DRAFT

PRELIMINARY ENGINEERING REPORT

Bay County Board of County Commissioners

Philip Griffitts Senior Parkway, Phase III

Clara Avenue to Chip Seal Parkway

Bay County, Florida

Financial Project Identification Numbers: 442483-4-34-01 & 442483-4-34-02

ETDM Number: 14531

September 2025

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated May 26, 2022, and executed by Federal Highway Administration and FDOT.

PROFESSIONAL ENGINEER CERTIFICATION

PRELIMINARY ENGINEERING REPORT

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Federal Aid Project Number: N/A

This preliminary engineering report contains engineering information that fulfills the purpose and need for the Philip Griffitts Senior Parkway Phase III Project Development & Environment Study from Clara Avenue to Chip Seal Parkway in Bay County, Florida. I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

I hereby certify that I am a registered professional engineer in the State of Florida practicing with Kimley-Horn and Associates, Inc., and that I have prepared or approved the evaluation, findings, opinions, conclusions or technical advice for this project.

*[**Only Sign and Seal the Final Report***

***Include "DRAFT" and Date on the Cover of the Draft Report**]*

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1.0 PROJECT SUMMARY

1.1 Project Description

Philip Griffitts Sr. (PGS) Parkway is a proposed new road approximately one mile north of US 98 (SR 30A/Panama City Beach Parkway) between SR 79 (N. Arnold Road) and Chip Seal Parkway. Phase III of the PGS Parkway extends from Clara Avenue to Chip Seal Parkway in Bay County, Florida (**Figure 1 Project Location Map**). The total distance of Phase III is approximately 5.1 miles.

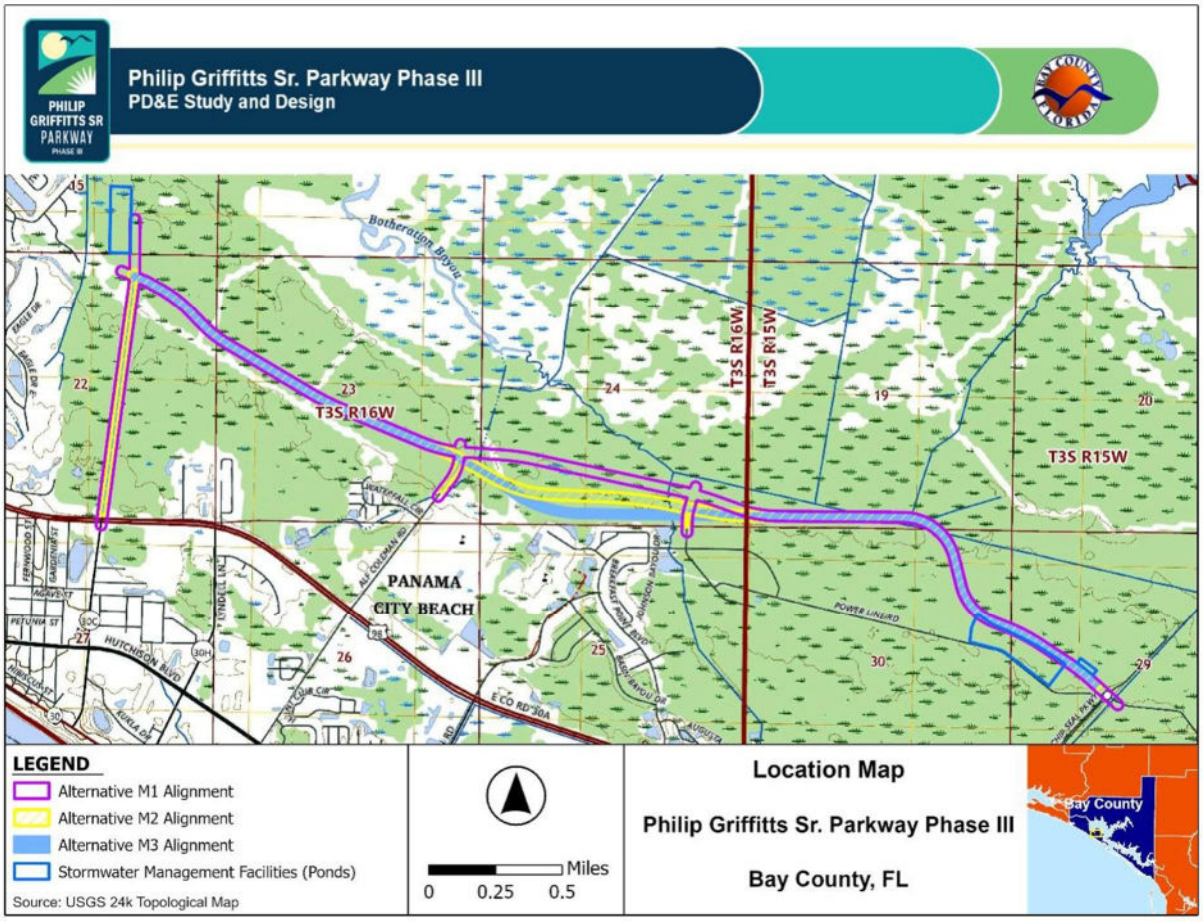

Figure 1: Project Location Map

This primarily east-west facility would provide a two-lane (major collector) roadway with 11-foot travel lanes, four to five-foot paved shoulders, curb and gutter, and a 10 to 12-foot shared-use path for most of the project length (**Figure 2: Typical Section**). The estimated right-of-way (ROW) width for the proposed project, including side slopes tying down to the existing grade, is 200 feet. The ROW is proposed to include extra width to accommodate several new utility lines for the City of Panama City Beach, to provide critical redundancy to the City's water and wastewater utility network.

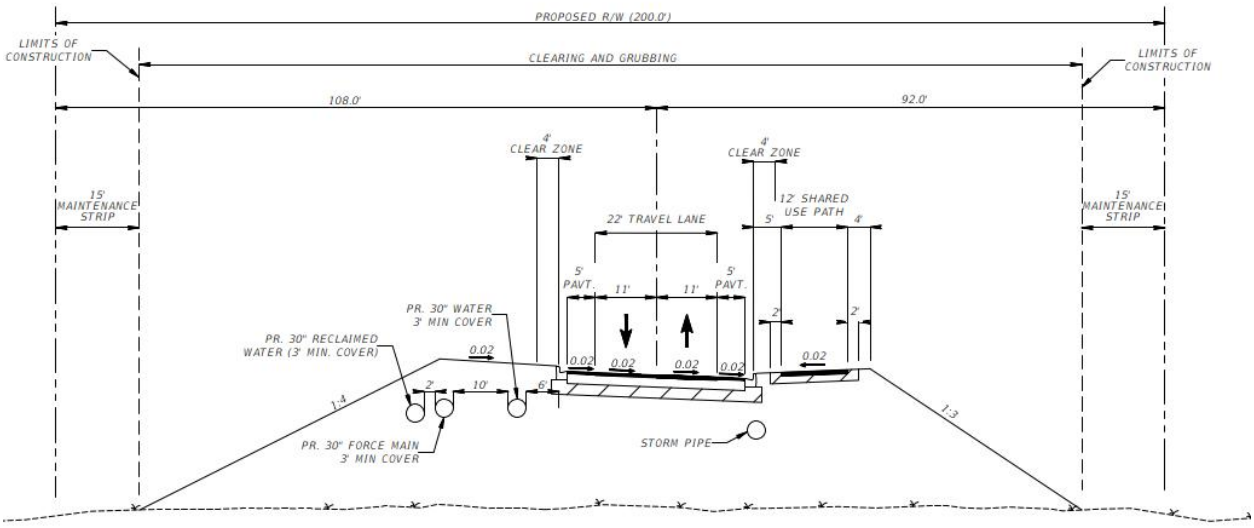

Figure 2: Typical Section

1.2 Purpose & Need

1.2.1 Purpose

The purpose of the PGS Parkway Phase III is to improve mobility in the study area by providing an alternative to US 98 (SR 30A/Panama City Beach Parkway) for local traffic; to enhance vehicular and pedestrian connectivity to J.R. Arnold High School, A. Gary Walsingham Academy, the Panama City Beach Publix Sports Park, and the Breakfast Point neighborhood; and to address safety concerns on US 98 (SR 30A/Panama City Beach Parkway) within the study limits by reducing congestion.

A secondary purpose is to enable risk reduction and resiliency of the transportation network by providing an alternate route that is constructed above the storm surge elevation in the coastal high hazard area.

1.2.2 Need

Study area needs include: provision of an additional link within the transportation network to provide an alternative to currently congested routes; accommodation of existing traffic and future transportation demand on the study area road network; improvement in safety on existing roads; and provision of a reliable alternate route for emergency responders. These are discussed in more detail in the Project Environmental Impact Report.

1.3 Commitments

Bay County has made the following commitments as part of this PD& E Study:

- Bay County will provide compensatory mitigation to offset the wetland mitigation credits generated within the portion of the BPMB impacted directly and indirectly by this project. This is in addition to mitigation for wetland impacts to areas not utilized for mitigation purposes.
- Bay County will purchase and remove conservation easements underlying the right-of-way necessary for this project.
- If the alligator snapping turtle is listed by the USFWS to Threatened or Endangered and the project may affect the species, Bay County commits to re-initiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species.
- If the monarch butterfly is listed by the USFWS as Threatened or Endangered and the project may affect the species, Bay County commits to re-initiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species.
- Species-specific surveys for Cooley's meadowrue, telephus spurge, Godfrey's butterwort, and white birds-in-a-nest will be completed during design. In the event federal-listed plant species are discovered during the surveys, consultation with USFWS will be reinitiated.
- A survey for state-listed plant species including wiregrass gentian, West's flax, primrose-flowered butterwort, yellow fringeless orchid, night-flowering wild petunia, pinewoods bluestem, southern milkweed, giant water cowbane, and Apalachicola dragonhead will be performed during the design phase and coordination with FWC/FDACS will occur if impacts to the species are anticipated.
- Upon listing of the tricolored bat, if the project contains suitable habitat and requires tree trimming and/or clearing, Bay County will not conduct tree trimming/clearing activities during the tricolored bat pup season (May 1st to July 15th) and when bats may be in torpor (when temperatures are below 45 degrees Fahrenheit).
- Upon listing of the tricolored bat, if the project contains suitable habitat and Bay County needs to trim or clear trees or perform work on bridges/culverts during the maternity season and/or when the temperature is below 45 degrees Fahrenheit, then Bay County will survey the project area for evidence of the tricolored bat. The Indiana Bat and Northern Long-Eared Bat Survey Guidance (USFWS), NRE Appendix J acoustic survey protocol in the year-round range (mist netting is not being conducted in Florida at this time), will be used for areas with tree trimming/clearing. For bridges and culverts, the Indiana Bat and Northern Long-Eared Bat Survey Guidance, NRE Appendix K, Assessing Bridges and Culverts for Bats, will be used.
- If the tricolored bat surveys result in no tricolored bats detected, then Bay County can proceed with the project activities. Negative results from bridge/culvert surveys are valid for 2 years. Negative results for acoustic surveys are valid for 5 years. However, negative results for either survey may be invalidated if additional tricolored bat survey data is submitted to FWS showing presence of the species within the vicinity of the project area. Additional survey work by Bay

County, or application of the avoidance and minimization measures noted in the implementation measure above, may be required if updated detections are reported, and may result in reinitiation of consultation with USFWS.

- If the tricolored bat surveys result in positive detections of the tricolored bat, Bay County will implement conservation measures such as not conducting tree trimming/clearing activities during the tricolored bat pup season (May 1st to July 15th) when pups are not volant and not able to escape disturbance; similarly avoid tree trimming/clearing activities when the temperatures are below 45 degrees Fahrenheit when bats may be in torpor and unresponsive to disturbance
- Design of the PGS Phase III project will incorporate culverted or bridged wildlife crossings and flow-ways to protect wildlife corridors and hydrological connections key to the ecological functions of the BPMB as identified in the permits and associated management plans for this mitigation bank.
- Bay County will coordinate with the BPMB to implement road closures during prescribed burns in the areas of the BPMB that would pose a smoke hazard to safe vehicular travel.

1.4 Alternatives Analysis Summary

Three Build alternatives were considered for PGS Parkway, Phase III in addition to the No-Build Alternative. The three alternatives differed primarily in horizontal alignment.

Alignment M1 was the furthest north (and therefore the furthest from the Breakfast Point development), Alignment M3 was the furthest south (and therefore the nearest to the Breakfast Point development), and Alignment M2 was between Alignment M1 and Alignment M3. All three horizontal alignment alternatives converged near the eastern extents of the existing Breakfast Point development before connecting with the roundabout at the eastern terminus intersection with Chip Seal Parkway.

The No-Build Alternative assumes PGS Parkway, Phase III is not constructed. The No-Build Alternative was considered a viable alternative throughout the PD&E Study.

1.4.1 Public Involvement Feedback

Bay County staff and the Consultant Team provided ample opportunity for project feedback by hosting a Public Kickoff Meeting in May 2023 and an Alternatives Meeting in March 2025. Between these public meetings, Bay County staff and leadership also provided opportunities to submit comments via a public website and attended meetings with various stakeholder groups, including the Breakfast Point Homeowners Association.

Feedback from the public was predominantly received by residents of the Breakfast Point subdivision south of the Build Alternative corridor between Alf Coleman Road and Chip Seal Parkway. Most of the members of the public who submitted written or emailed comments indicated a preference for the corridor to be located as far north as possible from the residential

homes, expressing concerns over anticipated noise and aesthetic impacts of the Phase III corridor. Some residents expressed concern over the possibility of future cut-through traffic utilizing the Phase III connection to Long Point Way to navigate between US 98 (SR 30A/Back Beach Road) and PGS Parkway and suggested that the Phase III corridor should not be connected to the neighborhood, while others were optimistic about the opportunity to navigate between the Breakfast Point neighborhood and Clara Avenue and Chip Seal Parkway without traveling on US 98 (SR 30A/Back Beach Road). Many commenters indicated a preference to include a shared use path as an extension to the Gayle's Trails network to improve multimodal connectivity north of US 98 (SR 30A/Back Beach Road), and some indicated concerns over the potential impacts of the corridor the natural environment in the Breakfast Point Mitigation Bank.

1.4.2 Overall Cost Estimates

The overall cost for the new PGS Parkway Phase III corridor Build Alternative is expected to range from approximately $86.9 Million for the M3 corridor to more than $110.8 Million for the M1 corridor. The cost estimate includes a potential elevated bridge structure in the middle segment between Alf Coleman Road and Chip Seal Parkway to mitigate environmental impacts in the Breakfast Point Mitigation Bank and provide a wildlife crossing. The cost estimate also includes estimated right-of-way costs and an estimate for the cost of mitigation bank credits that the County will be required to provide in exchange for the right-of-way that will be removed from the Breakfast Point Mitigation Bank to accommodate the Phase III roadway.

1.5 Description of Preferred Alternative

The preferred alternative is Build Alternative M1, which proposes the following elements:

- An approximate 2,000-foot extension of Clara Avenue with a two-lane typical section (one travel lane in each direction).
- A one-lane roundabout to facilitate northbound-to-eastbound and westbound-to-southbound traffic between Clara Avenue and PGS Parkway, Phase III.
- Construction of PGS Parkway, Phase III from Clara Avenue to Chip Seal Parkway with a two-lane typical section (one lane in each direction) and a 10–12 foot shared use path.
- An approximate 800-foot extension of Alf Coleman Road with northbound stop-control at the intersection with the new PGS Parkway, Phase III roadway.
- An approximate 650-foot extension of Longpoint Way with northbound stop-control at the intersection with the new PGS Parkway, Phase III roadway.

Build Alternative M1 meets the purpose of the project by providing parallel relief to US 98 (SR 30A/Panama City Beach Parkway) between Clara Avenue and Chip Seal for local traffic; by enhancing vehicular and multimodal connectivity to J.R. Arnold High School, A. Gary Walsingham Academy, the Panama City Beach Publix Sports Park, and the Breakfast Point

neighborhood; and by improving safety along US 98 (SR 30A/Panama City Beach Parkway) by reducing congestion.

Build Alternative M1 meets the needs of the project by providing an alternative link within the local transportation network to currently congested routes (primarily US 98 [SR 30A/Panama City Beach Parkway]), accommodating future transportation demand on the surrounding network, improving safety on existing roads by reducing congestion, and providing a reliable alternate route for emergency vehicles to and from the schools and neighborhoods north of US 98 (SR 30A/Panama City Beach Parkway) between Clara Avenue and Chip Seal Parkway).

Build Alternative M1 will require acquisition of approximately 200 feet of right-of-way for the PGS Parkway Phase III mainline from Clara Avenue to Chip Seal Parkway as well as the connections to Clara Avenue, Alf Coleman Road, and Longpoint Way. Overall right-of-way acreage will be approximately 134 acres through predominantly undeveloped parcels; no building relocations will be necessary.

1.5.1 Design Variations/Exceptions

No design variations or design exceptions are anticipated.

