor to the westbound to northbound movement (making this the primary direction and having the J-turn eastbound to northbound movement yield)
4. Demolition of the existing J-turn and replacement with an improved facility or combination of the other options noted herein
5. Installation of a structure to move traffic from south to east directly (small fly over ramp)
6. Consideration of a southbound overpass of Jefferson Highway that would connect at-grade and then use surface improvements to transfer traffic from this point to an intersection at Jefferson Highway
7. Other alternatives as developed in consultation with the PMC, including improved transit access

Variations of each of the seven (7) concepts preliminarily identified as potential options were developed. A baseline was created using an elimination method, which negated any option that severely underperformed according to one (1) or more evaluation criteria (the evaluation criteria is presented in Section 3). Potential options that failed to meet or exceed the baseline were not included in this report. Fifteen (15) potential options were deemed promising enough to merit additional investigation. In consultation with the Project Management Committee (PMC), which consists of representatives from the Regional Planning Commission, Jefferson Parish, and LADOTD, five (5) of these options were selected for further refinement and review:

- 2A: reversal of the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new northbound overpass of Jefferson Highway, and creation of a designated exit lane onto Jefferson Highway
- 2B: reversal of the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new northbound overpass of Jefferson Highway, and utilization of a traffic signal at the exit onto Jefferson Highway
- 4A: construction of a Jefferson Highway overpass of Causeway Boulevard
- 7A: expansion of the existing J-turn to accommodate two-way traffic, construction of a new northbound overpass of Jefferson Highway, and creation of designated entrance and exit lanes at Jefferson Highway
- 7B: expansion of the existing J-turn to accommodate two-way traffic, construction of a new northbound overpass of Jefferson Highway, and utilization of a traffic signal at the exit onto Jefferson Highway

An environmental review and an estimate of the probable construction cost was developed for each of the five (5) options, which were evaluated again considering this additional information. The results of the final evaluation are provided in Section 11.





**Figure 1: General Location of Causeway Boulevard – Jefferson Highway Intersection**



**Figure 2: Aerial of Causeway Boulevard – Jefferson Highway Intersection**

### **3 EVALUATION CRITERIA**

The following seven (7) primary criteria were used to identify the most feasible, economic, and effective potential options:

1. Long-term impact to surrounding businesses and neighborhoods
2. Environmental impact
3. Short-term impact of construction
4. Improvement to southbound to eastbound movement (morning peak hours)
5. Improvement to westbound to northbound movement (afternoon peak hours)
6. Estimated probable construction cost
7. Anticipated construction time to completion

The following sections provide explanations and details regarding each of the evaluation criterion.

#### **3.1 Long-term Impact to Surrounding Businesses and Neighborhoods**

A potential option's long-term impact to surrounding businesses and neighborhoods was anticipated by considering questions such as:

- Will nearby businesses be more difficult to access than previously?
- Will increased difficulty of access, if any, deter potential customers/clients from purchasing goods or using the services of these businesses?
- Will any businesses be forced to close or relocate?
- Will nearby neighborhoods be more difficult to access than previously?
- Will increased non-local traffic, if any, cause disruptions or disturbances for local residents?

#### **3.2 Environmental Impact**

A potential option's environmental impact was anticipated by considering questions such as:

- Are any Native American tribal lands located within or near the project site, and if so, how will they be affected by the project?
- Are any wetlands located within or near the project site, and if so, how will they be affected by the project?
- How will community elements such as churches, cemeteries, schools, public facilities, or the water supply be affected by the project?
- Will any Section 4(f) issues be created by the project (i.e. impact to public recreation areas, public parks, wildlife refuges, or historic sites)?



- Are any properties listed on the National Register of Historic Places located within or near the project site, and if so, how will they be affected by the project?
- Are any threatened or endangered species located within or near the project site, and if so, how will they be affected by the project?
- Are any components of the Louisiana Natural and Scenic Rivers System located within or near the project site, and if so, how will they be affected by the project?
- Are any significant trees located within or near the project site, and if so, how will they be affected by the project?
- Are any navigable waterways located within or near the project site, and if so, how will they be affected by the project?
- Are any hazardous materials, underground storage tanks, oil/gas wells, or other materials or facilities of environmental concern located within or near the project site, and if so, how will they be affected by the project?

A Stage 0 environmental review was completed and may be found in Appendix A. All supporting documents for the review may be found in Appendix B.

### **3.3 Short-term Impact of Construction**

The short-term impact of a potential option's construction was anticipated by considering questions such as:

- Will existing traffic congestion be significantly exasperated during construction?
- Will Jefferson Highway and/or Causeway Boulevard need to be closed at any time to accommodate construction?
- Will temporary detour routes be needed, and if so, will these routes cause disruptions or disturbances to local residents?
- Will the construction and accompanying noise significantly disturb local residents?
- Will the construction site create increased difficulty of access for nearby businesses, and if so, will this deter potential customers/clients from purchasing goods or using the services of these businesses?

### **3.4 Improvement to Southbound to Eastbound Movement (Morning Peak Hours)**

The improvement to southbound to eastbound movement created by each potential option, if any, was anticipated by considering questions such as:

- What are the current traffic conditions for this travel direction?

- Does the design concept improve movement in this travel direction, and if so, to what extent?
- Do the improvements to this travel direction, if any, come at the expense of any other travel directions?
- Do the improvements to this travel direction, if any, have the capacity to satisfy future increases in traffic volume, or do they only improve short-term movement?

### **3.5 Improvement to Westbound to Northbound Movement (Afternoon Peak Hours)**

The improvement of westbound to northbound movement created by each potential option, if any, was anticipated by considering questions such as:

- What are the current traffic conditions for this travel direction?
- Does the design concept improve movement in this travel direction, and if so, to what extent?
- Do the improvements to this travel direction, if any, come at the expense of any other travel directions?
- Do the improvements to this travel direction, if any, have the capacity to satisfy future increases in traffic volume, or do they only improve short-term movement?

### **3.6 Estimated Probable Construction Cost**

The probable construction costs for each potential option were estimated by considering questions such as:

- What is the extent of construction (i.e. minor roadwork vs. major bridge construction)?
- Is there adequate space available for construction, or must property acquisition and/or demolition of existing structures occur first?
- How many bridge spans, if any, does the option feature?
- How many foundations, if any, are needed?
- What type of materials will be used?

The probable construction costs of the five (5) options selected in consultation with the PMC for further refinement and review were estimated by determining expected quantities and bid prices for applicable project items. The applicable project items for each option were identified using the Louisiana Standard Specifications for Roads and Bridges (2016). The estimated bid prices for each project item were determined using past experience and past letting and bid information from both state (LADOTD) and local (Jefferson Parish) projects.

### **3.7 Anticipated Construction Time to Completion**

The construction time to completion for each potential option was anticipated by considering questions such as:

- How much demolition, if any, of existing structures or roadways must be performed before construction can begin?
- How much site work, if any, must be performed before construction can begin?
- What obstacles or obstructions, if any, present themselves in the vicinity of the construction site?
- Will the option be built in separate phases, or all at once?
- Will the construction interfere with traffic on adjacent roadways, and if so, will this necessitate restricted work times (i.e. nighttime construction)?
- How many foundations/piles are needed, if any?
- If foundations/piles are needed, what is the expected rate that piles may be driven?
- Will most of the structural members, if any, be prefabricated/precast, or will most structural members be constructed on the site?

## **4 OPTION 1: EXPANSION OF THE EXISTING J-TURN TO APPROPRIATELY ACCOMMODATE TWO-WAY TRAFFIC**

### **4.1 Design Concept**

The expansion of the existing J-turn to accommodate two-way traffic eliminates the signal at the Causeway Boulevard – Jefferson Highway intersection. The J-turn is bounded to the west by adjacent businesses and houses, to the east by Causeway Boulevard northbound, and to the south by Carrollton Way. To best utilize the available space, construction between the J-turn and Causeway Boulevard northbound as well as between the J-turn and the adjacent property, Popeyes fast food restaurant (parcel #9930012075), is recommended. Limited construction may be possible by: demolishing portions of the existing barriers of the J-turn; tying in new column bents to the existing column bents; and tying the new slab into the existing slab. Detailed structural analysis of the J-turn will be required to determine if reusing the existing portions of the ramp in conjunction with new construction is possible or if portions of the J-turn (or the entire J-turn) must be removed and replaced with new construction to achieve the design. The extensive shoulders of the J-turn make it possible to provide the additional traffic direction with limited widening of the roadway by implementing traffic lanes that are narrower than the existing traffic lane. The ramp entrances and exits are located as follows:

- Entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Entrance from Jefferson Highway eastbound: same as the existing J-turn entrance from Jefferson Highway eastbound
- Exit onto Jefferson Highway eastbound: adjacent to the existing J-turn entrance from Jefferson Highway eastbound
- Exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound

Designated entrance and exit lanes are provided, requiring Jefferson Highway eastbound through traffic to use the left two (2) lanes near the J-turn. Traffic approaching the ramp in the right lane of Jefferson Highway eastbound is required to enter the ramp entrance towards Causeway Boulevard northbound. Causeway Boulevard southbound to Jefferson Highway eastbound traffic will exit the ramp into its own lane of traffic; this lane will become the third (3<sup>rd</sup>) lane of Jefferson Highway eastbound. The close proximity of the Popeyes fast food restaurant entrance/exit to the ramp exit onto Jefferson Highway requires the closure of the entrance/exit, which severely inhibits the commercial viability of the property. As a result, acquisition of the property is necessary to provide adequate space for the ramp exit onto Jefferson Highway.

The median is extended at the intersection of Causeway Boulevard southbound and Jefferson Highway, similar to the intersection of Causeway Boulevard northbound and Jefferson Highway to prevent Causeway Boulevard southbound traffic from crossing the intersection. The median at the intersection of Maine Street and Jefferson Highway is also extended. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter ramp, exit onto Jefferson Highway eastbound
2. Enter ramp, exit onto Jefferson Highway eastbound, turn right onto Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 3.

## **4.2 Design Advantages**

The expansion of the existing J-turn to accommodate two-way traffic will significantly improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. The removal of the traffic signal at the Causeway Boulevard – Jefferson Highway intersection will eliminate the interruption of Jefferson Highway through traffic. By retrofitting the J-turn, construction costs will be reduced in relation to those associated with a full demolition and replacement of the J-turn.

## **4.3 Design Disadvantages**

The expansion of the existing J-turn to accommodate two-way traffic fails to address Jefferson Highway westbound to Causeway Boulevard northbound traffic congestion. The close proximity of the ramp exit onto Jefferson Highway to the Popeyes fast food restaurant requires acquisition of the property. The designated entrance and exit lanes of the ramp funnels Jefferson Highway eastbound through traffic into the left two (2) lanes near the entrance/exit of the ramp, potentially increasing congestion at this location. In addition, the J-turn exit prevents Jefferson Highway eastbound traffic from turning right onto Causeway Boulevard southbound.

#### **4.4 Evaluation of Design**

Although Option 1 improves morning peak traffic congestion, it fails to address afternoon peak traffic congestion. Because other options with comparable estimated probable construction costs, such as Options 2A, 2B, 2C, 2D, and 2E similarly improve southbound to eastbound movement while also improving westbound to northbound movement, Option 1 was not selected for further review.





**Figure 3: Option 1 Design Concept**

## **5 OPTION 2: MODIFICATION OF THE STRIPING, SIGNAGE AND PHASING OF THE EXISTING J-TURN RAMP SUCH THAT IT IS ONE-WAY SOUTHBOUND IN COMBINATION WITH A NEW NORTHBOUND OVERPASS OF JEFFERSON HIGHWAY**

Reversing the direction of the existing J-turn from one-way northbound to one-way southbound in conjunction with construction of a new overpass of Jefferson Highway allows free movement of traffic from Causeway Boulevard southbound to Jefferson Highway eastbound and Jefferson Highway westbound to Causeway Boulevard northbound without impeding Jefferson Highway through traffic. By repurposing the existing J-turn, construction time and costs as well as disruptions due to construction are reduced. Option 2 consists of the following five (5) variations: Option 2A features a designated exit lane onto Jefferson Highway; Option 2B features a traffic signal at the exit onto Jefferson Highway; Option 2C features a designated exit lane onto Jefferson Highway and an exit onto Causeway Boulevard southbound; Option 2D features a traffic signal at the exit onto Jefferson Highway and an exit onto Causeway Boulevard southbound; and Option 2E features a designated exit lane onto Jefferson Highway and an entrance to the northbound overpass at Maine Street.

### **5.1 Option 2A: Designated Exit Lane onto Jefferson Highway**

Option 2A entails reversing the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new overpass of Jefferson Highway, and creation of a designated exit lane onto Jefferson Highway.

#### **5.1.1 Design Concept**

The signal at the Causeway Boulevard – Jefferson Highway intersection is eliminated. To best utilize available space, it is recommended to construct the overpass to the east of the J-turn. The extensive shoulders of the J-turn make it possible to achieve a wider overpass traffic lane on the portion adjacent to the J-turn with less new construction by: demolishing portions of the existing eastern J-turn barriers; tying in new column bents to the existing column bents; tying the new slab into the existing slab; narrowing the J-turn traffic lane; and supporting portions of the overpass western shoulder with existing J-turn structural elements. Detailed structural analysis of the J-turn will be required to determine if reusing the existing portions of the J-turn in conjunction with new construction is possible or if the new overpass must be stand-alone construction. To achieve the required landing distance for the entrance of the overpass, Carrollton Way must be closed off between Causeway Boulevard northbound and Causeway Boulevard southbound. To accommodate local traffic, a new cross street between Jefferson Highway eastbound and Carrollton Way is constructed underneath the J-turn and overpass. The ramp entrances and exits are located as follows:



- J-turn entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Overpass entrance from Causeway Boulevard northbound: between Arlington Avenue and Carrollton Way and between Causeway Boulevard northbound and Causeway Boulevard southbound
- J-turn exit onto Jefferson Highway eastbound: adjacent to the existing J-turn entrance from Jefferson Highway eastbound
- Overpass exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound

To allow Causeway Boulevard southbound to Jefferson Highway eastbound traffic to continuously exit the J-turn, a designated exit lane onto Jefferson Highway is provided. Jefferson Highway eastbound through traffic is required to use the left two (2) traffic lanes; traffic approaching the ramp in the right lane of Jefferson Highway eastbound is required to merge into one of the left two (2) lanes. Causeway Boulevard southbound to Jefferson Highway eastbound traffic will exit the J-turn into its own lane of traffic; this lane will become the third (3<sup>rd</sup>) lane of Jefferson Highway eastbound. The close proximity of the Popeyes fast food restaurant (parcel #9930012075) entrance/exit to the ramp exit onto Jefferson Highway requires the closure of the entrance/exit, which severely inhibits the commercial viability of the property. As a result, acquisition of the property is necessary to provide adequate space for the ramp exit onto Jefferson Highway.

Ochsner Medical Center traffic will have the option of utilizing the overpass via River Road in lieu of crossing Jefferson Highway to access Causeway Boulevard northbound via Jefferson Highway westbound. Detailed traffic analysis of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway will be required to determine if they possess sufficient capacity to service the additional traffic demand. Improvements to this route may be required to achieve full traffic efficiency.

The median is extended at the Causeway Boulevard southbound – Jefferson Highway intersection similarly to the Causeway Boulevard northbound – Jefferson Highway intersection to prevent Causeway Boulevard southbound traffic from crossing the intersection. The median at the intersection of Maine Street and Jefferson Highway is also extended. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound

3. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of the routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter J-turn, exit onto Jefferson Highway eastbound
2. Enter J-turn, exit onto Jefferson Highway eastbound, turn right onto Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 4.

### **5.1.2 Design Advantages**

Reversing the direction of the existing J-turn in conjunction with construction of a new overpass will significantly improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. Traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center currently results in significant congestion; therefore, the creation of an alternate route from Ochsner Medical Center to Causeway Boulevard northbound will also indirectly improve Jefferson Highway westbound to Causeway Boulevard northbound traffic. The removal of the traffic signal at the Causeway Boulevard – Jefferson Highway intersection will eliminate the interruption of both Jefferson Highway westbound and Jefferson Highway eastbound traffic. By retrofitting the J-turn, construction costs will be reduced in relation to those associated with a full demolition and replacement of the J-turn. Creation of a designated exit lane onto Jefferson Highway prevents traffic from backing up onto the J-turn by allowing southbound to eastbound traffic to continuously exit without interruption from Jefferson Highway through traffic.

### **5.1.3 Design Disadvantages**

Reversing the direction of the existing J-turn in conjunction with construction of a new overpass results in a conflict with an existing roadway. The required landing distance for the entrance of the overpass will cause the ramp to come down to grade south of Carrollton Way, necessitating the closure of Carrollton Way between Causeway Boulevard northbound and Causeway Boulevard southbound. In addition, the close proximity of the ramp exit onto Jefferson Highway to the Popeyes fast food restaurant requires acquisition of the property.

The designated entrance and exit lanes of the ramp funnels Jefferson Highway eastbound through traffic into the left two (2) lanes near the entrance/exit of the ramp, potentially increasing

congestion at this location. The J-turn exit prevents Jefferson Highway eastbound traffic from turning right onto Causeway Boulevard southbound. Eastbound to northbound traffic must use alternate routes such as Shrewsbury Court to River Road to Causeway Boulevard northbound to access the overpass ramp. Access to the overpass will also be limited by the ability of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway to sufficiently service additional traffic demand.

#### **5.1.4 Evaluation of Design**

Option 2A improves both morning and afternoon peak traffic congestion while having limited disadvantages in comparison with other options. Because Option 2A improves both southbound to eastbound and westbound to northbound movement at a comparable or lower estimated probable construction cost to Options 1, 2C, 2D, 2E, 5A, 5B, and 6, Option 2A was selected for further review.

#### **5.1.5 Estimated Probable Construction Cost**

The estimated probable construction cost of Option 2A is \$17,769,636.33 if steel girders are used and \$16,678,936.33 if precast, prestressed concrete girders are used. The estimated probable construction cost does not include professional services, the relocation or replacement of any utilities or drainage, and any wiring or conduits for lighting or traffic signals. The existing J-turn has steel girders; therefore, it is preferable to match the new structure's girders to the existing structure. Although use of different girder types is not recommended, it is permitted. The full estimate of probable construction cost may be found in Appendix C.



**Figure 4: Option 2A Design Concept**

## **5.2 Option 2B: Traffic Signal at the Exit onto Jefferson Highway**

Option 2B entails reversing the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new overpass of Jefferson Highway, and utilization of a traffic signal at the exit onto Jefferson Highway.

### **5.2.1 Design Concept**

The signal at the Causeway Boulevard – Jefferson Highway intersection is eliminated. To best utilize available space, it is recommended to construct the overpass to the east of the J-turn. The extensive shoulders of the J-turn make it possible to achieve a wider overpass traffic lane on the portion adjacent to the J-turn with less new construction by: demolishing portions of the existing eastern J-turn barriers; tying in new column bents to the existing column bents; tying the new slab into the existing slab; narrowing the J-turn traffic lane; and supporting portions of the overpass western shoulder with existing J-turn structural elements. Detailed structural analysis of the J-turn will be required to determine if reusing the existing portions of the J-turn in conjunction with new construction is possible or if the new overpass must be stand-alone construction. To achieve the required landing distance for the entrance of the overpass, Carrollton Way must be closed off between Causeway Boulevard northbound and Causeway Boulevard southbound. To accommodate local traffic, a new cross street between Jefferson Highway eastbound and Carrollton Way is constructed underneath the J-turn and overpass. The ramp entrances and exits are located as follows:

- J-turn entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Overpass entrance from Causeway Boulevard northbound: between Arlington Avenue and Carrollton Way and between Causeway Boulevard northbound and Causeway Boulevard southbound
- J-turn exit onto Jefferson Highway eastbound: adjacent to the existing J-turn entrance from Jefferson Highway eastbound
- Overpass exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound

A traffic signal is placed at the J-turn exit onto Jefferson Highway eastbound. By providing a traffic signal instead of a designated exit lane as in Option 2A, acquisition of the adjacent Popeyes fast food restaurant (parcel #9930012075) is not necessary. In addition, Jefferson Highway eastbound traffic is still permitted to make a right turn onto Causeway Boulevard, unlike Option



2A. Jefferson Highway eastbound through traffic may use all three (3) lanes since no designated exit lane is provided.

Ochsner Medical Center traffic will have the option of utilizing the overpass via River Road in lieu of crossing Jefferson Highway to access Causeway Boulevard northbound via Jefferson Highway westbound. Detailed traffic analysis of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway will be required to determine if they possess sufficient capacity to service the additional traffic demand. Improvements to this route may be required to achieve full traffic efficiency.

The median is extended at the Causeway Boulevard southbound – Jefferson Highway intersection similarly to the Causeway Boulevard northbound – Jefferson Highway intersection to prevent Causeway Boulevard southbound traffic from crossing the intersection. The median at the intersection of Maine Street and Jefferson Highway is also extended. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of the routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter J-turn, exit onto Jefferson Highway eastbound
2. Enter J-turn, exit onto Jefferson Highway eastbound, turn right onto Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 5.

### **5.2.2 Design Advantages**

Reversing the direction of the existing J-turn in conjunction with construction of a new overpass will significantly improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. Traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center currently results in significant congestion; therefore, the creation of an alternate route from Ochsner Medical Center to Causeway Boulevard northbound will also indirectly improve Jefferson Highway westbound to Causeway Boulevard northbound traffic. The removal of the traffic signal at the Causeway Boulevard – Jefferson

Highway intersection will eliminate the interruption of both Jefferson Highway westbound and Jefferson Highway eastbound traffic. By retrofitting the J-turn, construction costs will be reduced in relation to those associated with a full demolition and replacement of the J-turn. Utilization of a traffic signal at the J-turn exit onto Jefferson Highway avoids disruption to the adjacent commercial property, making acquisition of the property unnecessary. The signal also allows Jefferson Highway eastbound traffic to maintain the ability to turn right onto Causeway Boulevard southbound.

### **5.2.3 Design Disadvantages**

Reversing the direction of the existing J-turn in conjunction with construction of a new overpass results in a conflict with an existing roadway. The required landing distance for the entrance of the overpass will cause the ramp to come down to grade south of Carrollton Way, necessitating the closure of Carrollton Way between Causeway Boulevard northbound and Causeway Boulevard southbound.

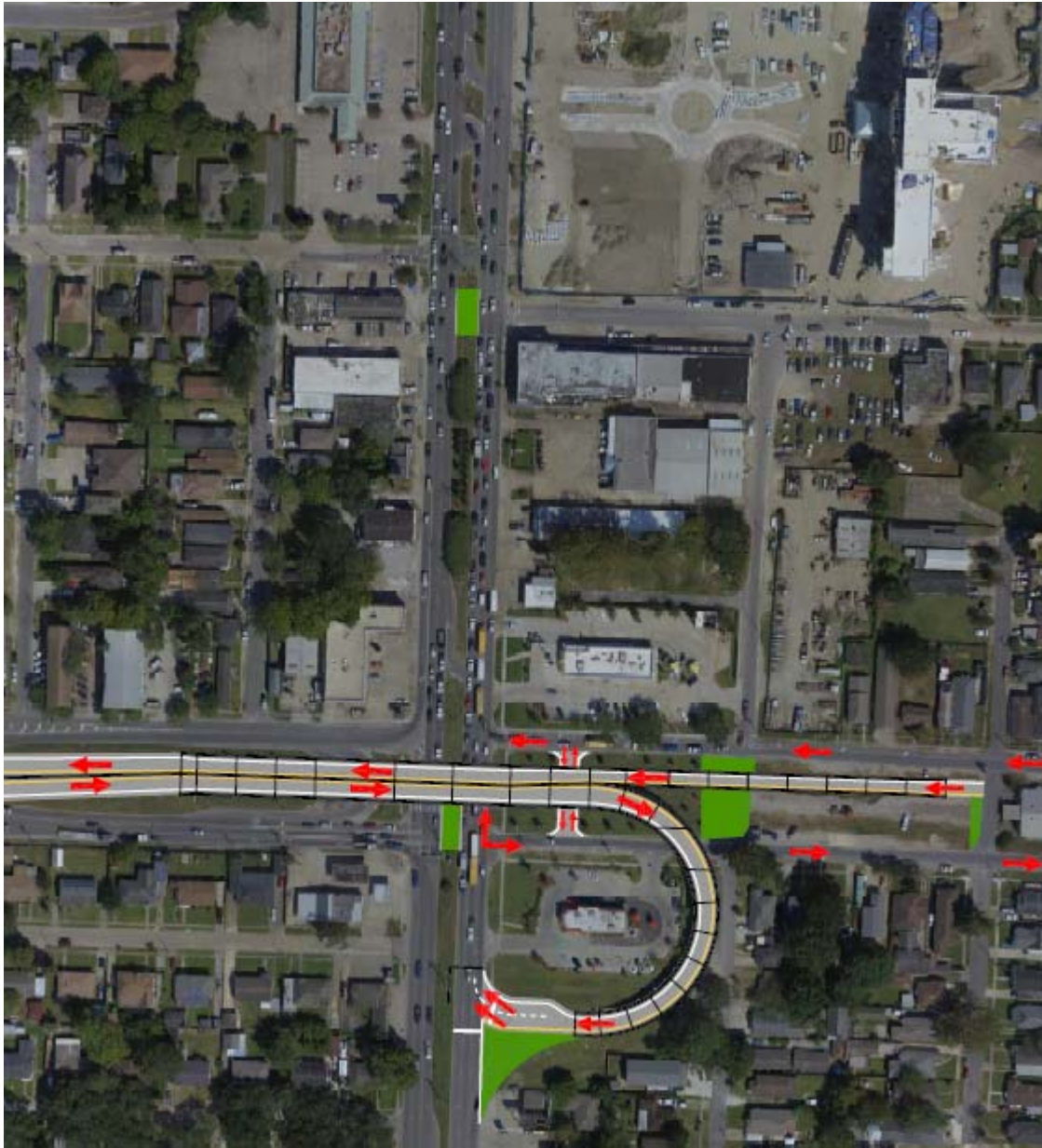
The traffic signal at the J-turn exit onto Jefferson Highway interrupts Jefferson Highway eastbound through traffic when southbound to eastbound movement has a green signal. In addition, the traffic signal could potentially cause traffic to back up onto the ramp when Jefferson Highway eastbound movement has a green signal. Access to the overpass will be limited by the ability of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway to sufficiently service additional traffic demand.

### **5.2.4 Evaluation of Design**

Option 2B improves both morning and afternoon peak traffic congestion while having limited disadvantages in comparison with other options. Because Option 2B improves both southbound to eastbound and westbound to northbound movement at a comparable or lower estimated probable construction cost to Options 1, 2C, 2D, 2E, 5A, 5B, and 6, Option 2B was selected for further review.

### **5.2.5 Estimated Probable Construction Cost**

The estimated probable construction cost of Option 2B is \$13,011,268.17 if steel girders are used and \$11,920,568.17 if precast, prestressed concrete girders are used. The estimated probable construction cost does not include professional services, the relocation or replacement of any utilities or drainage, and any wiring or conduits for lighting or traffic signals. The existing J-turn has steel girders; therefore, it is preferable to match the new structure's girders to the existing structure. Although use of different girder types is not recommended, it is permitted. The full estimate of probable construction cost may be found in Appendix C.



**Figure 5: Option 2B Design Concept**



### **5.3 Option 2C: Designated Exit Lane onto Jefferson Highway and Exit onto Causeway Boulevard Southbound**

Option 2C entails reversing the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new overpass of Jefferson Highway, creation of a designated exit lane onto Jefferson Highway, and creation of an exit onto Causeway Boulevard southbound.

#### **5.3.1 Design Concept**

The signal at the Causeway Boulevard – Jefferson Highway intersection is eliminated. To best utilize available space, it is recommended to construct the overpass to the east of the J-turn. The extensive shoulders of the J-turn make it possible to achieve a wider overpass traffic lane on the portion adjacent to the J-turn with less new construction by: demolishing portions of the existing eastern J-turn barriers; tying in new column bents to the existing column bents; tying the new slab into the existing slab; narrowing the J-turn traffic lane; and supporting portions of the overpass western shoulder with existing J-turn structural elements. Detailed structural analysis of the J-turn will be required to determine if reusing the existing portions of the J-turn in conjunction with new construction is possible or if the new overpass must be stand-alone construction. To achieve the required landing distance for the entrance of the overpass and J-turn exit onto Causeway Boulevard southbound, Carrollton Way must be closed off between Causeway Boulevard northbound and Causeway Boulevard southbound. To accommodate local traffic, a new cross street between Jefferson Highway eastbound and Carrollton Way is constructed underneath the J-turn and overpass. The ramp entrances and exits are located as follows:

- J-turn entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Overpass entrance from Causeway Boulevard northbound: between Arlington Avenue and Carrollton Way and between Causeway Boulevard northbound and Causeway Boulevard southbound
- J-turn exit onto Jefferson Highway eastbound: adjacent to the existing J-turn entrance from Jefferson Highway eastbound
- J-turn exit onto Causeway Boulevard southbound: adjacent to the overpass entrance between Arlington Avenue and Carrollton Way and between Causeway Boulevard northbound and Causeway Boulevard southbound
- Overpass exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound

To allow Causeway Boulevard southbound to Jefferson Highway eastbound traffic to continuously exit the J-turn, a designated exit lane onto Jefferson Highway is provided. Jefferson Highway eastbound through traffic is required to use the left two (2) traffic lanes; traffic approaching the ramp in the right lane of Jefferson Highway eastbound is required to merge into one of the left two (2) lanes. Causeway Boulevard southbound to Jefferson Highway eastbound traffic will exit the J-turn into its own lane of traffic; this lane will become the third (3<sup>rd</sup>) lane of Jefferson Highway eastbound. The close proximity of the Popeyes fast food restaurant (parcel #9930012075) entrance/exit to the ramp exit onto Jefferson Highway requires the closure of the entrance/exit, which severely inhibits the commercial viability of the property. As a result, acquisition of the property is necessary to provide adequate space for the ramp exit onto Jefferson Highway.

Ochsner Medical Center traffic will have the option of utilizing the overpass via River Road in lieu of crossing Jefferson Highway to access Causeway Boulevard northbound via Jefferson Highway westbound. Detailed traffic analysis of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway will be required to determine if they possess sufficient capacity to service the additional traffic demand. Improvements to this route may be required to achieve full traffic efficiency.

The median is extended at the Causeway Boulevard southbound – Jefferson Highway intersection similarly to the Causeway Boulevard northbound – Jefferson Highway intersection to prevent Causeway Boulevard southbound traffic from crossing the intersection. The median at the intersection of Maine Street and Jefferson Highway is also extended. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of the routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter J-turn, exit onto Jefferson Highway eastbound
2. Enter J-turn, exit onto Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 6.

### **5.3.2 Design Advantages**

Reversing the direction of the existing J-turn in conjunction with construction of a new overpass will significantly improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. Traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center currently results in significant congestion; therefore, the creation of an alternate route from Ochsner Medical Center to Causeway Boulevard northbound will also indirectly improve Jefferson Highway westbound to Causeway Boulevard northbound traffic. The removal of the traffic signal at the Causeway Boulevard – Jefferson Highway intersection will eliminate the interruption of both Jefferson Highway westbound and Jefferson Highway eastbound traffic. By retrofitting the J-turn, construction costs will be reduced in relation to those associated with a full demolition and replacement of the J-turn. Creation of a designated exit lane onto Jefferson Highway prevents traffic from backing up onto the J-turn by allowing southbound to eastbound traffic to continuously exit without interruption from Jefferson Highway through traffic. Creation of a ramp exit onto Causeway Boulevard southbound simplifies the process for southbound traffic seeking access to the portion of Causeway Boulevard south of Jefferson Highway by providing a direct route.

### **5.3.3 Design Disadvantages**

Reversing the direction of the existing J-turn in conjunction with construction of a new overpass results in a conflict with an existing roadway. The required landing distance for the entrance of the overpass and J-turn exit onto Causeway Boulevard southbound will cause the ramp to come down to grade south of Carrollton Way, necessitating the closure of Carrollton Way between Causeway Boulevard northbound and Causeway Boulevard southbound. In addition, the close proximity of the ramp exit onto Jefferson Highway to the Popeyes fast food restaurant requires acquisition of the property.

The designated entrance and exit lanes of the ramp funnels Jefferson Highway eastbound through traffic into the left two (2) lanes near the entrance/exit of the ramp, potentially increasing congestion at this location. The J-turn exit prevents Jefferson Highway eastbound traffic from turning right onto Causeway Boulevard southbound. Eastbound to northbound traffic must use alternate routes such as Shrewsbury Court to River Road to Causeway Boulevard northbound to access the overpass ramp. Access to the overpass will also be limited by the ability of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway to sufficiently service additional traffic demand.

### **5.3.4 Evaluation of Design**

Although Option 2C improves both morning and afternoon peak traffic congestion, the additional exit provided onto Causeway Boulevard southbound does not improve traffic movement enough

to justify the additional associated cost. Because other options such as Options 2A, 2B, and 2E similarly improve southbound to eastbound and westbound to northbound movement while also having lower estimated probable construction costs, Option 2C was not selected for further review.



**Figure 6: Option 2C Design Concept**

## **5.4 Option 2D: Traffic Signal at the Exit onto Jefferson Highway and Exit onto Causeway Boulevard Southbound**

Option 2D entails reversing the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new overpass of Jefferson Highway, utilization of a traffic signal at the exit onto Jefferson Highway, and creation of an exit onto Causeway Boulevard southbound.

