



Project Development and Corridor Study Report

63rd Avenue East – US 301 to Tuttle Avenue

CIP #: 6107860

REVISION 1 - December 1, 2021



Professional Engineer Certification

PROJECT DEVELOPMENT AND CORRIDOR STUDY REPORT

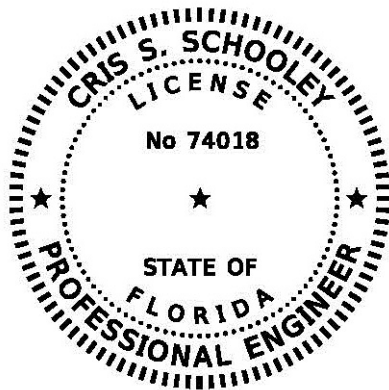
Project: 63rd Avenue East PD&C Study

Limits: From US 301 to Tuttle Avenue

CIP #: 6107860

This report contains preliminary information that fulfills the purpose and need for the 63rd Avenue East Project Development & Corridor Study from US 301 to Tuttle Avenue in Manatee 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.



This item has been digitally signed and sealed by Cris S. Schooley, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Executive Summary

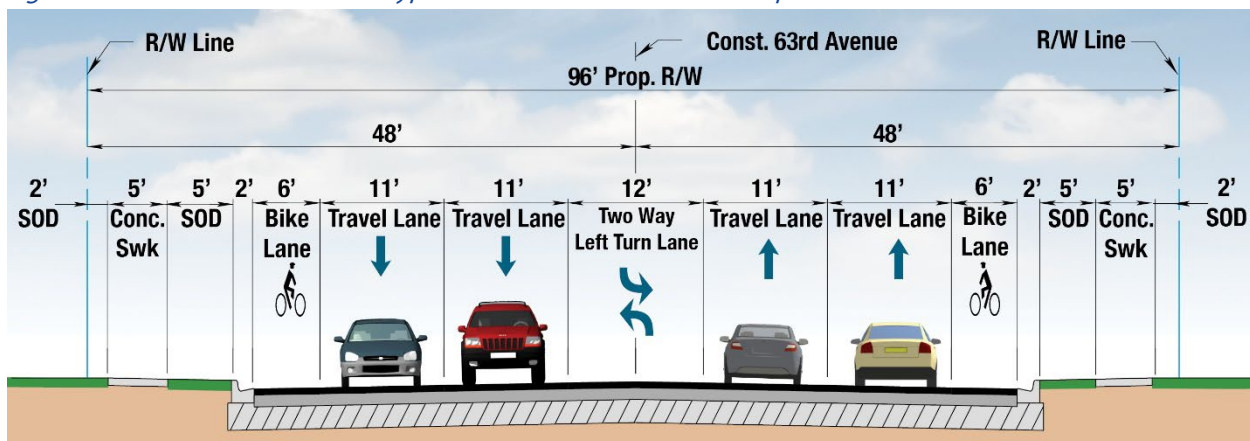
Manatee County conducted a Project Development and Corridor Study to evaluate a 1.1-mile segment of 63rd Avenue from US 301 to Tuttle Avenue in Manatee County, Florida. The study evaluated options for widening the existing two-lane roadway to a 4-lane roadway with bicycle lanes and sidewalks to provide an enhanced mobility experience for all users. The purpose of this project is to enhance safety, improve traffic operations, provide multimodal access, and meet future transportation demand. The Manatee County Comprehensive Plan shows 63rd Avenue as a future 4-lane roadway with 120 feet of right-of-way (ROW).¹

The existing typical section along 63rd Avenue consists of undivided two 12-foot travel lanes with roadside ditches on both sides. The existing roadway has 5-foot intermittent sidewalks but does not have shoulders or bicycle lanes. Although most of the corridor has at least 93 feet of ROW, there are pinch points as narrow as 56 feet.

Based on the engineering and environmental comparative analysis documented in this report, the recommended alternative for 63rd Avenue includes a 12-foot Two-Way Left-Turn Lane (TWLTL), 11-foot travel lanes, 6-foot buffered bike lanes, 5-foot sidewalks from US 301 to the Prospect Road (**Figure 1**) A 16-foot raised median is recommended from Prospect Road to Tuttle Avenue (**Figure 2**). Signal control is recommended at the 33rd Street intersection. The Recommended Alternative best meets the project purpose with:

- Sidewalks for pedestrians
- Buffer space between the road and sidewalk for pedestrian comfort
- Buffered bike lanes for cyclists
- TWLTL in the industrial area and raised median in the residential area
- Additional through lanes for rush hour traffic

Figure 1: Recommend Alternative Typical Section from US 301 to Prospect Road

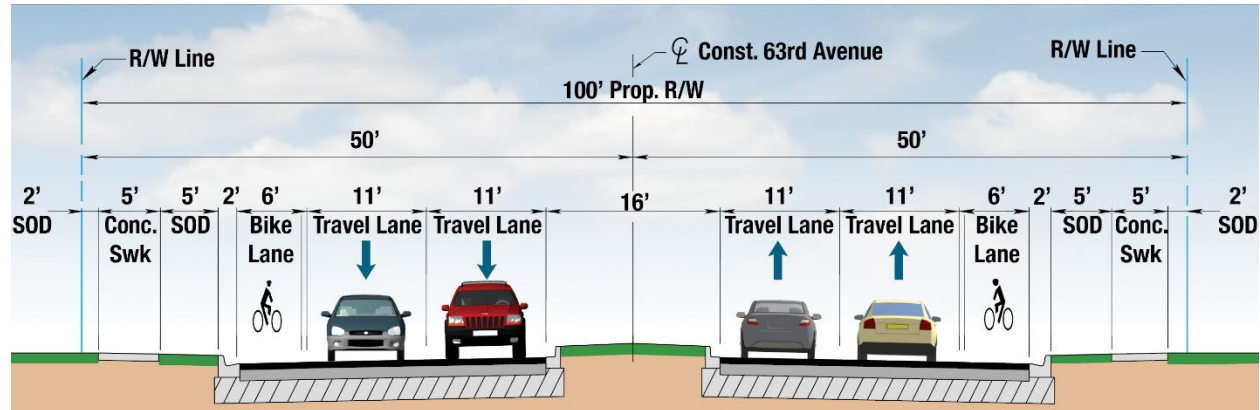


¹ Manatee County. 2009. *Map 5-C, Map 5-D*. PA-09-07/ORD-09-20.

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Figure 2: Recommended Alternative Typical Section from Prospect Road to Tuttle Avenue



The recommended alternative requires ROW acquisition from 38 parcels, but only 1 relocation. The project will require an Environmental Resource Permit for stormwater treatment and a State 404 dredge or fill permit due to wetland impacts. There are no properties listed on the National Register of Historic Places within the boundaries of the study. The project has a low risk to encounter contaminated soils during construction.