1.6 List of Technical Documents

Project Traffic Analysis Report (July 2024)

Project Environmental Impact Report (September 2025)

Natural Resources Evaluation (September 2025)

Cultural Resources Assessment Survey (September 2025)

Location Hydraulics Report (September 2025)

Pond Siting Report (September 2025)

2.0 EXISTING CONDITIONS

2.1 Previous Planning Studies

The construction of PGS Parkway is planned to be completed in phases. The current phase, Phase III, is planned to connect Clara Avenue to Chip Seal Parkway. Phases I and II of PGS Parkway have already been constructed. Phase I was completed in 2017 and extends 1.4 miles from SR-79 to Pier Park Drive. Phase II was completed in 2021 and created a 2.4-mile segment that connected Pier Park Drive to Nautilus Street. Future study will assess options for connecting Nautilus Street to Clara Avenue. No previous study has directly evaluated the Phase III connection between Clara Avenue and Chip Seal Parkway.

2.2 Existing Roadway Conditions

PGS Parkway, Phase III is a new roadway. There is no existing roadway connecting the northern extent of Clara Avenue to Chip Seal Parkway.

The existing half-mile portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway) is included in the study limits.

2.2.1 Roadway Typical Sections

For approximately one-quarter mile north of US 98 (SR 30A/Panama City Beach Parkway), the existing portion of Clara Avenue features two 12-foot travel lanes (one northbound, one southbound), a 6-foot sidewalk along the western side, and a 36-foot landscaped center median dividing the travel lanes. Approximately one-quarter mile north of US 98 (SR 30A/Panama City Beach Parkway), the travel lanes converge, eliminating the center median, and the remaining portion of Clara Avenue to its existing northern extent features two 12-foot travel lanes, a 6-foot sidewalk along the western side, and drainage ditches on either side of the travel lanes.

2.2.2 Roadway Functional & Context Classifications

The existing portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway) is a local connector. Clara Avenue is not assigned a Context Classification, but nearby roads are classified as C3C Suburban Commercial.

2.2.3 Access Management Classification

The existing portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway) is not on the FDOT network, but would likely be considered FDOT Access Class 7, which requires 125 feet spacing between access connections.

2.2.4 Right-of-Way

The existing half-mile section of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway) is situated within an approximate 100-foot right-of-way that stretches north to West Bay. Some additional right-of-way may be required for the proposed roundabout at the northern extent of Clara Avenue.

2.2.5 Adjacent Land Use

The existing land uses surrounding the subject PGS Parkway, Phase III corridor are illustrated in **Figure 3: Adjacent Land Use**. The westernmost portion of the corridor along Clara Avenue is surrounded by multifamily residential land uses. East of Clara Avenue, the corridor will traverse through Agriculture/Timberland land uses for approximately three miles, north of J.R. Arnold High School and single-family residential uses. At the eastern terminus intersection with Chip Seal Parkway, there is a hotel on the northwest corner of the intersection and the A. Gary Walsingham Academy on the east side of the intersection. Northeast of the hotel resides the Panama City

Beach Publix Sports Park, a recreational facility with 13 sports fields and various amenities for athletes and patrons.

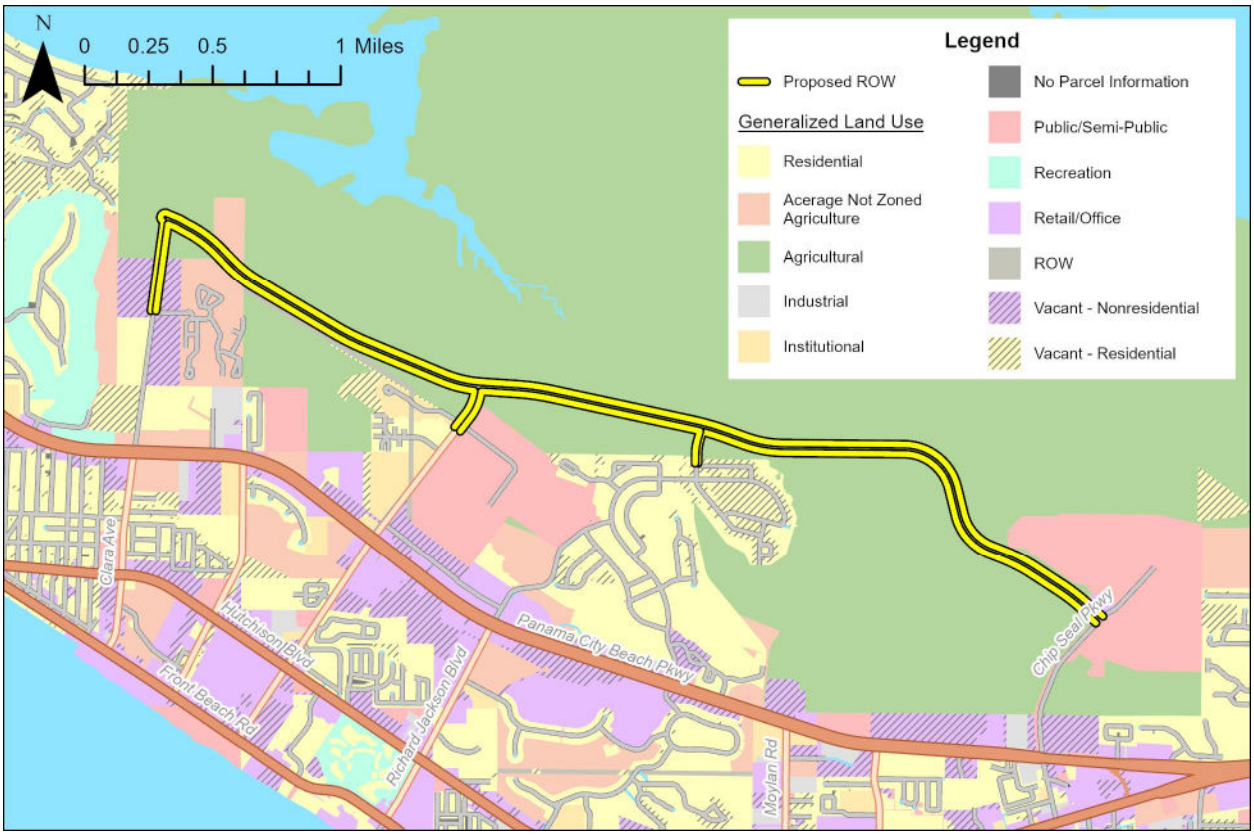

Figure 3: Adjacent Land Use

2.2.6 Pavement Type and Condition

PGS Parkway Phase III is a new roadway. The pavement on Clara Avenue is in relatively good condition since the roadway was constructed within the past six years.

2.2.7 Existing Design and Posted Speed

PGS Parkway Phase III is a new roadway. There is no existing roadway connecting Clara Avenue to Chip Seal Parkway. The design speed for PGS Parkway Phase III is 45 mph.

The existing portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway) has a 25-mile per hour posted speed limit.

2.2.8 Horizontal Alignment

PGS Parkway Phase III is a new roadway. There is no existing roadway connecting Clara Avenue to Chip Seal Parkway.

The existing portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway) does not have any horizontal curves.

2.2.9 Vertical Alignment

PGS Parkway Phase III is a new roadway. There is no existing roadway connecting Clara Avenue to Chip Seal Parkway.

The existing portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway) does not have any significant vertical curvature.

2.2.10 Multi-modal Facilities

The existing portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway) features a six-foot sidewalk along the western side of the road. There are no dedicated bicycle facilities along the existing portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway).

Additionally, a 1.45-mile segment of the Gayle's Trails shared use path network was constructed in 2023 extending from the western limits of the Breakfast Point neighborhood, westward to J.R. Arnold High School, and continues approximately one mile west of Alf Coleman Road along the Florida Power & Light Easement.

PGS Parkway Phase III is a new roadway. There are no transit routes serving the existing portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway).

2.2.11 Intersections

Existing intersection layouts and traffic control information within the PTAR study area are summarized in **Figure 4: Existing Intersection Control and Geometry**. There are traffic signals at the intersection of US 98 (SR 30A/Panama City Beach Parkway) with Clara Avenue, Alf Coleman Road, Richard Jackson Boulevard, Allison Avenue, and Chip Seal Parkway; a traffic signal is under construction at the intersection of US 98 (SR 30A/Panama City Beach Parkway) with Moylan Road. There is a roundabout at the eastern terminus of the Phase III corridor on Chip Seal Parkway. All other existing connections to Clara Avenue, Alf Coleman Road, and Chip Seal Parkway within the study area are two-way stop-controlled.

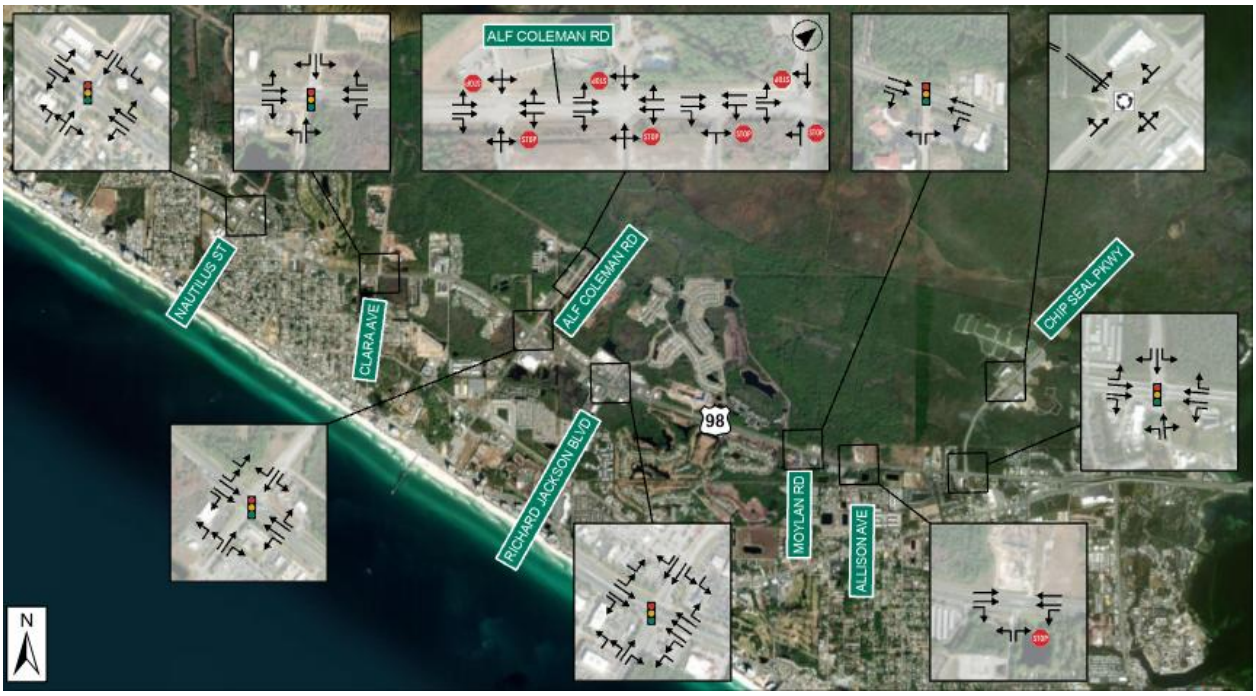

Figure 4: Existing Intersection Control and Geometry

2.2.12 Physical or Operational Restrictions

PGS Parkway Phase III is a new roadway. There are no physical or operational restrictions the existing portion of Clara Avenue north of US 98 (SR 30A/Panama City Beach Parkway) under existing conditions.

2.2.13 Traffic Data

PGS Parkway Phase III is a new roadway. For the purposes of understanding the potential traffic impacts associated with the construction of PGS Parkway Phase III, the existing (2023) traffic conditions along US 98 (SR 30A/Panama City Beach Parkway) between Clara Avenue and Chip Seal Parkway were evaluated in the PTAR. **Table 1: Existing (2023) Traffic Data** summarizes the existing (2023) Annual Average Daily Traffic (AADT) volume, peak hour two-way volume, Directional Design Hour Volumes (DDHV), truck percentages, pedestrian counts, and bicycle counts under existing conditions, based on data collected in May 2023. The data informing **Table 1: Existing (2023) Traffic Data** is provided in Appendix B of the PTAR.

Table 1: Existing (2023) Traffic Data

Roadway		Roadway Attributes			Existing (2023) Conditions					
From	To	Context Classification[1]	Number of Lanes[2]	Adopted LOS[2]	AADT	Peak Hour Two-Way Volume	DDHV	Truck %	Peak Hour Pedestrian Crossings	Peak Hour Bicycle Volumes
Alf Coleman Rd										
US 98 (Panama City Beach Parkway)	Northern Terminus	C3R	4	D	5,900	850	600	0.8%	9	0
Chip Seal Parkway										
US 98 (Panama City Beach Parkway)	Roundabout	C3C	2	D	2,700	350	250	0.0%	1	0
Clara Avenue										
US 98 (Panama City Beach Parkway)	Northern Terminus	C3R	2	D	3,000	250	150	3.6%	0	0
US 98 (Panama City Beach Parkway)										
Nautilus Street	Clara Avenue	C3C	4	D	63,500	4,600	2,500	3.9%	3	0
Clara Avenue	Alf Coleman Road	C3C	4	D	60,000	4,300	2,200	0.0%	1	0
Alf Coleman Road	Richard Jackson Boulevard	C3C	4	D	58,500	4,100	2,200	0.0%	3	0
Richard Jackson Boulevard	Moylan Road	C3C	4	D	59,000	4,300	2,300	0.0%	0	0
Moylan Road	Chip Seal Parkway	C3C	4	D	52,000	3,900	2,000	0.0%	0	0
Chip Seal Parkway	Thomas Drive	C3C	4	D	51,000	3,800	1,900	0.0%	1	0

1. Context Classification obtained from FDOT Preliminary Context Classification.
2. Roadway attributes obtained from the Bay County Concurrency Managament System

2.2.14 Roadway Operational Conditions

Existing (2023) daily capacity conditions within the study area are summarized in **Table 2: Existing (2023) Daily Traffic Conditions**. All study segments of US 98 (SR 30A/Panama City Beach Parkway) exceed their adopted LOS D service capacity under existing (2023) daily conditions. Existing (2023) PM peak hour two-way capacity conditions within the study area are summarized in Table **3**: Existing (2023) Peak Hour Two-way Traffic Conditions. As with the daily conditions, all study segments of US 98 (SR 30A/Panama City Beach Parkway) exceed their adopted LOS D service capacity under existing (2023) two-way peak hour conditions. Construction funding to widen these segments of US 98 (SR 30A/Panama City Beach Parkway) is included in the FDOT Five Year Work Program (Project ID 217838-5).

Intersection operational analyses were also performed within the study area under existing (2023) AM peak hour and PM peak hour conditions. Results of the intersection analyses are summarized in the PTAR. The only intersection that was determined to operate with LOS E or worse under existing (2023) conditions was the intersection of US 98 (SR 30A/Panama City Beach Parkway) and Allison Avenue, which was stop-controlled at the time of data collection but has since been modified to signal control.

Table 2: Existing (2023) Daily Traffic Conditions

Roadway		Roadway Attributes				2022 Seasonal Factor	Existing Year (2023) Daily Conditions		
From	To	Context Classification[1]	Number of Lanes[2]	Adopted LOS[2]	Daily MSV[3]		Volume	V/MSV	LOS[4]
Alf Coleman Rd									
US 98 (Panama City Beach Parkway)	Northern Terminus	C3R	4	D	37,000	1.00	5,900	0.16	C
Chip Seal Parkway									
US 98 (Panama City Beach Parkway)	Roundabout	C3C	2	D	21,700	1.00	2,700	0.12	C
Clara Avenue									
US 98 (Panama City Beach Parkway)	Northern Terminus	C3R	2	D	20,100	1.00	3,000	0.15	C
US 98 (Panama City Beach Parkway)									
Nautilus Street	Clara Avenue	C3C	4	D	40,300	1.00	63,500	1.58	F
Clara Avenue	Alf Coleman Road	C3C	4	D	40,300	1.00	60,000	1.49	F
Alf Coleman Road	Richard Jackson Boulevard	C3C	4	D	40,300	1.00	58,500	1.45	F
Richard Jackson Boulevard	Moylan Road	C3C	4	D	40,300	1.00	59,000	1.46	F
Moylan Road	Chip Seal Parkway	C3C	4	D	40,300	1.00	52,000	1.29	F
Chip Seal Parkway	Thomas Drive	C3C	4	D	40,300	1.00	51,000	1.27	F

1. Context Classification obtained from FDOT Preliminary Context Classification.
2. Roadway attributes obtained from the Bay County Concurrency Managament System
3. Maximum Service Volume (MSV) based on the LOS service capacity identified in the FDOT Q/LOS Handbook 2023.
4. LOS derived from the FDOT Q/LOS Handbook 2023.