### **5.4.1 Design Concept**

The signal at the Causeway Boulevard – Jefferson Highway intersection is eliminated. To best utilize available space, it is recommended to construct the overpass to the east of the J-turn. The extensive shoulders of the J-turn make it possible to achieve a wider overpass traffic lane on the portion adjacent to the J-turn with less new construction by: demolishing portions of the existing eastern J-turn barriers; tying in new column bents to the existing column bents; tying the new slab into the existing slab; narrowing the J-turn traffic lane; and supporting portions of the overpass western shoulder with existing J-turn structural elements. Detailed structural analysis of the J-turn will be required to determine if reusing the existing portions of the J-turn in conjunction with new construction is possible or if the new overpass must be stand-alone construction. To achieve the required landing distance for the entrance of the overpass and J-turn exit onto Causeway Boulevard southbound, Carrollton Way must be closed off between Causeway Boulevard northbound and Causeway Boulevard southbound. To accommodate local traffic, a new cross street between Jefferson Highway eastbound and Carrollton Way is constructed underneath the J-turn and overpass. The ramp entrances and exits are located as follows:

- J-turn entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Overpass entrance from Causeway Boulevard northbound: between Arlington Avenue and Carrollton Way and between Causeway Boulevard northbound and Causeway Boulevard southbound
- J-turn exit onto Jefferson Highway eastbound: adjacent to the existing J-turn entrance from Jefferson Highway eastbound
- J-turn exit onto Causeway Boulevard southbound: adjacent to the overpass entrance between Arlington Avenue and Carrollton Way and between Causeway Boulevard northbound and Causeway Boulevard southbound
- Overpass exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound



A traffic signal is placed at the J-turn exit onto Jefferson Highway eastbound. By providing a traffic signal instead of a designated exit lane as in Option 2C, acquisition of the adjacent Popeyes fast food restaurant (parcel #9930012075) is not necessary. In addition, Jefferson Highway eastbound traffic is still permitted to make a right turn onto Causeway Boulevard, unlike Option 2C. Jefferson Highway eastbound through traffic may use all three (3) lanes since no designated exit lane is provided.

Ochsner Medical Center traffic will have the option of utilizing the overpass via River Road in lieu of crossing Jefferson Highway to access Causeway Boulevard northbound via Jefferson Highway westbound. Detailed traffic analysis of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway will be required to determine if they possess sufficient capacity to service the additional traffic demand. Improvements to this route may be required to achieve full traffic efficiency.

The median is extended at the Causeway Boulevard southbound – Jefferson Highway intersection similarly to the Causeway Boulevard northbound – Jefferson Highway intersection to prevent Causeway Boulevard southbound traffic from crossing the intersection. The median at the intersection of Maine Street and Jefferson Highway is also extended. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of the routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter J-turn, exit onto Jefferson Highway eastbound
2. Enter J-turn, exit onto Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 7.

#### **5.4.2 Design Advantages**

Reversing the direction of the existing J-turn in conjunction with construction of a new overpass will significantly improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. Traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center currently results in significant congestion;

therefore, the creation of an alternate route from Ochsner Medical Center to Causeway Boulevard northbound will also indirectly improve Jefferson Highway westbound to Causeway Boulevard northbound traffic. The removal of the traffic signal at the Causeway Boulevard – Jefferson Highway intersection will eliminate the interruption of both Jefferson Highway westbound and Jefferson Highway eastbound traffic. By retrofitting the J-turn, construction costs will be reduced in relation to those associated with a full demolition and replacement of the J-turn. Utilization of a traffic signal at the J-turn exit onto Jefferson Highway avoids disruption to the adjacent commercial property, making acquisition of the property unnecessary. The signal also allows Jefferson Highway eastbound traffic to maintain the ability to turn right onto Causeway Boulevard southbound. Creation of a ramp exit onto Causeway Boulevard southbound simplifies the process for southbound traffic seeking access to the portion of Causeway Boulevard south of Jefferson Highway by providing a direct route.

#### **5.4.3 Design Disadvantages**

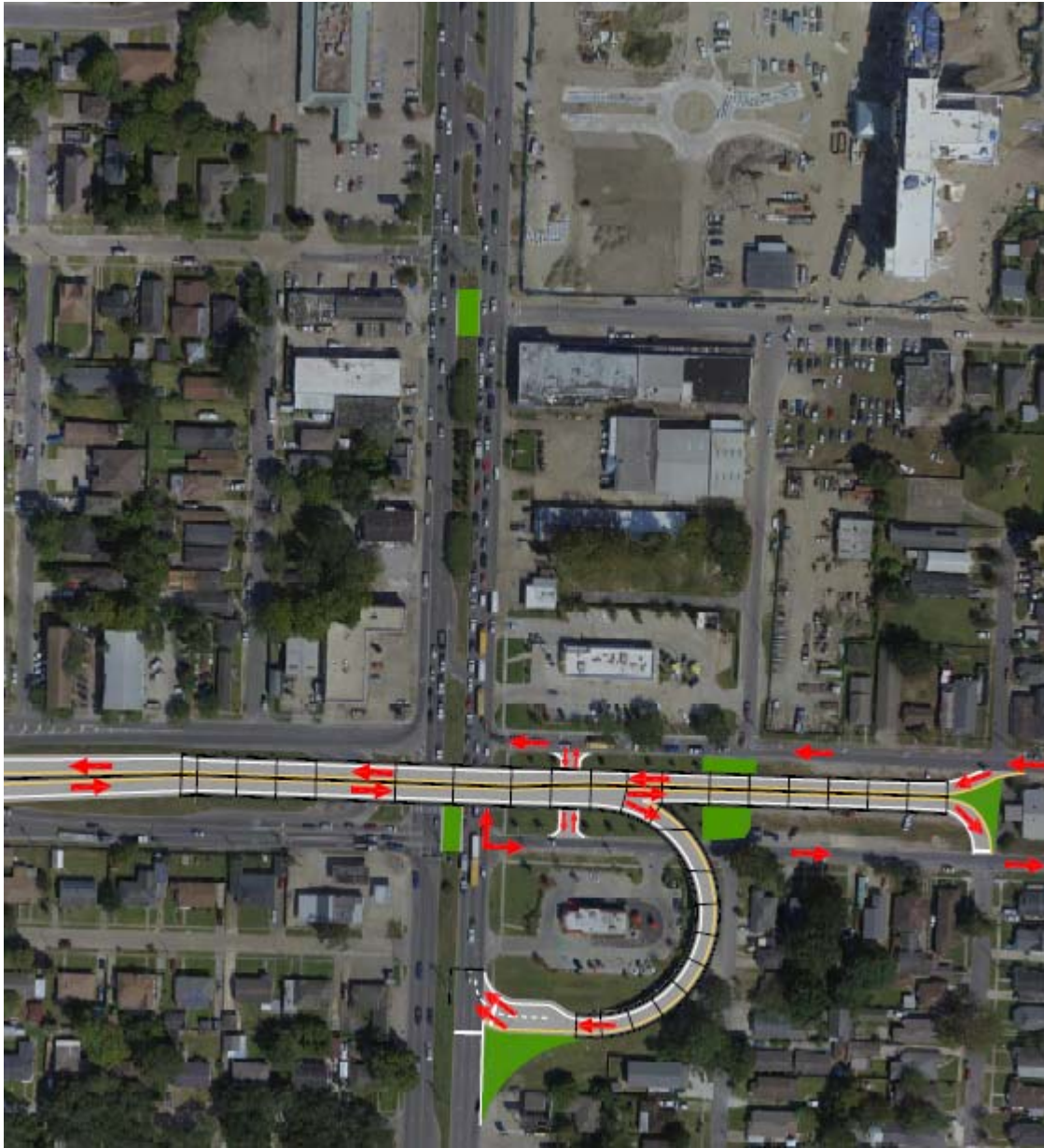
Reversing the direction of the existing J-turn in conjunction with construction of a new overpass results in multiple conflicts with existing roadways and structures. The required landing distance for the entrance of the overpass and J-turn exit onto Causeway Boulevard southbound will cause the ramp to come down to grade south of Carrollton Way, necessitating the closure of Carrollton Way between Causeway Boulevard northbound and Causeway Boulevard southbound.

The traffic signal at the J-turn exit onto Jefferson Highway interrupts Jefferson Highway eastbound through traffic when southbound to eastbound movement has a green signal. In addition, the traffic signal could potentially cause traffic to back up onto the ramp when Jefferson Highway eastbound movement has a green signal, which could also potentially prevent southbound traffic from accessing the ramp exit onto Causeway Boulevard southbound. Access to the overpass will be limited by the ability of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway to sufficiently service additional traffic demand.

#### **5.4.4 Evaluation of Design**

Although Option 2D improves both morning and afternoon peak traffic congestion, the additional exit provided onto Causeway Boulevard southbound does not improve traffic movement enough to justify the additional associated cost. Because other options such as Options 2A, 2B, and 2E similarly improve southbound to eastbound and westbound to northbound movement while also having lower estimated probable construction costs, Option 2D was not selected for further review.





**Figure 7: Option 2D Design Concept**

## **5.5 Option 2E: Designated Exit Lane onto Jefferson Highway and Northbound Overpass Entrance at Maine Street**

Option 2E entails reversing the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new overpass of Jefferson Highway, creation of a designated exit lane onto Jefferson Highway, and creation of an entrance to the northbound overpass at Maine Street.

### **5.5.1 Design Concept**

The signal at the Causeway Boulevard – Jefferson Highway intersection is eliminated. To best utilize available space, it is recommended to construct the overpass to the east of the J-turn. The extensive shoulders of the J-turn make it possible to achieve a wider overpass traffic lane on the portion adjacent to the J-turn with less new construction by: demolishing portions of the existing eastern J-turn barriers; tying in new column bents to the existing column bents; tying the new slab into the existing slab; narrowing the J-turn traffic lane; and supporting portions of the overpass western shoulder with existing J-turn structural elements. Detailed structural analysis of the J-turn will be required to determine if reusing the existing portions of the J-turn in conjunction with new construction is possible or if the new overpass must be stand-alone construction. To achieve the required landing distance for the entrance of the overpass, Carrollton Way must be closed off between Causeway Boulevard northbound and Maine Street. The ramp entrances and exits are located as follows:

- J-turn entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Overpass entrance from Maine Street: at the existing intersection of Maine Street and Carrollton Way
- J-turn exit onto Jefferson Highway eastbound: adjacent to the existing J-turn entrance from Jefferson Highway eastbound
- Overpass exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound

To allow Causeway Boulevard southbound to Jefferson Highway eastbound traffic to continuously exit the J-turn, a designated exit lane onto Jefferson Highway is provided. Jefferson Highway eastbound through traffic is required to use the left two (2) traffic lanes; traffic approaching the ramp in the right lane of Jefferson Highway eastbound is required to merge into one of the left two (2) lanes. Causeway Boulevard southbound to Jefferson Highway eastbound traffic will exit the J-turn into its own lane of traffic; this lane will become the third (3<sup>rd</sup>) lane of Jefferson Highway

eastbound. The close proximity of the Popeyes fast food restaurant (parcel #9930012075) entrance/exit to the ramp exit onto Jefferson Highway requires the closure of the entrance/exit, which severely inhibits the commercial viability of the property. As a result, acquisition of the property is necessary to provide adequate space for the ramp exit onto Jefferson Highway.

Ochsner Medical Center traffic will have the option of utilizing the overpass via River Road in lieu of crossing Jefferson Highway to access Causeway Boulevard northbound via Jefferson Highway westbound. Detailed traffic analysis of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway will be required to determine if they possess sufficient capacity to service the additional traffic demand. Improvements to this route may be required to achieve full traffic efficiency.

The median is extended at the Causeway Boulevard southbound – Jefferson Highway intersection similarly to the Causeway Boulevard northbound – Jefferson Highway intersection to prevent Causeway Boulevard southbound traffic from crossing the intersection. The median at the intersection of Maine Street and Jefferson Highway is also extended. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of the routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter J-turn, exit onto Jefferson Highway eastbound
2. Enter J-turn, exit onto Jefferson Highway eastbound, turn right onto Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 8.

### **5.5.2 Design Advantages**

Reversing the direction of the existing J-turn in conjunction with construction of a new overpass will significantly improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. Traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center currently results in significant congestion; therefore, the creation of an alternate route from Ochsner Medical Center to Causeway Boulevard

northbound will also indirectly improve Jefferson Highway westbound to Causeway Boulevard northbound traffic. The removal of the traffic signal at the Causeway Boulevard – Jefferson Highway intersection will eliminate the interruption of both Jefferson Highway westbound and Jefferson Highway eastbound traffic. By retrofitting the J-turn, construction costs will be reduced in relation to those associated with a full demolition and replacement of the J-turn. Creation of a designated exit lane onto Jefferson Highway prevents traffic from backing up onto the J-turn by allowing southbound to eastbound traffic to continuously exit without interruption from Jefferson Highway through traffic.

### **5.5.3 Design Disadvantages**

Reversing the direction of the existing J-turn in conjunction with construction of a new overpass results in multiple conflicts with existing roadways and structures. The required landing distance for the entrance of the overpass will cause the ramp to come down to grade at the existing intersection of Maine Street and Carrollton Way, necessitating the closure of Carrollton Way between Causeway Boulevard northbound and Maine Street. Alternate routes would be required to provide access to properties adjacent to this portion of Carrollton Way. Acquisition of a portion of the property south of Carrollton Way between Maine Street and Causeway Boulevard northbound may allow construction of the overpass without closure of Carrollton Way. In addition, the close proximity of the ramp exit onto Jefferson Highway to the Popeyes fast food restaurant requires acquisition of the property.

The designated entrance and exit lanes of the ramp funnels Jefferson Highway eastbound through traffic into the left two (2) lanes near the entrance/exit of the ramp, potentially increasing congestion at this location. The J-turn exit prevents Jefferson Highway eastbound traffic from turning right onto Causeway Boulevard southbound. Eastbound to northbound traffic must use alternate routes such as Shrewsbury Court to River Road to Causeway Boulevard northbound to access the overpass ramp. Access to the overpass will also be limited by the ability of the portions of Maine Street and River Road adjacent to Ochsner Medical Center to sufficiently service additional traffic demand.

### **5.5.4 Evaluation of Design**

Although Option 2E improves both morning and afternoon peak traffic congestion, locating the entrance to the overpass at Maine Street does not improve westbound to northbound movement as much as locating the entrance to the overpass at Causeway Boulevard northbound. Because other options such as Options 2A, and 2B similarly improve southbound to eastbound movement while also more effectively improving westbound to northbound movement, Option 2E was not selected for further review.





**Figure 8: Option 2E Design Concept**

## **6 OPTION 3: MODIFICATION OF THE STRIPING, SIGNAGE AND PHASING OF THE EXISTING AT-GRADE INTERSECTION OF THE J-TURN EXIT AND CAUSEWAY BOULEVARD NORTHBOUND TO GIVE GREATER FAVOR TO THE WESTBOUND TO NORTHBOUND MOVEMENT (MAKING THIS THE PRIMARY DIRECTION AND HAVING THE J-TURN EASTBOUND TO NORTHBOUND MOVEMENT YIELD)**

### **6.1 Design Concept**

Reworking the striping, signage and phasing of the intersection of the existing J-turn exit and Causeway Boulevard northbound gives preference to Jefferson Highway westbound to Causeway Boulevard northbound traffic over Jefferson Highway eastbound to Causeway Boulevard northbound traffic. The portion of Causeway Boulevard northbound between Jefferson Highway and the merge location is widened from one (1) traffic lane to two (2) traffic lanes. J-turn traffic is required to yield to Causeway Boulevard northbound traffic to reduce congestion at the Causeway Boulevard – Jefferson Highway intersection and allow greater traffic flow from Ochsner Medical Center to Causeway Boulevard northbound. All travel patterns not mentioned in this section will remain unchanged. The design concept is illustrated in Figure 9.

### **6.2 Design Advantages**

Reworking the striping, signage and phasing of the intersection of the existing J-turn exit and Causeway Boulevard northbound moderately improves Jefferson Highway westbound to Causeway Boulevard northbound traffic by increasing the rate at which traffic can merge. The increase in traffic lanes from one (1) to two (2) as well as the J-turn exit yield to Causeway Boulevard northbound traffic reduces congestion of Jefferson Highway westbound near the Causeway Boulevard – Jefferson Highway intersection.

### **6.3 Design Disadvantages**

Reworking the striping, signage and phasing of the intersection of the existing J-turn exit and Causeway Boulevard northbound does not fully address Jefferson Highway westbound to Causeway Boulevard northbound traffic congestion. A major contributor to the congestion is traffic seeking to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center. Improving traffic flow at the merge location does not improve the congestion caused by Ochsner Medical Center traffic crossing Jefferson Highway eastbound. By favoring Causeway Boulevard northbound over the J-turn exit, Jefferson Highway eastbound to Causeway Boulevard northbound traffic flow will be reduced. Causeway Boulevard southbound to Jefferson Highway eastbound traffic is not addressed; therefore, the overall effectiveness of reworking the striping, signage and phasing of the intersection is limited.

## **6.4 Evaluation of Design**

Although Option 3 moderately improves afternoon peak traffic congestion, it fails to address morning peak traffic congestion. Other options, such as Options 2A, 2B, 2C, 2D, 2E, are more effective at improving westbound to northbound movement while also improving southbound to eastbound movement. Despite its much lower estimated probable construction cost than the aforementioned options, Option 3 is too ineffective and was therefore not selected for further review.





**Figure 9: Option 3 Design Concept**

## **7 OPTION 4: DEMOLITION OF THE EXISTING J-TURN AND REPLACEMENT WITH AN IMPROVED FACILITY OR COMBINATION OF THE OTHER OPTIONS NOTED HEREIN**

Demolition of the existing J-turn creates a much larger buildable area than is currently available and presents the opportunity to implement improved facilities that would otherwise not be feasible given the current space constraints. Option 4A consists of a Jefferson Highway overpass of Causeway Boulevard. Options 4B and 4C consist of roundabout designs.

### **7.1 Option 4A: Jefferson Highway Overpass of Causeway Boulevard**

Option 4A entails construction of a Jefferson Highway overpass of Causeway Boulevard.

#### **7.1.1 Design Concept**

Construction of a Jefferson Highway overpass of Causeway Boulevard eliminates the interruption of Jefferson Highway through traffic. The existing J-turn is demolished to lower the required clearance of the overpass. Jefferson Highway eastbound and westbound through traffic is directed to the left two (2) lanes of each travel direction, which enters the overpass. The right lanes of Jefferson Highway eastbound and westbound become frontage roads that flank the overpass and provide access to local businesses and Causeway Boulevard. The existing Jefferson Highway median is removed at the intersection of Causeway Boulevard northbound and Jefferson Highway, allowing northbound traffic to cross Jefferson Highway. Causeway Boulevard southbound and northbound traffic is coordinated by a traffic signal underneath the overpass. Jefferson Highway U-turn and turn lanes located in the portion of the median currently underneath the proposed overpass location are removed as needed. The potential sale and commercialization of the land currently occupied by the J-turn to finance construction may be considered pending a review of who possesses the right of way. The available travel routes of traffic approaching the overpass are summarized in Tables 1, 2, 3 and 4 below.

**Table 1: Causeway Boulevard Northbound Travel Options**

Center Lane
<ul style="list-style-type: none"><li>• Continue straight on Causeway Boulevard northbound</li><li>• Turn right onto frontage road eastbound to access Jefferson Highway eastbound</li></ul>

**Table 2: Causeway Boulevard Southbound Travel Options**

Left Lane	Center Lane	Right Lane
• Turn left onto frontage road eastbound to access Jefferson Highway eastbound	• Continue straight on Causeway Boulevard southbound	• Turn right onto frontage road westbound to access Jefferson Highway westbound

**Table 3: Jefferson Highway Eastbound Travel Options**

Left Lane	Center Lane	Right Lane
• Enter overpass to continue straight on Jefferson Highway eastbound	• Enter overpass to continue straight on Jefferson Highway eastbound	• Enter frontage road eastbound to turn right onto Causeway Boulevard southbound

**Table 4: Jefferson Highway Westbound Travel Options**

Left Lane	Center Lane	Right Lane
• Enter overpass to continue straight on Jefferson Highway westbound	• Enter overpass to continue straight on Jefferson Highway westbound	• Enter frontage road westbound to turn right onto Causeway Boulevard northbound

The signal regulating Causeway Boulevard northbound and southbound traffic is programmed such that Causeway Boulevard southbound to Jefferson Highway eastbound traffic is favored during morning peak hours and Causeway Boulevard northbound traffic is favored during afternoon peak hours. Frontage road eastbound traffic west of Causeway Boulevard southbound is required to turn right onto Causeway Boulevard southbound and must yield to Causeway Boulevard southbound traffic. Frontage road westbound traffic east of Causeway Boulevard northbound is required to turn right onto Causeway Boulevard northbound and must yield to Causeway Boulevard northbound traffic.

Ochsner Medical Center traffic will have the option of utilizing Causeway Boulevard northbound via River Road in lieu of crossing Jefferson Highway to access Causeway Boulevard northbound via Jefferson Highway westbound. Detailed traffic analysis of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway will be required to determine if they possess sufficient capacity to service the additional traffic demand. Improvements to this route may be required to achieve full traffic efficiency. All travel patterns not mentioned in this section will remain unchanged. The design concept is illustrated in Figure 10.

### **7.1.2 Design Advantages**

Construction of a Jefferson Highway overpass of Causeway Boulevard separates Jefferson Highway traffic from Causeway Boulevard traffic, significantly improving traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. Traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center currently results in significant congestion; therefore, the creation of an alternate route from Ochsner Medical Center to Causeway Boulevard northbound will also indirectly improve Jefferson Highway westbound to Causeway Boulevard northbound traffic. The interruption of Jefferson Highway traffic due to the existing signal at the Causeway Boulevard – Jefferson Highway intersection is eliminated, allowing Jefferson Highway eastbound and westbound through traffic to flow freely in the left two (2) lanes. The additional property obtained following demolition of the J-turn may potentially provide revenue to help finance the construction of the overpass.

### **7.1.3 Design Disadvantages**

The overall size of the overpass necessitates significant construction time and cost. Local business opposition may be considerable if the lack of direct access to Jefferson Highway is deemed detrimental to their success. The utility poles currently located in the median of Jefferson Highway must be relocated to accommodate the overpass.

### **7.1.4 Evaluation of Design**

Option 4A improves both morning and afternoon peak traffic congestion while also significantly improving secondary traffic movements. Although it is expected to be more expensive than other options such as Options 1, 2A, 2B, 2C, 2D, 2E, and 3, Option 4A very effectively reduces the congestion at the Causeway Boulevard – Jefferson Highway intersection, which justifies its additional cost. Because Option 4A improves all traffic movements in the vicinity of the intersection at a comparable estimated probable construction cost to Options 5A, 5B, and 6, Option 4A was selected for further review.

### **7.1.5 Estimated Probable Construction Cost**

The estimated probable construction cost of Option 4A is \$28,572,404.16. The estimated probable construction cost does not include professional services, the relocation or replacement of any utilities or drainage, and any wiring or conduits for lighting or traffic signals. The full estimate of probable construction cost may be found in Appendix C.





Figure 10: Option 4A Design Concept

## 7.2 Option 4B: Reduced Size Roundabout

Option 4B entails the demolition of the existing J-turn in conjunction with the implementation of a reduced size two (2) lane roundabout and expansion of the portion of Causeway Boulevard south of Jefferson Highway.

### 7.2.1 Design Concept

The J-turn is demolished to obtain the space required for construction of the roundabout. The roundabout consists of two (2) lanes and is centered at the approximate center of the Causeway Boulevard – Jefferson Highway intersection. Causeway Boulevard northbound and southbound are both expanded from one (1) to two (2) lanes between Jefferson Highway and River Road. The available travel options of traffic approaching the roundabout are summarized in Tables 5, 6, 7 and 8 below.

**Table 5: Causeway Boulevard Northbound Travel Options**

Left Lane	Right Lane
<ul style="list-style-type: none"><li>• Continue straight on Causeway Boulevard northbound</li><li>• Turn left onto Jefferson Highway westbound</li><li>• U-turn onto Causeway Boulevard southbound</li></ul>	<ul style="list-style-type: none"><li>• Continue straight on Causeway Boulevard northbound</li><li>• Turn right onto Jefferson Highway eastbound</li></ul>

**Table 6: Causeway Boulevard Southbound Travel Options**

Left Lane	Center Lane	Right Lane
<ul style="list-style-type: none"><li>• Continue straight on Causeway Boulevard southbound</li><li>• Turn left onto Jefferson Highway eastbound</li><li>• U-turn onto Causeway Boulevard northbound</li></ul>	<ul style="list-style-type: none"><li>• Continue straight on Causeway Boulevard southbound</li><li>• Turn right onto Jefferson Highway westbound</li></ul>	<ul style="list-style-type: none"><li>• Turn right onto Jefferson Highway westbound</li></ul>

**Table 7: Jefferson Highway Eastbound Travel Options**

Left Lane	Center Lane	Right Lane
<ul style="list-style-type: none"><li>• Continue straight on Jefferson Highway eastbound</li><li>• Turn left onto Causeway Boulevard northbound</li><li>• U-turn onto Jefferson Highway westbound</li></ul>	<ul style="list-style-type: none"><li>• Continue straight on Jefferson Highway eastbound</li><li>• Turn right onto Causeway Boulevard southbound</li></ul>	<ul style="list-style-type: none"><li>• Turn right onto Causeway Boulevard southbound</li></ul>

**Table 8: Jefferson Highway Westbound Travel Options**

Left Lane	Center Lane	Right Lane
<ul style="list-style-type: none"><li>• Continue straight on Jefferson Highway westbound</li><li>• Turn left onto Causeway Boulevard southbound</li><li>• U-turn onto Jefferson Highway eastbound</li></ul>	<ul style="list-style-type: none"><li>• Continue straight on Jefferson Highway westbound</li><li>• Turn right onto Causeway Boulevard northbound</li></ul>	<ul style="list-style-type: none"><li>• Turn right onto Causeway Boulevard northbound</li></ul>

Traffic traveling in the inside lane of the roundabout is permitted to remain in the roundabout indefinitely and may exit at any time. Traffic traveling in the outside lane of the roundabout must exit at the first available exit by continuing straight on the roadway in which it entered the roundabout. The potential sale and commercialization of the land currently occupied by the J-turn to finance construction may be considered pending a review of who possesses the right of way. All travel patterns not mentioned in this section will remain unchanged. The design concept is illustrated in Figure 11.

### 7.2.2 Design Advantages

Demolition of the existing J-turn in conjunction with the implementation of a two (2) lane roundabout potentially improves both Causeway Boulevard southbound to Jefferson Highway eastbound traffic and Jefferson Highway westbound to Causeway Boulevard northbound traffic. The removal of the signal at the Causeway Boulevard – Jefferson Highway intersection and replacement with a roundabout permits the free flow of Jefferson Highway westbound and eastbound traffic during off-peak hours when Causeway Boulevard traffic is limited. Expansion of the portion of Causeway Boulevard south of Jefferson Highway from one (1) lane to two (2) lanes improves its capacity. In addition, the expansion provides an alternate route for Ochsner Medical Center traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound, which indirectly improves Jefferson Highway westbound to Causeway Boulevard northbound traffic. The evenly balanced travel options for each direction provide a



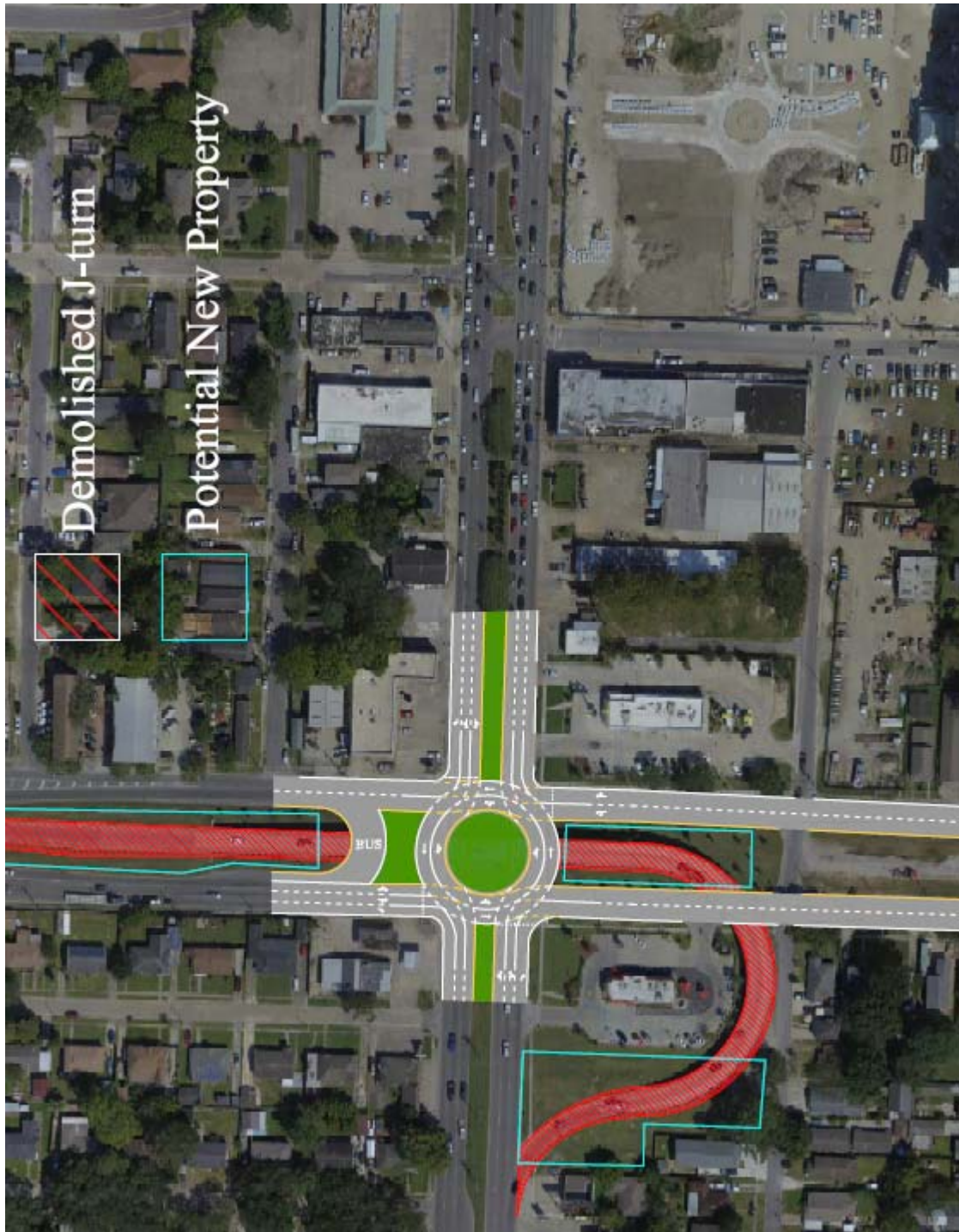
simple set of roundabout rules and give similar preference to each travel direction. The additional property obtained following demolition of the J-turn may potentially provide revenue to help finance the construction of the roundabout.

### **7.2.3 Design Disadvantages**

The effectiveness of a two (2) lane roundabout is limited due to the space constraints of the Causeway Boulevard – Jefferson Highway intersection. The reduced size roundabout does not require acquisition of property adjacent to the intersection; however, the limited size of the roundabout does not provide the required roundabout radius and accompanying site distance recommended for safety and effectiveness.

### **7.2.4 Evaluation of Design**

Although Option 4B potentially improves overall traffic congestion at the Causeway Boulevard – Jefferson Highway intersection without requiring property acquisition, the roundabout radius and accompanying site distance is too small to meet recommended standards. Because Option 4C also improves congestion while meeting recommended standards, Option 4B was not selected for further review.



**Figure 11: Option 4B Design Concept**

### **7.3 Option 4C: Full Size Roundabout**

Option 4C entails the demolition of the existing J-turn in conjunction with the implementation of a full size two (2) lane roundabout and expansion of the portion of Causeway Boulevard northbound south of Jefferson Highway.

#### **7.3.1 Design Concept**

The full size roundabout features the same design concept as Option 4B (Reduced Size Roundabout), except the roundabout radius is increased to the size required to achieve safety and effectiveness. The design concept is illustrated in Figure 12.

#### **7.3.2 Design Advantages**

The design advantages are the same as those for Option 4B (Reduced Size Roundabout) presented in section 6.2.2.

#### **7.3.3 Design Disadvantages**

The effectiveness of a two (2) lane roundabout is limited due to the space constraints of the Causeway Boulevard – Jefferson Highway intersection. The limited available space is insufficient to provide the required roundabout radius and accompanying site distance needed to service the anticipated traffic volume. A limited roundabout radius also creates difficulty for traffic attempting to enter the roundabout since reaction times are reduced. To achieve the proper roundabout radius needed to obtain full effectiveness, acquisition of the property adjacent to the Causeway Boulevard – Jefferson Highway intersection is required. Although the balanced travel options provided by the roundabout produce simple roundabout rules, the balance limits Causeway Boulevard southbound to Jefferson Highway eastbound traffic since only one (1) lane of Causeway Boulevard southbound may turn left onto Jefferson Highway eastbound. The utility poles currently located in the median of Jefferson Highway must be relocated to accommodate the roundabout.

#### **7.3.4 Evaluation of Design**

Although Option 4C potentially improves overall traffic congestion at the Causeway Boulevard – Jefferson Highway intersection while satisfying recommended standards, the roundabout radius and accompanying site distance is too large to be implemented without extensive acquisition of adjacent property. Because other options with comparable estimated probable construction costs, such as Options 4A, 7A, and 7B achieve similar or better intersection improvements without requiring such a considerable amount of property acquisition, Option 4C was not selected for further review.





**Figure 12: Option 4C Design Concept**

## **8 OPTION 5: INSTALLATION OF A STRUCTURE TO MOVE TRAFFIC FROM SOUTH TO EAST DIRECTLY (SMALL FLY OVER RAMP)**

Construction of a small fly over ramp accommodates Causeway Boulevard southbound to Jefferson Highway eastbound traffic without impeding Jefferson Highway westbound and eastbound traffic. By maintaining the current function of the J-turn, eastbound to northbound movement remains unaffected. Option 5 consists of the following two (2) variations: Option 5A features construction of a fly over ramp only; and Option 5B features construction of a fly over ramp and construction of a new northbound overpass.

### **8.1 Option 5A: Fly Over Ramp**

Option 5A entails the construction of a fly over ramp.

