



Preliminary Environmental Assessment

Interconnecting Gulfport
Airport Road Extension & Interstate 10 Overpass



April 2022



Preliminary

Environmental Assessment

for Presentation at a Public Hearing

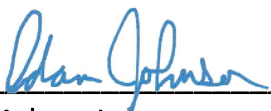
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Interconnecting Gulfport

Airport Road Extension & Interstate 10 Overpass

City of Gulfport
Mississippi

Recommended by:



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Environmental Division Director
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6-13-2022

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LIST OF ACRONYMS

| | |
|----------|--|
| AADT | Annual Average Daily Traffic |
| AASHTO | American Association of State Highway Transportation Officials |
| APE | Area of potential effect |
| BMP | Best Management Practices |
| BUILD | Better Utilizing Investments to Leverage Development |
| CAA | Clean Air Act |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CERCLIS | Comprehensive Environmental Response, Compensation, and Liability Information System |
| CESQG | Conditionally Exempt Small Quantity Generator |
| CFR | Code of Federal Regulations |
| COVID-19 | Coronavirus disease 2019 |
| CWA | Clean Water Act |
| dB | Decibel |
| dBA | decibels as “A” weighted level |
| DHV | Design Hour Volume |
| DMR | Department of Marine Resources |
| DO | Dissolved Oxygen |
| EA | Environmental Assessment |
| E.O. | Executive Order |
| EPA | Environmental Protection Agency |
| ESA | Endangered Species Act |
| FEMA | Federal Emergency Management Agency |
| FFIEC | Federal Financial Institutions Examination Council |
| FHWA | Federal Highway Transportation |
| FIRM | Flood Insurance Rate Map |
| FIS | Flood Insurance Study |
| FPPA | Farmland Protection Policy Act |
| GIS | Geographic Information System |
| GPT | Gulfport-Biloxi International Airport |

| | |
|-------|--|
| GRPC | Gulf Regional Planning Commission |
| JD | Jurisdictional Determination |
| KCS | Kansas City Southern |
| KCSR | Kansas City Southern Railway Company |
| LQG | Large Quantity Generator |
| LPA | Local Public Agency |
| LUST | Leaking Underground Storage Tank |
| MARIS | Mississippi Automated Resource Information System |
| MDAH | Mississippi Department of Archives and History |
| MDEQ | Mississippi Department of Environmental Quality |
| MDMR | Mississippi Department of Marine Resources |
| MDOT | Mississippi Department of Transportation |
| MDWFP | Mississippi Department of Wildlife, Fisheries, and Parks |
| MMNS | Mississippi Museum of Natural Science |
| MNHP | Mississippi Natural Heritage Program |
| MOVES | Motor Vehicle Emission Simulator |
| MPC | Mississippi Power Company |
| MPO | Metropolitan Planning Organization |
| MS | Mississippi |
| MS4 | Municipal Separate Storm Sewer Systems |
| MUTCD | Manual on Uniform Traffic Control Devices |
| NAAQS | National Ambient Air Quality Standards |
| NAC | Noise Abatement Criteria |
| NEPA | National Environmental Policy Act |
| NFRAP | No further remedial action planned |
| NMFS | National Marine Fisheries Service |
| NPL | National Priority List |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| N-S | Neel-Schaffer, Inc. |
| OAQPS | Office of Air Quality Planning and Standards |
| OCR | Office of Civil Rights |
| OHWM | Ordinary High Water Mark |
| PCPI | Per Capita Personal Income |

| | |
|-------|---|
| PEL | Planning and Environmental Linkage |
| PI | Personal Income |
| RCRA | Resource Conservation and Recovery Act |
| RCRIS | Resource Conservation and Recovery Information System |
| SHAs | State Highway Agencies |
| SHWS | State Hazardous Waste Site |
| SQG | Small Quantity Generator |
| SR | State Route |
| SWMM | Storm Water Management Model |
| SWPPP | Stormwater Pollution Prevention Plan |
| TDS | Total Dissolved Solids |
| TMDLs | Total Maximum Daily Loads |
| TNM | Traffic Noise Model |
| USACE | U.S. Army Corps of Engineers |
| USDA | U.S. Department of Agriculture |
| USEPA | U.S. Environmental Protection Agency |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | United States Geological Survey |
| UST | Underground Storage Tank |

1 INTRODUCTION

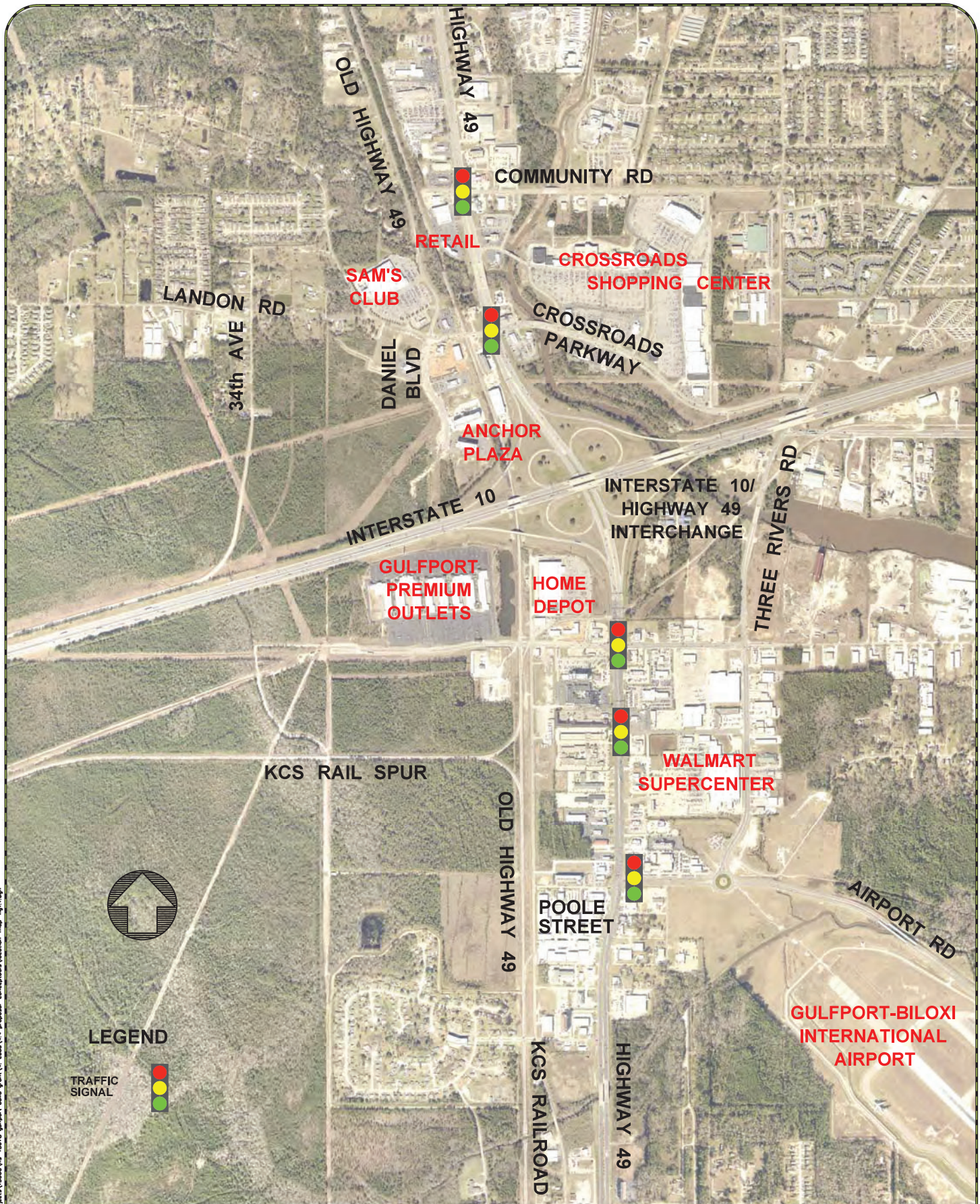
Prior to and after the construction of the interstate system in Mississippi, United States Highway 49 (US 49) has been the major north-south route for travel between Jackson, Mississippi, and Gulfport. The rural cloverleaf type interchange was constructed at the Interstate 10 (I-10) crossing of US 49 in the 1970s.

Since 1994, the City of Gulfport has more than doubled its size, due primarily to the annexation of 33 square miles north of the original city limits. Currently, Gulfport is the second largest urbanized area in the State of Mississippi with a population of nearly 210,000 residents.

US 49 is the main thoroughfare connecting Gulfport's beaches and downtown area to the commercial and retail development nearby and north of the I-10 interchange. With an Annual Average Daily Traffic (AADT) of over 50,000 vehicles on US 49 and 60,000 vehicles on I-10, this is one of the busiest interchanges in the State of Mississippi. As the city continues to expand north of I-10, commercial and retail development continues to grow around the I-10 interchange with US 49. Additionally, the Gulfport-Biloxi International Airport (GPT) - located southeast of the interchange - is expanding each year in private and commercial flights, becoming a hub for travel in the region. There are multiple military bases located in South Mississippi, which also use GPT.

Figure 1-1 is a project location map depicting the I-10/US 49 interchange, the US 49 local road intersections with traffic signals nearby the I-10 interchange, and major commercial developments or planned developments. Additional information supplementing **Figure 1-1** is provided below and in Section 3.

Access is not allowed along US 49 within the limits of the interchange. The first allowable US 49 access points south and north of the interchange have become local road intersections. To the south of the interchange Creosote Road is the first allowable US 49 access and to the north of the interchange, Landon Road-Crossroads Parkway is the first allowable US 49 access. Traffic signals have been installed south of the interchange on US 49 at the intersections with Creosote Road, Middle Driveway and Airport Road-Poole Street. North of the interchange on US 49,



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traffic signals have been installed at Landon Road-Crossroads Parkway and Community Road intersections.

The Crossroad Shopping Center is located north of the I-10 interchange with access to US 49 at Crossroads Parkway. The center has approximately 600,000-square foot of leasable retail space and is currently at 97% occupancy.

North of the I-10 interchange with access to Landon Road, a newly established 85-acre “Anchor Plaza” is experiencing rapid development as well. Construction began in 2016. Since that time, the plaza has seen the development of four hotels, four major restaurant chains, a home-furnishings store, and associated retail shopping centers. Additionally, a Sam’s Club has opened at the corner of Landon Road and Old Highway 49.

South of the interchange, Creosote Road continues west from US 49 to Old US 49 and becomes Factory Shop Boulevard as it continues westerly. The Gulfport Premium Outlets are located on Factory Shop Boulevard. This is a 40-acre complex with over 300,000 square feet of leasable space for major retailers. A Home Depot and a large recreational supply company lies to the east off Creosote Road. Furthermore, an approximate 100-acre sports complex is planned for development.

East of US 49 south of the interchange, Creosote Road, Middle Driveway and Airport Road are fully developed thoroughfares connecting to the Gulfport-Biloxi International Airport, several car dealerships, hotels, restaurants, a Wal-Mart, and other retail and commercial space.

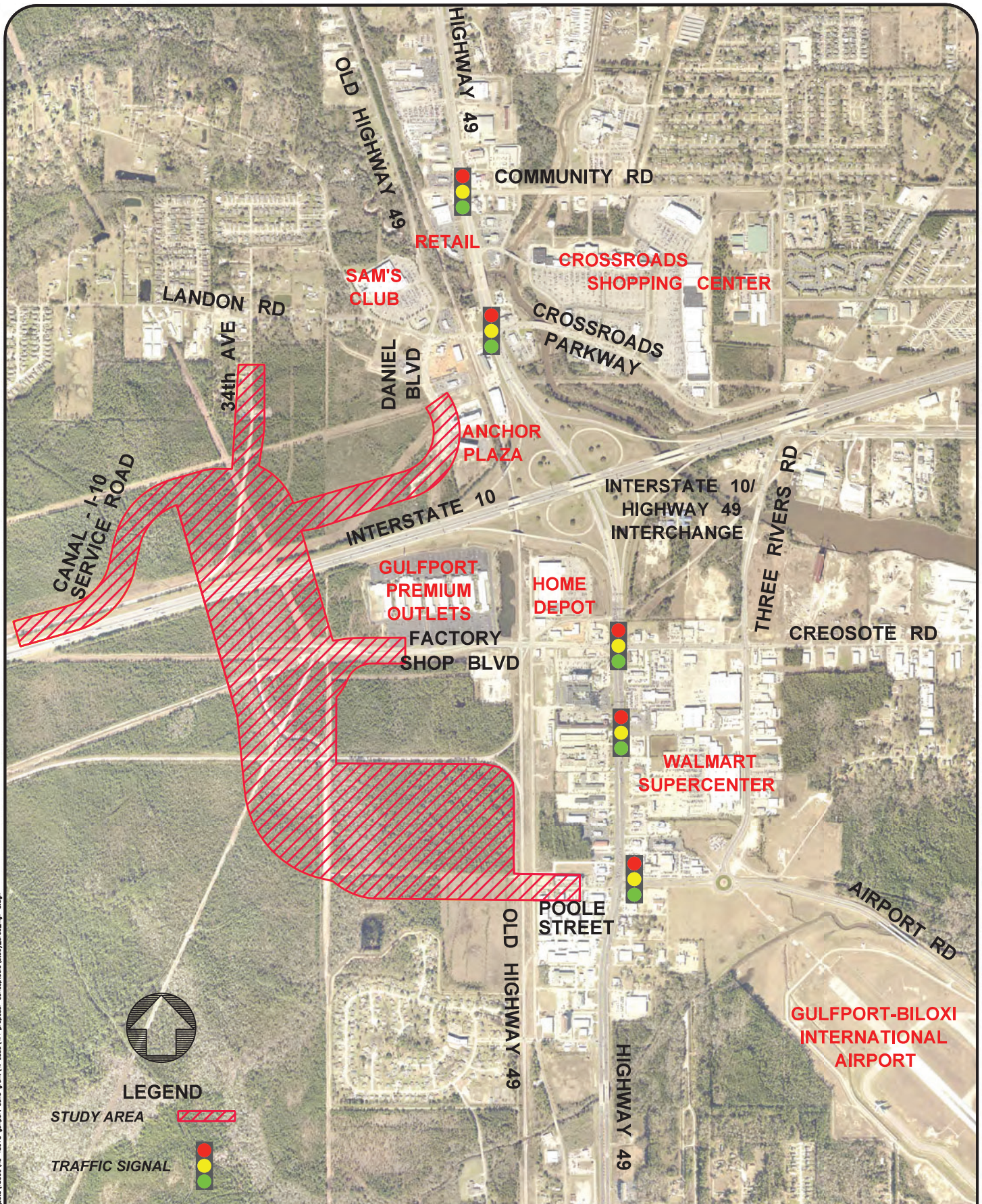
To the east of US 49, Three Rivers Road begins at a roundabout with Airport Road and continues northwest through intersections with Middle Driveway and Creosote Road crossing underneath I-10, where grade separation bridges are provided, and through an intersection with Crossroads Parkway. Therefore, Three Rivers Road provides an alternate to US 49 for traveling from Airport Road, Middle Driveway and Creosote Road to Crossroad Parkway. An alternate route does not exist west of US 49 for traffic between Poole Street-Airport Road, Factory Shop Boulevard and Landon Road.

The Mississippi Department of Transportation (MDOT) conducted a Planning and Environmental Linkage (PEL) study at the request of the City of Gulfport (see letter from MDOT dated 8-25-2015 in **Appendix A**) in October 2017 to: (1) identify the purpose and need for improvements within the I-10/US 49 Interchange area; (2) determine possible viable concepts for long-term solutions; and (3) recommend concepts for possible implementation. The concepts considered for improving traffic flow and safety on US 49 in the PEL study included providing an alternate route for travel west of US 49 connecting properties on the north and south side of the interstate. If provided, the alternate route would require a bridged crossing of the interstate and utilize the local road network for connecting to US 49 north of I-10 at the Landon Road - Crossroads Parkway intersection and for connecting US 49 south of I-10 at the Creosote Road and Poole Street - Airport Road intersections. A copy of the final report of the PEL study is contained in **Appendix A**.

After reviewing the information in the PEL Study, the city decided to prepare and submit an application for a 2019 Fiscal Year U.S. Department of Transportation BUILD grant for a transportation improvements project that were within the city's jurisdiction. The city was awarded a 2019 BUILD grant titled "Interconnecting Gulfport." As described in Attachment A of the grant, the project consists of a base phase for engineering and an option phase 1 for construction of a two-lane roadway on new location from the Old Highway 49 / Poole Street intersection to Creosote Road, then four lanes over I-10 to Daniel Boulevard Extension. A copy of the grant is contained in **Appendix A**.

This Environmental Assessment is prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), 42 U.S. Code §4332, as amended, and other regulations set forth by the Federal Highway Administration (FHWA) and the MDOT. The intent of this environmental assessment is to evaluate potential impacts on the human and natural environments associated with the construction of the proposed project at Gulfport in Harrison County. The project location is west of US 49 between the Poole Street intersection with Old US 49 south of I-10 and intersections or connections to the I-10 Canal Service Road, 34th Avenue and Daniel Boulevard north of I-10.

The initial study area for this document is shown in **Figure 1-2**. The study area will be narrowed and shown later in the document after the alternative or alternatives selected for detailed study are chosen. The proposed project is contained in the Gulf Regional Planning Commission Metropolitan Planning Organization *2045 Metropolitan Transportation Plan – Technical Report #5*. A copy of the appropriate documentation is contained in **Appendix A**.



2 PURPOSE AND NEED

The purpose and need for this project is to improve the flow of vehicular traffic around the Interstate 10 and US 49 Interchange. The volume of traffic has grown over the years, and the congestion that now exists is projected to become even more problematic. As noted, there are several ongoing and planned developments that will be generating even more traffic which will only exacerbate the situation.

Along with congestion, a purpose of the project is to address the local and through traffic that is plagued with delayed movement due to the high volume of traffic on US 49 coupled with the restricted access within the interchange. On the west side of US 49 a need exists for a connection between the areas north and south of Interstate 10 to serve the area's commercial growth and offer the public an alternative to the congested I-10/US 49 Interchange. The need is identified and further supported in the documentation and analyses provided in the prior *Interstate 10/US 49 Planning and Environmental Linkage (PEL) Study Final Report* and the Gulf Regional Planning Commission Metropolitan Planning Organization *2045 Metropolitan Transportation Plan – Technical Report #5* are included in **Appendix A**. In addition, traffic modeling is included in **Appendix B**.

In addition to the need for improved circulation, the project also considers safety concerns due to the proximity of the railroad spur that constricts movements of local traffic and emergency vehicles between the Gulfport Premium Outlets and US 49.

3 ALTERNATIVES

The alternative identification process involves an examination of transportation issues and consideration of constraints while satisfying the project purpose and need. After conducting a screening process of the initial alternatives under consideration, one or more build alternatives are advanced alongside a no-build alternative for further study and analyzed in-depth in terms of their ability to meet the purpose and need of the proposed project while still taking practicable measures to avoid, minimize, and mitigate potential impacts to the human and natural environments. The alternatives were identified in the PEL study, *the Community's Plan for the Turkey Creek and North Gulfport Neighborhoods* study and during the public involvement meetings. The *Community's Plan for the Turkey Creek and North Gulfport Neighborhoods* study and public involvement alternatives were not carried forward.

To meet purpose and need alternatives were developed to provide road connectivity to properties adjacent to the I-10 interchange. As discussed in the Introduction, Airport Road south of I-10 from the US 49 intersection east to Three Rivers Road, north underneath the I-10 bridges to Crossroads Parkway, west to the US 49 opposite Landon Road already provides an alternate access to US 49 for properties located east of US 49 on the opposite sides of I-10 (See **Figure 1-1**). There is no alternate access to US 49 on the west side of US 49.

In 2011, *The Community's Plan for the Turkey Creek and North Gulfport Neighborhoods* study identified a route on new alignment from Washington Avenue at Airport Road to I-10 with a new interchange and tying into Stewart Road which connects to Dedeaux Road. This route would cross over both Bernard Bayou and I-10. It was shown in the Gulf Regional Planning Commission 2035 Long Range Plan. In 2011 *The Community's Plan for the Turkey Creek and North Gulfport Neighborhoods* showed this proposed roadway corridor labeled as a Gulf Regional Planning Commission (GRPC) Road. The 2035 Long Range Plan was current at the time the plan for the Turkey Creek and North Gulfport Neighborhoods was published. This project was not carried forward in the 2040 Long Range Plan. Extensive public involvement and community input went into the development of the GRPC Long Range Plans (See **Appendix A**). This corridor was screened as stated above and does not meet the purpose and need for the project as Three Rivers

Road already provides the needed north south option east of US 49. It was not carried forward as an alternative for further study.

Another corridor that was suggested during the process was to reconnect Old Highway 49 which terminates on both sides of Interstate 10. When I-10 was constructed, a grade separation was not provided for this route. It runs parallel to and west of US 49. South of I-10 Old Highway 49 is on the east side of the Kansas City Southern Railroad. North of I-10 it is on the west side of the Kansas City Southern Railroad. The railroad crossing of I-10 is grade separated with the railroad going under I-10. There are four railroad underpasses, one for each ramp and one for each main line lane. The underpasses do not have adequate span lengths to accommodate reconnecting Old Highway 49 and it would not be feasible to lengthen them. The proximity of the KCS Railroad would make construction of an I-10 overpass impractical at this location. The land adjacent to I-10 on the north side is fully developed and any new road at this location would require significant relocation impacts. If it were feasible from a geometric standpoint, it would have substantial relocation impacts to developments along Daniel Boulevard north of I-10. This option was screened and did not meet the purpose and need. It was not carried forward as an alternative for further study.

The general alignment shown in the PEL study is the alignment that was carried forward in the development of alternatives. The PEL study alternative was modified through the environmental process to develop the Preferred Alternative. This alternative was identified as a need in the 2045 GRPC Long Range Plan. There is a need to connect Poole Street from US 49 to Old US 49 and then continue west and north over I-10. In addition, connections or intersections with 34th Avenue and Daniel Boulevard will provide additional connectivity to Landon Road Improving Landon Road east to US 49 opposite Crossroads Parkway would complete a local road network servicing all properties around the interchange (See **Figure 1-1**).

This project was identified in the PEL study and advanced through multiple screening processes. The I-10/US 49 PEL study area was approximately 6.5 miles along I-10 from the Canal Road Interchange to the Lorraine Road Interchange, and approximately 2.2 miles along US 49 from just south of Airport Road to Dedeaux Road in Gulfport, Mississippi (**Appendix A**). Resources were examined as part of the I-10/US 49 PEL Study to establish a baseline context and generally

describe the existing conditions within the study area. The resource information was also utilized during the screening process to broadly assess the potential impacts associated with each of the concepts. The existing conditions for the following social, economic and environmental resources located within the study area were analyzed:

- Businesses
- Residences / Non-Business Entities
- Minority and Low-Income Populations
- Archeological Sites
- Historic Resources
- Park Land
- Wetlands
- Floodplains / Floodways
- Biological Resources
- Hazardous Materials
- Traffic Noise Receivers

The PEL Study included 30 potential Build Concepts and the No-Build Concept. The effectiveness of each concept, in terms of meeting the needs of the study area, was measured against a wide range of criteria defined by the purpose and need and the study goals. The concepts were evaluated using a three-tiered screening process. These tiers were fatal flaw screening, refinement process screening and detailed evaluation screening of concepts. The successful concepts at each level were advanced to the next screening level for further evaluation, while the unsuccessful concepts were eliminated from further consideration. Decisions made during the screening process were thoroughly documented in the PEL study. The concepts from the PEL study that were shown to improve the traffic and safety situation on US 49 and considered worthy of advancement to the NEPA process were:

- **US 49 Intersection Improvements** – This concept improves each of the major intersections along US 49.
- **Airport Road Extension** – This concept is a five-lane roadway on new location heading westward from the US 49/Airport Road intersection for approximately one-half mile and then turning northward through a roundabout at Factory Shop Boulevard before crossing over I-10 and terminating near the Anchor Development.
- **C/D System without State Route 601/Canal Road** - This concept provides one C/D lane in each direction beginning just east of the existing Canal Road Interchange and terminating approximately 1.25 miles east of the US 49 Interchange.
- **C/D System with State Route 601/Canal Road** – This concept is similar to the previous C/D System, except that it would include ramps connecting to the State Route 601/Canal Road Interchange (interim design), should it be constructed.
- **Airport Road Extension Interchange** – This concept includes the addition of ramps to connect the Airport Road Extension to I-10 and would only be possible if the C/D system was in place.
- **Three Rivers Road Interchange** – Similar to the Airport Road Extension Interchange, this concept is only possible if the C/D system was in place. This concept would add diamond–style ramps from I-10 to existing Three Rivers Road in the eastbound direction, and folded diamond ramps in the westbound direction to create a full interchange providing all movements.

- **The I-10 Ramps at Lorraine Road** concept includes improvements to the Lorraine Road interchange, including minor widening of I-10 extending eastward past Fritz Creek.

There were seven projects recommended in the PEL study, however the Airport Road extension is the only corridor that falls within the City's jurisdiction. It was included in the final recommendations. The other 6 projects are improvements to MDOT facilities. Although five of the seven projects recommended in the PEL study are interrelated and associated with the US 49/I-10 interchange, the Airport Road extension project is the only one that has independent utility.

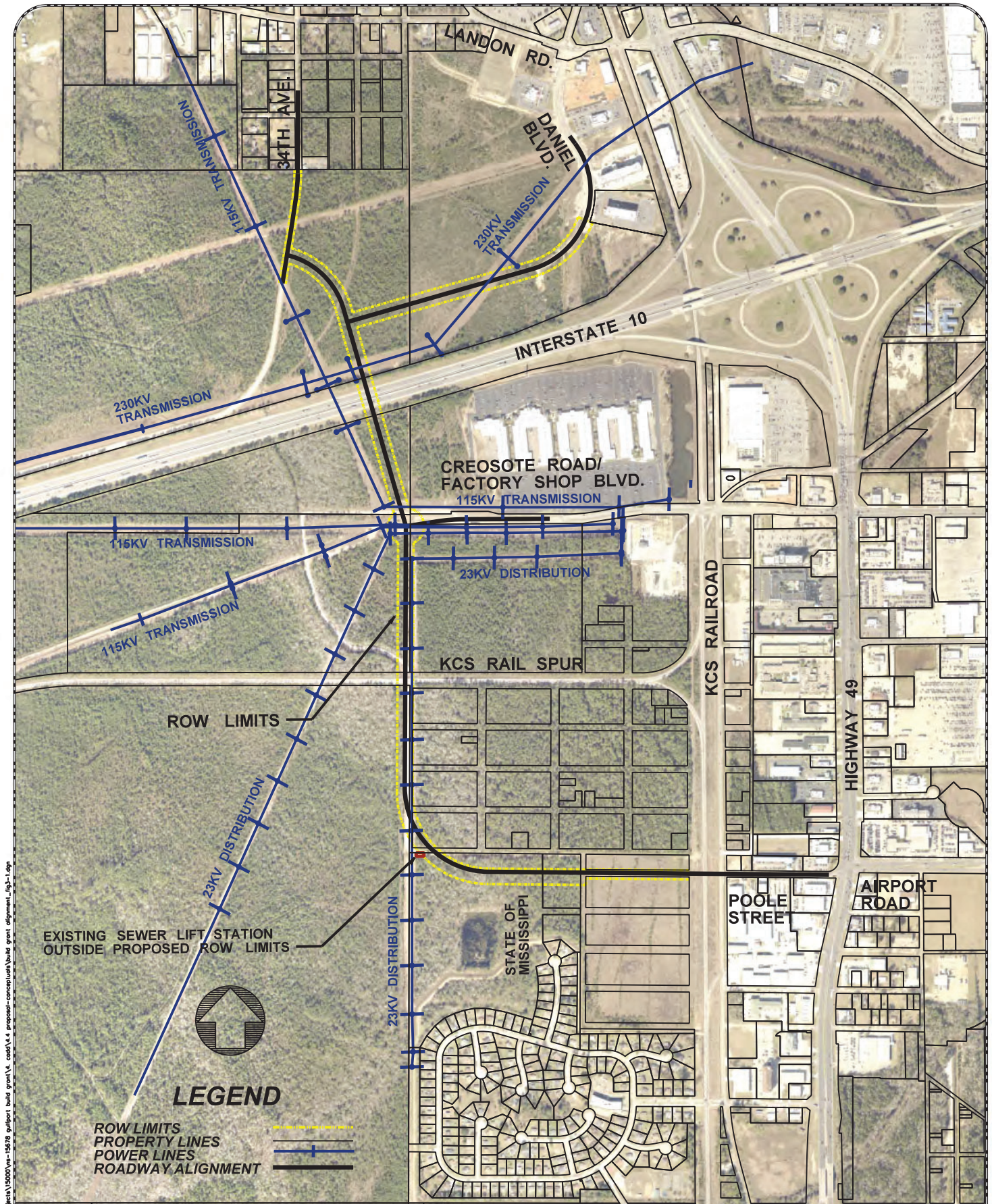
Due to the short distance between the Poole Street intersections with Old US 49 and US 49, a traffic analysis contained in **Appendix B** was conducted at the US 49 intersection with Poole Street - Airport Road to show the impacts of the new road to the approach at the intersection. Overall, the analysis projects around 2,500 vehicles per day would be using the west leg of the intersection. **Appendix B** shows the existing turning movements at this intersection and also shows both the build and no build 2045 PM Peak Hour volumes at the intersections. The results of the analysis show the level of service for this eastbound approach is currently an E and will remain at E for both the build and no-build 2045 PM Peak Hour conditions. The no-build condition means that the new project is not in place and the build condition means that the project is in place. The build condition has no additional lanes on Poole Street. Further comparison of the existing conditions versus the 2045 no-build and build conditions does show an overall worsening of the LOS from a C to a F; however, the main reason for that poor level of service is the very heavy thru volume on US 49 which will not be improved enough whether the project is built or not as it is currently planned.

Alternative A, the No Build Alternative, and Alternative B, the Grant Application Alternative, were initially considered for inclusion in this document. A third alternative, Alternative C, was developed to meet the purpose and need and minimize impacts.

3.1 ALTERNATIVE B - Eliminated

During the initial screening process conducted for Alternative B, the engineering analysis determined that the alternative was not a viable alternative and that its alignment needed adjusting to create a viable build alternative. The process used for eliminating Alternative B from detailed study is described below.

Alternative B (**Figure 3-1**) was determined to address a transportation need as identified through traffic and safety analysis in the MDOT Planning and Environmental Linkages Study dated October 2017. Beginning at the US 49 intersection with Poole Street – Airport Road south of I-10, Alternative B consisted of extending Airport Road westward as a two-lane facility without pedestrian accommodations within the existing 40 feet right-of-way of Poole Street, crossing the Kansas City Southern (KCS) Railroad, crossing land owned by the Secretary of State, curving to the north and following a power line to a point at the western terminus of Factory Shop Boulevard, an extension of Creosote Road, where a roundabout would be provided. At the roundabout, the alternative would change to a four-lane facility with accommodations for pedestrians and bicyclists and turn northwest to cross over I-10 and form an east side road intersection with an 1,800 feet extension of Daniel Boulevard, which has a four-lane divided type section. Slightly north of the intersection with the Daniel Boulevard extension, the alternative turned more northwest to terminate at an intersection in the vicinity of where the Canal I-10 Service Road becomes 34th Avenue.



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The following constraints that question the viability of Alternative B were identified during the initial screening process for this Environmental Assessment (See **Figure 3-1**).

- Discussions with Mississippi Power representatives elucidated the fact that this alternative conflicts with numerous transmission and distribution lines and poles. Mississippi Power indicated that the relocation of these multiple facilities would be very time consuming and costly.
- Discussions with the KCS Railroad revealed that the location of the Alternative B crossing of the rail spur does not allow enough queuing distance on the spur for the manual switching of the tracks to occur without blocking the proposed Alternative B crossing of the rail spur. KCS representatives stated that the spur crossing location would have to move westward to allow for adequate queuing distance.
- The existing 40-foot city right-of-way on Poole Street is not of sufficient width for Alternative B to accommodate a two-lane roadway that meets design standards.
- A review of the ownership deed of the Secretary of State land revealed that it had been placed in a perpetual conservation easement.
- A closer inspection of Alternative B also showed that an existing City of Gulfport sanitary sewer lift station is within the proposed road right of way. This lift station services many customers including the Forest Heights Subdivision. The relocation of this lift station would be cost prohibitive and disruptive to the community and could easily be avoided with a revised alignment.
- This alternative also terminated at 34th Avenue which is a substandard city street for making the primary connection to the existing local road network.

While the Grant Application Alternative addresses the project needs and objectives, the above-mentioned issues render Alternative B not a viable build alternative.

Alternative C was then developed in such a way to avoid and minimize the above impacts.

3.2 ALTERNATIVE A – No Build Alternative

The “No Build” Alternative (**Figure 3-2**) would retain the existing conditions. The No Build Alternative would avoid impacts caused by road construction to residences, businesses, and industry in the vicinity as well as wetlands, streams, forests, threatened and endangered species and other resources.

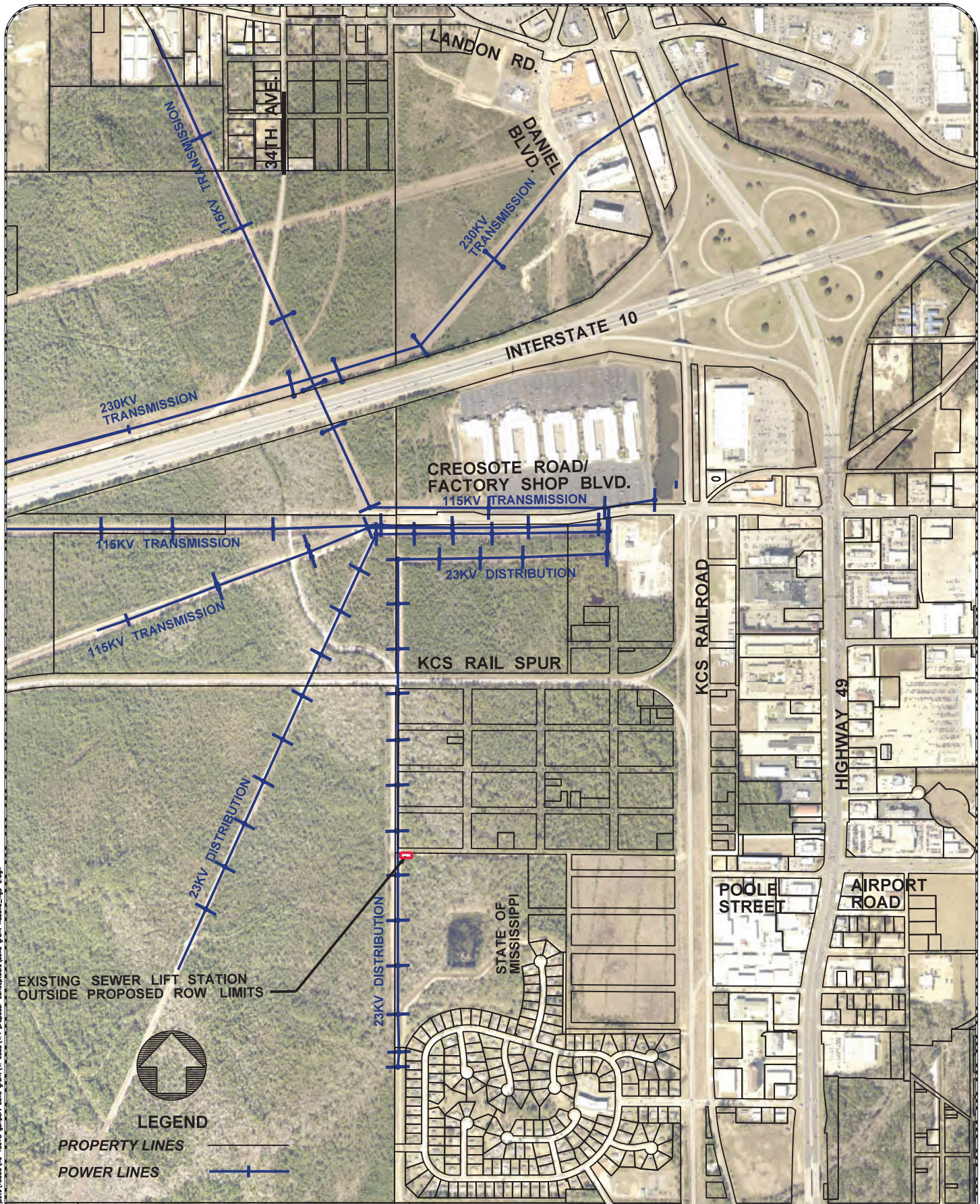
The No Build Alternative however would not provide connectivity among current businesses, the Gulfport-Biloxi International Airport, and properties otherwise separated by Interstate 10. The public safety issue of a single ingress and egress point across the Kansas City Southern (KCS) Railroad crossing on Factory Shop Boulevard for the Gulfport Premium Outlets would not be resolved. The No Build Alternative would not address relieving the traffic loads currently on US Highway 49 or aid the traffic movements between the airport and the area businesses on the north and south sides of I-10.

The No Build Alternative is not a viable option as it would not address the issues expressed in the purpose and need of the project.

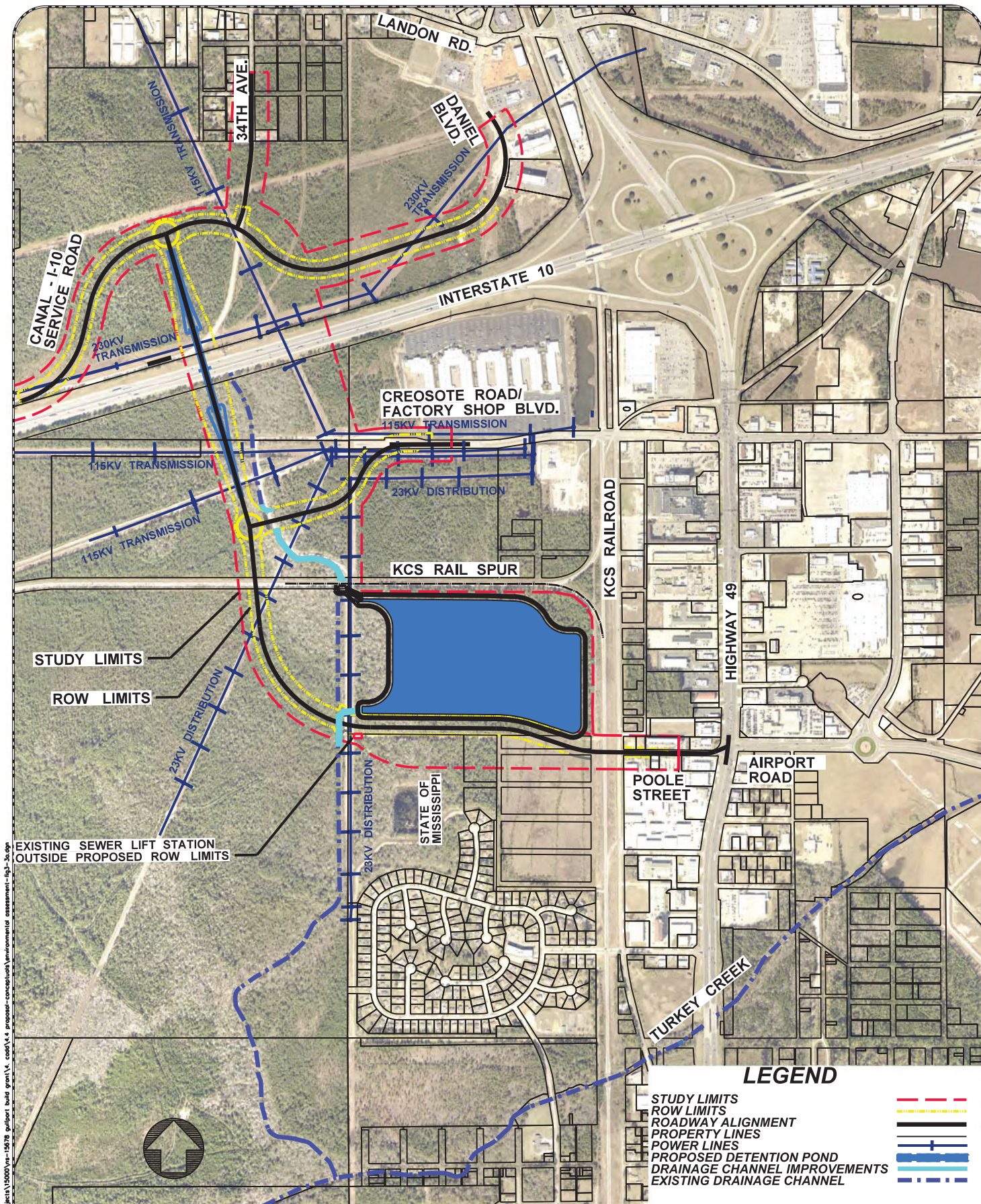
3.3 ALTERNATIVE C - Preferred

Alternative C (**Figure 3-3**) is a variation of the Build Grant alternative, previously referred to as eliminated Alternative B in this document. Alternative C provides connectivity and transportation benefits similar to Alternative B. Although the sewage lift station and the Secretary of State land (a conservation easement property) are within the study area for Alternative C, steps will be taken during design for the actual right-of-way needed to avoid these two constraints. Realigning the service road on the north side of I-10 from the adjacent Canal Road Interchange and terminating Airport Road extension at a roundabout on the north side of I-10 allows traffic to be distributed to the existing local network on Daniel Boulevard rather than the substandard 34th Avenue.

Another advantage of Alternative C is the middle portion of its alignment captures drainage from a channel that flows into Turkey Creek. This will allow the City of Gulfport to store this stormwater in a retention pond to be stored on undeveloped forested land adjacent to the KCS railroad that is deeded to the Land Trust of the Mississippi Coastal Plain. Via legal instrument with the Land

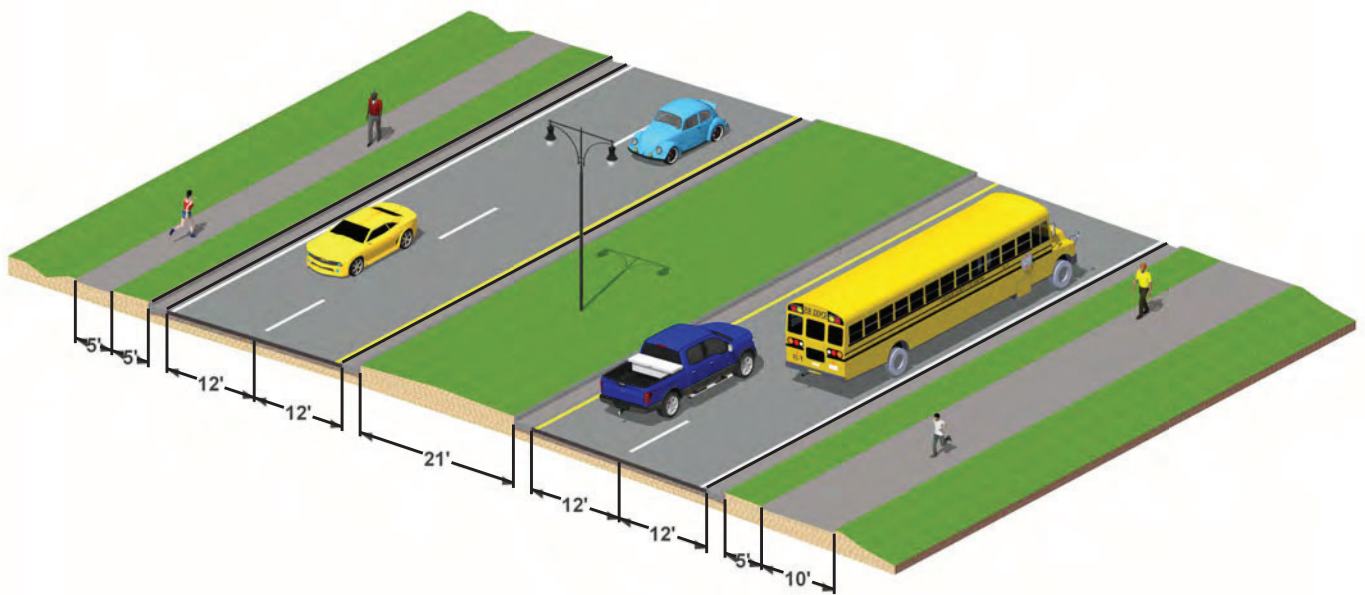


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Trust of the Mississippi Coastal Plain, the City of Gulfport will regulate the amount of stormwater discharged from the pond at a reduced rate that addresses downstream drainage concerns stated by the Forest Heights Subdivision. The area around the pond will be constructed with native plantings to aid in erosion and stormwater quality. Other facilities such as a walking track around the pond, interpretative learning signage, etc. were presented to the public for review as amenities for the neighboring communities as well as preserving open areas and green spaces.