Public involvement was not conducted during this study due to an abbreviated schedule. A public meeting is recommended during the design phase.

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Appendix F – Drainage Information

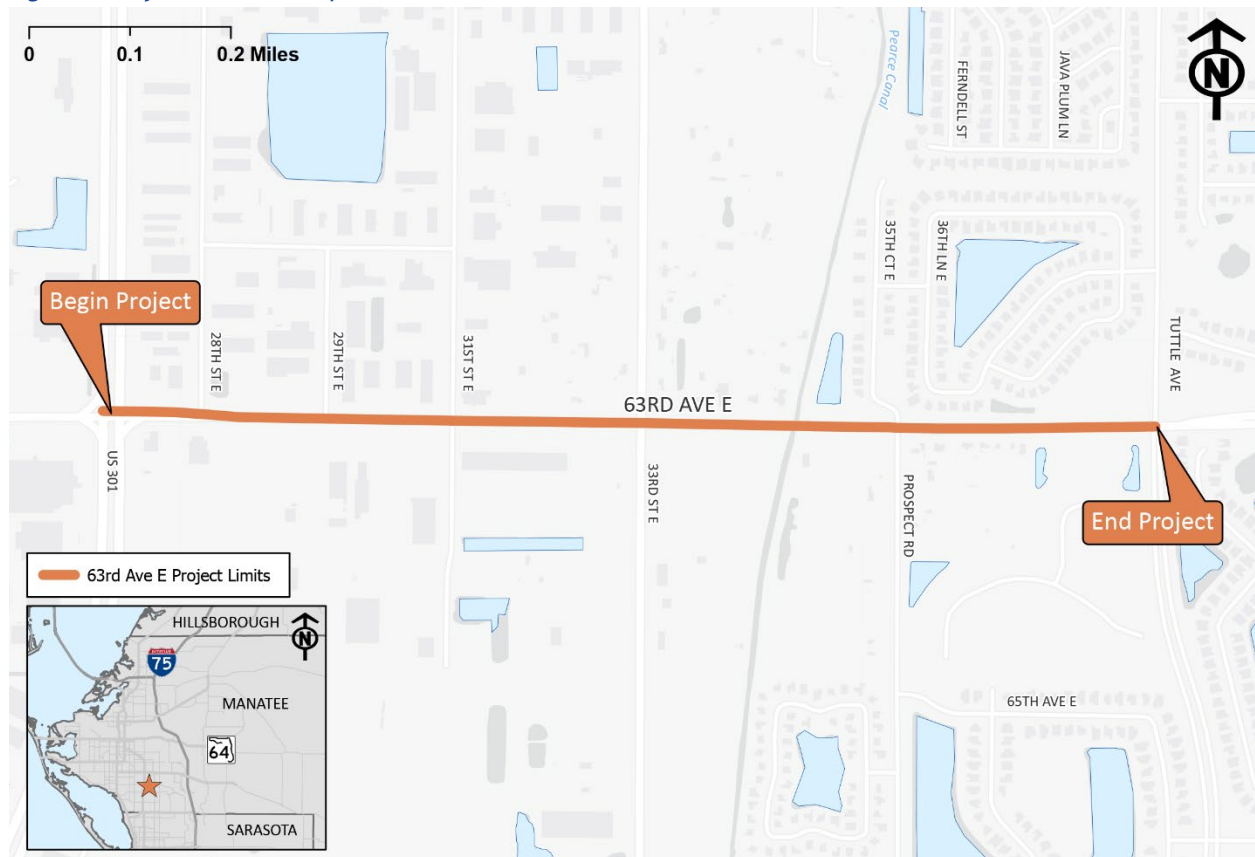
1.0 Project Summary

This section describes the project, the purpose and need, and related projects.

1.1 Project Description

Manatee County is conducting this Project Development & Corridor (PD&C) Study to evaluate a 1.1-mile segment of 63rd Avenue East (63rd Avenue) from US 301 to Tuttle Avenue in Manatee County, Florida (**Figure 3**). The study will evaluate options for widening the existing 2-lane roadway to a 4-lane roadway with bicycle lanes and sidewalks to provide an enhanced mobility experience for all users.

Figure 3: Project Location Map



1.2 Purpose and Need

The purpose of this project is to:

- Enhance safety
- Improve traffic operations
- Enhance multimodal access
- Meet future transportation demand

The project is needed because of population growth and the resulting increase in travel demand along the corridor. This 2-lane segment of 63rd Avenue creates a bottleneck. It connects to four lanes

on the east and the west and is a future 4-lane roadway per the Manatee County Comprehensive Plan.² Additional capacity in this segment will relieve parallel routes such as State Road (SR) 70 and Whitfield Avenue. In addition, the project limits lack adequate bicycle and pedestrian accommodations, turn lanes, or lighting.

1.3 Consistency with Other Plans

The improvements to the corridor should be consistent with local and regional plans guiding future development of the land and transportation network in the study area. The following planning documents were reviewed for consistency:

- Manatee County Comprehensive Plan
- Manatee County Capital Improvement Plan (CIP)
- Sarasota-Manatee Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan (LRTP), the “Transform 2045” Plan
- Sarasota-Manatee MPO Active Transportation Plan (2019)

Manatee County Comprehensive Plan

The Manatee County Comprehensive Plan was reviewed to determine how its stated goals, objectives, and policies encourage or require multimodal improvements to the study corridor:

- *Policy 2.9.3.5. Encourage the development of streetscape enhancements within the urban area of Manatee County. Enhancements may include but not be limited to, street furniture, decorative lighting, landscaping, and sidewalks on both sides of the street.*
- *Policy 5.4.1.3. Require, where feasible, the inclusion of either:*
 - *A minimum of 5-foot paved shoulders on both sides of rural section roadways;*
 - *A minimum of 4-foot wide bicycle lanes on both sides of urban section roadways in all roadway improvement projects involving major widening or new construction of roadways shown on the Major Thoroughfare Map required by Policy 5.1.1.1 for use by bicycles; or*
 - *Wherever bicycle lanes are not feasible, alternative routes shall be provided in accordance with the American Association of State Highway and Transportation Officials (AASHTO) guide for the development of bicycle facilities, and the Florida Department of Transportation (FDOT) bicycle facilities planning and design handbook.*
- *Policy 5.4.2.1. Require the inclusion of pedestrianways in all typical urban roadway sections developed pursuant to Policy 5.2.2.1 above. Particular attention shall be given to achieving pedestrian/transit intermodal travel.*
- *Policy 5.6.1.1. Improve public health and safety, active mobility and environmental quality by creating and maintaining an integrated network of multi-modal roadways for users of all ages and abilities through the Complete Street design, where applicable.*
- *Policy 5.6.1.2. Provide streets for walking, bicycling and public- private transportation to enable convenient and active travel as a part of daily activities for all users, where applicable.*