#### **8.1.1 Design Concept**

The signal at the Causeway Boulevard – Jefferson Highway intersection is eliminated. Portions of Causeway Boulevard southbound near the existing J-turn exit must be removed to implement the approach slab and entrance to the fly over ramp. Ramp pier caps are located adjacent to the J-turn north of Jefferson Highway westbound as well as in the median between Jefferson Highway westbound and eastbound. To achieve the required landing distance for the exit of the fly over ramp, multiple U-turn locations currently located between Jefferson Highway westbound and eastbound are removed. The ramp entrance and exit are located as follows:

- Fly over ramp entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Fly over ramp exit onto Jefferson Highway eastbound: between Jefferson Highway westbound and eastbound near Maine Street

The fly over ramp exit requires Causeway Boulevard southbound to Jefferson Highway eastbound traffic to merge into the left lane of Jefferson Highway eastbound. Detailed traffic analysis of the portion of Jefferson Highway eastbound adjacent to the fly over ramp will be required to determine if fly over ramp traffic can safely merge into Jefferson Highway eastbound and access the Ochsner Medical Center facilities.

The median is extended at the Causeway Boulevard southbound – Jefferson Highway intersection similarly to the Causeway Boulevard northbound – Jefferson Highway intersection to prevent Causeway Boulevard southbound traffic from crossing the intersection. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

These travel routes will be maintained; however, the means of travel of routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter fly over ramp, exit onto Jefferson Highway eastbound
2. Turn right onto Jefferson Highway westbound, make a U-turn onto Jefferson Highway eastbound, turn right onto Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 13.

### **8.1.2 Design Advantages**

Construction of a small fly over ramp will improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. The removal of the traffic signal at the Causeway Boulevard – Jefferson Highway intersection will eliminate the interruption of both Jefferson Highway westbound and Jefferson Highway eastbound traffic. Since the fly over ramp does not interfere with the J-turn, Jefferson Highway eastbound to Causeway Boulevard northbound traffic will be maintained.

### **8.1.3 Design Disadvantages**

Construction of a small fly over ramp does not address Jefferson Highway westbound to Causeway Boulevard northbound traffic congestion. A major contributor to the congestion is traffic seeking to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center. The limited space available at the Causeway Boulevard – Jefferson Highway intersection necessitates that the exit of the fly over ramp be located in the median between Jefferson Highway westbound and eastbound. Because the fly over ramp exit is near the location that Ochsner Medical Center traffic crosses Jefferson Highway eastbound to access Jefferson Highway westbound, it is possible that the fly over ramp will exasperate existing Jefferson Highway westbound to Causeway Boulevard northbound traffic congestion. Due to the expectation that a large portion of Causeway Boulevard southbound to Jefferson Highway eastbound traffic will be seeking to access the Ochsner Medical Center facilities, it is likely that many vehicles will attempt to cross all three lanes of Jefferson Highway eastbound upon exiting the fly over ramp. The possibility of rapid merging and crossing of Jefferson Highway eastbound

creates the potential for dangerous interactions between traffic exiting the fly over ramp and Jefferson Highway eastbound traffic.

The height of the fly over ramp must be adequate to provide the proper clearance for J-turn traffic. To achieve the required height, the entrance and exit must be located a large distance from the Causeway Boulevard – Jefferson Highway intersection to maintain an acceptable ramp slope. The overall size and curve of the fly over ramp as well as the limited available space for pier placement creates a significant construction cost. The utility poles currently located in the median of Jefferson Highway must be relocated to accommodate the fly over ramp.

#### **8.1.4 Evaluation of Design**

Although Option 5A improves morning peak traffic congestion, it fails to address afternoon peak traffic congestion. Additionally, the merge location of the flyover ramp exit and Jefferson Highway eastbound present a potentially dangerous conflict point. Because other options with comparable or lower estimated probable construction costs, such as Options 2A, 2B, 2C, 2D, and 2E similarly improve southbound to eastbound movement while also improving westbound to northbound movement, Option 5A was not selected for further review.





**Figure 13: Option 5A Design Concept**

## **8.2 Option 5B: Fly Over Ramp and Northbound Overpass**

Option 5B entails the construction of a fly over ramp and a northbound overpass.

### **8.2.1 Design Concept**

The signal at the Causeway Boulevard – Jefferson Highway intersection is eliminated. Portions of Causeway Boulevard southbound near the existing J-turn exit must be removed to implement the approach slab and entrance to the fly over ramp. Ramp pier caps are located adjacent to the J-turn north of Jefferson Highway westbound as well as in the median between Jefferson Highway westbound and eastbound. To achieve the required landing distance for the exit of the fly over ramp, multiple U-turn locations currently located between Jefferson Highway westbound and eastbound are removed.

To best utilize available space, it is recommended to construct the overpass to the east of the J-turn. The extensive shoulders of the J-turn make it possible to achieve a wider overpass traffic lane on the portion adjacent to the J-turn with less new construction by: demolishing portions of the existing eastern J-turn barriers; tying in new column bents to the existing column bents; tying the new slab into the existing slab; narrowing the J-turn traffic lane; and supporting portions of the overpass western shoulder with existing J-turn structural elements. Detailed structural analysis of the J-turn will be required to determine if reusing the existing portions of the J-turn in conjunction with new construction is possible or if the new overpass must be stand-alone construction. To achieve the required landing distance for the entrance of the overpass, Carrollton Way must be closed off between Causeway Boulevard northbound and Causeway Boulevard southbound. To accommodate local traffic, a new cross street between Jefferson Highway eastbound and Carrollton Way is constructed underneath the J-turn and overpass. The ramp entrance and exit are located as follows:

- Fly over ramp entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Fly over ramp exit onto Jefferson Highway eastbound: between Jefferson Highway westbound and eastbound near Maine Street
- Overpass entrance from Causeway Boulevard northbound: between Arlington Avenue and Carrollton Way and between Causeway Boulevard northbound and Causeway Boulevard southbound
- Overpass exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound

The fly over ramp exit requires Causeway Boulevard southbound to Jefferson Highway eastbound traffic to merge into the left lane of Jefferson Highway eastbound. Detailed traffic analysis of the portion of Jefferson Highway eastbound adjacent to the fly over ramp will be required to determine if fly over ramp traffic can safely merge into Jefferson Highway eastbound and access the Ochsner Medical Center facilities.

Ochsner Medical Center traffic will have the option of utilizing the overpass via River Road in lieu of crossing Jefferson Highway to access Causeway Boulevard northbound via Jefferson Highway westbound. Detailed traffic analysis of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway will be required to determine if they possess sufficient capacity to service the additional traffic demand. Improvements to this route may be required to achieve full traffic efficiency.

The median is extended at the Causeway Boulevard southbound – Jefferson Highway intersection similarly to the Causeway Boulevard northbound – Jefferson Highway intersection to prevent Causeway Boulevard southbound traffic from crossing the intersection. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of the routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter fly over ramp, exit onto Jefferson Highway eastbound
2. Turn right onto Jefferson Highway westbound, make a U-turn onto Jefferson Highway eastbound, turn right onto Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 14.

### **8.2.2 Design Advantages**

Construction of a small fly over ramp will improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. The removal of the traffic signal at the Causeway Boulevard – Jefferson Highway intersection will eliminate the interruption of both Jefferson Highway westbound and Jefferson Highway eastbound traffic. Since the fly over ramp does not interfere with the J-turn, Jefferson Highway eastbound to Causeway Boulevard northbound traffic

will be maintained. Traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center currently results in significant congestion; therefore, the creation of an alternate route from Ochsner Medical Center to Causeway Boulevard northbound will also indirectly improve Jefferson Highway westbound to Causeway Boulevard northbound traffic. By retrofitting the J-turn, construction costs will be reduced in relation to those associated with a full demolition and replacement of the J-turn.

### **8.2.3 Design Disadvantages**

The limited space available at the Causeway Boulevard – Jefferson Highway intersection necessitates that the exit of the fly over ramp be located in the median between Jefferson Highway westbound and eastbound. Because the fly over ramp exit is near the location that Ochsner Medical Center traffic crosses Jefferson Highway eastbound to access Jefferson Highway westbound, it is possible that the fly over ramp will exasperate existing Jefferson Highway westbound to Causeway Boulevard northbound traffic congestion. Due to the expectation that a large portion of Causeway Boulevard southbound to Jefferson Highway eastbound traffic will be seeking to access the Ochsner Medical Center facilities, it is likely that many vehicles will attempt to cross all three lanes of Jefferson Highway eastbound upon exiting the fly over ramp. The possibility of rapid merging and crossing of Jefferson Highway eastbound creates the potential for dangerous interactions between traffic exiting the fly over ramp and Jefferson Highway eastbound traffic.

The required landing distance for the entrance of the overpass will cause the ramp to come down to grade south of Carrollton Way, necessitating the closure of Carrollton Way between Causeway Boulevard northbound and Causeway Boulevard southbound. Access to the overpass will be limited by the ability of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway to sufficiently service additional traffic demand.

The height of the fly over ramp must be adequate to provide the proper clearance for J-turn traffic. To achieve the required height, the entrance and exit must be located a large distance from the Causeway Boulevard – Jefferson Highway intersection to maintain an acceptable ramp slope. The overall size and curve of the fly over ramp as well as the limited available space for pier placement creates a significant construction cost. The utility poles currently located in the median of Jefferson Highway must be relocated to accommodate the fly over ramp.

### **8.2.4 Evaluation of Design**

Although Option 5B improves both morning and afternoon peak traffic congestion, the merge location of the flyover ramp exit and Jefferson Highway eastbound present a potentially dangerous conflict point. Because other options with comparable or lower estimated probable construction

costs, such as Options 2A, 2B, 2C, 2D, 2E, 4A, 7A, and 7B similarly improve both southbound to eastbound and westbound to northbound movement without featuring potentially dangerous conflict points, Option 5B was not selected for further review.





**Figure 14: Option 5B Design Concept**

## **9 OPTION 6: CONSIDERATION OF A SOUTHBOUND OVERPASS OF JEFFERSON HIGHWAY THAT WOULD CONNECT AT-GRADE AND THEN USE SURFACE IMPROVEMENTS TO TRANSFER TRAFFIC FROM THIS POINT TO AN INTERSECTION AT JEFFERSON HIGHWAY**

### **9.1 Design Concept**

Construction of a southbound ramp that uses surface improvements to facilitate the movement of traffic back to Jefferson Highway eliminates the signal at the Causeway Boulevard – Jefferson Highway intersection. Construction between the J-turn and Causeway Boulevard southbound is required to allow traffic to enter the ramp from the portion of Causeway Boulevard southbound north of Jefferson Highway. The ramp height required to overpass the J-turn and maintain proper clearance is significant, which requires very large landing distances for the ramp entrance and exit. To achieve the required landing distance for the exit of the ramp, Arlington Avenue and Sundorn Street must be closed off between Causeway Boulevard northbound and Causeway Boulevard southbound. The Jefferson Lions Club on Arlington Avenue and the American Legion Jefferson Post 267 must be acquired and demolished to accommodate the exit of the ramp. In addition, the monument at River Road must be relocated. The ramp entrance and exit are located as follows:

- Ramp entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Ramp exit onto Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard near D'Aquin Street

Surface improvements are made to Shrewsbury Court to facilitate the increase in traffic. The median is extended at the Causeway Boulevard southbound – Jefferson Highway intersection similarly to the Causeway Boulevard northbound – Jefferson Highway intersection to prevent Causeway Boulevard southbound traffic from crossing the intersection. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

4. Turn left onto Jefferson Highway eastbound
5. Continue straight on Causeway Boulevard southbound
6. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of routes 1 and 2 are altered while route 3 remains unchanged:

4. Enter ramp, exit onto Causeway Boulevard southbound, turn right onto River Road, turn right onto Shrewsbury Court, turn right onto Jefferson Highway eastbound



5. Enter ramp, exit onto Causeway Boulevard southbound
6. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 15.

## **9.2 Design Advantages**

Construction of a southbound ramp that uses surface improvements to facilitate the movement of traffic back to Jefferson Highway could potentially improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound; however, detailed traffic analysis would be required to determine if it will actually improve.

## **9.3 Design Disadvantages**

Construction of a southbound ramp that uses surface improvements to facilitate the movement of traffic back to Jefferson Highway results in multiple conflicts with existing roadways and structures. The required landing distance for the exit of the ramp will cause the ramp to come down to grade near D'Aquin Street, necessitating the closure of Arlington Avenue and Sundorn Street between Causeway Boulevard northbound and Causeway Boulevard southbound. The exit of the ramp will also require the acquisition and demolition of the Jefferson Lions Club on Arlington Avenue and the American Legion Jefferson Post 267 on D'Aquin Street. To overpass the J-turn, large ramp construction costs will be incurred.

Significant surface improvements to Shrewsbury Court are required to facilitate the increase in traffic caused by Causeway Boulevard southbound to Jefferson Highway eastbound traffic. Residents of Shrewsbury Court as well as Jefferson Lions Club and American Legion Jefferson Post 267 members will likely strongly dissent to the redirection of Causeway Boulevard southbound to Jefferson Highway eastbound traffic through their neighborhood. Traffic will likely not improve or possibly worsen as opposed to maintaining the current signal at the Causeway Boulevard – Jefferson Highway intersection. In addition, the high construction costs associated with the ramp, surface improvements, and acquisition and demolition of the Jefferson Lions Club and American Legion Jefferson Post 267 make this option infeasible.

## **9.4 Evaluation of Design**

Option 6 requires considerable property acquisition and is expected to be extremely expensive due to the significant ramp height needed to overpass the existing J-turn. Because other options such as Options 1, 2A, 2B, 2C, 2D, 2E, 4A, 5A, 5B, 7A, and 7B are much more effective and have much lower estimated probable construction costs, Option 6 was not selected for further review.





**Figure 15: Option 6 Design Concept**

## **10 OPTION 7: OTHER ALTERNATIVES DEVELOPED IN CONSULTATION WITH THE PMC, INCLUDING IMPROVED TRANSIT ACCESS**

Expansion of the existing J-turn to accommodate two-way traffic in conjunction with construction of a new overpass of Jefferson Highway addresses both southbound to eastbound (morning peak) and westbound to northbound (afternoon peak) movement while maintaining the current function of the J-turn (accommodation of eastbound to northbound movement). By repurposing the existing J-turn, construction time and costs as well as disruptions due to construction are reduced. Option 7 consist of the following two (2) variations: Option 7A features designated entrance and exit lanes at Jefferson Highway; and Option 2B features a traffic signal at the exit onto Jefferson Highway.

### **10.1 Option 7A: Designated Entrance and Exit Lanes at Jefferson Highway**

Option 7A entails expanding the existing J-turn to accommodate two-way traffic, construction of a new overpass of Jefferson Highway, and creation of designated entrance and exit lanes at Jefferson Highway.

#### **10.1.1 Design Concept**

The expansion of the existing J-turn to accommodate two-way traffic eliminates the signal at the Causeway Boulevard – Jefferson Highway intersection. The J-turn is bounded to the west by adjacent businesses and houses, to the east by Causeway Boulevard northbound, and to the south by Carrollton Way. To best utilize the available space, construction between the J-turn and Causeway Boulevard northbound as well as between the J-turn and the adjacent property, Popeyes fast food restaurant (parcel #9930012075), is recommended. Limited construction may be possible by: demolishing portions of the existing barriers of the J-turn; tying in new column bents to the existing column bents; and tying the new slab into the existing slab. Detailed structural analysis of the J-turn will be required to determine if reusing the existing portions of the ramp in conjunction with new construction is possible or if portions of the J-turn (or the entire J-turn) must be removed and replaced with new construction to achieve the design. The extensive shoulders of the J-turn make it possible to provide the additional traffic direction with limited widening of the roadway by implementing traffic lanes that are narrower than the existing traffic lane. To achieve the required landing distance for the entrance of the overpass, Carrollton Way must be closed off between Causeway Boulevard northbound and Causeway Boulevard southbound. To accommodate local traffic, a new cross street between Jefferson Highway eastbound and Carrollton Way is constructed underneath the J-turn and overpass. The ramp entrances and exits are located as follows:

- J-turn entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- J-turn entrance from Jefferson Highway eastbound: same as the existing J-turn entrance from Jefferson Highway eastbound
- Overpass entrance from Causeway Boulevard northbound: between Arlington Avenue and Carrollton Way and between Causeway Boulevard northbound and Causeway Boulevard southbound
- J-turn exit onto Jefferson Highway eastbound: adjacent to the existing J-turn entrance from Jefferson Highway eastbound
- J-turn exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- Overpass exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound

Designated entrance and exit lanes are provided, requiring Jefferson Highway eastbound through traffic to use the left two (2) lanes near the J-turn. Traffic approaching the ramp in the right lane of Jefferson Highway eastbound is required to enter the ramp entrance towards Causeway Boulevard northbound. Causeway Boulevard southbound to Jefferson Highway eastbound traffic will exit the ramp into its own lane of traffic; this lane will become the third (3<sup>rd</sup>) lane of Jefferson Highway eastbound. The close proximity of the Popeyes fast food restaurant entrance/exit to the ramp exit onto Jefferson Highway requires the closure of the entrance/exit, which severely inhibits the commercial viability of the property. As a result, acquisition of the property is necessary to provide adequate space for the ramp exit onto Jefferson Highway.

Ochsner Medical Center traffic will have the option of utilizing the overpass via River Road in lieu of crossing Jefferson Highway to access Causeway Boulevard northbound via Jefferson Highway westbound. Detailed traffic analysis of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway will be required to determine if they possess sufficient capacity to service the additional traffic demand. Improvements to this route may be required to achieve full traffic efficiency.

Jefferson Highway eastbound to Causeway Boulevard northbound traffic occupies the left lane of the overpass. Causeway Boulevard northbound overpass traffic occupies the right lane of the overpass. As the overpass comes to grade north of Jefferson Highway, the two (2) lanes of traffic reduce to one (1) lane. The one (1) remaining lane occupies the left lane of Causeway Boulevard

northbound. Jefferson Highway westbound to Causeway Boulevard northbound traffic occupies the right lane of Causeway Boulevard northbound.

The median is extended at the intersection of Causeway Boulevard southbound and Jefferson Highway, similar to the intersection of Causeway Boulevard northbound and Jefferson Highway to prevent Causeway Boulevard southbound traffic from crossing the intersection. The median at the intersection of Maine Street and Jefferson Highway is also extended. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter ramp, exit onto Jefferson Highway eastbound
2. Enter ramp, exit onto Jefferson Highway eastbound, turn right onto Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 16.

### **10.1.2 Design Advantages**

The expansion of the existing J-turn to accommodate two-way traffic will significantly improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. Traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center currently results in significant congestion; therefore, the creation of an alternate route from Ochsner Medical Center to Causeway Boulevard northbound will also indirectly improve Jefferson Highway westbound to Causeway Boulevard northbound traffic. The removal of the traffic signal at the Causeway Boulevard – Jefferson Highway intersection will eliminate the interruption of both Jefferson Highway westbound and Jefferson Highway eastbound traffic. By retrofitting the J-turn, construction costs will be reduced in relation to those associated with a full demolition and replacement of the J-turn. Creation of a designated exit lane onto Jefferson Highway prevents traffic from backing up onto the J-turn by allowing southbound to eastbound traffic to continuously exit without interruption from Jefferson Highway through traffic.



### **10.1.3 Design Disadvantages**

The close proximity of the ramp exit onto Jefferson Highway to the Popeyes fast food restaurant requires acquisition of the property. The designated entrance and exit lanes of the ramp funnels Jefferson Highway eastbound through traffic into the left two (2) lanes near the entrance/exit of the ramp, potentially increasing congestion at this location. In addition, the J-turn exit prevents Jefferson Highway eastbound traffic from turning right onto Causeway Boulevard southbound.

Construction of a new overpass results in a conflict with an existing roadway. The required landing distance for the entrance of the overpass will cause the ramp to come down to grade south of Carrollton Way, necessitating the closure of Carrollton Way between Causeway Boulevard northbound and Causeway Boulevard southbound. Overpass traffic must condense into one (1) lane before entering the left lane of Causeway Boulevard northbound, potentially causing congestion at the overpass exit. Access to the overpass will be limited by the ability of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway to sufficiently service additional traffic demand. The addition of two (2) new travel lanes to the existing J-turn may necessitate the demolition of J-turn and new construction for the entire structure if the additional loads are too significant.

### **10.1.4 Evaluation of Design**

Option 7A improves both morning and afternoon peak traffic congestion while also maintaining the current J-turn function of facilitating eastbound to northbound movement. Although it is more expensive than other options such as Options 1, 2A, 2B, 2C, 2D, 2E, and 3, Option 7A very effectively reduces the congestion at the Causeway Boulevard – Jefferson Highway intersection, which justifies its additional cost. Because Option 7A improves southbound to eastbound and westbound to northbound movement at a comparable estimated probable construction cost to Options 5A, 5B, and 6, Option 7A was selected for further review.

### **10.1.5 Estimated Probable Construction Cost**

The estimated probable construction cost of Option 7A is \$26,532,984.70 if steel girders are used and \$24,651,447.20 if precast, prestressed concrete girders are used. If construction is completed in two (2) phases, with Phase One (1) consisting of reversal of the existing J-turn from one-way northbound to one-way southbound in conjunction with construction of a new overpass of Jefferson Highway and Phase Two (2) consisting of expansion of the existing J-turn, the estimated probable construction cost of Option 7A is \$27,986,871.28 if steel girders are used and \$26,105,333.78 if precast, prestressed concrete girders are used. The estimated probable construction cost does not include professional services, the relocation or replacement of any utilities or drainage, and any wiring or conduits for lighting or traffic signals. The existing J-turn has steel girders; therefore, it is preferable to match the new structure's girders to the existing

structure. Although use of different girder types is not recommended, it is permitted. The full estimate of probable construction cost may be found in Appendix C.



**Figure 16: Option 7A Design Concept**

## **10.2 Option 7B: Traffic Signal at the Exit onto Jefferson Highway**

Option 7B entails expanding the existing J-turn to accommodate two-way traffic, construction of a new overpass of Jefferson Highway, and utilization of a traffic signal at the exit onto Jefferson Highway.

### **10.2.1 Design Concept**

The expansion of the existing J-turn to accommodate two-way traffic eliminates the signal at the Causeway Boulevard – Jefferson Highway intersection. The J-turn is bounded to the west by adjacent businesses and houses, to the east by Causeway Boulevard northbound, and to the south by Carrollton Way. To best utilize the available space, construction between the J-turn and Causeway Boulevard northbound as well as between the J-turn and the adjacent property, Popeyes fast food restaurant (parcel #9930012075), is recommended. Limited construction may be possible by: demolishing portions of the existing barriers of the J-turn; tying in new column bents to the existing column bents; and tying the new slab into the existing slab. Detailed structural analysis of the J-turn will be required to determine if reusing the existing portions of the ramp in conjunction with new construction is possible or if portions of the J-turn (or the entire J-turn) must be removed and replaced with new construction to achieve the design. The extensive shoulders of the J-turn make it possible to provide the additional traffic direction with limited widening of the roadway by implementing traffic lanes that are narrower than the existing traffic lane. To achieve the required landing distance for the entrance of the overpass, Carrollton Way must be closed off between Causeway Boulevard northbound and Causeway Boulevard southbound. To accommodate local traffic, a new cross street between Jefferson Highway eastbound and Carrollton Way is constructed underneath the J-turn and overpass. The ramp entrances and exits are located as follows:

- J-turn entrance from Causeway Boulevard southbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound
- J-turn entrance from Jefferson Highway eastbound: same as the existing J-turn entrance from Jefferson Highway eastbound
- Overpass entrance from Causeway Boulevard northbound: between Arlington Avenue and Carrollton Way and between Causeway Boulevard northbound and Causeway Boulevard southbound
- J-turn exit onto Jefferson Highway eastbound: adjacent to the existing J-turn entrance from Jefferson Highway eastbound
- J-turn exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound

- Overpass exit onto Causeway Boulevard northbound: between Causeway Boulevard northbound and Causeway Boulevard southbound near the existing J-turn exit onto Causeway Boulevard northbound

A traffic signal is placed at the J-turn exit onto Jefferson Highway eastbound. By providing a traffic signal instead of a designated exit lane as in Option 7A, acquisition of the adjacent Popeyes fast food restaurant is not necessary. In addition, Jefferson Highway eastbound traffic is still permitted to make a right turn onto Causeway Boulevard, unlike Option 7A. Jefferson Highway eastbound through traffic may use all three (3) lanes since no designated exit lane is provided.

Ochsner Medical Center traffic will have the option of utilizing the overpass via River Road in lieu of crossing Jefferson Highway to access Causeway Boulevard northbound via Jefferson Highway westbound. Detailed traffic analysis of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway will be required to determine if they possess sufficient capacity to service the additional traffic demand. Improvements to this route may be required to achieve full traffic efficiency.

Jefferson Highway eastbound to Causeway Boulevard northbound traffic occupies the left lane of the overpass. Causeway Boulevard northbound overpass traffic occupies the right lane of the overpass. As the overpass comes to grade north of Jefferson Highway, the two (2) lanes of traffic reduce to one (1) lane. The one (1) remaining lane occupies the left lane of Causeway Boulevard northbound. Jefferson Highway westbound to Causeway Boulevard northbound traffic occupies the right lane of Causeway Boulevard northbound.

The median is extended at the intersection of Causeway Boulevard southbound and Jefferson Highway, similar to the intersection of Causeway Boulevard northbound and Jefferson Highway to prevent Causeway Boulevard southbound traffic from crossing the intersection. The median at the intersection of Maine Street and Jefferson Highway is also extended. Causeway Boulevard southbound traffic currently has the following three (3) travel routes:

1. Turn left onto Jefferson Highway eastbound
2. Continue straight on Causeway Boulevard southbound
3. Turn right onto Jefferson Highway westbound

These travel routes are maintained; however, the means of travel of routes 1 and 2 are altered while route 3 remains unchanged:

1. Enter ramp, exit onto Jefferson Highway eastbound
2. Enter ramp, exit onto Jefferson Highway eastbound, turn right onto Causeway Boulevard southbound

3. Turn right onto Jefferson Highway westbound

All travel patterns not mentioned in this section remain unchanged. The design concept is illustrated in Figure 17.

### **10.2.2 Design Advantages**

The expansion of the existing J-turn to accommodate two-way traffic will significantly improve traffic flow from Causeway Boulevard southbound to Jefferson Highway eastbound. Traffic attempting to access Causeway Boulevard northbound via Jefferson Highway westbound from Ochsner Medical Center currently results in significant congestion; therefore, the creation of an alternate route from Ochsner Medical Center to Causeway Boulevard northbound will also indirectly improve Jefferson Highway westbound to Causeway Boulevard northbound traffic. The removal of the traffic signal at the Causeway Boulevard – Jefferson Highway intersection will eliminate the interruption of both Jefferson Highway westbound and Jefferson Highway eastbound traffic. By retrofitting the J-turn, construction costs will be reduced in relation to those associated with a full demolition and replacement of the J-turn. Utilization of a traffic signal at the J-turn exit onto Jefferson Highway avoids disruption to the adjacent commercial property, making acquisition of the property unnecessary. The signal also allows Jefferson Highway eastbound traffic to maintain its ability to turn right onto Causeway Boulevard southbound.

### **10.2.3 Design Disadvantages**

Construction of a new overpass results in a conflict with an existing roadway. The required landing distance for the entrance of the overpass will cause the ramp to come down to grade south of Carrollton Way, necessitating the closure of Carrollton Way between Causeway Boulevard northbound and Causeway Boulevard southbound. The traffic signal at the J-turn exit onto Jefferson Highway interrupts Jefferson Highway eastbound through traffic when southbound to eastbound movement has a green signal. In addition, the traffic signal could potentially cause traffic to back up onto the ramp when Jefferson Highway eastbound movement has a green signal. Overpass traffic must condense into one (1) lane before entering the left lane of Causeway Boulevard northbound, potentially causing congestion at the overpass exit. Access to the overpass will be limited by the ability of the portion of River Road adjacent to Ochsner Medical Center and the portion of Causeway Boulevard northbound south of Jefferson Highway to sufficiently service additional traffic demand. The addition of two (2) new travel lanes to the existing J-turn may necessitate the demolition of J-turn and new construction for the entire structure if the additional loads are too significant.

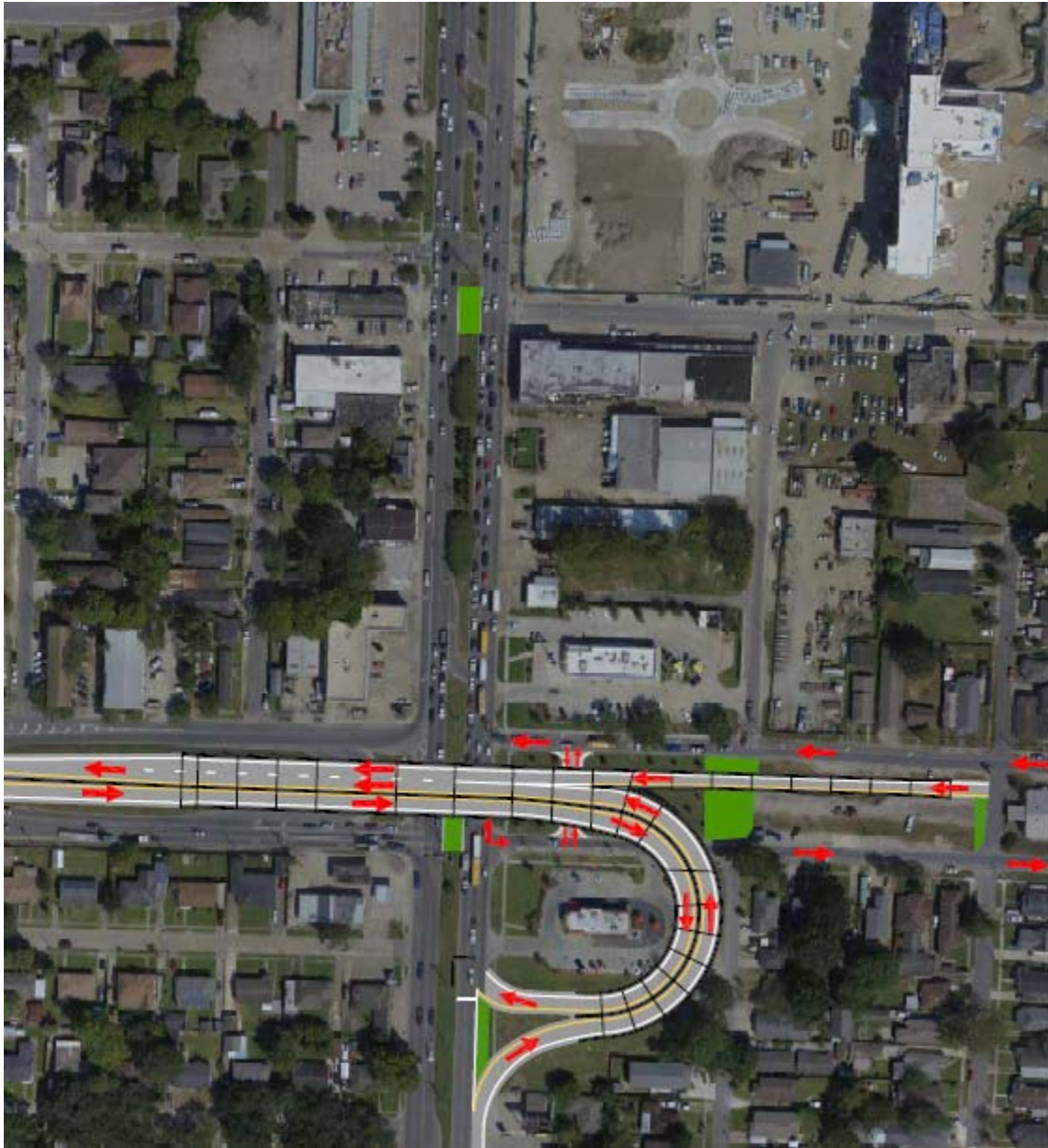


#### **10.2.4 Evaluation of Design**

Option 7B improves both morning and afternoon peak traffic congestion while also maintaining the current J-turn function of facilitating eastbound to northbound movement. Although it is more expensive than other options such as Options 1, 2A, 2B, 2C, 2D, 2E, and 3, Option 7B very effectively reduces the congestion at the Causeway Boulevard – Jefferson Highway intersection, which justifies its additional cost. Because Option 7B improves southbound to eastbound and westbound to northbound movement at a comparable estimated probable construction cost to Options 5A, 5B, and 6, Option 7B was selected for further review.

#### **10.2.5 Estimated Probable Construction Cost**

The estimated probable construction cost of Option 7B is \$21,774,616.54 if steel girders are used and \$19,893,079.04 if precast, prestressed concrete girders are used. If construction is completed in two (2) phases, with Phase One (1) consisting of reversal of the existing J-turn from one-way northbound to one-way southbound in conjunction with construction of a new overpass of Jefferson Highway and Phase Two (2) consisting of expansion of the existing J-turn, the estimated probable construction cost of Option 7B is \$23,228,503.12 if steel girders are used and \$21,346,965.62 if precast, prestressed concrete girders are used. The estimated probable construction cost does not include professional services, the relocation or replacement of any utilities or drainage, and any wiring or conduits for lighting or traffic signals. The existing J-turn has steel girders; therefore, it is preferable to match the new structure's girders to the existing structure. Although use of different girder types is not recommended, it is permitted. The full estimate of probable construction cost may be found in Appendix C.