Table 3: Existing (2023) Peak Hour Two-way Traffic Conditions

Roadway		Roadway Attributes				Existing Year (2023) Peak Hour Two-Way Conditions		
From	To	Context Classification[1]	Number of Lanes[2]	Adopted LOS[2]	Peak Hour Two-Way MSV[3]	Volume	V/MSV	LOS[4]
Alf Coleman Rd								
US 98 (Panama City Beach Parkway)	Northern Terminus	C3R	4	D	3,330	850	0.26	C
Chip Seal Parkway								
US 98 (Panama City Beach Parkway)	Roundabout	C3C	2	D	1,950	350	0.18	C
Clara Avenue								
US 98 (Panama City Beach Parkway)	Northern Terminus	C3R	2	D	1,810	250	0.14	C
US 98 (Panama City Beach Parkway)								
Nautilus Street	Clara Avenue	C3C	4	D	3,620	4,600	1.27	F
Clara Avenue	Alf Coleman Road	C3C	4	D	3,620	4,300	1.19	F
Alf Coleman Road	Richard Jackson Boulevard	C3C	4	D	3,620	4,100	1.13	F
Richard Jackson Boulevard	Moylan Road	C3C	4	D	3,620	4,300	1.19	F
Moylan Road	Chip Seal Parkway	C3C	4	D	3,620	3,900	1.08	F
Chip Seal Parkway	Thomas Drive	C3C	4	D	3,620	3,800	1.05	F

1. Context Classification obtained from FDOT Preliminary Context Classification.
2. Roadway attributes obtained from the Bay County Concurrency Managament System
3. Maximum Service Volume (MSV) based on the LOS service capacity identified in the FDOT Q/LOS Handbook 2023.
4. LOS derived from the FDOT Q/LOS Handbook 2023.

2.2.15 *Managed Lanes*

PGS Parkway Phase III is a new roadway. There are no managed lanes within the existing study area.

2.2.16 *Crash Data*

Crash records for the U.S. 98/Panama City Beach Parkway corridor from January 1, 2019, to December 31, 2023, were obtained from the University of Florida's *Signal 4 Analytics*.

A total of 1,476 crashes were recorded on U.S. 98/Panama City Beach Parkway for this segment from 2019-2023, as presented in **Table 4: US 98 (SR 30A/Panama City Beach Parkway) Crashes and Severity by Year**. The number of crashes fell from 2019 to 2020 and then increased each following year with the total number of crashes in 2023 being the first year to surpass the number of crashes in 2019. Over 95% of the crashes resulted in injury and property damage. Seven fatal crashes were reported during the five-year analysis period.

Table 4: US 98 (SR 30A/Panama City Beach Parkway) Crashes and Severity by Year

Crash Severity	Year					Total
	2019	2020	2021	2022	2023	
Fatality	0	2	1	2	2	**7**
Serious Injury	3	4	4	1	11	**23**
Injury	51	39	52	66	85	**293**
No Injury	296	147	174	276	260	**1153**
Total	*350*	*192*	*231*	*345*	*358*	***1476***

The most common crash type during this time period was rear ended crashes, which accounted for 52.9% of the total crashes. The other crash types that contributed to 10% or more of total crashes were left turn crashes and sideswipes. **Table 5: US 98 (SR 30A/Panama City Beach Parkway) Number of Crashes by Type and Year** details the crashes during the analysis period by type of crash and year that crash occurred.

Table 5: US 98 (SR 30A/Panama City Beach Parkway) Number of Crashes by Type and Year

Crash Type	Year					Total
	2019	2020	2021	2022	2023	
Angle	21	9	21	20	30	**101**
Animal	0	0	0	1	1	**2**
Bicycle	3	3	0	2	0	**8**
Head On	2	3	1	4	2	**12**
Left Turn	40	15	26	41	44	**166**
Off Road	6	3	7	8	2	**26**
Pedestrian	0	1	2	1	1	**5**
Rear End	185	112	123	178	183	**781**
Right Turn	5	3	2	7	5	**22**
Rollover	4	2	2	0	1	**9**
Sideswipe	37	22	22	44	40	**165**
Other	38	13	14	24	37	**126**
Unknown	9	6	11	15	12	**53**
Total	*350*	*192*	*231*	*345*	*358*	***1,476***

The crash rate lowered from 2019 to 2021 but then increased each subsequent year from 2021 to 2023. 2023 had the highest crash rate and the statewide crash rate average from 2019 was surpassed during years 2019, 2022, and 2023. Table **6**: Crash Rate by Year displays the crash rate information for each year from 2019-2023.

Table 6: Crash Rate by Year

Segment	Year					Total	Statewide Average
	2019	2020	2021	2022	2023		
US 98 (Panama City Beach Parkway) Clara Avenue to Chip Seal Parkway	4.79	3.45	3.19	4.77	4.95	**4.27**	**3.89**

Crashes per million vehicle-miles traveled
Source: Signal Four Analytics. Latest available statewide average is from 2019

Figure 5: Fatal and Serious Injury Crashes, 2019-2023 illustrates the fatal and serious injury crash locations along US 98 (SR 30A/Panama City Beach Parkway) during the analysis period. Most crashes along US 98 (SR 30A/Panama City Beach Parkway) occurred at the intersections within the study area. Several fatal and serious injury crashes were reported at the intersections of US 98 (SR 30A/Panama City Beach Parkway) with Moylan Road and with Allison Avenue, which will have both been signalized since the five-year crash analysis period.

Most of the study area crashes within the five-year analysis period occurred under daylight conditions (76%) and with dry roadway surface conditions (86%), as summarized in **Figure 6: Lighting and Roadway Surface Conditions for 2019-2023 Crashes**. Additional crash details and analyses are provided in the PTAR.

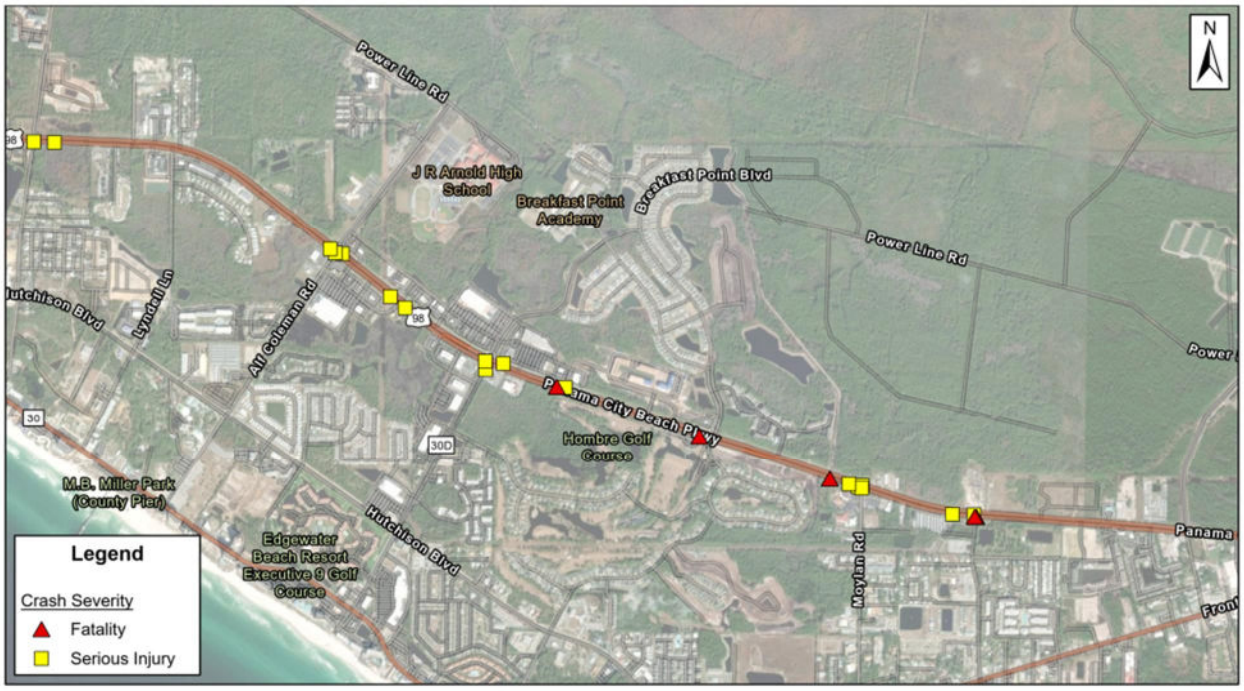

Figure 5: Fatal and Serious Injury Crashes, 2019-2023

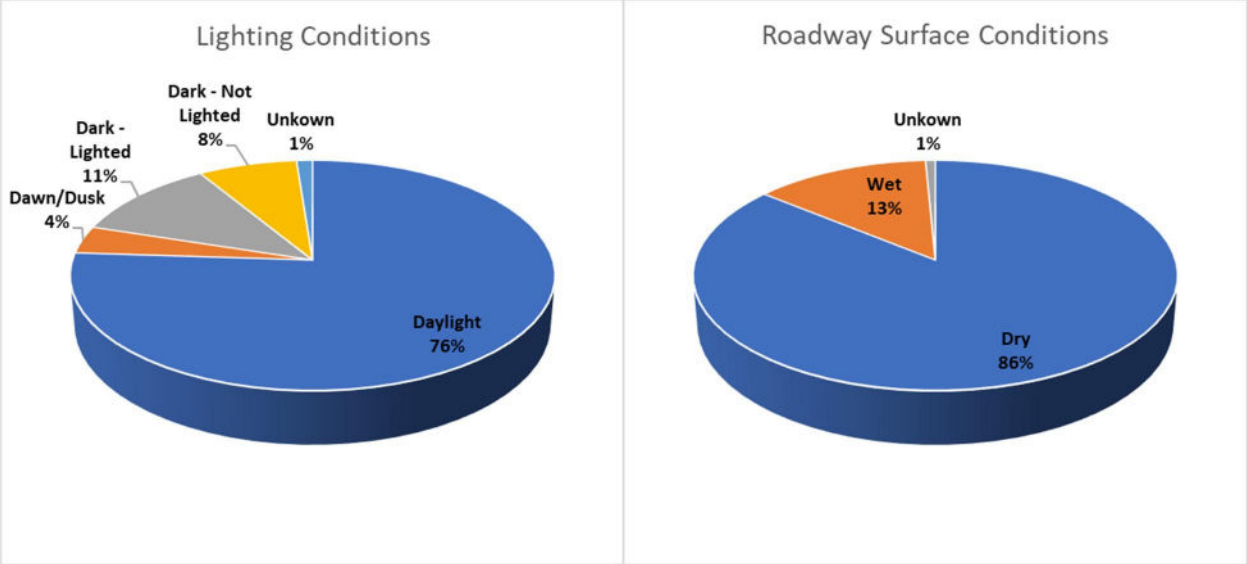

Figure 6: Lighting and Roadway Surface Conditions for 2019-2023 Crashes

2.2.17 Railroad Crossings

There are no existing railroad crossings within the study area.

2.2.18 Drainage

The majority of the project corridor is located within the jurisdictional boundaries of Bay County with a small portion of the eastern end of the project falling within the boundaries of Panama City Beach. The project is located within the Northwest Florida Water Management District (NWFWMD). Existing land cover across the site is primarily forested wetlands and a large portion of the project will bisect the existing Breakfast Point Conservation Easement. Stormwater runoff in the area drains south to north via, overland flow, small swales, and a handful of larger canals. The eventual outfall for the project area and the offsite running through it is West Bay (WBID #1061A) which drains into St. Andrew's Bay (WBID #1061B, 1061C, 1061E), and finally into the Gulf of Mexico (WBID #8014).

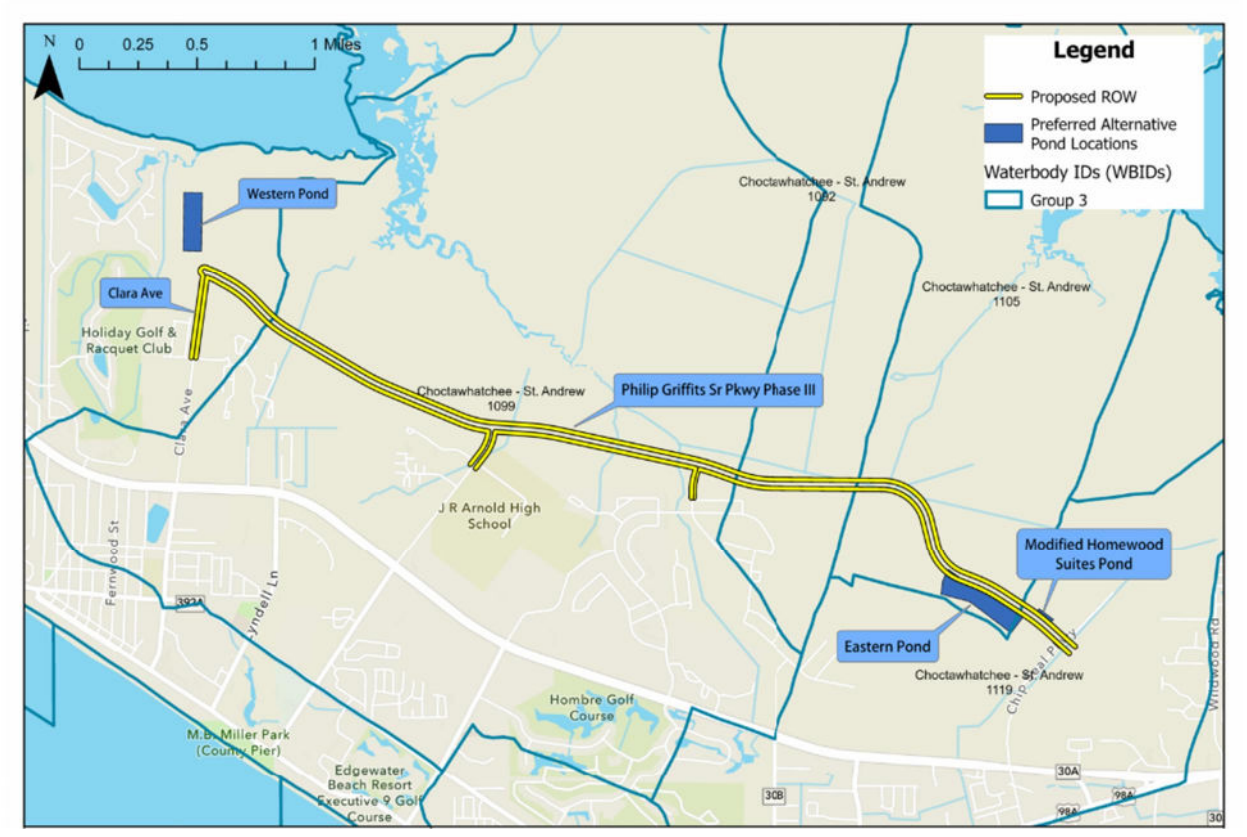

Figure 7: Waterbody ID Map

The Florida Department of Environmental Protection's (FDEP) Comprehensive Verified List of Impaired Waterbodies (February, 2025) lists the following downstream waterbodies as being impaired: West Bay (WBID #1061A) for Fecal Coliform, St. Andrew's Bay North and Middle

Segments (WBID #1061B, 1061C) for Enterococci. At the time of this report, there were no directly downstream waterbodies listed for nitrogen or phosphorus impairments. St. Andrew's Bay is classified as a FDEP Outstanding Florida Waters (OFW). OFW are waters of the state deemed worthy of special protection because of their natural attributes. Watersheds that drain to OFW are held to elevated water quality treatment standards.

Soils in the area are a mixture of different types of sand with hydrologic soil group classifications of (A/D). The dual classification is representative of soils with high hydraulic conductivity rates that reside in areas with a high groundwater table (<2-ft). Soils in the area most likely infiltrate at a high rate during the dry season and poorly during the wet season.

(38) basins have been identified within the limits of the study area. Detailed information about each drainage basin is available in the *Pond Siting Report* (PSR) available in the project file. Basins and sub-basins have been defined to corelate with anticipated cross-drains locations. 2020 Light Detection and Ranging (LiDAR) elevations used in the delineation of basins were sourced from the National Oceanic and Atmospheric Administration (NOAA). In addition to this data, field visits, and permitted information sourced from NWFWMD for adjacent developments were used where applicable. All basins within the corridor are considered open basins.