Alternative C begins on Poole Street at the eastern limit of a reconstructed intersection with Old US 49. A left turn lane will be provided on all four approaches on the reconstructed intersection. The beginning point of Alternative C on Poole Street is the approximate western limit of the two-lane Poole Street-Airport Road intersection with US 49. From its beginning point, Alternative C continues west as a two-lane facility along the Poole Street corridor a short distance before starting a slight reverse curve to the north near the centerline of Old US 49. **Figure 3-4** illustrates that accommodations for pedestrians and bicyclists begin on the western side of the reconstructed Poole Street/Old US 49 intersection. As Alternative C continues west from the intersection with Old US 49, the alternative will be a two-lane divided lighted facility with the support ports for the lighting provided in the center of a raised median. During the process of making the reverse curve to the north, Alternative C crosses the KCS railroad before finishing its curve. Establishing the reverse curve, enables the southern right-of-way needed for Alternative C to avoid the northern limits of the land owned by the Secretary of State, and the city's sanitary sewer lift station. Slightly before crossing the power line, the alignment for Alternative C then curves to the north and upon completing the curve crosses the KCS spur line at a location where stopped trains will not block Alternative C's at-grade crossing of the railroad. North of the spur line crossing, a roundabout is proposed where Alternative C intersects a southwest extension of the two-lane divided Factory Shop Boulevard. Between the spur line crossing and the roundabout, Alternative C curves to the northwest and at the roundabout Alternative C changes to a four-lane divided section as depicted in **Figure 3-5** with pedestrian and bicyclist accommodations, as well as lighting in the center of the raised median. The accommodations for pedestrians and bicyclists on the extension of Factory Shop Boulevard is shown in **Figure 3-6**.



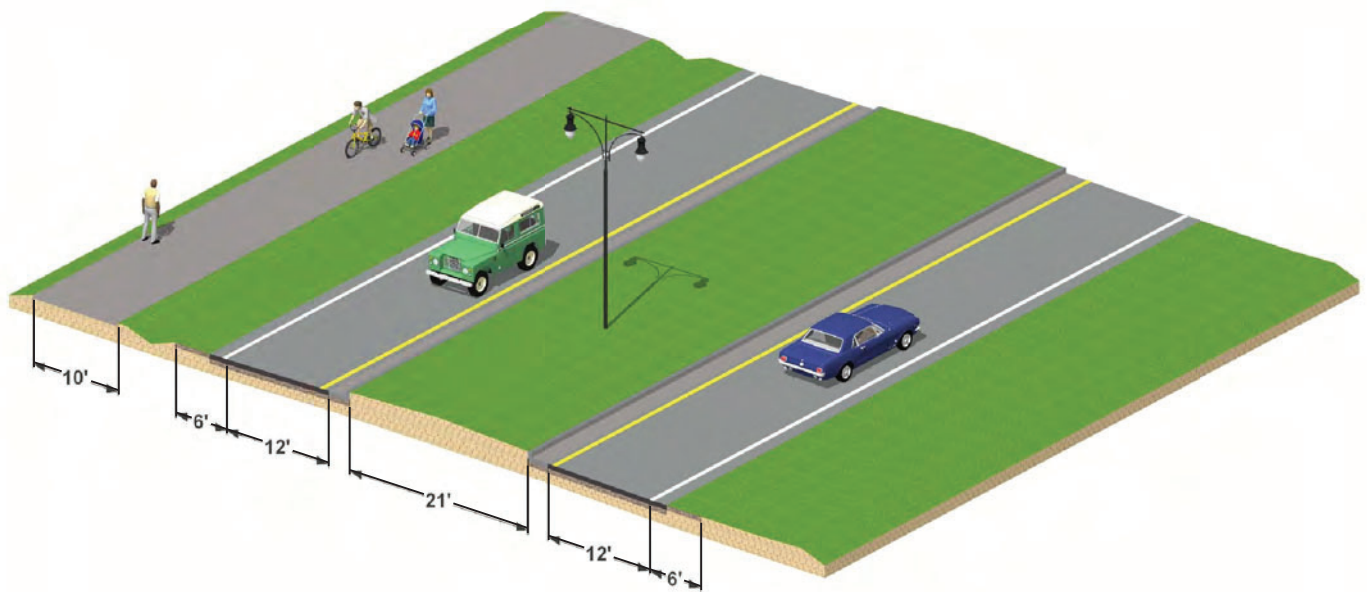
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NEEL-SCHAFER
Solutions you can build upon

Airport Road Extension
(From Creosote Road/ Factory Shop Blvd to I-10 Bridge)

FIGURE: 3-5



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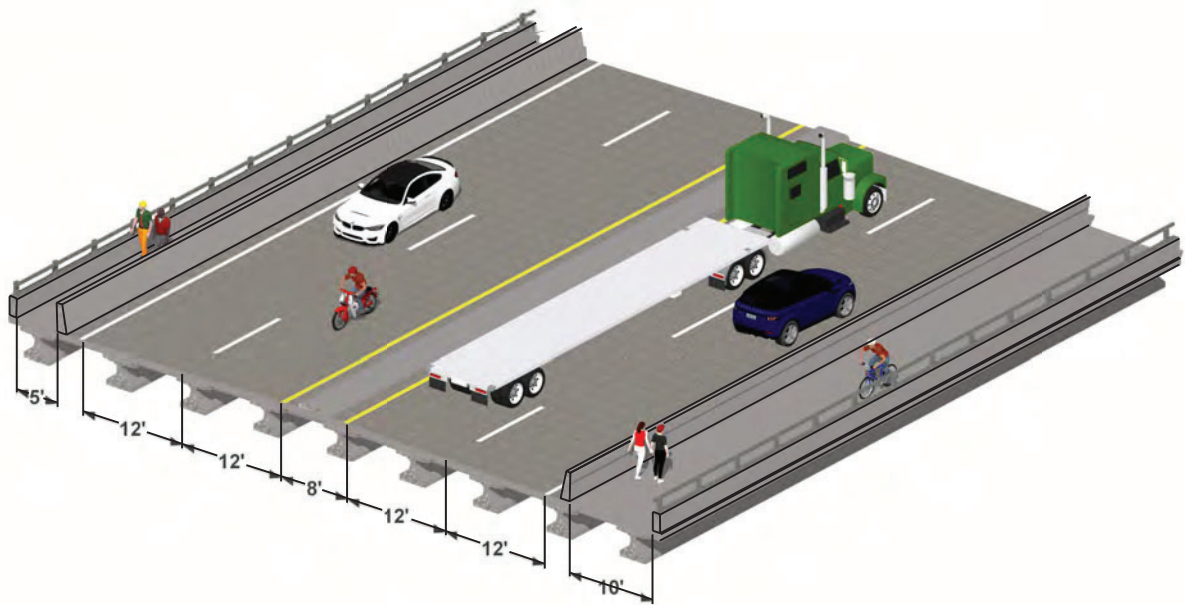
As the lighted four-lane divided section of Alternative C with accommodations for pedestrians and bicyclists continues northwest from the roundabout, the alternative crosses two sets of power lines, makes a bridged crossing over I-10, crosses another set of power lines and terminates at a roundabout intersection (see **Figure 3-7** and **Figure 3-8**). The other two roads intersecting opposite each other at the roundabout are a relocated lighted section of the Canal I-10 Service Road having accommodations for pedestrians and bicyclists (see **Figure 3-9**) and a lighted extension of the four-lane divided Daniel Boulevard having accommodations for pedestrians and bicyclists (see **Figure 3-10**). 34th Avenue would form a short tie-in north side road intersection with the extension of Daniel Boulevard slightly east of the roundabout. 34th Avenue does not have accommodations for pedestrians and bicyclists (see **Figure 3-11**). Therefore, no accommodations for pedestrians and bicyclists are proposed for the short tie-in connection on 34th Avenue at its intersection with the extension of Daniel Boulevard of Section 4.5.

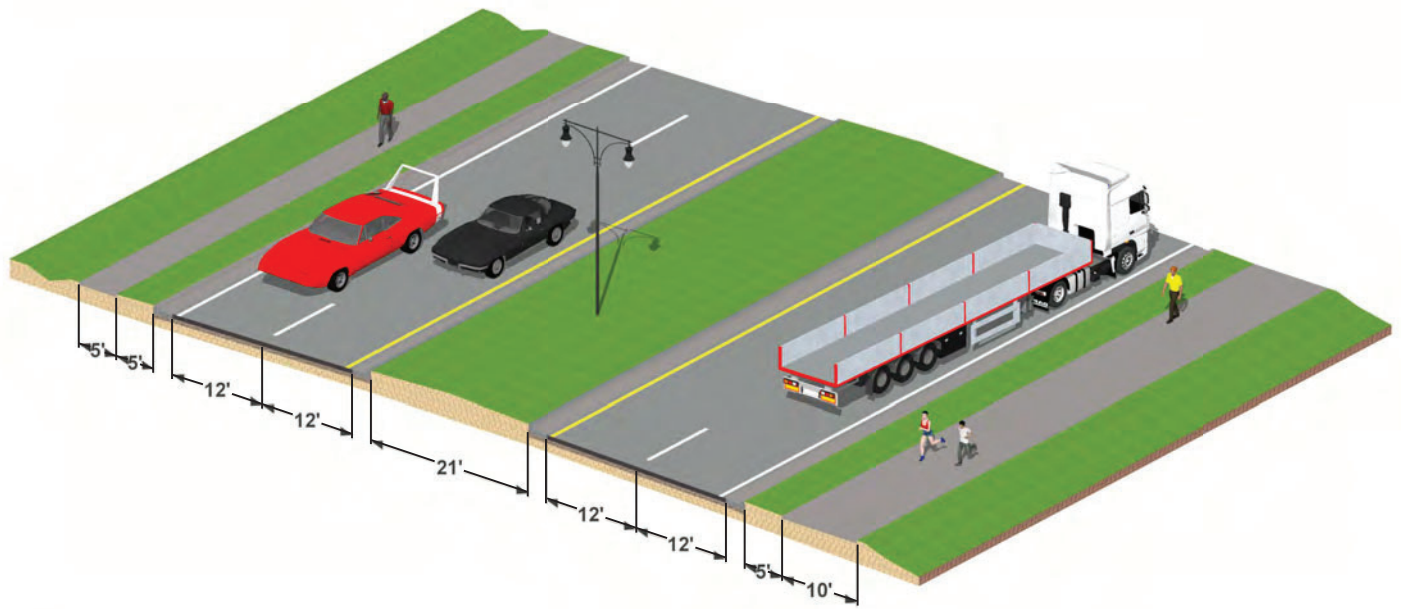
Alternative C addresses the project needs and objectives as well as the constraints which resulted in Alternative B being eliminated. Alternative C is the most viable build alternative. Therefore, it is the Preferred Alternative for this study.

3.4 Design Criteria

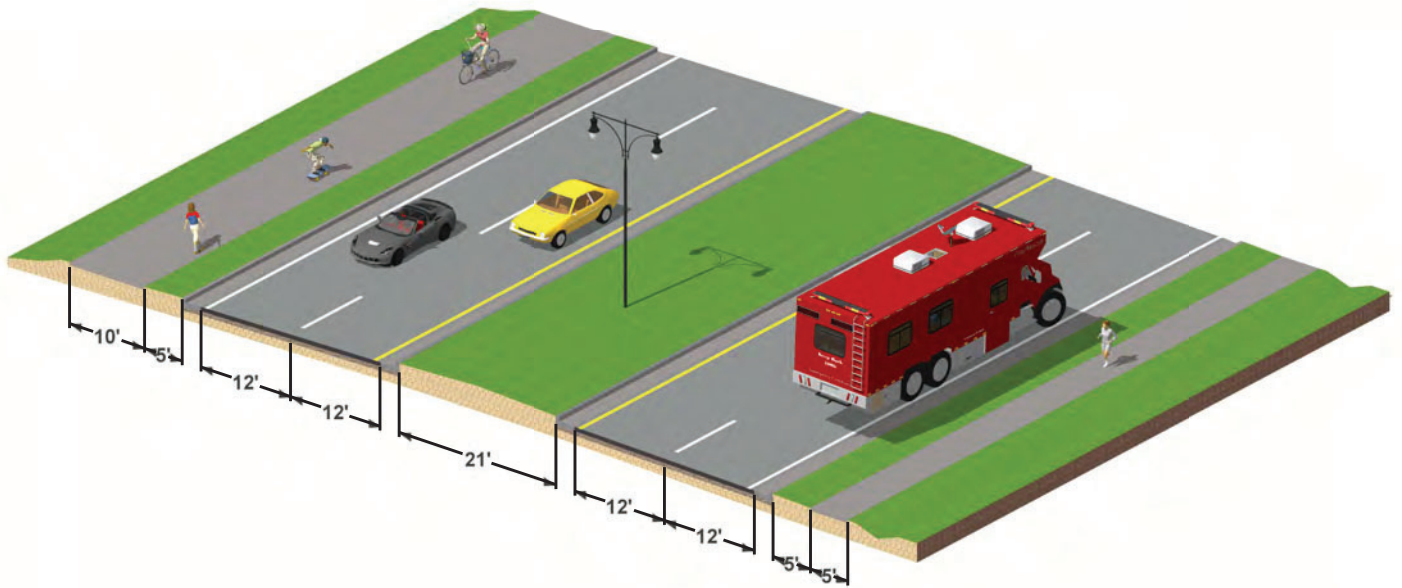
Preferred Alternative C was developed using the policies established by the American Association of State Highway Transportation Officials (AASHTO), the criteria presented in the MDOT 2020 Roadway Design Manual, the functional classification of the roadway segments and the MDOT established design procedures.

Subsection 3.4.1 addresses the functional classification of the roadway segments; Subsection 3.4.2 the access control; Subsection 3.4.3 the design speed; and Subsection 3.4.4 the remaining design criteria. Copies of drawings depicting the typical roadway and bridge sections are provided in **Appendix B**.

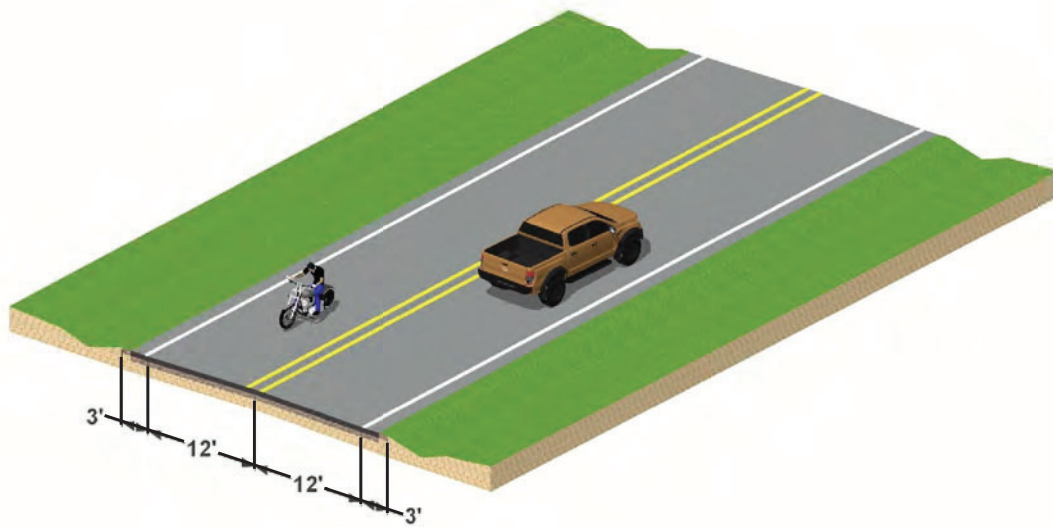




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3.4.1 Functional Classification

Functional classification of the local road network is established and maintained by GRPC. The Preferred Alternative C roadway segments are classified as collectors. The functional classification of the local roads where connections are provided are shown in **Table 3-1**.

With the exception of US 49 and tie-ins at intersections, in consultation with GRPC it was determined that all roadways in the study area would be classified as collectors to match the designation of the connecting roadways. In addition, Creosote Road west of Old Highway 49 would be re-classified from Arterial to Collector.

| TABLE 3-1 FUNCTIONAL CLASSIFICATION OF EXISTING ROADWAYS | |
|---|-----------------------------|
| ROADWAY | FUNCTIONAL CLASSIFICATION |
| Old Highway 49 | Collector |
| Poole Street | Non-Classified Local Street |
| Creosote Road | Arterial |
| Factory Shop Boulevard | Arterial |
| Daniel Boulevard | Non-Classified Local Street |
| 34th Avenue | Non-Classified Local Street |
| I-10 Canal Frontage Road | Non-Classified Local Street |

Source: Gulf Regional Planning Commission

3.4.2 Access Control

Access control is defined as the condition where the public authority fully or partially controls the right of abutting owners to have access to and from the public street, road or highway. Access points to Preferred Alternative C roadway segments will be constructed where they can best suit the traffic and land-use characteristics of the facility. Future access points will be in accordance with city regulations and will require special permits. Access points will not be constructed or permitted within close proximity of I-10, the roundabouts or intersections. Distances from these features will be determined during the design in accordance with accepted access management guidelines.

3.4.3 Design Speeds

The City of Gulfport typically uses 45 mph for the Design Speed of new roadways and posts a limit of 35 mph for enforcement.

North, south, east and west of the existing US 49 intersection with Airport Road, the posted speed limits are: 50 mph on the MDOT maintained section of US 49 north and south of the intersection; 40 mph of the city-maintained section of Airport Road east of the intersection; and 20 mph on the short city-maintained section of Poole Street west of the intersection between US 49 and Old US 49.

A Speed Limit of 35 mph is posted on the short roughly 2,000 feet four-lane divided section of Factory Shop Boulevard west of US 49.

The length of the four-lane divided section of Preferred Alternative C is approximately 2,700 feet, or a half-mile, between the roundabout south of I-10 at Factory Shop Boulevard and the roundabout north of I-10 at Daniel Boulevard / Canal I-10 Service Road. This is a short length of four-lane; a bridge over I-10 is included in this length; and traffic will be required to slow down for the roundabouts on opposite sides of I-10. Since a 35-mph speed limit is currently posted on Factory Shop Boulevard and since this segment between the two roundabouts is a four-lane facility, a 45-mph design speed with a posting of 35 mph seems appropriate.

The length of the two-lane divided section of Preferred Alternative C is approximately 5,600 feet, or a mile, between the roundabout at the Factory Shop Boulevard and the US 49 intersection. A 45-mph design speed for this new two-lane roadway with a posting of 35 mph is in accordance with the city's policy.

A 35-mph design speed with a posting of 30 mph will be used for the relocation of the four-lane divided extension of Daniel Boulevard. Both 34th Avenue and the Canal Road I-10 Service Road are being relocated to tie into the new roadway. These local streets are currently posted at speeds of 15 mph and 25 mph respectively. Therefore a 35 mph Design Speed will be used for these segments of roadway.

3.4.4 Remaining Criteria

The Preferred Alternative C roadway segments fit into one of two design criteria categories for establishment of design criteria contained in the 2020 MDOT Roadway Design Manual. All new location segments of roadway use the New Construction/Reconstruction criteria. The relocation of the Canal I-10 Service Road and the tie-in connection for 34th Avenue use the 3R Rehabilitation Criteria. **Appendix B** contains support information which was used as a reference for preparing the typical roadway and bridge sections. **Table 3-2** provides a summary of the support information. The typical roadway and bridge sections for the Preferred Alternative C are contained in **Appendix B** as are the plan and profile sheets.

| TABLE 3-2 DESIGN CRITERIA SUMMARY | | | |
|--------------------------------------|--------------|-----------------------------|--------------|
| SEGMENT | DESIGN SPEED | FUNCTIONAL CLASSIFICATION | DESIGN TABLE |
| Airport Road Extension | 45 mph | Collector | 14-2H |
| Factory Shop Boulevard Extension | 35 mph | Collector | 14-2H |
| Daniel Boulevard Extension | 35 mph | Collector | 14-2H |
| 34 th Avenue | 35 mph | Non-classified local street | 14-2I |
| Canal I-10 Service Road | 35 mph | Non-classified local street | 14-2I |

Source: Mississippi Department of Transportation 2020 Design Manual

3.5 Estimated Project Costs

Estimated preliminary engineering, railroad crossings, utility relocation, right-of-way (costs and credits), environmental mitigation and construction costs, are provided in **Table 3-3** and detailed in the Opinion of Probable Project Cost located in **Appendix B**.

The City of Gulfport (City) recognizes its responsibility for all project costs over and above the federal funds allocated to the project. In September and October of 2020, the City declared its intent to issue \$50 million in general obligation bonds for public infrastructure projects, such as this one. Also, in February 2021, the Gulfport Redevelopment Commission committed to the issuance of bonds to provide funding resources for the project as needed. These bonds will be issued to support the City's financial commitment to this project when funds are required.

The following sources of data were used for determining the estimated remaining costs for this project.

- The current Environmental and Design contract anticipated final design fees and number of parcels impacted were used for estimating the engineering and right of way acquisition costs.
- Right-of-way Land Costs were based on factors provided by the City of Gulfport for a cost per/acre or cost/square foot of land in the undeveloped and developed commercial areas.
- Right-of-way Utility Adjustment cost was based on estimates received from Mississippi Power Company.
- Information provided by local mitigation banks and the Land Trust for the Coastal Plain was used to establish mitigation cost estimates.
- Estimated retention requirements were used to develop anticipated Stormwater Retention costs.
- An Opinion of Probable Cost along with the costs from the agreement with the KCS Railroad and the City of Gulfport were used for estimating the railroad crossing costs.

Table 3-3
Estimated 2021 Costs and Credits for Preferred Alternative C

| Preliminary Engineering, Railroad Crossings, Utility Relocation, and Right-of-Way Costs | Wetland Mitigation and Stormwater Retention Costs | Construction Costs | Right of Way Donation Credits | TOTAL COST (\$) |
|--|--|---------------------------|--------------------------------------|------------------------|
| \$11,060,000 | \$5,640,000 | \$28,300,000 | \$5,000,000 | \$40,000,000 |

Source: Mississippi Power, KCS Railroad, City of Gulfport, & Harrison County Real Estate Records

4 ENVIRONMENTAL IMPACTS

4.1 Land Use and Terrain

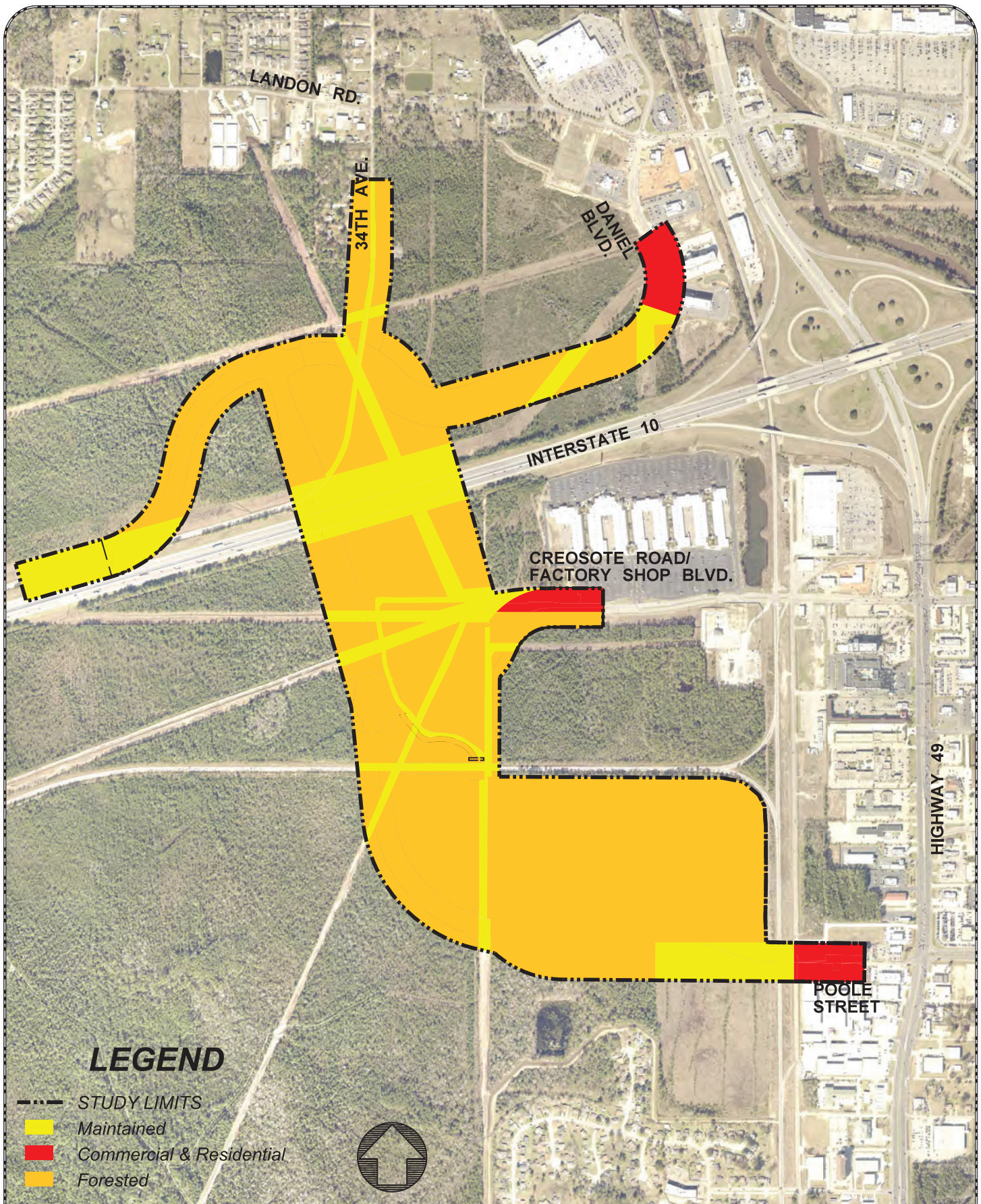
The study area is located on the north and south sides of I-10 at Gulfport in mainly undeveloped property west of US 49 in southern Harrison County. The land is located within the Coastal Plain physiographic province and the Coastal Meadows region of Mississippi. It is characterized as having generally low topographic elevations and tracts of marshy land with little agriculture in the region but having some pasture and cropland together with mixed forests and wetlands.

Land use within the Preferred Alternative C alignment was determined through a combination of aerial photography and field verification. Land use was separated into 3 primary categories: forested, maintained, and commercial and residential. The forested land use designation includes forested areas that support forested, scrub-shrub, or other vegetated areas that are not regularly maintained (mowed). The maintained land use designation includes all areas within the existing right-of-way (MDOT and local) that receive regular maintenance and other regularly maintained areas (*i.e.*, KCS railroad and utility access roads). The commercial and residential land use designation includes areas that contain commercial facilities, parking lots, other commercially related structures, homes, apartments, and other dwellings and their surrounding maintained areas (*i.e.*, landscaping and driveways).

The forested land use designation is the most common followed by maintained and commercial/residential, respectively. The breakdown of land uses for Preferred Alternative C alignment is shown in **Figure 4-1**. The acquisition of land for additional right-of-way would be required for the Preferred Alternative C alignment.

No Build Alternative

The No Build Alternative would not change the general pattern of development in and around Gulfport, which is shaped by local economic factors, market-driven demand, and local plans and zoning to meet the needs of an increasing population.



The No Build Alternative would result in increased congestion on US 49. The No Build Alternative may also result in a slower rate of development to the areas around the I-10 Interchange which would have been conveniently served by Preferred Alternative C.

Preferred Alternative C

For impact analysis in this EA, a worst-case scenario was assumed in that all areas within the alignment would be cleared and/or graded; therefore, changing land uses within the entire alignment. A breakdown of land uses for Preferred Alternative C is shown in **Table 4-1**.

Table 4-1. Potential Land Use Impacts

| Land Use | Preferred Alternative C (acres) | Percent of Right-of-Way |
|------------------------|---------------------------------|-------------------------|
| Forested | 156.3 | 83.3 |
| Maintained | 22.6 | 12.1 |
| Commercial/Residential | 8.7 | 4.6 |
| Total | 187.6 | 100 |
| Existing Right-of-way | 11.2 | 6.0 |
| Proposed Right-of-way | 176.4 | 94.0 |

Source: Neel-Schaffer, Inc.

The Preferred Alternative C encompasses a total of 187.6 acres. Within Preferred Alternative C, approximately 11.2 acres is in existing right-of-way of Interstate 10 and the KCS Railroad and public roads such as 34th Avenue and I-10 Canal Connector Road and 176.4 acres would be converted to new right-of-way and retention areas. These 176.4 acres of land to be used for right-of-way and stormwater facilities consist of 156.3 acres of forestland, 8.7 acres of commercial/residential land uses, and 22.6 acres of maintained lands. These lands would be permanently converted to new right-of-way and would no longer be available for other uses.

Local zoning ordinances generally influence the pattern for development in a community. According to the City of Gulfport's Online Atlas, the land areas within or adjoining the Preferred Alternative C study area are currently zoned B-4 (Highway business districts), R-1-7.5 (Single-family residence districts – low density), and B-2 (General business districts). The land areas

zoned R-1-7.5 are undeveloped. One of the R-1-7.5 zoned land areas is owned by Land Trust for Mississippi Coastal Plain, a non-profit organization, whose purpose is to preserve open spaces and green spaces in the counties of the Mississippi Coastal Plain.

Land within the study area was unzoned and not within the City of Gulfport prior to 1996. In 1996, the study area was annexed, and the current land use designations were adopted. An Interim Land Use Plan and Proposed Interim Transportation Plan prepared by Joseph A. Lusteck and Associates, was reviewed and revised in 1996. This process included a public hearing on March 12, 1996, and revisions to the land use and transportation plans based on input from the public. On April 2, 1996, the Gulfport City Council approved the Gulfport Planning Commission recommendation to annex property within the study area and to adopt the land use and transportation plans. The City of Gulfport placed emphasis on revising and amending its Comprehensive Plan for the purpose of establishing zoning and land use controls in the newly annexed areas. A copy of the April 2, 1996, Gulfport City Council resolution with the Gulfport Planning Commission resolution is included in **Appendix C**.

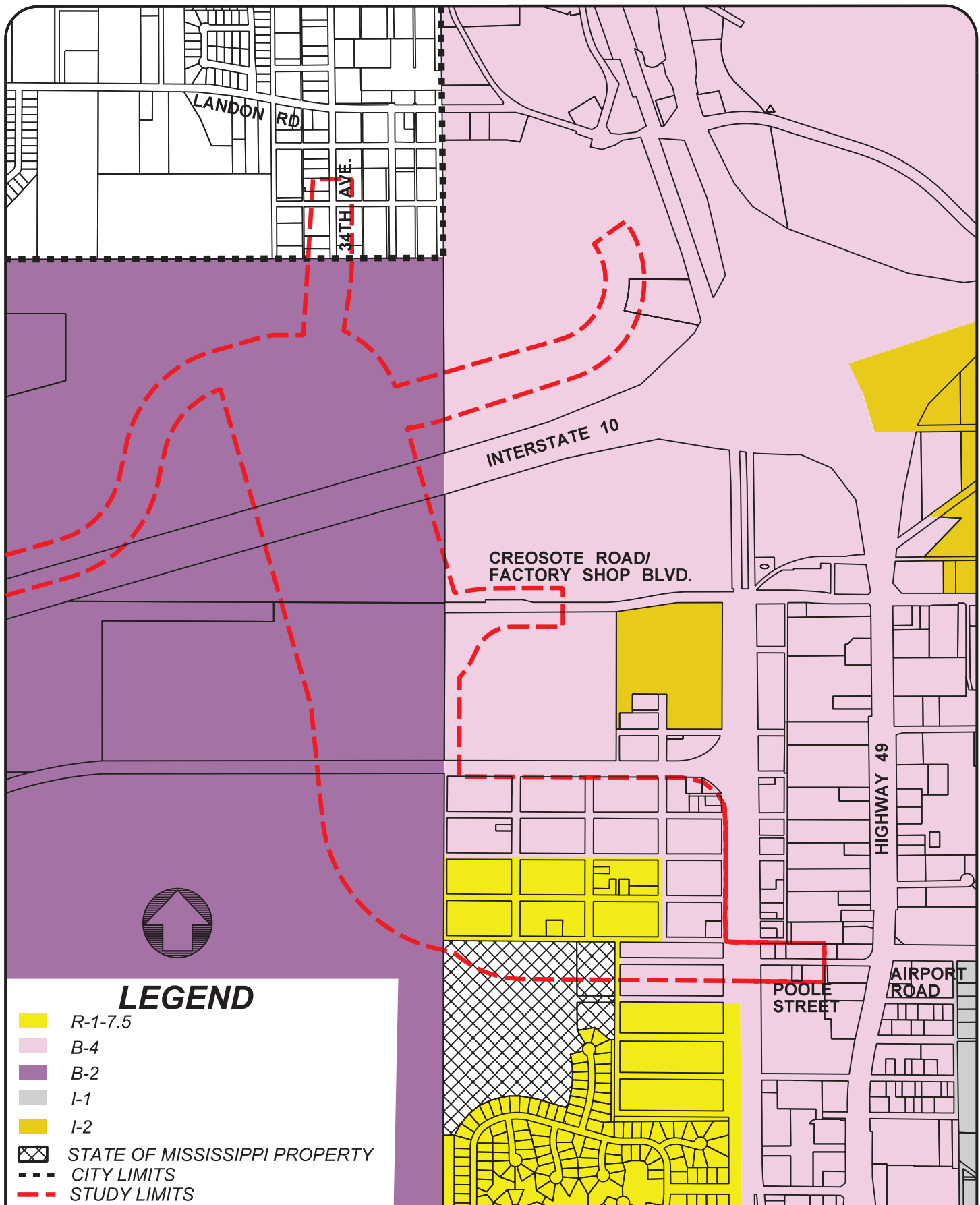
From 1996 to 2004, the City of Gulfport developed a Comprehensive Plan that included the newly annexed property within the study area. Public hearings were held, and community representatives provided input on the development of the Comprehensive Plan. On February 12, 2004, the Gulfport City Council held a special meeting with one of the items on the agenda being a discussion with Joe Lusteck, President of Joseph A. Lusteck & Associates, Inc., to answer questions submitted from Councilwoman Holmes-Hines regarding the Gulfport Comprehensive Plan. The questions and responses from the City Council minutes of the February 12, 2004, meeting are included in **Appendix C**. At the March 2, 2004, council meeting, the City Council approved and adopted the final Comprehensive Plan with an additional appendix incorporating the questions from Councilwoman Holmes-Hines and the answers from Joe Lusteck. A copy of the adopted resolution is included in **Appendix C**, along with the Future Land Use exhibit from the Comprehensive Plan showing this area as commercial.

Figure 4-2 depicts the current zoning within and adjoining the Preferred Alternative C study area. The existing B-4 and B-2 zoning allows commercial development within the project footprint. B-4 zoned areas are intended to include high intensity commercial activities requiring high visibility and accessibility. B-2 zoned areas are intended for businesses that supply a wider range of retail goods and services required by the community. To protect the abutting and surrounding residential areas, certain requirements are placed on uses of B-2 zoned areas.

The GRPC traffic model indicates that the Preferred Alternative C will have a direct impact on decreasing traffic on US Highway 49 north and south of Interstate 10. The model indicates that neighboring residential areas will be indirectly impacted by Preferred Alternative C with projected increased traffic volumes along Old Highway 49 and Landon Road. The GRPC traffic model data is included in **Appendix B**.

The City of Gulfport Erosion, Sediment, and Post-Construction Ordinance has controls to minimize the annual volume of surface water runoff which flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable. The increased runoff from Preferred Alternative C will be mitigated within a retention pond located south of the railroad and north of the proposed roadway. Consequently, the proposed project will not have an impact on the mapped FEMA floodplains. The Erosion, Sediment, and Post-Construction Ordinance is included in **Appendix B**.

Preferred Alternative C will provide improved access for the land locked B-2 zoned areas (General business districts). Therefore, the B-2 zoned areas will develop more rapidly with the access and improved traffic flow under Preferred Alternative C than under the No Build Alternative.



4.2 Soils

The proposed project is located on both sides of I-10 in mainly undeveloped property west of US 49 at Gulfport in Harrison County in south Mississippi. The county has ten soil associations as identified in the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Soil Survey for Harrison County, Mississippi (USDA 1975) report. The Atmore-Harleston-Plummer association and the Smithton-Plummer association are contained in the study area for this project. These are two of the four associations in the county made up of loamy and sandy soils on broad flats and floodplains which generally are wet for long periods, especially in winter and spring. More of the study area is in the Atmore-Harleston-Plummer association than the Smithton-Plummer association.

The Atmore-Harleston-Plummer association is found on broad nearly level flats that are broken by scattered drainage-ways and numerous low ridges where the soils are gently sloping. Many of the ridges are narrow, and most are less than one-fourth mile wide. Use of the soils for residential, commercial, or recreational development is severely limited in most areas by seasonal high-water table or flooding. This association makes up about four percent of the county. It is about 55 percent Atmore soils, 15 percent Harleston soils, 5 percent Plummer soils, and 25 percent Latonia, Poarch, Ocilla, and Escambia soils.

The Smithton-Plummer association is found on areas about one-fourth mile to more than one mile wide, several miles long, and irregular. Most areas in this association are flooded or have water standing on the surface for long periods. This association makes up about 10 percent of the county. It is about 60 percent Smithton soils, 30 percent Plummer soils, and 10 percent Hyde and Poarch soils.

Table 4-2 provides details for the soils located in the study area.

Table 4-2. Soils and Properties within the Study Area

| Soil | Drainage Classification | | | | | Percent Slopes | | |
|---------------------------|-------------------------|-------------------------|-------------------------|----------------|---------------------|----------------|-----|------|
| | Well Drained | Moderately Well Drained | Somewhat Poorly Drained | Poorly Drained | Very Poorly Drained | 0-2 | 0-5 | 0-12 |
| Atmore Silt Loam | | | | X | | X | | |
| Harleston Fine Sandy Loam | | X | | | | | X | |
| Plummer Loamy Sand | | | | X | | X | | |
| Poarch Fine Sandy Loam | X | | | | | | | X |
| Latonia Loamy Sand | X | | | | | | X | |
| Ocilla Loamy Sand | | | X | | | X | | |
| Escambia Silt Loam | | | X | | | X | | |
| Smithton Fine Sandy Loam | | | | X | | X | | |
| Hyde Silt Loam | | | | | X | X | | |

Source: USDA 1975

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon soils.

Preferred Alternative C

Implementation of Preferred Alternative C would involve standard construction activities including leveling and grading for new roadway construction, new retention area, and new right-of-way. Assuming a worst-case scenario, implementation of Preferred Alternative C would impact approximately 188 acres of soils. It should be expected that most of the soil would be leveled and/or graded to allow for the proposed road construction. Implementation of Preferred Alternative C would generally affect soils by soil disturbance, moderate cut and fill activities, and potential soil erosion. The proposed roadway would be cleared and paved, removing the soils from future biological and agricultural production.

Soil disturbance, moderate cut and fill activities, and potential soil erosion impacts will be minimized and mitigated using Best Management Practices (BMPs) which would reduce offsite movement of exposed soils during and after construction. Once final design is completed, the project would have a detailed, specific Storm Water Pollution Prevention Plan (SWPPP) to address all earth-disturbance aspects of construction, including all project components. The SWPPP would include BMPs, such as specific guidelines and controls, to minimize anticipated erosion and resultant sedimentation effects from construction of the new roadway.

As a result, implementation of Preferred Alternative C would result in short-term, adverse effects to soils. These effects would be reduced with the proper implementation of BMPs and adherence to the SWPPP and required permits.

4.3 Prime Farmland, Unique Farmland and Land of Statewide or Local Importance

Congress passed the Agriculture and Food Act of 1981 (Public Law 97-98) containing the Farmland Protection Policy Act (FPPA) subtitle I of Title XV, Section 1539-1549. On June 17, 1994, the final rules and regulations were published in the Federal Register.

The FPPA is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that to the extent possible federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland. Federal agencies are required to develop and review their policies and procedures to implement the FPPA every two years.

For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

In the 1975 USDA report for Harrison County, soybeans and corn were identified as the main cultivated crops. A table in that report identifies the estimated average yields per acre of soybeans and corn under high levels of management for the county's soil types. The absence of

yield value in the table indicates that the soil is not suited to the crop or the crop is not ordinarily grown on the soil. Of the nine soil types listed in **Table 4-2**, the Harleston fine sandy loam, Poarch fine sandy loam, and Escambia silt loam soil types had yields reported for soybeans and corn. However, no agricultural activity currently occurs within the project's study area.

The FPPA requires coordination with the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) for a determination of project involvement with farmland. In order to comply with the coordination requirements correspondence transpired with Mr. James Curtis, Assistant State Soil Scientist, of the USDA Natural Resources Conservation Service concerning potential prime farmland impacts. Mr. Curtis forwarded with a letter in response regarding the status of the area of interest. A copy of his correspondence is included in **Appendix I**.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, on prime farmlands.

Preferred Alternative C

The letter from Mr. Curtis stated that the Preferred Alternative C alignment is exempt from FPPA since the project is within the Gulfport City Limits and that no further FPPA documentation will be required. Therefore, no further consideration for farmland protection is warranted.

4.4 Socioeconomic and Environmental Justice

Within the environmental opportunities and constraints determined under this study, Preferred Alternative C was developed in accordance with the BUILD grant which would provide connectivity west of US 49 between the north and south sides of I-10. On the north side of I-10, the proposed new connector would provide access to the Canal I-10 Service Road, 34th Avenue and an extension of Daniel Boulevard. The proposed new connector would utilize the Poole Street and the Factory Shop Boulevard – Creosote Road corridors on the south side of I-10. Preferred Alternative C accomplishes the purpose of the Build Grant without displacing any businesses, residences or non-profit facilities.

4.4.1 Social and Economic Climate

Gulfport is the largest city in Harrison County. The available census type data for Harrison County includes the data for Gulfport. In 2010 for the census, the total population of Harrison County was 187,109; the total population of Gulfport was 67,793; and 2,967,297 was the total population of Mississippi (U.S. Census Bureau).

According to the U.S. Census Bureau QuickFacts, Harrison County had an estimated population of 208,080 in 2019; Gulfport had a population of 71,705 in 2019; and, Mississippi had an estimated population of 2,976,149 in 2019. When these estimates are compared to the 2010 Census Data, Harrison County had a 11.2% increase in population; Gulfport had an increase of 5.8%; and Mississippi had an increase of 0.3%.

According to the 2014-2018 American Community Survey 5-Year Estimates, the 2018 racial mix in Harrison County is 68.1% White; 24.6% Blacks or African Americans; and the remaining 7.3% is split mainly between American Indians and Alaska Natives, Asians, and others. The median age of the Harrison County population is 36.0 years. This data, as well as other Socioeconomic Data for Harrison County, is shown in **Table 4-3**. Comparison data for Gulfport and Mississippi is also contained in **Table 4-3**.

Harrison is one of Mississippi's 82 counties. The covered employment, workers with unemployment insurance, in Harrison County in the second quarter of 2015 was 83,876 (Bureau of Labor Statistics). The 2014-2018 unemployment rate for Harrison County was 9.6 percent, which is higher than the 8.2 percent for the state (U.S. Census Bureau). Approximately 20.0% of the total population in Harrison County and 24.8% of the total population in Gulfport lives below poverty according to the U.S. Census Bureau (2014-2018). This is slightly higher than the estimated 19.7% of the state population that lives below poverty.

In 2018, Harrison County had a \$37,303 per capita personal income (PCPI), which ranked 20th in the state. The PCPI for Harrison County was 99 percent of the \$37,834 state average, and 69 percent of the \$54,446 national average. The 2018 PCPI reflected an increase of 3.4 percent from 2017. The 2017-2018 state change was 4.0 percent, and the national change was 4.9 percent

(Bureau of Economic Analysis). In 2018, Harrison County had a \$7,708,723* personal income (PI).

*Personal income estimates are in thousands of dollars, not adjusted for inflation. This PI ranked 2nd in the state and accounted for 6.8 percent of the state total (Bureau of Economic Analysis). The 2018 PI reflected an increase of 8.6 percent from 2015. The 2015-2018 state change was 8.0 percent, and the national change was 13.4 percent (Bureau of Economic Analysis).

Personal income includes net earnings by place of residence; dividends, interest, and rent; and personal current transfer receipts received by residents of Harrison County. In 2018, net earnings accounted for 54.7 percent of the PI; dividends, interest and rent 20.5 percent; and personal current transfer receipts were 24.8 percent. From 2015 to 2018 net earnings increased 7.4 percent; dividends, interest, and rent increased 7.7 percent; and personal current transfer receipts increased 12.3 percent (Bureau of Economic Analysis).

Table 4-3**Socioeconomic Data for Harrison County, Gulfport and Mississippi**

| Parameter | Harrison County | Gulfport | Mississippi |
|---|------------------------|-----------------|--------------------|
| Population, 2019 estimate | 208,080 | 71,705 | 2,976,149 |
| Percent change, 2010 Census to 2019 Estimate | 11.2% | 5.8% | 0.3% |
| Persons under 18 years old, percent, 2018 Estimate | 24.2% | 24.6% | 24.1% |
| Persons 65 years old and older, percent, 2018 Estimate | 14.0% | 13.6% | 15.0% |
| White persons, percent, 2018 (a) Est. | 68.1% | 57.2% | 58.6% |
| Black persons, percent, 2018 (a) Est. | 24.6 % | 37.2% | 37.7% |
| American Indian & Alaska Native persons, percent, 2018 (a) Est. | 0.6% | 0.6% | 0.5% |
| Median Age, 2018 Estimate | 36.0 | 34.8 | 37.2 |
| Mean travel time to work, minutes, 2018 Estimate | 23.1 | 21.7 | 24.6 |
| Median household income, 2018 Est | \$45,566 | \$37,811 | \$43,567 |
| Retail sales, 2012 (\$1000) Quick Facts | 2,859,097 | 1,432,303 | 37,053,190 |
| Persons below poverty level, percent, 2018 Estimate | 20.0 % | 24.8% | 19.7% |
| Manufacturers' shipments, 2012 (\$1000) | 1,989,834 | N/A | 66,441,608 |
| Land area, 2010 (square miles) | 573.99 | 55.59 | 46,923.27 |
| Persons per square mile, 2010 | 326.0 | 1,219.5 | 63.2 |

Sources: (1) U.S. Census Bureau

(2) U.S. Census Bureau, State & County Quick Facts

(3) U.S. Census Bureau American Fact Finder's 2014-2018 American Community Survey 5-Year Estimate

(a) Includes persons reporting only one race

(b) Not Available N/A

Earnings of persons employed in Harrison County increased from \$5,293,442 in 2015 to \$5,756,449 in 2018, an increase of 8.7 percent. The 2015-2018 state change was from \$65,324.5* in 2015 to \$70,286.0* in 2018, an increase of 7.6 percent. The 2015-2018 national change was \$11,111,139.0* in 2015 and \$12,510,655.0* in 2018, an increase of 12.6 percent. * (Millions of dollars not adjusted for inflation).