**Figure 17: Option 7B Design Concept**

## 11 EVALUATION OF REFINED POTENTIAL OPTIONS

Each of the potential options not selected for further review suffer from either a lack of effectiveness or an excessive estimated probable cost in comparison with similar options. Option 1, expansion of the existing J-turn to appropriately accommodate two-way traffic, improves morning peak traffic congestion but fails to address afternoon peak traffic congestion. Options 2C, 2D, and 2E, variations of Option 2, reversal of the direction of the existing J-turn from one-way northbound to one-way southbound in conjunction with construction of a new overpass of Jefferson Highway, improve both morning and afternoon peak traffic congestion; however, other variations of Option 2 similarly improve southbound to eastbound and westbound to northbound movement while also having lower estimated probable construction costs. Option 3, reworking the striping, signage, and phasing of the intersection of the existing J-turn exit and Causeway Boulevard northbound, moderately improves afternoon peak traffic congestion but fails to address morning peak traffic congestion. Options 4B and 4C, demolition of the existing J-turn in conjunction with the implementation of a roundabout at the Causeway Boulevard – Jefferson Highway intersection, suffer from severe space constraints that limit their practical feasibility. Options 5A and 5B, variations of Option 5, construction of a small fly over ramp to bring traffic from south to east directly, improve morning peak traffic congestion but create a potentially dangerous merge location and have higher estimated probable construction costs than other options with similar effectiveness. Option 6, construction of a southbound ramp that uses surface improvements to facilitate the movement of traffic back to Jefferson Highway, requires considerable property acquisition and is expected to be extremely expensive, making it unfeasible. In consultation with the Project Management Committee (PMC), which consists of representatives from the Regional Planning Commission, Jefferson Parish, and LADOTD, five (5) of these options were selected for further refinement and review:

- 2A: reversal of the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new northbound overpass of Jefferson Highway, and creation of a designated exit lane onto Jefferson Highway
- 2B: reversal of the direction of the existing J-turn from one-way northbound to one-way southbound, construction of a new northbound overpass of Jefferson Highway, and utilization of a traffic signal at the exit onto Jefferson Highway
- 4A: construction of a Jefferson Highway overpass of Causeway Boulevard
- 7A: expansion of the existing J-turn to accommodate two-way traffic, construction of a new northbound overpass of Jefferson Highway, and creation of designated entrance and exit lanes at Jefferson Highway
- 7B: expansion of the existing J-turn to accommodate two-way traffic, construction of a new northbound overpass of Jefferson Highway, and utilization of a traffic signal at the exit onto Jefferson Highway

The five (5) options selected for further review represent the options that best satisfy the evaluation criteria:

1. Long-term impact to surrounding businesses and neighborhoods
2. Environmental impact
3. Short-term impact of construction
4. Improvement to southbound to eastbound movement (morning peak hours)
5. Improvement to westbound to northbound movement (afternoon peak hours)
6. Estimated probable construction cost
7. Anticipated construction time to completion

The five (5) options were ranked from one (1) to five (5) (most preferable to least preferable) according to each evaluation criterion. The rankings are displayed in Table 9 below.

**Table 9: Ranking of Options According to Evaluation Criteria**

Evaluation Criterion	Ranking				
	1	2	3	4	5
Long-term impact to surrounding businesses and neighborhoods	2B	7B	4A	2A	7A
Environmental impact	2B	2A	7B	7A	4A
Short-term impact of construction	2B	2A	7B	7A	4A
Improvement to southbound to eastbound movement (morning peak hours)	4A	7A	7B	2A	2B
Improvement to westbound to eastbound movement (afternoon peak hours)	4A	7A	7B	2A	2B
Estimated probable construction cost	2B	2A	7B	7A	4A
Anticipated construction time to completion	2B	2A	7B	7A	4A

Each of the five (5) options will improve both traffic flow through the Causeway Boulevard – Jefferson Highway intersection and access to Ochsner Medical Center; however, some options satisfy certain criteria better than others:

- 2B warrants consideration as a potential option if the following criteria are considered important: minimal impact on surrounding businesses and neighborhoods; minimal environmental impact; low estimated probable construction cost; and short anticipated construction time to completion.
- 4A warrants consideration as a potential option if the most effective solution to traffic congestion is desired, regardless of its performance according to other evaluation criteria.
- 7B warrants consideration as a potential option if a balance of cost and effectiveness is desired.

Ochsner Medical Center is continually expanding and the construction of many of its new facilities is concluding; however, subsequent additions are expected to further increase the average daily traffic (ADT) at the Causeway Boulevard – Jefferson Highway intersection. Construction of 7B in two (2) phases is a potential option to be considered that would address short-term needs with Phase One (1) while maintaining the opportunity to complete additional improvements at a later date with Phase Two (2):

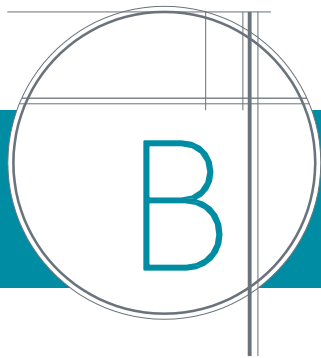
1. Phase One (1): reversal of the direction of the existing J-turn from one-way northbound to one-way southbound in conjunction with construction of a new northbound overpass of Jefferson Highway
  - Provides a potential solution to both morning peak and evening peak traffic congestion
  - Least expected impact to the surrounding area of each of the five (5) options
  - Lowest estimated probable construction cost of each of the five (5) options
  - Shortest anticipated construction time to completion of each of the five (5) options
2. Phase Two (2): expansion of the existing J-turn
  - Restores the current J-turn function to allow eastbound to northbound movement
  - Minimal additional impact to the surrounding area
  - Completion of both phases improves all major directions of traffic movement

Phased construction of Option 7B provides a balance of viability, economy, and effectiveness and has the potential to satisfy both short-term and long-term traffic congestion goals at the Causeway Boulevard – Jefferson Highway intersection.

# **Appendix A:**

## **Stage 0 Environmental Checklist Report**





## Stage 0 Environmental Checklist Report

*US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard*

### 1.0 ENVIRONMENTAL CONDITIONS

Environmental conditions for the project site are detailed below. Throughout this section, the term “project site” refers to the design alternatives’ construction corridor as well as adjacent properties to the construction corridor. (Please see Figure 1 for the “project site” as defined within this section of the report.) The Stage 0 Environmental Checklist and accompanying research documentation can be found in Appendix B.

Adjacent land use for the project site includes Neighborhood Commercial (C1), General Commercial District (C2), Medical Service District (H2), and Single-Family Residential District (R1A) zoning<sup>1</sup>.



Figure 1 - Vicinity map outlining "project site" as defined within Appendix A.

<sup>1</sup> *Jefferson Parish Geoportal*, Jefferson Parish Government, 8 Feb. 2018, [geoportal.jeffparish.net/public](http://geoportal.jeffparish.net/public).

### 1.1 Native American Tribal Lands

As per the Federal Lands and Indian Reservations Map, there are no tribal lands near the project site<sup>2</sup>. Additional confirmation was provided by a list of tribes found within each parish, as provided by the Louisiana Governor's Office of Indian Affairs. This list confirms that there are no tribal lands within Jefferson Parish. See Appendix B for the full reference documents.

### 1.2 Wetlands Inventory

The project site is in a developed area, with no wetlands within or adjacent to the site. Research on the Fish and Wildlife Services website confirmed that there are no wetlands present<sup>3,4</sup>. The site is within the Jefferson Parish Eastbank Levee System. See Appendix B for a map of the area as per the National Wetlands Inventory website.

### 1.3 Community Elements

The Stage 0 Environmental Checklist inquires if the proposed alternatives are adjacent to or will impact churches, cemeteries, schools, public facilities, or water supply. See Figure 2 below for a vicinity map of the project site<sup>5</sup>. Our investigation concludes the following:

There are no cemeteries near the project site.

There is one church near the project site. St. Agnus Church is located at 3310 Jefferson Highway; however, the only impacts to the church may be traffic issues and noise during construction. Otherwise, no relocation or direct property impacts will need to be considered. The St. Agnus School closed in 2015, with no current plans to reopen.

There is one school near the project site: the JCFA-East Non-Traditional High School. The school, located at 3410 Jefferson Highway, is west of the construction site (and St. Agnus Church). The only impacts to the school may be traffic issues and noise during construction. The JCFA East Non-Traditional High School is a school within the Jefferson Chamber Foundation Academy (JCFA) Charter School system. This school "provides a non-traditional pathway for Louisiana students to earn a high school diploma". While the school operates year-round, the

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<sup>2</sup> *pagefed\_la6.pdf*, Interior-Geological Survey, 2003, [nationalmap.gov/small\\_scale/printable/images/pdf/fedlands/LA.pdf](http://nationalmap.gov/small_scale/printable/images/pdf/fedlands/LA.pdf).

<sup>3</sup> *National Wetlands Inventory: Wetlands Mapper*, U.S. Fish & Wildlife Service, 21 Feb. 2018, [www.fws.gov/wetlands/data/Mapper.html](http://www.fws.gov/wetlands/data/Mapper.html).

<sup>4</sup> *Wetlands Reserve Program*, Natural Resources Conservation Service, 15 Nov. 2011, [www.nrcs.usda.gov/wps/portal/nrcs/main/national/water/wetlands/](http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/water/wetlands/).

<sup>5</sup> *Google Maps*, Google, 8 Feb. 2018, [www.google.com/maps/place/3000 Jefferson Hwy, Jefferson, LA 70121/data=!4m2!3m1!1s0x8620baafd21f8ca9:0x233b326b47bed02c?sa=X&ved=0ahUKEwiW25bd9snZAhUQ9GMKHT09AImQ8gEIjAA](http://www.google.com/maps/place/3000+Jefferson+Hwy,+Jefferson,+LA+70121/data=!4m2!3m1!1s0x8620baafd21f8ca9:0x233b326b47bed02c?sa=X&ved=0ahUKEwiW25bd9snZAhUQ9GMKHT09AImQ8gEIjAA).

JCFA students are only required to be in class for 3.5 hours per day. These factors alleviate any potential noise and traffic issues for the JFCA East Non-Traditional High School.

There are two public facilities near the project site. The Jefferson Lions Club, located at 2920 Arlington Avenue, may be impacted by the northbound overpass entrance of Options 2A, 2B, 7A, and 7B. The Jefferson Lions Club is used for community, private, and outreach events. The potential impact to the property includes noise, traffic, and possible access issues.

The American Legion Hall, located at 3001 River Road, is not likely to see direct property impacts due to the project. The greatest impact to the property would include noise and potential construction traffic. The American Legion hall is also used for community, private, and outreach events.

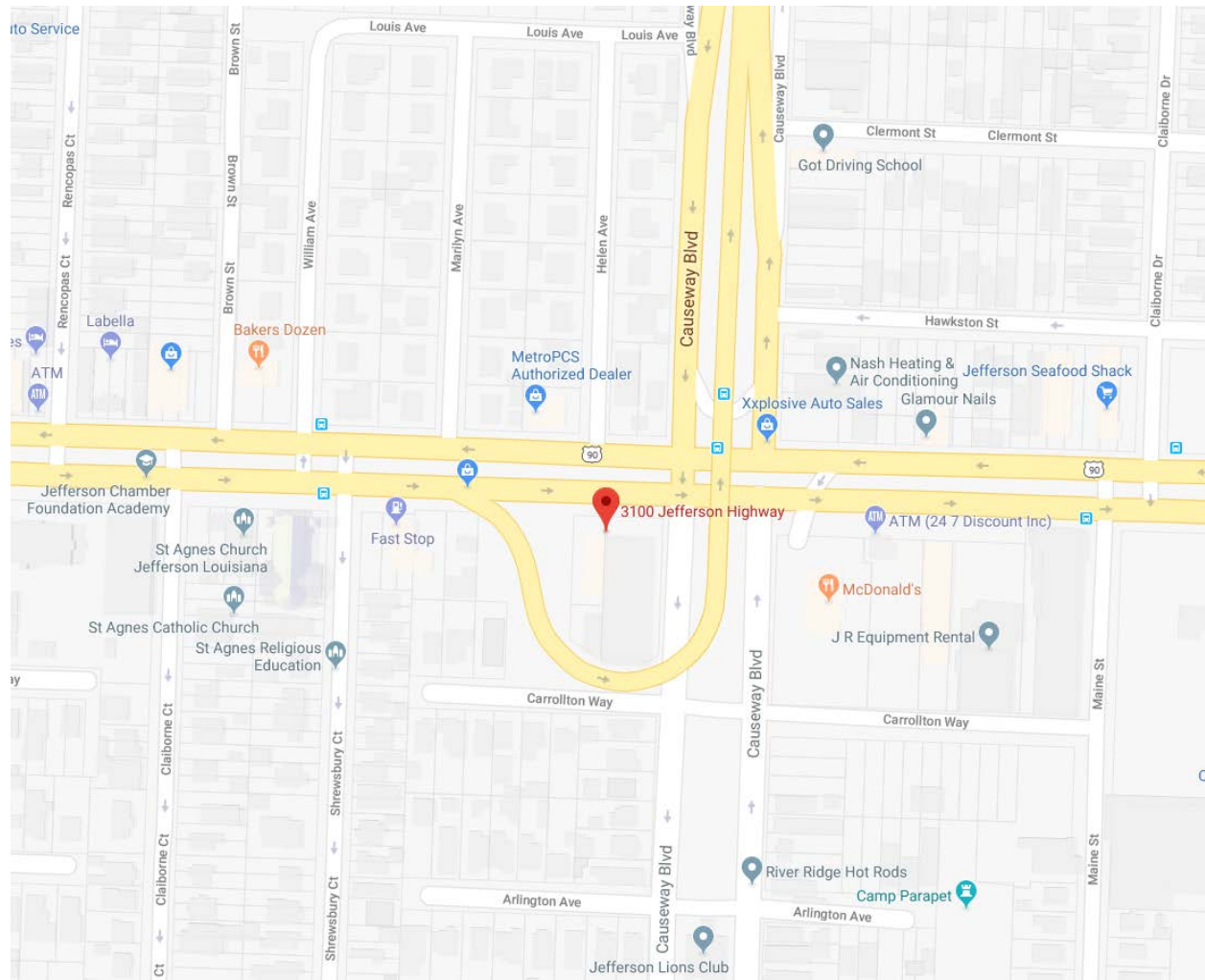
There are no active community/water wells within the project site. While there are historic wells in the area, they have all been plugged and abandoned<sup>6</sup>. See Figure 3 for abandoned well locations.

All of these community elements would gain long-term positive impacts upon project completion. The project is designed to alleviate current traffic congestion at and leading to the Causeway/Jefferson Highway interchange and prevent additional traffic congestion after the Ochsner expansion is complete. Users of these community elements will experience shorter travel times to and from the destinations listed above; thereby improving the community members' quality of life. Jefferson Parish should notify all community elements in operation during construction hours in advance of possible noise issues.

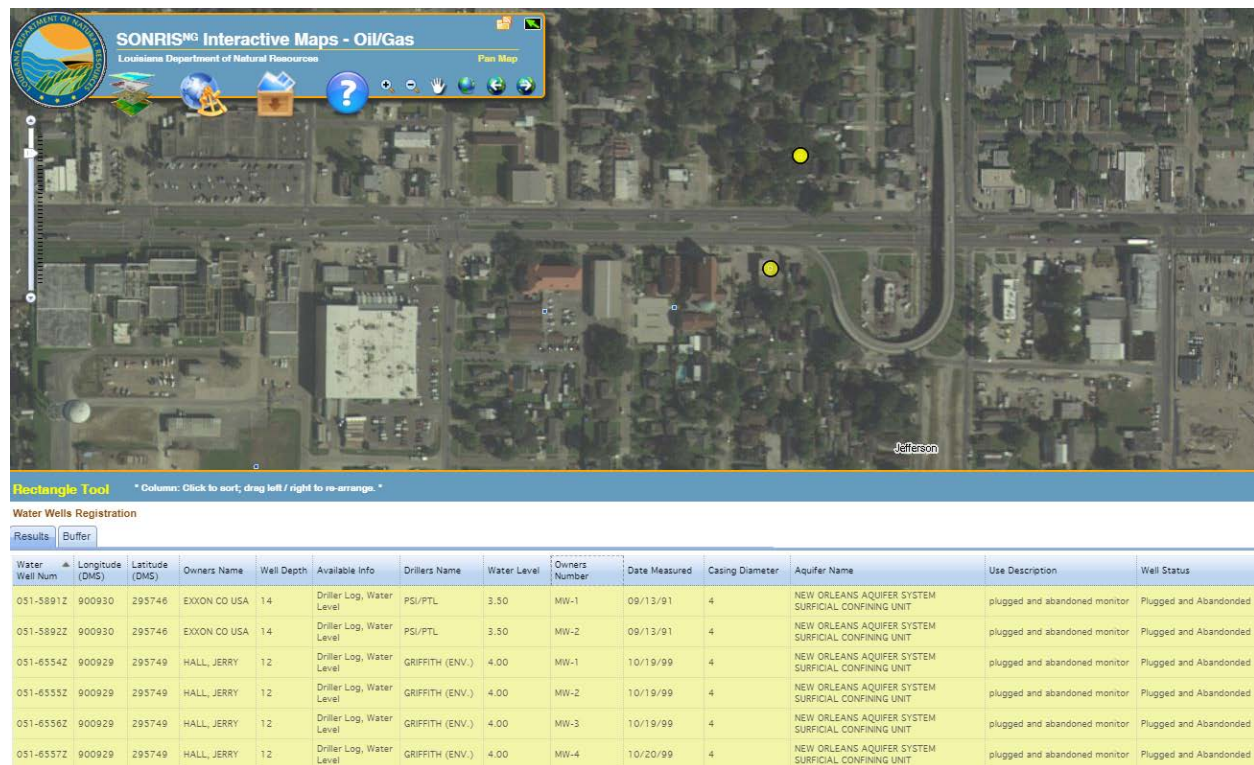
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<sup>6</sup> Louisiana Department of Natural Resources - Interactive Map, 8 Feb. 2018, [sonris-www.dnr.state.la.us/gis/agsweb/IE/JSViewer/index.html?TemplateID=181](http://sonris-www.dnr.state.la.us/gis/agsweb/IE/JSViewer/index.html?TemplateID=181).

**US 90 / Jefferson Highway at  
LA 3046 / Causeway Boulevard  
03/02/2018**



**Figure 2 - Vicinity Map containing locations of interest. Source: Google Maps**



**Figure 3 - Water Well Locations.** All water wells within the project site have been plugged and abandoned.

Source: <http://sonris-www.dnr.state.la.us/gis/agsweb/IE/JSViewer/index.html?TemplateID=181>

#### 1.4 Section 4(f) Issue

There are no public recreation areas<sup>7</sup>, public parks<sup>7</sup>, wildlife refuges<sup>8,9,10,11</sup>, nor historic sites<sup>12</sup> within the project site. Therefore, there are no related Section 4(f) issues present.

<sup>7</sup> Google Maps, Google, 8 Feb. 2018, [www.google.com/maps/place/3000 Jefferson Hwy, Jefferson, LA 70121/data=!4m2!3m1!1s0x8620baafd21f8ca9:0x233b326b47bed02c?sa=X&ved=0ahUKEwiW25bd9snZAhUQ9GMKHT09AiMQ8gEIJAA](http://www.google.com/maps/place/3000+Jefferson+Hwy,+Jefferson,+LA+70121/data=!4m2!3m1!1s0x8620baafd21f8ca9:0x233b326b47bed02c?sa=X&ved=0ahUKEwiW25bd9snZAhUQ9GMKHT09AiMQ8gEIJAA).

<sup>8</sup> Louisiana Department of Natural Resources - Interactive Map, 8 Feb. 2018, [sonris-www.dnr.state.la.us/gis/agsweb/IE/JSViewer/index.html?TemplateID=181](http://sonris-www.dnr.state.la.us/gis/agsweb/IE/JSViewer/index.html?TemplateID=181).

<sup>9</sup> National Wildlife Refuge System, U.S. Fish & Wildlife Service, 17 July 2015, [www.fws.gov/refuges/maps/NWRS\\_National\\_Map.gif](http://www.fws.gov/refuges/maps/NWRS_National_Map.gif).

<sup>10</sup> "Refuge Map - Big Branch Marsh - U.S. Fish and Wildlife Service." *Refuge Map*, U.S. Fish & Wildlife Service, 15 Mar. 2015, [www.fws.gov/refuge/Big\\_Branch\\_Marsh/map.html](http://www.fws.gov/refuge/Big_Branch_Marsh/map.html).

<sup>11</sup> *Refuge List by State*, U.S. Fish & Wildlife Service, 24 Dec. 2005, [www.fws.gov/refuges/profiles/ByState.cfm?state=LA](http://www.fws.gov/refuges/profiles/ByState.cfm?state=LA).

<sup>12</sup> *National Register of Historic Places - National Park Service*, U.S. Department of the Interior, 25 June 2016, [npgallery.nps.gov/NRHP/BasicSearch/](http://npgallery.nps.gov/NRHP/BasicSearch/).



## 1.5 Historic Places

The project does not impact, nor is it adjacent to, a property listed on the National Register of Historic Places<sup>13</sup>. Additionally, the project site is not within a historic district or a national landmark district. See Appendix B for a complete list of historic places in Jefferson Parish (from the National Park Service) and a map of the project site (from Louisiana Office of Cultural Development). Both of these sources indicate that there are no historical places present in the project site. Therefore, there are no historical site impacts due to this proposed project.

## 1.6 Threatened or Endangered Species

The Endangered Species Act of 1973 (ESA) was passed by Congress in an effort to ensure the survival of the nation's plants and animals, by protecting and recovering threatened and endangered species and the ecosystems in which they live. The ESA is overseen by both the U.S. Fish and Wildlife Service (FWS) and the Commerce Department's National Marine Fisheries Service (also known as NOAA Fisheries). Generally, FWS is responsible for land and freshwater organisms, while NOAA Fisheries is responsible for marine wildlife.

A full list of threatened and endangered species present within the parish can be found in Appendix B<sup>14</sup>. However, all species on the list are native to coastal areas. Since the project site is within the levee system and more than 0.2 miles from the Mississippi River and more than 3.8 miles from Lake Pontchartrain, the only species on the list with a possibility of being present is the whooping crane (see Figure 4). However, none have been observed in the vicinity and none are expected to be present due to the industrial and commercial nature of the project site. Additionally, the lack of suitable habitat makes the species' presence highly unlikely.

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<sup>13</sup> *OCD Standing Structures and Districts Map*, Louisiana Office of Cultural Development, 8 Feb. 2018, [laocd.maps.arcgis.com/apps/webappviewer/index.html?id=d6b1d2a16f214aaf9339064bc0f26312](http://laocd.maps.arcgis.com/apps/webappviewer/index.html?id=d6b1d2a16f214aaf9339064bc0f26312).

<sup>14</sup> U.S. Fish and Wildlife Service. *ECOS - Environmental Conservation Online System*, U.S. Fish & Wildlife Service, 8 Feb. 2018, [ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=22051](https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=22051).





**Figure 4 - Whooping Crane.** If seen at site, notify Louisiana Wildlife and Fisheries. Source: LA Dept. of Wildlife and Fisheries

### **1.7 Louisiana Natural and Scenic Rivers Act**

The Louisiana Natural and Scenic Rivers System was established by the Louisiana Legislature in 1970 “for the purpose of preserving, protecting, developing, reclaiming, and enhancing the wilderness qualities, scenic beauties, and ecological regimes of certain free-flowing Louisiana streams.” This system was adopted in the early 1970’s with the Louisiana Natural and Scenic River Act, which provides requirements for a waterway to be considered as a part of the System. The Act also provides management, funding, and regulatory guidelines for the Louisiana Natural and Scenic Rivers System. This Rivers System is administered by the Department of Wildlife and Fisheries. As shown in Figure 5, there are no components of the Louisiana Natural and Scenic Rivers System in the project site<sup>15</sup>. See Appendix B for the full map and listing of rivers.

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<sup>15</sup> *Louisiana Natural and Scenic Rivers Descriptions and Map*, Louisiana Department of Wildlife and Fisheries, 7 June 2013, [www.wlf.louisiana.gov/louisiana-natural-and-scenic-rivers-descriptions-and-map](http://www.wlf.louisiana.gov/louisiana-natural-and-scenic-rivers-descriptions-and-map).



Figure 5 - Louisiana Natural and Scenic Rivers Map (zoomed inset of Jefferson Parish and vicinity, red star represents the project site). Source: LA Dept. of Wildlife and Fisheries.

## 1.8 Significant Trees

Engineering Directives and Standards Manual (EDSM) I.1.1.21 was established to define a policy regarding the treatment of significant trees within the highway right-of-way, zone of construction, or operational influence. Within this policy, a significant tree is defined as “Live Oak, Red Oak, White Oak, Magnolia or Cypress that is considered aesthetically important, 18 inches or greater in diameter at breast height (4'-6" above the ground), and having a form that separates it from the surrounding vegetation or is considered historic.”

After a site evaluation, it was concluded that nine “significant trees” (as outlined by policy EDSM I.1.1.21) exist near street right of way boundaries. These trees are as follows:

- Three(3) 20”+ Live Oak trees exist between the sidewalk and street curb outside of the McDonalds restaurant on Northbound Causeway Blvd., each approximately 10’ from the back of curb.
- One(1) 28” Bald Cypress tree exists between the sidewalk and street curb on the south side of Louis St., near the intersection of Louis St. and Southbound Causeway Blvd. The tree is approximately 4’ from the back of curb on Louis St. and approximately 18’ from the back of curb on Southbound Causeway Blvd.
- Two(2) 30” Live Oak trees and two(2) Red Oak trees exist near the north side of the right of way near the address 3109 Carrollton Way. These trees are between 9’ and 21’ from the edge of asphalt on Carrollton Way.
- One(1) 24” Water Oak tree exists near the north side of the right of way near the address 3109 Carrollton Way. The location of this tree is approximately 9’ from

the edge of asphalt on Carrollton Way and approximately 191' from the center of Southbound Causeway Blvd.

There were other notable trees identified in the general proximity of the proposed street work, but the trees were either not of a significant species or not within the street rights of way. These trees, along with the previous significant trees described above, are shown in Figure 6.



Figure 6 - Notable trees within the project site.



Additionally, coordination with Jefferson Parish and LA DOTD should occur to assess the treatment of any trees impacted in the project site right-of-way. Specifically, the smaller trees in the neutral ground under Causeway Boulevard, neutral ground on Jefferson Highway in front of the McDonalds, and right-of-way on Causeway Boulevard next to McDonalds were provided using various sources of funding. Coordination with the above-mentioned agencies should occur if these trees are impacted by the selected alternative.

## 1.9 Bridge Construction

The existing J-turn ramp is owned by the LA DOTD and was built in 1957<sup>16</sup> (see Figure 7)<sup>17</sup>. The J-turn was reconfigured in 1999 as a one-way northbound design and raised in 2009 to achieve 17 ft of clearance. For the full bridge report, see Appendix B.

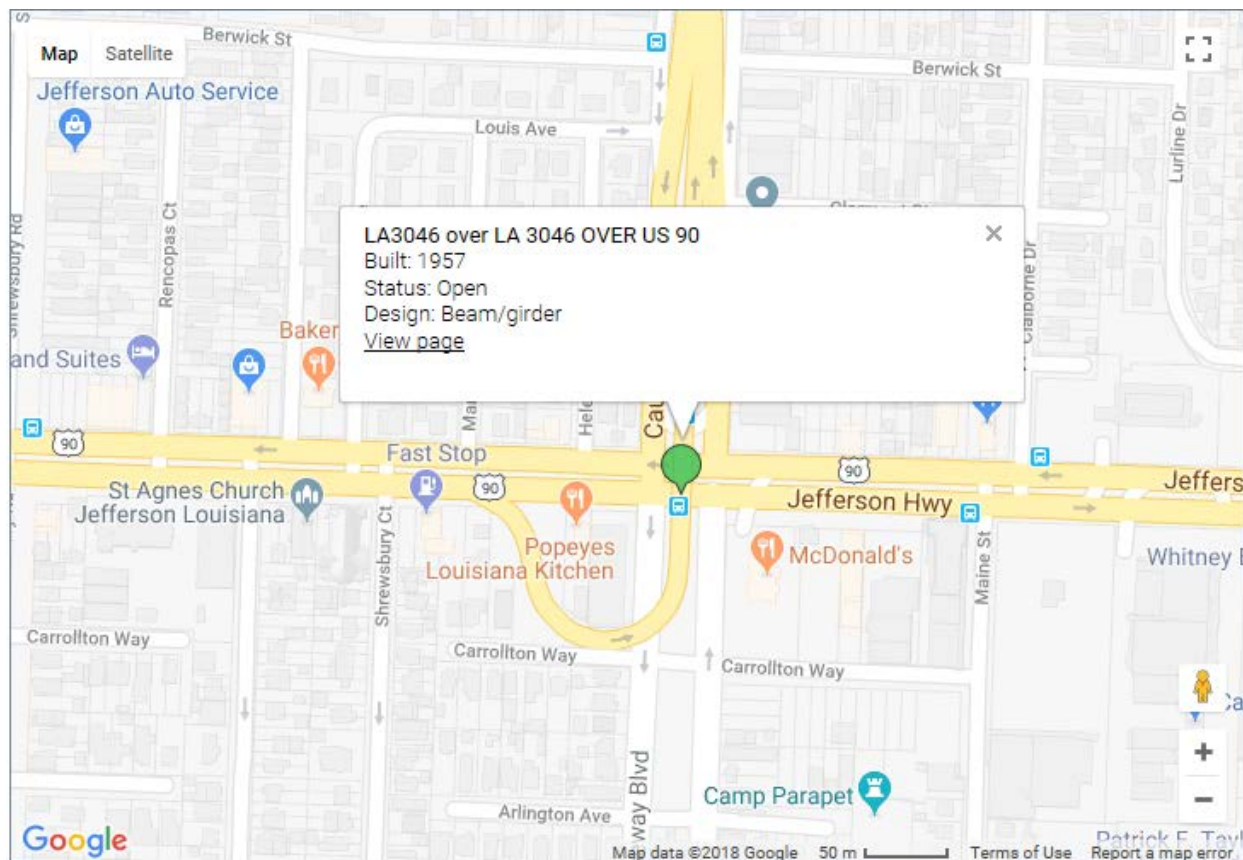


Figure 7 - Bridge details. Source: BridgeReports.com

<sup>16</sup> *National Bridge Inventory*, ArcGIS, 8 Feb. 2018, [www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=5ba496f7f5484a65bee680949147c762](http://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=5ba496f7f5484a65bee680949147c762)

<sup>17</sup> Map of New Orleans, Louisiana Bridges, BridgeReports.com: National Bridge Inventory Data, 8 Feb. 2018, [bridgereports.com/city/new-orleans-louisiana/exhibit/](http://bridgereports.com/city/new-orleans-louisiana/exhibit/).

### 1.10 Navigable Waterways

Generally, the determination as to whether a water body is “navigable” is dependent on judicial interpretation and there are no set administrative agencies<sup>18</sup>. However, the NOAA Electronic Navigation Charts<sup>19</sup> and USACE Navigable Waters list<sup>20</sup> and map<sup>21</sup> confirmed that no navigable waterways are impacted. There are no waterways, navigable or otherwise, in or adjacent to the project site. The site is more than 0.2 miles away from the Mississippi River, within the levee system. Figure 8 below shows that there are no USACE-designated Navigable Waterways within or adjacent to the project site.



Figure 8 - USACE Navigable Waterways. Source: <http://www.mvn.usace.army.mil/Missions/Navigation/>

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<sup>18</sup> *Code of Federal Regulations: Part 329—Definition of Navigable Waters of the United States*, Government Publishing Office, 4 Jan. 2018, [www.gpo.gov/fdsys/pkg/CFR-2017-title33-vol3/xml/CFR-2017-title33-vol3-part329.xml](http://www.gpo.gov/fdsys/pkg/CFR-2017-title33-vol3/xml/CFR-2017-title33-vol3-part329.xml).

<sup>19</sup> *Chart Locator*, Office of Coast Survey, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, 20 Mar. 2009, [www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml](http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml).

<sup>20</sup> MVD Navigable Waters, U.S. Army Corps of Engineers, 19 Nov. 2016, [www.mvd.usace.army.mil/Portals/52/docs/regulatory/11\\_MVD\\_navigable\\_waters.pdf](http://www.mvd.usace.army.mil/Portals/52/docs/regulatory/11_MVD_navigable_waters.pdf).

<sup>21</sup> *New Orleans District - Navigation*, U.S. Army Corps of Engineers, 19 Nov. 2016, [www.mvn.usace.army.mil/Missions/Navigation/](http://www.mvn.usace.army.mil/Missions/Navigation/).

### 1.11 Hazardous Material

To provide the most comprehensive environmental information possible, an EDR Report was purchased for the project site. EDR provides current and dependable data by searching over 1,600 environmental databases to compile the report<sup>22</sup>. The complete EDR Report (including Radius Map™ Report with GeoCheck®, Aerial Photo Decade Package, Certified Sanborn® Map Report, Historical Topo Map Report, and EDR-City Directory Image Report) is provided as an additional document separate from this report.

Hazardous materials pose a risk to both construction crews and the community members. Therefore, it is important to be aware of any present or historic leaking underground storage tanks (LUSTs), Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) sites, Emergency Response Notification System (ERNS) incidents, and Enforcement and Compliance history within the project site.

#### Leaking Underground Storage Tanks

According to the Environmental Protection Agency (EPA), there are approximately 555,000 underground storage tanks (USTs) across the nation currently storing petroleum or hazardous substances. When these tanks leak or fail, they pose a serious threat to the environment and community members by contaminating the soil, groundwater, surface waters, and air. Therefore, the timely detection (and subsequent remediation) of leaking underground storage tanks is very important.

Within the project site, there are no current LUSTs. However, there is record of one historic LUST, which has been remediated in accordance with EPA standards. Located at 3220 Jefferson Highway, a gas station owned by the Exxon Mobile company (the site now houses the Fast Stop of Jefferson) had a used oil leak reported in 1993. Four USTs were removed on/about February 19, 1993. Due to concerns over possible oil and grease contamination in the former tank pad, excavation was required to remediate the area. DEQ approved a request for “no further action” on 4/29/1996.

At the same site in May 1998, approximately 379 gallons of unleaded regular gasoline were released onto the concrete pavement and entered the stormwater system after the UST was overfilled by the gasoline transport company. The remediation case underwent its final evaluation and the case was closed on April 4, 2003.

See Appendix B for the full report on the LUST incidents.

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<sup>22</sup> EDR Radius Map Report, EDR, 5 Apr. 2015, [edrnnet.com/prods/edr-radius-map-report-geocheck/](http://edrnnet.com/prods/edr-radius-map-report-geocheck/).



#### CERCLIS

There are no potential or confirmed Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) sites within the project site.

#### ERNS

The Emergency Response Notification System (ERNS) records and stores information on reported releases of oil and hazardous substances. There are no recorded incidents within the project site.