² Manatee County. 2009. Map 5-D. PA-09-07 / ORD 09-20

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- *Policy 5.6.1.3. Promote infrastructure that facilities crossing of the right-of-way, such as accessible curb ramps, crosswalks, refuge islands and pedestrian signals, where applicable.*
- *Policy 5.6.1.4. Promote complete streets that contribute to the slowing down of traffic, reduce pollution and emissions, improve environmental quality and provides for local economic opportunities, where applicable.*

Manatee County Capital Improvement Plan

Manatee County's CIP for Fiscal Years 2022-2026 includes 63rd Avenue from US 301 to Tuttle Avenue (CIP number 6107860). The improvements to this segment are to increase capacity to support an anticipated increase in traffic demand and help maintain the county's adopted levels of service for parallel facilities including SR 70. The description and scope of the improvements to 63rd Avenue include widening the existing roadway to four lanes with raised median, bike lanes, and sidewalks. The requested funding totals \$16,206,768 over four years from FY2022 to FY2025.

Sarasota-Manatee MPO 2045 Long Range Transportation Plan (Transform 2045)

The Sarasota-Manatee MPO's 2045 LRTP was reviewed to identify any projects related, or adjacent, to the study corridor. This 63rd Avenue project was not listed in the LRTP, but any related projects are listed below in Section 1.4, if applicable.

Sarasota-Manatee MPO Active Transportation Plan (2019)

The Sarasota-Manatee MPO's Active Transportation Plan provides a foundation for the development of a multimodal network of bicycle and pedestrian facilities to connect key destinations, transit services, and the Shared-Use Nonmotorized (SUN) Trail network. This plan was examined to identify references to facility needs or envisioned improvements for the study corridor or that may intersect the corridor. This segment of 63rd Avenue is part of the Near-Term and Long-Term Vision Network within the Plan. The Vision Network is existing and planned routes that create a low-stress bicycle network throughout the region.

1.4 Related Projects

Manatee County's Recommended CIP for Fiscal Years 2022-2026 includes a traffic signal/intersection improvement project for the intersection of 63rd Avenue and Tuttle Avenue, CIP number 6065961. There is ongoing design work by HDR for reconstruction of both 63rd Avenue and Tuttle Avenue as 4-lane roadways through the intersection. The plans were not completed in time to incorporate into the concept plans but will be considered an existing condition for the recommended alternative.

The planned traffic signal at 63rd Avenue and 33rd street was put on hold pending the completion of this study because it did not include the proposed 4-lane construction. The design of the traffic signal was funded through the FDOT Local Agency Program (FPID 435113-2-58-01.) The plan components include roadway, signalization, utility, and signing & pavement marking.

The Sarasota-Manatee MPO's 2045 LRTP identifies the project below within this 63rd Avenue East project limits.

- Intelligent Transportation System (ITS) Infrastructure on 63rd Avenue from US 41 to Tuttle Avenue – Construction 2040. (Cost Feasible Project Number TSMO52)

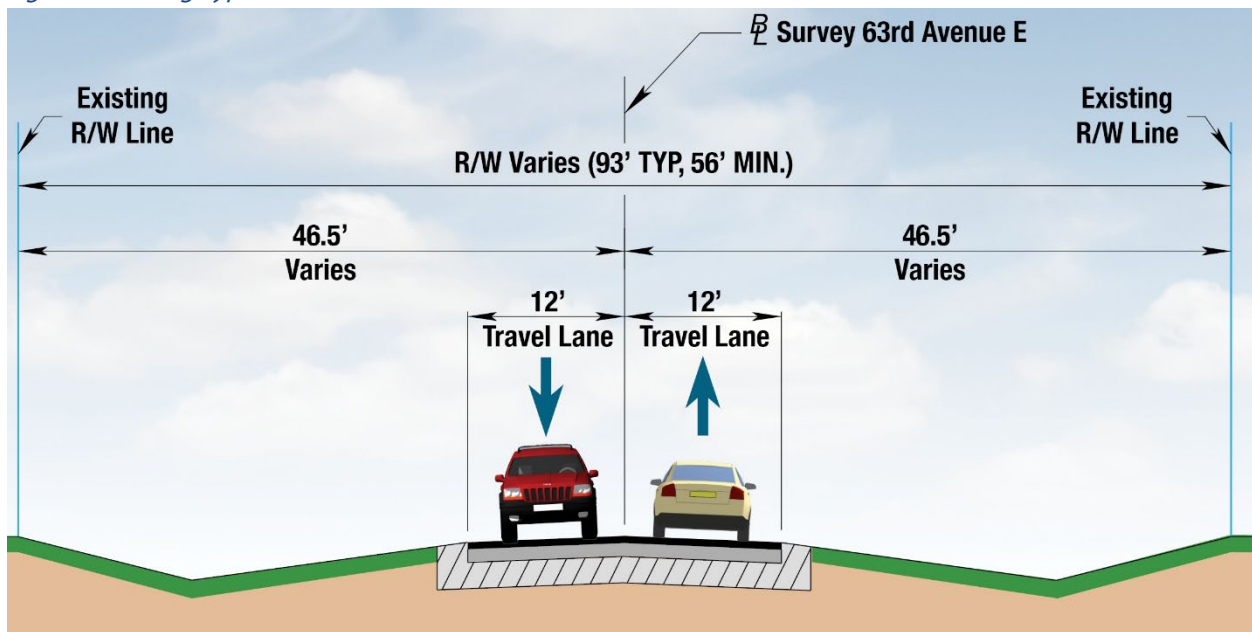
2.0 Existing Roadway Conditions

This section describes the existing roadway characteristics within the project limits based on a review of aerial photography, existing records, and site observations. The constraints, existing deficiencies, and opportunities along the corridor will be considered in the recommended alternative.

2.1 Typical Section

The existing typical section along 63rd Avenue consists of undivided two 12-foot travel lanes with roadside ditches on both sides (Figure 4). Manatee County is responsible for maintenance of this roadway. The existing roadway has a rural typical section with no shoulders and 5-foot intermittent sidewalk. Utility poles are located on both sides of the roadway. There is no lighting within the project limits except within the US 301, Prospect Road, and Tuttle Avenue intersections.

Figure 4: Existing Typical Section



2.2 Right-of-Way

Right-of-way (ROW) along 63rd Avenue varies considerably within the project limits as shown in Table 1. Although the ROW pinches down to as little as 56 feet, most of the corridor has at least 93 feet.

Table 1: Right-of-Way Widths

From	To	Min.	Typical	Max.
US 301	31st Street	71'	71'	212'
31st Street	33rd Street	93'	94'	95'
33rd Street	Prospect Road	95'	107'	125'
Prospect Road	Tuttle Avenue	56'	75'	81'
OVERALL		56'	93'	212'

63rd Avenue is shown to have a 120-foot right-of-way reservation on *Map 5-C – 2035 Future Traffic Circulation ROW Protection and Reservation* in the Manatee County Comprehensive Plan.