In the Mississippi Department of Revenue's Annual Report for Fiscal Year 2018, the City of Gulfport listing had 2,332 retail sales taxpayers with \$1,944,909,684 in gross sales. In the

Mississippi Department of Revenue's Annual Report for Fiscal Year 2017, the City of Gulfport listing had 2,283 retail sales taxpayers with \$1,801,589,275 in gross sales.

According to the two Mississippi Department of Revenue reports for the 2017 and 2018 fiscal years, the City of Gulfport gained 49 retail sales businesses and \$143,320,409 in gross sales.

All sales of tangible personal property in the State of Mississippi are subject to the regular retail trade rate of sales tax (7%) unless law exempts the item or provides a reduced rate of tax for an item. The tax is based on gross proceeds of sales or gross income, depending on the type of business.

Each month the Mississippi Department of Revenue distributes and transfers the sales tax collected during the prior month to various Treasury Funds. The State General Fund receives the largest portion; however, Sales Tax is also an important revenue source for Municipal Governments. In FY 2017 and FY 2018, the City of Gulfport received \$20,729,109 and \$21,574.457 respectively in diversion funds from sales tax collections.

No Build Alternative

The No Build Alternative will not displace any businesses generating diversion funds from sales tax collections that the City of Gulfport receives from the Mississippi Department of Revenue. It would also not displace any residences or non-profit facilities.

Preferred Alternative C

The labor for the construction of the proposed roadway may be provided by local and/or regional

contractors, resulting in short-term, insignificant increases in the population of the project area. Some materials and other project expenditures may be obtained through merchants in the local community giving a temporary direct economic benefit.

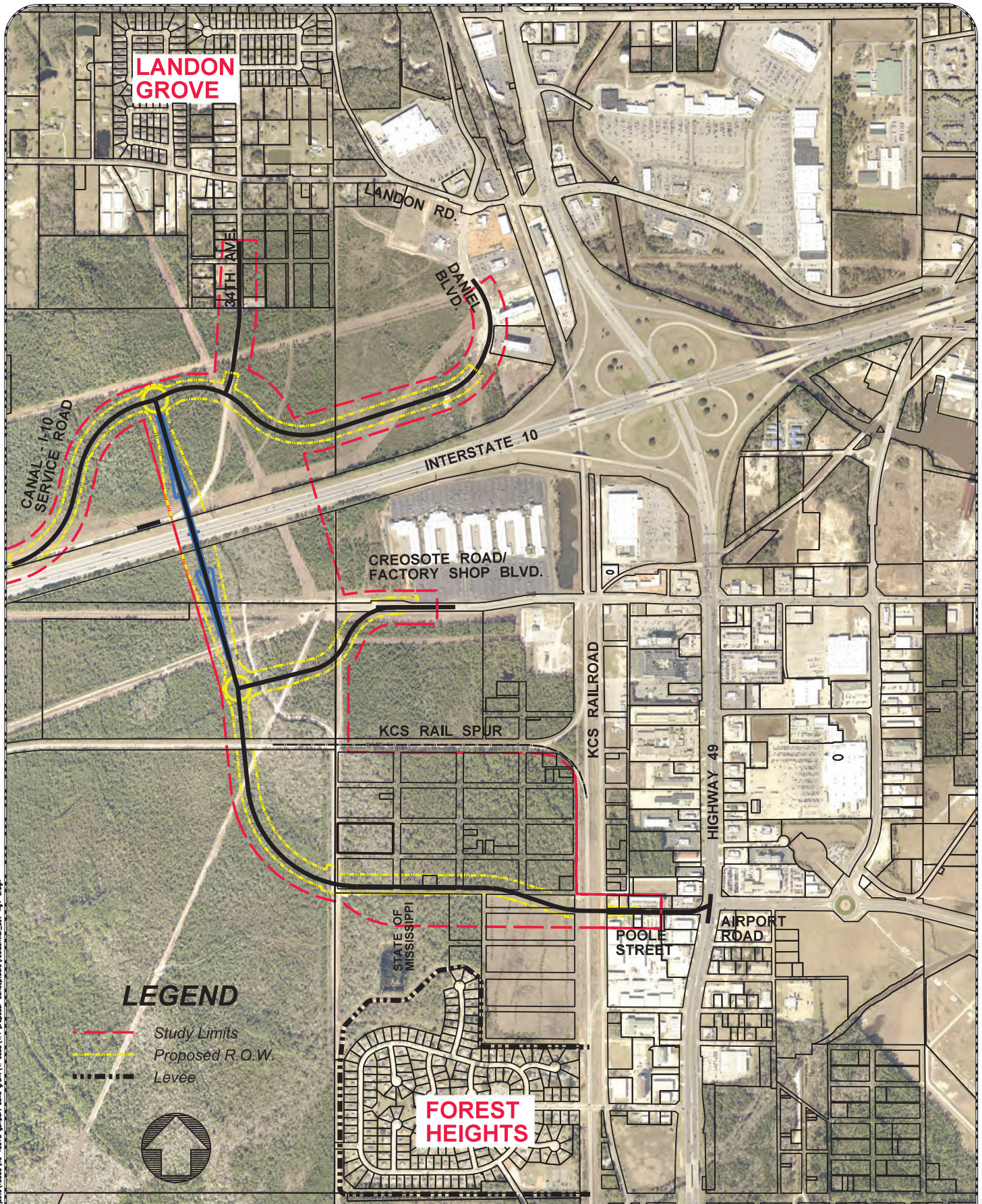
The proposed alignment for Preferred Alternative C avoids displacing residences and businesses and has no impacts on non-profit facilities.

4.4.2 Environmental Justice

On February 11, 1994, President Clinton issued E.O. 12898, “Federal Actions to Address Environmental Justice in Minority and Low-Income Populations”. The E.O. is designed to focus the attention of federal agencies on the human health and environmental conditions in minority communities and low-income communities.

Residential development in the project vicinity includes only two residential subdivisions, one subdivision on the northern side of I-10 and one subdivision on the southern side of I-10. The Landon Grove subdivision is approximately 600 feet north of the northern border of the of the study area centered on 34th Avenue and north of the proposed Daniel Boulevard Extension. The Forest Heights Subdivision is approximately 600 feet south of the southern border of the study area west of Old Highway 49 and south of the proposed Airport Boulevard Extension. The two subdivisions are shown on **Figure 4-3**.

Landon Grove was originally settled on October 20, 1838, when a man named John Dale first settled at Pecan Grove on 40 acres. He sold his land to a ship captain who had a sluiceway dug through the 40 acres to float timber to another waterway. It eventually eroded into a permanent waterway known as Qubbee Ditch. In 1880 the land was converted to a dairy farm, which allowed local dairy service throughout Gulfport and surrounding areas. Landon Grove contained a large sawmill around where I-10 is now, and by the sawmill was a train depot for freight and passenger trains. This was a main mode of transportation for residents in central Harrison County. In March 1911, bids were advertised to improve and build upon the then gravel Gulfport and Landon Road as a main thoroughfare from Gulfport to Wortham. In 1923, the road started



being paved. Orange Grove School opened in Landon Grove on September 15, 1919. Landon Grove was mostly a rural, agricultural community until the 1990's. In 2008, a community plan for western Harrison County mentioned plans for expanding water and sewer service to Landon Grove and creating the commercial center at I-10 and Landon Road.

Landon Grove subdivision was platted in 1907 in Harrison County with 12 blocks that included 317 lots. The subdivision has remained mostly undeveloped with 21 residences currently. The Landon Road commercial corridor bisects the subdivision. 5 commercial businesses and 1 church are located along Landon Road within the Landon Grove subdivision.

Forest Heights, also referred to as "Turnkey", was established in unincorporated North Gulfport around 1966 through a Department of Housing and Urban Development program designed to facilitate home ownership for low-income families. The Housing and Urban Development Act of 1965 was the enabling legislation for this program. The name Forest Heights is a tribute to civil rights activist Dorothy Height, who was president of the National Council of Negro Women from 1947 until 1997. The residential subdivision was developed with approximately two hundred three to five-bedroom homes on one hundred and seven acres. A community house was built central to the entrance of the subdivision and the intersection of Russell Boulevard and Holly Circle, the current location of the Boy's and Girl's Club, a non-profit afterschool program. Youther Lee Keys Park, located at the southeast corner of the subdivision, consists of two basketball courts, a walking track, playground equipment, a splash pad, picnic benches and a restroom building. The Forest Heights community was constructed within the Turkey Creek floodplain and is surrounded by a levee. During the construction of Ohio Avenue in 1985, Harrison County breeched the levee around the Forest Heights Community Levee. In April 1996, the City of Gulfport annexed a large area north of the city that included the Forest Heights Community. After annexation, the city restored the levee to its original height and raised the grade of Ohio Avenue to traverse over the top of the levee to address community concerns. The area within the levee is serviced by storm sewer pipes with gate valves and portable pumps. The city monitors water levels along Turkey Creek and if the Forest Heights community is anticipated to be impacted by rising water, then storm sewer pipes and gate vales are closed and the area

withing the levee is pumped to remove rainfall that collects within the levee. Forest Heights residents have express concerns that the proposed roadway project would increase flooding impacts. The predominant source of flooding in the Turkey Creek floodplain is from storm surges from the Back Bay of Biloxi (FEMA 2009). Historically, the only time the Forest Heights levee has been overtopped was in 2005 related to storm surge from Hurricane Katrina. The Gulf Coast of Mississippi suffered near total devastation from Hurricane Katrina with hurricane winds, 28-feet of storm surge, and unprecedented surf pushing casinos, barges, boats, commercial buildings, houses, debris, and flood waters inland from the coast to I-10. The Forest Heights levee was approximately 16 feet above sea level in 2005 when Hurricane Katrina overtopped the levee. Both the City of Gulfport and the USACE have recognized improvements were needed to the Forest Heights levee following Hurricane Katrina. The levee improvements were listed in the *Section 205, Turkey Creek Flood Damage Reduction Study* (USACE 2005) and now, in 2022, there is an active USACE project to raise the levee from 16 feet to 21 feet above sea level. The USACE project consists of improvements so that the levee meets certification guidelines for a 0.2-percent probability storm occurrence and protects the residents of Forest Heights from storm surge flooding. Approximately 6,500 linear feet of an existing non-Federal levee would be raised to a levee crest elevation of 21 feet North Atlantic Vertical Datum of 1988 (NAVD-88). An existing publicly owned park with a surface elevation of 12 to 14 feet NAVD-88 would be included in the plan to serve as a water detention area for temporary containment of rainfall during storm events (USACE 2009). The USACE project is a stand-alone project to reduce storm surge impacts on the Forest Heights community. Coordination is ongoing with the USACE, the City of Gulfport, and roadway designers and this coordination will continue as the design of the roadway project progresses.

Environmental justice analyses are performed to identify potential disproportionately high and adverse impacts of proposed actions on these communities and to identify alternatives that might mitigate these impacts. A review of the EPA's EJSscreen Report (Version 2.0) was utilized to help identify areas that may warrant additional consideration, analysis, or outreach. EJSscreen outputs confirmed that minority and low-income communities were present within the study

area. Environmental justice guidance directs agencies to ensure that representatives of an affected community have every opportunity to provide input regarding the effects of the proposed project. Outreach efforts for public participation included proactive efforts to ensure meaningful opportunities for input. A website was developed to provide updated and complete disclosure of the planned project and several virtual and in-person meetings were held. The DOT's EJ Order (DOT 5610.2C), dated May 14, 2021, defines "disproportionately high and adverse effects on minority and low-income populations as an adverse effect that:

1. is predominately borne by a minority population and/or a low-income population, or
2. will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population."

The FHWA's 2011 Guidance on Environmental Justice in NEPA was consulted regarding the methodology to identify disproportionately high and adverse effects. The guidance states that in order to identify disproportionately high and adverse effects a comparison of the impacts on the minority and/or low-income populations should be made with respect to the impacts on the overall population within the study area. The guidance also states that "fair distribution of the beneficial and adverse effects of the proposed action is the desired outcome."

Minority, as identified in DOT 5610.2C, includes American Indian or Alaskan Native (having origins in any of the original people of North America and who maintain cultural identification through tribal affiliation or community recognition); Asian or Pacific Islander (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); Black (having origins in any of the black racial groups of Africa); or Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race). Minority Population means any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons who might be similarly affected.

Minority population mandates, as defined by the United Nations Human Rights Committee, are ethnic, religious, or linguistic groups which constitute less than half of the population an entire territory, and whose members share common characteristics of culture, religion, or language, or a combination of any of these. To clarify a member of a minority population can be summarized as follows:

- 1) Indigenous peoples may constitute linguistic, religious, or ethnic minorities in the states in which they inhabit.
- 2) The “territory” to consider in determining whether or not a group is a minority is the entire territory of a State, and not one of its political or territorial subunits.
- 3) One of the main objective criteria for determining whether a group is a minority in a state is a numerical one. A minority in a territory of a State means it is not the majority.

According to the Mississippi Encyclopedia, in a North America Religious Atlas (NARA) survey of religious life, the majority religious community in Mississippi are evangelical Protestants, in which they are numerically dominated by Baptists. The majority of Mississippians speak English according to the Statistical Atlas, and the 2019 U.S. Census Bureau reported 58% of Mississippi’s population as white, non-Hispanic peoples. Consequently, groups that do not meet one or all these categories are considered minority communities in the State of Mississippi, as defined by the U.N.’s Human Rights Committee. Minority groups are often segregated from the majority, resulting disproportionate effects on the community. Therefore, environmental justice should be achieved for these groups during the planning of major projects that will directly affect the community.

Census Tract 31.01 includes the Forest Heights community, and according to the 2019 ACS estimates, 35% of the population in Census Tract 31.01 are considered minorities. Specifically, the Forest Heights community is located in Block Group 1 of Census Tract 31.01. The most recent recorded census data for Block Group 1 was in 2020, and a reported 864 individuals reside there. Approximately 605 individuals (70% of the population) are considered minorities. As Forest

Heights is considered a minority community an environmental justice analysis is needed to determine if there is a disproportionately high and adverse effect and if mitigation to offset these effects would be appropriate. The Forest Heights community is comprised of 30% Caucasian, 61% black or African American, 1% Asian, and 9% are American Indian, Alaskan Native, some other race, or multiracial.

Census Tract 35.05 includes the Landon Grove community, and according to 2019 ACS estimates, 29% of the population in Census Tract 35.05 are considered minorities. Specifically, the Landon Grove community is located in Block Groups 1 and 3 of Census Tract 35.05. The most recent recorded census data for Block Groups 1 and 3 was in 2010, which reported 4,991 individuals reside there. Approximately 1,439 individuals (29% of the population) are considered minorities. The Landon Grove Community is comprised of 71% Caucasian, 20% black or African American, 3% Asian, and 6% are American Indian, Alaskan Native, some other race, or multiracial. Therefore, concerns regarding environmental justice within the Landon Grove Community as a direct result of the proposed project are defined to a lesser extent than the Forest Heights community.

According to U.S. Department of Health and Human Services (HHS), the best approximation for the number of people below HHS poverty guidelines in a particular area would be the number of persons below the Census Bureau poverty thresholds in that area. The Census Bureau measures poverty by using a set of money income thresholds that vary by family size and composition. If a family's total income is less than the family's threshold, then that family, and every individual in it, is considered below the poverty line. Relative poverty between communities is when households receive 50% or less than average household incomes.

According to the 2019 ACS estimates, in the Forest Heights community, approximately 35% of the population falls below the poverty line, and 22% of the population are below poverty levels in the Landon Grove Community. Therefore, neither community should be considered low income.

According to the census tract map shown in **Figure 4-4**, the Landon Grove subdivision was in the southeast portion of Census Tract 35.05 and the Forest Heights subdivision was in the extreme southeast corner of Census Tract 31.01. The U.S. Census Bureau American Fact Finder's 2019 American Community Survey Estimates data for Mississippi, Census Tract 35.05, and Census Tract 31.01 was used to prepare **Table 4-4** and **Table 4-5**.

As shown in **Table 4-5**, Census Tract 35.05 had a 2019 estimated median family income of \$70,225; 837 minority households; and an estimated 1,040 individuals below the poverty line. Using the same reference, Census Tract 31.01 had a 2019 estimated median family income of \$45,344; 633 minority households; and 1,722 individuals living below the poverty line.

Table 4-4
2019 ACS Estimates
for Mississippi, Census Tract 35.05, and Census Tract 31.01

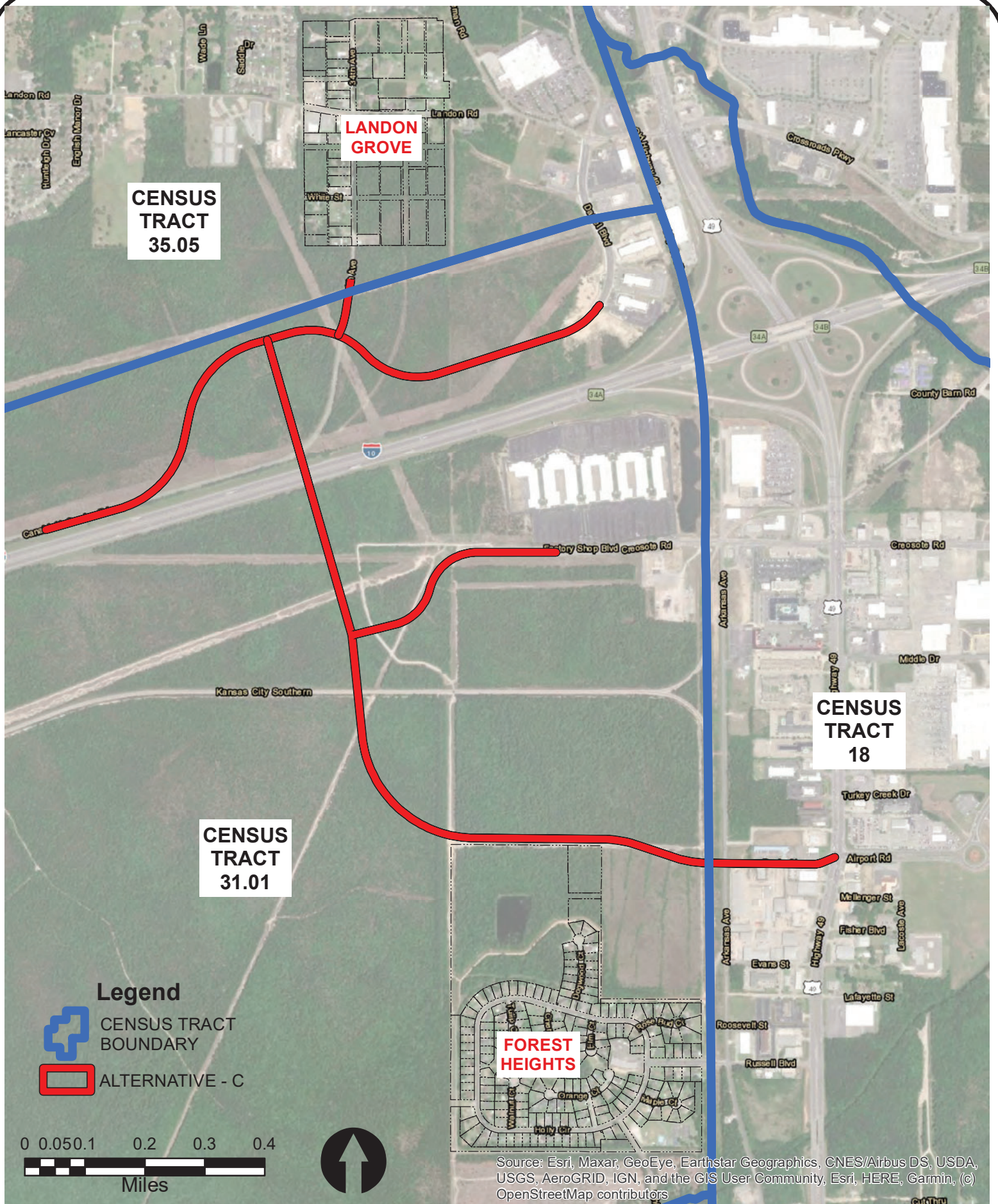
| Data | State of Mississippi | Census Tract 35.05 (includes Landon Grove Community) | Census Tract 31.01 (includes Forest Heights Community) |
|---|----------------------------|---|---|
| 2019 Total Population Estimate | 2,984,418 | 9,109 | 8,374 |
| 2019 Total Households Estimate | 1,104,394 | 3,128 | 2,936 |
| 2019 Median Household Income Estimate | \$45,081 | \$70,225 | \$45,344 |
| 2019 % Households Below Poverty Estimate | 40.3 | 22.3 | 35.3 |

Source: 2019 American Community Survey Estimate collection.

Table 4-5
2019 Estimates for
Census Tract 35.05 and Census Tract 31.01

| Data | Census Tract 35.05 (includes Landon Grove Subdivision) | Census Tract 31.01 (includes Forest Heights Subdivision) |
|---|---|---|
| 2019 Median Household Income Estimate | \$70,225 | \$45,344 |
| 2019 Total Households Estimate | 3,128 | 2,936 |
| 2019 Minority Households Estimate | 837 | 633 |
| 2019 Minorities Estimate | 2,597 | 2,471 |
| 2019 Individuals Living Below Poverty Level Estimate | 1,040 | 1,722 |

Source: 2019 American Community Survey Estimate Collection



From the Census tract information and other pertinent data examined, the Forest Heights Subdivision was identified as an area with identifiable minorities requiring an environmental justice review.

Forest Heights is one subdivision in a larger North Gulfport community that includes Turkey Creek. Studies have been conducted in this community including a Turkey Creek Watershed Implementation Plan (TCWIP) funded by the EPA was published in 2006 by the Land Trust for the Mississippi Coastal Plain in collaboration with Turkey Creek and North Gulfport community partners. A copy of the TCWIP is contained in **Appendix C**. A portion of Preferred Alternative C is located within the Turkey Creek watershed.

The TCWIP identified five goals as follows:

1. Protect Existing Resources
2. Educate and Empower the Community
3. Restore Ecological Functions and Natural Connections to System Headwaters
4. Increase Non-vehicular Connectivity between schools, parks, community centers, homes, businesses, and neighborhoods.
5. Coordinate funding so that public projects are well leveraged to maximize public benefit.

Portions of the TCWIP were successfully implemented including the establishment of a greenway along Turkey Creek. The plan was updated in 2010 and 2014 to reflect progress.

A Turkey Creek and North Gulfport Neighborhoods Community Plan (TCNGNCP) was published in 2011 under the direction of Turkey Creek Community Initiatives and North Gulfport Community Land Trust. A copy of the TCNGNCP is contained in **Appendix C**. The northern boundary of the plan area coincides with the project study area. The TCNGNCP has specific objectives identified which are centered around 7 strategies as follows:

1. Improve circulation and connectivity to ensure safe vehicular and non-vehicular access to local and regional amenities and commerce.

2. Stimulate economic development opportunities to ensure long term neighborhood prosperity.
3. Implement distinctive community design to communicate a strong sense of African American history and culture and create an attractive environment for both community members and visitors.
4. Restore and rejuvenate housing to support the existing community and attract new community members.
5. Establish and protect environmental health to provide clean air and water, flooding protection; healthy, locally grown food; and a native landscape for the benefit of future generations.
6. Provide education that helps youth and adults obtain skills needed to support the neighborhoods' vision.
7. Increase recreation resources to improve community health, strengthen social connections, and increase business opportunities.

The proposed project is supportive of these endeavors and specifically addresses the desire for improved vehicular and non-vehicular connectivity and economic opportunities.

To promote public participation and inform the general population including the Forest Heights Subdivision, a public meeting was held on September 3, 2020, in-person and virtually at www.interconnectinggulfport.com due to COVID-19 guidelines, to explain the project and gain public input regarding the project. The online and published public notices, sign-in sheets, and the comment sheets received from this meeting are included in **Appendix J**.

At the meeting site large drawings of the Preferred Alternative C and typical sections were placed on folding tables for perusal by the public. Members of the project development team were available to answer questions, engage in discussion and solicit comment. The materials can be found in **Appendix J**.

There were 53 attendees at the public meeting. Of these 53, there were 12 Neel-Schaffer and City of Gulfport personnel. The attendance lists can be found in **Appendix J**.

Those attending the virtual meeting were provided access to an overall project location map, map of Preferred Alternative C depicting the study area and typical sections for each segment of roadway. Team representatives interacted with the virtual attendees and answered questions. The media covered the in-person and virtual public meeting. Copies of the articles and scripts of the media's coverage are in **Appendix J**.

The virtual public meeting was recorded. The complete dialogue of the virtual public meeting was transcribed and is documented in **Appendix J**. During this virtual public meeting, most who attended did not express views or provide input on the project.

Public Comments were received through comment forms, hand-written letters, emails and verbally beginning at the time the public meeting was advertised. They were also received verbally and through the "chat" feature during the virtual meeting platform.

Nine comments were submitted at the meeting. Copies of all the comments are contained in **Appendix J**. 77% of the comments were either concerned with or opposed to the construction of this project. 23% were in favor of the project. Those opposed to the project showed some common concerns including flooding, wetland disruption, non-alleviation of traffic congestion of US Highway 49, stormwater runoff, the Turkey Creek Watershed Plan, and minimizing direct impacts on the Forest Heights subdivision. Those in favor stated that this project will ease access and make a connection between the North and South business districts. Another statement was made that the city will thrive off an increase in property and sales tax from this project.

A copy of the entire dialogue portion of the virtual meeting is contained in **Appendix J**. A summary of the dialog involving the EPA, and three Gulfport area residents is provided below.

- The EPA representative was advised wetland impacts have not been quantified at this time, an interchange was not included in this study and he was given the names of the stakeholders. After he asked about the Watershed Implementation Plan for Turkey Creek

funded by the EPA and published by the Land Trust for the Coastal Plain in 2006, the project development team representative advised him the study was being considered. The EPA representative was also informed how the project originated.

- One of the area residents advised they would be filing a complaint with the office of civil rights and asked about the potential for increased flooding in Forest Heights. She was informed hydrology and hydraulics were being evaluated for stormwater runoff and that the environmental class of action for the study is an Environmental Assessment.
- One of the area residents was advised: The Turkey Creek Watershed Plan and Turkey Creek and North Gulfport Neighborhoods Community Plans along with other studies were being considered; permits and applications will be made after the NEPA document is approved; and how the project originated.
- One of the area residents was advised how the project limits were determined and the roadway would be approximately 750' from its closest point to Forest Heights.

Comments were also received within an acceptable time frame after the Public Meeting. Copies of the 13 comments are contained in **Appendix J**. Copies of the comments and any follow-up acknowledgements of receiving the comments from the project development team are contained in **Appendix J**. 23% of the comments were neutral on the project and only concerned that the project be done correctly, and all the measurements were to be taken to properly address and fix any and all impacts the construction would have. 31% of the comments were in favor of the new construction, 31% of the comments were opposed to the project being constructed, and 15% of the comments were miscellaneous addressing the public meeting website. Those in favor of the project advised it will alleviate traffic congestion for Gulfport Premium Outlets and the US 49 intersections with Creosote Road, Airport Road and Landon Road.

The public was informed that a drainage mitigation assessment was performed to show that a retention pond would mitigate all peak runoff for the areas downstream of the project to make certain that the proposed project would have no impact on flooding in the Forest Heights

subdivision or any other downstream communities. The public was told that any wetlands mitigation would be performed in the Turkey Creek Watershed pending availability within the Turkey Creek Watershed and/or any other wetland mitigation banks as required by USACE. The public was advised that the proposed project addressed components of the TCWIP and TCNGNCP by increasing non-vehicular and vehicular access to businesses and amenities safely, stimulating economic development opportunities, and installing stormwater mitigation to aid the flooding of the area.

To further encourage public input and participation from the Forest Heights Subdivision and bring more awareness regarding the proposed project, a community meeting was held on June 1, 2021, at the Boys and Girls Club that is located inside the Forest Heights subdivision. Flyers notifying the residents of this meeting were distributed door-to-door by City of Gulfport employees. Copies of the flyers, sign-in sheets, and the comments received are included in **Appendix J**. An overall project location map, map of Preferred Alternative C depicting the study area and typical sections for each segment of roadway were shown to the attendees showing the proposed road improvements and location of the retention pond and an animation was shown explaining the pre-construction and post construction drainage pattern of the area around the proposed project. The animation also described how the retention would impound and release stormwater at a regulated rate. The drawings also showed possible facilities that could be installed around the retention pond for use by the public such as walking track, lighting, and interpretative signage. The retention pond and surrounding amenities showed the promotion to improve community health, strengthen social connections, educate youth and adults, provide filtration and retention of stormwater runoff coincides with the objectives of the TCWIP and TCNGNCP. The proposed road figures and the retention pond figure is included in **Appendix J**. Two comments were received from Gulfport citizens that live outside the project area with non-project related drainage concerns. The sign-in sheets were assessed and determined that 22 people listing Forest Heights addresses and 17 gave contact information consisting of phone number and/or email address. These 17 people were emailed and called to meet individually with these residents to discuss the proposed project and receive feedback. 5 comments were

received with comments being supportive, against, and indifferent to the project. Numerous attempts have been made to contact the remaining 12 residents with no response being made to the phone calls and/or emails. The comments received and the communication log is included in **Appendix J**.

Another public meeting was held to inspire public input and participation. The public meeting was held between 5:00 p.m. and 7:00 p.m. on Tuesday, March 29, 2022, in person at the Isiah Fredericks Community Center at 3312 Martin Luther King, Jr. Boulevard, in Gulfport. The meeting information was placed on the project website, www.interconnectinggulfport.com, for the public that did not attend the meeting in person. The purpose of the meeting was to provide an open forum for discussion of the proposed project. The meeting was advertised in the Sun Herald on March 8, 2022, March 15, 2022, March 20, 2022, March 22, 2022, March 23, 2022, and March 27, 2022. Copies of the advertisements are contained in **Appendix J**. The meeting was also promoted by emailing the attendees of the previous meetings, emailing the individuals who submitted contact information on comment sheets, posting flyer at the Boys and Girls Club in Forest Heights Subdivision, posting flyer at the Isiah Fredericks Community Center, the stakeholder group, the project website, and the City of Gulfport website. The media was present and covered the public meeting. Copies of the articles and scripts of the media's coverage are in **Appendix J**.

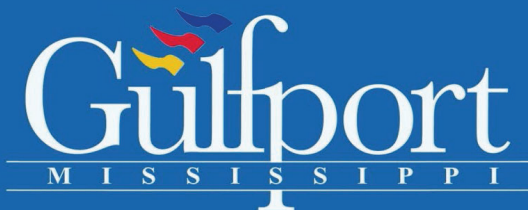
Representatives from US Army Corps of Engineers, Federal Highway Administration, Mississippi Department of Transportation, City of Gulfport, and the project team members were present to answer any questions.

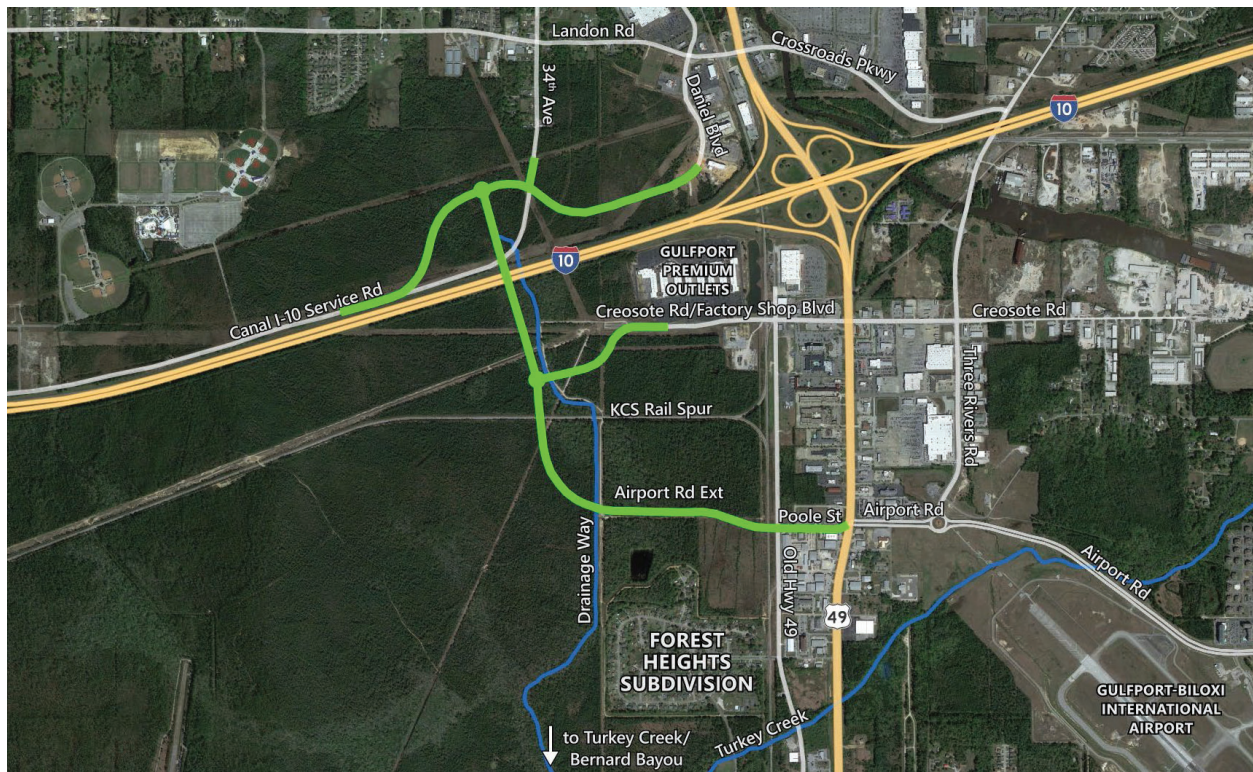
Residents were invited to view a brief video presentation regarding the proposed project that included an animation explaining the pre-construction and post construction drainage pattern of the area around the proposed project. The video also described how the retention pond would store and release stormwater at a regulated rate. The animation showed the heights of stormwater ponding for the 100-year storm event, comprised of 14.3 inches of rainfall over a 24-hour period, before and after construction, at two (2) different levee locations of the Forest

Heights levee that is adjacent to the south end of the project. The ponding water at these levee locations was shown to decrease post-construction and reduce the risk of erosion of the existing levee. After the presentation, attendees were encouraged to view the large drawings that were placed on folding tables around the room and fill out comment sheets. The drawings showed the route of Preferred Alternative C, typical sections, location of the retention pond, and possible facilities that could be installed around the retention pond for use by the public such as walking track, lighting, and interpretative signage. Members of the project development team were available to answer questions, engage in discussion and solicit comment. The US Army Corps of Engineers also were stationed at a folding table to respond to questions regarding the levee project. The meeting materials can be found in **Appendix J**. The animation shown at the public meeting can be viewed on the www.interconnectinggulfport.com website and is transcribed in the following graphics and text:

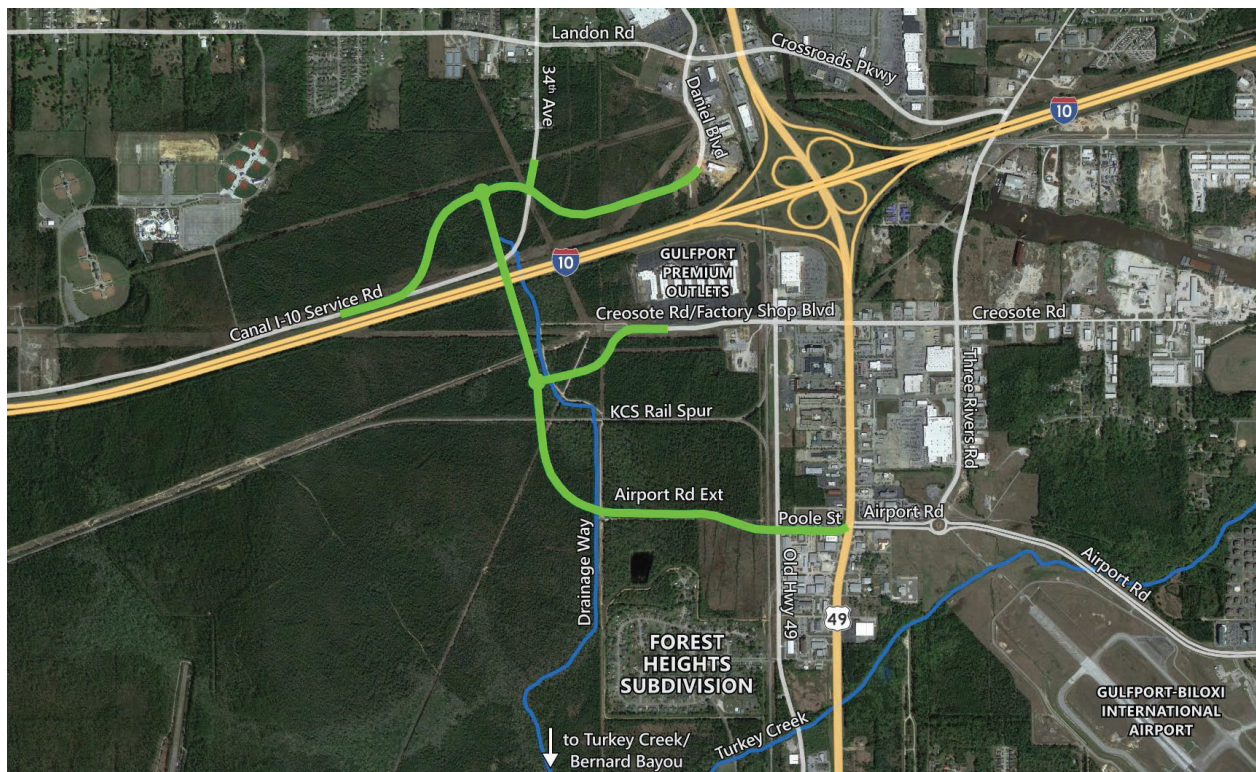
Interconnecting Gulfport Stormwater Mitigation Plan

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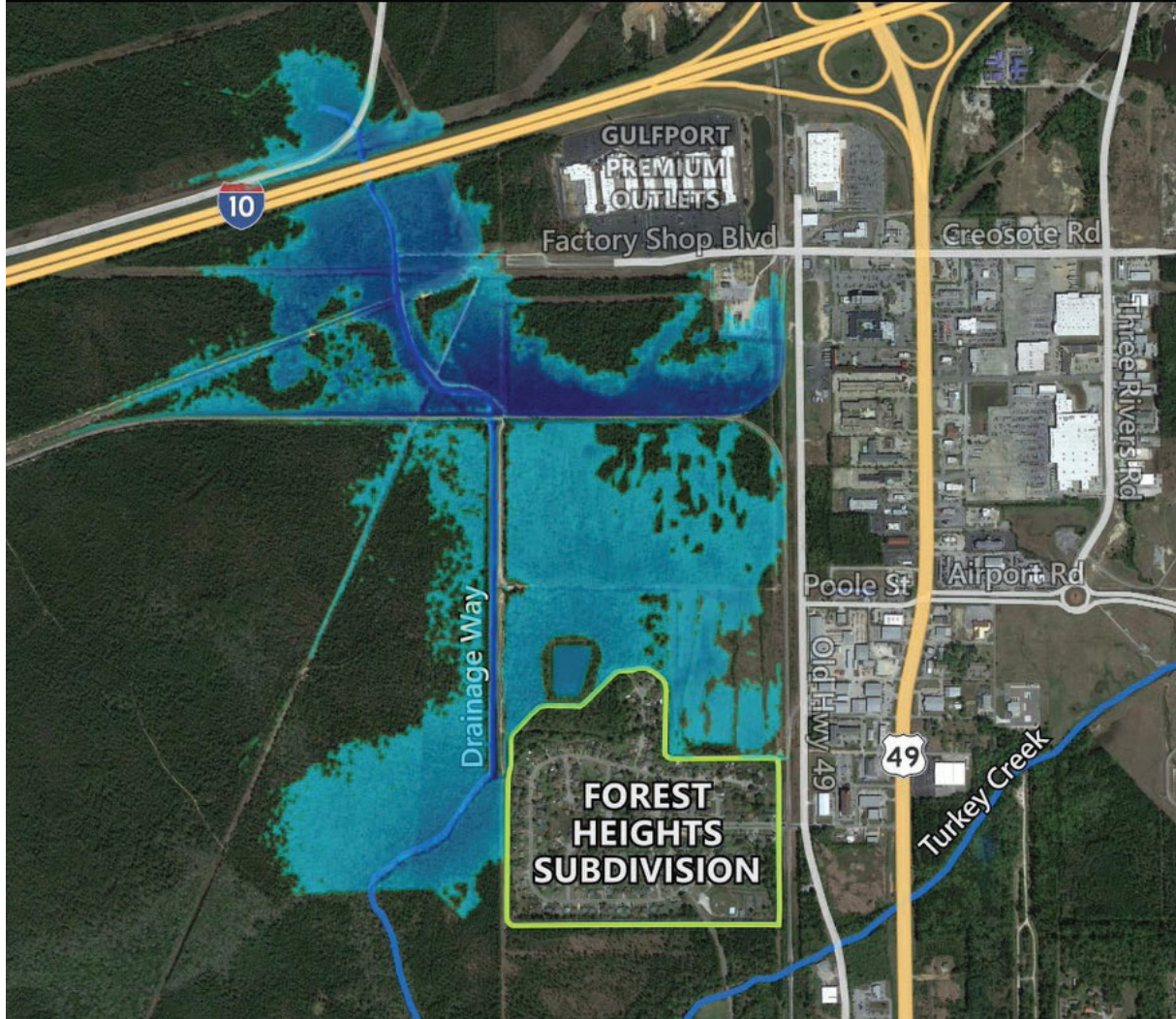
This is an overall project location map showing the project area. North of I-10 at the top of the map the project will extend the 4-lane roadway of Daniel Boulevard westward to a roundabout and connecting to 34th Avenue along the way. This roundabout will connect to a relocated 2-lane Canal-Interstate 10 service road to the west and to the 4-lane Airport Road extension with an overpass crossing I-10 to another roundabout. This roundabout connects to a 2-lane extension of Creosote Road/Factory Shop Blvd. to the east and to a 2-lane Airport Road extension to the south that crosses the KCS Rail Spur and then curves running eastward north of Forest Heights crossing the KCS railroad connecting to Old Highway 49 and Poole Street.



An existing drainage way flows under the interstate and railroad spur and continues south draining alongside the Forest Heights western levee and connects to Turkey Creek that drains east into Bernard Bayou

EXISTING CONDITIONS

100-Year Storm: 14.3 inches of rainfall
over a 24-hour period



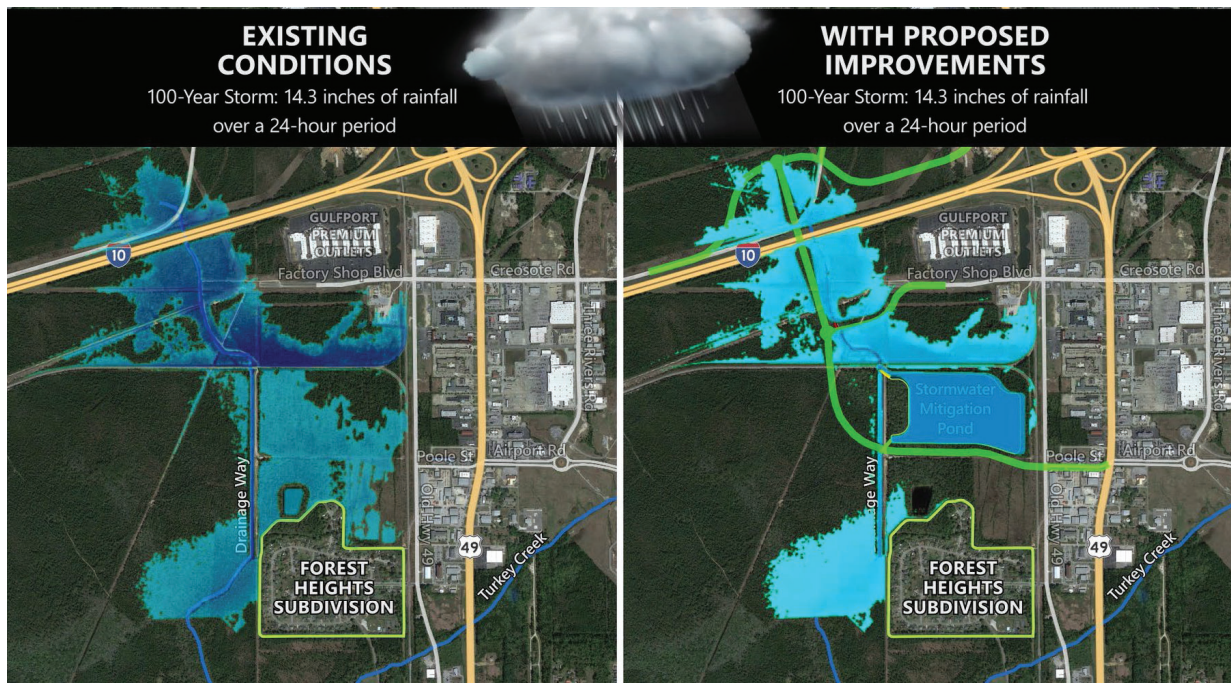
When it rains water from the surrounding areas enters the drainage way and the water level increases over time as shown on the left. A 100-year frequency storm event, which comprises 14.3 inches of rainfall over a 24-hour period, was used for this animation. This far exceeds the typical rainfall event.