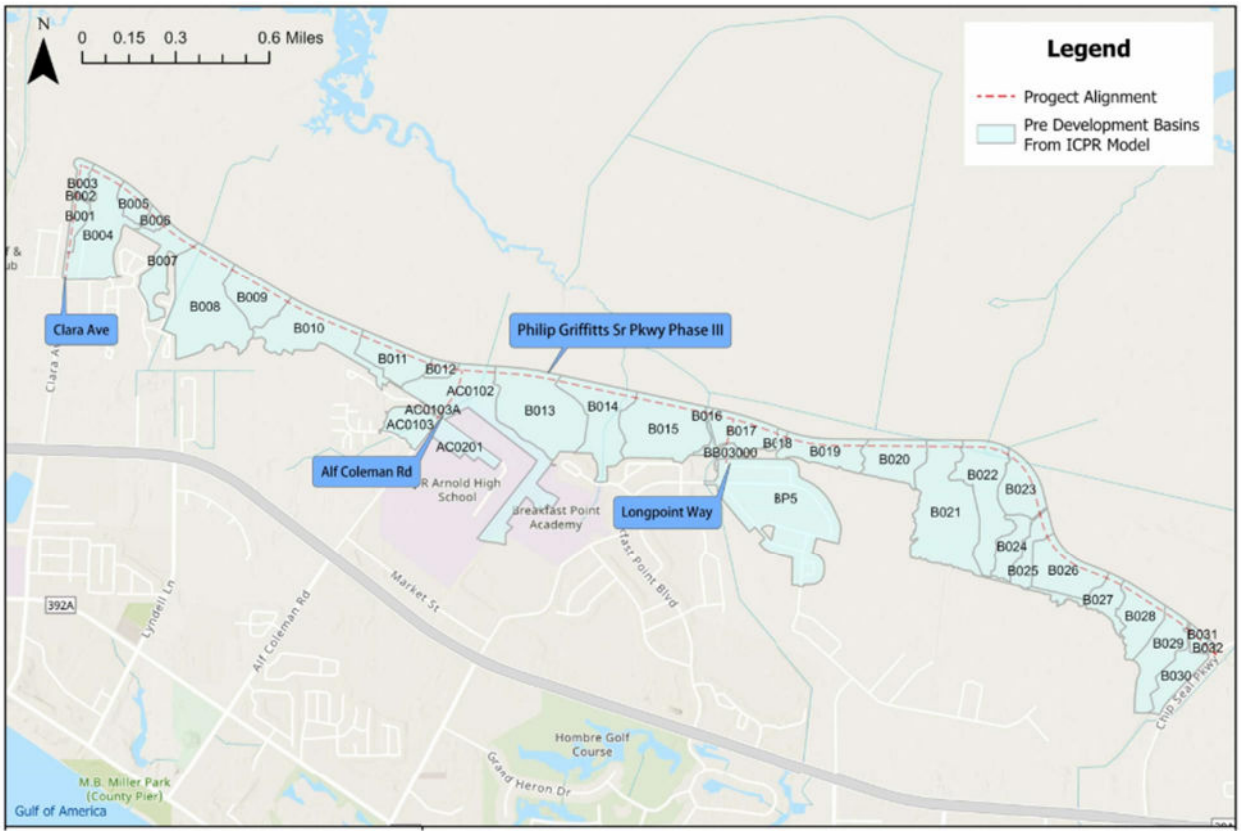

Figure 8: Pre Development Basin Map

There is a significant amount of off-site drainage which runs south to north at various locations throughout the project corridor. Areas of concentrated flow (i.e. depressions, swales, canals) running across the project corridor were identified for cross-drain analysis. Approximately (34) cross drains are anticipated for the proposed corridor. Information relating to estimated flow rates at these crossings in the existing condition can be found in the *Location Hydraulic Report* (LHR) provided in the project file.

The majority of the project is located within Federal Emergency Management Agency (FEMA) regulated Flood Zone A (floodplain elevation not established), and Flood Zone AE with floodplain elevations ranging from 8'-9'. A small portion of the project is located within Flood Zone X (0.2% annual chance flood hazard). There are no known regulated floodways within the project area. The following FEMA Flood Insurance Rate Maps (FIRM) contain the project area: 12005C0302J, 12005C0304J, 12005C0308J, 12005C0309J. Because the site sits directly adjacent to tidally influenced waters (West Bay), the flood elevations listed in the FEMA FIRM maps are based upon estimated tidal surge elevations.

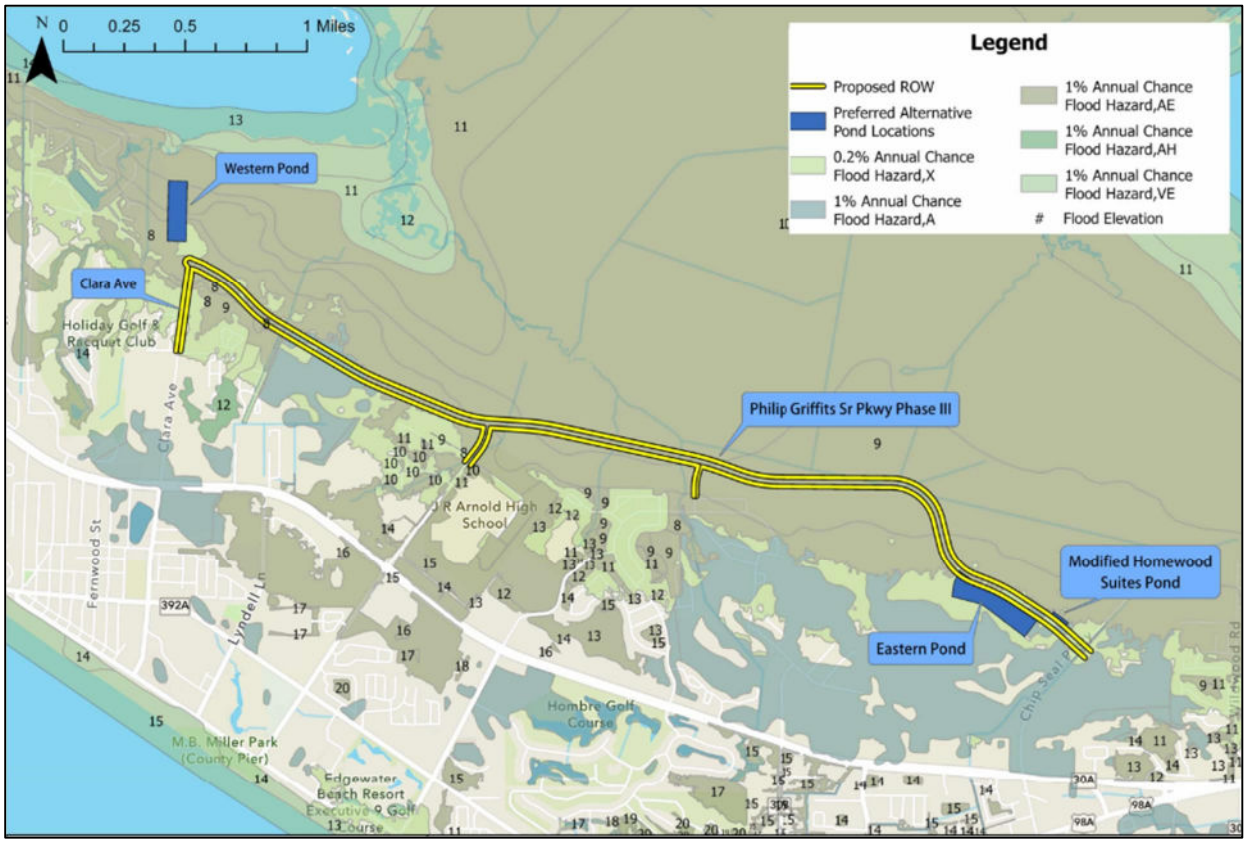

Figure 9: FEMA Flood Hazard Zones

The extents of the project fall within the following United Stages Geological Survey (USGS) defined HUC-12 Basin Boundaries: A small portion of the easternmost project extents outfall into the

Intercoastal Waterway-West Bay Basin (HUC12 #031401011002), the remainder of the project falls within the Alligator Bayou-Botheration Bay Frontal Basin (HUC12 #031401011003). Both basins drain north and outfall into St. Andrews Bay (HUC12 #031401011100), which then drains into Bell Shoal-Gulf of Mexico (HUC12 #031401011200).

2.2.19 Lighting

The existing lighting within the study area is summarized in Table **7**: Existing Lighting.

Table 7: Existing Lighting

Location	Type	Comment	Maintaining Agency
US 98 (SR 30A/Panama City Beach Parkway)	Conventional	From Nautilus Street to Chip Seal Parkway. Mostly located at intersections.	FPL
Clara Avenue	None	--	--

2.2.20 Utilities

All utility marked plans and as-built information will be included in the supporting Utility Assessment Report, to be provided under separate cover.

2.2.20.1 Utility Coordination

The preliminary utility coordination and investigation effort was conducted through written and verbal communications with the existing utility owners. A Sunshine State 811 of Florida Design Ticket System listing of existing utility owners was acquired on July 10, 2025.

Initially, verbal communication was made to all utility owners outlining the investigation effort along with the project limits. The list of utility agencies owners (UAO) known to operate utilities within the project corridor is provided in **Table 8**.

Table 8: Utility Contact Information

Utility Agency	Contact Name	Contact Phone	Contact Email
AT&T Distributions	Steve Perry	850-913-3709	SP3783@att.com
Comcast Communications	Andrew Sweeney	904-738-6898	Andrew_sweeney@comcast.com
Florida Power & Light	Catrell Briggs	850-872-3349	Catrell.Briggs@fpl.com
Wide Open West "WOW"(fka Knology)	Richard LaGanga	850-215-5740	Richard.LaGanga@wowinc.com
TECO Peoples Gas	Mark Noble	850-914-6129	MNoble@tecoenergy.com
City of Panama City Beach	Rosalie Hansen	850-233-5100	Rosalie.Hansen@pcbfl.gov
Verizon	Thomas Broyles	850-475-7465	Thomas.broyles@verizon.com

For the preparation of the report, utility owners were provided with an aerial depicting the limits of the PGS Parkway Phase III project. Using this aerial map, each utility owner was asked to indicate any of their existing utilities, infrastructure or facilities as well as any easements. In response, most utility owners replied via written communications. The utility owners provided the requested information concerning their facilities using either the utility plans or reference documentation (i.e., GIS maps). "Marked" Plans or reference documentation received from the Utility Agency Owners is listed in **Section 2.2.20.1 Existing Utility Facilities**.

2.2.20.2 Existing Utility Facilities

AT&T

AT&T has a fiber optic cable that runs along Chip Seal Parkway.

Comcast Communications

Comcast does not have facilities within the research limits.

Florida Power & Light

Florida Power & Light (FPL) owns, maintains, and operates facilities in proximity to the project limits. FPL has high voltage 115KV transmission lines on 90-ft poles within an easement along Power Line Road (from Clara Avenue to Alf Coleman Road). Power Line Road extends to Chip Seal Parkway; however, no facilities were identified on this stretch of the road.

Wide Open West "WOW" (fka Knology)

No response

TECO Peoples Gas

TECO has existing underground gas facilities serving developments along Alf Coleman Road, Richard Jackson Boulevard, and Chip Seal Parkway. There were no facilities beyond this extent identified.

City of Panama City Beach

The City of Panama City Beach has underground potable water and wastewater facilities serving the developments along Clara Avenue, Alf Coleman Road, Richard Jackson Boulevard, and Chip Seal Parkway. Additionally, the City has a 24" water transmission line within the FPL easement previously mentioned along Power Line Road.

Verizon

Verizon has cell towers along Philip Griffitts Sr Parkway and Alf Coleman Road.

2.2.21 Soils and Geotechnical Data

Based on the soil classifications found in the United States Department of Agriculture (USDA) and the National Resources Conservation (NRCS) Soil Survey for the project corridor, the project study area is comprised of 15 soil types as listed below and illustrated in

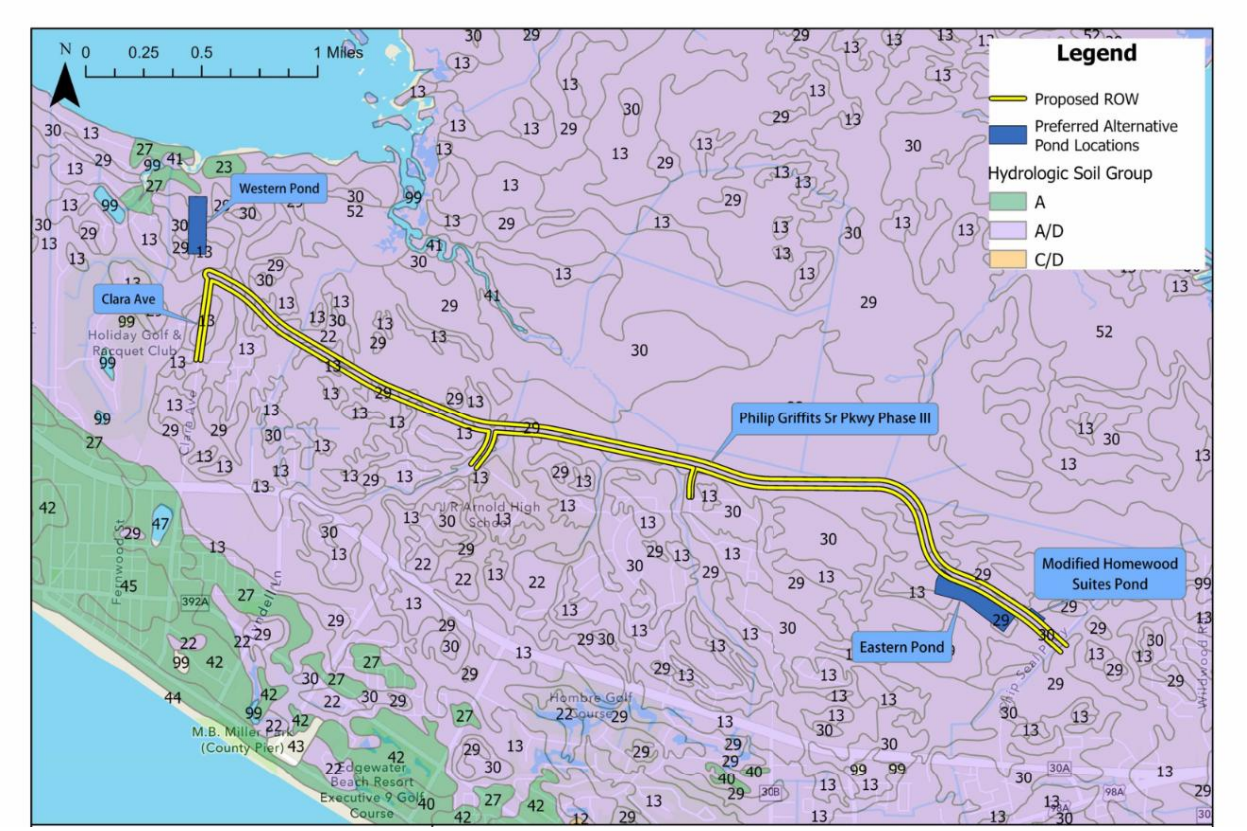

Figure 10: Study Area Hydrologic Soil Groups.

- 13: Leon Sand, 0 to 2 percent slopes
- 22: Pamlico-Dorovan Complex
- 23: Chipley Sand, 0 to 5 percent slopes
- 27: Mandarin Sand, 0 to 2 percent slopes
- 29: Rutlege Sand, 0 to 2 percent slopes
- 30: Pottsburg-Pottsburg, wet, sand, 0 to 2 percent slopes
- 40: Arents, 0 to 5 percent slopes
- 41: Dirego Muck

- 42: Resota Fine Sand, 0 to 5 percent slopes
- 43: Urban Land
- 44: Beaches
- 45 Kureb Sand, 0 to 5 percent slopes
- 47 Pits
- 52 Bayvi Loamy Sand
- 99 Water

Figure 10: Study Area Hydrologic Soil Groups

2.2.22 Aesthetics Features

The topography of the study area is relatively flat and the majority of the land within the study area south of the proposed Phase III corridor is or will be developed upon buildout. The natural features in the Breakfast Point Mitigation Bank provide significant foliage that will obstruct the view of the new roadway from the residents of the single family residential development.

2.2.23 Traffic Signs

No major overhead traffic signs are located on US 98 (Panama City Beach Parkway) within the study limits. Traffic signs along US 98 (Panama City Beach Parkway), Clara Avenue, Alf Coleman Road, and Chip Seal Parkway in the study area are consistent with typical signage on similar facilities. Regulatory, warning, and guide signs are located throughout the study area.

2.2.24 Noise Walls and Perimeter Walls

No noise or perimeter walls existing within the study area.

2.2.25 Intelligent Transportation Systems (ITS)/Transportation System Management and Operations (TSM&O) Features

[Details to be provided by Bay County Traffic Engineering. Pending September 2025.]

2.3 Existing Bridges and Structures

There are no existing bridges located within the study limits.

2.4 Existing Environmental Features

Ecological communities within the project corridor include freshwater wetlands, upland forest and upland prairie habitats. A large portion of the corridor occurs within the limits of the Breakfast Point Mitigation Bank, a state and federally permitted site that generates wetland credits to offset impacts elsewhere within the regional watershed. Anticipated impacts to the mitigation bank as well as to existing conservation easements are addressed in the Natural Resources Evaluation (NRE) report for this project.