#### Enforcement and Compliance History

The project site consists primarily of neighborhood commercial, general commercial, and single family residential properties, and the Ochsner complex. Businesses such as Fast Stop of Jefferson and Xxplosive Auto Sales are located within the project site along Jefferson Highway and Causeway Boulevard<sup>23</sup>. Enforcement and Compliance History Online (ECHO) reports provide integrated compliance and enforcement information for approximately 800,000 regulated facilities nationwide. The EPA is the governing agency on this system. There are no violations within the project site reported in the US EPA Enforcement and Compliance History Online (ECHO) report.

In conclusion, the EDR Report (which researches the Louisiana Department of Environmental Quality (LDEQ), EPA, and other relevant databases) shows no factors of environmental concern within the project site.

### **1.12 Underground Storage Tanks**

The only location within the project site containing underground storage tanks (USTs) is the Fast Stop of Jefferson (3220 Jefferson Highway). There are three active tanks at the business (two single-compartment tanks and one double-compartment tank), all installed in 1996. The single-compartment tanks store gasoline and the double-compartment tank stores diesel and gasoline. See Appendix B for full UST details.

### **1.13 Facilities of Environmental Concern**

There are no chemical plants, refineries, or landfills adjacent to the project. The site is not located near any large manufacturing facilities. Historically, there was a dry cleaner within the project site (potential for chemical emissions/effluent). However, the Jefferson Plaza Cleaners, located at 412 Maine Street, has been recently demolished. Therefore, no potential for future contamination exists from this site.

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<sup>23</sup> *Google Maps*, Google, 8 Feb. 2018, [www.google.com/maps/place/3000 Jefferson Hwy, Jefferson, LA 70121/data=!4m2!3m1!1s0x8620baafd21f8ca9:0x233b326b47bed02c?sa=X&ved=0ahUKEwiW25bd9snZAhUQ9GMKHT09AiMQ8gEIJjAA](http://www.google.com/maps/place/3000+Jefferson+Hwy,+Jefferson,+LA+70121/data=!4m2!3m1!1s0x8620baafd21f8ca9:0x233b326b47bed02c?sa=X&ved=0ahUKEwiW25bd9snZAhUQ9GMKHT09AiMQ8gEIJjAA).

#### **1.14 Oil/Gas Wells**

The Louisiana Department of Natural Resources (DNR) maintains a register of oil and gas wells across the state. There are no oil and gas wells in the Jefferson area, active or inactive.<sup>24</sup>

#### **1.15 Potential Residential/Commercial Displacements**

There are limited instances of residential/commercial displacements as a result of the project. Option 4A has no displacement effects. Options 2A and 7A require the acquisition of the Popeye's fast food restaurant at 3004 Jefferson Highway to accommodate the J-turn direction reversal and/or widening.

#### **1.16 Community or Cultural Issues**

A potential community issue is regarding the Jefferson Lions Club. The Jefferson Lions Club is used for community, private, and outreach events. The potential impact to the property includes noise, traffic, potential access issues, and possible relocation. Coordination with Jefferson Parish and the Lions Club is recommended if Options 2A, 2B, 7A, and 7B are selected. We are not aware of any cultural issues associated with the project site or project.

#### **1.17 Population Data**

The project site is not within a predominately low income or minority area<sup>25</sup>. Within a 3-mile radius, 36% of the population is a minority and 15.2% of the population is below the 2017 poverty line<sup>26</sup>. See Appendix B for the full demographic statistics within a 3-mile radius of 2809 Jefferson Highway (as determined through the ECHO report).

#### **1.18 Detour/Road Closures**

Every option will require a detour and closure of the overpass. Consultation the traffic engineer would be required to present options for traffic routing during construction.

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<sup>24</sup> Louisiana Department of Natural Resources - Interactive Map, 8 Feb. 2018, [sonris-www.dnr.state.la.us/gis/agsweb/IE/JSViewer/index.html?TemplateID=181](http://sonris-www.dnr.state.la.us/gis/agsweb/IE/JSViewer/index.html?TemplateID=181).

<sup>25</sup> Detailed Facility Report | ECHO, Environmental Protection Agency, 7 Feb. 2018, [echo.epa.gov/detailed-facility-report?fid=110003277347](http://echo.epa.gov/detailed-facility-report?fid=110003277347).

<sup>26</sup> Poverty Guidelines, U.S. Department of Health and Human Services, 12 Jan. 2018, [aspe.hhs.gov/poverty-guidelines](http://aspe.hhs.gov/poverty-guidelines).

## **Appendix B:**

# **Environmental Checklist Supporting Documents**

**STAGE 0**  
**Environmental Checklist**

Route \_\_\_\_\_ Parish: \_\_\_\_\_

C.S. \_\_\_\_\_ Begin Log mile \_\_\_\_\_ End Log mile \_\_\_\_\_

**ADJACENT LAND USE:** \_\_\_\_\_

**Any property owned by a Native American Tribe?**

(Y or N or Unknown) If so, which Tribe? \_\_\_\_\_

**Any property enrolled into the Wetland Reserve Program?**

(Y or N or Unknown) If so, give the location \_\_\_\_\_

**Are there any other known wetlands in the area?**

(Y or N) If so, give the location \_\_\_\_\_

**Community Elements: Is the project impacting or adjacent to any** (if the answer is yes, list names and locations):

(Y or N) Cemeteries \_\_\_\_\_

(Y or N) Churches \_\_\_\_\_

(Y or N) Schools \_\_\_\_\_

(Y or N) Public Facilities (i.e., fire station, library, etc.) \_\_\_\_\_

(Y or N) Community water well/supply \_\_\_\_\_

**Section 4(f) issue: Is the project impacting or adjacent to any** (if the answer is yes, list names and locations):

(Y or N) Public recreation areas \_\_\_\_\_

(Y or N) Public parks \_\_\_\_\_

(Y or N) Wildlife Refuges \_\_\_\_\_

(Y or N) Historic Sites \_\_\_\_\_

**Is the project impacting, or adjacent to, a property listed on the National Register of Historic Places?**

(Y or N) **Is the project within a historic district or a national landmark district?** (Y or N) If the answer is yes to either question, list names and locations below:

\_\_\_\_\_  
\_\_\_\_\_

**Do you know of any threatened or endangered species in the area?** (Y or N)

If so, list species and location. \_\_\_\_\_

\_\_\_\_\_

**Does the project impact or adjacent to a stream protected by the Louisiana Scenic Rivers Act?** (Y or N) If yes, name the stream. \_\_\_\_\_

**Are there any Significant Trees as defined by EDSM I.1.1.21 within proposed ROW?** (Y or N) If so, where? \_\_\_\_\_

**What year was the existing bridge built?** \_\_\_\_\_

**Are any waterways impacted by the project considered navigable?** (Y or N) If unknown, state so, list the waterways: \_\_\_\_\_

\_\_\_\_\_

**Hazardous Material: Have you checked the following DEQ and EPA databases for potential problems?** (If the answer is yes, list names and locations.)

(Y or N) Leaking Underground Storage Tanks \_\_\_\_\_

(Y or N) CERCLIS \_\_\_\_\_

(Y or N) ERNS \_\_\_\_\_

(Y or N) Enforcement and Compliance History \_\_\_\_\_

**STAGE 0**  
**Environmental Checklist**

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**Underground Storage Tanks (UST): Are there any Gasoline Stations or other facilities that may have UST on or adjacent to the project? (Y or N)** \_\_\_\_\_

If so, give the name and location: \_\_\_\_\_

**Any chemical plants, refineries or landfills adjacent to the project? (Y or N) Any large manufacturing facilities adjacent to the project? (Y or N) Dry Cleaners? (Y or N)** If yes to any, give names and locations: \_\_\_\_\_

**Oil/Gas wells: Have you checked DNR database for registered oil and gas wells? (Y or N)** List the type and location of wells being impacted by the project. \_\_\_\_\_

**Are there any possible residential or commercial relocations/displacements? (Y or N)**

How many? \_\_\_\_\_

**Do you know of any sensitive community or cultural issues related to the project? (Y or N)**

If so, explain \_\_\_\_\_

**Is the project area population minority or low income? (Y or N)** \_\_\_\_\_

**What type of detour/closures could be used on the job?** \_\_\_\_\_

**Did you notice anything of environmental concern during your site/windshield survey of the area? If so, explain below.**

\_\_\_\_\_  
**Point of Contact**

\_\_\_\_\_  
**Phone Number**

\_\_\_\_\_  
**Date**

## STAGE 0 Environmental Checklist

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### General Explanation:

To adequately consider projects in Stage 0, some consideration must be given to the human and natural environment which will be impacted by the project. The Environmental Checklist was designed knowing that some environmental issues may surface later in the process. This checklist was designed to obtain basic information, which is readily accessible by reviewing public databases and by visiting the site. It is recognized that some information may be more accessible than other information. Some items on the checklist may be more important than others depending on the type of project. It is recommended that the individual completing the checklist do their best to answer the questions accurately. Feel free to comment or write any explanatory comments at the end of the checklist.

### The Databases:

To assist in gathering public information, the previous sheet includes web addresses for some of the databases that need to be consulted to complete the checklist. As of February 2011, these addresses were accurate.

Note that you will not have access to the location of any threatened or endangered (T&E) species. The web address lists only the threatened or endangered species in Louisiana by Parish. It will generally describe their habitat and other information. If you know of any species in the project area, please state so, but you will not be able to confirm it yourself. If you feel this may be an issue, please contact the Environmental Section. We have biologist on staff who can confirm the presence of a species.

### Why is this information important?

Land Use? Indicator of biological issues such as T&E species or wetlands.

Tribal Land Ownership? Tells us whether coordination with tribal nations will be required.

WRP properties? Farmland that is converted back into wetlands. The Federal government has a permanent easement which cannot be expropriated by the State. Program is operated through the Natural Resources Conservation Service (formerly the Soil Conservation Service).

Community Elements? DOTD would like to limit adverse impacts to communities. Also, public facilities may be costly to relocate.

Section 4(f) issues? USDOT agencies are required by law to avoid certain properties, unless a prudent or feasible alternative is not available.

Historic Properties? Tells us if we have a Section 106 issue on the project. (Section 106 of the National Historic Preservation Act) See <http://www.achp.gov/work106.html> for more details.

Scenic Streams? Scenic streams require a permit and may require restricted construction activities.

Significant Trees? Need coordination and can be important to community.

Age of Bridge? Section 106 may apply. Bridges over 50 years old are evaluated to determine if they are eligible for the National Register of Historic Places.

Navigability? If navigable, will require an assessment of present and future navigation needs and US Coast Guard permit.

Hazardous Material? Don't want to purchase property if contaminated. Also, a safety issue for construction workers if right-of-way is contaminated.

Oil and Gas Wells? Expensive if project hits a well.

Relocations? Important to community. Real Estate costs can be substantial depending on location of project. Can result in organized opposition to a project.

Sensitive Issues? Identification of sensitive issues early greatly assists project team in designing public involvement plan.

Minority/Low Income Populations? Executive Order requires Federal Agencies to identify and address disproportionately high and adverse human health and environmental effects on minority or low income populations. (Often referred to as Environmental Justice)

Detours? The detour route may have as many or more impacts. Should be looked at with project. May be unacceptable to the public.



## STAGE 0 Environmental Checklist

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Louisiana Governor's Office of Indian Affairs:

<http://www.indianaffairs.com/tribes.htm>

Louisiana Wetlands Reserve Program:

<http://www.nrcs.usda.gov/programs/wrp/states/la.html>

Community Water Well/Supply

<http://sonris.com/default.htm>

Louisiana Department of Wildlife and Fisheries – Wildlife Refuges

<http://www.wlf.louisiana.gov/refuges>

<http://www.fws.gov/refuges/profiles/ByState.cfm?state=LA>

<http://www.fws.gov/refuges/refugelocator/maps/Louisiana.html>

U.S. Fish & Wildlife Service – National Wetlands Inventory:

<http://www.fws.gov/wetlands/>

Louisiana State Historic Sites:

<http://www.crt.state.la.us/parks/ihistoricsiteslisting.aspx>

National Register of Historic Places (Louisiana):

<http://nrhp.focus.nps.gov/natreg/home.do?searchtype=natreg/home>

<http://www.nationalregisterofhistoricplaces.com/la/state.html>

National Historic Landmarks Program:

<http://www.nps.gov/history/nhl/>

Threatened and Endangered Species Databases:

<http://www.wlf.louisiana.gov/wildlife/louisiana-natural-heritage-program>

Louisiana Scenic Rivers:

<http://www.wlf.louisiana.gov/wildlife/scenic-rivers>

<http://media.wlf.state.la.us/experience/scenicrivers/louisiananaturalandscenicriversdescriptions/>

<http://www.legis.state.la.us/lss/lss.asp?doc=104995>

Significant Tree Policy (EDSM I.1.1.21)

<http://notes1/ppmemos.nsf>

(Live Oak, Red Oak, White Oak, Magnolia or Cypress, aesthetically important, 18" or greater in diameter at breast height and has form that separates it from surrounding or that which may be considered historic.)

CERCLIS (Superfund Sites):

<http://www.epa.gov/superfund/sites/cursites/>

[http://www.epa.gov/enviro/html/cerclis/cerclis\\_query.html](http://www.epa.gov/enviro/html/cerclis/cerclis_query.html)

ERNS - Emergency Response Notification System - Database of oil and hazardous substances spill reports: <http://www.epa.gov/region4/r4data/erns/index.htm>

Enforcement & Compliance History (ECHO)

<http://www.epa-echo.gov/echo/>

DEQ – Underground Storage Tank Program Information:

<http://www.deq.louisiana.gov/portal/tabid/2674/Default.aspx>

Leaking Underground Storage Tanks:

<http://www.deq.state.la.us/portal/tabid/79/Default.aspx>

**STAGE 0**  
**Environmental Checklist**

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**SONRIS – Oil and Gas Well Information & Water Well Information**  
<http://sonris.com/default.htm>

**Environmental Justice (minority & low income)**  
<http://www.fhwa.dot.gov/environment/ej2000.htm>

**Demographics**  
<http://www.census.gov/>

**FHWA’s Environmental Website**  
<http://www.fhwa.dot.gov/environment/index.htm>

Additional Databases Checked

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Other Comments:

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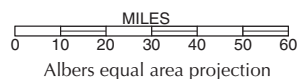
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## FEDERAL LANDS AND INDIAN RESERVATIONS

- Bureau of Indian Affairs
- Department of Defense (includes Army Corps of Engineers lakes)
- Fish and Wildlife Service / Wilderness
- Forest Service / Wilderness
- National Park Service / Wilderness

Some small sites are not shown, especially in urban areas.



### Abbreviations

- NF National Forest  
NWR National Wildlife Refuge





OFFICE *of the* GOVERNOR

JOHN BEL EDWARDS

**State of Louisiana**  
**List of Federal and State Recognized Tribes**

**Federal Tribes**

Chitimacha Tribe of Louisiana  
Charenton, LA 70523  
**(St. Mary Parish)**

Coushatta Tribe of Louisiana  
Elton, LA 70532  
**(Jefferson Davis Parish)**

Jena Band of Choctaw Indians  
Jena, LA 71342  
**(LaSalle Parish)**

Tunica-Biloxi Tribe of Louisiana  
Marksville, LA 71351  
**(Avoyelles Parish)**

**State Recognized Tribes**

Adai Caddo Indians of Louisiana  
Robeline, LA 71469  
**(Natchitoches Parish)**

Biloxi Chitimacha Confederation/  
Bayou Lafourche Band  
Zachary, LA 70791  
**(East Baton Rouge Parish)**

Choctaw-Apache Tribe of Ebarb  
Thomas Rivers, Chairman  
Zwolle, LA 71486  
**(Sabine Parish)**

Clifton Choctaw Tribe of Louisiana  
Clifton, LA 71447

**(Rapides Parish)**

Four-Winds Cherokee Tribe  
DeRidder, LA 70634

**(Beauregard Parish)**

Grand Caillou/Dulac Band of Biloxi-Chitimacha-Choctaw  
Bourg, LA 70343

**(Terrebone Parish)**

Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw  
Montegut, LA 70377

**(Terrebone Parish)**

Louisiana Band of Choctaw Indians  
Prairieville, LA 70769

**(Ascension Parish)**

Point au Chien Indian Tribe  
Montegut, LA 70377

**(Terrebone Parish)**

United Houma Nation  
Golden Meadow, LA 70357

**(Lafourche Parish)**





U.S. Fish and Wildlife Service

# National Wetlands Inventory

## Causeway @ Jeff Hwy



February 6, 2018

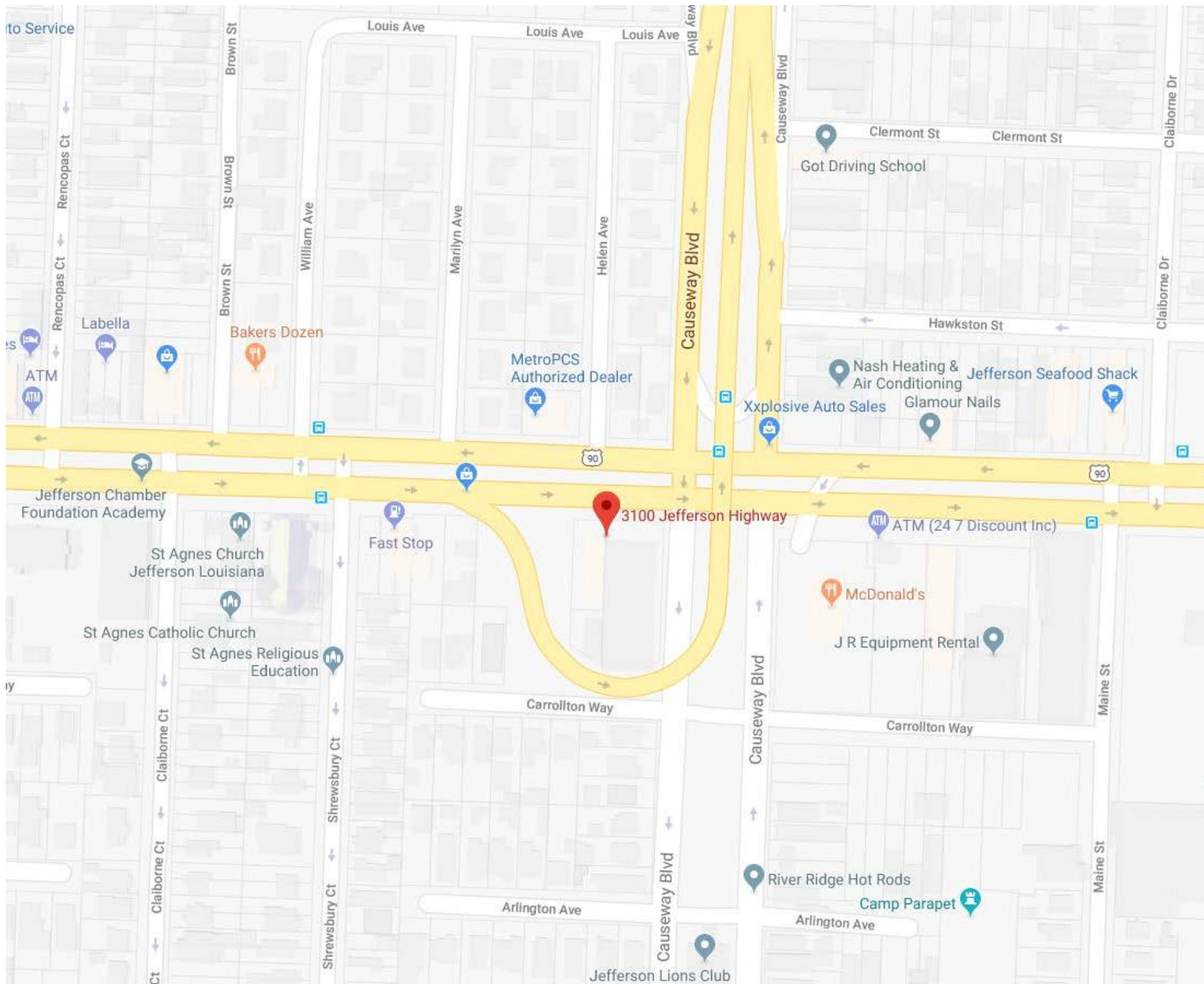
### Wetlands

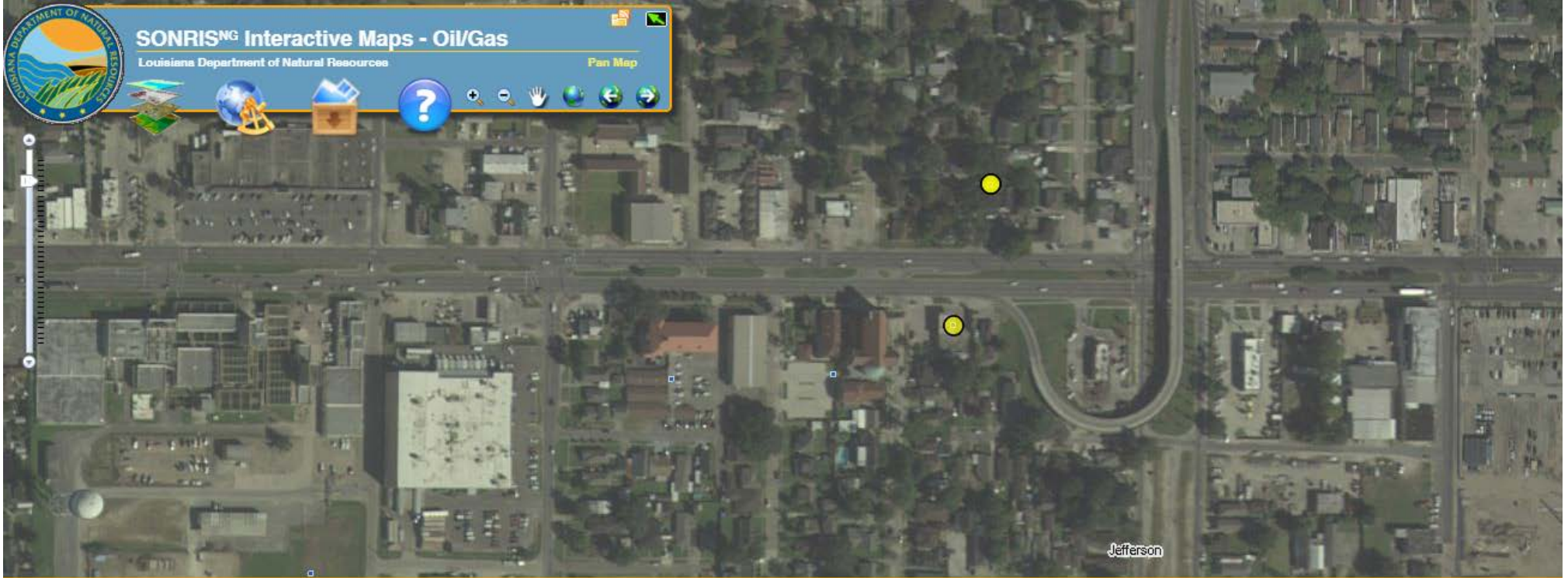
	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)  
This page was produced by the NWI mapper







**Rectangle Tool** \* Column: Click to sort; drag left / right to re-arrange. \*

#### Water Wells Registration

Results Buffer

Water Well Num	Longitude (DMS)	Latitude (DMS)	Owners Name	Well Depth	Available Info	Drillers Name	Water Level	Owners Number	Date Measured	Casing Diameter	Aquifer Name	Use Description	Well Status
051-5891Z	900930	295746	EXXON CO USA	14	Driller Log, Water Level	PSI/PTL	3.50	MW-1	09/13/91	4	NEW ORLEANS AQUIFER SYSTEM SURFICIAL CONFINING UNIT	plugged and abandoned monitor	Plugged and Abandoned
051-5892Z	900930	295746	EXXON CO USA	14	Driller Log, Water Level	PSI/PTL	3.50	MW-2	09/13/91	4	NEW ORLEANS AQUIFER SYSTEM SURFICIAL CONFINING UNIT	plugged and abandoned monitor	Plugged and Abandoned
051-6554Z	900929	295749	HALL, JERRY	12	Driller Log, Water Level	GRIFFITH (ENV.)	4.00	MW-1	10/19/99	4	NEW ORLEANS AQUIFER SYSTEM SURFICIAL CONFINING UNIT	plugged and abandoned monitor	Plugged and Abandoned
051-6555Z	900929	295749	HALL, JERRY	12	Driller Log, Water Level	GRIFFITH (ENV.)	4.00	MW-2	10/19/99	4	NEW ORLEANS AQUIFER SYSTEM SURFICIAL CONFINING UNIT	plugged and abandoned monitor	Plugged and Abandoned
051-6556Z	900929	295749	HALL, JERRY	12	Driller Log, Water Level	GRIFFITH (ENV.)	4.00	MW-3	10/19/99	4	NEW ORLEANS AQUIFER SYSTEM SURFICIAL CONFINING UNIT	plugged and abandoned monitor	Plugged and Abandoned
051-6557Z	900929	295749	HALL, JERRY	12	Driller Log, Water Level	GRIFFITH (ENV.)	4.00	MW-4	10/20/99	4	NEW ORLEANS AQUIFER SYSTEM SURFICIAL CONFINING UNIT	plugged and abandoned monitor	Plugged and Abandoned

# National Register of Historic Places

Digital Archive on NPGallery (<http://npgallery.nps.gov>)

Your search returned 19 results, Showing page 1 of 1, Items 1 through 19

List View ▾

## Photos



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## Text



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## Name

Barataria Unit of Jean Lafitte  
Historical Park Historic District



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Camp Parapet Powder  
Magazine





Crockett, David, Fire Hall and Pumper

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Fort Livingston

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Gretna Historic District

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Harahan Elementary School

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Kenner High School, Old

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**National Register of Historic Places**  
**Registration Form**  
 Form NR-1010  
 10-19-90

**Section 1. Name**

Name:

Section 2. Location

Location:



Section 3. Classification

Classification:

Section 4. Owner of Property

Owner:

Kenner Town Hall

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DECLARATION OF THE STATE OF NEW YORK  
DECLARATION OF THE STATE OF NEW YORK  
JANUARY 1, 1977  
JANUARY 1, 1977  
JAMES A. ABRAHAMSON  
JAMES A. ABRAHAMSON

## Kerner House

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[illegible]

Magnolia Lane Plantation  
House

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**Technische Universität Hamburg**  
 Fachbereich Wirtschaftswissenschaften  
 Fakultät für Wirtschaftswissenschaften  
 Fachhochschule für Angewandte Wissenschaften

2009

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**1. Fachinformatiker**

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**Wirtschaftswissenschaften**

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**Wirtschaftswissenschaften**

**Fachhochschule für Angewandte Wissenschaften**

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Factory and House

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**Section 1**

**A. Description of Property**

**B. Location**

**C. Classification**

**D. Status of Property**

Old Jefferson Parish  
Courthouse

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10-109 (Rev. 10-1-80)  
 U.S. DEPARTMENT OF THE ARMY  
 OFFICE OF THE SECRETARY  
 1215 Jefferson Davis Highway  
 Arlington, Virginia 22202-4302  
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St. Joseph Church-Convent of  
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List View ▼



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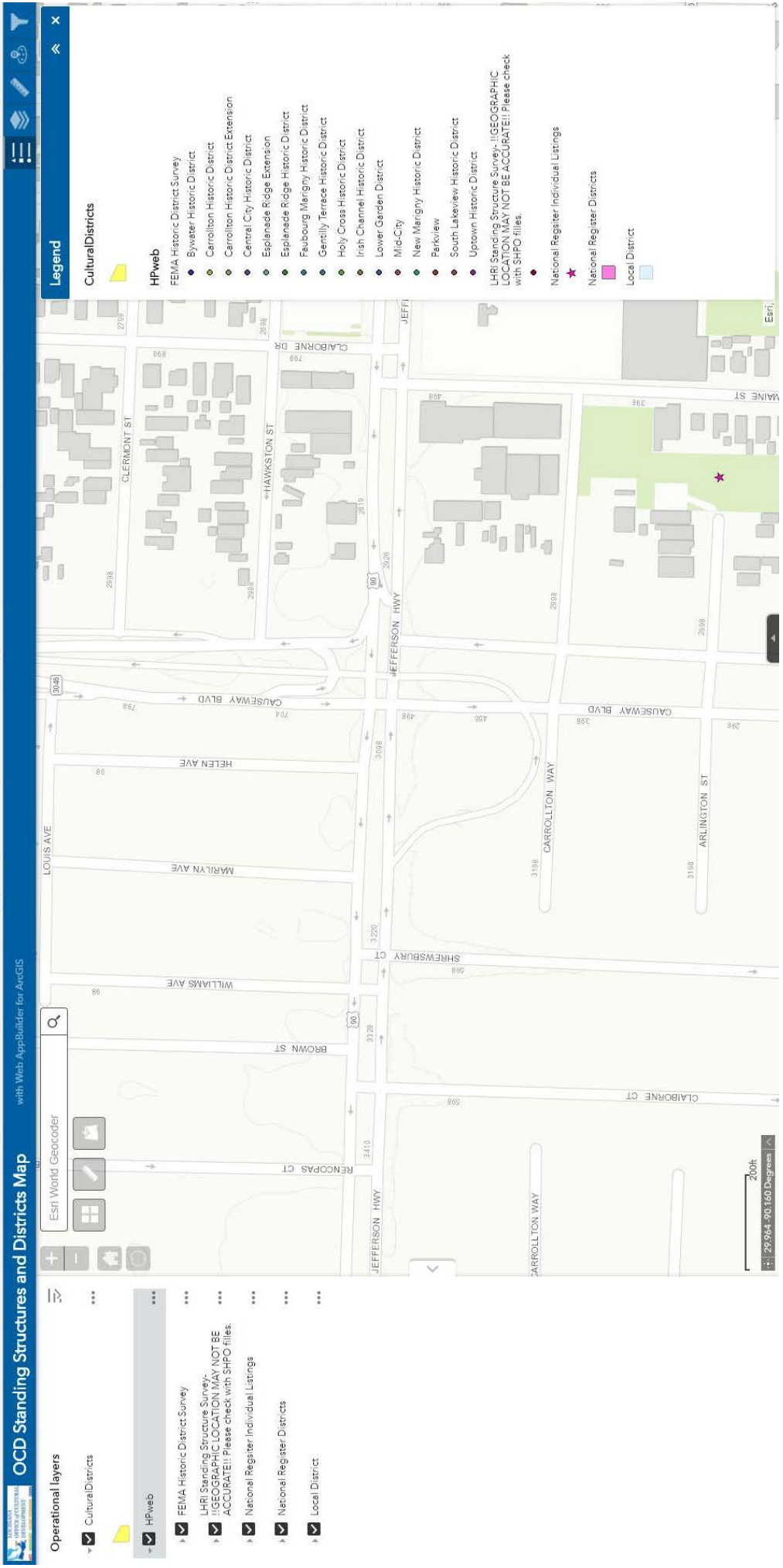


(<https://www.nps.gov/aboutus/news/news-releases.htm>)



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[ECOS](#) / [Species Reports](#) / Species By County Report

## Species By County Report

The following report contains Species that are known to or are believed to occur in this county. Species with range unrefined past the state level are now excluded from this report. If you are looking for the Section 7 range (for Section 7 Consultations), please visit the [IPaC](#) application.

County: Jefferson, Louisiana

[Download CSV](#)

Need to contact a FWS field office about a species? Follow [this link](#) to find your local FWS Office.

Group	Name	Population	Status	Lead Office	Recovery Plan	Recovery Plan Action Status	Recovery Plan Stage
Birds	Whooping crane ( <i>Grus americana</i> )	U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY)	Experimental Population, Non-Essential	Office of the Regional Director			
Birds	Brown pelican ( <i>Pelecanus occidentalis</i> )	except U.S. Atlantic coast, FL, AL	Recovery	Ventura Fish and Wildlife Office			
Birds	Piping Plover ( <i>Charadrius melodus</i> )	[Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.	Threatened	Office of the Regional Director	<a href="#">Piping Plover Atlantic Coast Population Revised Recovery Plan</a>	<a href="#">Implementation Progress</a>	Final Revision 1
Birds	Piping Plover ( <i>Charadrius melodus</i> )	[Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.	Threatened	Office of the Regional Director	<a href="#">Volume I: Draft Revised Recovery Plan for the Northern Great Plains Piping Plover (Charadrius melodus)</a>	Recovery efforts in progress, but no implementation information yet to display.	Draft Revision 1
Birds	Red knot ( <i>Calidris canutus rufa</i> )	Wherever found	Threatened	New Jersey Ecological Services Field Office			
Fishes	Atlantic sturgeon (Gulf subspecies) ( <i>Acipenser oxyrinchus (=oxyrhynchus) desotoi</i> )	Wherever found	Threatened	Panama City Ecological Services Field Office	<a href="#">Gulf Sturgeon</a>	<a href="#">Implementation Progress</a>	Final
Fishes	Pallid sturgeon ( <i>Scaphirhynchus albus</i> )	Wherever found	Endangered	Missouri River Coordinator Office	<a href="#">Final Revised Recovery Plan for the Pallid Sturgeon (Scaphirhynchus albus)</a>	<a href="#">Implementation Progress</a>	Final Revision 1
Mammals	West Indian Manatee ( <i>Trichechus manatus</i> )	Wherever found	Threatened	North Florida Ecological Services Field Office	<a href="#">Recovery Plan Puerto Rican Population of the West Indian (Antillean) Manatee</a>	<a href="#">Implementation Progress</a>	Final

Group	Name	Population	Status	Lead Office	Recovery Plan	Recovery Plan Action Status	Recovery Plan Stage
Mammals	West Indian Manatee ( <i>Trichechus manatus</i> )	Wherever found	Threatened	North Florida Ecological Services Field Office	<a href="#">Florida Manatee Recovery Plan, Third Revision</a>	<a href="#">Implementation Progress</a>	Final Revision 3
Mammals	Louisiana black bear ( <i>Ursus americanus luteolus</i> )	Wherever found	Recovery	Louisiana Ecological Services Field Office	<a href="#">Louisiana Black Bear</a>	<a href="#">Implementation Progress</a>	Final
Reptiles	Hawksbill sea turtle ( <i>Eretmochelys imbricata</i> )	Wherever found	Endangered	North Florida Ecological Services Field Office	<a href="#">Recovery Plan for the Hawksbill Turtle in the U.S. Caribbean, Atlantic and Gulf of Mexico</a>	<a href="#">Implementation Progress</a>	Final Revision 1
Reptiles	Hawksbill sea turtle ( <i>Eretmochelys imbricata</i> )	Wherever found	Endangered	North Florida Ecological Services Field Office	<a href="#">Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle</a>	<a href="#">Implementation Progress</a>	Final Revision 1
Reptiles	Leatherback sea turtle ( <i>Dermochelys coriacea</i> )	Wherever found	Endangered	North Florida Ecological Services Field Office	<a href="#">Recovery Plan for Leatherback Turtles in the U.S. Caribbean, Atlantic, and Gulf of Mexico</a>	<a href="#">Implementation Progress</a>	Final Revision 1
Reptiles	Leatherback sea turtle ( <i>Dermochelys coriacea</i> )	Wherever found	Endangered	North Florida Ecological Services Field Office	<a href="#">Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle</a>	<a href="#">Implementation Progress</a>	Final Revision 1
Reptiles	Kemp's ridley sea turtle ( <i>Lepidochelys kempii</i> )	Wherever found	Endangered	Texas Coastal Ecological Services Field Office	<a href="#">Bi-National Recovery Plan for the Kemp's Ridley Sea Turtle (Lepidochelys kempii) SECOND REVISION</a>	<a href="#">Implementation Progress</a>	Final Revision 2
Reptiles	Loggerhead sea turtle ( <i>Caretta caretta</i> )	Northwest Atlantic Ocean DPS	Threatened	North Florida Ecological Services Field Office	<a href="#">Recovery Plan for the Northwest Atlantic Population of the Loggerhead Sea Turtle (Caretta caretta): Second Revision</a>	<a href="#">Implementation Progress</a>	Final Revision 2



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## Scenic Rivers

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# Louisiana Natural and Scenic Rivers Descriptions and Map



## Natural and Scenic Rivers - RS 56:1847

1. **Abita River** in St. Tammany Parish.
2. **Amite River** - East Feliciana - From the Louisiana-Mississippi state line to La. Hwy. 37.
3. **Barnes Creek** - from La. Hwy. 27 to the Calcasieu River in Allen and Beauregard parishes.
4. **Bashman Bayou** - St. Bernard - From its origin to Bayou Dupre.
5. **Bayou Bartholomew** - Morehouse - From the Louisiana-Arkansas state line to Dead Bayou.
6. **Bayou Bienvenue** - St. Bernard - From Bayou Villere to Lake Borgne.
7. **Bayou Cane** - St. Tammany - From its head waters to Lake Pontchartrain.
8. **Bayou Chaperon** - St. Bernard - From its origin to its end.
9. **Bayou Chinchuba** - St. Tammany - From the West Causeway approach south to Lake Pontchartrain.