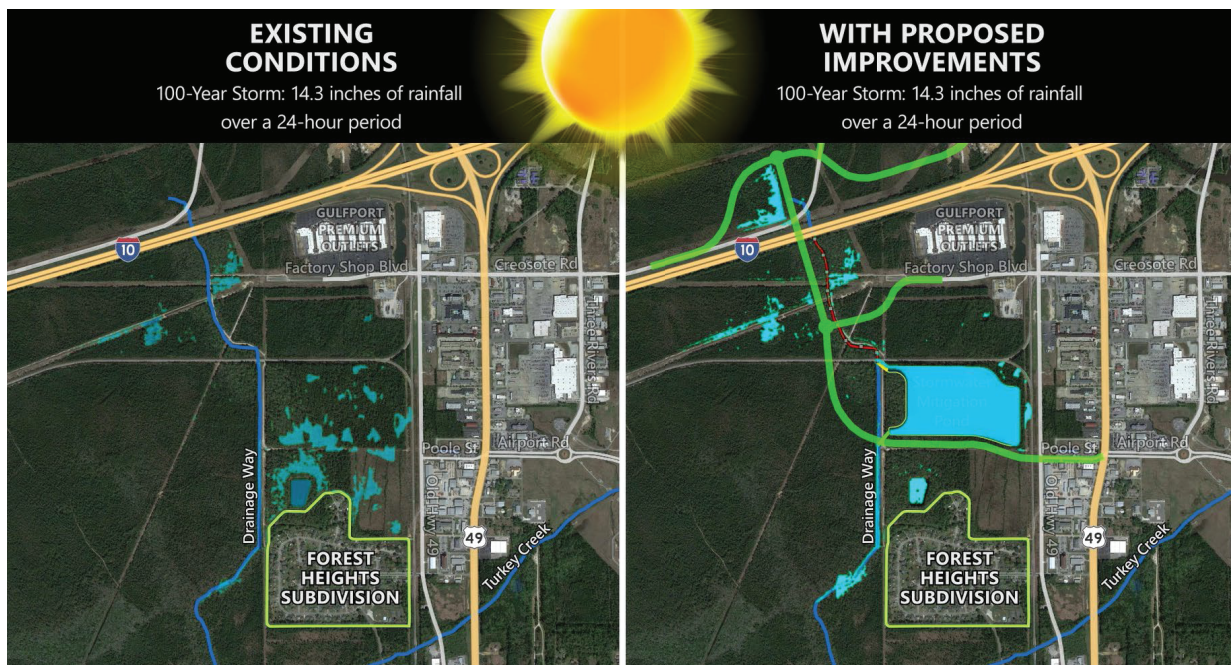
The water levels of a 100-year frequency storm event comprised of 14.3 inches of rainfall over a 24-hour period on the new roadway and stormwater system will be illustrated. This system includes a detention pond bordered by the railroad, the new roadway, and new roadside drainage. The pond will regulate the stormwater runoff into the drainage way.



During a local rain event, storm water from the existing drainage way as well as the proposed roadway is diverted into the detention pond. During the rain event, stormwater is flowing into the pond at a higher rate than it is flowing out, causing the pond to fill and be released at a controlled rate.



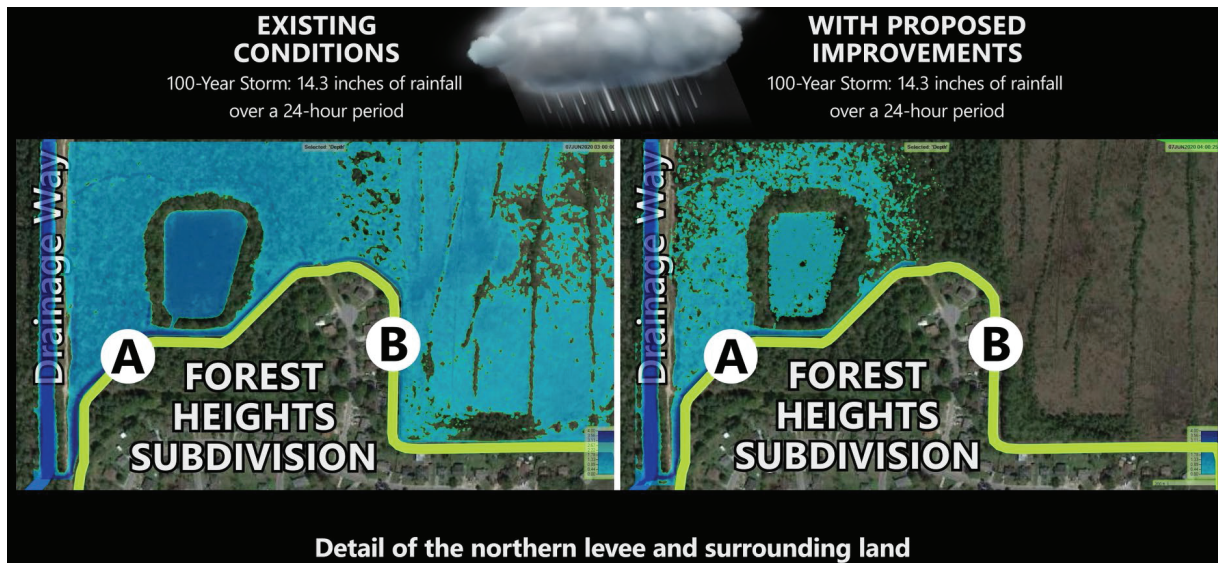
This detention pond provides storage volume for the storm water and helps reduce peak flows downstream of the pond.



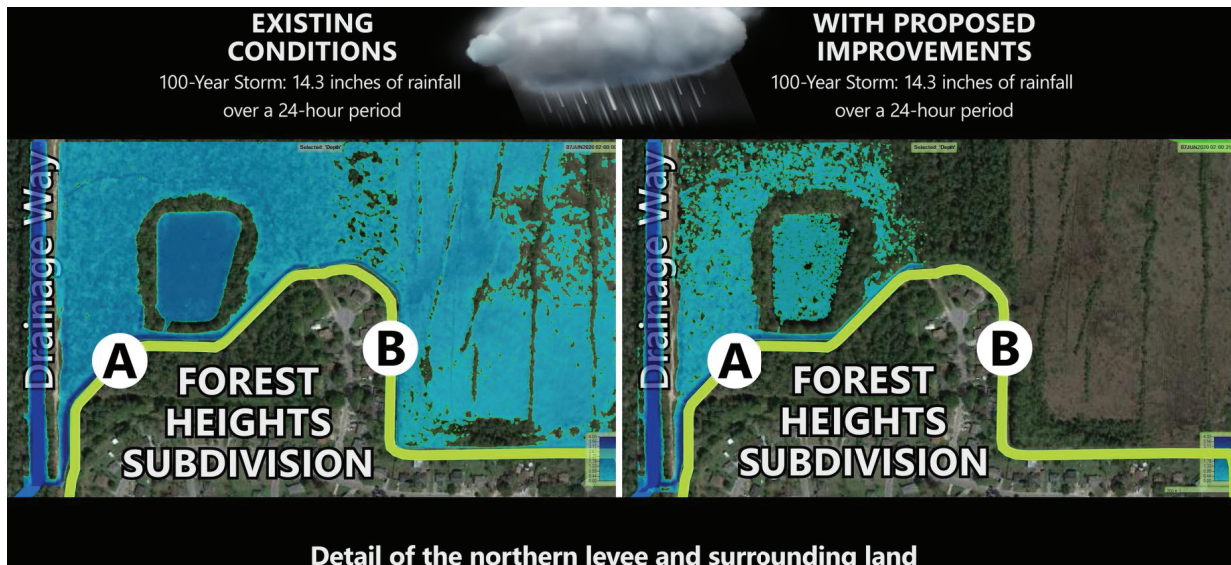
The detention pond continues to release the stormwater until after the runoff subsides and the pond reaches normal pool depth of 2 feet in 36 hours after the peak of the storm event.



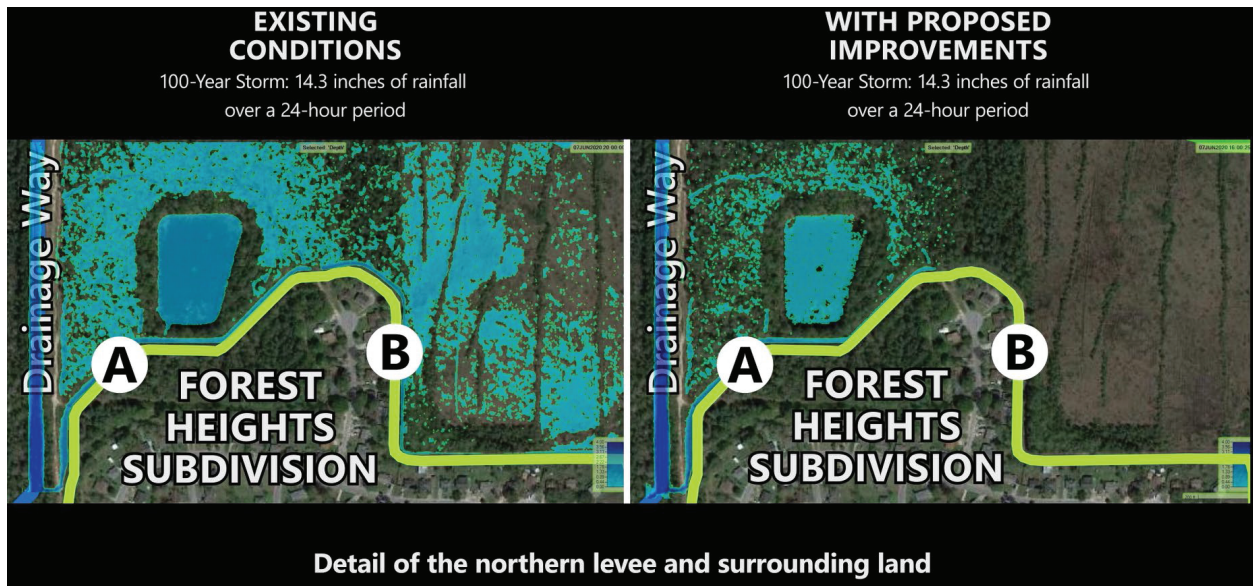
By routing most of the stormwater flow through the detention pond and through the existing drainage way, this greatly reduces water surface elevations upstream of the Forest Heights Subdivision reducing risk of potential flooding.



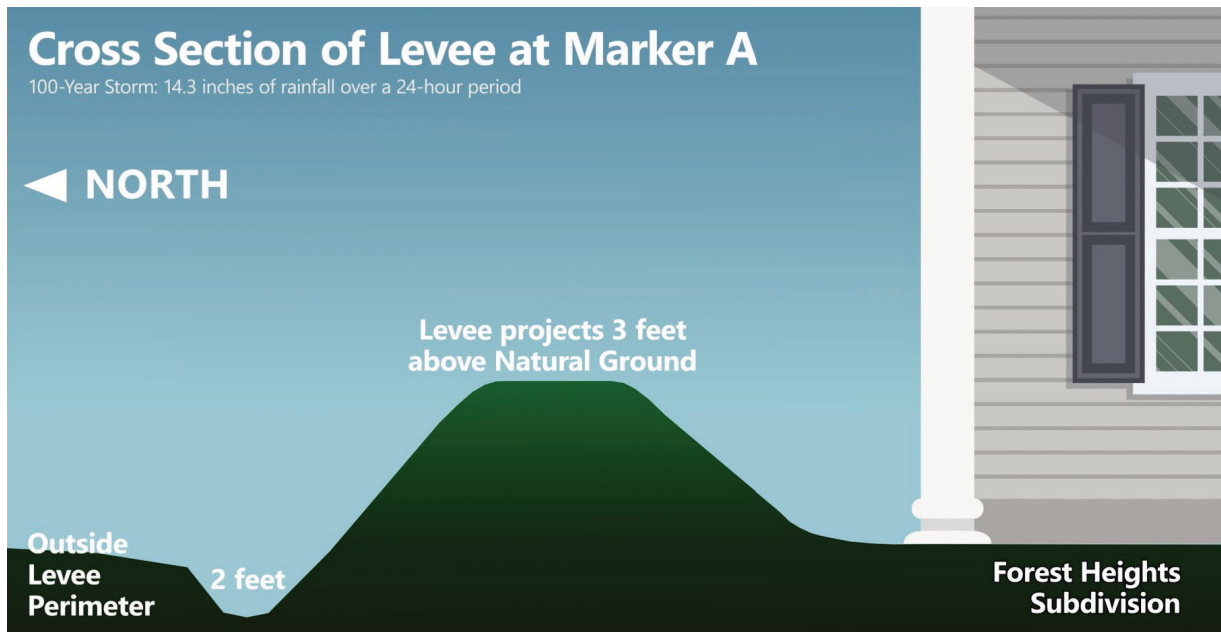
Here we can see a close-up of the northern portion of the Forest Heights neighborhood and levee during a 100-year 24-hour storm event. On the left side of the screen, today a significant amount of water drains to and around the northern Forest Heights levee. The water does not overtop the existing levee; however, there is potential for erosion of the levee over time.



Shown on the right side of the screen, is after the construction of the proposed roadway, stormwater system and pond. By capturing the flow north of the Forest Heights levee and regulating the water into the drainage way, the water levels along the northern forest heights levee are significantly reduced. By reducing the flow along the northern levee, the risk of erosion to the existing levee is also reduced.



Note the location labeled A on the western end of the north levee and the location labeled B on the eastern end of the north levee. The following animation will show a comparison of the existing and proposed water surface elevations at these locations.



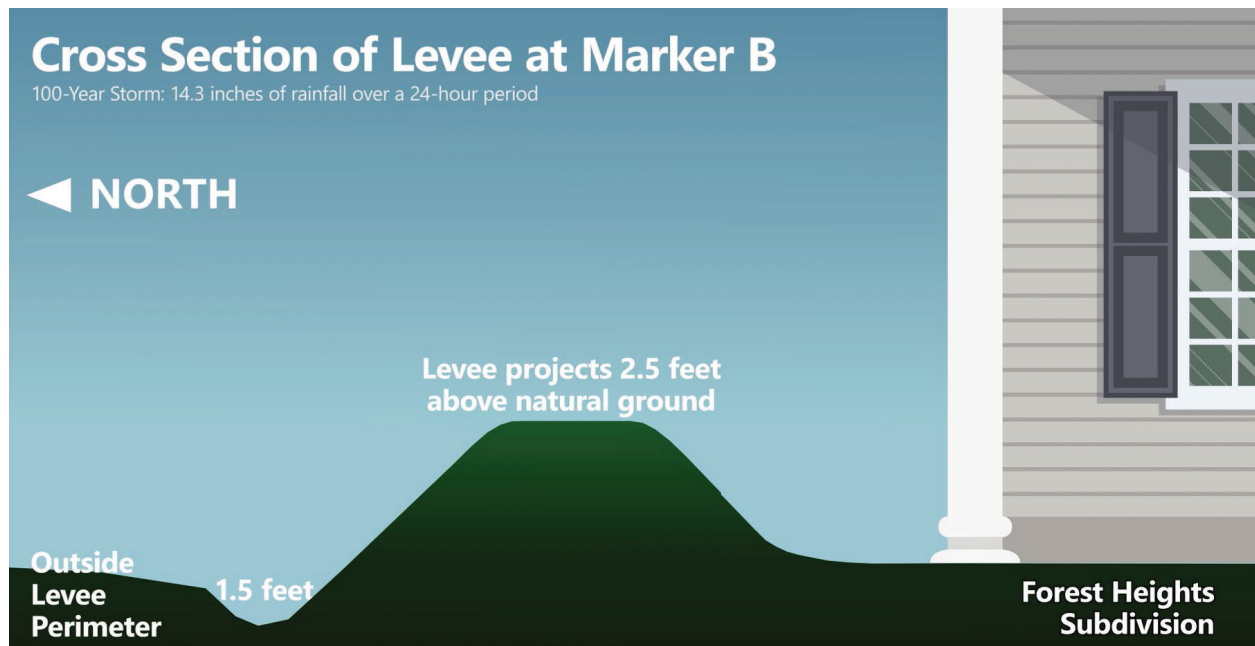
The animation shown here is a cross-sectional view of the northern Forest Heights neighborhood and existing levee at the location that was labeled “A” on the previous animation. In this location, the existing levee projects 3 feet above natural ground north of the levee and has a 2-foot-deep ditch which drains flow west around the levee. Note that this does not take the proposed Corps of Engineers levee project into account.



In existing conditions, water ponds up to a depth of 1.3 feet above the natural ground north of the levee.



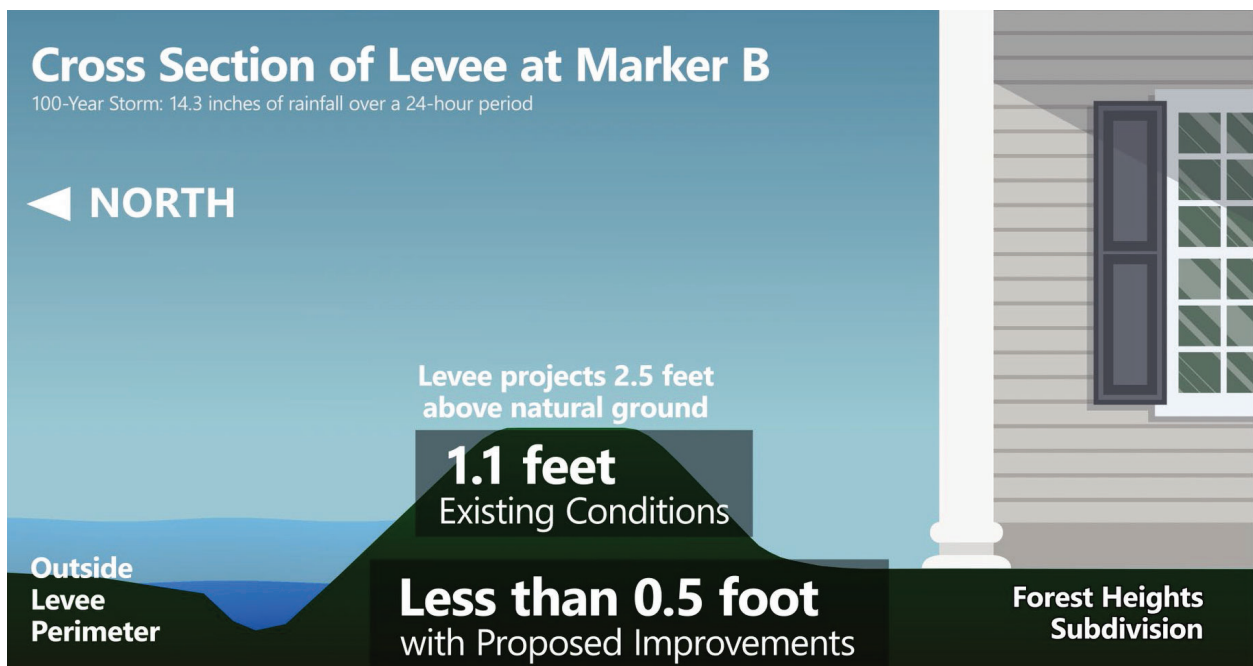
In proposed conditions, the ponding is reduced to a maximum depth of 0.5 feet.



The animation shown here is a cross-sectional view of the northern Forest Heights neighborhood and existing levee at the location that was labeled “B” on the previous animation. In this location, the existing levee projects 2.5 feet above natural ground north of the levee and has a 1.5-foot-deep ditch which drains flow west around the levee. Note that this does not take the Corps of Engineers proposed levee project into account.



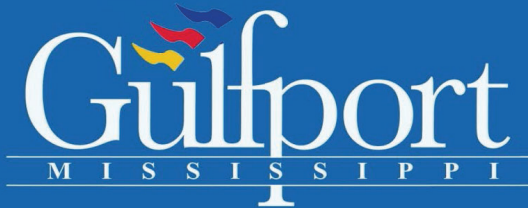
In existing conditions, water ponds up to a depth of 1.1 feet above the natural ground north of the levee.



In proposed conditions, the ponding is contained to the area around the levee ditch.

Interconnecting Gulfport Stormwater Mitigation Plan

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The proposed stormwater retention improvements are not intended to abate the impacts of storm surge during a severe tropical storm or coastal surge event. However, the proposed improvements will capture overland flow in the retention pond and discharge stormwater runoff at a controlled rate into the existing stream. This provides benefits by reducing water surface elevations from rainfall in the downstream areas with reduced peak flow and overland flow providing additional storage within the Turkey Creek floodplain. This would provide a flood risk reduction benefit to the downstream areas that are impacted by coastal storm surge.

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Members of the public set up a station to disperse a handout of another alternative titled "Gulfport Central Artery Connector" (see **Appendix J**). This potential transportation corridor was identified in 2006 and developed in 2011 during the North Gulfport and Turkey Creek Community Plan. It consisted of a proposed new interstate access point between US 49 and SR 605 and a new north-south road connecting Hewes Avenue to the new interchange. This would create a

continuous transportation corridor from US 90 to I-10 east of US 49. This route was in the GRPC 2035 Long Range Plan, but no planning or environmental studies were performed. The route was not in the 2040 or 2045 Long Range Plan. It was presented at the public meeting as an alternate for consideration in the study. This corridor does not address the need for a north-south connection and alternate route to US 49 west of I-10. Because of this and the fact that Three Rivers Road already provides a north-south connection and alternate route east of I-10 it was determined that this corridor did not meet the purpose and need. This is covered in the alternatives analysis in section 3 of the document.

Members of the public were also gathering signatures for a petition in opposition to the proposed project. A copy of this petition is included in **Appendix J**.

A manned sign in and comment sheet station was set up for attendee use. There were eighty-five (85) attendees that signed in at the public meeting that were not members of the USACE, MDOT, FHWA, or the project team. The attendance lists and photographs from the meeting can be found in **Appendix J**. Of these eighty-five (85), there were six (6) people listing Forest Heights addresses. Sixteen (16) comment sheets were received at the meeting. Five (5) against the project, four (4) in favor of the project, one (1) indifferent - interest in flooding outside of project area, and six (6) were asking questions about the project. One (1) comment sheet in favor of the project was received in an acceptable timeframe after the meeting. Responses to the comment sheets received at the meeting and within two (2) weeks after the public meeting were sent to the individuals that gave contact information. Responses along with the comment sheets received are included in **Appendix J**.

The written and oral questions received were comprised of topics questioning the evaluation of alternatives for the project, and the reduction of congestion. Section 3 describes the alternatives that were evaluated for the proposed project. Section 3 and Appendix B describe how the preferred alternative would reduce congestion.

Flooding impacts was another topic discussed. Section 4.11 discusses how the City of Gulfport Erosion, Sediment, and Post-Construction Ordinance has controls to minimize the annual volume of surface water runoff which flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable. The increased runoff from Preferred Alternative C will be mitigated within a retention pond located south of the railroad and north of the proposed roadway. Consequently, the proposed project will not have an impact on the mapped FEMA floodplains. The Erosion, Sediment, and Post-Construction Ordinance is included in Appendix B. Most of the Preferred Alternative C alignment is located outside of the FEMA 500-year and 100-year floodplain limits. Approximately 3,800 feet is located within the 500-year floodplain associated with Turkey Creek. Approximately 60 feet of the Preferred Alternative C alignment is located within the mapped 100-year floodplain. This portion of the 100-year floodplain does not contribute to the conveyance of Turkey Creek and the mapped floodplain is the result of backwater from Turkey Creek along an existing unnamed stream that is a tributary to Turkey Creek. The unnamed stream is not a FEMA studied stream included within the FEMA Flood Insurance Study (FIS) and does not have established base flood elevations established by FEMA. Additionally, the project design, including the proposed retention pond, intends to maintain the existing drainage patterns and the rate of flow for the area draining to Turkey Creek in the project area. The construction of the roadway will increase runoff due to the additional impervious cover and drainage improvements. The increased runoff impacts will be mitigated within the retention pond located south of the railroad and north of the proposed roadway. Based on this information, the proposed project will not have an impact on the mapped FEMA floodplains. A Floodplain and Downstream Impact Assessment dated November 2020 was prepared as a supplement to this document for Preferred Alternative C and is contained in Appendix G. The assessment indicates that the proposed improvements, including the retention pond, will mitigate all peak runoff for the areas downstream, ensuring that the proposed project will have no impact on rainfall/runoff flooding in the Forest Heights subdivision or any downstream communities. In fact, the proposed improvements will decrease the existing potential rainfall/runoff flooding conditions in the Forest Heights community and areas

downstream by reducing the overland flow and discharging the stormwater runoff at a controlled rate. Without this project the proposed retention pond, such stormwater would not be controlled and would continue to affect areas downstream, as it has in the past. The project, therefore, will help reduce stormwater flow and enhance flooding protections for areas downstream and south of the interstate. The public was informed that a 2D HEC-RAS analysis was performed within the project area to analyze the existing drainage patterns and base floodplains and design the retention pond and the roadway hydraulic structures (roadside ditches, storm sewers, culvert crossings, etc.) to result in no increase in peak flows downstream of the project limits. The results of that analysis demonstrate that the proposed project will not increase the existing base floodplains and will not increase peak flows downstream to Turkey Creek, a FEMA studied stream with associated floodplains. This was done drainage mitigation assessment was performed to show that a retention pond would mitigate peak runoff for the areas downstream of the project to make certain that the proposed project would have no impact on rainfall/runoff flooding in the Forest Heights subdivision or any other downstream communities, and to ensure that the final design complies with 23 CFR Part 650.

The proposed stormwater retention improvements are not intended to abate the impacts of storm surge during a severe weather event. Throughout much of the study area, existing topography dictates that flooding impacts from storm surge will occur in the opposite direction from stormwater flow. Stormwater control structures are ineffective if submerged by storm surge. However, the proposed improvements will reduce overland flow discharge stormwater runoff from the proposed project area at a controlled rate. These benefits would delay not prevent or mitigate storm surge impacts but will reduce rainfall/runoff flooding by providing additional stormwater freeboard storage volume within the Turkey Creek floodplain basin.

Another topic was the impacts of wetlands. Section 4.10 discusses impacts to wetlands and the use of natural design components to increase flood storage capacity in the Turkey Creek drainage. A Floodplain and Downstream Impact Assessment dated November 2020 was prepared as a supplement to this document for Preferred Alternative C and is contained in **Appendix G**. Both the City of Gulfport and the USACE MsCIP program have recognized that flooding is an

existing problem in the Tuckey Creek watershed (USACE 2009). The USACE is currently implementing a project in the study area that fills Turkey Creek watershed wetlands in an effort to minimize flooding impacts on the Forest Heights community. The USACE has participated in the public involvement meetings for the Interconnecting Gulfport roadway project in an effort to inform residents of all the proposed projects that may provide improvements to the current situation regarding flooding.

Inquiries involving the proposed roadway were received regarding the intersections, future right-of-way, and expansion. Roundabouts are proposed to be in the design of the new Factory Shoppe Blvd & Airport Rd extension intersection and the new Daniel Blvd & Airport Rd extension intersection. Roundabouts are preferred over other intersection types as they promote a continuous flow of traffic. Traffic is not required to stop and have the potential to reduce delays. Roundabouts are also a safer alternative. The circle of a roundabout forces drivers to slow down and the most severe types of intersection crashes – right-angle, left-turn and head-on collisions – are unlikely. The new intersection at Airport Rd extension/Poole St & Old Highway 49 will be an improved traditional intersection with turn lanes due to right-of-way constraints and will be reviewed during the design phase of the project to determine the traffic control device that is warranted. Future widening will be considered in the proposed right-of-way for the 2-lane portions of Airport Road extension and Factory Shoppes Blvd to 4-lanes if traffic levels warrant additional lanes. There are no plans being developed at this time to expand further north or west.

Concerns regarding safety at the proposed retention pond was questioned by some individuals. The piers and gazebos at the retention pond may be for observation only with no fishing or swimming allowed. A fence may be installed around the perimeter of the pond to enhance safety. The city will continue coordinating with the community regarding access as design further refined.

Some of the comments received after the public meeting questioned the meeting notices, the public meeting format, requesting a need to address indirect and cumulative impacts, and an environmental justice analysis needed. The advertisement process, sending of meeting notices,

meeting format, and comment submissions all comply with Department of Transportation procedures. The environmental justice analysis is explained in this section (Section 4.4.2). The public involvement process is discussed in Section 5. An analysis of indirect and cumulative impacts is included in Section 4.20.

A comment was provided by a City Councilwoman requesting consideration of reconnecting Old 49 as an alternate. Old Highway 49 is a two-lane facility that was severed when Interstate 10 was constructed. This route was considered in Section 3 Alternatives Analysis and was not carried forward as an alternative for further study.

Comments were received regarding the prioritization of this project over the other project in the PEL study. This project was identified in the PEL study and advanced through multiple screening processes. It was included in the final recommendations. Of the seven projects recommended in the PEL study the Airport Road extension is the only corridor that falls within the City's jurisdiction. The other 6 projects are improvements to MDOT facilities. Five of the seven projects recommended in the PEL study are interrelated and are associated with the US 49/I-10 interchange. The Airport Road extension project does have independent utility.

Preferred Alternative C will not have direct connection to any of the streets of the Forest Heights Subdivision avoiding any direct impacts from increased traffic within the subdivision. Preferred Alternative C will not have any impacts on the ingress and egress from the Forest Heights Subdivision due to the access to the subdivision from Old Highway 49 is controlled with a four-way stop. However, the proposed project would have a positive effect on improved connectivity for the neighborhood offering access to the north while avoiding congestion of US 49. The sidewalks and multi-use lanes are in-line with the TCNGNC Plan.

Currently 34th Avenue serves as the primary route from Landon Road to the Canal I-10 Service Road. Landon Grove would not be affected by the project and will experience decreased traffic flow on 34th Avenue by the right-in and right-out intersection at 34th Avenue and the Daniel Boulevard extension proposed in Preferred Alternative C. Traffic patterns in the area would change with the construction of the roundabout on the northern side of I-10 providing direct

access to an extension of Daniel Boulevard on the eastern side of the roundabout and a relocation of the Canal I-10 Service Road on the western side of the roundabout. With 34th Avenue forming a side road intersection with the extension of Daniel Boulevard east of the roundabout, the extension of Daniel Boulevard will become the primary access to US 49 and the portion of Landon Road located east of the 34th Avenue/Landon Road intersection.

Through the public involvement process and review of previous studies it was discovered that potential stormwater impacts were a concern for the Forest Heights community. A drainage mitigation assessment was performed to show that the proposed improvements including a retention pond will substantially mitigate peak runoff for the areas downstream ensuring that the proposed project will have minimal impact on flooding in the Forest Heights subdivision or any downstream communities. In fact, the proposed improvements will decrease the existing potential flooding conditions in the Forest Heights community and areas downstream by reducing the overland flow and discharging the stormwater runoff at a controlled rate. The proposed project will not exacerbate flooding. Without this project, such stormwater would not be controlled and would continue to affect areas downstream as it has. The project, therefore, will help reduce stormwater flow and enhance flooding protections for areas downstream and south of the interstate. Region retention for stormwater is also being developed as part of the project.

Stormwater BMPs will be employed during construction to manage sediment and erosion control to maintain stormwater runoff quality. The retention pond with the native vegetation will improve the stormwater quality by allowing any sediments or other pollutants to settle in the pond and be filtered by the vegetation before being discharged downstream toward Forest Heights, other communities, and the Turkey Creek Watershed.

A comment was received regarding pollution. An air quality analysis was performed to determine any future non-standard concentration levels would result from the proposed project. The results determined that Preferred Alternative C is not a project of air quality concern the area, including Forest Heights Subdivision.

A noise study was performed to determine the impacts of the proposed project. Noise levels were recorded at varying locations at different times of the day along the project corridor and exterior noise levels were developed FHWA's Traffic Noise Model. There are no predicted noise impacts for Preferred Alternative C per federal and MDOT policies.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, on any neighborhood or community.

Preferred Alternative C

Through the steps of the Environmental Justice Analysis, Forest Heights Subdivision was identified to be an area to evaluate the project's effects. Numerous efforts were made to engage the Forest Heights community for participation and input. Two separate public meetings were held, in-person and virtually, to provide the citizens opportunities to become familiar with the project, ask questions, and provide comments. One of these meetings was held inside the Forest Heights Subdivision to be more accessible to the residents. Individual one-on-one meetings were held with Forest Heights residents to gain participation from the community. Preferred Alternative C addresses the concerns received from the residents regarding flooding, stormwater runoff, wetlands, and agreement with the TCWIP and TCNGNCP. The drainage mitigation assessment performed showed that the proposed improvements including a retention pond will improve the drainage for the areas downstream ensuring that the proposed project will have minimal impact on flooding in the Forest Heights subdivision or any downstream communities. The retention pond and other BMPs will improve the stormwater runoff quality for Forest Heights and Turkey Creek. The project will have no effect on storm surge that has often been a concern expressed by the community. As previously discussed, the only time the Forest Heights levee has been overtopped was in 2005 related to storm surge from Hurricane Katrina. The Forest Heights levee was approximately 16 feet above sea level in 2005 when Hurricane Katrina overtopped the levee. Both the City of Gulfport and the USACE have recognized improvements were needed to the Forest Heights levee following Hurricane Katrina. There is an active USACE project to raise

the levee from 16 feet to 21 feet above sea level. Coordination is ongoing with the USACE, the City of Gulfport, and roadway designers to make sure USACE improvements provide additional protection from storm surge.

Wetlands will be mitigated in accordance with the permitting agency and mitigation will occur within the Turkey Creek Watershed pending availability within the Turkey Creek Watershed and/or any other wetland mitigation banks as required by USACE. The proposed project and retention pond amenities comply with many of the objectives of the TCWIP and TCNGNCP such as increasing non-vehicular and vehicular access to businesses and amenities safely, stimulating economic development opportunities, and installing stormwater mitigation to aid the flooding of the area, provide education to adults and youth, and increase recreation resources to improve community health. An air quality analysis and a noise study deemed the proposed project to be of no concern to the Forest Heights Subdivision and surrounding areas. With the results from the Environmental Justice Analysis, Preferred Alternative C will not result in a disproportionately high and adverse impact to any minority or low-income population, including the Forest Heights Subdivision, Landon Grove, or any other area along the Preferred Alternative.

4.4.3 Relocations

In general, relocation is considered necessary when a site would be directly in the path of the proposed roadway, access would be eliminated, or when the roadway would cause a reduction in use of the property.

Preferred Alternative C has been located to avoid displacing any residences, businesses and non-profit facilities.

No Build Alternative

The No Build Alternative will not displace any residences, businesses or non-profit facilities, but it would not address the purpose and need of the project.

Preferred Alternative C

Preferred Alternative C meets the purpose and need for this study without displacing any residence, business, or non-profits facility.

4.5 Considerations Relating to Bicyclists and Pedestrians

The safe accommodation of pedestrians and bicyclists was given full consideration during the development of this study.

A common statement made at multiple meetings with local stakeholders, meetings with representatives of the local communities, and from the public meeting comments (included in **Appendix J**) was to utilize the Turkey Creek and North Gulfport Neighborhoods Community Plan in developing this project. One of the major priority issues listed in *The Community's Plan for the Turkey Creek and North Gulfport neighborhoods* is to provide pedestrian and bicycle traffic safe access at Highway 49. A copy of the complete plan is in **Appendix C**.

The project team recognized the need for multiuse pathways for bicyclists and pedestrians between the highly trafficked areas near the I-10 corridor. This project directly addresses this need by providing multi-use pathways and sidewalks west of Highway 49 to access neighborhoods, schools, and businesses in North Gulfport.

No Build Alternative

The No Build Alternative would not improve accommodations for pedestrians and bicyclists on Highway 49 to commercial and residential areas in North Gulfport. The No Build Alternative would also not improve connectivity for bicyclists and pedestrians between the North Gulfport, Forest Heights, and Turkey Creek communities.

Preferred Alternative C

Preferred Alternative C will provide accommodations for pedestrians and bicyclists from the west side of the Old 49 reconstructed intersection with Poole Street south of I-10, to the roundabout at an extension of Factory Shop Boulevard south of I-10, across the new bridge over I-10, to the

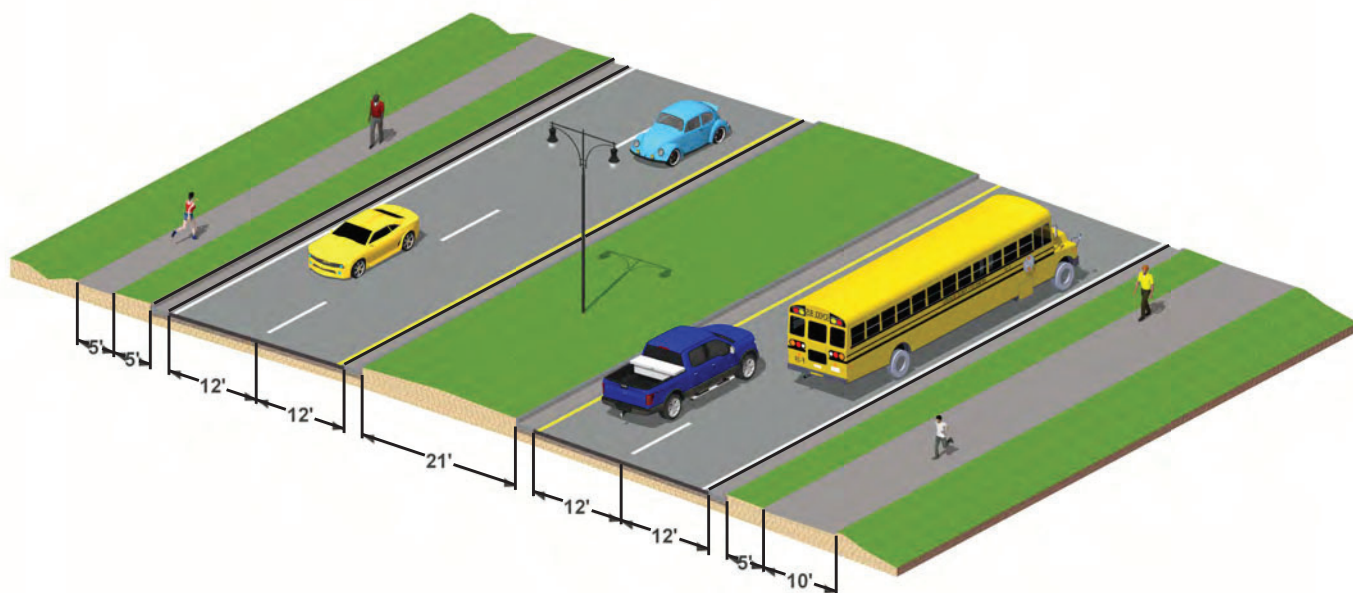
roundabout north of I-10. Preferred Alternative C will also accommodate pedestrians and bicyclists for: the relocation of Factory Shop Boulevard south of I-10; the relocation of the I-10 Canal Service Road north of I-10; and the extension of Daniel Boulevard north of I-10.

As a minimum, Preferred Alternative C will have a 10-foot-wide multiuse pathway on one of its sides in coordination with the Turkey Creek and North Gulfport Neighborhoods Community Plan as mentioned by the local stakeholders, local community representatives, and the public meeting comments. Typically, it will have a 10-foot-wide multiuse pathway on one side and a 5-foot wide sidewalk on the other side. Guardrail will be provided on the approaches to the new I-10 bridge and provide protection for users on the bicycle/pedestrian paths. The new I-10 Bridge will be constructed with a concrete barrier located between the roadway traffic and the bicycle/pedestrian paths for the safety of the users of the paths. The multiuse pathway and sidewalk will provide pedestrians and bicyclists a safe alternative to using U.S. Highway 49 that has no bicycle or pedestrian facilities.

Figures 4-5 through **4-7** depict the pathways described above between the western sides of the reconstructed Old US 49 intersection with Poole Street and the I-10 Bridge. **Figures 4-8** depicts the pathways on the I-10 Bridge. **Figures 4-9** through **4-11** are typical roadway sections depicting the pathways for the portion of the project that would be located between the I-10 Bridge and the roundabout north of the bridge as well as for the relocation of the Canal I-10 Service Road and the extension of Daniel Boulevard. **Figure 4-12** indicates that no pathways are located on 34th Avenue. The roadway typical sections contained in **Appendix B** provide more detail.

Preferred Alternative C will accommodate pedestrians and bicyclists from the Turkey Creek and North Gulfport communities and improve the quality of life for residents. The Preferred Alternative C will also be an enhancement to the residential neighborhoods in the area in accordance with the Turkey Creek and North Gulfport Neighborhoods Community Plan.