The environmental features vary moderately between the alignment alternatives that were evaluated. Generally, the project area consists of approximately 47–49 acres wetland habitats (Bottomland, Cypress, Hydric Pine Flatwoods, Wetland Forested Mixed, Wetland Shrub, Wet Prairie), 40–46 percent undeveloped lands (Palmetto Prairie, Flatwoods), and 7–12 percent developed lands (Disturbed Land, Roadway, Stormwater Pond).

Several natural upland communities considered suitable for wildlife were identified in the project area including communities identified as Palmetto Prairie and Mesic Flatwoods.

The existing conditions of the wetlands in the project area were assessed utilizing Geographical Information System (GIS) data and field verified. A total of six wetland communities were

identified, all occurring within the St. Andrew's Bay basin. The wetland communities are composed of Stream and Lake Swamp, Cypress, Hydric Pine Flatwoods, Wetland Forested Mixed, Wetland Scrub-Shrub, and Wet Prairie.

One OSW was identified within the project area, which is an existing stormwater pond on the eastern portion of the study area, which provides stormwater treatment and attenuation for the Panama City Beach Publix Sports Park on Chip Seal Parkway. As a constructed stormwater pond, this site is not classified as a jurisdictional water of the state or the U.S. The OSW is not considered suitable habitat for listed wading birds due to the depth of the pond, the high nuisance coverage, and steeply incised banks.

The NRE also summarizes and addresses potential effects on state and federal protected species, with the conclusion that there will be no effect, no adverse effect, or may affect but not likely to affect protected species.

3.0 FUTURE CONDITIONS

3.1 Future Conditions Considerations

3.1.1 Future Conditions – Land Use

Within the study area, there are several approved developments that are expected to be constructed prior to or concurrent with the PGS Parkway Phase III corridor. Along Clara Avenue at the western project limits, a self-storage facility and a 158-unit single-family and townhome subdivision have been approved.

Breakfast Point East Phase 4 has been approved for 176 single-family residential units east of the existing Breakfast Point subdivision, and 4 commercial lots have been approved on Moylan Road, north of US 98 (Panama City Beach Parkway). Construction of Moylan Road and the traffic signal modifications at the intersection of US 98 (Panama City Beach Parkway) and Moylan Road are underway and are expected to result in minor changes to travel patterns to and from the Breakfast Point subdivision.

Near the eastern limits of the study area, a 136,500-square foot indoor sport complex and the Western Region Resiliency Center (WRRC) are being constructed on Chip Seal Parkway, north of A. Gary Walsingham Academy.

3.1.2 Future Conditions – Travel Demand

Opening Year (2030) traffic volumes in the study area were developed in the PTAR by applying a 2.50 percent (2.50%) annual growth rate to existing (2023) traffic volumes based on historical growth trends, population projections in the County, and the latest development patterns within and near the study area. Design Year (2050) traffic volumes were developed in the PTAR by applying a more modest 1.50 percent (1.50%) annual growth rate to Opening Year (2030) volumes.

3.1.3 Future Conditions – US 98 (Panama City Beach Parkway)

US 98 (Panama City Beach Parkway is being widened from four lanes to six lanes within the project limit under FDOT project numbers 217838-4 (Nautilus Street to Richard Jackson Boulevard) and 217838-5 (Richard Jackson Boulevard to Hathaway Bridge). The additional capacity is necessary to accommodate future east-west volume projections through the study area, but traffic volumes on US 98 (Panama City Beach Parkway) in Opening Year (2030) are still expected to exceed the adopted LOS D standard.

4.0 DESIGN CONTROLS & CRITERIA

4.1 Design Controls

The FDOT Context Classification (October 2024) guidebook provides detailed criteria to determine the context classification. Based on project limits including mostly residential uses within large blocks of disconnected or sparse roadway networks, the context classification of C3R (Suburban Residential) will be used to control the design criteria.

4.2 Design Criteria

The design criteria will adhere to the 2025 FDOT Design Manual (FDM). Roadway design elements and applicable design standards considered in the design of the corridor are summarized in **Table 8**.

Table 8: Design Control Criteria

Design Element	Design Standard	Source
General Criteria		
Design Standard Manual	FDOT Design Manual	
Design Vehicle:	WB-62FL	FDM 201.6.2
Functional Classification	C3R – Suburban Residential	FDM – Table 200.4.1
Design Speed Mainline	45 MPH	FDM – Table 201.5.1
Access Control Classification	Class 3 – Restrictive	FDM – Table 201.4.2
Horizontal Geometry Criteria		
Lane Width Mainline	11 feet	FDM – Table 210.2.1
Shoulder Width	N/A – Curb & Guttered Road	N/A
Cross Slope Roadway Shoulder	0.02 0.02	FDM 210.2.4
Median Width	N/A	-
Border Width	14 feet	FDM – Table 210.7.1
Lateral Offset Curbed Roadway	4 feet	FDM – Table 215.2.2

Design Element	Design Standard	Source
Clear Zone Width	24 feet	FDM – Table 215.2.1
Rate of Superelevation	0.05	FDM – Table 210.9.2
Minimum Curve Radius	694 feet	FDM – Table 210.8.2
Minimum Length of Horizontal Curve	675 feet	FDM – Table 210.8.1
Maximum Deflection without Curve	14 degrees	FDM 210.8.1
Maximum Deflection through Intersection	3 degrees	FDM – Table 212.7.1
Auxiliary Lane Minimum Acceleration Length	N/A	N/A
Auxiliary Lane Drop	N/A	N/A
Vertical Geometry Criteria		
Minimum Stopping Sight Distance	Downgrade: 400 feet (6% Grade) Upgrade: 331 feet (6% Grade)	FDM – Table 210.11.1
Minimum Passing Sight Distance	1625	FDM – Table 210.11.2
Minimum Profile Grade	0.3 %	FDM – Table 210.10.1.1
Maximum Profile Grade	6 %	FDM 210.10.1
Minimum Length of Vertical Curve	135 feet	FDM – Table 210.10.4
Crest Vertical Curve (Minimum K- Value)	98	FDM – Table 210.10.3
Sag Vertical Curve (Minimum K- Value)	79	FDM – Table 210.10.3
Maximum Change in Grade without Vertical Curve	0.70 %	FDM – Table 210.10.2

Design Element	Design Standard	Source
Stormwater Management Criteria		
Water Quality	Wet Detention: 1-inch of total runoff from developed project site (standard) + 0.5-inch of total runoff from developed project site (OFW) = 1.5-inches	NWFWMD Applicant's Handbook Vol. II
Water Quantity	Peak post-development discharge rate must not exceed peak pre-development discharge rate for all project basins for the SCS III 25yr/24hr storm event.	NWFWMD Applicant's Handbook Vol. II
	Peak post-development discharge rate must not exceed peak pre-development discharge rate for all project basins for the critical duration storm event for all FDOT storms up to the 100 yr frequency event.	FDOT Drainage Design Guide & Bay County Land Development Regulations

5.0 ALTERNATIVES ANALYSIS

5.1 No-Build (No-Action) Alternative

The No-Build Alternative considers programmed improvements within the study area but does not include the proposed PGS Parkway Phase III corridor from Clara Avenue to Chip Seal Parkway. These improvements include the following:

- The planned widening of U.S. 98 (Panama City Beach Parkway) from four lanes to six lanes
- The construction of a northern leg for Moylan Road
- Modifying the intersection at U.S. 98 (Panama City Beach Parkway) and Allison Avenue from a two-way stop control to a signalized intersection

In the No-Build scenario, it is assumed that signal timings would be modified over time to better accommodate future traffic patterns with the span of the Opening Year and Design Year.

The advantages of the No-Build Alternative include:

- No impact to adjacent social, cultural, natural, or physical environments
- No utility impacts
- No expenditure of funds for ROW acquisition, design, or construction

The disadvantages of the No-Build Alternative include:

- Does not meet the Purpose of the project.
    - Does not improve mobility in the study area by providing an alternative to US 98 (SR 30A/Panama City Beach Parkway) for local traffic.
    - Does not enhance vehicular and pedestrian connectivity to J.R. Arnold High School, A. Gary Walsingham Academy, the Panama City Beach Publix Sports Park, and the Breakfast Point neighborhood.
    - Does not address safety concerns on US 98 (SR 30A/Panama City Beach Parkway) within the study limits by reducing congestion.
    - Does not enable risk reduction and resiliency of the transportation network by providing an alternate route that is constructed above the storm surge elevation in the coastal high hazard area.
- Does not address the Needs of the project.

- Does not provide an additional link within the transportation network to provide an alternative to currently congested routes
- Does not accommodate existing and future transportation demand on the study area road network
- Does not improve safety on existing roads
- Does not provide a reliable alternate route for emergency responders

The traffic capacity and operational results of the No-Build (No-Action) scenario are thoroughly evaluated in the PTAR. If PGS Parkway Phase III is not constructed, the segment of US 98 (Panama City Beach Parkway) between Clara Avenue will continue to experience significant congestion, leading to extensive travel delays and associated safety concerns.

The No-Build Alternative will remain viable throughout the PD&E Study.

5.2 Transportation Systems Management and Operations (TSM&O) Alternative

If no alternative route is provided, traffic conditions along US 98 (SR 30A/Panama City Beach Parkway) will continue to deteriorate. TSM&O and ITS improvements are inherent for the No-Build Alternative, as Bay County Engineering continues to address operational deficiencies at individual traffic signal along US 98 (Panama City Beach Parkway) within the study area. However, those TSM&O and ITS improvements are not expected to fully address the deficiencies without the construction of additional east-west capacity within the study area.

TSM&O and ITS improvements are similarly incorporated into the traffic signals within the study area under any of the Build alternatives.

5.3 Multimodal Alternatives

A Build alternative that strictly includes multimodal improvements is not considered in this PD&E Study. However, a shared use path is included in all Build alternatives that were considered. A new segment of Gayle's Trails from approximately 0.35-mile east of Clara Avenue to Cedar Hammock Lane in the Breakfast Point subdivision was recently constructed. The Build alternatives will include a 10-12 foot shared use path for the entirety of the Phase III corridor, increasing multimodal connectivity throughout the study area, especially for the schools and the sports park.

5.4 Build Alternatives

Three Build Alternatives were developed for PGS Parkway Phase III between Clara Avenue and Chip Seal Parkway. The alternatives are effectively identical except for the horizontal alignment between Alf Coleman Road and approximately 1.25 miles east of Alf Coleman Road (eastern end of the existing Breakfast Point subdivision). **Figure 11: Build Alternative Alignments, PGS Parkway Phase III** illustrates the three Build Alternative alignments that were evaluated.

5.4.1 Western Segment – Clara Avenue to Alf Coleman Road

All three alignment alternatives would generally follow the same route for the western segment between Clara Avenue and Alf Coleman Road. PGS Parkway Phase III would extend north from the existing Clara Avenue terminus to just north of the existing Florida Power and Light (FPL) power line easement. A roundabout at the northern terminus would facilitate the north-to-east and west-to-south movements, and the corridor would then continue eastward along the northern edge of the power line easement. Approximate one mile east of Clara Avenue, the alignment would begin a slight northward curve until the intersection with Alf Coleman Road. The northward curve may vary slightly depending on the alignment selected for the Middle Segment, but it will be aligned at least 700 feet north of the school to avoid impacts to the Arnold High School conservation easement.

5.4.2 Middle Segment – Alf Coleman Road to east of Breakfast Point

The three Build Alternatives divert most considerably in the middle segment. A brief description of each of the Middle Segment horizontal alignments follows:

5.4.2.1 Alignment 1 – Northern Option

The northernmost alignment alternative was developed to provide more distance from the existing Breakfast Point residential development without decreasing the viability of PGS Parkway Phase III as an alternative corridor to U.S. 98 (Panama City Beach Parkway). At the western end of the Breakfast Point subdivision, the northern option would provide more than 1,000 feet between the roadway and the nearest residential home. At the eastern end, the northern option would provide more than 400 feet between the roadway and the nearest residential home.

5.4.2.2 Alignment 2 – Center Alignment

Between the southern edge of the BPMB and the northern option, a center alignment was developed to compromise between the competing interests of the residential development to the south and the desire of USACE and FDEP to maintain the integrity of the BPMB to the north. The center alignment was aligned to avoid some potential protected habitats and run parallel with the Breakfast Point neighborhood northern boundary, approximately 350 feet to the north.

5.4.2.3 Alignment 3 – Southern Edge

The southernmost alignment alternative would be designed to effectively traverse the southern edge of the BPMB to minimize the amount of land that would be removed from the BPMB in order to accommodate the Phase III roadway.

5.4.3 Eastern Segment – East of Breakfast Point to Chip Seal Parkway

The easternmost portion of the PGS Parkway Phase III corridor would culminate at the existing roundabout on Chip Seal Parkway, near A. Gary Walsingham Academy. Much like the Western Segment, the Eastern Segment is expected to follow approximately the same route, regardless of which alignment alternative is ultimately selected for the Middle Segment. In any of the three alternatives, the Eastern Segment will curve south out of the BPMB, then curve east to align its terminus with the existing roundabout.

5.4.4 Other Build Alternative Components

Aside from the new two-lane roadway with a shared use path that will follow one of the three Build Alternatives discussed above, the following components of the study network are also included in the evaluation prepared for this PER:

- Clara Avenue Extension
  - Two-lane typical section extending from existing terminus to north of the FPL power line easement.
  - At the northern extent of the Clara Avenue extension, a one-lane roundabout will facilitate north-to-east and west-to-south movements.
- PGS Parkway and Alf Coleman Road Intersection
  - Two-way stop control with northbound Alf Coleman Road stop-controlled.
- PGS Parkway and Longpoint Way Road Intersection
  - Two-way stop control with northbound Longpoint Way stop-controlled.

Additional information related to the Build Alternatives are provided in the following sections.

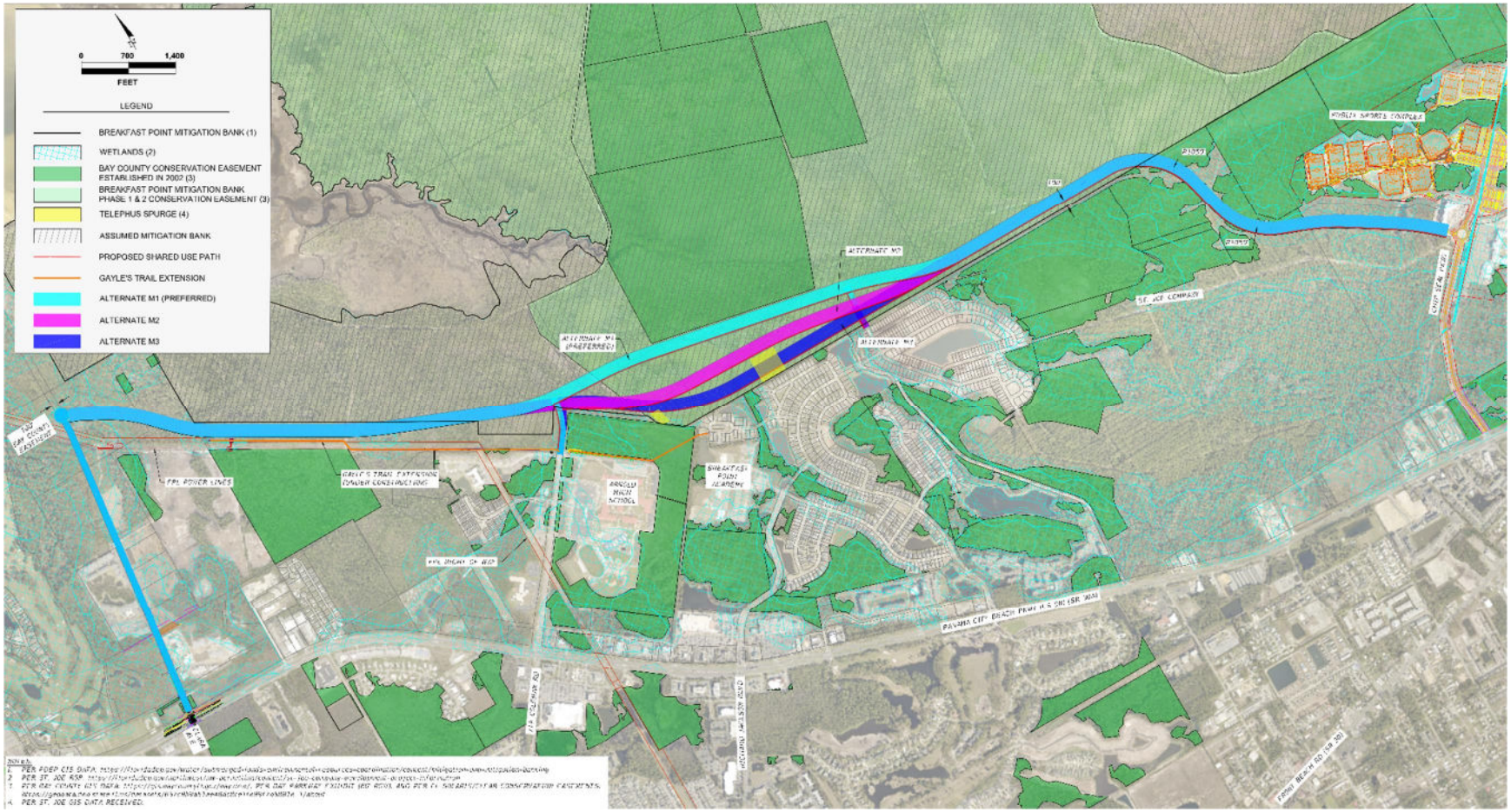

Figure 11: Build Alternative Alignments, PGS Parkway Phase III

5.4.5 PGS Parkway Phase III Typical Section

5.4.5.1 Build Alternative – Clara Avenue to St. Joe Property Line

The proposed typical section for PGS Parkway Phase III is the same for the three Build Alternatives. The proposed typical section from Clara Avenue to the St. Joe Property Line is shown in **Figure 12: Build Alternative Typical Section, Clara Avenue to St. Joe Property Line**. The typical section consists of 11-foot wide travel lanes (one in each direction), a 5-foot paved shoulder in both directions, and a 12-foot shared use path on the southern side of PGS Parkway. The proposed right-of-way width is 200 feet, which includes accommodation for a reclaimed water line, a force main, and a water line that the City of Panama City Beach plans to construct within the right-of-way as part of the project.