9. **Bayou Chenierade** - St. Tammany - From the West Causeway approach south to Lake Pontchartrain.

10. **Bayou Cocodrie** - Concordia - From Wild Cow Bayou to Little Cross Bayou.

11. **Bayou Cocodrie** - Rapides, Evangeline - From U.S. Hwy. 167 to the Bayou Boeuf-Cocodrie Diversion Canal.

12. **Bayou D'Arbonne** - Union, Ouachita - From the Lake D'Arbonne dam to its entrance into the Ouachita River.

13. **Bayou D'Loutre (L'Outre)** - Ouachita, Union - From the Louisiana-Arkansas state line to its entrance into the Ouachita River.

14. **Bayou Des Allemands** - Lafourche, St. Charles - From Lac Des Allemands to Lake Salvador.

15. **Bayou Dupre** - St. Bernard - From the Lake Borgne Canal to Terre Beau Bayou.

16. **Bayou Kisatchie** - Natchitoches - From its entrance into Kisatchie National Forest to its entrance into Old River.

17. **Bayou La Branche** - St. Charles - From its source to where it drains into Lake Pontchartrain.

18. **Bayou LaCombe** - St. Tammany - From its head waters to Lake Pontchartrain.

19. **Bayou Liberty** - St. Tammany Parish.

20. **Bayou Trepagnier** - St. Charles - From Norco to where it joins Bayou La Branche.

21. **Beckwith Creek** - from its headwaters to the west fork of the Calcasieu River in Beauregard and Calcasieu parishes.

22. **Big Creek** - Grant - From Hwy. 167 to its entrance into Little River.

23. **Black Lake Bayou** - Red River, Winn, Bienville - From the Webster-Bienville parish line to Black Lake in Natchitoches Parish.

24. **Blind River** - St. James, Ascension, Livingston, St. John - From its origin in St. James Parish to its entrance into Lake Maurepas.

25. **Bogue Chitto River** - Washington, St. Tammany - From the Louisiana-Mississippi state line to its entrance into the Pearl River Navigation Canal.

26. **Bogue Falaya River** - St. Tammany - the river from its headwaters to La. Hwy. 437 in the parish of St. Tammany.

27. **Bradley Slough (Bayou)** - St. Tammany - All of that portion of the slough lying within the boundaries of St. Tammany Parish.

28. **Bundicks Creek** - Vernon, Beauregard, and Allen - From its headwaters to Bundicks Lake and from Bundicks Lake to Whiskey (Ouiska) Chitto Creek.

29 a **Calcasieu River** - Vernon, Rapides - From La. Hwy. 8 east through Vernon Parish and all of that portion of said river lying within the boundaries of Rapides Parish.

29 b **Calcasieu River** - Allen, Jefferson Davis, and Calcasieu - From the mouth of the Whiskey (Ouiska) Chitto River in Allen Parish, south through Jefferson Davis Parish, and to its intersection with the Ward Eight Park in Calcasieu Parish.

30. **Comite River** - East Feliciana, East Baton Rouge - From the Wilson-Clinton Hwy. in East Feliciana Parish to the entrance of White Bayou in East Baton Rouge Parish.

31. **Corney Bayou** - Claiborne, Union - From the Louisiana-Arkansas state line to Corney Lake and Corney Lake Dam to Lake D'Arbonne.

32. **Dorcheat (Dauchite) Bayou** - Webster - From the Arkansas state line to its entrance into Lake Bistineau.

33. **Drake's Creek** - Vernon - from Lookout Road to its confluence with Whiskey (Ouiska) Chitto Creek located within Vernon Parish.

34. **Fish Creek** - Grant - From its origin near Williana to its entrance into Little River.

35. **Hickory Branch** - Beauregard, Calcasieu - From its headwaters to the west fork of the Calcasieu River.

36. **Holmes Bayou** - St. Tammany - All of that portion of the bayou lying within the boundaries of St. Tammany Parish.

37. **Lake Borgne Canal** - St. Bernard - From the Forty Arpent Canal to Bayou Dupre.

38. **Little River** - Rapides, Grant, Catahoula, LaSalle - From the juncture of Dugdemonia and Castor Creek to its entrance into Catahoula Lake.

39. **Middle Fork of Bayou D'Arbonne** - Claiborne, Union - From its origin near La. Hwy. 2 alternate to Lake D'Arbonne.

40. **Morgan River** - St. Tammany - From its juncture with the Porters River to its reentry into the West Pearl River.

41. **Ouachita River** - Morehouse, Union - From the north bank of Bayou Bartholomew at its intersection with the Ouachita River to the Arkansas state line.

42. **Pearl Creek** - Vernon - From La. Hwy. 111 to its entrance into Sabine River.
43. **Pirogue Bayou** - St. Bernard - From Bayou Dupre to New Canal.
44. **Pushepatapa Creek** - Washington - From where East Fork and West Fork join near state line to where it breaks up prior to its entrance into the Pearl River.
45. **Saline Bayou** - Bienville, Winn, Natchitoches - From its origin near Arcadia to La. Hwy. 156 in Winn Parish.
46. **Saline Bayou** - Catahoula, LaSalle - From Saline Lake to Larto Lake.
47. **Six Mile Creek** - Allen, Vernon - Includes the East and West Forks and beginning at the boundary of Fort Polk Military Reservation (Lookout Road) and extending south through Vernon and Allen Parishes to its entrance into Whiskey (Ouiska) Chitto Creek.
48. **Spring Creek** - Rapides - From Otis to Cocodrie Lake in Rapides Parish.
49. **Tangipahoa River** - Tangipahoa - From the Louisiana-Mississippi state line to its entrance into Lake Pontchartrain.
- 50 a **Tchefuncte River and its tributaries\*** - Washington, Tangipahoa, St. Tammany - From its origin in Tangipahoa Parish to its juncture with the Bogue Falaya River.
- \*tributaries include, but are not limited to, Beech, Champagne, Clark, Cowpen, Cypress, Hornsby, Horse, Mary, McClothlin, Mile, Rattlesnake, Savannah, Smith, Soap and Tallow and Timber branches, Flowers Bayou, Pruden, St. Pauls, Simpson and Tantella creeks in St. Tammany Parish; Black, Bull and Reedy branches, Snow and Taylor creeks in Tangipahoa Parish; Catca, Gorman, North Carson and South Carson creeks in Washington Parish; and all other direct tributaries of the Tchefuncte River.
- 50 b **Tchefuncte River (excluding any tributaries)** - St. Tammany - From the Bogue Falaya River to Lake Pontchartrain
51. **Ten Mile Creek** - Rapides, Allen, Vernon - From the boundary of Fort Polk Military Reservation (Lookout Road) through Vernon Parish and all of that portion of said creek lying within the boundaries of Rapides and Allen Parishes.
52. **Terre Beau Bayou** - St. Bernard - From Bayou Dupre to the New Canal.
53. **Tickfaw River** - St. Helena - From the Louisiana-Mississippi state line to La. Hwy. 42.
54. **Trout Creek** - LaSalle - From its origin near Hwy. 8 to its entrance into Little River.
55. **West Pearl River** - Washington, St. Tammany - From the state line to its entrance into Lake Borgne.
56. **Whiskey (Ouiska) Chitto Creek** - Vernon, Beauregard, Allen - From the boundary of Fort Polk Military Reservation (Lookout Road) to its entrance into Calcasieu River.
57. **Wilson Slough (Bayou)** - St. Tammany - All of that portion of the slough lying within the boundaries of St. Tammany Parish.
- Historic and Scenic Rivers - RS 56:1856**
58. **Bayou Manchac** - From the Amite River to the Mississippi River.
59. **Bayou St. John** within the boundaries of Orleans Parish.
- Last updated 12/20/2012



LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES  
 PO BOX 98000  
 2000 QUAIL DRIVE  
 BATON ROUGE, LA 70898  
 800.256.2749  
 225.765.2800  
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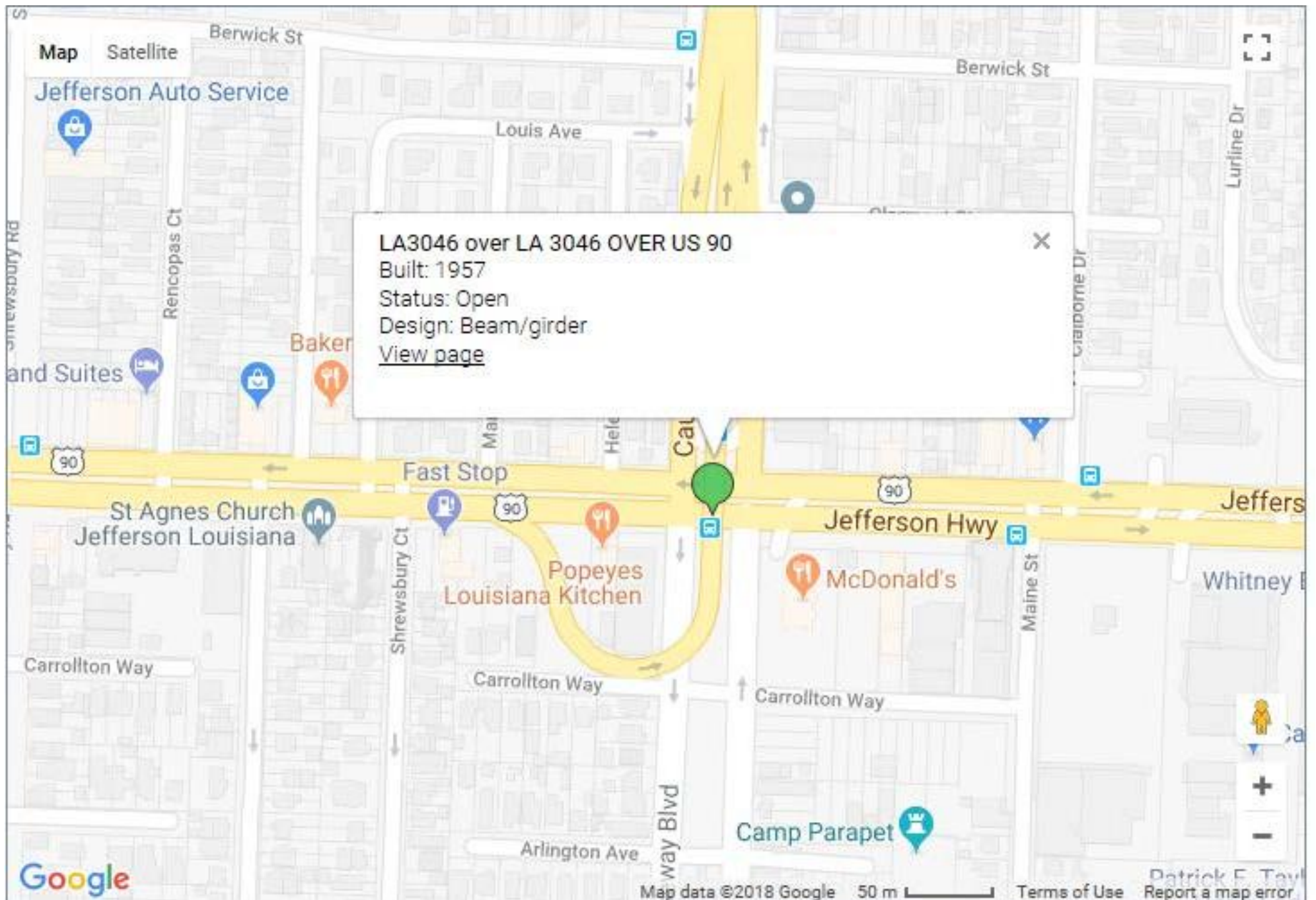
LA3046 over LA 3046 OVER US 90

Built: 1957

Status: Open

Design: Beam/girder

[View page](#)



# LA3046 over LA 3046 OVER US 90

[Jefferson Parish, Louisiana](#)  
[Enlarge map](#)

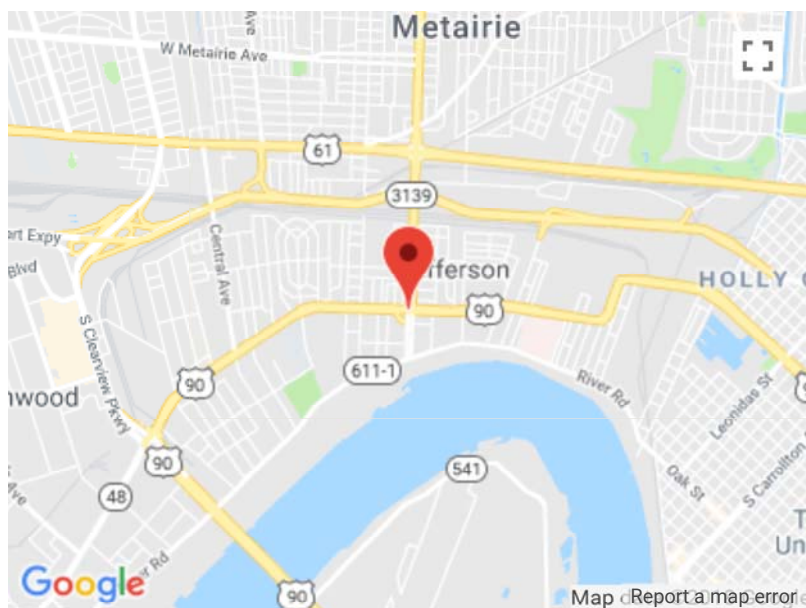
## Map

- [Google Maps](#)
- [Bing Maps](#)
- [OpenStreetMap](#)
- [MapQuest.com](#)
- [USGS National Map](#)
- [Geo URI \(Android\)](#)

### Coordinates:

+29.96295, -90.15684

29°57'47" N, 90°09'25" W



Source: National Bridge Inventory  
Information not verified. Use at your own risk.

## Facts

Name:	LA3046 over LA 3046 OVER US 90
Structure number:	022604230100031
Location:	LA 3046 OVER US 90
Purpose:	Carries highway over highway
Route classification:	Other Principal Arterial (Urban) [14]
Length of largest span:	73.2 ft. [22.3 m]
Total length:	944.9 ft. [288.0 m]
Roadway width between curbs:	27.9 ft. [8.5 m]
Deck width edge-to-edge:	34.1 ft. [10.4 m]
Vertical clearance below bridge:	14.4 ft. [4.4 m]

Owner: State Highway Agency [01]  
 Year built: 1957  
 Historic significance: Bridge is not eligible for the National Register of Historic Places [5]  
 Design load: MS 18 / HS 20 [5]  
 Number of main spans: 20  
 Main spans material: Steel [3]  
 Main spans design: Stringer/Multi-beam or girder [02]  
 Deck type: Concrete Cast-in-Place [1]

## Latest Available Inspection: February 2017

Good/Fair/Poor  
 Condition: Good  
 Status: Open, no restriction [4]  
 Average daily traffic: 52,300 [as of 2015]  
 Truck traffic: 5% of total traffic  
 Deck condition: Good [7 out of 9]  
 Superstructure condition: Very Good [8 out of 9]  
 Substructure condition: Good [7 out of 9]  
 Structural appraisal: Better than present minimum criteria [7]  
 Deck geometry appraisal: Basically intolerable requiring high priority of corrective action [3]  
 Underclearances appraisal: Somewhat better than minimum adequacy to tolerate being left in place as is [5]  
 Roadway alignment appraisal: Better than present minimum criteria [7]  
 Scour condition: Bridge not over waterway. [N]  
 Operating rating: 59.8 tons [54.4 metric tons]  
 Inventory rating: 36.0 tons [32.7 metric tons]  
 Sufficiency rating: 80.0  
 Recommended work: Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]  
 Estimated cost of work: \$3,712,000

## Previous Inspections

Date	Suff. Rating	Condition	Deck	Superstructure	Substructure	SD/FO	ADT
February 2017	80.0	Good	Good	Very Good	Good	FO	52300
February 2015	80.0	Good	Very Good	Very Good	Good	FO	52100
February 2013	80.0	Good	Very Good	Very Good	Very Good	FO	51100
February 2011	80.0	Good	Very Good	Very Good	Very Good	FO	46100
January 2009	80.0	Good	Very Good	Very Good	Very Good	FO	46700
November 2007	67.0	Fair	Fair	Fair	Satisfactory	FO	53200
December 2006	67.0	Fair	Fair	Fair	Satisfactory	FO	53200
June 2005	67.0	Fair	Fair	Fair	Satisfactory	FO	53200
April 2004	67.0	Fair	Fair	Fair	Satisfactory	FO	52400

July 2002	58.2	Fair	Fair	Fair	Fair	FO	52500
April 2000	56.2	Fair	Fair	Fair	Fair	FO	53178
January 1998	56.2	Fair	Fair	Fair	Fair	FO	51416
December 1996	56.2	Fair	Fair	Fair	Fair	FO	60397
July 1995	56.2	Fair	Fair	Fair	Fair	FO	59213
August 1994	56.2	Fair	Fair	Fair	Fair	FO	57769
August 1993	54.2	Poor	Poor	Fair	Fair	SD	51870
August 1992	54.2	Poor	Poor	Fair	Fair	SD	58793
February 1991	39.2	Poor	Poor	Poor	Fair	SD	58793

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Disclaimer: All data is taken from the National Bridge Inventory and has **not** been verified.

This page's URL is <http://bridgereports.com/1220982>

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**A23**  
**FAST STOP OF JEFFERSON**  
**3220 JEFFERSON HWY**  
**JEFFERSON, LA 70121**  
**< 1/8**  
**1 ft.**

**HIST LUST**  
**REM**  
**S106034080**  
**N/A**

**Site 9 of 9 in cluster A**

**Relative:**  
**Higher**

**Actual:**  
**6 ft.**

HIST LUST:  
Facility ID: 26-004168  
Facility Parish: JEFFERSON  
Substance Name: USED OIL  
Substance Name 2: Not reported  
Quantity: UNKNOWN  
  
Quantity 2: Not reported  
Date Confirmed: 02/09/1993  
Date Confirmed 2: Not reported  
Incident Number: 93-3-0030  
Incident Date: 02/09/1993  
Type of Incident: UST LEAK  
Type of Incident No2: Not reported  
Reported By: Not reported  
Reported By 2: Not reported  
Owner ID: 00109200  
Owner Name: EXXON MOBIL COMPANY, U.S.A.  
Owner Address: P. O. BOX 4386  
Owner City,St,Zip: HOUSTON,, TX 77210-4386  
Assessment Pending Info: No  
Assessment Request Date: Not reported  
Assessment Plan Due Date: Not reported  
Assessment Plan Received Date: Not reported  
Assessment Approved Date: Not reported  
Assessment Contractor: Not reported  
Assess Date Add Info Due: 05/14/1994  
Assess Date Add Info Recd: Not reported  
Assess Date Add Info Due2: Not reported  
Assess Date Add Info Recd: Not reported  
Assess Date Add Info Due3: Not reported  
Corrective Plan Due Date: 02/07/1995  
Corrective Plan Received Date: Not reported  
Corrective Plan Approved Date: 01/12/1996  
Corr Act Date Add Info Due: 07/15/1995  
Corr Act Date Add Info Recd: Not reported  
Corr Act Date Add Info Due2: Not reported  
Corr Act Date Add Info Recd2: Not reported  
Corr Act Date Add Info Due3: Not reported  
Remediation Method: Not reported  
Remediation Date: Not reported  
Remediation Terminated Date: Not reported

LA HIST LUST INCIDENT:

Comments: REC'D LIMITED EXCAVATION PROPOSAL ON 10/30/95. DEQ APPROVED CORRECTIVATION FOR IMPLEMENTATION OF THE EXCAVATION PROJECT ON 1/12/96. DEQAPPROVED REQUEST FOR NO FURTHER ACTION ON 4/29/96.

LA HIST LUST ASSESMENT:

Comments: 4 USTS WERE REMOVED ON/ABOUT 2/19/93. POSSIBLE OIL AND GREASECONTAMINATION IN FORMER TANK PAD. DEQ LETTER 4/14/94 REQUEST FURTHERINFORMATION.

LA HIST LUST CORRECTIVE ACTION:

Comments: Not reported

Facility ID: 26-004168

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

Facility Parish: JEFFERSON  
Substance Name: Not reported  
Substance Name 2: Not reported  
Quantity: Not reported  
Quantity 2: Not reported  
Date Confirmed: Not reported  
Date Confirmed 2: Not reported  
Incident Number: 93-3-0030  
Incident Date: 02/09/1993  
Type of Incident: Not reported  
Type of Incident No2: Not reported  
Reported By: Not reported  
Reported By 2: Not reported  
Owner ID: 00109200  
Owner Name: EXXON MOBIL COMPANY, U.S.A.  
Owner Address: P. O. BOX 4386  
Owner City,St,Zip: HOUSTON,, TX 77210-4386  
Assessment Pending Info: No  
Assessment Request Date: Not reported  
Assessment Plan Due Date: Not reported  
Assessment Plan Received Date: Not reported  
Assessment Approved Date: Not reported  
Assessment Contractor: Not reported  
Assess Date Add Info Due: Not reported  
Assess Date Add Info Recd: Not reported  
Assess Date Add Info Due2: Not reported  
Assess Date Add Info Recd: Not reported  
Assess Date Add Info Due3: Not reported  
Corrective Plan Due Date: 02/07/1995  
Corrective Plan Received Date: Not reported  
Corrective Plan Approved Date: 01/12/1996  
Corr Act Date Add Info Due: Not reported  
Corr Act Date Add Info Recd: Not reported  
Corr Act Date Add Info Due2: Not reported  
Corr Act Date Add Info Recd2: Not reported  
Corr Act Date Add Info Due3: Not reported  
Remediation Method: PASSIVE REMEDIATION  
Remediation Date: Not reported  
Remediation Terminated Date: 04/29/1996

LA HIST LUST INCIDENT:

Comments: REC'D LIMITED EXCAVATION PROPOSAL ON 10/30/95. DEQ APPROVED CORRECTIVACTION FOR IMPLEMENTATION OF THE EXCAVATION PROJECT ON 1/12/96. DEQAPPROVED REQUEST FOR NO FURTHER ACTION ON 4/29/96.

LA HIST LUST ASSESMENT:

Comments: 4 USTS WERE REMOVED ON/ABOUT 2/19/93. POSSIBLE OIL AND GREASECONTAMINATION IN FORMER TANK PAD. DEQ LETTER 4/14/94 REQUEST FURTHERINFORMATION.

LA HIST LUST CORRECTIVE ACTION:

Comments: Not reported

Facility ID: 26-004168  
Facility Parish: JEFFERSON  
Substance Name: GASOLINE  
Substance Name 2: Not reported  
Quantity: 379 GALLON  
Quantity 2: Not reported  
Date Confirmed: 05/14/1998  
Date Confirmed 2: Not reported  
Incident Number: 98-3-0033



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

Incident Date: 05/14/1998  
Type of Incident: OVERFILL  
Type of Incident No2: Not reported  
Reported By: OFFICE MELVIN REIN/STATE POLICE  
Reported By 2: Not reported  
Owner ID: 00447300  
Owner Name: HALL, JERRY L.  
Owner Address: 3738 AIRLINE HWY  
Owner City,St,Zip: METAIRIE, LA 70001  
Assessment Pending Info: No  
Assessment Request Date: 08/04/1999  
Assessment Plan Due Date: 10/24/1999  
Assessment Plan Received Date: Not reported  
Assessment Approved Date: Not reported  
Assessment Contractor: ENVIRONMENTAL AUDITORS OF AMERICA  
Assess Date Add Info Due: Not reported  
Assess Date Add Info Recd: Not reported  
Assess Date Add Info Due2: Not reported  
Assess Date Add Info Recd: Not reported  
Assess Date Add Info Due3: Not reported  
Corrective Plan Due Date: Not reported  
Corrective Plan Received Date: Not reported  
Corrective Plan Approved Date: Not reported  
Corr Act Date Add Info Due: Not reported  
Corr Act Date Add Info Recd: Not reported  
Corr Act Date Add Info Due2: Not reported  
Corr Act Date Add Info Recd2: Not reported  
Corr Act Date Add Info Due3: Not reported  
Remediation Method: Not reported  
Remediation Date: Not reported  
Remediation Terminated Date: Not reported

LA HIST LUST INCIDENT:

Comments: REC'D 7 DAY RELEASE NOTIFICATION REPORT ON 5/29/98: SPILL PREVENTIONEQUIPMENT WHILE UNLEADED REGULAR GASOLINE WAS BEING DELIVERED TO USTSYSTEM BY GORMAN TRANSPORT COMPANY. APPROX. 379 GALLONS OF GASOLINEWAS RELEASED ONTO THE CONCRETE SURFACE AND INTO THE ADJACENT STORMDRAINAGE SYSTEM. DEQ INSPECTION 5/15/98 TO OBSERVE FACILITY AFTERREPORT OF AN OVERFILL OF UNAUTHORIZED FUEL DELIVERY. REC'D 20 DAYNOTIFICATION REPORT ON 6/23/98. DEQ LETTER 6/26/98 REQUEST SITEASSESSMENT. DEQ LETTER 12/17/98 REQUEST ADDITIONAL SUBSURFACEINVESTIGATION. REC'D LIMITED SITE ASSESSMENT PROPOSAL ON 1/11/99. DEQLETTER 4/26/99 APPROVED LIMITED SITE ASSESSMENT. RECEIVED LIMITEDSITE ASSESSMENT REPORT ON 6/21/99. DEQ LETTER 8/4/99 REQUEST FULL SITEASSESSMENT. DEQ LETTER 10/5/99 APPROVED SITE ASSESSMENT PROPOSAL.

LA HIST LUST ASSESMENT:

Comments: Not reported

LA HIST LUST CORRECTIVE ACTION:

Comments: Not reported

Facility ID: 26-004168  
Facility Parish: JEFFERSON  
Substance Name: Not reported  
Substance Name 2: Not reported  
Quantity: Not reported  
Quantity 2: Not reported  
Date Confirmed: Not reported  
Date Confirmed 2: Not reported  
Incident Number: 98-3-0033  
Incident Date: 05/14/1998

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

Type of Incident: Not reported  
Type of Incident No2: Not reported  
Reported By: Not reported  
Reported By 2: Not reported  
Owner ID: 00447300  
Owner Name: HALL, JERRY L.  
Owner Address: 3738 AIRLINE HWY  
Owner City,St,Zip: METAIRIE, LA 70001  
Assessment Pending Info: No  
Assessment Request Date: 08/04/1999  
Assessment Plan Due Date: 10/24/1999  
Assessment Plan Received Date: Not reported  
Assessment Approved Date: Not reported  
Assessment Contractor: ENVIRONMENTAL AUDITORS OF AMERICA  
Assess Date Add Info Due: Not reported  
Assess Date Add Info Recd: Not reported  
Assess Date Add Info Due2: Not reported  
Assess Date Add Info Recd: Not reported  
Assess Date Add Info Due3: Not reported  
Corrective Plan Due Date: Not reported  
Corrective Plan Received Date: Not reported  
Corrective Plan Approved Date: Not reported  
Corr Act Date Add Info Due: Not reported  
Corr Act Date Add Info Recd: Not reported  
Corr Act Date Add Info Due2: Not reported  
Corr Act Date Add Info Recd2: Not reported  
Corr Act Date Add Info Due3: Not reported  
Remediation Method: Not reported  
Remediation Date: Not reported  
Remediation Terminated Date: Not reported

LA HIST LUST INCIDENT:

Comments: REC'D 7 DAY RELEASE NOTIFICATION REPORT ON 5/29/98: SPILL PREVENTIONEQUIPMENT WHILE UNLEADED REGULAR GASOLINE WAS BEING DELIVERED TO USTSYSTEM BY GORMAN TRANSPORT COMPANY. APPROX. 379 GALLONS OF GASOLINEWAS RELEASED ONTO THE CONCRETE SURFACE AND INTO THE ADJACENT STORMDRAINAGE SYSTEM. DEQ INSPECTION 5/15/98 TO OBSERVE FACILITY AFTERREPORT OF AN OVERFILL OF UNAUTHORIZED FUEL DELIVERY. REC'D 20 DAYNOTIFICATION REPORT ON 6/23/98. DEQ LETTER 6/26/98 REQUEST SITEASSESSMENT. DEQ LETTER 12/17/98 REQUEST ADDITIONAL SUBSURFACEINVESTIGATION. REC'D LIMITED SITE ASSESSMENT PROPOSAL ON 1/11/99. DEQLETTER 4/26/99 APPROVED LIMITED SITE ASSESSMENT. RECEIVED LIMITEDSITE ASSESSMENT REPORT ON 6/21/99. DEQ LETTER 8/4/99 REQUEST FULL SITEASSESSMENT. DEQ LETTER 10/5/99 APPROVED SITE ASSESSMENT PROPOSAL.

LA HIST LUST ASSESMENT:

Comments: Not reported

LA HIST LUST CORRECTIVE ACTION:

Comments: Not reported

REM:

AI Num: 13423  
Evaluated And Closed: 04/04/2003  
Program: UST  
EAC Type: Approve CA NFA w/ BOD  
Comments: EDMS ID 1735883

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

A5      **FAST STOP OF JEFFERSON**  
**3220 JEFFERSON HWY**  
< 1/8      **JEFFERSON, LA 70121**  
1 ft.

UST      U003921468  
N/A

Site 4 of 9 in cluster A

Relative:  
Higher

UST:

Master Agency Id:      13423  
Subject Item ID:      1

Actual:  
6 ft.