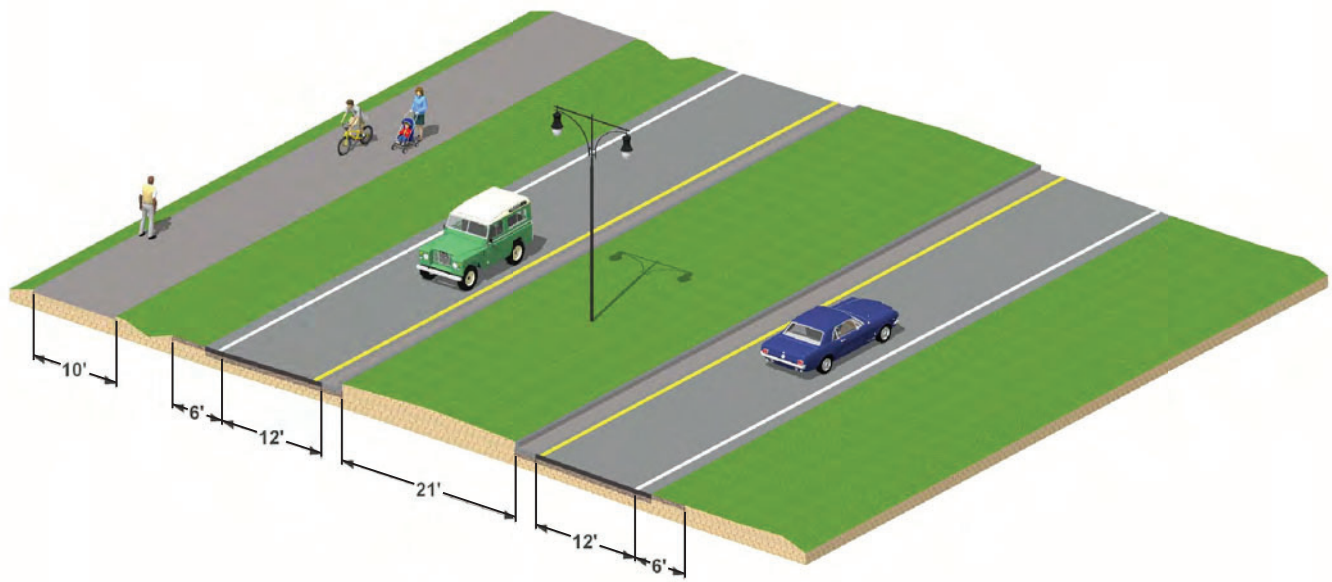
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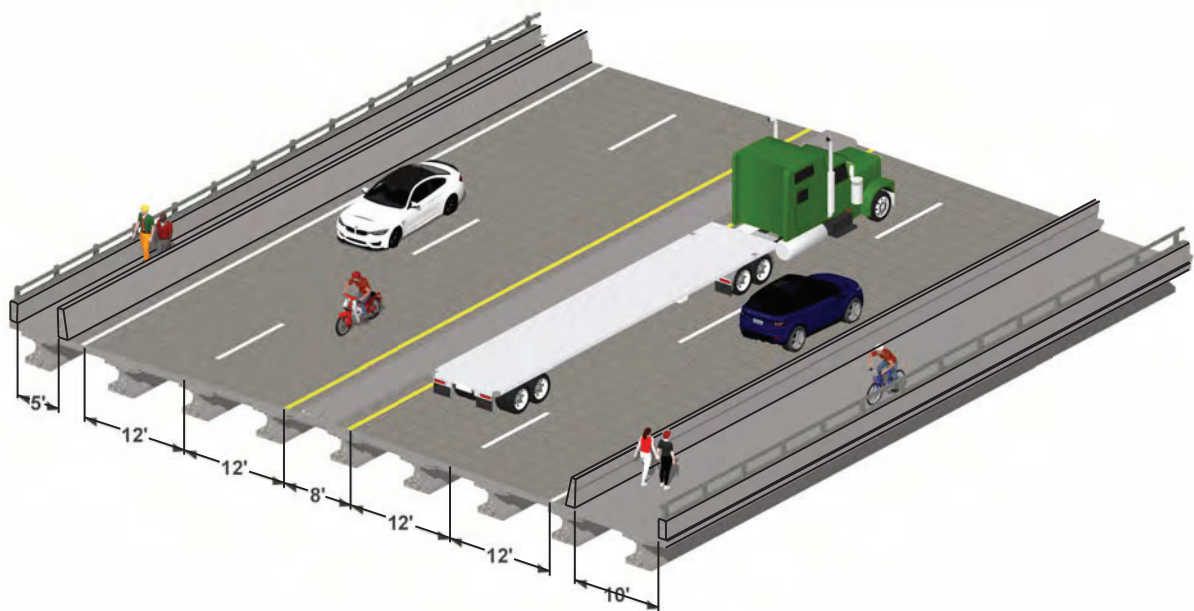
NEEL-SCHAFER
Solutions you can build upon

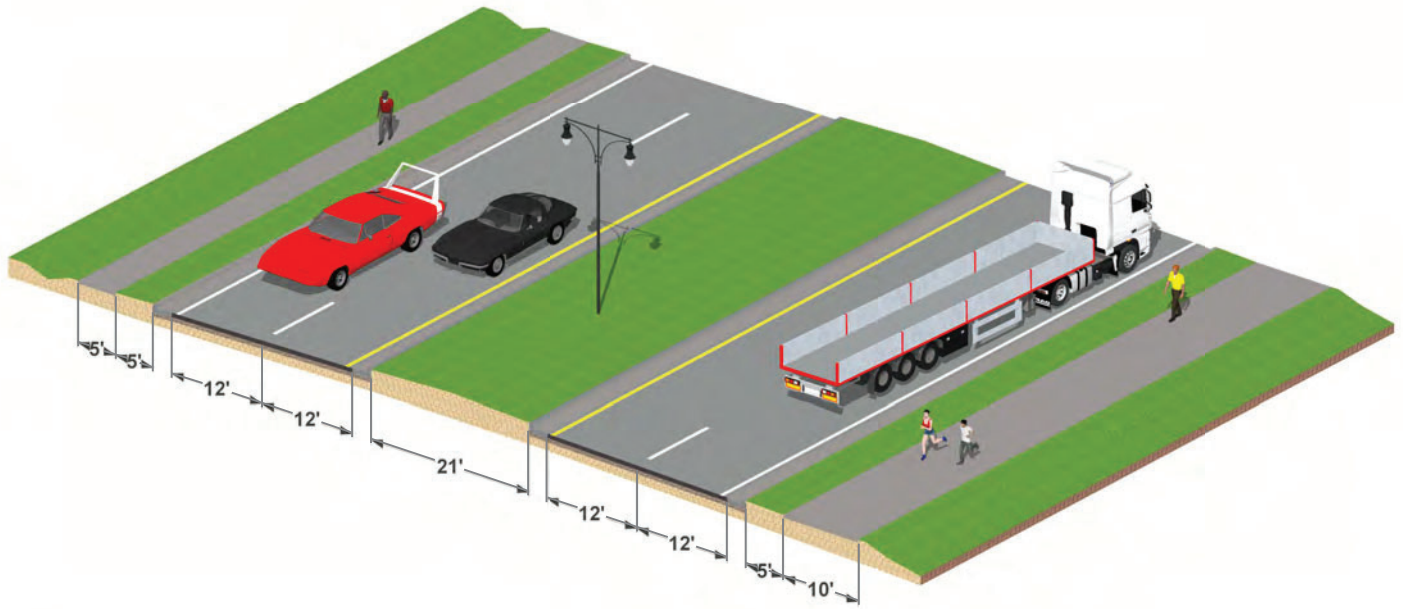
Airport Road Extension
(From Creosote Road/ Factory Shop Blvd
to I-10 Bridge)

FIGURE: 4-6

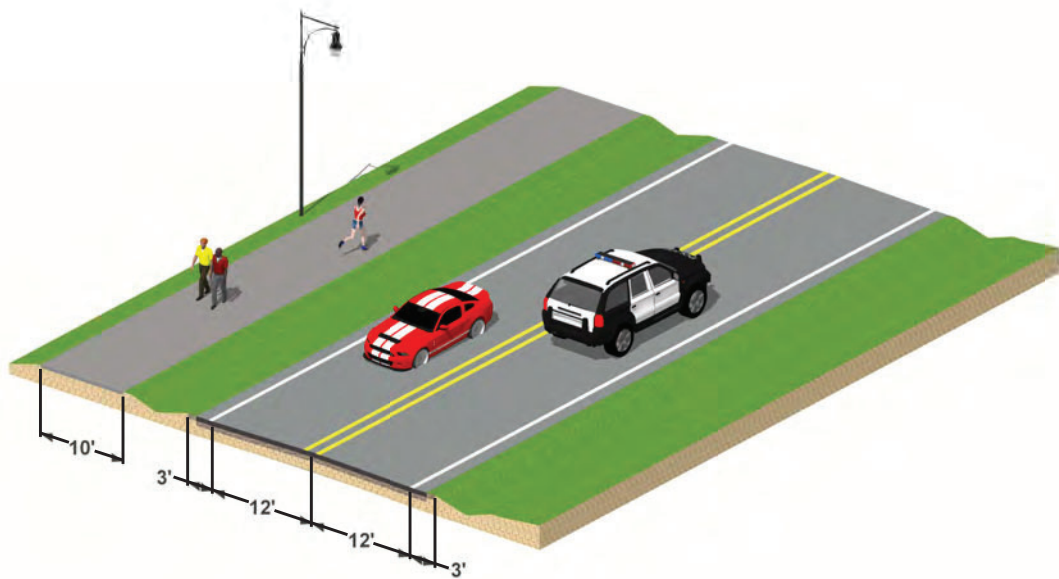


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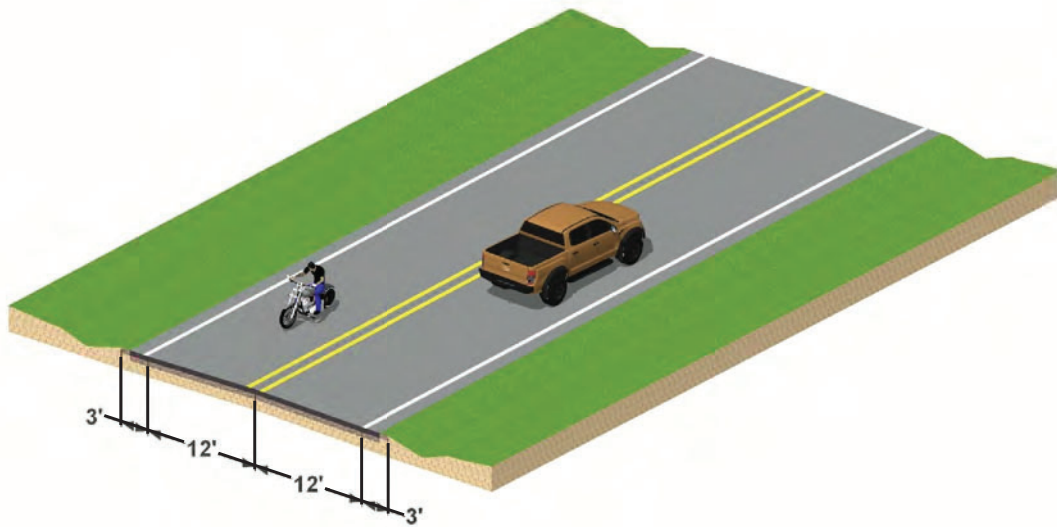




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4.6 Air Quality

The Clean Air Act (CAA), last amended in 1990, requires the U.S. Environmental Protection Agency (USEPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. Harrison County is located in USEPA Region 4. The USEPA has classified Harrison County as being an attainment area for all NAAQS criteria pollutants. However, due to concern surrounding increased impacts of heavy vehicles, a qualitative PM_{2.5} air quality analysis was performed. The intersections of interests are:

- US 49 and Airport Road
- US 49 and Creosote Road
- US 49 and Crossroads Parkway
- Old Magnolia Road and Landon Road

A microscale hotspot air quality analysis was performed to determine future PM_{2.5} concentrations resulting from the proposed project. A hot-spot analysis is defined in 40 CFR 93.101 as an estimation of likely future localized pollutant concentrations and a comparison of those concentrations to the relevant NAAQS. MOVES and CAL3QHC along with EPA guidance – “Transportation Conformity Guidance for Quantitative Hot-spot Analysis in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas” were used to predict the PM_{2.5} concentration near sensitive receptors at all intersections of interest. Parameters and variables for inclusion in this program were consistent with EPA guidance.

The maximum predicted PM_{2.5} concentrations for the evaluation year of 2045 Build conditions for all study intersections was determined to be 0.50 ppm. None of the identified receptors experienced an exceedance of the NAAQ standards. See the **Appendix D** for output data.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon air quality in the project area.

Preferred Alternative C

Based on the microscale model results, it was determined that the Interconnecting BUILD Grant Roadway Project is not a project of air quality concern. Based on the regional conditions and surrogate site analysis conducted for proposed roadway, it has been determined that the intersections of interest meet all the project level conformity requirements relating to the annual PM_{2.5} standard. Further, it has been extrapolated based on the analyzed data that the completion of the roadway project will not cause or contribute to a new violation of the PM_{2.5} NAAQS or increase the frequency or severity of a violation or interfere with any interim milestones.

Air emissions would result from construction activities within the corridor for the Preferred Alternative C. Potential emissions from construction equipment include nitrogen oxide (NO), sulfur dioxide (SO₂), carbon monoxide (CO), hydrocarbons (HC), and particulate matter (PM). However, these emissions would be of a relatively small amount and would have a short-term impact.

Proper and routine maintenance of all construction equipment would be implemented to ensure that air emissions are within the design standards of the piece of equipment. Project-related emissions would be minimized by the implementation of Best Management Practices (BMPs) in the form of a truck-watering program for dirt surfaces, construction curtailed in times of high winds and efficient utilization of equipment to minimize the amount of time engines are left idling.

4.7 Noise

A separate technical report titled *Traffic Noise Analysis Technical Report for Interconnecting Gulfport Build Grant Harrison County, MS November 2020* was prepared and is included as an **Appendix E** supplement to this document. The noise study methods and results are covered in detail in the noise study report. However, the noise study is summarized for convenience in the following paragraphs.

Fundamentals of Sound and Noise

Sound is the vibration of air molecules in waves, like ripples on water. When these vibrations (or sound waves) reach our ears, we hear what we call sound. These sound waves are produced by objects, which move back and forth very rapidly, such as our vocal cords when we speak. The rate at which these objects move back and forth is called their frequency. The frequency of the moving objects determines the frequency, or pitch, of the sound. Human ears can only hear sound waves with a frequency between approximately 20 cycles per second and 15,000 cycles per second.

The intensity or loudness of sound is measured in units called decibels (dB). Since the human ear does not hear sound waves of different frequencies at the same subjective “loudness”, an adjustment or weighting of the high-pitched and low-pitched sounds is made to approximate how an average person hears sounds. When such adjustments to the sound levels are made, they are called “A-weighted levels” and are usually labeled “dBA.”

The decibel scale for measuring the intensity of sound is based on the logarithm of the sound level pressure relative to a reference sound level pressure. Because of the logarithmic nature of the decibel scale for sound levels, changes in sound levels are complex to define. For example, if a sound of 60 dBA is added to another sound of 60 dBA, the resulting sound is 63 dBA instead of 120 dBA. **Table 4-6** presents some common A-weighted noise levels.

Noise is defined as unwanted sound. Since highway traffic sound is normally unwanted, highway traffic sound is usually called highway traffic noise. The level of highway traffic noise is never constant; therefore, it is necessary to use a statistical descriptor to describe the varying traffic noise levels. The equivalent continuous sound level (Leq) is the statistical descriptor used in the noise report.

Table 4-6. Common Indoor and Outdoor Noise Levels

| Common Outdoor Noise Levels | Noise Level (dBA) | Common Indoor Noise Levels |
|--|-------------------|---|
| Jet Flyover at 1,000 ft. | 110 | Rock Band |
| Gas Lawnmower at 3 ft. | 100 | |
| Diesel Truck at 50 ft. | 90 | Inside Subway Train (New York) |
| Noisy Urban Daytime | 80 | Food Blender at 3 ft. Garbage Disposal at 3 ft. Shouting at 3 ft. |
| Gas Lawn Mower at 100 ft. | 70 | Vacuum Cleaner at 10 ft. Normal Speech at 3 ft. |
| Commercial Area Heavy Traffic at 300 ft. | 60 | Large Business Office |
| Quiet Urban Daytime | 50 | Dishwasher Next Room |
| Quiet Urban Nighttime | 40 | Small Theater, Large Conference Room (Background) Library |
| Quiet Suburban Nighttime | 30 | Bedroom at Night Concert Hall (Background) |
| Quiet Rural Nighttime | 20 | Broadcast and Recording Studio |
| | 10 | Threshold of hearing |
| | 0 | |

Source: *Fundamentals and Abatement of Highway Traffic Noise*, Bolt Beranek and Newman Inc., June 1973

Data Collection and Analysis

Noise level measurements were recorded at eight (8) sites using a Larson Davis SoundTrack LxT sound level meter. The measurements were taken for 15 minutes during the estimated peak traffic periods of the day. Estimates of the exterior noise levels were developed using the FHWA's Traffic Noise Model (TNM).

Noise Level Estimates

Estimates of the exterior noise levels at all noise sensitive, occupied facilities in the vicinity of the proposed project were made using TNM. Traffic noise level predictions were made for: 1) Base Year 2025 conditions; 2) Design Year 2045 conditions if the proposed project is constructed (i.e., Build Alternative or Preferred Alternative C); and 3) Design Year 2045 conditions if the proposed

project is not constructed (i.e., No-Build Alternative). In making these estimates, the traffic volume, operating speed, intervening buildings, and terrain were considered.

Traffic Data

23 CFR 772 states that "in predicting noise levels and assessing noise impacts, traffic characteristics which will yield the worst hourly traffic noise impact on a regular basis for the design year shall be used." Since the level of highway traffic noise is normally related directly to the traffic volume, the traffic characteristics which will yield the worst hourly traffic noise impact on a regular basis for the design year will be the Design Hourly Volume (DHV).

Output from the Gulf Regional Planning Commission provided Base Year 2025 and Design Year 2045 "base volumes" were used to predict traffic noise levels. For the Build Alternative (Preferred Alternative C), design speeds of 45 mph for Airport Road Extension and 35 mph for Daniel Boulevard and Canal I-10 Service Road were provided by Neel-Schaffer, Inc. For the Base Year, No-Build, and Build cases, the posted speeds of 70 mph for I-10, 50 mph for US 49, and 30 mph for Old Highway 49 were used and modeled.

Traffic Noise Results

Eight noise sensitive receptors are located in the vicinity of the proposed project: Five are residential and three are motel swimming pools. None of these facilities have Base Year 2025 traffic noise levels approaching or exceeding the Noise Abatement Criteria (NAC).

The No-Build noise levels at the noise sensitive receptors in the Design Year 2045 are expected to be approximately 0 - 1 dBA higher than the Base Year noise levels if the proposed project is not constructed. Noise impacts are not predicted at any of the noise sensitive receptors.

The predicted noise levels for the Build Alternative (Preferred Alternative C) at the residences are below 66 dBA and predicted noise levels at the motel swimming pools are below 71 dBA. Therefore, these uses are not impacted based on the NAC. Predicted noise levels are 0 to 7 dBA higher than existing noise levels. These increases are below MDOT's threshold of 15 dBA.

There are no predicted traffic noise impacts per 23 CFR 772 and MDOT's noise policy; therefore, noise abatement is not considered for this project.

No Build Alternative

The No-Build noise levels at the noise sensitive receptors in the Design Year 2045 are expected to be approximately 0 - 1 dBA higher than the Base Year noise levels if the proposed project is not constructed. Noise impacts are not predicted at any of the noise sensitive receptors.

Preferred Alternative C

The predicted noise levels for the Preferred Alternative C at the residences are below 66 dBA and predicted noise levels at the motel swimming pools are below 71 dBA. Therefore, these uses are not impacted based on the NAC. Predicted noise levels are 0 to 7 dBA higher than existing noise levels. These increases are below MDOT's threshold of 15 dBA.

There are no predicted traffic noise impacts per 23 CFR 772 and MDOT's noise policy; therefore, noise abatement is not considered for this project.

4.8 Water Quality

The proposed project is located within the Big Lake-Bernard Bayou watershed, hydrologic unit code 031700090702. This watershed includes Turkey Creek and Bernard Bayou. In 2005, the USEPA and the Mississippi Department of Environmental Quality (MDEQ) designated the Big Lake-Bernard Bayou Watershed as a priority watershed. In keeping with the Turkey Creek Watershed Implementation Plan, the City, in conjunction with local conservation partners, has purchased acreage identified as priority conservation areas and will continue to work with local, state, and federal entities to help complete connectivity goals along Turkey Creek reaching from Long Beach to the confluence with Bernard Bayou. The city has been instrumental in participating in *Replant South Mississippi* and has revised their city-wide tree ordinance aimed at protecting indigenous species. The city has placed an emphasis on promoting and creating a gateway to visitors into the city by planting indigenous tree species along Highway 49 and at the I-10/Highway 49 Interchange.

In 1998, a segment of Turkey Creek was included on the MDEQ Section 303(d) list of impaired waterbodies due to fecal coliform. At that time, MDEQ projected that a 52% reduction was needed to meet water quality standards. The suspected primary source of fecal coliform was attributed to pollution from failing septic tanks and accidental spills from the municipal wastewater collection system during flood events.

Further, a TMDL, a measurement of the amount of a pollutant that can be present without violating the water quality standard, for low pH was developed in this segment of Turkey Creek in 2001. The low pH is likely a result of stormwater runoff draining through the forested and marshy terrain containing decaying vegetation.

Since these TMDLs were developed, the city has placed an emphasis on improving water quality standards for not only Turkey Creek, but also the general region. A regional wastewater collection and treatment system has been established and upgraded which drastically improved wastewater pollution including failing septic systems and spills during flood events. The city has participated in supporting increased Best Management Practices and in education projects regarding water quality. The construction project will require a Large Construction Notice of Intent (LCNOI) which will include a Stormwater Pollution Prevention Plan (SWPPP).

As of this date, Turkey Creek has been removed from the MDEQ 2020 List of Impaired Water Bodies. Turkey Creek has been re-assigned to a Category 4C water due to hydrologic alterations that have reduced the size of the drainage area. EPA's Integrated Reporting Guidance (IRG) explains that a water may be placed in Category 4C if data indicates that at least one designated use is not being met, but the impairment is not caused by a pollutant, but by pollution. Per MDEQ's declassification decision form, Turkey Creek was delisted due to altered hydrology and drastically reduced drainage area. In 2006 a canal was constructed by the USACE that connects to Turkey Creek and adversely affects the stream's ability to move sediment downstream. Prior to construction of the canal, the Turkey Creek drainage area was approximately 14.35 square miles. Since the canal was constructed, the Turkey Creek drainage area has been reduced to 0.39 square miles with the remainder diverted into the new canal.

Regardless of the fact that Turkey Creek has been re-assigned to a Category 4C water and is no longer on the MDEQ list of impaired waters, the City of Gulfport remains committed that water quality continues to not degrade. The city is further committed to ensuring that this project will not cause a regression in water quality improvements, but rather will be a component of the continued water quality improvements for Turkey Creek and the Big Lake-Bernard Bayou watershed.

Section 305(b)

The 305(b) Report is prepared to describe for the USEPA, the U.S. Congress, and the public the status of the quality of Mississippi's waters. The report details the causes and sources of pollution, pollution control programs for point and non-point sources, any environmental improvements over the past two years, the water quality monitoring program and/or special studies, groundwater quality issues, and recommendations for needed studies, programs and/or funding.

The water quality assessment process begins with the collection and compilation of available data (including but not limited to chemical, physical, bacteriological, toxicological, and/or biological [e.g., macroinvertebrate, fish, and algal community measurements]) followed by the analysis of water quality data and information for the purpose of determining the quality of the state's surface water resources. Surface waters in Mississippi are used for a number of purposes. Waters are used for drinking and food processing, shell-fishing, recreation, fishing, and aquatic life support. Water bodies are designated and assigned various use classifications by MDEQ in the state's Water Quality Standards (11 Miss. Admin. Code Pt. 6, Ch. 2). This designation is made based on the use(s) of the water body as identified by the public and other entities. The use classifications and associated USEPA designated uses for water quality assessment purposes recognized by the State of Mississippi are as follows: Public Water Supply (Drinking Water Supply), Recreation (Contact Recreation), Fish and Wildlife (Aquatic Life Use, Fish Consumption, Secondary Contact Recreation), and Shellfish Harvesting (Shellfish Consumption).

Most of Mississippi's waters are classified as "Fish and Wildlife". For each of the use classifications, there are various water quality criteria that apply to those water body uses. Mississippi's Water Quality Standards specify the appropriate levels for which various water quality parameters or indicators support a water body's designated use(s). Each use assessed for a water body is determined to be either "Attaining" or "Not Attaining" in accordance with the applicable water quality standards and USEPA guidelines for assessments pursuant to Section 305(b).

After assessing attainment status of the water body's designated use(s), each water body is assigned to an assessment unit that defines the length of the reach assessed and is placed into one of five assessment categories as per USEPA guidance.

Section 303(d)

Mississippi's 2018 Section 303(d) List of Impaired Water Bodies fulfills the state's obligation with respect to Section 303(d) of the CWA to develop a listing of the state's impaired waters. MDEQ's Section 303(d) list and the Section 305(b) report are not physically integrated, but the lists are meant to have a one-to-one relationship in that all of the water body segments found in the Section 305(b) report listed in Category 5 are also listed in Section 303(d) list.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon water quality.

Preferred Alternative C

Impacts to water quality are possible during construction phases of the Preferred Alternative C. Erosion during and after the construction of the proposed roadway can contribute large amounts of sediment and silt to runoff waters, resulting in deteriorated water quality. Surface water runoff could increase turbidity, lower dissolved oxygen, and increase biological oxygen demand in receiving waterbodies. Heavy metals, oils, other toxic substances, and debris from construction traffic and spillage can be absorbed by soil at construction sites and carried with

runoff water. **Table 4-7** lists the pollutants commonly found in runoff from roads, highways, and bridges and their sources.

Construction materials will be stored and disposed of such that they are not discharged into or alongside of streams and other water bodies. Construction measures will be determined for minimizing water quality impacts for water bodies once final design is completed. The BMPs would be implemented and a SWPPP would be prepared to minimize the potential for erosion and sedimentation during construction. Erosion and sediment control certified construction personnel will implement and maintain BMPs in an effort to prevent further degradation of the watershed.

Table 4-7. Typical Pollutants Found in Runoff from Roads and Highways

| Pollutant | Primary Source |
|-----------------------|---|
| Particulates | Pavement wear, vehicles, maintenance |
| Nitrogen & Phosphorus | Roadside fertilizer application |
| Lead | Leaded gasoline (auto exhaust), tire wear (lead oxide filler material), lubricating oil and grease, bearing wear |
| Zinc | Tire wear (filler material), motor oil (stabilizing additive), grease |
| Iron | Auto body rust, steel highway structures (guard rails, bridges, etc.), moving engine parts |
| Copper | Metal plating, bearing and bushing wear, moving engine parts, brake lining wear, fungicides and insecticides |
| Cadmium | Tire wear (filler material), insecticide application |
| Chromium | Metal plating, moving engine parts, brake lining wear |
| Nickel | Diesel fuel and gasoline (exhaust), lubricating oil, metal plating, bushing wear, brake lining wear, asphalt paving |
| Manganese | Moving engine parts |
| Petroleum | Spills, leaks or blow-by of motor lubricants, antifreeze and hydraulic fluids, asphalt surface leachate |

Source: USEPA 1993

Because implementation of Preferred Alternative C would encompass five or more acres of construction, a Mississippi Large Construction Storm Water General Permit will be required. Erosion control and sediment control measures would be in accordance with this permit as

obtained from the Office of Pollution Control of the MDEQ. The MDEQ would be contacted prior to the commencement of construction to obtain the necessary permits.

As a result, implementation of Preferred Alternative C could result in short-term, adverse effects to water quality. These effects would be reduced with the proper implementation of BMPs and adherence to the SWPPP.

Several measures will be considered during the design, such as: small road shoulders to reduce the impacts to regulated waters; the incorporation of detention/retention into the project for the purpose of collecting, storing, and treating runoff to eliminate and/or reduce adverse effects to water quality as well as increased runoff; and avoidance of critical wastewater infrastructure.

4.9 Water Resources

4.9.1 Surface Water

The proposed project is located within the Big Lake-Bernard Bayou watershed, hydrologic unit code 03170009, of the Mississippi Coastal Streams Basin. The Turkey Creek hydrologic unit code is 031700090702. It flows approximately 12.9 miles in a southeastern direction from its headwaters until its confluence with Bernard Bayou. The basin drains approximately 11,000 acres.

The project area contains stream crossings with intermittent classification. This stream is an unnamed tributary to Turkey Creek.

The potential Waters of the U.S. impacts for the intermittent stream traversed by the Preferred Alternative C are summarized in **Table 4-8** contained in Section 4.10 (Wetlands and Waters of the U.S.). Impacts to surface waters are also addressed in Sections 4.9 (Water Quality) and 4.10 (Wetlands and Waters of the U.S.).

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon surface water within the project area.

Preferred Alternative C

Approximately 3,726 linear feet of intermittent stream would be potentially impacted by Preferred Alternative C. These potential impacts are depicted in **Figure 4-13** contained in Section 4.10 (Wetlands and Waters of the U.S.). Final impacts to this stream have not been determined. Every effort to avoid and minimize impacts to this stream will be made during the final design of the proposed project.

Construction materials will be stored and disposed of such that they are not discharged into or alongside of streams and other water bodies. Trained construction inspectors will implement and maintain BMPs to reduce erosion and sedimentation impacts.

As mentioned previously in Section 4.8 Water Quality, erosion control measures would be in accordance with the Mississippi Stormwater Construction General Permit obtained from the Office of Pollution Control of the MDEQ.

Stormwater runoff quality will be managed with use of BMPs during construction to minimize discharge to surface waters.

4.9.2 Groundwater

The project area is located within the limits of the Coastal Lowlands Aquifer System (USGS 1998). The Coastal Lowlands aquifer extends through parts of Mississippi, Louisiana, Alabama, Florida, and Texas. Recharge to this system generally occurs from precipitation in the recharge areas to the north. Ground-water flow is generally toward the coast and laterally toward the Mississippi River. The project area is not located within an aquifer designated as a sole-source aquifer by the USEPA (USEPA 2020). The USEPA defines a sole source aquifer as an underground water

source that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer.

The Miocene aquifer system, found within the project area, is an aquifer within the Coastal Lowlands Aquifer System. The area is underlain by a series of deltaic and estuarine sediments that are composed mostly of clay, silt, sand, and irregular beds of gravel. In Mississippi the aquifer ranges from 1,200 - 3,000 feet thick.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon ground water within the project area.

Preferred Alternative C

No impacts to ground water are anticipated because of Preferred Alternative C. Safe handling of hazardous construction materials, in accordance with all local, state, and federal regulations, and maintaining construction equipment in good working order would minimize the potential for leaks and spills of hazardous materials and consequent water contamination.

4.10 Wetlands and Waters of the U.S.

Background

The objective of the CWA is to maintain and restore the chemical, physical, and biological integrity of the Waters of the United States. Section 404 of the CWA authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material into Waters of the U.S., including deep-water habitats, special aquatic sites, and wetlands. The U.S. Army Corps of Engineers (USACE) has the authority to make decisions regarding the jurisdictional status of a wetland. Therefore, the USACE should be contacted prior to disturbance of any area identified in this report. Areas of the subject property which are determined to be Waters of the U.S. and which meet the wetland criteria outlined in the 1987 USACE Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of

Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain (2010) are hereafter referred to as potential jurisdictional wetlands.

The USACE manual defines wetlands as:

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

In order for an area to be considered a jurisdictional wetland by the USACE, it must have evidence of hydrophytic vegetation, hydric soils, and wetland hydrology during the growing season. Under normal circumstances (site not altered in the last 5 years), the absence of any one of these three parameters results in a non-jurisdictional determination. If disturbed conditions are present, then consideration must be given to what conditions would have been present had the disturbance not occurred.

Should non-jurisdictional wetlands and/or other waters be present within the project area, coordination with MDEQ would occur. The city intends to work with non-governmental organizations on several fronts: design features to address runoff and water quality into the Turkey Creek watershed; design features to address runoff and water quality into Turkey Creek; and avoidance, minimization, and compensatory mitigation of regulated waters and associated habitat.

Methods

Survey area boundaries were determined utilizing the most current design plan for the Preferred Alternative C alignment. Biologists used aerial photography, the Soil Survey of Harrison County, Mississippi (USDA 1963), and a list of hydric soils, along with a field survey to produce an accurate delineation of the potential jurisdictional wetlands and Waters of the U.S. within the Preferred Alternative C alignment.

The ecological/wetland study was completed in April of 2020 and addressed the Build Alternative (Preferred Alternative C). The study was initiated to document the location and status of

wetlands and other Waters of the U.S. within the corridor. Field reviews were conducted between April 22, 2020, and April 28, 2020, for Preferred Alternative C. Hydrologic, vegetative, and soil characteristics of each wetland were recorded during the field surveys.

A jurisdictional determination to verify these findings has not been requested from the USACE. A letter dated January 26, 2021, was sent to the USACE seeking comment on the project. A formal wetland delineation was conducted for the Preferred Alternative C and is incorporated by reference. The final delineation report must be submitted to the USACE MDOT liaison requesting a jurisdictional determination prior to any construction activities. Consultation with USACE would then continue until the necessary Department of Army permits are obtained. The USACE has the authority to make the final decision regarding the jurisdictional status of Waters of the U.S. including wetlands within the Preferred Alternative C alignment.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, on wetlands and/or Waters of the U.S.

Preferred Alternative C

A separate technical report for the Build Alternative (Preferred Alternative C) titled *Wetland and Other Waters Assessment, Gulfport Interconnecting Roadway, Harrison County, Mississippi* dated April 2022 was prepared as a supplement to this document. A copy of the report is contained in **Appendix F**.

A breakdown of jurisdictional features within the Preferred Alternative C alignment is shown in **Table 4-8**. The locations of these potential jurisdictional features are shown in **Figure 4-13**.

Implementation of the Preferred Alternative C would require the acquisition of right-of-way resulting in impacts to wetlands and Waters of the U.S. Providing Preferred Alternative C would involve standard construction activities including placement of fill, ditching and adding culverts, and a new bridge over Interstate 10. The placement of fill associated with implementation of the Preferred Alternative C will require a permit from the USACE under Section 404 of the CWA. To

offset the loss of wetlands and streams, mitigation credits would be purchased from USACE approved mitigation banks within the Turkey Creek watershed pending availability. There are currently 79 wetlands credits available to purchase from mitigation banks in the direct vicinity of Turkey Creek and approximately 1,000 credits available for purchase in wetland mitigation banks within the Turkey Creek watershed service area.

Preferred Alternative C includes the utilization of an existing wetland area for the construction of a retention basin within a proposed City of Gulfport easement. Natural design components will be used in the development of the retention basin that will provide wetlands and habitats in addition to the retention volume. As part of the basin construction, the flow along an intermittent stream would be improved to facilitate the flow of stormwater to the basin. In fact, the proposed improvements will decrease the existing potential flooding conditions in the Forest Heights community and areas downstream by reducing the overland flow and discharging the stormwater runoff at a controlled rate. Without this project, such stormwater would not be controlled and would continue to affect areas downstream as it has. The project, therefore, will actually help reduce stormwater flow and enhance flooding protections for areas downstream and south of the interstate.

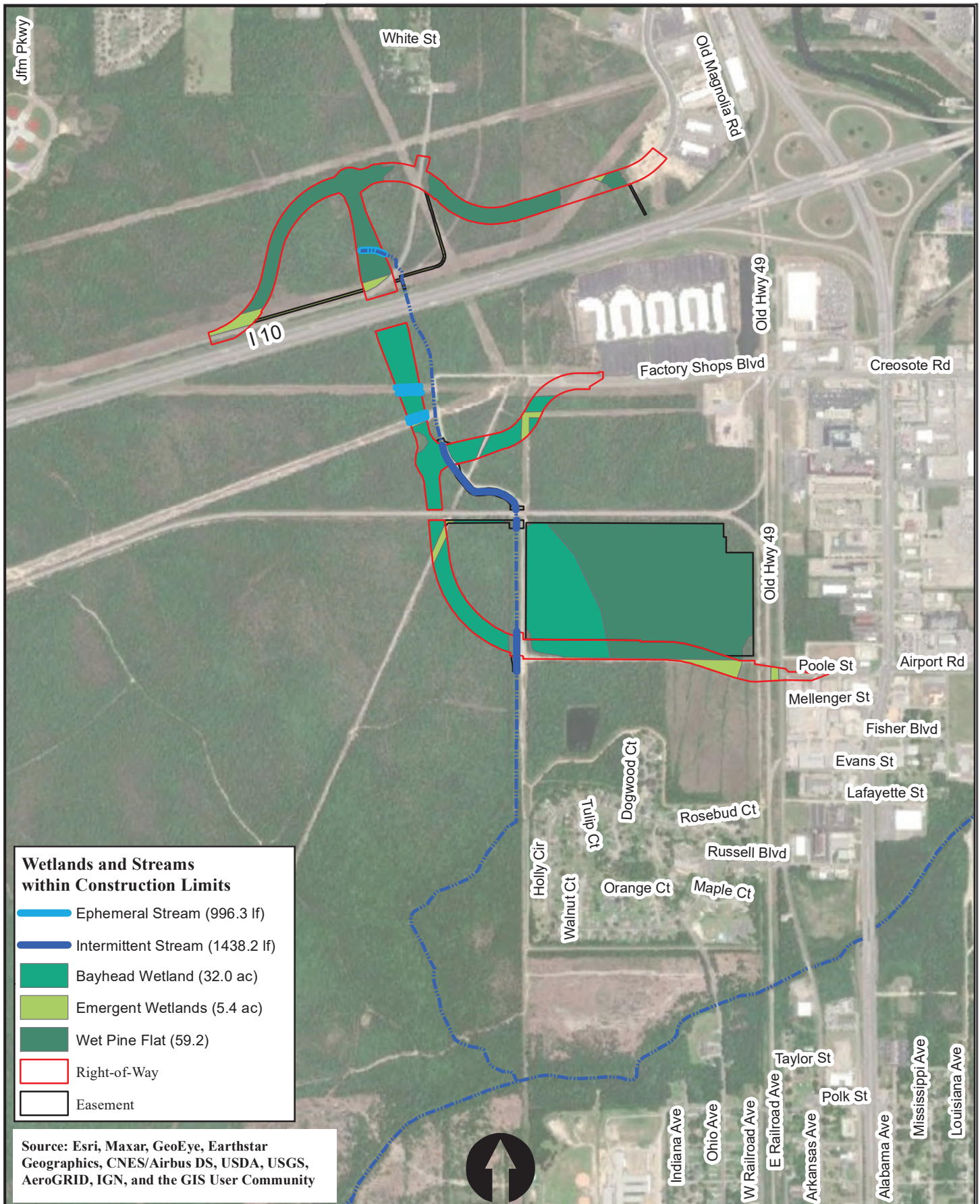
Construction materials will be stored and disposed of such that they are not discharged into or alongside of streams and other water bodies. Trained construction inspectors will implement and maintain BMPs.

Table 4-8. Potential Impacts to Wetlands and Waters of the U.S.

| | Number within Corridor | Linear Feet | Acres |
|---------------------------|---------------------------|-----------------|--------------|
| Wetlands | | | |
| Palustrine Emergent | 8 | | 5.36 |
| Palustrine Forested | 12 | | 91.21 |
| Total | 20 | | 96.57 |
| Waters of the U.S. | | | |
| Ephemeral | 5 | 996.29 | |
| Intermittent | 2 | 454.26 | |
| Total | 7 | 1,450.55 | |

Source: Neel-Schaffer, Inc. 2022

Long-term, adverse impacts to wetlands and Waters of the U.S. are anticipated as a result of fill activities for roadway and bridge construction.



4.11 Floodplain and Floodway

The project area is generally located within undeveloped forested land with a general flow pattern draining overland from north to south. The overland flow combines within existing small streams that outfall into Turkey Creek. A small portion of the Daniel Boulevard extension north of I-10 drains south and crosses I-10 and discharges into the existing pond located on the eastside of the Gulfport Premium Outlets. From here, the flow is drained via storm sewer ultimately into Bernard Bayou. The portion of the project located east of the existing KCS Rail Line is already developed and drained via roadside ditches. The portion of the project area west of the KCS Rail Line outfalls into an existing unnamed stream that runs from I-10 south to the northwest corner of the Forest Heights Levee before draining west and then south into Turkey Creek.

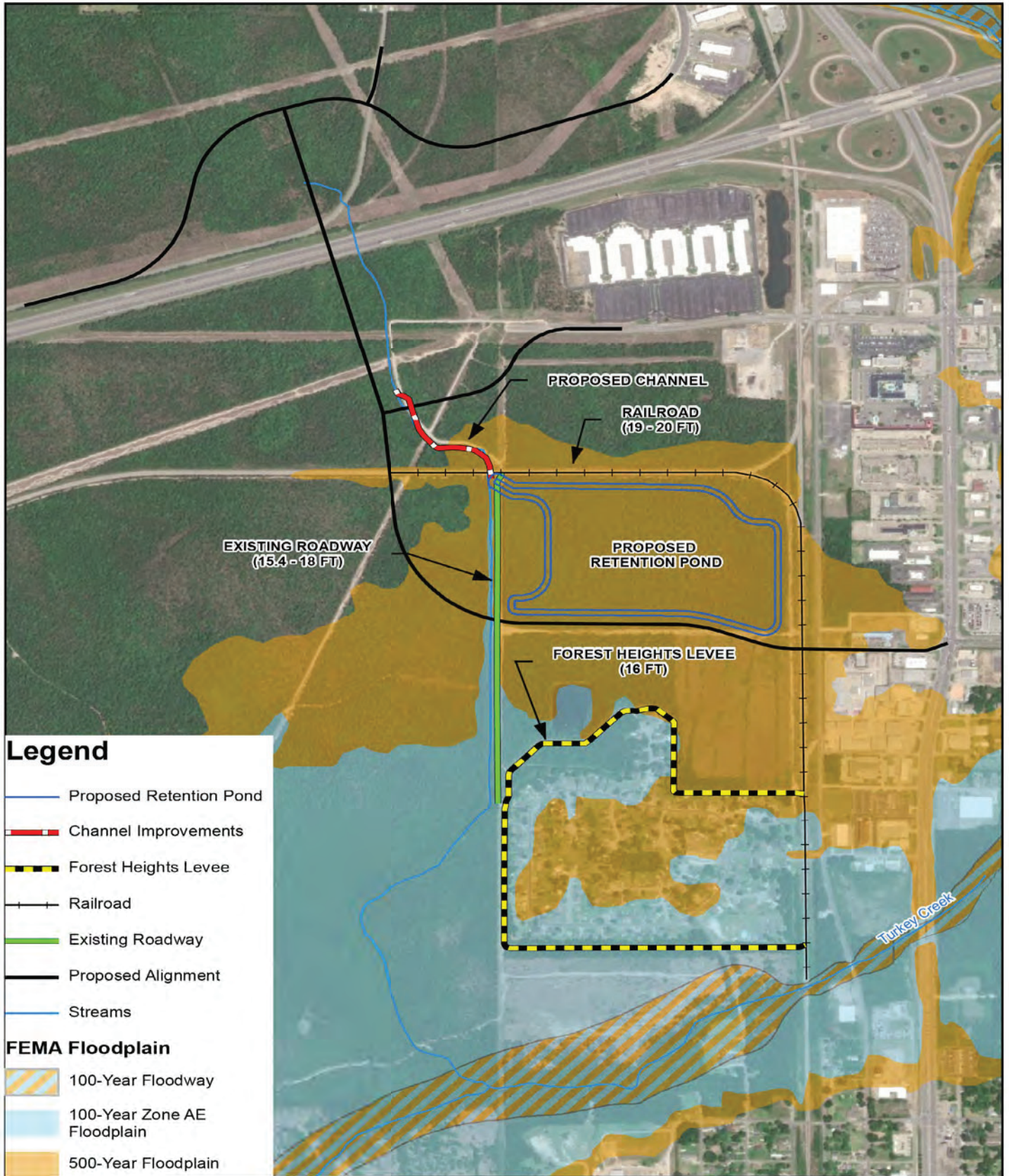
In accordance with the Federal Highway Administration (FHWA) regulations for Location and Hydraulic Design of Encroachments on Flood Plains (23 CFR 650 A), Floodplain Insurance Rate Maps (FIRMs) for Harrison County, Community Panel Number 28047C0261G (all effective June 16, 2009) were reviewed to determine the potential impacts to areas of the 100 and 500-year FEMA floodplains within the Build Alternative (Preferred Alternative C) alignment. The FEMA floodplains within the Build Alternative (Preferred Alternative C) alignment are associated with Turkey Creek. The unnamed stream is not included within the FIS and is therefore an unstudied stream with no determined base flood elevations; however, as part of the design, the existing base floodplain was determined for the unnamed stream.

Areas within the Preferred Alternative C alignment classified as “Zone X” are areas subject to minimal flood hazard. Areas within the Preferred Alternative C alignment classified as “Zone AE” are areas subject to inundation by the FEMA 100-year “base” floodplain – officially termed the “base flood” or “one percent annual chance flood” event or 100-year flood.

Areas within the Preferred Alternative C alignment classified as FEMA 500-year floodplain show the boundary of the flood that has a 0.2 percent chance of being equaled or exceeded in any given year. This area is officially termed the “0.2-percent annual chance floodplain event.”

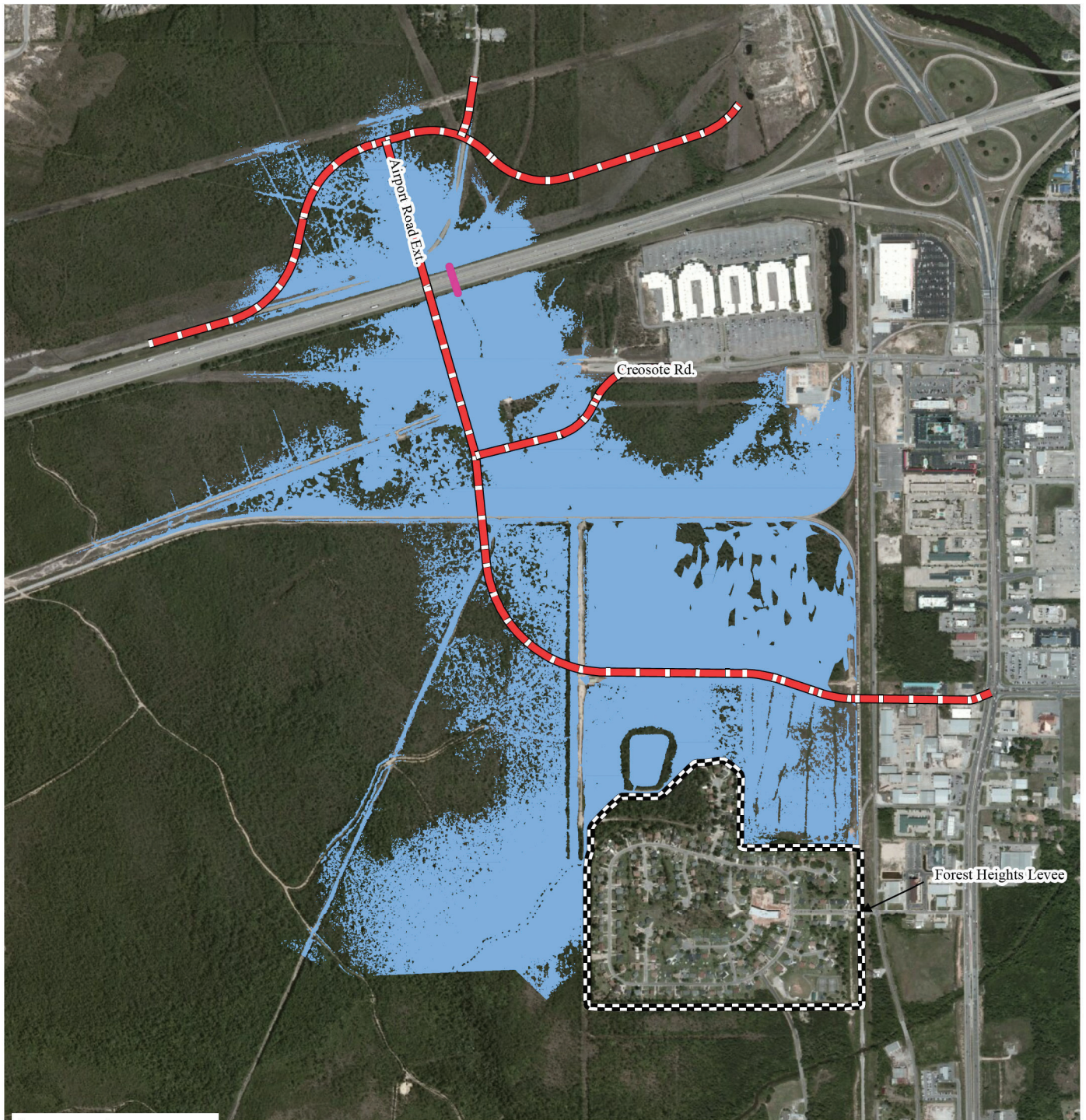
A map with the proposed alignment and proposed drainage improvements, including a proposed retention pond, are superimposed with the FEMA Effective Floodplain in Figure 4-14. Approximately 60-feet of the proposed roadway is located within the 100-year floodplain. With a total project length of 16,800 feet, this corresponds to less than 0.5% of the preferred Alternative C alignment located in the 100-year base floodplain.

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The drainage analysis for Alternative C includes stormwater management activities designed to ensure the overall project complies with 23 CFR Part 650 Subpart A. The Build Alternative (Preferred Alternative C) alignment actions are within the extent of base floodplains not mapped by FEMA and outside of the influence of the mapped Turkey Creek floodplain such as the unnamed stream that drains from I-10 south into Turkey Creek. To address potential flood risk within these and other areas, other streams/areas/floodplains not mapped by FEMA were modeled initially with EPA's Storm Water Management Model (SWMM) and later in a 2D HEC-RAS model developed as part of the design. Existing base floodplain extents were established within the vicinity of the proposed project from north of I-10 to the southern edge of the Forest Heights Community. Development of the 2D HEC-RAS model for the unnamed stream and all associated hydrologic and hydraulic calculations have been incorporated into the design.