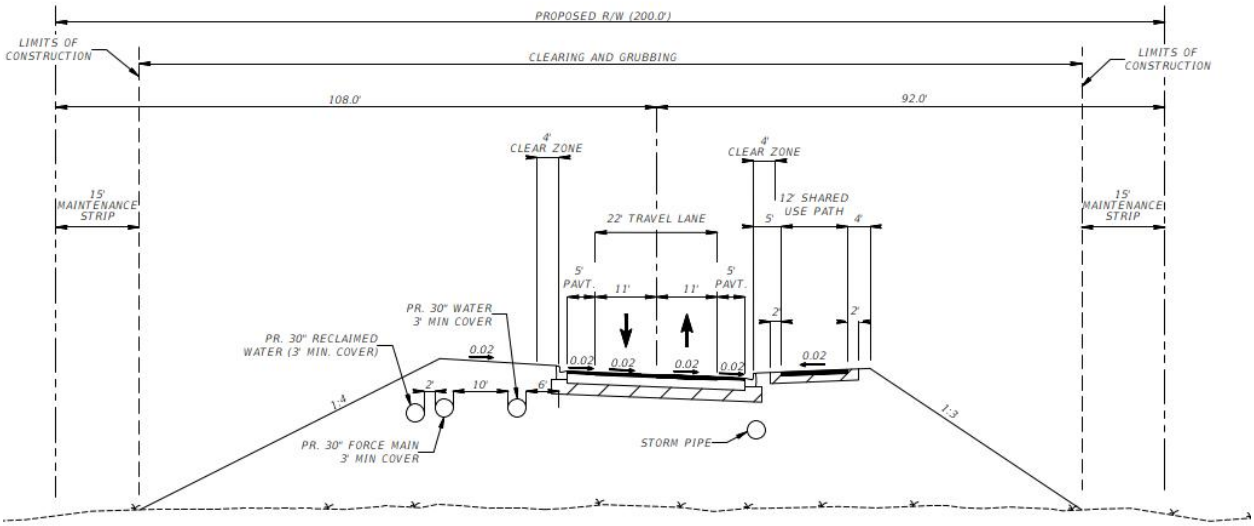

Figure 12: Build Alternative Typical Section, Clara Avenue to St. Joe Property Line

5.4.5.2 Build Alternative – St. Joe Property Line to Alf Coleman Road

The proposed typical section from the St. Joe Property Line to Alf Coleman Road is shown in **Figure 13: Build Alternative Typical Section, St. Joe Property Line to Alf Coleman Road**. The typical section consists of 11-foot wide travel lanes (one in each direction) with a 5-foot paved shoulder in each direction. Separated from the typical section within these limits is an existing 12-foot portion of the Gayle's Trails shared use path. The proposed right-of-way width is 200 feet, which includes accommodation for a reclaimed water line, a force main, and a water line that the City of Panama City Beach plans to construct within the right-of-way as part of the project.

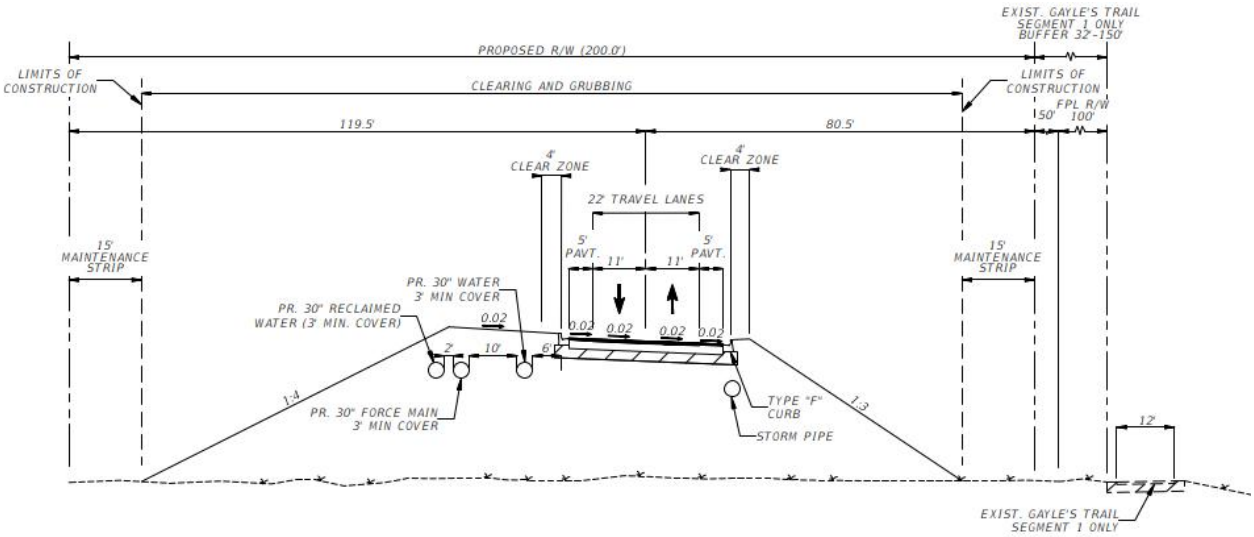

Figure 13: Build Alternative Typical Section, St. Joe Property Line to Alf Coleman Road

5.4.5.3 Build Alternative – Alf Coleman Road to Chip Seal Parkway

The proposed typical section from Alf Coleman Road to Chip Seal Parkway is shown in **Figure 14: Build Alternative Typical Section, Alf Coleman Road to Chip Seal Parkway**. The typical section consists of 11-foot wide travel lanes (one in each direction), a 5-foot paved shoulder in both directions, and a 12-foot shared use path on the southern side of PGS Parkway. The proposed right-of-way width is 200 feet, which includes accommodation for a reclaimed water line, a force main, and a water line that the City of Panama City Beach plans to construct within the right-of-way as part of the project.

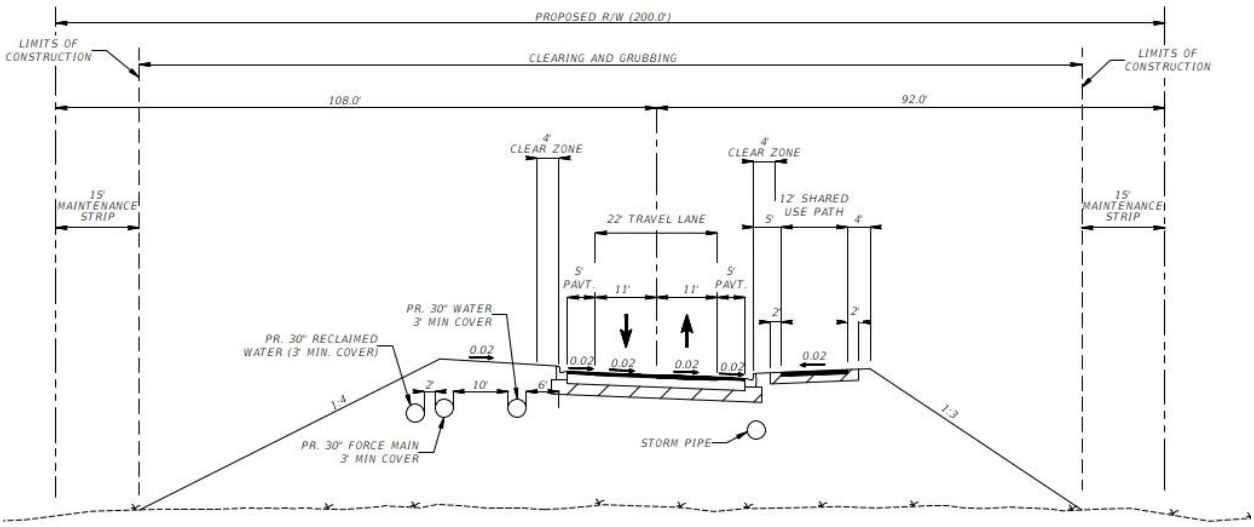

Figure 14: Build Alternative Typical Section, Alf Coleman Road to Chip Seal Parkway

Pending review of geotechnical data, environmental conditions, and negotiations with the FDEP and USACE, a portion of the Phase III segment between Alf Coleman Road and Chip Seal Parkway may ultimately be elevated to provide a wildlife crossing within the Breakfast Point Mitigation Bank. **Figure 15: Build Alternative Wildlife Crossing Bridge Typical Section** illustrates the typical section that would be utilized if a bridged section is deemed viable for the preferred alternative between Alf Coleman Road and Chip Seal Parkway.

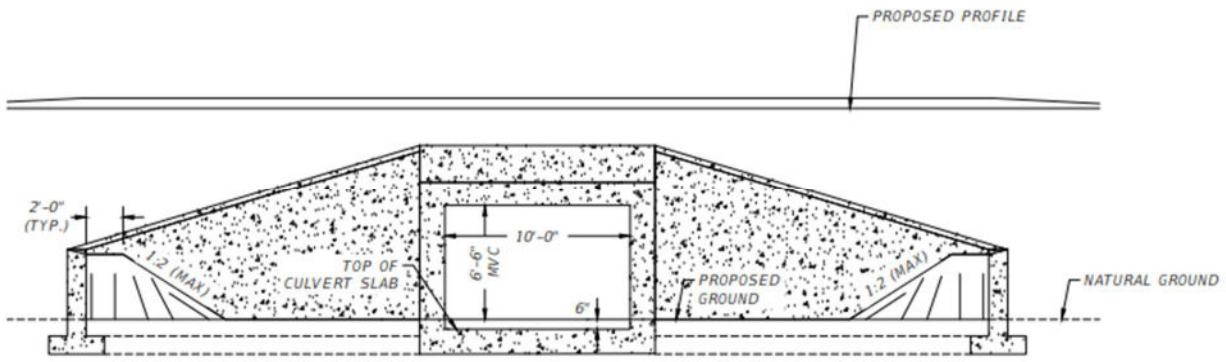

Figure 15: Build Alternative Wildlife Crossing Bridge Typical Section

5.4.6 Clara Avenue Extension Typical Section

The proposed typical section for the extension of Clara Avenue includes 11-foot wide travel lanes (one in each direction) and a 5-foot paved shoulder in both directions of travel. A 6-foot wide sidewalk would be extended on the western side of Clara Avenue, consistent with the existing typical section. The 100-foot right-of-way typical section for the Clara Avenue extension is shown in **Figure 16: Build Alternative Typical Section, Clara Avenue Extension**.

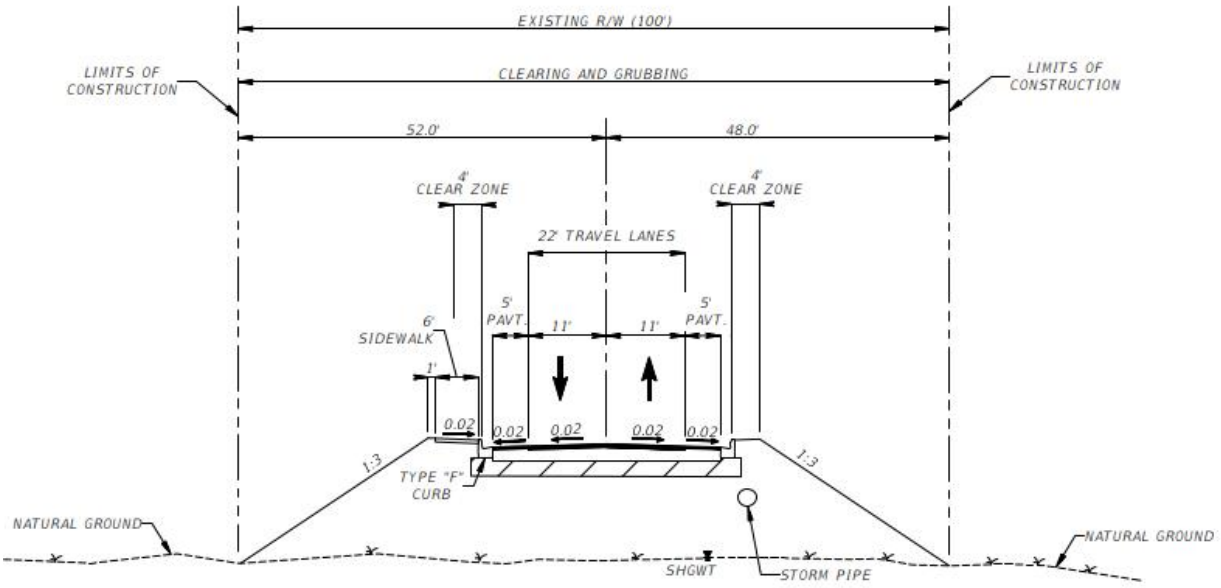

Figure 16: Build Alternative Typical Section, Clara Avenue Extension

5.4.7 *Alf Coleman Road Extension Typical Section*

The proposed typical section for the extension of Alf Coleman Road includes four 12-foot wide travel lanes (two in each direction), a 15.5-foot raised grass median, a 5-foot paved shoulder in both directions of travel, a 12-foot shared use path on the west side of the roadway, and a 6-foot sidewalk on the east side of the roadway. The 190-foot right-of-way typical section for the Alf Coleman Road extension is shown in Figure **17**: Build Alternative Typical Section, Alf Coleman Road Extension.

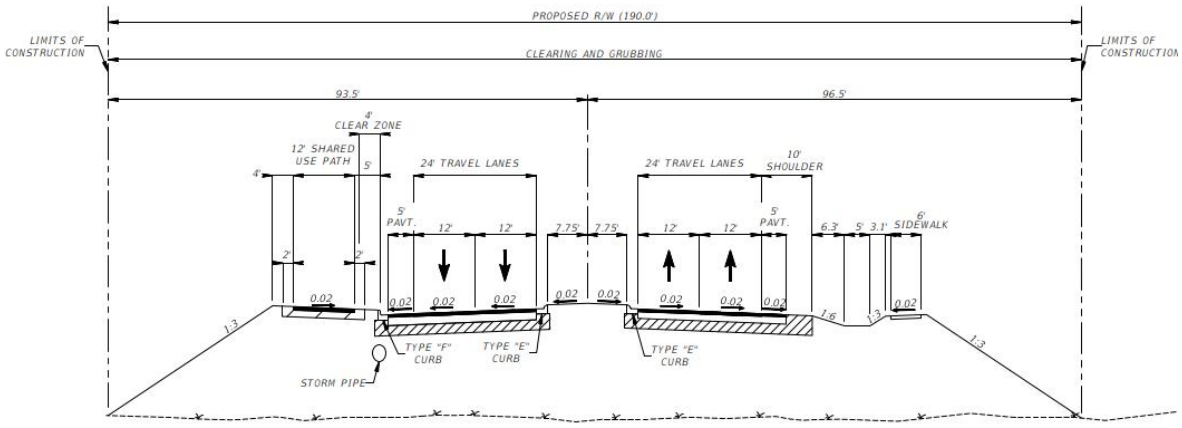

Figure 17: Build Alternative Typical Section, Alf Coleman Road Extension

5.4.8 *Longpoint Way Extension Typical Section*

The proposed typical section for the extension of Longpoint Way includes two 11-foot wide travel lanes (one in each direction) and 6-foot sidewalks on both the east and west side of the roadway. The 115-foot right-of-way typical section for the Longpoint Way extension is shown in Figure **18**: Build Alternative Typical Section, Longpoint Way Extension.