2.3 Adjacent Land Use

The west portion of the project limits is characterized by light industrial uses, while the east portion is residential with suburban single-family housing. **Figure 5** depicts the Manatee County zoning designations within the study area. **Table 2** shows the setback standards Manatee County that may be applicable during potential improvements to the corridor for Light Manufacturing (LM), Agricultural (A-1), and Planned Development-Residential (PD-R).

The future land use designations along the corridor are Industrial Light (IL), Industrial Heavy (IH), and Residential (RES-6), as shown in **Figure 6**.

Table 2: Manatee County Minimum Setback Standards

	LM	A-1	PD-R
Front Yard	25'	50'	20'/25'*
Side Yard	20'	10'	8'
Rear Yard	20'	25'	15'
Min. Lot Area	10,000 sf	43,560 sf	Determined by PD
Land Development Regulations Reference	Section 401.4 – Table 4-9	Section 401.4 – Table 4-5	Section 402.7.D.

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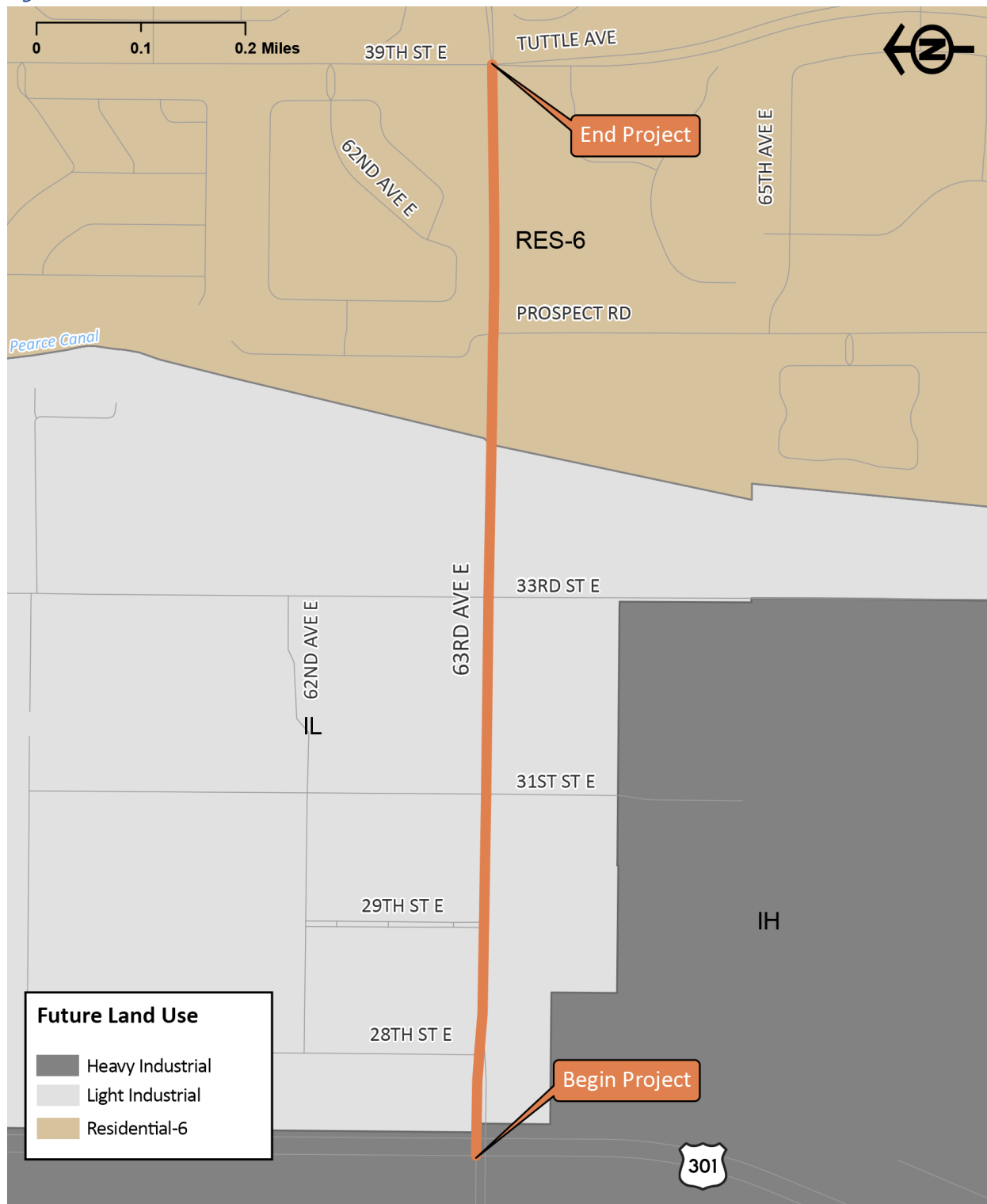
Figure 5: Existing Zoning



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Figure 6: Future Land Use



2.4 Design and Posted Speed Limit

The existing posted speed limit is 40 miles per hour (MPH) as shown in **Figure 7**. The design speed is also 40 MPH.

Figure 7: Existing Speed Limit Sign (looking west)



2.5 Horizontal and Vertical Alignment

The horizontal alignment generally consists of a straight alignment with easterly bearing, minimal deflections, and no horizontal curvature.

The vertical alignment is very flat. A high point is located at the Pearce Canal crossing where the profile slopes away from the canal so that the gutters can drain into the roadside ditches.

2.6 Multimodal Facilities

The multimodal facilities are shown on **Figure 8**. The existing 5-foot-wide sidewalks are discontinuous and there are no bike lanes or shoulders along 63rd Avenue. While most of the existing sidewalk is in good condition, there are places where the sidewalk is broken and needs to be replaced. A photo showing an example of the sidewalk condition is provided in **Figure 9**.

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There is a single bus stop on the 63rd Avenue corridor that includes a bench near the northwest quadrant of the 29th Street intersection (see **Figure 10**). This bus stop is served by Route 16: 15th Street East/Tallevast, which operates Monday-Saturday.