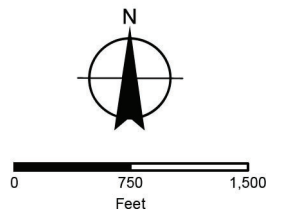
The 100-year existing base floodplain developed from the 2D HEC-RAS model for the streams not studied by FEMA is shown in Figure 4-15. The 100-year existing base floodplain for these unstudied areas includes ponding north of the railroad associated with the relatively small culvert crossings (5-36" pipes) under the railroad along the unnamed stream. In fact, the results of the existing HEC-RAS 2D model show that during a 24-hour 100-year storm event, overtopping of the existing railroad may occur at a location immediately west of the unnamed stream crossing. The results also show that the existing base floodplain include the area north of the existing Forest Heights levee. In this area, the levee blocks flow from continuing south and instead directs the flow west around the Forest Heights community and back into the unnamed stream. It is important to note that no overtopping of the existing Forest Heights levee occurs with the base floodplain for the unnamed stream.



Legend

-  Existing Culvert Crossings
-  Forest Heights Levee
-  Proposed Roadway Alignment
-  Existing 100 yr Inundation

EXISTING CONDITIONS



The FEMA FIS shows that the project is in an area with compound flooding from runoff and storm surge. Based on the FIS, the difference between the runoff event BFE and the combined surge/runoff event BFE is approximately 1 foot at lettered cross section F (14.4 feet – 15.4 feet) in the project area. The proposed roadway profile is elevated above this elevation and will not be impacted by a combined surge/runoff event. To the east and south of the proposed roadway alignment, there is a levee identified as the Forest Heights Levee and an access road that runs from the levee north connecting Creosote Road. The road and levee are both elevated above the regulatory BFE at elevation 16 feet based on the design elevation of the levee. Due to the presence of the levee and the access road, the proposed roadway alignment is located within an ineffective flow area as the regulatory BFE is shown to not overtop the access road or levee. Therefore, the proposed project will have no impact on the conveyance along Turkey Creek and consequently will have no impact on the water surface profiles along Turkey Creek. The levee and access road are identified in Figure 4-15. Outside of the scope of this project, USACE has initiated engineering and design of a project to increase the height of the Forest Heights levee system and include an adequate pumping system to provide drainage capacity for design storm events within the neighborhood.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, on any areas located within the 100 or 500-year floodplain.

Preferred Alternative C

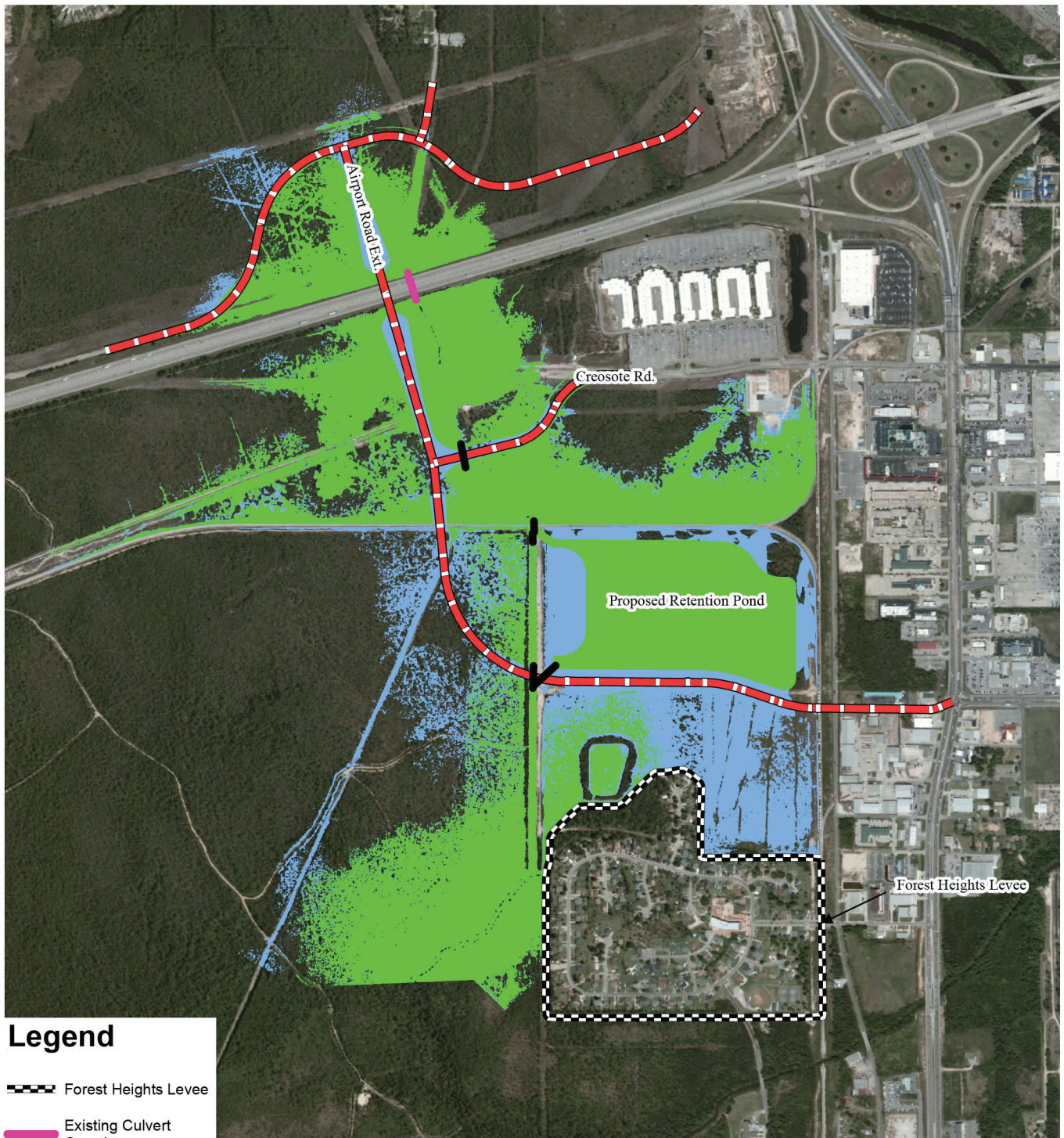
The City of Gulfport Erosion, Sediment, and Post-Construction Ordinance has controls to minimize the annual volume of surface water runoff which flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable. The construction of the roadway will increase runoff due to the additional impervious cover and drainage improvements. The additional runoff from the proposed project features included in Preferred Alternative C will be managed within a retention

pond located south of the railroad and north of the proposed roadway. The Erosion, Sediment, and Post-Construction Ordinance is included in Appendix B.







Consequently, the proposed project will not have an impact on the mapped FEMA floodplains. Most of the Preferred Alternative C alignment is located outside of the FEMA 500-year and 100-year floodplain limits. Approximately 3,800 feet is located within the 500-year floodplain associated with Turkey Creek. Approximately 60 feet of the Preferred Alternative C alignment is located within the mapped 100-year floodplain. This portion of the 100-year floodplain does not contribute to the conveyance of Turkey Creek, and the mapped floodplain is the result of backwater from Turkey Creek along an existing unnamed stream that is a tributary to Turkey Creek.

A Floodplain and Downstream Impact Assessment dated February 2021 was prepared as a supplement to this document for Preferred Alternative C and is contained in Appendix G. For the area that is part of the Bernard Bayou watershed (Daniel Boulevard Extension), mitigation will be provided inline within oversized roadside ditches. For the area that is part of the Turkey Creek watershed, the assessment indicates that the proposed improvements, including the retention pond, will mitigate all peak runoff from the project features for the areas downstream ensuring that the proposed project will have no impact on flooding in the Forest Heights subdivision or any downstream communities.

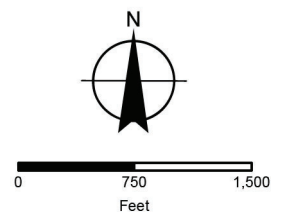
The proposed project design intends to maintain the existing hydrology and existing drainage patterns and maintain or reduce the peak flow rate for the area draining to Turkey Creek in the project area utilizing a storm sewer drainage system, drainage improvements (i.e., culvert crossings and channel modifications) and a retention pond. As part of the design for the Preferred Alternative C, the drainage features including the retention pond were modeled within the 2D HEC-RAS model for the unnamed stream. A comparison of the existing and proposed base floodplains is shown in Figure 4-16.



Legend

-  Forest Heights Levee
-  Existing Culvert Crossings
-  Proposed Culvert Crossings
-  Proposed Roadway Alignment
-  Proposed 100 yr Inundation
-  Existing 100 yr Inundation

EXISTING & PROPOSED 100 YEAR



Based on the 2D HEC-RAS analysis, the design of Alternative C ensures the existing drainage patterns and base floodplains are not adversely affected. The proposed project design maintains or reduces the base floodplain and the peak flow rate for the area draining to Turkey Creek in the project area by utilizing a storm sewer drainage system, associated drainage improvements (i.e., culvert crossings and channel modifications), and a retention pond. With the proposed project improvements, overland flow is captured by the proposed roadway and retention pond. This will allow for the runoff to be managed and reduces overland flows from impacting the existing levee system. In fact, the proposed improvements will reduce the existing potential flood risk around the Forest Heights community and areas downstream as shown by the reduction in the base floodplain within this area. Additionally, the proposed drainage system lowers water surface elevations upstream of the railroad line reducing the risk of overtopping of the railroad during a 24-hour 100-year storm event. In summary, the project will reduce stormwater peak flow and enhance flooding protections for areas downstream and south of Interstate 10.

The public was informed that a drainage mitigation assessment was performed to show that a retention pond would mitigate peak runoff for the areas downstream of the project to make certain that the proposed project would have no impact on flooding in the Forest Heights subdivision or any other downstream communities. In addition, the US Army Corps of Engineers levee improvement project will provide additional storm surge and flooding protection to the Forest Heights subdivision.

The proposed stormwater retention improvements are not intended to abate the impacts of storm surge during a severe tropical storm or coastal surge event. However, the proposed improvements will capture overland flow in the retention pond and discharge stormwater runoff at a controlled rate into the existing stream. This provides benefits by reducing water surface elevations from rainfall in the downstream areas with reduced peak flow and overland flow providing additional storage within the Turkey Creek floodplain. This would provide a flood risk reduction benefit to the downstream areas that are impacted by coastal storm surge.

4.12 Outstanding Waters (Wild and Scenic Rivers/HQ Streams)

The Wild and Scenic Rivers Act enacted by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) and the Mississippi Scenic Streams Stewardship Act (Mississippi State Legislature Laws 1999, Chapter 381, §1, effective July 1, 1999) state that there exist many unique and diverse free-flowing rivers and streams which should be preserved, protected, and enhanced for the present and future benefit of citizens. To qualify as eligible, the stream must possess unique or outstanding scenic, recreational, geological, botanical, fish, wildlife, historic or cultural values. At the present time, there are no formally designated scenic streams in Harrison County (MDWFP 2020).

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon wild and scenic streams.

Preferred Alternative C

There are no formally designated scenic streams within the Preferred Alternative C alignment. None of the streams within the Preferred Alternative C alignment (including unnamed tributaries) flow into a formally designated scenic stream. Therefore, the implementation of the Preferred Alternative C would have no effect, either beneficial or adverse, upon wild and scenic streams.

4.13 Natural Environmental Resources

4.13.1 Vegetation

Harrison County is located in the Eastern Gulf Coast Flatwoods (152A) Major Land Resource Area portion of the Atlantic and Gulf Coast Lowland Forest and Crop Region (LRR T) as described by the Natural Resource Conservation Service. Dominant land use in the area is commercial and forested. Typical vegetation community characteristics of the alternative alignments were recorded by biologists during site visits conducted between April 22, 2020, and April 28, 2020. The information recorded during the field visits and current aerial photography was used to

classify each vegetation community. No unique or sensitive vegetation communities were located within the Preferred Alternative C alignment.

The dominant plant communities in the project area consisted of sweetbay (*Magnolia virginiana*), wax myrtle (*Morella cerifera*), pitcherplant (*Sarracenia alata*), laurel leaf greenbriar (*Smilax laurifolia*), slash pine (*Pinus elliottii*), loblolly pine (*Pinus taeda*), bald cypress (*Taxodium distichum*), long leaf pine (*Pinus palustris*), gallberry (*Ilex coriacea*), ti-ti (*Cyrilla racemiflora*), yaupon (*Ilex vomitoria*), laurel oak (*Quercus laurifolia*), red maple (*Acer rubrum*), tupelo (*Nyssa aquatica*), blunt spike rush (*Eleocharis obtusa*), chain fern (*Woodwardia areolata*), rush (*Juncus* spp.), sedge (*Carex* spp.), water oak (*Quercus nigra*), and plumegrass (*Saccharum giganteum*).

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon vegetation.

Preferred Alternative C

Project components that would result in direct impacts to vegetation communities include clearing within the right-of-way, crossings of streams and drainages, and intersection construction. These activities would result in removal and permanent loss of all existing vegetation communities within the proposed right-of-way. The majority of the Preferred Alternative C alignment is forested (e.g., pine savannah).

No unique or sensitive vegetation communities are present within the Preferred Alternative C alignment. Overall impacts to vegetation are not considered significant based on the presence of similar vegetation communities adjacent to the proposed alignment. Therefore, implementation of the Preferred Alternative C would have a long-term, minor adverse effect on local vegetation communities but is not anticipated to effect vegetation communities on a regional basis.

4.13.2 Wildlife

For this EA, existing conditions of terrestrial and aquatic communities were assessed and documented through a combination of direct field surveys, aerial photo interpretation, and a review of existing literature. Wildlife within the Build Alternative alignment is highly influenced by the existing railroads, roadways and urbanization of the city of Gulfport. Wildlife may use adjacent areas for permanent inhabitation, seasonal inhabitation, migratory routes, temporary shelter, and/or foraging.

4.13.2.1 Terrestrial Species

Gulfport is located in the Eastern Gulfcoast Flatwoods. Common fauna of these Flatwoods varies with the age of the forest, percent of deciduous trees, proximity to openings, and presence of bottomland forest types. Whitetail deer (*Odocoileus virginianus*), raccoon (*Pryonon lotor*), gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), striped skunk (*Mephitis mephitis*) and rabbits (*Sylvilagus floridanus* and *Sylvilagus aquaticus*), gray squirrels (*Sciurus carolinensis*) are common.

Common songbird species include Northern cardinal (*Cardinalis cardinalis*), Carolina wren (*Thryothorus ludovicianus*), red-eyed vireo (*Vireo olivaceus*), wood thrush (*Hylocichla mustelina*), summer tanager (*Piranga rubra*), and hooded warbler (*Wilsonia citrina*).

Common forest snakes include the cottonmouth (*Agkistrodon piscivorus*), copperhead (*Agkistrodon contortrix*), common garter snake (*Thamnophis sirtalis*), timber rattlesnake (*Crotalus horridus*), and the speckled kingsnake (*Lampropeltis getula*).

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon wildlife.

Preferred Alternative C

Implementation of the Preferred Alternative C would fragment a small segment of habitat along the alignment. Certain wildlife species prefer dense forest interiors and are adversely affected by activities that fragment habitat while other species prefer open forests and are benefited by activities that create habitat edges. Because the Preferred Alternative C lies within the City of Gulfport and many surrounding areas have already been developed or altered, the additional impact on species requiring large, contiguous blocks of habitat is not expected to adversely affect regional wildlife populations.

Implementation of the Preferred Alternative C could include the direct loss of approximately 188 acres of undeveloped habitat that consists mainly of forested habitat.

The construction of the project could also result in increased animal mortality (roadkill). The direct loss of undeveloped land and associated vegetation communities would result in the displacement of wildlife and potential decline in species diversity and quantity in the general vicinity of the roadway. Impacts to wildlife associated with the Preferred Alternative C generally would include a displacement of wildlife from the immediate area due to habitat alterations and fragmentation, as well as an increase in human/wildlife conflicts.

Overall habitat loss and disturbance would be minor because of the linear nature of the project corridor and proximity of similar habitat adjacent to the project corridor. Direct and indirect impacts to wildlife by the implementation of the Preferred Alternative C are anticipated to be long-term and minimal.

Additional short-term, minor, adverse impacts could be expected from noise and lights from construction activities. Light and noise could affect migration, breeding, and nesting of wildlife in the vicinity of the roadway. Short-term, minor, adverse impacts to wildlife species during project construction could include temporary disturbances to nesting and annual migration patterns of birds passing over or stopping.

4.13.2.2 Aquatic Species

Aquatic communities within the Preferred Alternative C alignment consist of ephemeral ditches and intermittent streams. While the aquatic communities lend diversity to the area, their overall contribution to wildlife habitat is diminished due to the fact that these have been channelized or disturbed and now primarily exist to convey and discharge stormwater. All channels eventually flow into Turkey Creek, and many of the streams flow into culverts that cross beneath existing railroads/roadways. These channels are subject to extreme fluctuations in water level. A summary of the aquatic communities present in the Preferred Alternative C alignment can be found in **Table 4-8** of Section 4.10 Wetlands and Waters of the US.

Observation of aquatic wildlife within the channels located in the Preferred Alternative C alignment was difficult due to the high-water turbidity of the streams and the lack of flowing water. No sampling for common aquatic vertebrates or invertebrates was performed as part of the field surveys. Some surface invertebrates (crayfish, spiders, etc.) were seen within the alignment.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon aquatic species.

Preferred Alternative C

Implementation of Preferred Alternative C could impact approximately 3,726 linear feet of intermittent streams. Portions of the stream banks and channels would be physically altered with the implementation of Preferred Alternative C. This would involve trimming or removing trees growing on banks and riparian lands and the installation of bridges or culverts to allow for roadway construction. Reducing the tree canopy near waterways can increase the exposure of the channel to sunlight. The increased water temperatures can reduce the quality of the waterway as habitat for some aquatic organisms.

Preferred Alternative C includes the construction of a new bridge over I-10. These activities would leave large areas of earth unprotected, and sloping work could increase the potential for

erosion of the surface material during storm events. The construction of roadside ditches could result in eroded material being carried from the construction site down-slope entering downstream wetlands where sediment would be deposited.

Construction materials would be stored and disposed of such that they are not discharged into or alongside of streams and other water bodies. Trained construction inspectors will implement and maintain BMPs to reduce erosion and sedimentation impact. The MDEQ would be contacted prior to the commencement of construction to acquire any other necessary permits.

Impacts to aquatic species resulting from sediment deposition or increased turbidity would be reduced by the proper use of BMPs. As a result, direct impacts to aquatic species by the implementation of Preferred Alternative C are expected to be short-term and minimal.

4.13.3 Section 4(f) / 6(f) Lands

Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC Section 303) requires that when federal funds are used on a project, the agency must consider the effect on Section 4(f) resources.

Section 6(f) of the 1965 Land and Water Conservation Fund Act provides funding for acquiring property and developing public recreational facilities and protects the loss of that property to other uses. Section 6(f) of the act states “no property acquired or developed with assistance under this section shall, without the approval of the Secretary be converted to other than public outdoor recreation uses”

Within or bordering the study area, there are no Section 4(f)/6(f) resources.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon Section 4(f)/6(f) resources.

Preferred Alternative C

Preferred Alternative C would not impact Section 6(f) resources.

A cultural resources survey conducted for Preferred Alternative C did not determine any above or below ground resources are listed or eligible for listing in the National Register of Historic Places. Section 4.15 Historic and Archaeological Preservation provides more detail on the cultural resources survey.

Preferred Alternative C would not impact any known Section 4(f) resources. If previously undetected below ground cultural resources are encountered during construction, work would cease in the immediate area and federal regulations (36 CFR 800.13) pertaining to the emergency discovery situation would be followed.

4.14 Threatened and Endangered Species

4.14.1 Protected Species and Critical Habitats

The Endangered Species Act of 1973 (ESA) [16 U.S.C. 1531 et. seq.], as amended, was enacted to provide a program for the preservation of endangered and threatened species and to provide protection for the ecosystems upon which these species depend for their survival. All federal agencies or projects utilizing federal funding are required to implement protection programs for designated species and to use their authorities to further the purposes of the Act.

The USFWS is the primary agency responsible for implementing the ESA for birds and terrestrial and freshwater species. The USFWS responsibilities under the ESA include: (1) the identification of threatened and endangered species; (2) the identification of critical habitats for listed species; (3) implementation of research on, and recovery efforts for these species; and (4) consultation with other federal agencies concerning measures to avoid harm to listed species.

A threatened species is a species likely to become endangered within the foreseeable future throughout all or a significant portion of its range. An endangered species is a species in danger of extinction throughout all or a significant portion of its range.

Critical habitat is a term defined and used in the ESA. It is specific geographic areas that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. Critical habitat may also include areas that are not currently occupied by the species but will be needed for its recovery (USFWS 2015).

4.14.2 Federally - Listed Species

A total of four federally protected species potentially exists within Harrison County, Mississippi (USFWS 2020). Information pertaining to the distribution, status, and habitat requirements for the four protected species is included in the following paragraphs and **Table 4-9**.

Table 4-9. Federally Protected Species of Potential Occurrence

| Common Name | Scientific Name | Federal Status |
|---------------------|------------------------------|----------------|
| Wood Stork | <i>Mycteria americana</i> | Threatened |
| Gopher Tortoise | <i>Gopherus polyphemus</i> | Threatened |
| Dusky Gopher Frog | <i>Rana Sevosa</i> | Endangered |
| Louisiana Quillwort | <i>Isoetes louisianensis</i> | Endangered |

Source: USFWS 2020

Wood Stork

The threatened woods stork (*Mycteria Americana*) is a large, long-legged wading bird, about 50 inches tall, with a wingspan of 60-65 inches. The plumage is white except for black primaries and secondaries and short black tail. The head and neck are largely unfeathered and dark gray in color. Two distinct populations of wood storks occur in the U.S. One population breeds in Florida, Georgia, and South Carolina, and is federally protected (threatened). The other population breeds from Mexico to northern Argentina and is not federally protected. Wood storks from each of these populations occur seasonally in Mississippi during the non-breeding season (May-

October) and are not distinguishable from one another. Typical foraging sites include freshwater marshes, swales, ponds, hardwood and cypress swamps, narrow tidal creeks or shallow tidal pools, and artificial wetlands.

Habitat could exist for the wood stork within the Preferred Alternative C alignment.

Gopher Tortoise

The threatened gopher tortoise (*Gopherus polyphemus*) occupies a wide range of upland habitat types, most frequently the longleaf pine ecosystem. The general physical and biotic features thought to characterize suitable tortoise habitat are presence of well-drained, sandy soils, which allow easy burrowing; an abundance of diverse herbaceous ground cover; and an open canopy and sparse shrub cover, which allows sunlight to reach the ground floor. The gopher tortoise digs burrows for shelter, and groups of tortoises dig burrows in the same location, forming a colony. Some of the major threats to the species are habitat degradation (often attributed to fire suppression) and habitat fragmentation (often attributed to urbanization and agricultural/silvicultural conversion), which can result in forage reduction, direct human impacts, and reproductive isolation.

No habitat exists, nor has critical habitat been designated for, the gopher tortoise within or adjacent to the Preferred Alternative C alignment.

Dusky Gopher Frog

The endangered dusky gopher frog (*Rana sevosa*), formerly called the Mississippi gopher frog, historically was widely distributed in the southern counties of Mississippi. Dusky gopher frog habitat includes both upland sandy sites historically forested with longleaf pine and isolated temporary wetland breeding sites embedded within the forested landscape. Adult and subadult dusky gopher frogs spend the majority of their lives underground, primarily in stump holes and small mammal burrows, but they will also use gopher tortoise burrows. Breeding sites are small, relatively shallow, isolated, depressional ponds (not connected to any other water body) that dry completely on a cyclic basis. Emergent herbaceous vegetation is important for egg attachment. The dominant source of water to the ponds is rainfall within their small, localized watersheds.

Approximately 4,933 acres are designated as critical habitat in Forrest, Harrison, Jackson, and Perry Counties, Mississippi. The critical habitat that is designated in Harrison County is located in the northern portion of the county.

Within the Preferred Alternative C alignment, potential habitat could exist for this species.

Louisiana Quillwort

The endangered Louisiana quillwort (*Lsoetes louisianensis*) is a small, nonflowering grass-like semi-aquatic to aquatic plant. Mature plants are six to ten inches long, mostly evergreen, with spore-bearing structures below ground. Surveys need to be conducted during the appropriate field season when the plants are visible, typically November into May. Timing varies depending upon rainfall, as plants completely die back and are not visible when the intermittent streams, which are habitat for this species, have dried-up. As such, it is recommended that known sites be visited prior to initiating surveys to determine if plants will likely be visible. Threats include activities that increase stream sedimentation, reduce stream flow, and reduce the overstory canopy cover.

Within the Preferred Alternative C alignment, potential habitat could exist for this species.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon protected federally protected species and critical habitat.

Preferred Alternative C

The USFWS Mississippi Field Office was contacted regarding the project on June 24, 2020, and on August 3, 2020. Responses were received from the USFWS on July 14 and August 11, 2020, stating their concerns regarding threatened and endangered species within the Build Alternative alignment on July 14, 2020, and August 11, 2020. A copy of the letters is included in **Appendix I**.

The USFWS letters state that four federally listed species could potentially occur in the vicinity of the alignment. These four species have been detailed above. The letters also state that the project occurs within the Turkey Creek watershed. Natural resources within this watershed

should be considered and avoided to the extent practical during the environmental planning phase of the project.

Headwaters conducted biological surveys in April of 2020. From that information, the USFWS has determined that no federally listed species were present at the time of the survey.

Implementation of the Preferred Alternative C may affect but is not likely to adversely affect these federally listed species.

4.14.3 State - Listed Species

The Mississippi Natural Heritage Program (MNHP), part of the Mississippi Department of Wildlife, Fisheries and Parks (MDWFP), maintains a database of Species of Concern. This list includes species whose occurrence in Mississippi is or may be in jeopardy, or with known or perceived threats or population declines. These species are not necessarily the same as those protected under the ESA.

In response to a request by the Neel-Schaffer consultant, the MNHP searched their database for occurrences of state or federally listed species and species of special concern that occur within two miles of the Preferred Alternative C study area. **Appendix I** contains a copy of the MNHP response letter dated August 19, 2020. **Table 4-10** duplicates the table provided in the MNHP response documentation.

State ranks in **Table 4-10** denotes a species' status in Mississippi on a five-point scale from critically imperiled (1) to secure (5). S1 means critically imperiled in Mississippi because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation. S2 means imperiled in Mississippi because of rarity (6 to 20 occurrences of few remaining individuals or acres) or because of some factor(s) making it vulnerable to extirpation. S3 means vulnerable in Mississippi due to a restricted range (on the order of 21 to 100 occurrences), relatively few populations or occurrences, recent and widespread declines, or other factors making it vulnerable to extirpation. S4 means apparently secure uncommon but not rare in Mississippi

some cause for long term concern due to declines or other factors (more than 101 occurrences). S5 means secure, common, widespread, and abundant in Mississippi. Minimal impacts to any state waterbodies.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon state-listed species.

Table 4-10. State Protected Species of Potential Occurrence

| SCIENTIFIC NAME | COMMON NAME | STATE RANK |
|--|------------------------------|------------|
| <i>Agalinis aphylla</i> | Coastal Plain False-foxglove | S3 |
| <i>Agrimonia incisa</i> | Incised Groovebur | S2 |
| <i>Amaranthus australis</i> | Southern Amaranth | S1 |
| <i>Carex exilis</i> | Coast Sedge | S2 |
| <i>Creaserinus byersi</i> | Lavender Burrowing Crayfish | S3 |
| <i>Cyperus elegans</i> | Sticky Flatsedge | S1 |
| <i>Cyperus ovatus</i> | Ovateleaf Flatsedge | S2,S3 |
| <i>Cyperus polystachyos</i> var. <i>Polystachyos</i> | Many-spike Flatsedge | S2,S3 |
| <i>Dichanthelium nudicaule</i> | Naked-stemmed Panic Grass | S2,S3 |
| <i>Epidendrum conopseum</i> | Green-fly Orchid | S2,S3 |
| <i>Erythrodiplex umbrata</i> | Band-winged Dragonlet | S1 |
| <i>Fuirena breviseta</i> | Saltmarsh Umbrella-sedge | S3,S4 |
| <i>Fuirena longa</i> | Coastal-plain Umbrella-sedge | S1 |
| <i>Fuirena pumila</i> | Dwarf Umbrella-sedge | S3 |
| <i>Heterandria formosa</i> | Least Killfish | S3 |
| <i>Ilex Amelanchier</i> | Juneberry Holly | S3 |
| <i>Lachnocaulon digynum</i> | Pineland Bogbutton | S2,S3 |
| <i>Lilaeopsis carolinensis</i> | Carolina Lilaeopsis | S2 |
| <i>Mikania cordifolia</i> | Florida Keys Hempweed | S3,S4 |
| <i>Pinguicula primuliflora</i> | Southern Butterwort | S3 |
| <i>Platanthera blephariglottis</i> var. <i>conspicua</i> | Large White Fringed Orchid | S2 |
| <i>Polygala crenata</i> | Crenate Milkwort | S2 |
| <i>Polygala leptostachys</i> | Georgia Milkwort | S1,S2 |
| <i>Rhadinaea flavilata</i> | Pine Woods Snake | S2,S3 |
| <i>Rhynchospora cephalantha</i> | Capitate Beakrush | S3 |
| <i>Rhynchospora ciliaris</i> | Ciliate Beakrush | S3,S4 |
| <i>Rhynchospora debilis</i> | Savannah Beakrush | S3 |
| <i>Rhynchospora macra</i> | Large Beakrush | S2,S3 |
| <i>Rhynchospora oligantha</i> | Few-flowered Beakrush | S3,S4 |
| <i>Rhynchospora plumosa</i> | Plume Beakrush | S3,S4 |
| <i>Scleria georgiana</i> | Georgia Nutrush | S2 |
| <i>Scleria reticularis</i> | Reticulated Nutrush | S1 |
| <i>Spiranthes longilabris</i> | Giant Spiral Ladies'-tresses | S2 |
| <i>Syngonanthus flavidulus</i> | Yellow Pipewort | S2 |
| <i>Xyris chapmanii</i> | Chapman's Yellow-eyed Grass | S2 |
| <i>Xyris drummondii</i> | Drummond's Yellow-eyed Grass | S2 |
| <i>Xyris scabrifolia</i> | Harper's Yellow-eyed Grass | S3 |
| <i>Xyris serotina</i> | Acid-swamp Yellow-eyed-grass | S1 |

Preferred Alternative C

As recommended in the MNHP response letter, best management practices will be properly implemented, maintained, and monitored regularly for compliance, both upstream and downstream of any crossings. Specific emphasis will be placed on measures that help look for signs of increased erosion, and minimize the occurrence of excess sedimentation, suspended particulate matter, and contaminants at all project sites and surrounding areas from leaving in stormwater run-off or from direct entry into nearby streams and waterbodies.

Minimal impacts to any state listed species of concern in Harrison County are expected.

4.15 Historic and Archaeological Preservation

Neel Schaffer, Inc., was contracted by the City of Gulfport to conduct a Phase I cultural resources survey for the proposed Interconnecting Gulfport BUILD Grant Project in Harrison County, Mississippi. Field work was carried out by a four-person crew between June 15 and June 29, 2020.

The investigation, which employed both visual surface inspection and subsurface testing, included an archaeological and architectural survey of the Area of Potential Effect (APE), an area totaling approximately two linear miles, or roughly 30 acres. No archaeological resources eligible for preservation or data recovery were observed during the course of the field investigations. Additionally, there are no standing structures 50 years of age or older eligible for listing on the National Register of Historic Places (NRHP) within the project's APE. No NRHP eligible properties were evaluated within the Forest Heights Subdivision due to the proposed project not being within the Forest Heights Subdivision view shed. The project corridor will cross a small section of the Kansas City Southern Railroad (previously known as the Gulfport and Ship Island Railroad, 22Hr0120), which will connect to Highway 49, in line with Airport Road.

A report was prepared and submitted to the Mississippi Department of Archives and History (MDAH) and tribal correspondent from FHWA for review. The report submitted to MDAH for review was titled *Phase I Cultural Resources Survey for the Proposed Interconnecting Gulfport Build Grant Project, Final, Harrison County, Mississippi.*

On August 4, 2020, the FHWA tribal correspondent forwarded the executive summary of the Cultural Resources Survey Report to Native American Tribes requesting any comments or concerns regarding the proposed project. A copy of this correspondence and the responses received are included in **Appendix I**.

In a letter dated September 15, 2020, the MDAH provided their comments on the project. A copy of the MDAH letter is contained in **Appendix I** and a copy of the final Neel-Schaffer Cultural Resources Survey Report is available if requested.

4.15.1 Archaeological Sites

Background research revealed seven previously recorded archaeological sites that fall within a one-mile radius of the project's APE, as well as the NRHP-listed Turkey Creek Historic District; however, none of these cultural resources are located directly within the construction footprint and should not be impacted by the proposed construction. Based on the findings of this study, no further archaeological work is necessary.

4.15.2 Architectural Investigations

The project corridor will cross a small section of the Kansas City Southern Railroad (previously known as the Gulfport and Ship Island Railroad, 22Hr0120), which will connect to Highway 49, in line with Airport Road. There will be no direct or indirect adverse effects to this resource.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon cultural resources.

Preferred Alternative C

As stated in their response letter, MDAH concurs that no historic properties or resources eligible for listing in the National Register of Historic Places are likely to be affected by the proposed project.

If previously undetected cultural resources are encountered during construction, work would cease in the immediate area and federal regulations (36 CFR 800.13) pertaining to the emergency discovery situations would be followed.

4.16 Hazardous Waste Sites

A Phase I Environmental Site Assessment (ESA) was performed in general accordance with ASTM E1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The purpose of the Phase I ESA was to identify recognized environmental conditions in connection with the proposed Build Alternative (Preferred Alternative C) corridor. A copy of the Interconnecting Gulfport Phase I ESA Report is contained in **Appendix H**.

The Phase I ESA Scope of Work included reviewing user provided information, conducting a site reconnaissance, reviewing reasonably ascertainable environmental records, reviewing reasonably ascertainable historical records, conducting interviews, evaluating the information, and preparing the Phase I ESA Report.

The **Appendix H** report documents the analysis, opinions, and results and conclusions obtained during development of the hazardous materials survey. This survey is based on information collected and is correct and current as of the date of the research and site visits. When a survey is completed with little or no subsurface exploration or chemical screening of soil and groundwater at or beneath the site, no statement of scientific certainty can be made regarding latent environmental conditions that may be the result of on-site or off-site sources. The findings and conclusions of the report are not scientific certainties, but rather, probabilities based on professional judgment concerning the data gathered during the course of the environmental survey.

It is not represented in the report that the site or adjoining land contains no hazardous materials, oil, or other latent conditions beyond that detected or observed during the survey. The possibility always exists for contaminants to migrate through surface water, air, or groundwater.

ASTM E1527-13 defines a recognized environmental condition as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” The recognized environmental condition is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

There was no evidence detected of recognized environmental conditions (RECs) in connection with the study area that would warrant further investigation. Although impacts to soil and groundwater along the railroad corridor may be present due to undocumented events or historical accumulations of drips, leaks, or spills, no evidence of potential contamination was observed during the site reconnaissance activities. It has been documented that the east west KCS rail spur has limited utilization up to two times a day.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon hazardous materials/hazardous waste sites in the project area.

Preferred Alternative C

There was no evidence detected of recognized environmental conditions (RECs) in connection with the Build Alternative corridor that would warrant further investigation.

Unknown hazardous materials sites may also be encountered during construction of Preferred Alternative C. Should this occur, construction would cease immediately until hazards and safety considerations are determined.

4.17 Visual

The topography of this area would be considered relatively flat. Elevations in this area range from 15 feet to 25 feet with the highest elevations being north of I-10. The City of Gulfport is highly developed with a mixture of residential, retail, commercial, and industrial settings. The southern termini (Poole Street) is located within a retail and commercially developed area that is near the airport. South of this termini is Forest Heights subdivision.

Most of the Preferred Alternative C would be constructed on new location through privately owned property in a forested area. There are no residences located along or adjacent to the alignment. However, there are multiple utility rights-of-way and a railroad crossing. The railroad crossing would be an at grade crossing. Preferred Alternative C includes constructing a lighted roadway with a lighted bridge to cross I-10, but no other bridges would be constructed with the alternative.

The northern termini of Preferred Alternative C would provide connectivity to Landon Road via the local network in an area with relatively new commercial and retail area. The southern termini would end up the Poole Street – Airport Road intersection with US 49 in a commercial built-up area.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon the visual setting of the project area.

Preferred Alternative C

The visual impacts of the Preferred Alternative C at the southern termini will be minimal due the highly developed nature along Poole Street just east of the Old US 49 intersection. The visual impact caused by the lighting in the roadway median and on the bridge will be nominal due to the forested buffer areas between Preferred Alternative C and the Forest Heights subdivision and the neighborhood on the northern termini. The added safety benefit for the pedestrians and bicyclists is a tradeoff for the minimal visual impacts produced by the lighting.

The Preferred Alternative C will have minimum visual impacts. In order to lessen the visual impacts, attempts will be made to blend the proposed project into the surrounding mostly forested areas near the right-of-way in a pleasing and compatible manner.

4.18 Energy

Mississippi Power Company serves the City of Gulfport for electricity. Minimal, if any, additional right-of-way will be needed for constructing the Preferred Alternative C in front of the substation. CenterPoint Energy Resources Corp. provides natural gas service to the area.

Energy resources appear to be plentiful to meet any demands placed on the area from the construction and maintenance of the proposed transportation facility. The construction of a transportation facility represents a considerable one-time expenditure of energy resources both in the fabrication of construction materials and in the actual roadway construction process. Large amounts of electricity are used in initial preparation and fabrication of construction materials, whether derived from hydro or fossil fuel (coal) sources. Some of the construction materials may be manufactured in other locations and transported to the project area.

No Build Alternative

The No Build Alternative would have no effect, either beneficial or adverse, upon energy consumption.

Preferred Alternative C

Preferred Alternative C is on new location in a mainly undeveloped portion of the City of Gulfport. The construction of the Preferred Alternative C will require the relocation of some power poles currently located on the proposed new right-of-way and possibly some of the poles currently located on the existing right-of-way. This type of relocation of power poles is to be expected. The relocations will be carefully coordinated with Mississippi Power and the City of Gulfport to minimize disruption of service.

The construction phase requires a large one-time commitment of energy resources in fabrication of materials and construction itself. Although the use of large amounts of energy during

construction and many construction materials (plastics, asphalt, etc.) would require the consumption of crude oil, the net result of project construction would be a long-term savings of this resource. The improvements associated with the proposed Preferred Alternative C would allow for energy conservation resulting from improved traffic flow.

4.19 Construction

During construction, temporary increases in water, noise, solid waste, and air pollution would be experienced. Construction also creates an inconvenience to road users, adjacent residents, and businesses. Traffic impacts during construction would result in some delays and inconvenience. However, construction planning would attempt to minimize delays and inconveniences at all levels.

No Build Alternative

The No Build Alternative would have no adverse construction impacts.

Preferred Alternative C

Construction planning and sequencing would be coordinated to minimize traffic delays at all levels. The construction of the Preferred Alternative C requires relocating the existing Canal I-10 Service Road and connecting 34th Avenue to the extended Daniel Boulevard. While the Canal I-10 Service Road is closed, existing Landon Road and J.F.M. Parkway would be used for a detour. The City will coordinate the planning and approval of the traffic control plan for the closure and detour with Harrison County in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) and the standard policies and procedures of the two jurisdictions. The construction of Preferred Alternative C also requires construction of an I-10 overpass. The City will coordinate the planning and approval of the traffic control plan for the potential short-term closure and lane closures of I-10 with MDOT and in accordance with the MUTCD and the standard policies and procedures of the two agencies.

Most of the construction-related water pollution associated with the Preferred Alternative C would be attributed to erosion and siltation. A stormwater pollution prevention plan and corresponding erosion control plans will be formulated incorporating best management practices. To minimize impacts to vegetation and wildlife, the construction limits will be staked and enforced. A variety of controls are effective in preventing erosion and slowing sediment during construction. Controls effective during construction may include phased clearing and grubbing, silt screens, shell and gravel filters, and temporary sedimentation basins amongst others.

The construction activities would result in temporary noise and vibration impacts due to the use of heavy construction equipment. Mitigation of construction noise and vibration would be accomplished through development of a construction noise control plan. This plan would include measures such as limiting certain construction activities or equipment use during the evenings, weekends, or holidays; locating storage and staging areas away from noise-sensitive sites; and shielding stationary equipment.

Increases in solid waste generation would result from removal of structures and materials that cannot be relocated or re-used. Any burning of wastes would be the responsibility of the construction contractor and should be performed in compliance with state and local laws and ordinances. Any hazardous materials encountered during construction would be removed and disposed in accordance with state and federal regulations. Disposal of excess material would be the responsibility of the contractor who would be contractually required to handle and dispose of the material in accordance with MDOT standard specifications.

All phases of construction operations would temporarily contribute air pollution. Airborne particulates would increase slightly in the corridor as dust from construction collects in the air surrounding the project. The construction equipment would also produce a slight increase in exhaust emissions. The emission of air pollutants would be reduced using properly maintained equipment and the use of tarps and covers on trucks transporting construction materials and waste products.

Construction of Preferred Alternative C would result in the relocation of utilities. Appropriate officials and organizations would be contacted and coordinated with to minimize damage or disruption of existing service. The public would be notified of the timing and duration of expected outages.

In addition to known utilities, other subsurface obstructions or conditions may exist that are not known at this time. Archaeological materials, for example, may be uncovered during construction, and in this case, work in the area would cease. The City Consultant will have archaeologists on staff that would be immediately contacted for coordinating an examination and evaluation of the finding with the MDOT and MDAH. Unknown hazardous materials sites may also be encountered. Construction would cease immediately until hazards and safety considerations could be determined.

During the course of construction, safety of construction workers and the public is of utmost importance. Safety precautions will be implemented in accordance with Occupational Safety and Health Administration requirements and will include fencing and other barriers to separate pedestrians and vehicles from the construction site.

4.20 Secondary and Cumulative Effects

Secondary and cumulative impacts are a potential concern in any transportation improvement project. Secondary, or indirect impacts, are “caused by the action and occur later in time or farther removed in distance” as opposed to direct impacts. These effects are often less predictable than direct project effects but are still “reasonably foreseeable” (40 CFR 1508.8). Cumulative effects encompass all effects related to a project, both direct and indirect, as well as effects of any other actions that may impact the environment in the area under study. The cumulative impact of a project is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions” (40 CFR 1508.7). Actions to be considered in a cumulative effects’ assessment include not only previous or future actions of the City of Gulfport, but actions of other government agencies, private citizens, corporations, and other entities which may be either

related or unrelated to the project team. This section of the EA addresses the potential secondary and cumulative impacts associated with the implementation of Preferred Alternative C outlined in Section 3 and other projects/programs that are planned for the region.

Secondary, or indirect impacts, would mainly be the result of induced development that would be encouraged by construction of the Preferred Alternative C. Induced development includes development that would not take place if not for the proposed action, or development that would take place at a different location, a smaller scale, or a later time. For a transportation project in a somewhat undeveloped area such as this proposed project, induced development can occur at any location where access is allowed along the roadway. However, induced development for this project will be controlled to some degree by the adjacent floodplain and wetlands.

To evaluate cumulative effects, any other major projects that are planned or under construction need to be considered. It is not the intention of this document to evaluate or identify all impacts associated with the other identified project(s). No other major projects have been identified at this time.

No Build Alternative

Secondary

The No Build Alternative would have no impact on the potential for inducing changes in patterns of land use, population density, or growth rate. When compared with Preferred Alternative C, the No Build Alternative would result in continued and increased congestion. This may result in localized impacts to businesses and residences and slow the development of vacant and developed properties.

Cumulative

The No Build Alternative would have no incremental impact with respect to cumulative effects of past, current, and future projects on most environmental resources. However minimal, expected degradation in intersection levels of service along US 49 in the 2045 Design Year

presented in **Appendix B** may adversely affect localized air quality due to increased emissions from vehicle delays. Excess emissions resulting from congestion and idling in town could increase localized levels of carbon monoxide, volatile organic compounds, and nitrogen oxides, although no predicted emissions levels would exceed ambient air quality standards at this time.

Preferred Alternative C

Secondary

Implementation of Preferred Alternative C is anticipated to change the general pattern of development in the project area as the pattern results from the local economy that drives the market demands for industrial growth, additional housing, commercial services, and community facilities to meet the needs of an increasing population.

Based on the existing and projected traffic data, presented in **Appendix B**, the Preferred Alternative C removal of some local traffic from US 49 would be a long-term safety benefit.

Cumulative

Direct cumulative impacts on socioeconomics from constructing Preferred Alternative C would be expected to be beneficial. Preferred Alternative C would enhance in the undeveloped areas due to better accessibility.

In the context of other transportation and development projects, the proposed Preferred Alternative C action would have the potential to result in an incremental impact to water quality during construction. Preferred Alternative C would have an incremental adverse impact through the addition of increased impervious surfaces. Also, completion of the project, which would be expected to increase the rate of development in the area, would indirectly increase the quantity of impervious surfaces. Construction of the retention basin would have the capacity to contain stormwater flows from some of the initial development along the alignment. Should development continue along the alignment, additional stormwater retention would be needed to mitigate stormwater flows.