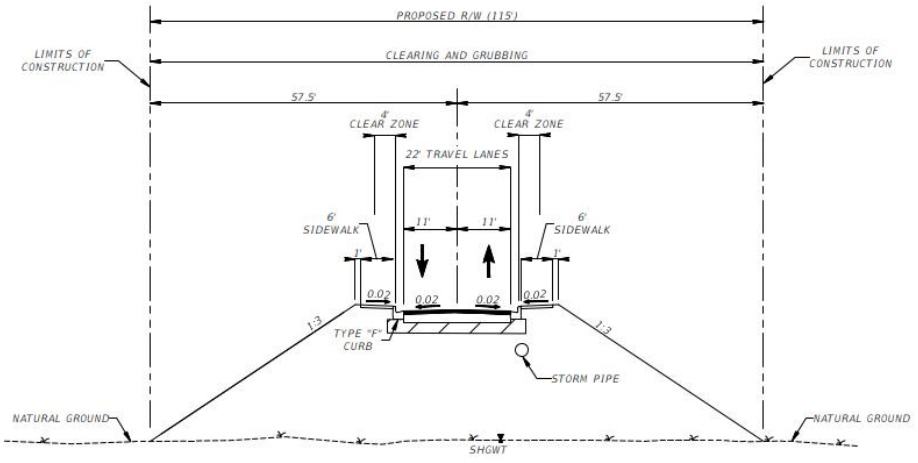

Figure 18: Build Alternative Typical Section, Longpoint Way Extension

5.5 Comparative Alternatives Evaluation

A comparative evaluation of the alternatives is provided in Table **9**: Evaluation Matrix. The subsequent sections provide additional information in terms of engineering, socioeconomic, environmental, physical, traffic, and safety impacts, as well as cost estimates for each of the Build Alternatives.

Table 9: Evaluation Matrix

Evaluation Parameters	Build Alternatives			No-Build Alternative
	M1 (North)	M2 (Middle)	M3 (South)	
Purpose and Need				
Meets Purpose and Need	✓	✓	✓	✗
Traffic Effectiveness				
Improve mobility for local traffic	✓	✓	✓	✗
Enhance vehicular and pedestrian connectivity to schools, park, and Breakfast Point neighborhood	✓	✓	✓	✗
Reduce congestion along US 98 (SR 30A/ Panama City Beach Parkway)	✓	✓	✓	✗
Enhance resiliency of the transportation network by providing an alternate route above the storm surge elevation in the coastal high hazard area	✓	✓	✓	✗
Potential Right-of-Way Impacts				
Right of Way Required (acres)	134.4 ac	134.0 ac	134.3 ac	0.0
Number of Parcels Impacted	8	8	8	0
Number of Potential Residential Relocations	0	0	0	0
Number of Potential Non-Residential Relocations	0	0	0	0
Natural/ Cultural/ Physical Environmental Effects				
Known Previously Recorded National Register Eligible Archaeological Sites Effected	0	0	0	0
Known Previously Recorded National Register Eligible Historic Sites Effected	0	0	0	0
Potential Noise Impacts	0	0	0	N/A
Air Quality Effects	0	0	0	None
Wetland Total Impacts (acres)	77.93 ac	77.07 ac	77.28 ac	0

Evaluation Parameters	Build Alternatives			No-Build Alternative
	M1 (North)	M2 (Middle)	M3 (South)	
Floodplain Impacts (acres)	134.4 ac	134.0 ac	134.3 ac	0
Protected Species Involvement	Moderate	Moderate	Moderate	None
Conservation Easement Impacts (acres)	41.47 ac	39.65 ac	39.59 ac	0.0
Potential Utility Impacts	FPL Easement	FPL Easement	FPL Easement	No
Potential Contamination Sites (medium or high)	0	0	0	0
Estimates in 2025 Present Day Costs ($ millions)				
Construction	$84.9M – 90.5M	$83.5M – 89.1M	$71.6M	$0
Right-of-Way	$0.9M	$0.9M	$0.9M	$0
Mitigation Bank Impacts	$3.6M – 7.3M	$3.6M – 5.9M	$4.2M – 6.0M	$0
Final Design	$3.0M	$3.0M	$3.0M	$0
Construction Engineering and Inspection (10%)	$8.5M – 9.1M	$8.4 – 8.9M	$7.2M	$0
Total Costs ($ millions)	**$100.9M – 110.8M**	**$99.4M – 110.5M**	**$86.9M – 88.7M**	**$0**

5.6 Selection of the Preferred Alternative

Build Alternative M1 is recommended as the Preferred Alternative for the following reasons:

- The No Build Alternative does not meet the purpose and need of the project. If parallel east-west capacity is not constructed, US 98 (SR 30A/Panama City Beach Parkway) is expected to exceed its daily and PM peak hour service capacities significant by Design Year 2050. Even with the construction of the Build Alternative.
- Alternative M1 provides the largest distance between the Phase III corridor and the Breakfast Point neighborhood, which is the preference of the residents and would create the greatest real and perceived buffer for noise and aesthetic impacts.
- Alternative M1 provides the largest swath of land south of the Phase III corridor that could continue to be maintained as a Conservation Easement. The M2 and M3 alignments would create smaller, less manageable parcels that would be more difficult to manage with controlled burns and other maintenance.
- Alternative M1 avoids a portion of the Breakfast Point Mitigation Bank which has been identified as potential habitat for the *telelphus spurge*, a protected species.

6.0 AGENCY COORDINATION & PUBLIC INVOLVEMENT

6.1 Agency Coordination

Agency coordination has occurred throughout the PD&E phase of the project and will continue as the project moves forward into design. Agency coordination documentation will be included in the Comments and Coordination Report, prepared as a supporting document to this study. Throughout the project, the County and Consultant team have met monthly to discuss project tasks and issues; representatives from the City of Panama City Beach have participated in those monthly meetings on occasion. In addition to monthly meetings, below is a history of specific agency coordination meetings that have been conducted, to date:

- Meeting with FDOT - April 17, 2023. Meeting included a review of the project segmenting, typical section, and environmental discussions. It was agreed that the PD&E would be county led and FDOT would informally review and not be a signatory on the environmental documentation. Plans for public involvement were also discussed, including a request from FDOT to be informed of field work in case the public reached out to FDOT when they saw surveyors, traffic counts, etc.
- Meeting with FDEP and USACE – June 30, 2023. The County introduced the project to representatives from FDEP and USACE Project, including information about the purpose of the project and the project schedule. The Consultant Team shared some of the constraints governing the project, including the planned widening of US 98 (SR 30A/Panama City Beach Parkway) and the Breakfast Point Mitigation Bank through which a portion of the Phase III corridor would traverse. There was discussion about avoidance and minimization options, mitigation requirements, and other mitigation considerations. The Consultant Team informed FDEP and USACE staff that the project would be screened through the Efficient Transportation Decision Making (ETDM) Programming Screen for agency review, and identified key representatives from FDEP and USACE for future coordination.
- Mitigation Bank Agency Meeting – August 27, 2024. The County and the Consultant team provided an overview of the project, the purpose and need, and the development process for the build alternatives being considered. The Consultant team acknowledged the agency input received through the ETDM Programming Screen regarding mitigation bank and conservation easement, jurisdictional waters, impacts, and mitigation needs which will be required or expected. The eminent domain process was discussed for the roadway, noting that Florida Statute and case law are consistent that conservation easement can be condemned for roadways serving the public good. The Consultant Team summarized the anticipated impacts to the Breakfast Point

Mitigation Bank, and USACE and FDEP provided feedback on the potential changes to the BPMB as a result of the eminent domain and roadway construction.

6.2 Public Involvement

Public outreach and involvement are important to the success of the project. This outreach effort will continue as the project moves forward into subsequent phases. The Comments and Coordination Report includes documentation of the items listed below. Listed below is a history of the public outreach events to date:

- Public Kickoff Meeting – May 25, 2023 from 5:00 PM-8:00 PM. A Letter, Project Handout, and Comment Form were emailed to Elected/Appointed Officials and Stakeholders on April 30, 2023 and May 2, 2023. A Project Handout and Comment Form were mailed to property owners on May 10, 2023. A print ad was placed in *Panama City News Herald* on May 14, 2023. The legal advertisement appeared in the Florida Administrative Register on May 17, 2023. The project information was presented and displayed for the public and agencies in attendance at the Lyndell Conference Center, 423 Lyndell Lane, Panama City Beach. Written comments submitted at the meeting or sent by mail became part of the official record.
- Alternatives Public Meeting – March 6, 2025; 5:00 PM – 7:00 PM. The purpose of the public alternatives meeting was to offer interested persons new information on the proposed improvements, provide an opportunity to learn about the project, and allow them to share their views. Bay County representatives and project team members were available to explain proposed improvements, answer questions, and receive comments. A project handout was emailed to Elected/Appointed Officials and Stakeholders on February 21, 2025, and the project handout was mailed to property owners on February 21, 2025. A print ad was placed in the *Panama City News Herald* on February 26, 2025, and the legal advertisement appeared in the Florida Administrative Register on February 26, 2025. Informational materials available at the public alternatives meeting included a project handout providing an overview of the PD&E study and a comment form with contact information. Below is a listing of the display exhibits at the public alternatives meeting:
    - Welcome Board
    - Alignment Alternatives Board
    - Evaluation Matrix Board
    - Preliminary Project Rendering Board
    - Traffic Noise Analysis Board

- Typical Section Board
- Contact Us Board
- Title VI Board

A total of 39 comment forms were received: 18 comments were provided at the public alternatives meeting, 10 comments were emailed, 2 comments were received by phone, and 9 comments were mailed in; 7 prior to the public alternatives meeting and 2 after the public alternatives meeting.

- Prefer Alternative A
- Recommendation to consider a roundabout
- Oppose Access Road into Breakfast Point/limit places to enter and exit to U.S. 98 (Panama City Beach Parkway)
- Environmental/wetland/wildlife concerns
- Noise concerns, cost concerns

6.3 Public Hearing

Public Hearing is being planned for November 10, 2025. Section will be finalized after Public Hearing.

7.0 PREFERRED ALTERNATIVE

The M1 Build Alternative is recommended as the Preferred Alternative for the PGS Parkway Phase III connection between Clara Avenue and Chip Seal Parkway.

7.1 Typical Sections

Proposed typical sections are illustrated in **Section 5.4.5 PGS Parkway Phase III Typical Section**. The proposed typical section consists of 11-foot wide travel lanes (one in each direction), a 5-foot paved shoulder in both directions, and a 12-foot shared use path on the southern side of PGS Parkway. For a portion of the corridor east of Clara Avenue to Alf Coleman Road, the shared use path will connect south to the existing segment of Gayle's Trails in lieu of constructing a new shared use path within the PGS Parkway Phase III right-of-way. The proposed right-of-way width is 200 feet, which includes accommodation for a reclaimed water line, a force main, and a water line that the City of Panama City Beach plans to construct to provide critical redundancy to the City's water and wastewater utility network.

7.2 Access Management

Access to PGS Parkway Phase III will be provided via connections to Clara Avenue, Alf Coleman Road, Long Point Way, and Chip Seal Parkway. Given the presence of Conservation land surrounding the Preferred Alternative, it is anticipated that no further access connections will be provided within the project limits.

7.3 Right of Way

Approximately 134.4 acres of right-of-way from eight parcels will be required for the Preferred Alternative. No residential or non-residential relocations will be necessary to accommodate the Preferred Alternative.

7.4 Horizontal and Vertical Geometry

The proposed horizontal alignment for PGS Parkway Phase III contains 10 horizontal curves within the project limits. The radius of the horizontal curves range between 1050' and 5500'. **Table 10: Proposed Horizontal Geometry** lists the proposed horizontal curves for this project.

Table 10: Proposed Horizontal Geometry

Centerline PI Station	Bearing		Degree of Curvature	Radius (ft)	Length (ft)
	Back	Ahead			
111+94.34'	S 62° 35' 07" E	S 43° 52' 46" E	2° 17' 31"	2500'	816.19'
122+62.22'	S 43° 52' 46" E	S 59° 25' 33" E	2° 17' 31"	2500'	678.33'
148+52.87'	S 59° 25' 33" E	S 67° 23' 30" E	1° 08' 45"	5000'	695.15'

Centerline PI Station	Bearing		Degree of Curvature	Radius (ft)	Length (ft)
	Back	Ahead			
173+40.99'	S 67° 23' 30" E	S 86° 00' 57" E	2° 17' 31"	2500'	812.64'
188+58.55'	S 86° 00' 57" E	S 77° 49' 24" E	1° 08' 45"	5000'	714.92'
225+22.93'	S 77° 49' 24" E	S 70° 14' 17" E	1° 02' 30"	5500'	728.14'
237+34.34'	S 70° 14' 17" E	S 89° 26' 59" E	2° 17' 31"	2500'	838.27'
274+28.35'	S 89° 26' 59" E	S 13° 56' 22" E	5° 27' 24"	1050'	1383.80'
291+16.05'	S 13° 56' 22" E	S 68° 35' 29" E	5° 27' 24"	1050'	1001.55'
302+19.39'	S 68° 35' 29" E	S 56° 52' 51" E	1° 38' 13"	3500'	715.35'

The proposed vertical alignment for PGS Parkway Phase III was established taking into consideration that the project area is in flood zone A with adjacent zones varying AE-6 and AE-7. Changes of elevation vary between four feet and six feet along the entire length of the study area. The vertical alignments are designed for storm surge category 4 with elevations ranging from six feet to ten feet. Table **11**: Proposed Vertical Geometry lists the proposed vertical curves for the PGS Parkway Phase III roadway.

Table 11: Proposed Vertical Geometry

Centerline PVI Station	Type of Curve	PVI Elevation (ft)	Grade (%)		Length of Curve (ft)	K-Value
			In	Out		
109+69.56'	Crest	12.84'	0.12%	0.10%	425'	26971.73
116+83.28'	Crest	13.57'	0.10%	0.01%	425'	4384.69
137+38.24'	Sag	13.68'	0.01%	0.02%	425'	32264.08
144+93.96'	Crest	13.82'	0.02%	-0.12%	425'	3152.97
171+00.00'	Sag	10.79'	-0.12%	0.30%	425'	1019.03
184+99.63'	Crest	15.00'	0.30%	-0.30%	425'	703.93
201+50.00'	Sag	10.00'	-0.30%	0.04%	425'	1239.69
251+66.84'	Crest	12.00'	0.04%	-0.14%	425'	2308.36
265+53.34'	Sag	10.00'	-0.14%	0.09%	425'	1799.16
270+42.61'	Crest	10.45'	0.09%	0.08%	425'	41637.81
285+59.12'	Sag	11.69'	0.08%	0.19%	425'	4091.64
291+00.00'	Crest	12.69'	0.19%	0.01%	425'	2358.34
297+62.11'	Sag	12.73'	0.01%	0.02%	425'	40559.44
303+27.99'	Sag	12.82'	0.02%	0.11%	425'	4555.84
313+17.08'	Crest	13.90'	0.11%	-0.79%	425'	475.00

7.5 Design Variations and Design Exceptions

No design variations or design exceptions are anticipated.

7.6 Multimodal Accommodations

Accommodations for pedestrians and bicyclists will be provided along the PGS Parkway Phase III corridor in the Preferred Alternative. From Clara Avenue to approximately one-half mile east, a shared use path will be included within the Phase III right-of-way; where the existing Gayle's Trail segment begins, the PGS Parkway Phase III shared use path will connect south. A shared use path connection will be provided at Alf Coleman Road between the existing Gayle's Trails segment and the PGS Parkway Phase III shared use path, and the shared use path will continue east on the south side of Phase III from Alf Coleman Road to Chip Seal Parkway.

7.7 Intersection/ Interchange Concepts and Signal Analysis

Where the Clara Avenue extension ends and the Phase III corridor begins traversing east-west, a roundabout is proposed to facilitate the north-to-east and west-to-south movements. The roundabout would have a stub-out to the north for the property to the north, which is currently vacant.

At the intersections with Alf Coleman Road and Long Point Way, the mainline PGS Parkway Phase III will be free-flowing and westbound left-turn lanes will be constructed to provide safe storage for westbound left-turn movements that do not impede the flow of westbound through traffic. The minor street northbound approaches are expected to operate acceptable with stop-control.

In conjunction with the construction of the PGS Parkway Phase III corridor, several geometrical and signal operations improvements will be necessary along US 98 (SR 30A/Panama City Beach Parkway) to provide acceptable peak hour operational conditions (LOS E or better) through Design Year 2050. These improvements are included in the Build Geometry summarized in the PTAR:

- US 98 (SR 30A/Panama City Beach Parkway) & Clara Avenue
    - Implement a southbound right-turn overlap phase
- US 98 (SR 30A/Panama City Beach Parkway) & Alf Coleman Road
    - Implement a southbound right-turn overlap phase
- US 98 (SR 30A/Panama City Beach Parkway) & Chip Seal Parkway/Cauley Avenue
    - Construct a second eastbound left-turn lane
    - Construct a second southbound left-turn lane
    - Implement a westbound right-turn overlap phase

7.8 Tolled Projects

Not applicable.