Figure 8: Existing Bike/Ped Facility Network



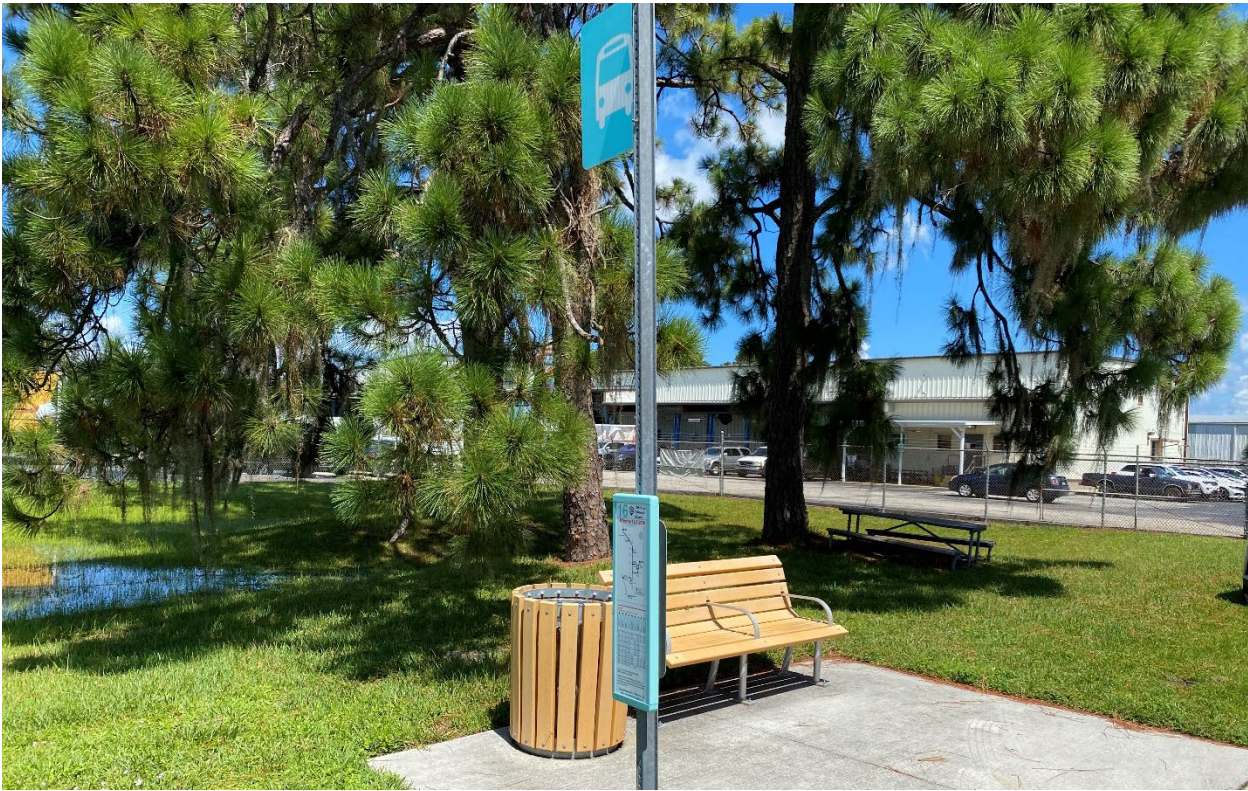
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Figure 9: Broken and Uplifted Sidewalk along 63rd Avenue (looking east)



Figure 10: Bus stop on 29th Street (looking northwest)



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2.7 Intersections

The existing intersections are described in **Table 3**. There are seven intersections within the project limits. Only the US 301 intersection is signalized. The most common intersection deficiency is off tracking around the radial returns. This is likely caused by the large trucks turning to access the adjacent industrial properties.

Table 3: Existing Intersection Features

63rd Ave E &	Traffic Control	Left-turn Lanes	Right-turn Lanes	Crosswalks	Remarks
US 301	Signalized	NB, SB, EB, WB	NB, SB	N, S, E, W	Span wire signals, no sidewalk connections
28 th St E	Minor Stop	None	None	None	Vehicles off tracking radial return
29 th St E	Minor Stop	None	None	None	Vehicles off tracking radial return
31 st St E	Minor Stop	None	None	None	Vehicles off tracking radial return
33 rd St E	All-way Stop	None	None	None	Vehicles off tracking radial return
35 th Court E/ Prospect Rd	Minor Stop	None	NB	N	Sidewalk on north side only
Tuttle Ave	All-way Stop	None	NB, WB	N, S, E, W	Good sidewalk connectivity

Table 4 summarizes the US 301 signalized intersection features.

Table 4: Existing Signal Features

Side Street Roadway	Existing Structure	Detection Type	Retroreflective Backplates	63rd Ave Left Turn Type	Side Street Left Turn Type	Pedestrian Crossings
US 301	Box Span Wire	Loops	Yes	Protected/Permissive	Protected	North, South, East, & West

An underground 36-count fiber optic cable runs along US 301, with a 12-count fiber optic cable drop provided to the existing traffic signal at 63rd Avenue.

2.8 Traffic Data

The Annual Average Daily Traffic (AADT) in 2021 is shown in **Table 5**. The 63rd Avenue operates at Level of Service (LOS) D, the adopted LOS target in the Manatee County Comprehensive Plan.³ The latest traffic signal timings and phasing operations were provided by Manatee County and used in the intersection analysis. **Table 6** summarizes the overall intersection delay and LOS for the signalized and All Way Stop Control (AWSC) intersections. See the Design Traffic Memorandum in **Appendix B** for more information.

Table 5: Existing Year (2021) Segment LOS

Segment		AADT	Adopted Service Volume	LOS
West Limit	East Limit			
US 301	Tuttle Avenue	11,000	12,390	D

³ Manatee County. 2021. Table 5-1. (PA-21-04) Manatee County Peak Hour Level of Service Standards Right-of-Way Needs / Twenty Year Roadway Requirements. Page 6.

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Table 6: Existing Year (2021) Intersection LOS

Intersection	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
	LOS	Delay (s/veh)	Max v/c	LOS	Delay (s/veh)	Max v/c
US 301	E	77.1	1.05 (WBT/R)	F	116.7	1.21 (NBL)
33rd Street E	F	102.2	1.30 (WB)	F	103.2	1.35 (EB)
Tuttle Avenue	F	128.9	1.37 (EB)	F	171.7	1.72 (EB)

The intersections of 63rd Avenue with 33rd Street East and with Tuttle Avenue have previously been evaluated for signal warrants and both intersections met the warrants to be signalized. Improvements are planned and being designed at the intersection of 63rd Avenue and Tuttle Avenue independent of this study.

2.9 Crash Data

Crash data from the most recent 5-year period (2016-2020) was collected from Signal Four analytics. The distribution of crashes within the project limits is proportional to the traffic volumes and potential conflicts. The most crashes occurring at the US 301 intersection, as shown in **Figure 11**. Although there is an endwall and drop off hazard within the clear zone shown in **Figure 12**, there have not been any reports of crashes involving this endwall.