Long-term indirect cumulative effects would continue to occur. However, these effects, both beneficial and adverse, are difficult, if not impossible, to quantify. Reductions in habitat have undoubtedly created inter- and intra-species competition for available food and shelter and, eventually, slight reductions in some wildlife populations. Close coordination and approval from the appropriate state and federal agencies would be required for any activity potentially affecting any unique or sensitive areas (Turkey Creek) to ensure adverse effects would be avoided or substantially reduced.

4.21 Relationship of Local Short-Term Uses vs. Long-Term Productivity

The local short-term impacts of the project are mainly associated with the period of construction. The short-term impacts will affect the areas of construction as well as travelers utilizing the roadway system during this period. The short-term impacts during construction include the increased consumption of energy, increased waste production/pollution, and decreased traffic efficiency. Residents near the construction areas may be affected by increased levels of noise, vibration, fugitive dust, and lack of road access. Some temporary disruptions of travel patterns can be anticipated.

The greatest potential, short-term impact to natural resources anticipated is an increase in the turbidity of water bodies immediately adjacent to construction areas. However, best management practices will be implemented for erosion and sediment control during construction to reduce this impact. The major short-term benefit of the proposed project is the economic stimulation derived from construction-related jobs and associated commercial activity.

The major long-term impact will be the taking of natural habitat and biotic communities and the associated displacement of wildlife. However, this impact is expected to be mitigated by the conservation of lands along and adjacent to Turkey Creek. These lands would be protected in perpetuity. These protections would allow Turkey Creek to remain in its natural state for residents. The conservation of these lands would assist the residents of the North Gulfport and Turkey Creek communities in the execution of their community plan. The long-term benefits of this project include improved transportation for the area, increased potential for economic

development opportunities, and increased public safety. The economic base of the area will be improved through increases in economic development opportunities and improved access. The increased accessibility to the area will enhance the area's potential for both commercial and residential development. Such development increases property values, tax revenues, and available jobs.

4.22 Irreversible and Irretrievable Commitments of Resources

This project will require certain irreversible and irretrievable commitments of resources. These commitments involve natural, human, physical, and fiscal commitments of resources. Existing land uses within the proposed right-of-way will be irreversibly committed for the lifetime of the transportation facility. The construction of the roadway will require a considerable commitment of fuels, labor, and highway construction materials, including cement, aggregate, and bituminous materials. These materials are not generally retrievable. However, such materials are not in short supply and committing them to the construction of this facility will have no adverse impact upon the continued regional availability of these resources.

Construction of Preferred Alternative C would require a substantial one-time commitment of local, state and federal transportation funds, which are not retrievable. Several sources of data were used for determining the estimated costs for this project. A unit price Opinion of Probable Cost was developed for estimating the construction costs. Right-of-way land costs were estimated using Harrison County's appraisal records and by local appraisers. The estimated preliminary engineering, right-of-way and construction costs are \$48,500,000.00 (forty-eight million five hundred thousand dollars) for Preferred Alternative C.

An important long-term cost to consider for a roadway investment is maintenance cost. Maintenance costs include major items such as resurfacing as well as routine maintenance which includes re-striping, mowing, clearing drainage structures, patching potholes, repairing signs and guardrails, and bridge maintenance. Over time, maintenance costs can be expected to be a major expense.

The commitment of these resources is based upon the concept that local residents and other road users would benefit from the improved transportation system. The construction would result in improved accessibility, economic activity, and safety. Savings would be realized in both travel time and consumption of fuel from these improvements.

4.23 Summary of Impacts

This section provides a comparison of potential impacts that can be quantified for Preferred Alternative C. **Table 4-11** on the next page summarizes the potential impacts of Preferred Alternative C.

Table 4-11. Summary of Impacts

| Category | Build Alternative I |
|--|------------------------|
| Land Use (acres) | 188 |
| Existing Public Maintained Land (acres) | 11 of the 188 |
| Prime Farmlands (acres) | 0 |
| Residences Displaced | 0 |
| Businesses Displaced | 0 |
| Commercial Buildings Owned by Non-Profits Displaced | 0 |
| Mobile Home Weekend/Hunting Camp Displaced | 0 |
| Estimated Employees Displaced | 0 |
| Noise Impacted Sites | 0 |
| Waters of the U.S. Streams (linear feet) | 3,726 |
| Waters of the U.S. Ponds (acres) | 620 |
| Wetlands Crossed (acres) | 121 |
| Turkey Creek Floodplain Elevation Increase | 0 |
| Cultural Resource Sites | 0 |
| Vegetation/wildlife habitat removed (acres) | 156 |
| Hazardous Waste Sites | 0 |
| Estimated 2021 Preliminary Engineering, Railroad Crossings, Utility Relocation, and Right-of-way Costs | \$11,060,000 |
| Estimated 2021 Wetland Mitigation and Stormwater Retention Costs | \$5,640,000 |
| Estimated 2021 Construction Costs | \$28,300,000 |
| Estimated 2021 Right of Way Donation Credits | \$5,000,000 |
| Estimated 2021 Total Costs | \$40,000,000 |

5 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

The project development team for this study included representation from the following: the City of Gulfport; the Mississippi Department of Transportation; the City of Gulfport's selected consultant for providing the study, Neel-Schaffer, Inc. (N-S); and sub-consultants who conducted a portion or portions of the study for N-S. The sub-consultants are Headwaters, Pickering, Machado Patano, Kimley Horn, Bowlby, and Soil Tech.

The process of preparing this document included obtaining input from numerous agencies, stakeholders and the public. Close coordination with agencies and community stakeholders was initiated at the outset of the study, and a public meeting was held early on to raise awareness of the project and to provide an initial opportunity to review and comment on the project. In addition to providing formal opportunities for comment, the City of Gulfport encouraged continuing communication with the public on an informal basis in order to keep potentially affected residents and property owners apprised of developments in the study effort.

This section describes the project development team's coordination activities with local officials, project stakeholders, and representatives of governmental agencies. It also describes the study's public involvement program. Most of these activities involved meetings or conference calls and follow-up actions taken in response to the meetings and conference calls. Some of the activities only involved the project development team.

Appendices I and J supplement this section. **Appendix I** contains copies of correspondence with the governmental agencies and Native American tribes. **Appendix J** contains more detailed information on the remaining coordination activities involving the project development team, stakeholders and the public.

5.1 N-S Meeting with Mississippi Power Company on February 13, 2020, and Follow-up

Representatives of N-S introduced the project to representatives of Mississippi Power Company (MPC) at the meeting. The impact of the proposed project on MPC's distribution and transmission lines was discussed at the meeting. The MPC representatives agreed to provide a worst-case scenario cost estimate for adjusting and/or relocating their impacted utility.

A follow-up conference call between N-S and MPC representatives was held on March 16th, and emails were exchanged between N-S and MPC on March 20, March 24, and March 25, 2020.

It was agreed the cost estimate provided by MPC would be finalized and discussed further after the alignment is finalized. Copies of follow-up documentation and estimate are contained in **Appendix J**.

5.2 N-S Correspondence with Kansas City Southern Railway dated February 27, 2020, and Follow-up

In correspondence dated February 27, 2020, N-S introduced the project to the Kansas City Southern Railway (KCS). Subsequent phone calls involving representatives of N-S and the KCS were held on March 4, 9, and 13, 2020. As a result of this interaction, a revised alignment was presented for consideration due to issues raised concerning train lengths and schedules on the spur line. The KCS expressed the need for as much a western crossing of the “DeLisle Lead” line as possible in order to avoid train stoppings and resulting traffic delays associated with movement of trains off of the main line on to this spur at the wye of the track. In November of 2020 the City of Gulfport and KCS executed an agreement for the relocation of the existing crossing on the KCS “DeLisle Lead” line and for the construction of a new crossing on KCS’s main north-south line at-grade. A copy of this agreement is contained in **Appendix J**.

5.3 Project Kickoff/Zoom Meeting on March 4, 2020

The meeting was held at the City of Gulfport Public Works Department. Representatives of N-S and the City of Gulfport along with representation from the MDOT Sixth District, Rail Division and Right-of-Way Division were present at the meeting. Participating via phone in the meeting were representatives from the Federal Highway Administration (FHWA), N-S, MDOT Sixth District, MDOT LPA, MDOT Environmental Division, MDOT Roadway Design Division and MDOT Bridge Division.

The meeting was called to order by Mr. David Seyfarth of the MDOT Sixth District. After introductions were completed, the general items discussed included the following: project scope overview, funding availability and obligation goals, scope of engineering services, engineering

contract status, advance construction letter approval, notice to proceed, project schedule and project development team meetings.

The environmental discussion items included the following: agency scoping list, public involvement, stakeholder meetings, drainage “no-rise”, cultural resources, wetlands and hot spot air quality.

The survey discussion items included landowner notification, entry/staking/drilling approval, utility coordination and geotechnical. The design items discussed included alignment, number of lanes and the KCS railroad. The last item discussed was right-of-way plans. Critical dates and follow-up actions were discussed in the closing remarks.

Appendix J contains a copy of the minutes for the meeting.

5.4 N-S Meeting with Greater Gulfport Properties on March 9, 2020, and Follow-up

Representatives of N-S met with Messrs. Roy Anderson III, Richard Salloum, Paul Franke and Martin Miller of Greater Gulfport Properties, which own a large amount of the land located within this project’s study area. At this meeting, N-S introduced the project outlining the alignment, study area, I-10 overpass, and the roadway configuration including the number of lanes. The Alternative C alignment was presented for consideration due to the utility and other impacts associated with Alternative B.

After the meeting there were follow-up conference call between Greater Gulfport Properties representatives and N-S on March 24, 30 and April 1, 2020. The series of conversations ensured regarding the topics of access to Landon Road, connections to Daniel Boulevard and 34th Avenue, existing utilities, future access to I-10 and roundabout location. On April 1st following the last phone call, a representative of Greater Gulfport Properties sent an email stating that they agree with the updated alignment and look forward to working with the City of Gulfport to help make this project a reality.

5.5 City of Gulfport Conference Call with Turkey Creek Limited Partnership on March 23, 2020

City of Gulfport representatives conducted this call with Messrs. Jerard Ward and Paul Mayronne of Turkey Creek Limited Partnership, which owns a large amount of the land located within this project's study area. During this call, the project was introduced outlining the alignment, study area, I-10 overpass, and the roadway configuration including the number of lanes. The Alternative C alignment was presented for consideration due to the various conflicts with utilities and connectivity with the current terminus of Factory Shop Boulevard.

In response to the conference call, a representative of the property owner sent an email stating that they agree with the Alternative C alignment and look forward to working with the City to help make this project a reality.

5.6 N-S and MDOT Sixth District Email Correspondence on March 30, 2020

In the email from N-S to MDOT, N-S asked whether I-10 was planned for a future widening soon or in the foreseeable future. In the email response, the MDOT Sixth District advised there were no current plans to widen I-10 in the area and that has not been mentioned in any of the studies in recent years.

5.7 N-S Conference Call with Summit Development Corporation on March 31, 2020

Representatives of N-S held a conference call with Ms. Susan Knauer and Messrs. Jim Frisby and Phillip Frisby of Summit Development Cooperation, which own a large amount of the land located within this project's study area. N-S introduced the project outlining the alignment, study area and the roadway configuration including the number of lanes. The project background - including the PEL Study, grant funding, and project timeline - were discussed. Summit representatives inquired about ingress and egress, zoning for the property, and ownership of existing unimproved rights of way in the area. The topics were referred to the City of Gulfport for further discussion. The Summit representatives requested a follow-up meeting with the City of Gulfport.

5.8 City of Gulfport Correspondence to Study Area Landowners dated April 1, 2020

Mr. Wayne Miller, the Director of Public Works for the City of Gulfport, mailed a letter to landowners within the study area advising them that surveys will be made to collect information for roadway improvements and that their property was identified as one that will need to be entered. The letter informed the landowners that the work would include collection of topographic information, environmental studies and geotechnical investigations for design of the roadway improvements within this project's study area. A copy of the letter is contained in **Appendix J**.

5.9 City of Gulfport Conference Call with Department of Marine Resources on April 7, 2020, and Follow-up

Background: The northern part of an approximately 34-acre parcel of land owned by the State of Mississippi is within the study area for the project. The deed for the property stated in part: "The State of Mississippi is acting by and through the Secretary of State as Land Commissioner for the State of Mississippi pursuant to Title 7, Chapter 11 , The State of Mississippi shall exercise use and possession of the PROPERTY by and through the Mississippi Department of Marine Resources, 1141 Bayview Avenue, Biloxi, MS 39530, an agency of the State of Mississippi." The deed also stated in part: "The property herein conveyed shall be used for the conservation and preservation of its natural features in recognition the public benefits in protecting it as coastal area and associated ecosystems in the interest of present and future generations. The property shall be used and maintained forever as a natural area for the preservation, protection, restoration and sustenance of its natural characteristics and features, and of its ecological integrity and associated habitats". The Land Trust for the Mississippi Coastal Plain - a Mississippi nonprofit corporation - granted, sold, conveyed and warranted the property unto the State of Mississippi by a Warranty Deed on January 13, 2012. The Mississippi Regional Housing Authority sold, conveyed, warranted and delivered the property to Coastal Plain by Warranty Deed on September 30, 2011.

The City of Gulfport introduced the project to Ms. Jennifer Wittmann, the Coastal Preservation Bureau for Department of Marine Resources (DMR). In response, she wanted to verify DMR's

involvement on the deed to the State of Mississippi. The project was then introduced to Mr. Ray Carter of the Secretary of State's Office.

There were follow-up emails between the three agencies on April 8, and 20, 2020. Ms. Wittmann and Mr. Carter became the contacts for further discussions as the study develops.

5.10 N-S Hydrology and Hydraulics Conference Call with MDOT on April 10, 2020, and Follow-up

A project coordination conference call to discuss hydraulics and hydrology was held on April 10, 2020. Participating were Mandy Farmer (MDOT); Glen Ledet, Jessica Dilley and Damon Torricelli (N-S). Subsequent correspondence took place with Rhonda Varner (MDOT) who was not able to attend.

N-S presented an exhibit depicting the project location, noted that the hydraulic in this area are sensitive and advised N-S wanted to make sure it takes the correct approaches to addressing hydrology and hydraulic issues throughout the project. MDOT's roadway hydraulic expectations and guidance on the expected software and manuals that would be required were discussed. The contract, specifically Part 6 – HIGHWAY HYDRAULIC DESIGN and the MDOT Design Manual 2001 and other design resources are available on MDOT website and were discussed.

It was decided the Hydraulic Report for the design should include at least the following:

1. Summary or brief discussion of the various roadway hydraulic components used on the project and methodology of design for each.
2. Sections for each type of component (i.e., cross drains, side drains, storm systems, special ditches, silt basins, etc.) with design recommendations, referenced by alignment stationing.
3. Drainage area map (create a drainage areas DGN file that includes sub-areas for the different components.)

5.11 N-S / City of Gulfport Public Involvement Planning Meeting on April 13, 2020, and Follow-up

The purpose of the meeting was to finalize the Public Involvement and Schedule for presentation to the MDOT for approval.

The Public Involvement Plan centered around six items. The items in order, with overlap between adjacent items in some instances, were: an initial Stakeholder Meeting, a second Stakeholder Meeting, a Public Meeting, Individual Stakeholder Coordination, a third Stakeholder Meeting and a Public Hearing.

The goals of the meeting were met, and the City of Gulfport requested that N-S follow-up with an email requesting approval.

A follow-up email was sent to MDOT on April 14th. Appropriate representatives of the FHWA were copied on the email to MDOT.

The MDOT responded that the approach for the project was acceptable as long as it adhered to the COVID-19 Guidance issued to MS. MDOT does not recommend holding any “Open Format” Public Hearings during this interim period due to the COVID-19; however, MDOT understands that projects need to continue to move forward during this time. Therefore, the use of virtual public involvement tools such as Zoom, Microsoft Team, conference calls, online surveys, etc. for stakeholder coordination/meetings, public meetings, etc., are acceptable.

The MDOT response also expressed hope that by the time of the Public Hearing things would be somewhat back to normal. If not, MDOT advised it should receive some guidance from the FHWA shortly because this is currently being discussed at FHWA Headquarters.

5.12 City of Gulfport Conference Call with Mississippi Coastal Plain on April 14, 2020, and Follow-up

Reference is made to Section 5.9 concerning the northern portion of the State of Mississippi owned property contained in the study area, the Mississippi Coastal Plain sold that property to the State of Mississippi. Therefore, the Mississippi Coastal Plain has an interest in the property remaining in accordance with the stipulations stated in the deed.

The City of Gulfport introduced the project to Ms. Judy Steckler outlining the alignment, study area, proposed roadway configuration, including the number of lanes, pedestrians and bicyclists’ accommodations, and lighting. She inquired about the timeline associated with completion of

the project and the width of the right-of-way needed in the area of properties owned by the Mississippi Coastal Plain.

There was a follow-up email between the two parties on April 20, 2020.

5.13 N-S Alignment and Typical Section Video Conference with MDOT and FHWA on April 15, 2020, and Follow-up on May 19, 2020

The video conference was held via Microsoft Teams. Meeting participants included representatives from the FHWA; MDOT District 6, LPA, Planning, Environmental, and Roadway Design; and N-S.

Representatives from N-S provided a brief project overview; advised they have been working closely with the City of Gulfport on the project; and commented that the project has a proposed alignment supported by the city and typical roadway sections that are supported by the city. The N-S representatives advised the bridge typical section, and the typical section of I-10 were still in development.

N-S presented the following three alternatives for the study: (1) Alternative A - No Build, (2) Alternative B – Build Grant, (3) Alternative C – Revised Alignment. Alternative C addresses some fatal flaws that were identified in Alternative B and has the concurrence of MDOT District 6 as the new proposed alignment. FHWA agreed that Alternative C was viable and could be moved forward.

The typical sections for the four-lane, two-lane, and 34th Avenue sections of roadway were shown. In response to a request made during the conference, confirmation was made after the conference that number of lanes shown on the three typical roadway section match the number of lanes as described for those roadway segments in the build grant.

A typical section for the bridge over the interstate was not finalized.

Three options being studied for the I-10 median drainage were shown. MDOT District 6 was supportive of the options being considered but will need to look at them further before making a final decision. On May 19, 2020, there was a conference call between Messrs. Kelly Castleberry

and Gabe Faggard of the MDOT Sixth District and Mr. Steve Twedt of N-S. MDOT District 6 prefers the pier to be installed in the middle of the I-10 median and wants the drainage to go around the median to prevent installing another pipe under the eastbound lanes of the interstate.

5.14 N-S Contacts Stakeholders between May 18 and 22, 2020

A stakeholder group was identified by the city for the purpose of connecting with the community and businesses in the project area to facilitate communications and the exchange of information throughout the project development. The stakeholder group included:

Kent Jones – Harrison County District 4 Supervisor

Patrick White – Community Leader

Rip Daniels – Community Business Owner

Judy Steckler – Executive Director of Land Trust for Mississippi Coastal Plain

Pam Meinzinger – Premium Outlet Manager

Roy Anderson, III – Property Owner (Greater Gulfport Properties)

Don Shepley – Property Owner/Community Leaders

Sonya Williams-Barnes – MS House Member for District 119

Joel Carter – MS Senate for District 49

Text messages, phone calls and emails were then used by N-S to introduce the stakeholders to the project and to poll them about possible dates to schedule the meeting between May 18th and May 22nd.

5.15 N-S Contacts Stakeholders on May 29, 2020

Phone call and voice calls were used for inviting the following stakeholders to a Zoom Meeting scheduled on Wednesday, June 10th at 2:00 p.m.: Ms. Judy Steckler, Pam Meinzinger, and State Representative Sonya Williams-Barnes; and Messrs. Kent Jones, Patrick White, Rip Daniels, Roy Anderson, Don Shepley, and State Senator Joel Carter. Verbal contact was made to all the stakeholders except for Joel Carter and Roy Anderson III. Voice messages were left for Senator Carter and Mr. Anderson.

5.16 N-S Email Correspondence to Stakeholders, FHWA and Project Development Team on June 1, 2020

Email was used for providing the Video Conference information prior to the Zoom Meeting scheduled on Wednesday, June 10th at 2:00 p.m.

The following stakeholders were emailed the information: Ms. Judy Steckler, Ms. Pam Meinzing, and State Representative Sonya Williams-Barnes; and Messrs. Kent Jones, Patrick White, Rip Daniels, Roy Anderson, Don Shepley, and State Senator Joel Carter.

5.17 First Stakeholder Meeting by Video Conference on June 10, 2020

Mr. Steve Twedt of N-S was the presenter for the conference. A copy of the images used for Mr. Twedt's presentation, and emailed to the conference attendees on June 1, 2020, is contained in **Appendix J**.

In response to Mr. Twedt's presentation, a comment was expressed by one stakeholder and a question was asked by another stakeholder. Mr. Patrick White voiced his support for the project. State Representative Sonya Williams-Barnes asked about the flooding of Forest Heights Subdivision. In response, Mr. Twedt explained that N-S will be performing a hydraulic analysis for the project to ensure that it will not adversely impact the current stormwater drainage.

The conference concluded with Mr. Jeff Bruni of the City of Gulfport thanking everyone for their participation in the conference.

A copy of the meeting's minutes is contained in **Appendix J** and provides more detailed information on the conference.

Due to stakeholder Ms. Judy Steckler being unable to participate in the video conference, Mr. Steve Twedt made a phone call to her after the conference concluded. He provided Ms. Steckler an overview of the comments he made on the images during his presentation earlier in the day.

5.18 N-S Phone Call with Gulfport City Council Ward 3 Member on June 15, 2020

This phone call was between Mr. Steve Twedt of N-S and Council Member Ella Holmes-Hines. Ms. Holmes-Hines asked about the status of the project. After Mr. Twedt provided her with the

status and that the public involvement process had just started with stakeholder meetings, Ms. Holmes-Hines advised that she was a stakeholder and wanted advance notice of any meetings. Ms. Holmes-Hines expressed concerns over flooding in Forest Heights. In response, Mr. Twedt advised her that N-S is aware of the community concerns and will study stormwater as part of the environmental process. Mr. Twedt told her that N-S would determine what would be required to ensure that the stormwater discharge is not increased. She expressed concerns over secondary and cumulative impacts of future development. In response, Mr. Twedt told her that detention for developments would be a city policy decision.

The conversation concluded with Ms. Holmes advising flooding became an issue due to post annexation development and that flooding was an environmental justice issue.

5.19 Headwaters Mail Correspondence to US Fish and Wildlife Service (USFWS) on June 24, 2020

Mr. Lang Kirkwood of Headwaters submitted a letter including a general location map, U.S.G.S. *Gulfport North, Mississippi* Topo Quadrangle Map, two (2) aerial maps, and an overview of the project to the USFWS requesting a review of the location for issues relative to threatened and/or endangered plant and animal species and a written reply with any comments and/or instructions regarding any issues. **Appendix I** contains a copy of the correspondence Mr. Kirkwood provided to the USFWS.

5.20 Headwaters Mail Correspondence to Mississippi Natural Heritage Program (MNHP) on June 24, 2020

Mr. Lang Kirkwood of Headwaters submitted a letter including a general location map, U.S.G.S. *Gulfport North, Mississippi* Topo Quadrangle Map, two (2) aerial maps, and an overview of the project to the MNHP requesting a review of the location for issues relative to threatened and/or endangered plant and animal species and a written reply with any comments and/or instructions regarding any issues. **Appendix I** contains a copy of the correspondence Mr. Kirkwood provided to the MNHP.

5.21 Headwaters Mail Correspondence to Mississippi Department of Environmental Quality (MDEQ) on July 8, 2020

Mr. Lang Kirkwood of Headwaters submitted a letter including a general location map, U.S.G.S. *Gulfport North, Mississippi* Topo Quadrangle Map, two (2) aerial maps, and an overview of the project to the MDEQ requesting a review of the location for issues of concern and a written reply with any comments and/or instructions regarding any issues. **Appendix I** contains a copy of the correspondence Mr. Kirkwood provided to the MDEQ.

5.22 Headwaters Mail Correspondence to Mississippi Department of Marine Resources (MDMR) on July 8, 2020

Mr. Lang Kirkwood of Headwaters submitted a letter including a general location map, U.S.G.S. *Gulfport North, Mississippi* Topo Quadrangle Map, two (2) aerial maps, and an overview of the project to the MDMR requesting a review of the location for issues of concern, particularly related to wetlands, threatened and/or endangered species, and a written reply with any comments and/or instructions regarding any issues. **Appendix I** contains a copy of the correspondence Mr. Kirkwood provided to the MDMR.

5.23 N-S Phone Call with Prime Asset, LLC on July 8, 2020

Mr. Steve Twedt of N-S initiated the phone call to Ms. Janet Gordon. He introduced the project to her outlining the same information that was provided at the video conference on June 10th. She was told that the other landowners along the roadway corridor were developers and that they were donating right-of-way for the project. Options for crossing the Prime Assets property were discussed and she requested an exhibit so that she could see the overall project layout and the potential right-of-way requirements at her property. She advised Mr. Twedt that there were no issues that would complicate the right of way acquisition. She asked about the North Gulfport Community concerns with area developments. In response, Mr. Twedt advised the concerns would be addressed in the study.

An exhibit of Alternative C was sent to her for review.

5.24 N-S Email to Stakeholders, FHWA and Project Development Team on July 9, 2020

Mr. Twedt's email advised a stakeholder meeting has been scheduled for 10:00 a.m. on Wednesday, July 29th via Zoom. A link was included to provide meeting access

The email stated that an update on the status of the study and the project schedule would be provided as well as the public meeting planning process and strategies for engaging the public.

The following stakeholders were emailed the information: Ms. Judy Steckler, Ms. Pam Meinzing, and State Representative Sonya Williams-Barnes; and Messrs. Kent Jones, Patrick White, Rip Daniels, Roy Anderson and Don Shepley.

5.25 N-S Phone Call with Prime Asset, LLC on July 13, 2020

Mr. Steve Twedt of N-S received the phone call from Ms. Janet Gordon concerning several questions about the study. The questions and the responses provided by Mr. Twedt are addressed in the following paragraphs.

What is the difference between Study Limits and Right-of-Way Limits? The response was we are surveying and studying everything within the "Study Limits", but the anticipated Right-of-Way required for the project could be less than the study limits.

What factors were used in setting the alignment? The response was the MPC power lines and drainage under I-10 dictated the roadway and overpass alignments.

Prime Asset's agent, Brian Bolis with NAI Sawyer asked if N-S could provide an exhibit showing details of their site? The response was not right now. More details will be available when the study, survey and preliminary design are complete.

What is the schedule? The response given was the Public Meeting around the first of September, Public Hearing in November, Right-of-Way in February of 2021.

Who mitigates wetlands? The response was the City of Gulfport will pay for mitigation within the Right-of-Way limits.

Do we need to formalize an agreement? The response was not at this point. No transactions on right-of-way need to take place before the environmental document is approved.

The meeting concluded with Mr. Twedt advising Ms. Gordon that surveys and studies would be done within the boundaries shown on the exhibit that he had provided her.

5.26 Mail Response from US Fish and Wildlife Service (USFWS) to Headwaters on July 14, 2020

Mr. Lang Kirkwood of Headwaters received a letter from the USFWS stating the proposed project is within the range of several federally listed species and named four (4) such species. The correspondence stated that project is within the Turkey Creek watershed and recommended that natural resources be considered and avoided to the extent practical during the environmental planning phase of the project. **Appendix I** contains a copy of the correspondence Mr. Kirkwood received from the USFWS.

5.27 Project Development Team Video Conference Meeting on July 17, 2020

MDOT, N-S and Headwaters representatives participated in this meeting to discuss the 2006 Watershed Implementation Plan for Turkey Creek, stormwater detention, wetlands and the public meeting scheduled for September 3, 2020.

Mr. Walt Dinkelacker of Headwaters had received a letter from the U.S. Fish and Wildlife Service referencing the 2006 Watershed Implementation Plan for Turkey Creek and involving EPA in the study. Headwaters and Ms. Kim Thurman of the MDOT Environmental Division agreed there were elements of the plan that would need addressing in the EA. It was agreed Headwaters would communicate with Mr. Kenneth Dean, the EPA Liaison, and the MDOT Environmental Division would be copied on the correspondence.

N-S representatives then brought up the subject of storm water management in the Turkey Creek watershed and the possibility of using detention. This detention would also include secondary and cumulative impacts from future development. It was agreed that the regional detention concept was a good plan to mitigate stormwater impacts and that detention also provides water quality benefits. Maintenance of the detention areas would need to be addressed as well as possible impacts to the City of Gulfport's MS4 Stormwater Management Plan.

The discussions then turned to wetlands. Due to the area of wetlands in the project area, Headwaters advised an individual Corps of Engineers permit would be needed. Ms. Thurman advised that mitigation possibly in Turkey Creek was a key factor. She said that the Executive

Director of the Land Trust meets once a quarter with members of Turkey Creek community and suggested that the Land Trust be contacted. Headwaters agreed to communicate with the Executive Director of the Land Trust.

It was decided that the public meeting on September 3, 2020, can be a virtual meeting due to the Governor's executive order because of COVID-19 and since FHWA allows virtual public meetings. However, MDOT advised that FHWA still is requiring in person public hearings. N-S will plan on holding both an in person and virtual public meeting and submit a plan for the virtual meeting to MDOT for review.

5.28 Headwaters Mail Correspondence to US Environmental Protection Agency (USEPA) on July 21, 2020

Mr. Lang Kirkwood of Headwaters submitted a letter including a general location map, U.S.G.S. *Gulfport North, Mississippi* Topo Quadrangle Map, two (2) aerial maps, and an overview of the project to the USEPA requesting a review of the location and a written reply with any comments and/or instructions. **Appendix I** contains a copy of the correspondence Mr. Kirkwood provided to the USEPA.

5.29 N-S Phone Call with Summit Development Corporation on July 27, 2020

Mr. Steve Twedt of N-S received the phone call from Mr. Jim Frisby checking on the status of the project.

After receiving an update from Mr. Twedt on the surveys and studies still being performed, Mr. Frisby asked if property was needed from Summit and if so which side of the right-of-way that lines up with Poole Street would it be on? Mr. Twedt responded that additional right-of-way would most likely be needed on the north side.

Mr. Frisby then asked when the decision would be made, and Mr. Twedt told him after the public hearing.

5.30 N-S Phone Call with Stakeholder Roy Anderson III in Morning of July 29, 2020

Mr. Anderson called Mr. Steve Twedt to advise that he would not be available for the stakeholders meeting. Mr. Twedt provided him an overview of the items that would be discussed such as the Public Meeting, Public Hearing, stormwater detention areas, alternatives and schedule.

5.31 Second Stakeholders Video Coordination Meeting on July 29, 2020

Participating in the zoom video meeting beginning at 2:00 p.m. were Jeff Bruni, Wayne Miller and Tyler Gentry (City of Gulfport); Judy Steckler, Pam Meinzingler and Don Shepley (Stakeholder Group); Lee Frederick, Mitchell Young, Kim Thurman, Adam Johnson, David Seyfarth and Necole Baker (MDOT); Jeff Schmidt, Billy Wilson, Eric Griffin and Carr Brown (FHWA); Paul Gavin and Kenneth Yarrow (GRPC); Damon Torricelli, Cori Gavin and Steve Twedt (Neel-Schaffer).

Mr. Twedt was the presenter at the meeting. After introductions were made, Mr. Twedt provided a recap of the previous June 10, 2020, Stakeholder Meeting and a status of the studies underway. The studies underway included air quality, noise, hydrology, wetlands and waters of the U.S., threatened and endangered species, historic and archaeological preservations, hazardous waste sites, field survey, and public involvement.

Ms. Judy Steckler spoke regarding the Turkey Creek Watershed Improvement Plan that was referenced by U.S. Fish and Wildlife in response to the wetlands report prepared by Headwaters.

The alternatives were presented with the adjustment of Factory Shop Boulevard shown to provide better alignment with the roundabout. The roadway typical sections were discussed, and it was explained that there have been no changes since the last meeting.

Mr. Twedt advised the in person Public Meeting will be held September 3rd at the Premium Outlet Mall Food Court with COVID-19 guidelines in place. He also stated a virtual meeting will be held concurrently online if anyone does not want to attend in person. Ms. Thurman advised the Public Meeting advertisement needs to be reviewed by the MDOT prior to publishing and that the advertisement needs to be published 21 days prior to the meeting. Ms. Pam Meinzingler suggested contacting the Chamber of Commerce and the Gulf Coast Business Council to create

involvement. Ms. Judy Steckler brought up contacting local church ministers like John Whitfield to get the word out to the public.

After the project schedule was presented and discussed, the meeting concluded with Mr. Wayne Miller thanking everyone for their participation.

5.32 N-S Phone Call to Stakeholders in Afternoon of July 29, 2020

Mr. Steve Twedt made separate phone calls to State Representative Sonya Williams-Barnes and Messrs. Patrick White and Rip Daniels.

State Representative Williams-Barnes was not in attendance at the Stakeholders Meeting earlier in the day. Mr. Twedt discussed the information provided at the meeting with Representative Williams-Barnes and forwarded her the presentation for review. Representative Williams-Barnes was positive regarding the project and had constructive comments on how to engage the public.

Mr. White had confirmed attending the Stakeholders Meeting earlier in the day, but there was a problem confirming his attendance. Mr. Twedt attempted to call Mr. White to discuss the information presented at the meeting but was unable to make contact with him.

Mr. Daniels was not in attendance at the Stakeholders Meeting earlier in the day. Mr. Twedt discussed the information provided at the meeting with Mr. Daniels and forwarded him a copy of the presentation for review. Mr. Daniels was positive about the project and had constructive comments on how to engage the public.

5.33 Headwaters Mail Correspondence to US Fish and Wildlife Service (USFWS) on August 3, 2020

Mr. Joshua Brown of Headwaters submitted an endangered species survey of the property to USFWS asserting the four (4) federally listed in the agency's letter from July 14, 2020, do not occur within the boundaries of the subject property. **Appendix I** contains a copy of the correspondence Mr. Brown provided to the USFWS.

5.34 FHWA Tribal Correspondent Correspondence to Native American Tribes on August 4, 2020, and Follow-up

The tribal correspondent from FHWA forwarded the executive summary from the Cultural Resources Survey Report to the Native American Tribes requesting any questions or comments regarding the proposed project. The correspondence and the responses are included in **Appendix I**.

5.35 Project Development Team Video Conference with GRPC on August 6, 2020

GRPC is the Metropolitan Planning Organization (MPO) for the urbanized area regarding functional classification of the local roads and streets within the study area. Therefore, the project development team needed input from the GRPC on the existing and future functional classification of the impacted local roads and streets. The project development team could then determine the design criteria that would be used for constructing or reconstructing the impacted roads or streets.

Participating in the conference were: Paul Gavin and Kenneth Yarrow (GRPC); Wayne Miller, Kris Riemann and Tyler Gentry (City of Gulfport); and Steve Twedt and Damon Torricelli (N-S).

5.36 N-S Email Correspondence to Stakeholders on August 6, 2020

Steve Twedt of N-S sent an email to the stakeholders with an attached notice of the public meeting stating the meeting is set for 3:00 to 6:00 p.m. on Thursday, September 3, 2020, at the Gulfport Premium Outlets Food Court.

The email stated that the meeting would be also virtually linked through the <https://www.interconnectinggulfport.com> website. The City of Gulfport was copied on the email. The stakeholders were asked to share the notice with members of the community and to encourage participation. Stakeholders emailed the correspondence were: State Representative Sonya Williams-Barnes, Judy Steckler, Pam Meinzinger, Wayne Miller, Kent Jones, Patrick White, Rip Daniels, Roy Anderson III and Don Shepley. Kris Riemann and Tyler Gentry (City of Gulfport); and Steve Twedt and Damon Torricelli (N-S).

5.37 Mail Response from US Fish and Wildlife Service (USFWS) to Headwaters on August 11, 2020

Mr. Joshua Brown of Headwaters received a letter from the USFWS stating that no further coordination under the Endangered Species Act (ESA) is required based on the results of the biological survey conducted in April of 2020. **Appendix I** contains a copy of the correspondence Mr. Brown received from the USFWS.

5.38 Email Response from US Environmental Protection Agency (USEPA) to Headwaters on August 13, 2020

Mr. Lang Kirkwood of Headwaters received an email from the USEPA providing comments to consider regarding the project purpose and need, priority watershed designation, aquatic resources of national importance, Clean Water Act Section 404, hydrology and habitat fragmentation, collaborative watershed restoration and protection activities, community engagement, and reasonably foreseeable actions. **Appendix I** contains a copy of the correspondence Mr. Kirkwood received from the USEPA.

5.39 Citizen Email to N-S through Website on August 17, 2020

Ms. Cassandra Ellis submitted an inquiry through the www.interconnectinggulfport.com website wondering if this meeting is going to talk about the families living in the Turkey Creek area having to sell their property.

In his email response, Mr. Steve Twedt thanked Ms. Ellis for her inquiry concerning the project. He advised her: the purpose of the upcoming Public Meeting is to disseminate project materials and gather information for use in the decision-making process; it will be in an open format allowing all attendees to view project exhibits and speak with project representatives; and this would certainly be an appropriate time to discuss concerns of landowners in Turkey Creek. Mr. Twedt closed his response by advising all comments and/or questions and answers will be documented in the project record. A copy of this response is included in **Appendix J**.

5.40 Project Development Team Video Conference with Land Trust for the Mississippi Coastal Plain on August 18, 2020

The video conference was held via Zoom. Participating in the conference were: Ms. Judy Steckler (the Land Trust for the Mississippi Coastal Plan and a Stakeholder in this study); Messrs. Walt Dinkelacker and Lang Kirkwood (Headwaters); and Messrs. Steve Twedt and Damon Torricelli (N-S). The purpose of the conference was to discuss the views of the Land Trust regarding the project using Land Use property for mitigation and detention.

Ms. Steckler advised the long-term use of the Land Trust property in the project area needs to be maintained as green space. She expressed a willingness to work with the project development team in protecting any Land Trust property impacted by the project as green space.

5.41 Email Response from Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) to Headwaters on August 19, 2020

Ms. Pamela Hall of Headwaters received an email from the MDWFP in response to the correspondence dated June 24, 2020. The email provided a list of occurrences of state or federally listed species and species of concern within two (2) miles of the project site and concluded that if best management practices are properly implemented, monitored, and maintained, the project likely poses no threat to the listed species or their habitats. **Appendix I** contains a copy of the correspondence Ms. Hall received from the MDWFP.

5.42 N-S Phone Calls with Two Stakeholders on August 26, 2020

Both of the phone calls concerning publicizing the public meeting were made by Mr. Steve Twedt of N-S. One of the calls was made to State Representative Sonya Williams-Barnes. The other call was made to Mr. Patrick White.

Representative Barnes advised Mr. Twedt that she had put the flyer out on her social media and that she is going to do it again. Mr. White told Mr. Twedt that he was planning on attending the meeting and that he has been telling others in the Turkey Creek area about the meeting.

5.43 Coalition to Preserve and Protect Forest Heights Correspondence to Department of Transportation dated August 29, 2020

Appendix I contains a copy of the correspondence to the Departmental Office of Civil Rights regarding opposition to FY 2018-2019 BUILD discretionary Grant application for City of Gulfport.

5.44 Coalition to Preserve and Protect Forest Heights Correspondence Community Flyer

Appendix J contains a copy of the community flyer opposing the project that was distributed prior to the Public Meeting.

5.45 N-S Phone Calls with Two Stakeholders on September 1, 2020

Both of the phone calls concerning the public meeting were made by Mr. Steve Twedt of N-S. One of the calls was made to State Representative Sonya Williams-Barnes. The other was made to Mr. Rip Daniels.

Mr. Twedt spoke with State Representative Williams-Barnes about the public meeting and the flyer that has been distributed by the community about the project. She responded that she has been promoting the meeting and appreciated knowing about the community flyer distribution.

Mr. Twedt spoke with Mr. Daniels about the meeting and the flyer being distributed by the community. Mr. Daniels responded that he was aware of the community concerns and suggested that the project development team have a visual representation of Turkey Creek and the area drainage for presentation at the meeting.

5.46 Public Meeting on September 3, 2020

The in-person Public Meeting was held between 3:00 and 6:00 p.m. on Thursday, September 3, 2020, in person at the Gulfport Premier Outlets Food Court at 10000 Factory Shop Boulevard in Gulfport and virtually at www.interconnectinggulfport.com. The purpose of the meeting was to provide an open forum for discussion of the proposed project. The meeting was advertised in the Sun Herald on August 13, 2020. A copy of the advertisement is contained in **Appendix J**. The meeting was also promoted by the stakeholder group and the City of Gulfport website.

There were two options provided for attending the meeting. One option was to attend the meeting in person and the other option was to attend the meeting from another location virtually.

At the meeting site large drawings of the Preferred Alternative C and Typical Sections were placed on folding tables for perusal by the public. Members of the project development team were available to answer questions, engage in discussion and solicit comment. The meeting materials can be found in **Appendix J**. In addition, a manned sign in and comment card station was set up for attendee use.

There were 53 attendees at the public meeting. Of these 53, there were 12 Neel-Schaffer and City of Gulfport personnel. The attendance lists and photographs can be found in **Appendix J**.

Those attending the virtual meeting were provided access to an overall project location map, map of Preferred Alternative C depicting the study area and typical sections for each segment of roadway. Team representatives interacted with virtual attendees and answered questions. The media covered both the in person and virtual public meeting. Copies of the articles and scripts of the media's coverage are in **Appendix J**.

The virtual public meeting was recorded. The complete dialogue of the virtual public meeting was transcribed and is documented in **Appendix J**. During this virtual public meeting, most who attended did not express views or provide on the project.

Public Comments were received through comment forms, hand-written letters, emails and verbally beginning at the time the public meeting was advertised. They were also received verbally and through the "chat" feature during the virtual meeting platform.

Nine comments were submitted at the meeting. Copies of all the comments are contained in **Appendix J**. 77% of the comments were either concerned with or opposed to the construction of this project. 23% were in favor of the project. Those opposed to the project showed some common concerns including flooding, wetland disruption, non-alleviation of traffic congestion of US Highway 49, stormwater runoff, the Turkey Creek Watershed Plan, and the Forest Heights subdivision. Those in favor stated that this project will ease access and make a connection

between the North and South business districts. Another statement was made that the city will thrive off an increase in property and sales tax from this project.

A copy of the entire dialogue portion of the virtual meeting is contained in **Appendix J**. A summary of the dialog involving the EPA, and three Gulfport area residents is provided below.

- The EPA representative was advised wetland impacts have not been quantified at this time, an interchange was not included in this study and he was given the names of the stakeholders. After he asked about the Watershed Implementation Plan for Turkey Creek funded by the EPA and published by the Land Trust for the Coastal Plain in 2006, the project development team representative advised him the study was being considered. The EPA representative was also informed how the project originated.
- One of the area residents advised they would be filing a complaint with the office of civil rights and asked about the potential for increased flooding in Forest Heights. She was informed hydrology and hydraulics were being evaluated for stormwater runoff and that the environmental class of action for the study is an Environmental Assessment.
- One of the area residents was advised: The Turkey Creek Watershed Plan and Turkey Creek and North Gulfport Neighborhoods Community Plans along with other studies were being considered; permits and applications will be made after the NEPA document is approved; and how the project originated.
- One of the area residents was advised how the project limits were determined and the roadway would be approximately 750' from its closest point to Forest Heights.

Comments were also received within an acceptable time frame after the Public Meeting. Copies of the 13 comments are contained in **Appendix J**. Copies of the comments and any follow-up acknowledgements of receiving the comments from the project development team are contained in **Appendix J**. 23% of the comments were neutral on the project and only concerned that the project be done correctly, and all the measurements were to be taken to properly address and fix any and all impacts the construction would have. 31% of the comments were in favor of the new construction, 31% of the comments were opposed to the

project being constructed, and 15% of the comments were miscellaneous addressing the public meeting website. Those in favor of the project advised it will alleviate traffic congestion for Gulfport Premium Outlets and the US 49 intersections with Creosote Road, Airport Road and Landon Road.

5.47 N-S Phone Call with Property Owner on September 24, 2020

Mr. Steve of Neel-Schaffer spoke to property owner, Jerard Ward, regarding the aspects of the project such as alignment, wetlands, cultural resources, threatened and endangered species, soils, and stormwater detention. Mr. Ward was in favor of the project. Mr. Twedt asked Mr. Ward if he had any information on these items to please forward to him as it may be helpful with locating regional stormwater detention areas.

5.48 Mail Response from Mississippi Department of Marine Resources (MDMR) to Headwaters on October 15, 2020

Mr. Lang Kirkwood of Headwaters received a letter from the MDMR stating that wetlands will be apparently impacted, and the impacts would require a permit from the US Army Corps of Engineers with the application being submitted through the MDMR for review. **Appendix I** contains a copy of the correspondence Mr. Kirkwood received from the MDMR.

5.49 N-S Email Correspondence with USDA-NRCS on October 27, 2020

The correspondence between Ms. Cori Gavin of N-S and Mr. James Curtis of the NRCS resulted in a determination being made by Mr. Curtis that the project is exempt from the Farmland Protection Policy Act (FPPA) because the study area is within the city limits. Therefore, Mr. Curtis advised no further FPPA documentation will be required. **Appendix I** contains a copy of the correspondence Ms. Gavin provided to Mr. Curtis and his response.

5.50 N-S Meeting with Property Owner on November 9, 2020

Mr. Jim Frisby, Summit Development Corporation property owner, met with Mr. Steve Twedt of Neel-Schaffer to check on the status of the BUILD Grant project. Mr. Frisby has an interest in the Summit Development property. Mr. Twedt gave Mr. Frisby a copy of the overall project

drawing from the public meeting. Other items of discussion were alignment, schedule, and environmental considerations.