7.9 Intelligent Transportation System and TSM&O Strategies

The ITS and TSM&O infrastructure on US 98 (Panama City Beach Parkway) from Clara Avenue to Chip Seal Parkway will continue to be monitored and updated as ITS technologies advance. Bay County monitors and maintains the traffic operations on US 98 (Panama City Beach Parkway) in partnership with FDOT, and given the capacity constraints along the corridor, the County is frequently optimizing signal timings and implementing new phasing patterns to adapt to changing travel patterns through Panama City Beach.

7.10 Landscape

Landscaping will be included along the southern side of the PGS Parkway Phase III corridor to contribute to minimizing aesthetic impacts of the new corridor relative to the existing residential developments, particularly the Breakfast Point neighborhood. Minimal landscaping will be included in the roundabout at the northern extent of Clara Avenue.

7.11 Lighting

Lighting is not included along the PGS Parkway Phase III corridor to minimize impacts to the existing residential developments, particularly the Breakfast Point neighborhood. Lighting will be included in the design of the roundabout at the northern extent of Clara Avenue to improve driver perception and awareness on all approaches at the roundabout.

7.12 Wildlife Crossings

Regulatory agency comments in ETDM—as well as at a meeting prior to submittal of the project through ETDM—inquired how the BPMB would be managed consistent with its purpose as a mitigation bank after construction of PGS Parkway Phase III through the southern portion of the mitigation bank. Although this question is best addressed by the mitigation bank sponsor, Bay County has reviewed the BPMB permits, management plan, and other authorized mitigation banks in Florida in order to evaluate potential options for ongoing management.

Design of this project will include evaluation of locations for wildlife crossings in accordance with FDOT wildlife crossing guidelines; bridges and culverts for preservation of key flow-ways and management corridors for compatibility with the BPMB; and other measures to minimize the ecological impact while maximizing opportunities for preservation, restoration, and management of lands south of the roadway. The design submitted for permit applications will also identify locations and measures for temporarily closing all access to the roadway during prescribed burns in accordance with the management plan for BPMB and the conservation lands south of the roadway.

7.13 Permits

Several federal and state agencies provided comments to Bay County via the FDOT ETDM tool. The USACE indicated an "Issue Resolution" degree of effect, while the USEPA and NWFWMD indicated "Substantial" degree of effect, with all three agencies basing these effect determinations primarily on anticipated direct and indirect effects on wetlands and surface waters, particularly within the BPMB. The NWFWMD also commented on fragmentation of the surrounding wetlands and wildlife usage. These agencies requested that impacts and mitigation be fully evaluated in this PD&E study to address their ETDM comments and degree of effect determinations. These concerns are addressed in the NRE.

An Individual Environmental Resource Permit (ERP) with the NWFWMD will be required for the project. The permit application will be submitted to Bay County for review and comment before submitting to NWFWMD. Bay County will issue approval of the ERP application before it is submitted to the NWFWMD for review and issuance. FDEP will be responsible for Section 404 reviews and permitting. A National Pollutant Discharge Elimination System (NPDES) permit will also be required from FDEP.

7.14 Drainage and Stormwater Management Facilities

The Preferred Alternative will be designed to meet the regulatory requirements of the Northwest Florida Water Management District Applicant's Handbook Vol. 2, the FDOT Drainage Manual, and the Bay County Land Development Regulations handbook. The PD&E Study is anticipated to be completed and approved prior to the June 28, 2026 grandfathering deadline associated with Florida's New Stormwater Rule, as outlined in Chapter 62-330, Florida Administrative Code (F.A.C.). As such, the project is expected to remain subject to the existing water quality treatment requirements in effect prior to the adoption of the new rule.

An analysis was conducted to determine potential pond requirements. **Table 12: Anticipated Right-of-Way for Preferred Ponds** below provides a summary of proposed project basins and approximate ROW needs for ponds.

Table 12: Anticipated Right-of-Way for Preferred Ponds

Basin	Location	Anticipated Pond ROW Required
B-WEST	From beginning of Clara Avenue extension to approximately half-way marker of proposed PGS corridor.	12.3 acres
B-EAST	From approximately half-way marker of proposed PGS corridor to Chip Seal Parkway.	21.2 acres

Because of the protected status of the Breakfast Point Conservation Easement, the two proposed pond locations are located outside the conservation easement at the east and west ends of the project. Stormwater runoff across the project will be conveyed via a closed inlet and pipe collection system to minimize the proposed roadway footprint and corresponding wetland disturbance. The Western Pond will be designed to discharge directly into West Bay, a tidally influenced waterbody, and thus discharge rates will not be held to water quantity standards. Because the Western Pond will function exclusively as a water quality pond, it is considerably smaller than the eastern pond which will be required to provide water quality and water quantity storage. The third proposed pond, the Modified Homewood Suites Pond, will be constructed to replace the portion of the existing pond being impacted by the proposed corridor. All three ponds being proposed will function as wet-detention ponds. Additional information on the proposed stormwater management facilities can be found in the Pond Siting Report available in the project file. Proposed pond locations are shown in **Figure 19: Preferred Pond Location Exhibit** below.

Figure 19: Preferred Pond Location Exhibit

7.15 Floodplain Analysis

The majority of the project is located within Federal Emergency Management Agency (FEMA) regulated Flood Zone A (floodplain elevation not established) and Flood Zone AE with floodplain elevations ranging from 8'-9'. A small portion of the project is located within Flood Zone X (0.2%

annual chance flood hazard). There are no known regulated floodways within the project area. The following FEMA Flood Insurance Rate Maps (FIRM) contain the project area: 12005C0302J, 12005C0304J, 12005C0308J, 12005C0309J. Because the site sits directly adjacent to tidally influenced waters (West Bay), the flood elevations listed in the FEMA FIRM maps are based upon estimated tidal surge elevations. **Figure 20: FEMA Flood Hazard Map** and **Figure 21: FEMA Estimated Hurricane Surge Map** depict FEMA Flood Hazard Zones and Estimated Tidal Sure Zones respectively.

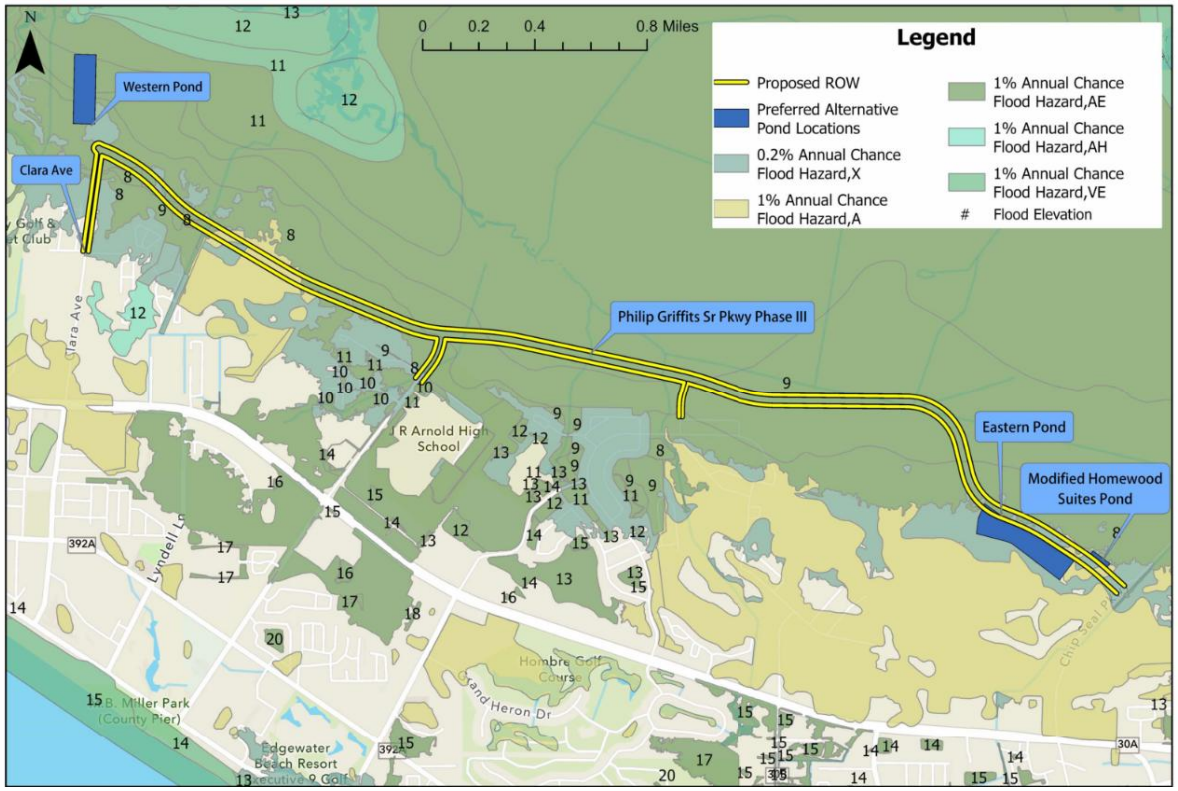

Figure 20: FEMA Flood Hazard Map

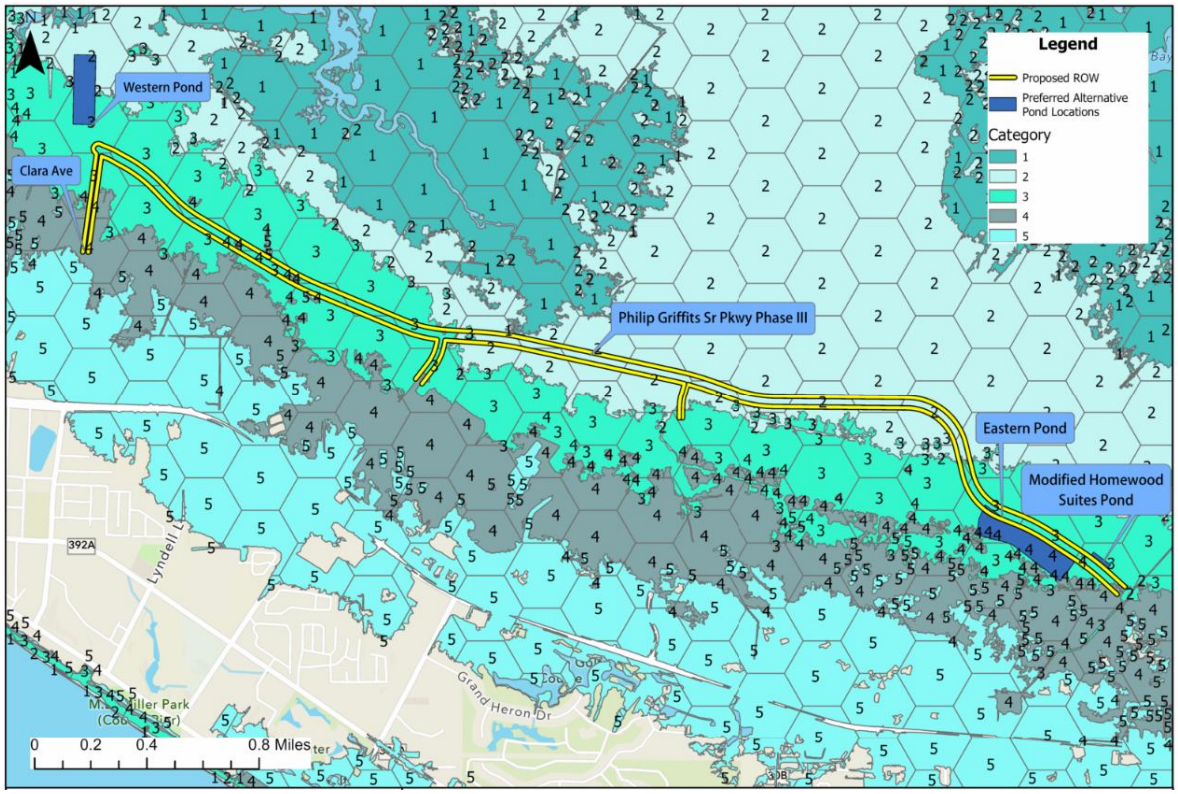

Figure 21: FEMA Estimated Hurricane Surge Map

As illustrated in **Figure 21: FEMA Estimated Hurricane Surge Map**, the entirety of the project is located within a FEMA designated hurricane surge zone. Because of this, project impacts to the existing FEMA floodplain are not expected to require volumetric compensation. Instead, cross drains throughout the project will be sized appropriately to convey the 100-year design storm event without causing adverse impacts to floodplain upstream (south) of the proposed corridor. In total, approximately (34) new cross drain culverts along the corridor are anticipated. At least two (2) of these cross drains are expected to be bridge culverts. Additional details of the cross drain analysis are provided in the Location Hydraulics Report (LHR) available under separate cover.

7.16 Bridge and Structure Analysis

Several culvert or bridge structures are expected to be included in the design of the PGS Parkway Phase III corridor between Alf Coleman Road and Chip Seal Parkway to accommodate a wildlife crossing and surface hydraulics**.** However, limitations on the availability of geotechnical data and the accessibility of the land within the Breakfast Point Mitigation Bank require that the right-of-way for the PGS Parkway Phase III corridor be removed from the mitigation bank before sufficient geotechnical data can be acquired to identify a suitable location for the bridge structure. The County is in the process of obtaining the right-of-way and removing it from the BPMB, and will then proceed to the location and design of the bridge structure.

7.17 Transportation Management Plan

No road closures or detours will be required during construction of the PGS Parkway Phase III corridor, since it is a new roadway.

7.18 Constructability

Since PGS Parkway Phase III will be a new roadway, construction sequencing is not anticipated to be impacted by the need to maintain traffic. For the western portion of the corridor on the existing Clara Avenue segment, entrances to local residences and businesses will be maintained to the maximum extent possible during project construction.

7.19 Construction Impacts

Construction impacts of PGS Parkway Phase III are outlined in the PEIR. It is anticipated that construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to applicable FDOT Standard Specifications for Road and Bridge Construction.

Based on the existing land uses within the limits of this project, construction of the proposed roadway improvements may cause temporary noise and/or vibration impact. It is anticipated that the application of the FDOT's Standard Specifications for Road and Bridge Construction will minimize or eliminate most of the potential construction noise and vibration impacts.

The air quality effect of construction activities will be short-term and will mainly be in the form of dust from earth work and unpaved roads. These impacts will be minimized by adherence to all applicable State and Local regulations and to the FDOT's Standard Specifications for Road and Bridge Construction.

Bridges are built with heavy construction equipment and there is potential for noise and vibration impacts. Early identification of potential noise and vibration sensitive sites along the project is important in minimizing these impacts. Construction noise and vibration impacts to these sites will be minimized by adherence to the controls listed in the latest edition of the FDOT's Standard Specifications for Road and Bridge Construction.

Water quality impacts resulting from erosion and sedimentation will be controlled in accordance with regulatory agency permits, BMPs, and adherence to FDOT's Standard Specifications for Road and Bridge Construction (Section 104, "Prevention, Control, and Abatement of Erosion and Water Pollution").

Construction activities will also require the development of a Stormwater Runoff Control Concept (SRCC) and proper coordination for National Pollutant Discharge Elimination System (NPDES) permit requirements.

7.20 Special Features

N/A

7.21 Utilities

Minimal impacts to existing utilities are anticipated with construction of the new roadway. The western portion of PGS Parkway Phase III will cross through the FPL easement between Clara Avenue and Chip Seal Parkway. Coordination with FPL will be undertaken to ensure that the roadway does not conflict with utilities within the easement.

7.22 Cost Estimates

The overall cost for the new PGS Parkway Phase III corridor Build Alternative is expected to range from approximately $100.9 Million to $110.8 Million. The cost estimate includes a potential elevated bridge structure in the middle segment between Alf Coleman Road and Chip Seal Parkway to mitigate environmental impacts in the Breakfast Point Mitigation Bank and provide a wildlife crossing.

The cost estimate also includes estimated right-of-way costs and an estimate for the cost of mitigation bank credits that the County will be required to provide in exchange for the right-of-way that will be removed from the Breakfast Point Mitigation Bank to accommodate the Phase III roadway. The lower threshold cost estimate for the mitigation bank credits that the County will be required to compensate in exchange for removing right-of-way from the Breakfast Point Mitigation Bank is approximately $3.6 Million, which would account only for the 200-foot right-of-way within which Phase III would be constructed. The County intends to negotiate to keep the remaining land south of the roadway within a Conservation Easement and therefore still eligible for mitigation bank credits; however, if review agencies refuse to acknowledge the land south of the corridor as still providing ecological value and require that the land to the south be removed from the Breakfast Point Mitigation Bank and the Conservation Easement, then the cost for mitigation bank credits may be approximately $7.3 Million.

The construction of the Phase III corridor itself, from Clara Avenue to Chip Seal Parkway, is expected to cost between $85 Million and $91 Million. This cost was approximated from the FDOT Long Range Estimating tool and accounts for an elevated structure to provide a wildlife crossing within the portion of Phase III between Alf Coleman Road and Chip Seal Parkway.

APPENDIX – *[PLACEHOLDER]*