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Figure 11: Crash Heat Map

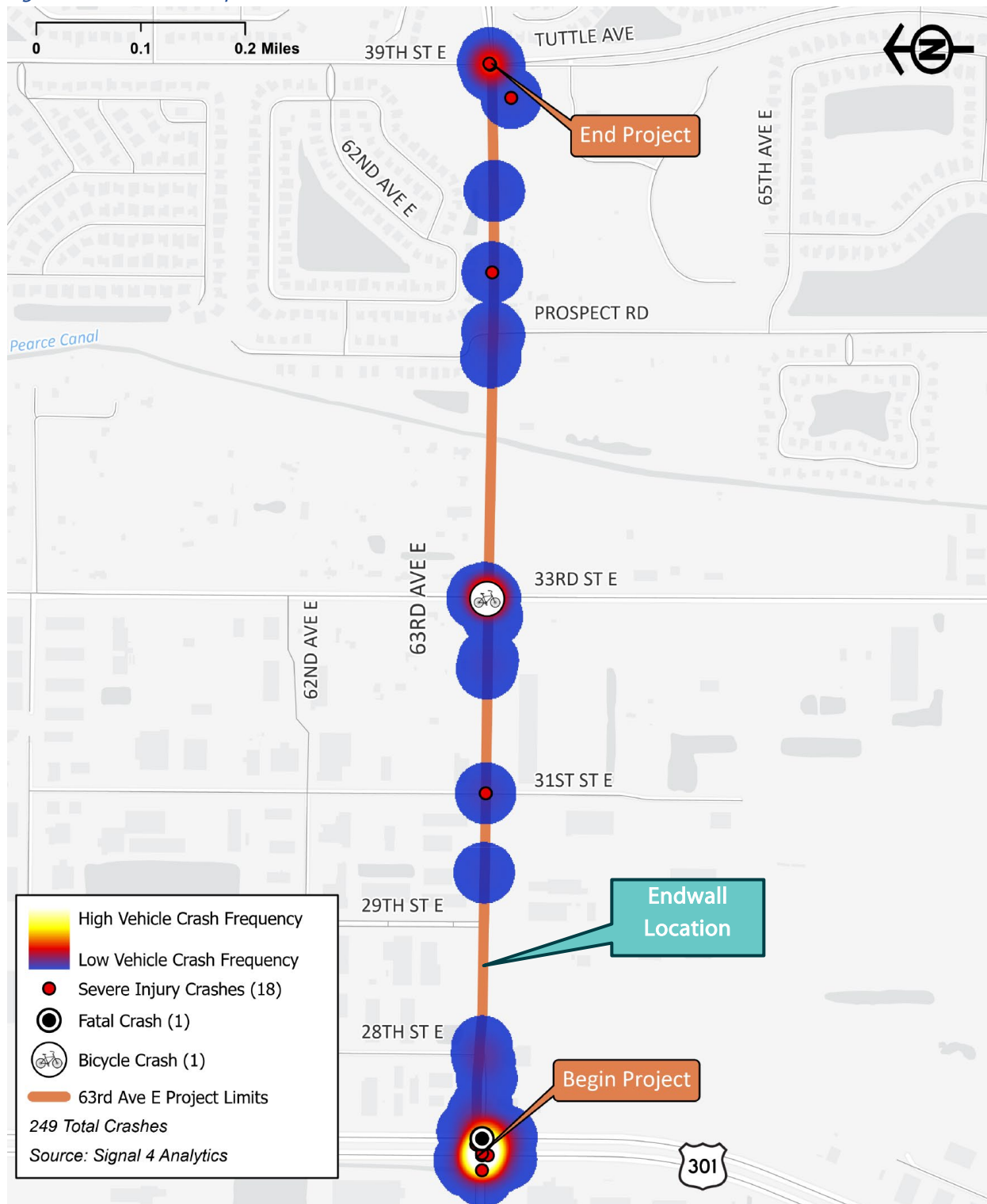


Figure 12: Endwall in the Clear Zone of 63rd Avenue (looking west)



2.10 Drainage System

The existing drainage system along 63rd Avenue is an open system with ditches, ditch bottom inlets, and side drains. A weir is located on the south side of the road west of the bridge over Pearce Canal. The road is permitted under existing Environmental Resource Permit (ERP) #19387.002 with the Southwest Florida Water Management District (SWFWMD).

The drainage basins were determined using existing permit information, site visits, and contours from the Manatee County GIS Data Site. The corridor runoff outfalls to Gap Creek (Pearce Canal) at Sta. 135+60. The project is within the Manatee River Watershed (WBID 1899) which is impaired for nutrients and bacteria. An additional 50% treatment volume is expected due to the nutrient impairment.

See the **Table 7** for a summary of the drainage basins:

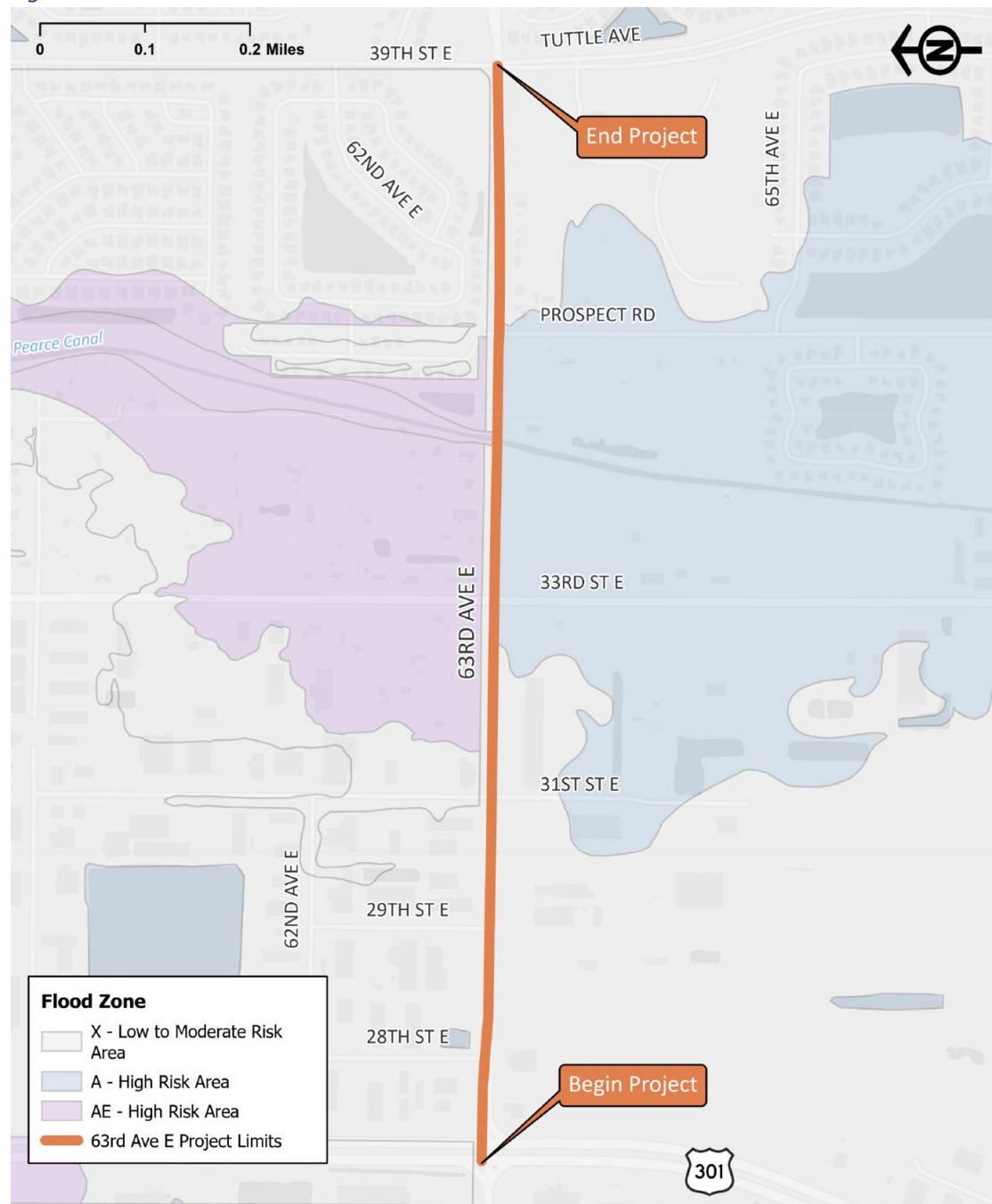
Table 7: Basin Summary

Basin	Total Area	Begin Station	End Station	Outfall
Basin 1	11.36	102+00	136+50	Gap Creek
Basin 2	7.88	136+50	155+00	Gap Creek

2.11 Floodplain

The project falls within FEMA FIRM Panel 12081C0317E (dated 03/17/2014). A portion of the project limits fall within Zone A (High Risk), Zone AE (High Risk with Elevation determined), and a Zone AE Floodway as shown in **Figure 13**. Zone AE has a floodplain elevation of 17 feet, but no base flood elevation has been determined in Zone A. Floodplain compensation will be required due to floodplain impacts. The same volume of storage impacted will be provided elsewhere in the floodplain per floodplain compensation requirements.

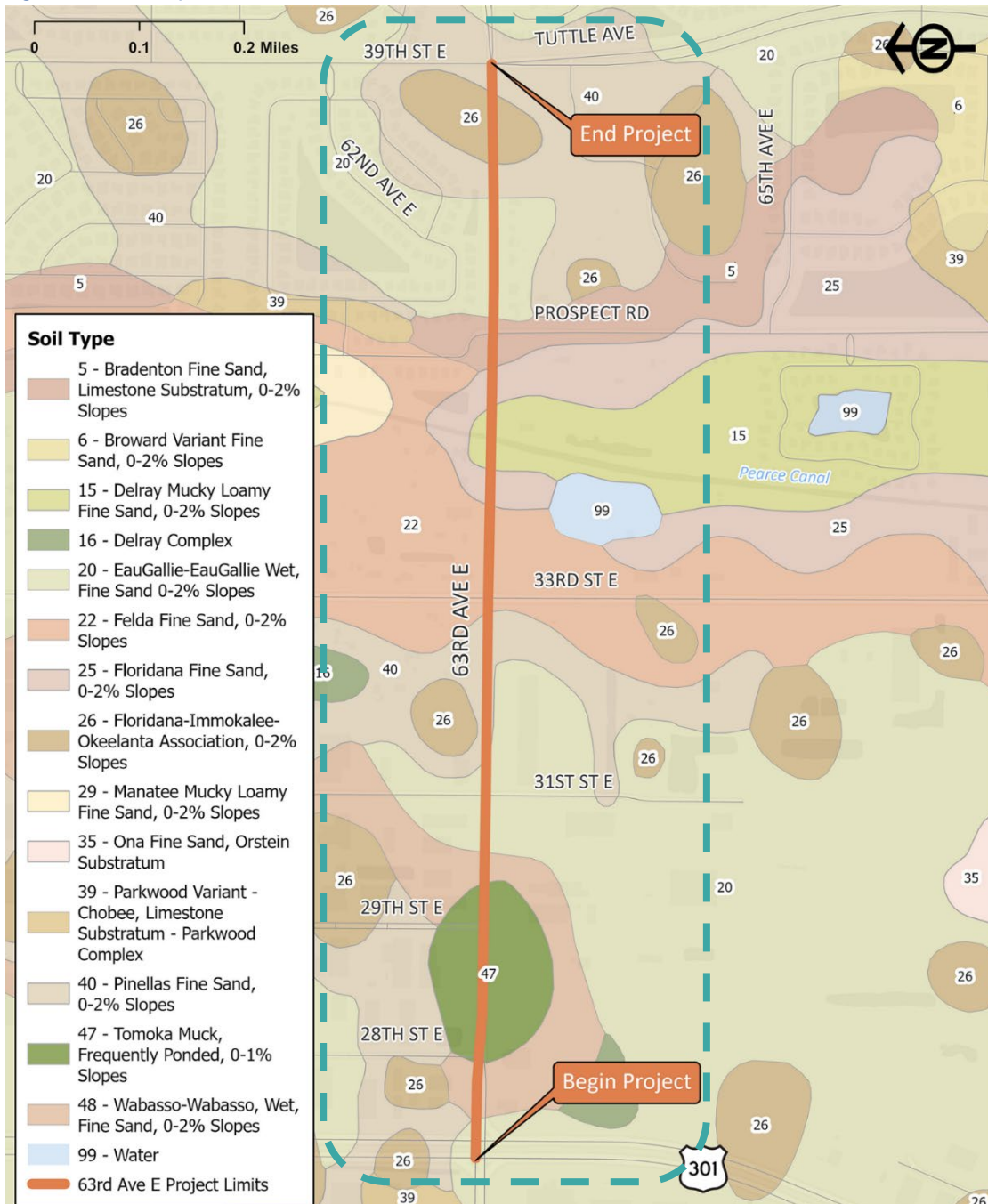
Figure 13: FEMA Flood Zones



2.12 Soils and Geotechnical Data

Soils data was collected from the United States Department of Agriculture National Resources Conservation Service (NRCS),⁴ as shown in **Figure 14** and summarized in **Table 8**. Soils in the project limits are mostly sandy with some areas of muck.