UST Tank Num:      11750  
**Tank Status:**      **Closed**  
Install Date:      04/18/1981  
Total Capacity:      10000  
Number Of Compartments:      1  
Gasoline:      Not reported  
Diesel:      Not reported  
Gasohol:      Yes  
Kerosene:      Not reported  
Heating Oil:      Not reported  
New Used Oil:      Not reported  
MS Aviation Fuel:      Not reported  
MS Additive:      Not reported  
MS Antifreeze:      Not reported  
MS Naptha:      Not reported  
MS Varsol:      Not reported  
Unknown:      Not reported  
Other Sub:      Not reported  
Steel Tank Covered With Asphalt:      Not reported  
Cathodically Protected:      Not reported  
Epoxy Coated Tank:      Not reported  
A Composite Of Different Materials:      Not reported  
Fiberglass Or Plastic:      Y  
Interior Line With Some Material:      Not reported  
Double Wall As Opposed To Single Wall:      Not reported  
Outside Lined w/ Polyethylen Jacket:      Not reported  
Made Of Concrete:      Not reported  
Liner Covering Excavation Hole:      Not reported  
Other Material:      Not reported  
Pipe Method Description:      Not reported

UST Tank Num:      11751  
**Tank Status:**      **Closed**  
Install Date:      04/18/1981  
Total Capacity:      6000  
Number Of Compartments:      1  
Gasoline:      Not reported  
Diesel:      Not reported  
Gasohol:      Yes  
Kerosene:      Not reported  
Heating Oil:      Not reported  
New Used Oil:      Not reported  
MS Aviation Fuel:      Not reported  
MS Additive:      Not reported  
MS Antifreeze:      Not reported  
MS Naptha:      Not reported  
MS Varsol:      Not reported  
Unknown:      Not reported  
Other Sub:      Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

Steel Tank Covered With Asphalt:	Not reported
Cathodically Protected:	Not reported
Epoxy Coated Tank:	Not reported
A Composite Of Different Materials:	Not reported
Fiberglass Or Plastic:	Y
Interior Line With Some Material:	Not reported
Double Wall As Opposed To Single Wall:	Not reported
Outside Lined w/ Polyethylen Jacket:	Not reported
Made Of Concrete:	Not reported
Liner Covering Excavation Hole:	Not reported
Other Material:	Not reported
Pipe Method Description:	Not reported

UST Tank Num:	11752
<b>Tank Status:</b>	<b>Closed</b>
Install Date:	04/18/1981
Total Capacity:	6000
Number Of Compartments:	1
Gasoline:	Not reported
Diesel:	Not reported
Gasohol:	Yes
Kerosene:	Not reported
Heating Oil:	Not reported
New Used Oil:	Not reported
MS Aviation Fuel:	Not reported
MS Additive:	Not reported
MS Antifreeze:	Not reported
MS Naptha:	Not reported
MS Varsol:	Not reported
Unknown:	Not reported
Other Sub:	Not reported
Steel Tank Covered With Asphalt:	Not reported
Cathodically Protected:	Not reported
Epoxy Coated Tank:	Not reported
A Composite Of Different Materials:	Not reported
Fiberglass Or Plastic:	Y
Interior Line With Some Material:	Not reported
Double Wall As Opposed To Single Wall:	Not reported
Outside Lined w/ Polyethylen Jacket:	Not reported
Made Of Concrete:	Not reported
Liner Covering Excavation Hole:	Not reported
Other Material:	Not reported
Pipe Method Description:	Not reported

UST Tank Num:	11753
<b>Tank Status:</b>	<b>Closed</b>
Install Date:	04/18/1981
Total Capacity:	1000
Number Of Compartments:	1
Gasoline:	Not reported
Diesel:	Not reported
Gasohol:	Not reported
Kerosene:	Not reported
Heating Oil:	Not reported
New Used Oil:	Yes
MS Aviation Fuel:	Not reported
MS Additive:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MS Antifreeze: Not reported  
MS Naptha: Not reported  
MS Varsol: Not reported  
Unknown: Not reported  
Other Sub: Not reported  
Steel Tank Covered With Asphalt: Not reported  
Cathodically Protected: Not reported  
Epoxy Coated Tank: Not reported  
A Composite Of Different Materials: Not reported  
Fiberglass Or Plastic: Y  
Interior Line With Some Material: Not reported  
Double Wall As Opposed To Single Wall: Not reported  
Outside Lined w/ Polyethylen Jacket: Not reported  
Made Of Concrete: Not reported  
Liner Covering Excavation Hole: Not reported  
Other Material: Not reported  
Pipe Method Description: Not reported

UST Tank Num: 50352  
**Tank Status:** **Active**  
Install Date: 09/12/1996  
Total Capacity: 10000  
Number Of Compartments: 1  
Gasoline: Yes  
Diesel: Not reported  
Gasohol: Not reported  
Kerosene: Not reported  
Heating Oil: Not reported  
New Used Oil: Not reported  
MS Aviation Fuel: Not reported  
MS Additive: Not reported  
MS Antifreeze: Not reported  
MS Naptha: Not reported  
MS Varsol: Not reported  
Unknown: Not reported  
Other Sub: Not reported

Steel Tank Covered With Asphalt: Not reported  
Cathodically Protected: Not reported  
Epoxy Coated Tank: Not reported  
A Composite Of Different Materials: Not reported  
Fiberglass Or Plastic: Y  
Interior Line With Some Material: Not reported  
Double Wall As Opposed To Single Wall: Not reported  
Outside Lined w/ Polyethylen Jacket: Not reported  
Made Of Concrete: Not reported  
Liner Covering Excavation Hole: Not reported  
Other Material: Not reported  
Pipe Method Description: Pressure

UST Tank Num: 50353  
**Tank Status:** **Active**  
Install Date: 09/01/1996  
Total Capacity: 10000  
Number Of Compartments: 1  
Gasoline: Yes  
Diesel: Not reported  
Gasohol: Not reported

## Demographic Profile

### Demographic Profile of Surrounding Area (within 3 Mile radius of 2809 Jefferson Highway)

Select radius: 3 miles

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 US Census and American Community Survey data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table (LRT) when available.

Radius of Area:	3	Land Area:	90%	Households in Area:	50,612
Center Latitude:	29.96307	Water Area:	10%	Housing Units in Area:	58,726
Center Longitude:	-90.15491	Population Density:	4,435/sq.mi.	Households on Public Assistance:	836
Total Persons:	115,002	Percent Minority:	36%	Persons Below Poverty Level:	36,815

Race Breakdown	Persons (%)	Age Breakdown	Persons (%)
White:	79,634 (69%)	Child 5 years and younger:	6,565 (6%)
African-American:	26,848 (23%)	Minors 17 years and younger:	20,815 (18%)
Hispanic-Origin:	10,045 (9%)	Adults 18 years and older:	94,187 (82%)
Asian/Pacific Islander:	2,613 (2%)	Seniors 65 years and older:	16,026 (14%)
American Indian:	358 (0%)		
Other/Multiracial:	5,549 (5%)		

Education Level (Persons 25 & older)	Persons (%)	Income Breakdown	Households (%)
Less than 9th Grade:	3,307 (4.32%)	Less than \$15,000:	7,251 (15.2%)
9th through 12th Grade:	6,703 (8.76%)	\$15,000 - \$25,000:	5,577 (11.69%)
High School Diploma:	19,574 (25.59%)	\$25,000 - \$50,000:	12,952 (27.16%)
Some College/2-yr:	19,016 (24.87%)	\$50,000 - \$75,000:	7,606 (15.95%)
B.S./B.A. or More:	27,876 (36.45%)	Greater than \$75,000:	14,310 (30%)



# **Appendix C: Estimated Probable Construction Costs of Refined Potential Options**

**Conceptual Planning Study**  
**US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard**

**Estimated Probable Construction Cost (By Option Number, Low to High)**

Option Number	Phase 1 Cost	Phase 2 Cost	Total Cost
2A (Alt. 1)	\$ 17,769,636.33	N/A	\$ 17,769,636.33
2A (Alt. 2)	\$ 16,678,936.33	N/A	\$ 16,678,936.33
2B (Alt. 1)	\$ 13,011,268.17	N/A	\$ 13,011,268.17
2B (Alt. 2)	\$ 11,920,568.17	N/A	\$ 11,920,568.17
4A	\$ 28,572,404.16	N/A	\$ 28,572,404.16
7A (Alt. 1)	\$ 26,532,984.70	N/A	\$ 26,532,984.70
7A (Alt. 2)	\$ 24,651,447.20	N/A	\$ 24,651,447.20
7B (Alt. 1)	\$ 21,774,616.54	N/A	\$ 21,774,616.54
7B (Alt. 2)	\$ 19,893,079.04	N/A	\$ 19,893,079.04
7A (Alt. 1, Phased)	\$ 17,769,636.33	\$ 10,217,234.96	\$ 27,986,871.28
7A (Alt. 2, Phased)	\$ 16,678,936.33	\$ 9,426,397.46	\$ 26,105,333.78
7B (Alt. 1, Phased)	\$ 13,011,268.17	\$ 10,217,234.96	\$ 23,228,503.12
7B (Alt. 2, Phased)	\$ 11,920,568.17	\$ 9,426,397.46	\$ 21,346,965.62

Alt. 1 = Steel Girders

Alt. 2 = Precast, Prestressed Concrete Girders

Phased = Construction in 2 Phases

\*This cost estimate does not include professional services, the relocation or replacement of any utilities or drainage, and any wiring or conduits for lighting or signals

**Options List**

Option 2: Reversal of the J-turn to One-way Southbound in Conjunction with Construction of a New Overpass of Jefferson Highway

Option 2A: Designated Exit Lane onto Jefferson Highway

Option 2B: Traffic Signal at the Exit onto Jefferson Highway

Option 4A: Demolition of the Existing J-turn and Replacement with a Jefferson Highway Overpass of Causeway Boulevard

Option 7: Expansion of the Existing J-turn to Accommodate Two-way Traffic in Conjunction with Construction of a New Overpass of Jefferson Highway

Option 7A: Designated Exit Lane onto Jefferson Highway

Option 7B: Traffic Signal at the Exit onto Jefferson Highway

**Conceptual Planning Study**  
**US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard**

**Estimated Probable Construction Cost (By Estimated Cost, Low to High)**

Option Number	Phase 1 Cost	Phase 2 Cost	Total Cost
2B (Alt. 2)	\$ 11,920,568.17	N/A	\$ 11,920,568.17
2B (Alt. 1)	\$ 13,011,268.17	N/A	\$ 13,011,268.17
2A (Alt. 2)	\$ 16,678,936.33	N/A	\$ 16,678,936.33
2A (Alt. 1)	\$ 17,769,636.33	N/A	\$ 17,769,636.33
7B (Alt. 2)	\$ 19,893,079.04	N/A	\$ 19,893,079.04
7B (Alt. 2, Phased)	\$ 11,920,568.17	\$ 9,426,397.46	\$ 21,346,965.62
7B (Alt. 1)	\$ 21,774,616.54	N/A	\$ 21,774,616.54
7B (Alt. 1, Phased)	\$ 13,011,268.17	\$ 10,217,234.96	\$ 23,228,503.12
7A (Alt. 2)	\$ 24,651,447.20	N/A	\$ 24,651,447.20
7A (Alt. 2, Phased)	\$ 16,678,936.33	\$ 9,426,397.46	\$ 26,105,333.78
7A (Alt. 1)	\$ 26,532,984.70	N/A	\$ 26,532,984.70
7A (Alt. 1, Phased)	\$ 17,769,636.33	\$ 10,217,234.96	\$ 27,986,871.28
4A	\$ 28,572,404.16	N/A	\$ 28,572,404.16

Alt. 1 = Steel Girders

Alt. 2 = Precast, Prestressed Concrete Girders

Phased = Construction in 2 Phases

\*This cost estimate does not include professional services, the relocation or replacement of any utilities or drainage, and any wiring or conduits for lighting or signals

**Options List**

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Option 2A: Designated Exit Lane onto Jefferson Highway

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Option 7A: Designated Exit Lane onto Jefferson Highway

Option 7B: Traffic Signal at the Exit onto Jefferson Highway



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 2A Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

ITEM	DESCRIPTION OF ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
202-02-02020	Removal of Asphalt Pavement	SQ. YD.	1397.4	\$ 18.00	\$ 25,154.00
202-02-05000	Removal of Building	EACH	1	\$ 15,000.00	\$ 15,000.00
202-02-06060	Removal of Concrete Catch Basin	EACH	4	\$ 750.00	\$ 3,000.00
202-02-06080	Removal of Concrete Combination Curb and Gutter	LIN. FT.	1,542.0	\$ 12.00	\$ 18,504.00
202-02-12020	Removal of Fence (Chain Link)	LIN. FT.	471	\$ 7.50	\$ 3,532.50
202-02-32500	Removal of Portland Cement Concrete Pavement	SQ. YD.	2,730	\$ 20.00	\$ 54,608.89
202-02-40100	Removal of Traffic Signal Equipment	LUMP	1	\$ 10,000.00	\$ 10,000.00
203-01-00100	General Excavation	CU. YD.	2,371	\$ 25.00	\$ 59,268.61
203-04-00200	Nonplastic Embankment (Sand)	CU. YD.	761	\$ 30.00	\$ 22,820.00
203-08-00100	Geotextile Fabric	SQ. YD.	2,282	\$ 6.00	\$ 13,692.00
204-02-00100	Temporary Hay Bales	EACH	54	\$ 25.00	\$ 1,350.00
204-06-00100	Temporary Silt Fencing	LIN. FT.	3,791	\$ 6.00	\$ 22,746.00
302-02-12020	Class II Base Course (12" Thick) (Crushed Stone)	SQ. YD.	2,282.0	\$ 45.00	\$ 102,690.00
502-01-00100	Asphalt Concrete	TON	1,423.5	\$ 175.00	\$ 249,113.49
509-01-00100	Milling Asphalt Pavement	SQ. YD.	1,606	\$ 10.00	\$ 16,062.22
509-02-00100	Contractor Retained Reclaimed Asphalt Pavement	CU. YD.	-89	\$ 0.05	\$ (4.46)
702-03-00100	Catch Basins (CB-01)	EACH	2	\$ 6,000.00	\$ 12,000.00
702-03-00600	Catch Basins (CB-07)	EACH	2	\$ 8,000.00	\$ 16,000.00
705-06-00300	Chain Link Fence (6 Foot Height)	LIN. FT.	565	\$ 40.00	\$ 22,608.00
706-01-00100	Concrete Walk (4" Thick)	SQ. YD.	349	\$ 80.00	\$ 27,946.67
707-03-00100	Combination Concrete Curb and Gutter	LIN. FT.	1,955.0	\$ 55.00	\$ 107,525.00
713-01-00100	Temporary Signs and Barricades	LUMP	1	\$ 250,000.00	\$ 250,000.00
714-01-00100	Slab Sodding (Bermuda Grass)	SQ. YD.	4,128	\$ 12.00	\$ 49,534.67
722-02-00100	Project Site Laboratory (Equipped)	EACH	1	\$ 40,000.00	\$ 40,000.00
727-01-00100	Mobilization	LUMP	1	\$ 550,000.00	\$ 550,000.00
729-01-00102	Sign (Type A) (Furnish and Install)	SQ. FT.	486.0	\$ 50.00	\$ 24,300.00
729-08-00110	Mounting (2 1/2" Size Post) (Structure Mount)	EACH	30	\$ 950.00	\$ 28,500.00
729-21-00100	U-Channel Post	EACH	24	\$ 100.00	\$ 2,400.00
731-02-00100	Reflectorized Raised Pavement Markers	EACH	725	\$ 25.00	\$ 18,125.25
732-02-02000	Plastic Pavement Striping (Solid Line) (4" Width) (Thermoplastic 90 mil)	MILE	1.248	\$ 20,000.00	\$ 24,965.91
732-05-00100	Removal of Existing Markings	MILE	1.133	\$ 16,000.00	\$ 18,127.27
740-01-00100	Construction Layout	LUMP	1	\$ 300,000.00	\$ 300,000.00



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 2A Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

802-01-00100	Structural Excavation	CU. YD.	1,843	\$	35.00	\$	64,490.74
802-03-00100	Temporary Sheet piling (Steel)	SQ. FT.	15,015	\$	50.00	\$	750,750.00
804-01-00200	Precast Concrete Piles (14")	LIN. FT.	28,050	\$	70.00	\$	1,963,500.00
804-09-00200	Static Load Test (Precast Concrete Piles (14"))	EACH	2	\$	25,000.00	\$	50,000.00
804-14-00100	Dynamic Monitoring Assistance	EACH	38	\$	2,000.00	\$	76,000.00
804-15-00100	Dynamic Monitoring Instrumentation	LUMP	1	\$	8,000.00	\$	8,000.00
804-17-00100	Construction Site Survey	LUMP	1	\$	10,000.00	\$	10,000.00
804-18-00100	Vibration Monitoring	DAY	94	\$	150.00	\$	14,100.00
805-01-00100	Class A1 Concrete (Slab Span)	CU. YD.	114.07	\$	1,200.00	\$	136,888.89
805-01-00200	Class A1 Concrete (Deck)	CU. YD.	511.03	\$	1,000.00	\$	511,027.78
805-04-00100	Class MASS(A1) Concrete (Bent Cap)	CU. YD.	241.19	\$	1,200.00	\$	289,422.22
805-04-00200	Class MASS(A1) Concrete (Column)	CU. YD.	111.70	\$	1,200.00	\$	134,041.29
805-04-00300	Class MASS(A1) Concrete (Footing)	CU. YD.	1,274.07	\$	500.00	\$	637,037.04
806-01-00100	Deformed Reinforcing Steel	LB	419,157	\$	1.85	\$	775,441.09
810-01-00100	Concrete Bridge Railing (Standard)	LIN. FT.	279	\$	150.00	\$	41,850.00
810-01-00200	Concrete Bridge Railing (Slotted)	LIN. FT.	1,097	\$	100.00	\$	109,700.00
810-01-00300	Concrete Bridge Railing (Double Face)	LIN. FT.	564	\$	190.00	\$	107,160.00
810-05-00300	Concrete Roadway Barrier (Double Face)	LIN. FT.	471	\$	150.00	\$	70,650.00
813-01-00100	Concrete Approach Slabs (Cast-in-Place)	SQ. FT.	2,606	\$	35.00	\$	91,210.00
814-02-00100	Elastomeric Bearing Pads (Reinforced)	SQ. FT.-IN.	360	\$	167.00	\$	60,120.00
815-02-00200	Sealed Expansion Joint (End Dams and Preformed Silicone Seal)	LIN. FT.	352	\$	200.00	\$	70,400.00
822-05-02100	Light Pole (Structure Mount)	EACH	15	\$	5,000.00	\$	75,000.00
822-07-01600	Luminaire (250 Watt) (High Pressure Sodium)	EACH	15	\$	450.00	\$	6,750.00
822-12-00100	Removal and Storage of Light Pole (Ground Mount)	EACH	2	\$	500.00	\$	1,000.00
822-13-00100	Removal and Disposal of Light Pole Foundation	EACH	2	\$	600.00	\$	1,200.00
822-15-02100	Relocate Light Poles	EACH	5	\$	2,750.00	\$	13,750.00
NS-MNT-05060	Tree Removal (Less than 18" in diameter)	EACH	25	\$	50.00	\$	1,250.00
	Property Acquisition (Parcel #9930012075)	LUMP	1	\$	3,755,000.00	\$	3,755,000.00
					<b>Subtotal General</b>	\$	11,935,309.06
	<b>Alternative 1 (Steel Girders)</b>						
807-01-00200	Structural Metalwork (Grade 50)	LUMP	1	\$	2,030,400.00	\$	2,030,400.00
811-01-00100	Cleaning and Painting	LUMP	1	\$	250,000.00	\$	250,000.00
	Contingency (25%)					\$	3,553,927.27
					<b>Subtotal Alt. 1</b>	\$	17,769,636.33



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 2A Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

	<b>Alternative 2 (PPC Girders)</b>				
805-08-00400	Precast-Prestressed Concrete Girders (Type III)	LIN. FT.	2,400	\$ 275.00	\$ 660,000.00
805-08-01300	Precast-Prestressed Concrete Girders (Type LG-45)	LIN. FT.	984	\$ 760.00	\$ 747,840.00
	Contingency (25%)				\$ 3,335,787.27
				<b>Subtotal Alt. 2</b>	\$ 16,678,936.33





US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 2B Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

ITEM	DESCRIPTION OF ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
202-02-02020	Removal of Asphalt Pavement	SQ. YD.	1397.4	\$ 18.00	\$ 25,154.00
202-02-06060	Removal of Concrete Catch Basin	EACH	4	\$ 750.00	\$ 3,000.00
202-02-06080	Removal of Concrete Combination Curb and Gutter	LIN. FT.	1,542.0	\$ 12.00	\$ 18,504.00
202-02-12020	Removal of Fence (Chain Link)	LIN. FT.	471	\$ 7.50	\$ 3,532.50
202-02-40100	Removal of Traffic Signal Equipment	LUMP	1	\$ 10,000.00	\$ 10,000.00
203-01-00100	General Excavation	CU. YD.	2,371	\$ 25.00	\$ 59,268.61
203-04-00200	Nonplastic Embankment (Sand)	CU. YD.	761	\$ 30.00	\$ 22,820.00
203-08-00100	Geotextile Fabric	SQ. YD.	2,282	\$ 6.00	\$ 13,692.00
204-02-00100	Temporary Hay Bales	EACH	54	\$ 25.00	\$ 1,350.00
204-06-00100	Temporary Silt Fencing	LIN. FT.	3,791	\$ 6.00	\$ 22,746.00
302-02-12020	Class II Base Course (12" Thick) (Crushed Stone)	SQ. YD.	2,282.0	\$ 45.00	\$ 102,690.00
502-01-00100	Asphalt Concrete	TON	1,423.5	\$ 175.00	\$ 249,113.49
509-01-00100	Milling Asphalt Pavement	SQ. YD.	1,606	\$ 10.00	\$ 16,062.22
509-02-00100	Contractor Retained Reclaimed Asphalt Pavement	CU. YD.	-89	\$ 0.05	\$ (4.46)
702-03-00100	Catch Basins (CB-01)	EACH	2	\$ 6,000.00	\$ 12,000.00
702-03-00600	Catch Basins (CB-07)	EACH	2	\$ 8,000.00	\$ 16,000.00
705-06-00300	Chain Link Fence (6 Foot Height)	LIN. FT.	565	\$ 40.00	\$ 22,608.00
706-01-00100	Concrete Walk (4" Thick)	SQ. YD.	349	\$ 80.00	\$ 27,946.67
707-03-00100	Combination Concrete Curb and Gutter	LIN. FT.	1,955.0	\$ 55.00	\$ 107,525.00
713-01-00100	Temporary Signs and Barricades	LUMP	1	\$ 250,000.00	\$ 250,000.00
714-01-00100	Slab Sodding (Bermuda Grass)	SQ. YD.	1,397	\$ 12.00	\$ 16,769.33
722-02-00100	Project Site Laboratory (Equipped)	EACH	1	\$ 40,000.00	\$ 40,000.00
727-01-00100	Mobilization	LUMP	1	\$ 550,000.00	\$ 550,000.00
729-01-00102	Sign (Type A) (Furnish and Install)	SQ. FT.	486.0	\$ 50.00	\$ 24,300.00
729-08-00110	Mounting (2 1/2" Size Post) (Structure Mount)	EACH	30	\$ 950.00	\$ 28,500.00
729-21-00100	U-Channel Post	EACH	24	\$ 100.00	\$ 2,400.00
731-02-00100	Reflectorized Raised Pavement Markers	EACH	725	\$ 25.00	\$ 18,125.25
732-01-02080	Plastic Pavement Striping (24" Width) (Thermoplastic 125 mil)	LIN. FT.	73	\$ 20.00	\$ 1,460.00
732-02-02000	Plastic Pavement Striping (Solid Line) (4" Width) (Thermoplastic 90 mil)	MILE	1.248	\$ 20,000.00	\$ 24,965.91
732-03-02000	Plastic Pavement Striping (Broken Line) (4" Width) (Thermoplastic 90 mil)	MILE	0.022	\$ 10,000.00	\$ 219.70
732-05-00100	Removal of Existing Markings	MILE	1.133	\$ 16,000.00	\$ 18,127.27
736-04-24035	Signal Pole (Dual Mast Arm, 40ft-Arm 1, 35ft-Arm 2)	EACH	1	\$ 15,000.00	\$ 15,000.00

US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 2B Opinion of Probable Construction Cost  
DEI Supplied Unit Prices



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 2B Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

	<b>Alternative 1 (Steel Girders)</b>				
807-01-00200	Structural Metalwork (Grade 50)	LUMP	1	\$ 2,030,400.00	\$ 2,030,400.00
811-01-00100	Cleaning and Painting	LUMP	1	\$ 250,000.00	\$ 250,000.00
	Contingency (25%)				\$ 2,602,253.63
				<b>Subtotal Alt. 1</b>	\$ 13,011,268.17
	<b>Alternative 2 (PPC Girders)</b>				
805-08-00400	Precast-Prestressed Concrete Girders (Type III)	LIN. FT.	2,400	\$ 275.00	\$ 660,000.00
805-08-01300	Precast-Prestressed Concrete Girders (Type LG-45)	LIN. FT.	984	\$ 760.00	\$ 747,840.00
	Contingency (25%)				\$ 2,384,113.63
				<b>Subtotal Alt. 2</b>	\$ 11,920,568.17



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 4A Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

ITEM	DESCRIPTION OF ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
202-02-02020	Removal of Asphalt Pavement	SQ. YD.	11965.2	\$ 18.00	\$ 215,374.00
202-02-04000	Removal of Bridge	EACH	1	\$ 500,000.00	\$ 500,000.00
202-02-06060	Removal of Concrete Catch Basin	EACH	19	\$ 750.00	\$ 14,250.00
202-02-06080	Removal of Concrete Combination Curb and Gutter	LIN. FT.	5,568.2	\$ 12.00	\$ 66,818.40
202-02-12020	Removal of Fence (Chain Link)	LIN. FT.	471	\$ 7.50	\$ 3,532.50
202-02-40100	Removal of Traffic Signal Equipment	LUMP	1	\$ 10,000.00	\$ 10,000.00
203-01-00100	General Excavation	CU. YD.	7,819	\$ 25.00	\$ 195,469.83
203-04-00200	Nonplastic Embankment (Sand)	CU. YD.	2,509	\$ 30.00	\$ 75,261.11
203-08-00100	Geotextile Fabric	SQ. YD.	7,526	\$ 6.00	\$ 45,156.67
204-02-00100	Temporary Hay Bales	EACH	108	\$ 25.00	\$ 2,700.00
204-06-00100	Temporary Silt Fencing	LIN. FT.	2,445	\$ 6.00	\$ 14,670.00
302-02-12020	Class II Base Course (12" Thick) (Crushed Stone)	SQ. YD.	7,526.1	\$ 45.00	\$ 338,675.00
502-01-00100	Asphalt Concrete	TON	4,553.4	\$ 175.00	\$ 796,845.12
702-03-00100	Catch Basins (CB-01)	EACH	6	\$ 6,000.00	\$ 36,000.00
702-03-00600	Catch Basins (CB-07)	EACH	13	\$ 8,000.00	\$ 104,000.00
707-03-00100	Combination Concrete Curb and Gutter	LIN. FT.	5,102.0	\$ 55.00	\$ 280,610.00
713-01-00100	Temporary Signs and Barricades	LUMP	1	\$ 500,000.00	\$ 500,000.00
714-01-00100	Slab Sodding (Bermuda Grass)	SQ. YD.	1,990	\$ 12.00	\$ 23,882.67
722-02-00100	Project Site Laboratory (Equipped)	EACH	1	\$ 40,000.00	\$ 40,000.00
725-01-00100	Temporary Detour Roads	SQ. YD.	3,911.1	\$ 100.00	\$ 391,111.11
727-01-00100	Mobilization	LUMP	1	\$ 1,100,000.00	\$ 1,100,000.00
729-21-00100	U-Channel Post	EACH	72	\$ 100.00	\$ 7,200.00
729-01-00102	Sign (Type A) (Furnish and Install)	SQ. FT.	648.0	\$ 50.00	\$ 32,400.00
731-02-00100	Reflectorized Raised Pavement Markers	EACH	1,103	\$ 25.00	\$ 27,577.00
732-02-02000	Plastic Pavement Striping (Solid Line) (4" Width) (Thermoplastic 90 mil)	MILE	1.491	\$ 20,000.00	\$ 29,810.61
732-03-02000	Plastic Pavement Striping (Broken Line) (4" Width) (Thermoplastic 90 mil)	MILE	0.409	\$ 10,000.00	\$ 4,087.12
736-04-00001	Signal Pole (Pedestal Pole)	EACH	1	\$ 2,500.00	\$ 2,500.00
736-04-10500	Signal Pole (Single Mast Arm, 50 ft)	EACH	1	\$ 12,000.00	\$ 12,000.00
736-05-30000	Signal Heads (3 Section, 12 inch Led Lens, R, Y, G)	EACH	2	\$ 1,000.00	\$ 2,000.00
736-05-31001	Signal Hds (3 Sec, 12 inch Led Lens, LT. R, LT. Y, LT. G)	EACH	1	\$ 1,000.00	\$ 1,000.00
736-05-35001	Signal Hds (3 Sec, 12 inch Led Lens, RT. R, RT. Y, RT. G)	EACH	1	\$ 1,000.00	\$ 1,000.00
736-08-00102	Signal Controller (980 ATC, Type 2)(Furnish & Install)	EACH	1	\$ 10,000.00	\$ 10,000.00

US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 4A Opinion of Probable Construction Cost  
DEI Supplied Unit Prices



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7A Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

ITEM	DESCRIPTION OF ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
202-02-02020	Removal of Asphalt Pavement	SQ. YD.	1397.4	\$ 18.00	\$ 25,154.00
202-02-05000	Removal of Building	EACH	1	\$ 15,000.00	\$ 15,000.00
202-02-06060	Removal of Concrete Catch Basin	EACH	4	\$ 750.00	\$ 3,000.00
202-02-06080	Removal of Concrete Combination Curb and Gutter	LIN. FT.	1,542.0	\$ 12.00	\$ 18,504.00
202-02-12020	Removal of Fence (Chain Link)	LIN. FT.	471	\$ 7.50	\$ 3,532.50
202-02-32500	Removal of Portland Cement Concrete Pavement	SQ. YD.	2,730	\$ 20.00	\$ 54,608.89
202-02-40100	Removal of Traffic Signal Equipment	LUMP	1	\$ 10,000.00	\$ 10,000.00
203-01-00100	General Excavation	CU. YD.	2,375	\$ 25.00	\$ 59,378.27
203-04-00200	Nonplastic Embankment (Sand)	CU. YD.	762	\$ 30.00	\$ 22,862.22
203-08-00100	Geotextile Fabric	SQ. YD.	2,286	\$ 6.00	\$ 13,717.33
204-02-00100	Temporary Hay Bales	EACH	54	\$ 25.00	\$ 1,350.00
204-06-00100	Temporary Silt Fencing	LIN. FT.	3,889	\$ 6.00	\$ 23,334.00
302-02-12020	Class II Base Course (12" Thick) (Crushed Stone)	SQ. YD.	2,286.2	\$ 45.00	\$ 102,880.00
502-01-00100	Asphalt Concrete	TON	1,494.9	\$ 175.00	\$ 261,615.58
509-01-00100	Milling Asphalt Pavement	SQ. YD.	1,606	\$ 10.00	\$ 16,062.22
509-02-00100	Contractor Retained Reclaimed Asphalt Pavement	CU. YD.	-89	\$ 0.05	\$ (4.46)
702-03-00100	Catch Basins (CB-01)	EACH	2	\$ 6,000.00	\$ 12,000.00
702-03-00600	Catch Basins (CB-07)	EACH	2	\$ 8,000.00	\$ 16,000.00
705-06-00300	Chain Link Fence (6 Foot Height)	LIN. FT.	565	\$ 40.00	\$ 22,608.00
706-01-00100	Concrete Walk (4" Thick)	SQ. YD.	349	\$ 80.00	\$ 27,946.67
707-03-00100	Combination Concrete Curb and Gutter	LIN. FT.	1,871.0	\$ 55.00	\$ 102,905.00
713-01-00100	Temporary Signs and Barricades	LUMP	1	\$ 250,000.00	\$ 250,000.00
714-01-00100	Slab Sodding (Bermuda Grass)	SQ. YD.	4,128	\$ 12.00	\$ 49,534.67
722-02-00100	Project Site Laboratory (Equipped)	EACH	1	\$ 40,000.00	\$ 40,000.00
727-01-00100	Mobilization	LUMP	1	\$ 900,000.00	\$ 900,000.00
729-08-00110	Mounting (2 1/2" Size Post) (Structure Mount)	EACH	60	\$ 950.00	\$ 57,000.00
729-21-00100	U-Channel Post	EACH	30	\$ 100.00	\$ 3,000.00
729-01-00102	Sign (Type A) (Furnish and Install)	SQ. FT.	810.0	\$ 50.00	\$ 40,500.00
731-02-00100	Reflectorized Raised Pavement Markers	EACH	787	\$ 25.00	\$ 19,670.75
732-02-02000	Plastic Pavement Striping (Solid Line) (4" Width) (Thermoplastic 90 mil)	MILE	1.355	\$ 20,000.00	\$ 27,094.70
732-05-00100	Removal of Existing Markings	MILE	1.133	\$ 16,000.00	\$ 18,127.27
740-01-00100	Construction Layout	LUMP	1	\$ 300,000.00	\$ 300,000.00





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802-01-00100	Structural Excavation	CU. YD.	3,194	\$	35.00	\$	111,805.56
802-03-00100	Temporary Sheet piling (Steel)	SQ. FT.	24,675	\$	50.00	\$	1,233,750.00
804-01-00200	Precast Concrete Piles (14")	LIN. FT.	49,950	\$	70.00	\$	3,496,500.00
804-09-00200	Static Load Test (Precast Concrete Piles (14"))	EACH	2	\$	25,000.00	\$	50,000.00
804-14-00100	Dynamic Monitoring Assistance	EACH	63	\$	2,000.00	\$	126,000.00
804-15-00100	Dynamic Monitoring Instrumentation	LUMP	1	\$	8,000.00	\$	8,000.00
804-17-00100	Construction Site Survey	LUMP	1	\$	10,000.00	\$	10,000.00
804-18-00100	Vibration Monitoring	DAY	167	\$	150.00	\$	25,050.00
805-01-00100	Class A1 Concrete (Slab Span)	CU. YD.	114.07	\$	1,200.00	\$	136,888.89
805-01-00200	Class A1 Concrete (Deck)	CU. YD.	1,035.58	\$	1,000.00	\$	1,035,583.33
805-04-00100	Class MASS(A1) Concrete (Bent Cap)	CU. YD.	587.85	\$	1,200.00	\$	705,422.22
805-04-00200	Class MASS(A1) Concrete (Column)	CU. YD.	205.95	\$	1,200.00	\$	247,138.62
805-04-00300	Class MASS(A1) Concrete (Footing)	CU. YD.	2,355.56	\$	500.00	\$	1,177,777.78
806-01-00100	Deformed Reinforcing Steel	LB	802,320	\$	1.85	\$	1,484,291.75
810-01-00100	Concrete Bridge Railing (Standard)	LIN. FT.	508	\$	150.00	\$	76,200.00
810-01-00200	Concrete Bridge Railing (Slotted)	LIN. FT.	1,682	\$	100.00	\$	168,200.00
810-01-00300	Concrete Bridge Railing (Double Face)	LIN. FT.	921	\$	190.00	\$	174,990.00
810-05-00300	Concrete Roadway Barrier (Double Face)	LIN. FT.	471	\$	150.00	\$	70,650.00
813-01-00100	Concrete Approach Slabs (Cast-in-Place)	SQ. FT.	2,606	\$	35.00	\$	91,210.00
814-02-00100	Elastomeric Bearing Pads (Reinforced)	SQ. FT.-IN.	744	\$	167.00	\$	124,248.00
815-02-00200	Sealed Expansion Joint (End Dams and Preformed Silicone Seal)	LIN. FT.	770	\$	200.00	\$	154,000.00
822-05-02100	Light Pole (Structure Mount)	EACH	22	\$	5,000.00	\$	110,000.00
822-07-01600	Luminaire (250 Watt) (High Pressure Sodium)	EACH	22	\$	450.00	\$	9,900.00
822-12-00100	Removal and Storage of Light Pole (Ground Mount)	EACH	2	\$	500.00	\$	1,000.00
822-13-00100	Removal and Disposal of Light Pole Foundation	EACH	2	\$	600.00	\$	1,200.00
822-15-02100	Relocate Light Poles	EACH	5	\$	2,750.00	\$	13,750.00
NS-MNT-05060	Tree Removal (Less than 18" in diameter)	EACH	25	\$	50.00	\$	1,250.00
	Property Acquisition (Parcel #9930012075)	LUMP	1	\$	3,755,000.00	\$	3,755,000.00
					<b>Subtotal General</b>	\$	17,117,187.76
	<b>Alternative 1 (Steel Girders)</b>						
807-01-00200	Structural Metalwork (Grade 50)	LUMP	1	\$	3,859,200.00	\$	3,859,200.00
811-01-00100	Cleaning and Painting	LUMP	1	\$	250,000.00	\$	250,000.00
	Contingency (25%)					\$	5,306,596.94
					<b>Subtotal Alt. 1</b>	\$	26,532,984.70