5.51 N-S Phone Call with Prime Asset, LLC on November 16, 2020

Mr. Steve Twedt received a phone call from Janet Gordon of Ellis Land Development inquiring about the status of the project and the Prime Asset, LLC parcel. The environmental process and timeline were discussed.

5.52 N-S Video Conference with Land Trust for the Mississippi Coastal Plain on November 24, 2020

The video conference was held via Zoom. Participating in the conference were: Ms. Dawn Haight (the new Executive Director of The Land Trust for the Mississippi Coastal Plan) and Messrs. Steve Twedt and Damon Torricelli (N-S). The purpose of the conference was to discuss the views of the Land Trust regarding the project using Land Use property for mitigation and detention.

Ms. Haight had no issues with using the Land Trust property as detention if it was transformed into a functioning wetland with a natural water feature with the planting of appropriated species of grasses, plants, etc. that were native to wetland areas.

5.53 Derrick Evans Communications December 2, 2020

At the suggestion of Judy Steckler, Steve Twedt attempted to contact Derrick Evans as a potential stakeholder via text message. Mr. Evans did not respond.

5.54 Meetings with Three (3) Individual Stakeholders on December 15, 2020

Mr. Steve Twedt of N-S and Mr. Wayne Miller of the City of Gulfport met individually with Ms. Pam Meinzing in person at Prime Outlets, Sonya Williams-Barnes via teleconference, and Mr. Rip Daniels via teleconference. The project status was provided informing them the environmental study for stormwater was reviewed and that the draft environmental document had been submitted to MDOT for review. Ms. Meinzing did not have any questions or concerns.

Ms. Williams-Barnes stated that the only concern that she was aware of from the community was flooding. She requested a copy of the environmental document when available and that a copy of the study be placed in the Isaiah Fredericks Community Center during advertisement.

Mr. Daniels wanted to know if the project was consistent with the Turkey Creek and North Gulfport Neighborhood Community plan. He was told that the plan was reviewed, and the project is being developed in a consistent manner. Mr. Daniels inquired about the acreage and depth of the wetlands mitigation detention area. He also asked if it would be fenced for safety and options for recreational uses were discussed. He was told that these items will be finalized during project design. Mr. Daniels stated that he would discuss the project with Derrick Evans.

5.55 Meetings with Three (3) Individual Stakeholders on December 16, 2020

Mr. Steve Twedt of N-S and Mr. Wayne Miller of the City of Gulfport met individually with Mr. Don Shepley in person at the Gulfport-Biloxi International Airport, Mr. Patrick White via teleconference, and Mr. Kent Jones in person at the Harrison County Courthouse in Gulfport. The project status was provided informing them the environmental study for stormwater was reviewed and that the draft environmental document had been submitted to MDOT for review. The future Public Hearing was discussed with Mr. Jones. None of the stakeholders had any questions or concerns.

5.56 Meeting with Individual Stakeholder Representative from the Land Trust for the Mississippi Coastal Plain on December 23, 2020

The video conference was held via Zoom. Participating in the conference were: Ms. Dawn Haight (the new Executive Director of The Land Trust for the Mississippi Coastal Plain) and Messrs. Steve Twedt and Damon Torricelli (N-S). The purpose of the conference was to update the status of the project. The discussed topics were Stakeholder Group Members, Public Meeting recap, development of preliminary plans, draft environmental document, upcoming public hearing, and environmental approval process. The possible community uses of the Land Trust property that will be used as mitigation and detention was also discussed. Ms. Haight was supportive of the project and did not have any questions or concerns.

5.57 Headwaters Mail Correspondence to US Army Corps of Engineers (USACE) dated January 6, 2021

Mr. Lang Kirkwood of Headwaters submitted a letter including a general location map, U.S.G.S. *Gulfport North, Mississippi* Topo Quadrangle Map, two (2) aerial maps, and an overview of the project to the USACE requesting a review of the location for issues of concern and a written reply with any comments and/or instructions regarding any issues. **Appendix I** contains a copy of the correspondence Mr. Kirkwood provided to the USACE.

5.58 Response to US Environmental Protection Agency (USEPA) from Headwaters dated January 15, 2021

Mr. Lang Kirkwood of Headwaters responded to comments received from the USEPA in an email dated regarding the project purpose and need, priority watershed designation, aquatic resources of national importance, Clean Water Act Section 404, hydrology and habitat fragmentation, collaborative watershed restoration and protection activities, community engagement, and reasonably foreseeable actions. **Appendix I** contains a copy of the correspondence Mr. Kirkwood sent to the USEPA.

5.59 Coalition to Preserve and Protect Forest Heights Correspondence to Department of Transportation dated January 20, 2021

Appendix I contains a copy of the updated correspondence to the Departmental Office of Civil Rights regarding opposition to FY 2018-2019 discretionary Grant application for City of Gulfport.

5.60 Coalition to Preserve and Protect Forest Heights Correspondence to Department of Transportation dated February 3, 2021

Appendix I contains a copy of the updated correspondence of the Departmental Office of Civil Rights regarding opposition to FY 2018-2019 discretionary Grant application for City of Gulfport.

5.61 Media Coverage of Community Coalition Appealing Construction of Roadway dated February 4, 2021

Appendix J contains a Sun Herald article regarding a community coalition appealing the construction of the new roadway.

5.62 Meeting with Individual Representative from the Land Trust for the Mississippi Coastal Plain on February 24, 2021

City of Gulfport representatives met on site with Neel-Schaffer and members of the Land Trust of the Mississippi Coastal Plain to discuss and show the location of the proposed project in relation to their property.

5.63 Media Coverage of Group Saying that Racism Plagues Endangered MS Coast Waterway dated April 13, 2021

Appendix J contains a Sun Herald article stating that American Rivers cites the roadway proposal as danger to Turkey Creek.

5.64 Media Coverage of Gulfport Mayor Stating that Race Is Not a Factor in Turkey Creek Project dated April 15, 2021

Appendix J contains a Sun Herald article where Gulfport Mayor states that the BUILD Grant Project is pursuing community input, scientific research, and environmental sensitivity. Creek.

5.65 Media Coverage Mentioning Turkey Creek Flooding, Gulfport BUILD Grant, and Levee Project dated April 15, 2021

Appendix J contains a WLOX news story that discussed the flooding of Turkey Creek, the proposed levee project and the Gulfport BUILD Grant project.

5.66 Derrick Evans April 21, 2021

Steve Twedt contacted Derrick Evans about discussing the Gulfport Roadway Project via text message. He said he would be out of town until May 1 or 2. Mr. Twedt responded that he would like to discuss engaging Mr. Evans to work on the community impact section of the NEPA document.

5.67 Meeting with US Army Corps of Engineers (USACE) on April 22, 2021

City of Gulfport representatives met with Neel-Schaffer and Justin McDonald of USACE to discuss the Forest Heights Levee Project that has received funding and its association with the Gulfport BUILD Grant project.

5.68 Media Coverage of Turkey Creek Residents Saying that Mayor took things out of Context dated April 25, 2021

Appendix J contains a Sun Herald article where Turkey Creek Residents state that Gulfport Mayor took things out of context.

5.69 Derrick Evans May 3, 2021

Steve Twedt contacted Derrick Evans via text message and requested a time for a discussion. The discussion took place on Thursday May 6th. Mr. Twedt offered to compensate Mr. Evans to assist with the NEPA document. Mr. Evans declined stating that he would only be interested if it was a comprehensive study of the entire Turkey Creek watershed. Mr. Evans invited Mr. Twedt to a watershed meeting on May 17, 2021. Mr. Twedt said that he would like to attend. Mr. Twedt showed up, but the meeting was cancelled. Mr. Evans told Mr. Twedt that he would let him know about future meetings. Mr. Evans has yet to contact Mr. Twedt about any future meetings.

5.70 Video Conference with Department of Transportation Office of Civil Rights on May 10, 2021

The Department of Transportation Office of Civil Rights held a video conference via Zoom with representatives of the City of Gulfport, Federal Highway Administration, Mississippi Department of Transportation, and Neel-Schaffer to gather information based on the letter received from the Coalition to Preserve and Protect Forest Heights to determine if an issue exists. The topics of flooding and air quality were discussed. Information was presented demonstrating how the concerns of flooding and air quality were addressed. The Department of Transportation Office of Civil Rights to contact the US Army Corps of Engineers (USACE) regarding the levee project.

5.71 Stakeholders Meeting on May 10, 2021

City of Gulfport and Neel-Schaffer representatives updated stakeholders regarding work done to date, schedule, and discussions with the US Army Corps of Engineers (USACE). Stakeholder reviewed and commented on the materials being prepared for the Forest Heights Community Meeting. Upon request, Sonya Williams Barnes gave the name of Stacy Turner Key and Kent Jones gave the name of Isaac Pittman as individuals in the Forest Heights community that could

assist in getting the information out to the residents. These individuals were added to the stakeholder list to include a property owner and a resident of Forrest Heights.

5.72 Meeting with Two (2) Individuals Within the Forest Heights Community on May 17, 2021

Mr. Steve Twedt and Mr. Richie Ashley of Neel-Schaffer met with Stacy Turner Key, a Forest Heights property owner and former resident, and Wayne Buchanan, COO for the Boys and Girls Club Gulf Coast, to give the project background and explain the project exhibits. Ms. Key stated that flooding is the main concern of the residents, and that the presenters needed to make sure that the meeting attendees understand that the roadway project was taking stormwater into account. She felt that the Forest Heights Community Meeting should have good participation.

5.73 Meeting with Two (2) Individuals Within the Forest Heights Community on May 17, 2021

Mr. Steve Twedt of Neel-Schaffer met with Stacy Turner Key, a Forest Heights property owner and former resident, and Isaac Pittman, a longtime Forest Heights resident, to give the project background and review the exhibits with Mr. Pittman. Levee maintenance and construction was mentioned by Ms. Key and Mr. Pittman. Mr. Twedt reminded them that the levee was not part of the roadway project and that the US Army Corps of Engineers (USACE) would have to address it.

5.74 Meeting with Individual Stakeholder on May 24, 2021

Mr. Steve Twedt of Neel-Schaffer met with Mr. Don Shepley at the Gulfport Biloxi International Airport to review the status of the project since Mr. Shepley was unable to attend the Stakeholder Meeting on May 10, 2021. The stormwater plan and materials for the Forest Heights Community Meeting were discussed. Mr. Shepley had no questions or concerns.

5.75 Forest Heights Community Meeting Notice Emailed to Stakeholders on May 24, 2021

Mr. Steve Twedt of Neel-Schaffer emailed the Forest Heights Community Meeting announcement stating the meeting specifics to the stakeholders. Mr. Twedt told them that flyers with the meeting information would be distributed to every home in Forest Heights on May 25, 2021, and that the flyer is also on the <https://www.interconnectinggulfport.com/website>. He

also encouraged the stakeholders to attend and participate at the meeting. A copy of this correspondence is included in **Appendix J**.

5.76 Forest Heights Community Meeting Notification Sent to Two (2) Individuals Within the Forest Heights Community on May 24, 2021

Mr. Steve Twedt of Neel-Schaffer sent the Forest Heights Community flyer to Ms. Stacy Turner Key, a Forest Heights property owner and former resident, and Isaac Pittman, a longtime Forest Heights resident, for their information and ability to notify residents.

5.77 Forest Heights Community Meeting on June 1, 2021

The Forest Heights Community Meeting was held between 6:30 and 8:00 p.m. on Tuesday, June 1, 2021, at the Boys and Girls Club at 201 Holly Circle located in the Forest Heights Subdivision. The purpose of the meeting was to discuss the project and receive comments from the residents of the Forest Heights Subdivision. Flyers were distributed at each residence within the Forest Heights Subdivision by the City of Gulfport personnel on May 25, 2021. A copy of the flyer is contained in **Appendix J**.

Representatives from US Army Corps of Engineers, Federal Highway Administration, Mississippi Department of Transportation, Gulf Regional Planning Commission, City of Gulfport, Land Trust for the Mississippi Coastal Plain, and project staff were present to answer any questions.

Residents were invited to view (in person or virtually) a brief presentation regarding the proposed project that included an animation shown explaining the pre-construction and post construction drainage pattern of the area around the proposed project. The animation also described how the retention pond would store and release stormwater at a regulated rate. After the presentation, attendees were encouraged to view the large drawings that were placed on folding tables around the room and fill out comment sheets. The drawings showed the route of Preferred Alternative C, typical sections, location of the retention pond, and possible facilities that could be installed around the retention pond for use by the public such as walking track, lighting, and interpretative signage. Members of the project development team were available to answer questions, engage in discussion and solicit comment. The US Army Corps of Engineers

also were stationed at a folding table to respond to questions regarding the levee project. The meeting materials and photographs from the meeting can be found in **Appendix J**.

A manned sign in and comment sheet station was set up for attendee use. There were 59 attendees that signed in at the community meeting. Of these 59, there were 22 people listing Forest Heights addresses and 17 of the 22 that gave contact information consisting of phone number and/or email address. Two comment sheets were received at the meeting from Gulfport citizens that live outside the project area with non-project related drainage concerns. The verbal comments received were regarding tree removal, drainage, wetlands, flood insurance rates, and City maintenance. The comment sheets and sign in sheets are included in **Appendix J**.

5.78 Forest Heights Resident Outreach on June 3, 2021

Mr. Richie Ashley of Neel-Schaffer phoned or emailed the 17 people listing Forest Heights addresses at the community meeting using the contact information listed on the sign in sheets to set up individual meetings to discuss the project and receive comments. Mr. Ashley did speak to Sylvia Lee and set up a meeting on June 4, 2021, at 8:00 a.m.

Mr. Ashley also spoke to Rosita Patton. Ms. Patton stated that she wanted to see the project layout and a meeting was set up for June 4, 2021, at 9:00 a.m.

Mr. Ashley spoke with Ms. Sandra Norris. Ms. Norris stated that she does not want to meet and that she is against the project and believes that the pond will work when she sees it. A comment sheet with Ms. Norris' remarks is included in **Appendix J**.

Mr. Ashley called Ms. Betty Childers and her daughter Katena Willis answered the phone saying that she was speaking for the family. She asked that a comment sheet be sent to her. A link to the comment sheet was emailed to her on June 3, 2021, at 5:13 p.m.

Mr. Ashley spoke to Cheryl Clark. She said that she was at the first public meeting and understands the project. She said that she had a comment sheet that she would complete and send in. A comment sheet with Ms. Clark's remarks is included in **Appendix J**.

Mr. Ashley talked with Mr. William Arnold. Mr. Arnold said that he would call back with a time to meet after coordinating with Ms. Mary Thigpen.

Mr. Ashley left a message, when possible, on the other phone calls. The account of these calls and emails are included on a communications log in **Appendix J**.

5.79 Forest Heights Resident Communications on June 4, 2021

Mr. Richie Ashley and Damon Torricelli of Neel-Schaffer met Ms. Sylvia Lee at her residence of 93 Maple Court for the scheduled 8:00 a.m. meeting. Neel-Schaffer representatives explained the project including roadway alignment, drainage, and retention pond using the drawings presented at the community meeting.

Ms. Lee was concerned with flooding. She has allergies living on a fixed income and cannot afford to start over. She was concerned about mosquitoes and protection around the proposed pond for children. However, she liked the concept of amenities at the pond for the community to use such as the walking track. She said that the City of Gulfport would have to keep this area maintained. She liked the concept of walking from Forest Heights to Sam's Club and other areas north of Interstate 10 and keeping pedestrians off U.S Highway 49. She had concern about noise from the overpass. It was explained to her that the overpass would only go over the interstate and the new road would be ground level. The meeting concluded with her saying that she was glad that she agreed to meet and get a better understanding of the project. Ms. Lee's comments are included in **Appendix J**. Mr. Richie Ashley and Damon Torricelli of Neel-Schaffer arrived at 24 Dogwood Court, the residence of Ms. Rosita Patton, for 9:00 a.m. meeting and received no answer at the door. Ms. Patton was called while still on site and left a message when receiving no answer. An account of this visit is included on a communication log in **Appendix J**.

Mr. Richie Ashley and Damon Torricelli of Neel-Schaffer arrived at 103 Holly Circle, the residence of Ms. Marla Bajoie. Ms. Bajoie left no contact information at the community meeting, but Ms. Stacy Turner Key said that she would be home. Ms. Bajoie said that she had no comments on the project. She stated that she did not need any further discussion or information regarding the project and that she received all the necessary information from the community meeting. An account of her comments is included in **Appendix J**.

Mr. Ashley called and spoke to Ms. Mary Thigpen to set up an individual meeting to discuss the project and receive comments. She said that she would contact Mr. William Arnold and would

call back with a time to meet. An account of this call is included on a communication log in **Appendix J.**

5.80 Forest Heights Residents Outreach on June 7, 2021

Mr. Richie Ashley of Neel-Schaffer had sent an email to Ms. Monica Marsh on June 3, 2021, to set up an individual meeting to discuss the project and receive comments. Since no response had been received from the email, Mr. Ashley called Ms. Marsh with the contact information on the community meeting sign in sheet. He received no answer and could not leave a message. An account of this call and email is included in **Appendix J.**

Mr. Richie Ashley phoned Mr. Isaac Pittman and set up an individual meeting at the Boys and Girls Club on June 8, 2021, at 5:00 p.m. to discuss the project and receive comments. He did not leave any contact information at the community meeting, but he had Mr. Pittman's number from previous discussions. An account of this call is included on a communication log in **Appendix J.**

5.81 Meeting with Individual Forest Heights Resident on June 8, 2021

Mr. Richie Ashley and Damon Torricelli of Neel-Schaffer met Mr. Isaac Pittman of 140 Tulip Court at the Boys and Girls Club and discussed the aspects of the proposed project. Mr. Pittman stated that the community is concerned with flooding issue and that if the community had assurances that the levee would be raised the opinion of the project would be better. He believes that there should be cost sharing between the proposed project and the USACE levee project. He supports the BUILD Grant project but wants the project to be fair for all parties involved. He understands the use of the pond for drainage but is concerned about security in the area around the pond and questioned police presence in this area. He said that there should be no amenities in the pond area to save money that could be spent elsewhere and to prevent loitering/crime. He favored the sidewalk and multi-use pathway along the proposed road and asked about Forest Heights having direct access to the sidewalk and pathway. He stated that he would meet with other Forest Heights residents to get additional comments. Mr. Pittman's comments are included in **Appendix J.**

5.82 Forest Heights Residents Outreach on June 11, 2021

Mr. Richie Ashley of Neel-Schaffer had phoned Ms. Linda Peoples on June 3, 2021, to set up an individual meeting to discuss the project and obtain comments. He received no answer and had no option to leave a message. One June 11, 2021, Mr. Ashley called Ms. Peoples and received no answer with no option to leave a message. No other contact information was given on the community meeting sign in sheet. An account of these calls is included on a communications log in **Appendix J**.

Mr. Ashley spoke to Mr. Isaac Pittman. Mr. Pittman said that he is working on getting residents together to collect comments regarding the proposed project. An account of this call is included on a communications log in **Appendix J**.

5.83 Conversation with Individual Forest Heights Resident on June 17, 2021

Mr. Richie Ashley of Neel-Schaffer phoned and spoke to Mr. Isaac Pittman. Mr. Pittman said that it has been hard to get residents to come together as a group. He said that the plan was for members of his neighborhood group to go door-to-door to residents for feedback on the project. He felt that there would be more participation if the members of the neighborhood visited the residents without any outside participation. He requested additional comment sheets for the door-to-door meetings and would contact Mr. Ashley when and where to provide the comment sheets. An account of this call is included on a communications log in **Appendix J**.

5.84 Outreach to Individual Forest Heights Resident on June 25, 2021

Mr. Richie Ashley of Neel-Schaffer phoned Mr. Isaac Pittman and received no answer. Mr. Pittman returned the call later that day, but the call was missed. An account of this call is included on a communications log in **Appendix J**.

5.85 Outreach to Individual Forest Heights Resident on June 28, 2021

Mr. Richie Ashley of Neel-Schaffer phoned Mr. Isaac Pittman and received no answer. An account of this call is included on a communications log in **Appendix J**.

5.86 Outreach to Individual Forest Heights Resident on July 8, 2021

Mr. Richie Ashley of Neel-Schaffer phoned Mr. Isaac Pittman and received no answer. An account of this call is included on a communications log in **Appendix J**.

5.87 Outreach to Gulfport Councilmember Representing Forest Heights on July 13, 2021

Mr. Steve Twedt of Neel-Schaffer phoned Ms. Ella Holmes-Hines and left a message requesting a return call.

5.88 Communication with Individual Stakeholder on July 14, 2021

Mr. Steve Twedt of Neel-Schaffer phoned and spoke with stakeholder Sonya Williams-Barnes, the state representative for the area. She asked how the meeting notices for the community meeting at the Boys and Girls Club were distributed. Mr. Twedt told her that they were hand delivered to all 200 houses in the community. She asked how many people from Forest Heights attended, Mr. Twedt told her around 20. She asked how many comments had been documented, Mr. Twedt told her 5. Mr. Twedt told her that the stormwater design is proceeding and that there would be another public meeting/hearing. She said the meeting/hearing should be held at the Forest Heights Baptist Church or at Isaiah Fredericks Community Center. How the format of the community meeting could be improved for the next meeting/hearing was discussed. She asked if we had met with Ella Holmes-Hines and stated that she would be happy to facilitate the meeting, and Mr. Twedt told her that would be appreciated.

After the call, Mr. Twedt emailed Representative Williams-Barnes thanking her for speaking with him and that the City of Gulfport appreciated her service as a stakeholder and her continued support on the proposed project. This correspondence is included in **Appendix J**.

5.89 Communication with Individual Stakeholder on July 15, 2021

Mr. Steve Twedt of Neel-Schaffer met with stakeholder Kent Jones, the county supervisor for the area. Mr. Twedt told him that the notices for the community meeting at the Boys and Girls Club were hand delivered to all the homes in the Forest Heights Subdivision. Mr. Twedt informed him on the number of Forest Heights residents attended the meeting and the number of comments received. Mr. Twedt explained the timeline going forward. Supervisor Jones saw how the

drainage concerns were addressed. He was supportive of the project and understood the benefits.

After the meeting, Mr. Twedt emailed Supervisor Jones thanking him for the meeting and that the City of Gulfport appreciated his service as a stakeholder and his continued support on the proposed project. This correspondence is included in **Appendix J**.

5.90 Outreach to City of Gulfport Councilmember Representing Forest Heights on July 16, 2021

Ms. Ella Holmes-Hines returned Mr. Twedt's call of 7-13-2021 but he was out of the office. He returned her call later in the day and left a message requesting a return call.

5.91 Communication with Individual Stakeholder on July 22, 2021

Mr. Steve Twedt of Neel-Schaffer called stakeholder Pam Meinzinger, Premium Outlet Manager. Mr. Twedt informed her on the number of Forest Heights residents attended the meeting and the number of comments received. Mr. Twedt explained the timeline going forward. She was supportive of the project and understood the benefits.

After the meeting, Mr. Twedt emailed Ms. Meinzinger thanking her for the phone conversation and that the City of Gulfport appreciated her service as a stakeholder and her continued support on the proposed project. This correspondence is included in **Appendix J**.

5.92 Citizen Email to N-S through Website on July 26, 2021

Mr. Josh King submitted an inquiry through the www.interconnectinggulfport.com website asking if there is a way to follow the progress on this project. Mr. Steve Twedt of Neel-Schaffer responded by thanking Mr. King for the inquiry and said that the project is currently in the environmental review process with anticipation of a public meeting later this fall with updates being posted on the website prior to the meeting. This correspondence is included in **Appendix J**.

5.93 Outreach to Individual Forest Heights Resident on July 28, 2021

Mr. Richie Ashley of Neel-Schaffer sent a text message to Mr. Isaac Pittman letting him know that he had the comment sheets that were previously requested, and Mr. Pittman sent a response

thanking him. An account of this text message is included on a communications log in **Appendix J**.

5.94 FHWA Office Civil Rights Correspondence to City of Gulfport on July 29, 2021

The City of Gulfport received an email from FHWA – Office of Civil Rights that included the letter to Ruth Story of the Coalition to Preserve Forest Heights regarding FHWA’s receipt of her Title VI complaint. This correspondence is included in **Appendix I**.

5.95 Outreach to City of Gulfport Councilmember Representing Forest Heights on August 6, 2021

Ms. Ella Holmes-Hines returned Mr. Twedt’s call of 7-16-2021 but he was out of the office. He returned her called later in the day and they spoke.

- Ms. Holmes-Hines said that she had met with the Mayor on July 29th to discuss the BUILD Grant project. They discussed the environmental document and she had questions about the drainage and the wetlands. He encouraged her to call Mr. Twedt.
- Mr. Twedt told her he appreciated her returning his call and that he had been wanting to speak to her as well and asked her what she meant at the community meeting when she stated that the stormwater around Forest Heights does not flow the like we showed it in the presentation. She stated that water flows north from the Seabee base and east from Long Beach into Turkey Creek. Mr. Twedt agreed with this statement (this does not contradict what was shown in the exhibits). She also stated that water from the Premier Outlets and the hotels north of the interstate were contributing to the stormwater flow. Mr. Twedt told her that these areas drained to Bernard Bayou, not Turkey Creek. She said she had photos of water flowing from Premier Outlets over Creosote Road and into Turkey Creek that prove her point. He asked for copies of these photos. She did not offer to provide them however she later told him that the Corps of Engineers had these photos.
- She stated that she supported de-snagging of Turkey Creek, and that she had been misrepresented on this position.

- She stated that the Sierra Club was involved in reviewing this project and that the environmental document would end up in court. She asked if Mr. Twedt would meet with the Sierra Club and he told her that he would.
- She asked why we used the format we did for the community meeting, Mr. Twedt told her the decision to do a presentation came out of a stakeholder meeting with Kent Jones and Sonya Williams Barnes and a conversation with Rip Daniels. Mr. Twedt told her the next meeting would go back to the open format with stations. She said that public meetings should be presentation style followed by comments taken from the floor.
- She stated that she monitors rainfall and flooding in North Gulfport and that she received calls from residents as soon as storm events begin. She stated that they (assuming residents) use “sticks and stones” to protect against water overtopping the levee. They see as much as 3-6 feet of water during major rainfall events. She feels like low to moderate income residents do not have any options and should not be subjected to these conditions.
- She stated that the road would place more concrete in the watershed and cause more stormwater runoff. Mr. Twedt told her that detention would be installed to mitigate the stormwater. She stated that detention will not work. She said that the Premium Outlets and hotel detention systems do not work. She said that she had observed this and that WLOX had done stories on it.
- She said that Forest Heights was not her only concern, that she was concerned about all North Gulfport. She is opposed to the project because the road will make flooding worse. She said that project in Turkey Creek had gone to court before.
- She stated that there should be a moral discussion on this project, and it is an environmental justice issue. She reiterated that it was going to court.
That was the end of the conversation.

5.96 Communication with Individual Stakeholder on August 11, 2021

Mr. Damon Torricelli of Neel-Schaffer called Ms. Pam Meinzinger, Premium Outlet Manager. He explained that as part of the environmental process that all public comments that are received must be addressed and a comment had been received stating that the pond and drainage from the outlet flows south across Creosote Road/Factory Shop Boulevard. Ms. Meinzinger stated that has never happened. When asked if the parking lots or stores experienced any flooding under heavy rain, she said that has never happened and went on to say that the drainage at the outlet works fine. She said that she understood the reason for the call and said to call her any time.

5.97 Conference Call with FHWA Office of Civil Rights, MDOT, and City of Gulfport on August 18, 2021

A conference call was held with representatives of FHWA Office of Civil Rights (OCR), MDOT, and City of Gulfport. Gulfport requested status of the investigation and the official Title VI complaint that OCR received. OCR explained the investigation process and said that Gulfport will be receiving a Request for Information soon.

5.98 Outreach to Individual Forest Heights Resident on August 19, 2021

Mr. Ashley of Neel-Schaffer sent a text message to Mr. Pittman on informing him that the requested comment sheets had been dropped off at the Boys and Girls Club for him to pick up. Mr. Pittman responded thanking Mr. Ashley. An account of this text message is included on a communications log in **Appendix J**.

5.99 Correspondence from FHWA Office of Civil Rights to MDOT and City of Gulfport on August 19, 2021

FHWA Office of Civil Rights emailed a copy of the original Title VI complaint to MDOT and Gulfport stating that FHWA's investigation is not bound by any specific allegations in the complaint and reiterated that Gulfport will be receiving a Request for Information soon. A copy of this correspondence is included in **Appendix I**.

5.100 Correspondence and meeting with City of Gulfport Councilmember at Forest Heights on August 31, 2021

Mr. Steve Twedt of Neel-Schaffer received a text message from Councilmember Ella Holmes-Hines stating that Forest Heights was experiencing a flood event due to Hurricane Ida and that she had notified City of Gulfport personnel. Later Ms. Holmes-Hines requested via text message that Mr. Twedt visit the subdivision and take pictures. Mr. Twedt arrived at Forest Heights at approximately 7:00 AM. Turkey Creek water had not started to recede yet from Hurricane Ida and related rainfall. This was evidenced by the fact that storm debris line for Turkey Creek was at the current water line. The valve at the Youther keys Park outfall was closed so that water could not enter Forest Heights from outside the levee. Public Works was on site operating pumps pumping water out of Forest Heights. No houses had flooded. Water was standing in the gutter lines of the roads. The centerline of the road was under water on Holly Circle from Walnut Circle to Orange Court. Maple Court and Walnut Court were also under water.

Outside the levee at the Forest Heights Baptist Church water was within a few feet of the building. Water was also flowing across Ohio Avenue north of the Turkey Creek Bridge; it was approximately 6" deep.

Mr. Twedt went up to Premier Outlets and verified that all stormwater from the site had been contained in the retention pond. At 7:47 he received a video text from Ella Holmes Hines indicating that water was flowing into the subdivision from the back side of the levee. He went back to Forest Heights and walked the entire perimeter of the levee. Water was close to several homes on the south side of Holly Circle and east side of Dogwood Court, but no evidence of homes being flooded. There were no breaches, and the water surface elevation outside the levee was approximately 4 feet below the top of the levee in most places. Behind Dogwood Court the water surface elevation was closest to the top of the levee at approximately 3 feet.

Mr. Twedt spoke to Ms. Holmes-Hines a couple of times on site. Once near Youther Keys Park shortly after he arrived. She agreed that no houses had flooded and that the levee had not been topped. They discussed the late-night rainfall event that occurred after Public Works had pumped most of the water out of Forest Heights. Mr. Twedt also spoke to her on the levee

behind Dogwood Court after receiving her video. This is where she took the video. She told him that the levee had been “compromised” meaning it was not as high as it used to be. She also noted that runoff was entering the levee toe ditch from the land owned by the Secretary of State. Mr. Twedt told her this was the natural flow. She said that this was not true, and that water did not always flow this direction. She also talked about a ditch along 28th Street that flowed into Turkey Creek and that it was contributing too much water to the basin. She showed him a picture on her phone. Mr. Twedt did not go to this location or to the Harrison Drive location. These areas are both on the other side of Turkey Creek from the project location and Forest Heights.

Mr. Twedt documented his observations with photographs that are included in **Appendix J**.

5.101 Correspondence from FHWA Office of Civil Rights to MDOT and City of Gulfport dated September 1, 2021

FHWA Office of Civil Rights sent a Request for Information to MDOT and the City of Gulfport requesting documents and/or information related to the Title VI complaint. This correspondence is included in **Appendix I**.

5.102 Media Coverage of Hurricane Ida Impacts on a Turkey Creek Community dated September 2, 2021

Appendix J contains a Sun Herald article that discusses the impacts of Hurricane Ida on the Forest Heights Subdivision, the proposed road project, and the proposed levee project.

5.103 Media Coverage of Gulfport Accepting a Revised Project Budget dated September 8, 2021

Appendix J contains a Sun Herald article that discusses the revised project budget, the Federal Civil Rights Investigation, the new road addressing traffic issues, and the regulatory hurdles left to clear.

5.104 Outreach to Individual Forest Heights Resident on September 10, 2021

Mr. Richie Ashley of Neel-Schaffer sent a text message to Mr. Isaac Pittman asking him if he picked up the requested additional comment forms that were dropped off with Mrs. Stacey

Turner-Key at the Boys and Girls Club and received no response. An account of this text message is included in **Appendix J**.

5.105 Media Coverage of Gulfport Saying the Proposed Project is Vital dated October 18, 2021

Appendix J contains a Sun Herald article that discusses the Planning and Environmental Study and the BUILD Grant application.

5.106 Video Conference with USACE, City of Gulfport, & Neel-Schaffer on January 11, 2022

Mr. Steve Twedt of Neel-Schaffer explained a broad overview of the proposed model and methodology to be used for the analysis. A follow up meeting was scheduled for January 18, 2022, for more detail and share the results.

5.107 Video Conference with USACE, City of Gulfport, & Neel-Schaffer on January 18, 2022

Neel Schaffer representatives gave a presentation summarizing the modeling approach for the Hydrology and Hydraulic design. USACE stated that from the presentation, the modeling approached seemed sound. An account of the meeting along with the presentation are included in **Appendix I**.

5.108 Conversation with Two (2) Individual Stakeholders on March 4, 2022

Mr. Steve Twedt of Neel-Schaffer spoke to Representative Sonya Williams-Barnes regarding the upcoming public meeting. She explained that she would be in session and unable to attend the public meeting on March 29, 2022. Mr. Twedt explained that the public would have the opportunity to ask questions and get answers at the meeting. He told her that the information from the public meeting would be placed on the interconnectinggulfport.com website. A later meeting was scheduled for her to view the figures and video that were to be presented at the meeting.

Mr. Steve Twedt of Neel-Schaffer spoke to Roy Anderson about the upcoming meeting. Mr. Twedt explained the figures and video to be presented at the meeting. Mr. Anderson stated that he supported the project but could not attend the public meeting.

5.109 Video Conferences with Two (2) Individual Stakeholders on March 7, 2022

Mr. Steve Twedt of Neel-Schaffer contacted Ms. Pam Meinzing, Premium Outlet Manager, to inform her of the public meeting. He showed her the video that is to be presented at the meeting on March 29, 2022. She thought the video was beneficial and is supportive of the project. She suggested that the stakeholder support be documented, highlight that flood reduction is an added benefit to the project and not part of the original scope of work, and to point out that the potential for flooding is higher without the project. She stated that she would not be able to attend the public meeting.

Mr. Steve Twedt of Neel-Schaffer contacted Mr. Don Shepley with the Gulfport Biloxi International Airport to inform him of the public meeting on March 29, 2022. Mr. Twedt showed him the video that is to be presented at the meeting. Mr. Shepley thought the video was self-explanatory and stated that the airport supports the project. He stated that he would not be able to attend the public meeting.

5.110 Video Conference with Individual Stakeholder on March 11, 2022

Mr. Steve Twedt and Mr. Damon Torricelli of Neel-Schaffer held a video conference with Representative Sonya Williams-Barnes to show her the figures and video that would be presented at the public meeting on March 29, 2022. She thought the video explained the stormwater design well. She was told that the meeting announcement is on the City of Gulfport website and the interconnectinggulfport.com website. The Neel-Schaffer representatives told her that the figures would be presented at stations with project team members present to answer questions and that comment cards would be available for the public. The meeting location of Isiah Fredericks Community Center was discussed about giving other residents of north Gulfport an opportunity to attend the public meeting. The Neel-Schaffer representatives told her discussions about the public meeting were being held with the stakeholders and that Gulfport City Councilmember Ella Holmes-Hines would be contacted.

5.111 Discussion with Individual Stakeholder on March 11, 2022

Mr. Steve Twedt of Neel-Schaffer spoke to Rip Daniels regarding the public meeting on March 29, 2022. Mr. Twedt asked Mr. Daniels if he could schedule a time to review the figures and

video to be presented at the meeting. Mr. Daniels told him Mr. Twedt that he would get back with him when he was available.

5.112 Discussion with Individual Stakeholder on March 14, 2022

Mr. Steve Twedt of Neel-Schaffer spoke to Janet Gordon of Ellis Land Development regarding the public meeting on March 29, 2022. She said that their property was about to be listed with a broker, Judy Bush. She wanted an update on the project. Mr. Twedt told her that the intention was to have the NEPA document complete the summer of 2022 and right-of-way acquisition would begin thereafter.

5.113 Outreach to Community Meeting Attendees on March 16, 2022

Notification regarding the public meeting on March 29, 2022, was emailed to the addresses of individuals from the sign-in sheets of the community meeting held on June 1, 2021, at the Boys and Girls Club in the Forest Heights subdivision. A copy of the emails and delivery receipts are included in **Appendix J**.

5.114 Outreach to First Public Meeting Attendees on March 18, 2022

Notification regarding the public meeting on March 29, 2022, was emailed to the addresses of individuals from the sign-in sheets of the public meeting held on September 3, 2020, at the Gulfport Premium Outlets Food Court. A copy of the emails is included in **Appendix J**.

5.115 Outreach to Comments Received Prior to First Public Meeting on March 24, 2022

Notification regarding the public meeting on March 29, 2022, was emailed to the addresses of individuals from the comments received prior to the public meeting held on September 3, 2020, at the Gulfport Premium Outlets Food Court. A copy of the emails is included in **Appendix J**.

5.116 Outreach to Comments Received After the First Public Meeting on March 24, 2022

Notification regarding the public meeting on March 29, 2022, was emailed to the addresses of individuals from the comments received after the public meeting held on September 3, 2020, at the Gulfport Premium Outlets Food Court. A copy of the emails is included in **Appendix J**.

5.117 Discussion with Individual Stakeholder on March 28, 2022

Mr. Steve Twedt of Neel-Schaffer spoke to Patrick White regarding the public meeting on March 29, 2022. Mr. Twedt told him about the figures and video that would be presented at the meeting. Mr. White said that he supported the project and would attend the meeting.

5.118 Meeting with City Councilmember Representing Forest Heights and Television Interview on March 28, 2022

Mr. Steve Twedt of Neel-Schaffer met with Councilmember Ella Holmes-Hines to discuss the figures and video that were to be presented at the public meeting on March 29, 2022. The following topics were discussed:

- Ms. Holmes-Hines was concerned about COVID. Mr. Twedt told her that masks and hand sanitizer will be available. He told her that all of the information would be on the website if anyone had concerns about attending in person.
- She stated that she did not get a meeting notice and that she did not think stakeholders had been notified. Mr. Twedt told her that three legal ads and three ¼ page ads were published in the paper. He stated that he had called all of the stakeholders personally, and that everyone who had attended a meeting and left an email address as well as those who had called or contacted us through the website had been emailed the notice.
- While viewing the video it was discussed that the stormwater from Daniel Boulevard developments and Premier Outlets flowed under US 49 to Bernard Bayou. She stated that she had a video that showed otherwise but would not provide it.
- She asked about the old sewage lagoon that appears on the aerial photography. He told her what it was, and she wanted to know if it served a stormwater purpose. He told her that it was not incorporated into the stormwater plan.
- She acknowledged that she understood the stormwater elevation against the levee would be reduced.
- He told her that the USACE was planning on attending the meeting.
- She wanted to know how much water we were holding in the retention pond for a 100-year storm. He told her that he would get back with her on that.

- She asked about the location of the pond and if it could be placed elsewhere. He told her that this was the best location as it was closest to the outfall.
- She was concerned about children going into the pond and drowning.
- She expressed concerns about the internal drainage system in Forest Heights not functioning properly.
- She asked if the pipes under the railroad tracks could be closed off and the drainage diverted. He told her that something similar up by I-10 was looked at and that it was not feasible.
- She asked about the impact of future developments. He told her that the city could control this through their ordinances with enforcement through the planning department.
- She asked about the sidewalk and multi-use pathway. He told her that this came out of the Forest Heights and North Gulfport Neighborhood Community Plan.
- She asked about the elevation of the road which he assumed to mean grade separated crossings. He told her all crossings were at-grade with the exception of I-10.
- She wanted a comprehensive look at Turkey Creek from a stormwater standpoint. Although she does not support the project, she did agree that it could be part of the stormwater solution.
- It was discussed that the fact that stormwater attenuation could reduce the time that the Forest Heights outfall pipe would need to be closed due to high water. She stated that the USACE project would replace the outfall pipe with a pump.

She stated that she would attend the meeting.

A local television station performed an interview with Councilmember Ella Holmes-Hines, Mayor Hewes, and Steve Twedt of Neel-Schaffer after the meeting. A copy of the story is included in **Appendix J**.

5.119 Public Meeting on March 29, 2022

The Public Meeting was held between 5:00 p.m. and 7:00 p.m. on Tuesday, March 29, 2022, in person at the Isiah Fredericks Community Center at 3312 Martin Luther King, Jr. Boulevard, in Gulfport. The meeting information was placed on the project website,

www.interconnectinggulfport.com, for the public that did not attend the meeting in person.

The purpose of the meeting was to provide an open forum for discussion of the proposed project. The meeting was advertised in the Sun Herald on March 8, 2022, March 15, 2022, March 20, 2022, March 22, 2022, March 23, 2022, and March 27, 2022. Copies of the advertisements are contained in **Appendix J**. The meeting was also promoted by emailing the attendees of the previous meetings, emailing the individuals who submitted contact information on comment sheets, posting flyer at the Boys and Girls Club in Forest Heights Subdivision, posting flyer at the Isiah Fredericks Community Center, the stakeholder group, the project website, and the City of Gulfport website. The media was present and covered the public meeting. Copies of the articles and scripts of the media's coverage are in **Appendix J**.

Representatives from US Army Corps of Engineers, Federal Highway Administration, Mississippi Department of Transportation, City of Gulfport, and the project team members were present to answer any questions.

Residents were invited to view a brief video presentation regarding the proposed project that included an animation explaining the pre-construction and post construction drainage pattern of the area around the proposed project. The video also described how the retention pond would store and release stormwater at a regulated rate. The animation showed the heights of stormwater ponding at two (2) different levee locations for the 100-year storm event comprised of 14.3 inches of rainfall over a 24-hour period before and after construction. The ponding water at these levee locations was shown to decrease post-construction and reduce the risk of erosion of the existing levee. After the presentation, attendees were encouraged to view the large drawings that were placed on folding tables around the room and fill out comment sheets. The drawings showed the route of Preferred Alternative C, typical sections, location of the retention pond, and possible facilities that could be installed around the retention pond for use by the public such as walking track, lighting, and interpretative signage. Members of the project development team were available to answer questions, engage in discussion and solicit comment. The US Army Corps of Engineers also were stationed at a folding table to respond to questions regarding the levee project. The meeting materials can be found in **Appendix J**. The

animation shown at the public meeting can be viewed on the www.interconnectinggulfport.com website.

Members of the public set up a station to disperse a handout of another alternative titled “Gulfport Central Artery Connector” (see **Appendix J**). This potential transportation corridor was identified in 2006 and developed in 2011 during the North Gulfport and Turkey Creek Community Plan. It consisted of a proposed new interstate access point between US 49 and SR 605 and a new north-south road connecting Hewes Avenue to the new interchange. This would create a continuous transportation corridor from US 90 to I-10 east of US 49. This route was in the GRPC 2035 Long Range Plan, but no planning or environmental studies were performed. The route was not in the 2040 or 2045 Long Range Plan. It was presented at the public meeting as an alternate for consideration in the study. This corridor does not address the need for a north-south connection and alternate route to US 49 west of I-10. Because of this and the fact that Three Rivers Road already provides a north-south connection and alternate route east of I-10 it was determined that this corridor did not meet the purpose and need. This is covered in section 3 of the document.

Members of the public were also gathering signatures for a petition in opposition to the proposed project. A copy of this petition is included in **Appendix J**.

A manned sign in and comment sheet station was set up for attendee use. There were eighty-five (85) attendees that signed in at the public meeting that were not members of the USACE, MDOT, FHWA, or the project team. The attendance lists and photographs from the meeting can be found in **Appendix J**. Of these eighty-five (85), there were six (6) people listing Forest Heights addresses. Sixteen (16) comment sheets were received at the meeting. Five (5) against the project, four (4) in favor of the project, one (1) indifferent - interest in flooding outside of project area, and six (6) were asking questions about the project. One (1) comment sheet in favor of the project was received in an acceptable timeframe after the meeting. Responses to the comment sheets received at the meeting and within two (2) weeks after the public meeting were sent to the individuals that gave contact information. Responses along with the comment sheets received are included in **Appendix J**.

5.120 Conversation with Individual Stakeholder on March 30, 2022

Mr. Steve Twedt of Neel-Schaffer spoke to Representative Sonya Williams-Barnes regarding the public meeting. She said that she could not attend. Mr. Twedt told her that there was good attendance and flow of information. She asked specifically about the National Council of Negro Women, and Mr. Twedt confirmed that they were in attendance. She asked that Mr. Twedt reach out to a couple of their members (Vicki Sharpe and Janice Green-Merrell) about a petition that was circulating. Mr. Twedt told her that he would contact them.

5.121 Conversation with National Council of Negro Women Member on April 7, 2022

Mr. Steve Twedt of Neel-Schaffer reached out to Janice Merrell and Vicki Sharpe with the National Council of Negro Women after the public meeting at Isiah Fredericks Community Center via phone call, email, and text. They both attended the meeting. Ms. Merrell called Mr. Twedt back and they spoke about the project. She said that she had watched the video and viewed the exhibits. She was concerned about changes and how the project would impact Forest Heights. She spoke about Dorothy Heights and how she worked to secure housing to improve the lives of those in the community and that her organization was trying to preserve Forest Heights. She wants to see projects that complement the neighborhood. She is not against progress. She stated that the levee had degraded over time and that stormwater was an issue in North Gulfport. She understood from the meeting that the Interconnecting Gulfport Project would improve stormwater management. She said she would speak with the president of the NCNW and try and coordinate a time for me to come speak to the group.

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