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DEI Supplied Unit Prices

Date: 3/2/2018

				<b>Cost of Phased Construction</b>	\$ 27,986,871.28
	<b>Alternative 2 (PPC Girders)</b>				
805-08-00400	Precast-Prestressed Concrete Girders (Type III)	LIN. FT.	4,710	\$ 275.00	\$ 1,295,250.00
805-08-01300	Precast-Prestressed Concrete Girders (Type LG-45)	LIN. FT.	1,722	\$ 760.00	\$ 1,308,720.00
	Contingency (25%)				\$ 4,930,289.44
				<b>Subtotal Alt. 2</b>	\$ 24,651,447.20
				<b>Cost of Phased Construction</b>	\$ 26,105,333.78



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7A Phase 1 Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

ITEM	DESCRIPTION OF ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
202-02-02020	Removal of Asphalt Pavement	SQ. YD.	1397.4	\$ 18.00	\$ 25,154.00
202-02-05000	Removal of Building	EACH	1	\$ 15,000.00	\$ 15,000.00
202-02-06060	Removal of Concrete Catch Basin	EACH	4	\$ 750.00	\$ 3,000.00
202-02-06080	Removal of Concrete Combination Curb and Gutter	LIN. FT.	1,542.0	\$ 12.00	\$ 18,504.00
202-02-12020	Removal of Fence (Chain Link)	LIN. FT.	471	\$ 7.50	\$ 3,532.50
202-02-32500	Removal of Portland Cement Concrete Pavement	SQ. YD.	2,730	\$ 20.00	\$ 54,608.89
202-02-40100	Removal of Traffic Signal Equipment	LUMP	1	\$ 10,000.00	\$ 10,000.00
203-01-00100	General Excavation	CU. YD.	2,371	\$ 25.00	\$ 59,268.61
203-04-00200	Nonplastic Embankment (Sand)	CU. YD.	761	\$ 30.00	\$ 22,820.00
203-08-00100	Geotextile Fabric	SQ. YD.	2,282	\$ 6.00	\$ 13,692.00
204-02-00100	Temporary Hay Bales	EACH	54	\$ 25.00	\$ 1,350.00
204-06-00100	Temporary Silt Fencing	LIN. FT.	3,791	\$ 6.00	\$ 22,746.00
302-02-12020	Class II Base Course (12" Thick) (Crushed Stone)	SQ. YD.	2,282.0	\$ 45.00	\$ 102,690.00
502-01-00100	Asphalt Concrete	TON	1,423.5	\$ 175.00	\$ 249,113.49
509-01-00100	Milling Asphalt Pavement	SQ. YD.	1,606	\$ 10.00	\$ 16,062.22
509-02-00100	Contractor Retained Reclaimed Asphalt Pavement	CU. YD.	-89	\$ 0.05	\$ (4.46)
702-03-00100	Catch Basins (CB-01)	EACH	2	\$ 6,000.00	\$ 12,000.00
702-03-00600	Catch Basins (CB-07)	EACH	2	\$ 8,000.00	\$ 16,000.00
705-06-00300	Chain Link Fence (6 Foot Height)	LIN. FT.	565	\$ 40.00	\$ 22,608.00
706-01-00100	Concrete Walk (4" Thick)	SQ. YD.	349	\$ 80.00	\$ 27,946.67
707-03-00100	Combination Concrete Curb and Gutter	LIN. FT.	1,955.0	\$ 55.00	\$ 107,525.00
713-01-00100	Temporary Signs and Barricades	LUMP	1	\$ 250,000.00	\$ 250,000.00
714-01-00100	Slab Sodding (Bermuda Grass)	SQ. YD.	4,128	\$ 12.00	\$ 49,534.67
722-02-00100	Project Site Laboratory (Equipped)	EACH	1	\$ 40,000.00	\$ 40,000.00
727-01-00100	Mobilization	LUMP	1	\$ 550,000.00	\$ 550,000.00
729-01-00102	Sign (Type A) (Furnish and Install)	SQ. FT.	486.0	\$ 50.00	\$ 24,300.00
729-08-00110	Mounting (2 1/2" Size Post) (Structure Mount)	EACH	30	\$ 950.00	\$ 28,500.00
729-21-00100	U-Channel Post	EACH	24	\$ 100.00	\$ 2,400.00
731-02-00100	Reflectorized Raised Pavement Markers	EACH	725	\$ 25.00	\$ 18,125.25
732-02-02000	Plastic Pavement Striping (Solid Line) (4" Width) (Thermoplastic 90 mil)	MILE	1.248	\$ 20,000.00	\$ 24,965.91
732-05-00100	Removal of Existing Markings	MILE	1.133	\$ 16,000.00	\$ 18,127.27
740-01-00100	Construction Layout	LUMP	1	\$ 300,000.00	\$ 300,000.00



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802-01-00100	Structural Excavation	CU. YD.	1,843	\$	35.00	\$	64,490.74
802-03-00100	Temporary Sheet piling (Steel)	SQ. FT.	15,015	\$	50.00	\$	750,750.00
804-01-00200	Precast Concrete Piles (14")	LIN. FT.	28,050	\$	70.00	\$	1,963,500.00
804-09-00200	Static Load Test (Precast Concrete Piles (14"))	EACH	2	\$	25,000.00	\$	50,000.00
804-14-00100	Dynamic Monitoring Assistance	EACH	38	\$	2,000.00	\$	76,000.00
804-15-00100	Dynamic Monitoring Instrumentation	LUMP	1	\$	8,000.00	\$	8,000.00
804-17-00100	Construction Site Survey	LUMP	1	\$	10,000.00	\$	10,000.00
804-18-00100	Vibration Monitoring	DAY	94	\$	150.00	\$	14,100.00
805-01-00100	Class A1 Concrete (Slab Span)	CU. YD.	114.07	\$	1,200.00	\$	136,888.89
805-01-00200	Class A1 Concrete (Deck)	CU. YD.	511.03	\$	1,000.00	\$	511,027.78
805-04-00100	Class MASS(A1) Concrete (Bent Cap)	CU. YD.	241.19	\$	1,200.00	\$	289,422.22
805-04-00200	Class MASS(A1) Concrete (Column)	CU. YD.	111.70	\$	1,200.00	\$	134,041.29
805-04-00300	Class MASS(A1) Concrete (Footing)	CU. YD.	1,274.07	\$	500.00	\$	637,037.04
806-01-00100	Deformed Reinforcing Steel	LB	419,157	\$	1.85	\$	775,441.09
810-01-00100	Concrete Bridge Railing (Standard)	LIN. FT.	279	\$	150.00	\$	41,850.00
810-01-00200	Concrete Bridge Railing (Slotted)	LIN. FT.	1,097	\$	100.00	\$	109,700.00
810-01-00300	Concrete Bridge Railing (Double Face)	LIN. FT.	564	\$	190.00	\$	107,160.00
810-05-00300	Concrete Roadway Barrier (Double Face)	LIN. FT.	471	\$	150.00	\$	70,650.00
813-01-00100	Concrete Approach Slabs (Cast-in-Place)	SQ. FT.	2,606	\$	35.00	\$	91,210.00
814-02-00100	Elastomeric Bearing Pads (Reinforced)	SQ. FT.-IN.	360	\$	167.00	\$	60,120.00
815-02-00200	Sealed Expansion Joint (End Dams and Preformed Silicone Seal)	LIN. FT.	352	\$	200.00	\$	70,400.00
822-05-02100	Light Pole (Structure Mount)	EACH	15	\$	5,000.00	\$	75,000.00
822-07-01600	Luminaire (250 Watt) (High Pressure Sodium)	EACH	15	\$	450.00	\$	6,750.00
822-12-00100	Removal and Storage of Light Pole (Ground Mount)	EACH	2	\$	500.00	\$	1,000.00
822-13-00100	Removal and Disposal of Light Pole Foundation	EACH	2	\$	600.00	\$	1,200.00
822-15-02100	Relocate Light Poles	EACH	5	\$	2,750.00	\$	13,750.00
NS-MNT-05060	Tree Removal (Less than 18" in diameter)	EACH	25	\$	50.00	\$	1,250.00
	Property Acquisition (Parcel #9930012075)	LUMP	1	\$	3,755,000.00	\$	3,755,000.00
					<b>Subtotal General</b>	\$	11,935,309.06
	<b>Alternative 1 (Steel Girders)</b>						
807-01-00200	Structural Metalwork (Grade 50)	LUMP	1	\$	2,030,400.00	\$	2,030,400.00
811-01-00100	Cleaning and Painting	LUMP	1	\$	250,000.00	\$	250,000.00
	Contingency (25%)					\$	3,553,927.27
					<b>Subtotal Alt. 1</b>	\$	17,769,636.33



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
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DEI Supplied Unit Prices

Date: 3/2/2018

	<b>Alternative 2 (PPC Girders)</b>				
805-08-00400	Precast-Prestressed Concrete Girders (Type III)	LIN. FT.	2,400	\$ 275.00	\$ 660,000.00
805-08-01300	Precast-Prestressed Concrete Girders (Type LG-45)	LIN. FT.	984	\$ 760.00	\$ 747,840.00
	Contingency (25%)				\$ 3,335,787.27
				<b>Subtotal Alt. 2</b>	\$ 16,678,936.33



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7A Phase 2 Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

ITEM	DESCRIPTION OF ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
202-02-02020	Removal of Asphalt Pavement	SQ. YD.	642.1	\$ 18.00	\$ 11,558.00
202-02-06000	Removal of Concrete Approach Slabs	SQ. YD.	290	\$ 60.00	\$ 17,373.33
202-02-06080	Removal of Concrete Combination Curb and Gutter	LIN. FT.	410.0	\$ 12.00	\$ 4,920.00
203-01-00100	General Excavation	CU. YD.	1,464	\$ 25.00	\$ 36,594.86
203-04-00200	Nonplastic Embankment (Sand)	CU. YD.	470	\$ 30.00	\$ 14,090.00
203-08-00100	Geotextile Fabric	SQ. YD.	1,409	\$ 6.00	\$ 8,454.00
204-02-00100	Temporary Hay Bales	EACH	54	\$ 25.00	\$ 1,350.00
204-06-00100	Temporary Silt Fencing	LIN. FT.	2,852	\$ 6.00	\$ 17,112.00
302-02-12020	Class II Base Course (12" Thick) (Crushed Stone)	SQ. YD.	1,409.0	\$ 45.00	\$ 63,405.00
502-01-00100	Asphalt Concrete	TON	718.6	\$ 175.00	\$ 125,758.83
706-01-00100	Concrete Walk (4" Thick)	SQ. YD.	349	\$ 80.00	\$ 27,946.67
707-03-00100	Combination Concrete Curb and Gutter	LIN. FT.	876.0	\$ 55.00	\$ 48,180.00
713-01-00100	Temporary Signs and Barricades	LUMP	1	\$ 250,000.00	\$ 250,000.00
714-01-00100	Slab Sodding (Bermuda Grass)	SQ. YD.	677	\$ 12.00	\$ 8,129.33
722-02-00100	Project Site Laboratory (Equipped)	EACH	1	\$ 40,000.00	\$ 40,000.00
727-01-00100	Mobilization	LUMP	1	\$ 425,000.00	\$ 425,000.00
729-08-00110	Mounting (2 1/2" Size Post) (Structure Mount)	EACH	30	\$ 950.00	\$ 28,500.00
729-21-00100	U-Channel Post	EACH	6	\$ 100.00	\$ 600.00
729-01-00102	Sign (Type A) (Furnish and Install)	SQ. FT.	324.0	\$ 50.00	\$ 16,200.00
731-02-00100	Reflectorized Raised Pavement Markers	EACH	570	\$ 25.00	\$ 14,250.50
732-02-02000	Plastic Pavement Striping (Solid Line) (4" Width) (Thermoplastic 90 mil)	MILE	0.900	\$ 20,000.00	\$ 18,000.00
732-03-02000	Plastic Pavement Striping (Broken Line) (4" Width) (Thermoplastic 90 mil)	MILE	0.081	\$ 10,000.00	
732-05-00100	Removal of Existing Markings	MILE	0.681	\$ 16,000.00	\$ 10,900.00
740-01-00100	Construction Layout	LUMP	1	\$ 250,000.00	\$ 250,000.00
802-01-00100	Structural Excavation	CU. YD.	1,352	\$ 35.00	\$ 47,314.81
802-03-00100	Temporary Sheet piling (Steel)	SQ. FT.	9,660	\$ 50.00	\$ 483,000.00
804-01-00200	Precast Concrete Piles (14")	LIN. FT.	21,900	\$ 70.00	\$ 1,533,000.00
804-14-00100	Dynamic Monitoring Assistance	EACH	25	\$ 2,000.00	\$ 50,000.00
804-15-00100	Dynamic Monitoring Instrumentation	LUMP	1	\$ 8,000.00	\$ 8,000.00
804-17-00100	Construction Site Survey	LUMP	1	\$ 10,000.00	\$ 10,000.00
804-18-00100	Vibration Monitoring	DAY	73	\$ 150.00	\$ 10,950.00





US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7A Phase 2 Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

805-01-00200	Class A1 Concrete (Deck)	CU. YD.	524.56	\$ 1,000.00	\$ 524,555.56
805-04-00100	Class MASS(A1) Concrete (Bent Cap)	CU. YD.	260.00	\$ 1,200.00	\$ 312,000.00
805-04-00200	Class MASS(A1) Concrete (Column)	CU. YD.	94.25	\$ 1,200.00	\$ 113,097.34
805-04-00300	Class MASS(A1) Concrete (Footings)	CU. YD.	1,081.48	\$ 500.00	\$ 540,740.74
806-01-00100	Deformed Reinforcing Steel	LB	365,829	\$ 1.85	\$ 676,783.99
810-01-00100	Concrete Bridge Railing (Standard)	LIN. FT.	229	\$ 150.00	\$ 34,350.00
810-01-00200	Concrete Bridge Railing (Slotted)	LIN. FT.	585	\$ 100.00	\$ 58,500.00
810-01-00300	Concrete Bridge Railing (Double Face)	LIN. FT.	921	\$ 190.00	\$ 174,990.00
810-05-00300	Concrete Roadway Barrier (Double Face)	LIN. FT.	450	\$ 150.00	\$ 67,500.00
813-01-00100	Concrete Approach Slabs (Cast-in-Place)	SQ. FT.	1,543	\$ 35.00	\$ 54,005.00
814-02-00100	Elastomeric Bearing Pads (Reinforced)	SQ. FT.-IN.	384	\$ 167.00	\$ 64,128.00
815-02-00200	Sealed Expansion Joint (End Dams and Preformed Silicone Seal)	LIN. FT.	418	\$ 200.00	\$ 83,600.00
822-05-02100	Light Pole (Structure Mount)	EACH	7	\$ 5,000.00	\$ 35,000.00
822-07-01600	Luminaire (250 Watt) (High Pressure Sodium)	EACH	7	\$ 450.00	\$ 3,150.00
822-15-02100	Relocate Light Poles	EACH	8	\$ 2,750.00	\$ 22,000.00
				<b>Subtotal General</b>	\$ 6,344,987.96
	<b>Alternative 1 (Steel Girders)</b>				
807-01-00200	Structural Metalwork (Grade 50)	LUMP	1	\$ 1,828,800.00	\$ 1,828,800.00
	Contingency (25%)				\$ 2,043,446.99
				<b>Subtotal Alt. 1</b>	\$ 10,217,234.96
	<b>Alternative 2 (PPC Girders)</b>				
805-08-00400	Precast-Prestressed Concrete Girders (Type III)	LIN. FT.	2,310	\$ 275.00	\$ 635,250.00
805-08-01300	Precast-Prestressed Concrete Girders (Type LG-45)	LIN. FT.	738	\$ 760.00	\$ 560,880.00
	Contingency (25%)				\$ 1,885,279.49
				<b>Subtotal Alt. 2</b>	\$ 9,426,397.46



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7B Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

ITEM	DESCRIPTION OF ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
202-02-02020	Removal of Asphalt Pavement	SQ. YD.	1397.4	\$ 18.00	\$ 25,154.00
202-02-06060	Removal of Concrete Catch Basin	EACH	4	\$ 750.00	\$ 3,000.00
202-02-06080	Removal of Concrete Combination Curb and Gutter	LIN. FT.	1,542.0	\$ 12.00	\$ 18,504.00
202-02-12020	Removal of Fence (Chain Link)	LIN. FT.	471	\$ 7.50	\$ 3,532.50
202-02-40100	Removal of Traffic Signal Equipment	LUMP	1	\$ 10,000.00	\$ 10,000.00
203-01-00100	General Excavation	CU. YD.	2,375	\$ 25.00	\$ 59,378.27
203-04-00200	Nonplastic Embankment (Sand)	CU. YD.	762	\$ 30.00	\$ 22,862.22
203-08-00100	Geotextile Fabric	SQ. YD.	2,286	\$ 6.00	\$ 13,717.33
204-02-00100	Temporary Hay Bales	EACH	54	\$ 25.00	\$ 1,350.00
204-06-00100	Temporary Silt Fencing	LIN. FT.	3,889	\$ 6.00	\$ 23,334.00
302-02-12020	Class II Base Course (12" Thick) (Crushed Stone)	SQ. YD.	2,286.2	\$ 45.00	\$ 102,880.00
502-01-00100	Asphalt Concrete	TON	1,494.9	\$ 175.00	\$ 261,615.58
509-01-00100	Milling Asphalt Pavement	SQ. YD.	1,606	\$ 10.00	\$ 16,062.22
509-02-00100	Contractor Retained Reclaimed Asphalt Pavement	CU. YD.	-89	\$ 0.05	\$ (4.46)
702-03-00100	Catch Basins (CB-01)	EACH	2	\$ 6,000.00	\$ 12,000.00
702-03-00600	Catch Basins (CB-07)	EACH	2	\$ 8,000.00	\$ 16,000.00
705-06-00300	Chain Link Fence (6 Foot Height)	LIN. FT.	565	\$ 40.00	\$ 22,608.00
706-01-00100	Concrete Walk (4" Thick)	SQ. YD.	349	\$ 80.00	\$ 27,946.67
707-03-00100	Combination Concrete Curb and Gutter	LIN. FT.	1,871.0	\$ 55.00	\$ 102,905.00
713-01-00100	Temporary Signs and Barricades	LUMP	1	\$ 250,000.00	\$ 250,000.00
714-01-00100	Slab Sodding (Bermuda Grass)	SQ. YD.	1,397	\$ 12.00	\$ 16,769.33
722-02-00100	Project Site Laboratory (Equipped)	EACH	1	\$ 40,000.00	\$ 40,000.00
727-01-00100	Mobilization	LUMP	1	\$ 900,000.00	\$ 900,000.00
729-08-00110	Mounting (2 1/2" Size Post) (Structure Mount)	EACH	60	\$ 950.00	\$ 57,000.00
729-21-00100	U-Channel Post	EACH	30	\$ 100.00	\$ 3,000.00
729-01-00102	Sign (Type A) (Furnish and Install)	SQ. FT.	810.0	\$ 50.00	\$ 40,500.00
731-02-00100	Reflectorized Raised Pavement Markers	EACH	787	\$ 25.00	\$ 19,670.75
732-01-02080	Plastic Pavement Striping (24" Width) (Thermoplastic 125 mil)	LIN. FT.	73	\$ 20.00	\$ 1,460.00
732-02-02000	Plastic Pavement Striping (Solid Line) (4" Width) (Thermoplastic 90 mil)	MILE	1.355	\$ 20,000.00	\$ 27,094.70
732-03-02000	Plastic Pavement Striping (Broken Line) (4" Width) (Thermoplastic 90 mil)	MILE	0.022	\$ 10,000.00	\$ 219.70
732-05-00100	Removal of Existing Markings	MILE	1.133	\$ 16,000.00	\$ 18,127.27
736-04-24035	Signal Pole (Dual Mast Arm, 40ft-Arm 1, 35ft-Arm 2)	EACH	1	\$ 15,000.00	\$ 15,000.00

US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7B Opinion of Probable Construction Cost  
DEI Supplied Unit Prices



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7B Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

	<b>Alternative 1 (Steel Girders)</b>				
807-01-00200	Structural Metalwork (Grade 50)	LUMP	1	\$ 3,859,200.00	\$ 3,859,200.00
811-01-00100	Cleaning and Painting	LUMP	1	\$ 250,000.00	\$ 250,000.00
	Contingency (25%)				\$ 4,354,923.31
				<b>Subtotal Alt. 1</b>	\$ 21,774,616.54
				<b>Cost of Phased Construction</b>	\$ 23,228,503.12
	<b>Alternative 2 (PPC Girders)</b>				
805-08-00400	Precast-Prestressed Concrete Girders (Type III)	LIN. FT.	4,710	\$ 275.00	\$ 1,295,250.00
805-08-01300	Precast-Prestressed Concrete Girders (Type LG-45)	LIN. FT.	1,722	\$ 760.00	\$ 1,308,720.00
	Contingency (25%)				\$ 3,978,615.81
				<b>Subtotal Alt. 2</b>	\$ 19,893,079.04
				<b>Cost of Phased Construction</b>	\$ 21,346,965.62



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7B Phase 1 Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

ITEM	DESCRIPTION OF ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
202-02-02020	Removal of Asphalt Pavement	SQ. YD.	1397.4	\$ 18.00	\$ 25,154.00
202-02-06060	Removal of Concrete Catch Basin	EACH	4	\$ 750.00	\$ 3,000.00
202-02-06080	Removal of Concrete Combination Curb and Gutter	LIN. FT.	1,542.0	\$ 12.00	\$ 18,504.00
202-02-12020	Removal of Fence (Chain Link)	LIN. FT.	471	\$ 7.50	\$ 3,532.50
202-02-40100	Removal of Traffic Signal Equipment	LUMP	1	\$ 10,000.00	\$ 10,000.00
203-01-00100	General Excavation	CU. YD.	2,371	\$ 25.00	\$ 59,268.61
203-04-00200	Nonplastic Embankment (Sand)	CU. YD.	761	\$ 30.00	\$ 22,820.00
203-08-00100	Geotextile Fabric	SQ. YD.	2,282	\$ 6.00	\$ 13,692.00
204-02-00100	Temporary Hay Bales	EACH	54	\$ 25.00	\$ 1,350.00
204-06-00100	Temporary Silt Fencing	LIN. FT.	3,791	\$ 6.00	\$ 22,746.00
302-02-12020	Class II Base Course (12" Thick) (Crushed Stone)	SQ. YD.	2,282.0	\$ 45.00	\$ 102,690.00
502-01-00100	Asphalt Concrete	TON	1,423.5	\$ 175.00	\$ 249,113.49
509-01-00100	Milling Asphalt Pavement	SQ. YD.	1,606	\$ 10.00	\$ 16,062.22
509-02-00100	Contractor Retained Reclaimed Asphalt Pavement	CU. YD.	-89	\$ 0.05	\$ (4.46)
702-03-00100	Catch Basins (CB-01)	EACH	2	\$ 6,000.00	\$ 12,000.00
702-03-00600	Catch Basins (CB-07)	EACH	2	\$ 8,000.00	\$ 16,000.00
705-06-00300	Chain Link Fence (6 Foot Height)	LIN. FT.	565	\$ 40.00	\$ 22,608.00
706-01-00100	Concrete Walk (4" Thick)	SQ. YD.	349	\$ 80.00	\$ 27,946.67
707-03-00100	Combination Concrete Curb and Gutter	LIN. FT.	1,955.0	\$ 55.00	\$ 107,525.00
713-01-00100	Temporary Signs and Barricades	LUMP	1	\$ 250,000.00	\$ 250,000.00
714-01-00100	Slab Sodding (Bermuda Grass)	SQ. YD.	1,397	\$ 12.00	\$ 16,769.33
722-02-00100	Project Site Laboratory (Equipped)	EACH	1	\$ 40,000.00	\$ 40,000.00
727-01-00100	Mobilization	LUMP	1	\$ 550,000.00	\$ 550,000.00
729-01-00102	Sign (Type A) (Furnish and Install)	SQ. FT.	486.0	\$ 50.00	\$ 24,300.00
729-08-00110	Mounting (2 1/2" Size Post) (Structure Mount)	EACH	30	\$ 950.00	\$ 28,500.00
729-21-00100	U-Channel Post	EACH	24	\$ 100.00	\$ 2,400.00
731-02-00100	Reflectorized Raised Pavement Markers	EACH	725	\$ 25.00	\$ 18,125.25
732-01-02080	Plastic Pavement Striping (24" Width) (Thermoplastic 125 mil)	LIN. FT.	73	\$ 20.00	\$ 1,460.00
732-02-02000	Plastic Pavement Striping (Solid Line) (4" Width) (Thermoplastic 90 mil)	MILE	1.248	\$ 20,000.00	\$ 24,965.91
732-03-02000	Plastic Pavement Striping (Broken Line) (4" Width) (Thermoplastic 90 mil)	MILE	0.022	\$ 10,000.00	\$ 219.70
732-05-00100	Removal of Existing Markings	MILE	1.133	\$ 16,000.00	\$ 18,127.27
736-04-24035	Signal Pole (Dual Mast Arm, 40ft-Arm 1, 35ft-Arm 2)	EACH	1	\$ 15,000.00	\$ 15,000.00

US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7B Phase 1 Opinion of Probable Construction Cost  
DEI Supplied Unit Prices





US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7B Phase 1 Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

	<b>Alternative 1 (Steel Girders)</b>				
807-01-00200	Structural Metalwork (Grade 50)	LUMP	1	\$ 2,030,400.00	\$ 2,030,400.00
811-01-00100	Cleaning and Painting	LUMP	1	\$ 250,000.00	\$ 250,000.00
	Contingency (25%)				\$ 2,602,253.63
				<b>Subtotal Alt. 1</b>	\$ 13,011,268.17
	<b>Alternative 2 (PPC Girders)</b>				
805-08-00400	Precast-Prestressed Concrete Girders (Type III)	LIN. FT.	2,400	\$ 275.00	\$ 660,000.00
805-08-01300	Precast-Prestressed Concrete Girders (Type LG-45)	LIN. FT.	984	\$ 760.00	\$ 747,840.00
	Contingency (25%)				\$ 2,384,113.63
				<b>Subtotal Alt. 2</b>	\$ 11,920,568.17



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7B Phase 2 Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

ITEM	DESCRIPTION OF ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
202-02-02020	Removal of Asphalt Pavement	SQ. YD.	642.1	\$ 18.00	\$ 11,558.00
202-02-06000	Removal of Concrete Approach Slabs	SQ. YD.	290	\$ 60.00	\$ 17,373.33
202-02-06080	Removal of Concrete Combination Curb and Gutter	LIN. FT.	410.0	\$ 12.00	\$ 4,920.00
203-01-00100	General Excavation	CU. YD.	1,464	\$ 25.00	\$ 36,594.86
203-04-00200	Nonplastic Embankment (Sand)	CU. YD.	470	\$ 30.00	\$ 14,090.00
203-08-00100	Geotextile Fabric	SQ. YD.	1,409	\$ 6.00	\$ 8,454.00
204-02-00100	Temporary Hay Bales	EACH	54	\$ 25.00	\$ 1,350.00
204-06-00100	Temporary Silt Fencing	LIN. FT.	2,852	\$ 6.00	\$ 17,112.00
302-02-12020	Class II Base Course (12" Thick) (Crushed Stone)	SQ. YD.	1,409.0	\$ 45.00	\$ 63,405.00
502-01-00100	Asphalt Concrete	TON	718.6	\$ 175.00	\$ 125,758.83
706-01-00100	Concrete Walk (4" Thick)	SQ. YD.	349	\$ 80.00	\$ 27,946.67
707-03-00100	Combination Concrete Curb and Gutter	LIN. FT.	876.0	\$ 55.00	\$ 48,180.00
713-01-00100	Temporary Signs and Barricades	LUMP	1	\$ 250,000.00	\$ 250,000.00
714-01-00100	Slab Sodding (Bermuda Grass)	SQ. YD.	677	\$ 12.00	\$ 8,129.33
722-02-00100	Project Site Laboratory (Equipped)	EACH	1	\$ 40,000.00	\$ 40,000.00
727-01-00100	Mobilization	LUMP	1	\$ 425,000.00	\$ 425,000.00
729-08-00110	Mounting (2 1/2" Size Post) (Structure Mount)	EACH	30	\$ 950.00	\$ 28,500.00
729-21-00100	U-Channel Post	EACH	6	\$ 100.00	\$ 600.00
729-01-00102	Sign (Type A) (Furnish and Install)	SQ. FT.	324.0	\$ 50.00	\$ 16,200.00
731-02-00100	Reflectorized Raised Pavement Markers	EACH	570	\$ 25.00	\$ 14,250.50
732-02-02000	Plastic Pavement Striping (Solid Line) (4" Width) (Thermoplastic 90 mil)	MILE	0.900	\$ 20,000.00	\$ 18,000.00
732-03-02000	Plastic Pavement Striping (Broken Line) (4" Width) (Thermoplastic 90 mil)	MILE	0.081	\$ 10,000.00	
732-05-00100	Removal of Existing Markings	MILE	0.681	\$ 16,000.00	\$ 10,900.00
740-01-00100	Construction Layout	LUMP	1	\$ 250,000.00	\$ 250,000.00
802-01-00100	Structural Excavation	CU. YD.	1,352	\$ 35.00	\$ 47,314.81
802-03-00100	Temporary Sheet piling (Steel)	SQ. FT.	9,660	\$ 50.00	\$ 483,000.00
804-01-00200	Precast Concrete Piles (14")	LIN. FT.	21,900	\$ 70.00	\$ 1,533,000.00
804-14-00100	Dynamic Monitoring Assistance	EACH	25	\$ 2,000.00	\$ 50,000.00
804-15-00100	Dynamic Monitoring Instrumentation	LUMP	1	\$ 8,000.00	\$ 8,000.00
804-17-00100	Construction Site Survey	LUMP	1	\$ 10,000.00	\$ 10,000.00
804-18-00100	Vibration Monitoring	DAY	73	\$ 150.00	\$ 10,950.00



US 90 / Jefferson Highway at LA 3046 / Causeway Boulevard  
Option 7B Phase 2 Opinion of Probable Construction Cost  
DEI Supplied Unit Prices

Date: 3/2/2018

805-01-00200	Class A1 Concrete (Deck)	CU. YD.	524.56	\$ 1,000.00	\$ 524,555.56
805-04-00100	Class MASS(A1) Concrete (Bent Cap)	CU. YD.	260.00	\$ 1,200.00	\$ 312,000.00
805-04-00200	Class MASS(A1) Concrete (Column)	CU. YD.	94.25	\$ 1,200.00	\$ 113,097.34
805-04-00300	Class MASS(A1) Concrete (Footing)	CU. YD.	1,081.48	\$ 500.00	\$ 540,740.74
806-01-00100	Deformed Reinforcing Steel	LB	365,829	\$ 1.85	\$ 676,783.99
810-01-00100	Concrete Bridge Railing (Standard)	LIN. FT.	229	\$ 150.00	\$ 34,350.00
810-01-00200	Concrete Bridge Railing (Slotted)	LIN. FT.	585	\$ 100.00	\$ 58,500.00
810-01-00300	Concrete Bridge Railing (Double Face)	LIN. FT.	921	\$ 190.00	\$ 174,990.00
810-05-00300	Concrete Roadway Barrier (Double Face)	LIN. FT.	450	\$ 150.00	\$ 67,500.00
813-01-00100	Concrete Approach Slabs (Cast-in-Place)	SQ. FT.	1,543	\$ 35.00	\$ 54,005.00
814-02-00100	Elastomeric Bearing Pads (Reinforced)	SQ. FT.-IN.	384	\$ 167.00	\$ 64,128.00
815-02-00200	Sealed Expansion Joint (End Dams and Preformed Silicone Seal)	LIN. FT.	418	\$ 200.00	\$ 83,600.00
822-05-02100	Light Pole (Structure Mount)	EACH	7	\$ 5,000.00	\$ 35,000.00
822-07-01600	Luminaire (250 Watt) (High Pressure Sodium)	EACH	7	\$ 450.00	\$ 3,150.00
822-15-02100	Relocate Light Poles	EACH	8	\$ 2,750.00	\$ 22,000.00
				<b>Subtotal General</b>	\$ 6,344,987.96
	<b>Alternative 1 (Steel Girders)</b>				
807-01-00200	Structural Metalwork (Grade 50)	LUMP	1	\$ 1,828,800.00	\$ 1,828,800.00
	Contingency (25%)				\$ 2,043,446.99
				<b>Subtotal Alt. 1</b>	\$ 10,217,234.96
	<b>Alternative 2 (PPC Girders)</b>				
805-08-00400	Precast-Prestressed Concrete Girders (Type III)	LIN. FT.	2,310	\$ 275.00	\$ 635,250.00
805-08-01300	Precast-Prestressed Concrete Girders (Type LG-45)	LIN. FT.	738	\$ 760.00	\$ 560,880.00
	Contingency (25%)				\$ 1,885,279.49
				<b>Subtotal Alt. 2</b>	\$ 9,426,397.46