Figure 14: Soil Map



⁴ NRCS. 2020. National Cooperative Soil Survey. Version 17, Jun. 8, 2020. Accessed on Aug. 24, 2021 from <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

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Table 8: Soils within Area of Interest

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5	Bradenton fine sand, limestone substratum	11.0	3.2%
15	Delray mucky loamy fine sand	16.2	4.8%
16	Delray complex	4.2	1.2%
20	EauGallie-EauGallie wet, fine sand, 0 to 2 percent slopes	109.7	32.2%
22	Felda fine sand, 0 to 2 percent slopes	41.4	12.2%
25	Floridana fine sand, 0 to 2 percent slopes	14.3	4.2%
26	Floridana-Immokalee-Okeelanta association	35.6	10.5%
29	Manatee mucky loamy fine sand	4.1	1.2%
39	Parkwood variant-Chobee, limestone substratum-Parkwood complex	3.9	1.1%
40	Pinellas fine sand	69.4	20.4%
47	Tomoka muck, frequently ponded, 0 to 1 percent slopes	10.0	2.9%
48	Wabasso-Wabasso, wet, fine sand, 0 to 2 percent slopes	17.0	5.0%
99	Water	3.6	1.0%
Totals for Area of Interest		340.4	100.0%

Geotechnical borings conducted at the intersection with 33rd Street as part of the design of a new signal (FPID 435113-2-58-01) show sandy soils and a depth to groundwater between 2 to 4 feet. The borings did not encounter unsuitable soils. The borings were only drilled to a depth of 5 feet. Deeper borings during the design phase are recommended to determine if unsuitable soils are present.

2.13 Lighting

There is minimal lighting along the 63rd Avenue corridor. Some luminaries are located at or near major intersections, but the majority of the roadway is not illuminated. Overhead electric lines span both sides of the corridor from US 301 to east of 33rd Street East. From there, the overhead lines are only on the south side of the roadway and then cross back over to the north side again just west of the intersection of 63rd Avenue and Tuttle Avenue. Both residential and industrial properties are located along the project, which provide some background lighting. Luminaires at major intersections are summarized below:

- 63rd Avenue at US 301 – There are freestanding aluminum light poles located on all corners of the intersection.
- 63rd Avenue at Prospect Road – One luminaire is located on a concrete power pole located on the southwest corner of the intersection (**Figure 15**).
- 63rd Avenue at Tuttle Avenue – One luminaire is located on a concrete power pole located on the southeast corner of the intersection.

Figure 15: Existing Street Light (looking south)



2.14 Utilities

Sunshine 811 was contacted to identify utilities along the corridor. **Table 9** identifies the utility contacts that noted having facilities with the study area. The Utility Agencies/Owners (UAOs) were contacted to request the types of facilities and approximate locations. **Figure 16** shows the location of utilities within the study corridor. Since utility providers are not required to respond to a design ticket, this list and figure may not include all utilities within the study area.

Table 9: UAO Contacts

UOA	Utility Type	Contact	Phone Number
Crown Castle	Fiber	Nick Belinsky	724-426-2449
Florida Power and Light	Electric	Carey McCoy	941-723-4421
Florida Gas Transmission	Natural Gas	Joseph Sanchez	407-838-7171
Teco Peoples Gas	Natural Gas	Joan Domning	813-275-3783
Unifi Fiber	Fiber	David Woods	813-539-1180
City of Bradenton	Sewer	Tom Meador	941-708-6300
City of Bradenton	Water	Tom Meador	941-708-6300
Manatee County	Sewer	Kathy McMahan	941-792-8811
Manatee County	Water	Kathy McMahan	941-792-8811
Manatee County	Reclaimed Water	Kathy McMahan	941-792-8811

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Figure 16: Existing Utilities Located Within Project Limits



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Overhead utility poles on both sides of the corridor and may conflict with the proposed roadway widening. Florida Power and Light (FPL) overhead lines are located on both sides of the 63rd Avenue corridor. There are 230 kV transmission lines and 23 kV distribution lines on the north side of the corridor and a 23 kV distribution line on the south side of the corridor. FPL also has two, 6-inch conduits underground along the roadway corridor. A 30-inch reclaimed water line maintained by Manatee County travels along the eastern side of the corridor and connects the system to the Reclaimed Water Pumping Station (see **Figure 17**). Additional Manatee County water lines (varying in size from 8-inch to 16-inch) and a sewer line (both gravity and force main) travel along the 63rd Avenue corridor. Additional coordination with the UAOs in this corridor is recommended during design phase of the project.

Figure 17: Reclaimed Water Pumping Station (looking south)



2.15 Signs

There are no overhead or multipost signs within the project limits. Other than the standard single post traffic control signage, there is a regulatory sign along eastbound 63rd Avenue near the Tuttle Avenue intersection that reads "NO THRU TRUCKS BEYOND 39 ST E ON 63 AVE E" (**Figure 18**). This prohibition seems to be aimed at reducing truck traffic in the residential areas to the east of 39th Street.

Figure 18: Truck Prohibition Sign (source: Google)



2.16 Structures

The existing bridge number 134117 was built in 2010, has a 98.6 Sufficiency Rating, and a 99.79 Health Index.⁵ According to the Manatee County Senior Bridge Engineer, the structure is a single span prestressed slab unit bridge and would be widened if needed. The railing is a 36-inch-high concrete parapet with a pedestrian/bicycle bullet railing on top (57-inch total height). The sidewalk width over the bridge meets standards, measuring 6-feet 10-inches from railing to face of curb. The structure was built wide enough to accommodate an additional lane in each direction, as shown in **Figure 19**.

Figure 19: Bridge Over Pearce Canal (looking east)



⁵ FDOT. 2021. Florida bridge Information, page 175. Accessed on August. 23, 2021 from <https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/maintenance/str/bi/florida-bridge-information-july-2021.pdf>

2.17 Maintenance Issues

Several areas requiring ongoing maintenance were observed and can be addressed with the recommended alternative. The eastbound edge of pavement across from 29th Street has eroded away at the edge to form an undesirable drop off more than three inches (**Figure 20**). This can be addressed in the long-term with the addition of curb and gutter.

The frequent turning trucks traveling to/from the Industrial areas along the project have created an issue with off tracking around the radial returns. The off tracking has killed the grass, caused erosion, and contributed to the ponding as shown in **Figure 21**. This can be addressed in the long-term with using a larger turning radius and the addition of curb and gutter.

The concrete weir along the south side of 63rd Avenue has a severe erosion issue that could lead to a washout if not corrected (**Figure 22**). This is due to water flowing around the side of the weir. This can be corrected by extending the top of the weir to the adjacent sidewalk.

Manatee County maintenance noted that the intersection with 33rd Street has a history of pipe failures and flooding.

Figure 20: Erosion Along the Edge of Pavement (looking north)



Figure 21: Off-Tracking at 31st Street Intersection (looking east)



Figure 22: Erosion Around Side of Weir (looking north)



3.0 Existing Environmental Conditions

This PD&C Study considered the existing Natural, Cultural and Physical environment.

3.1 Natural Resources

This section summarizes the Natural Resources Assessment memo in **Appendix C**.

3.1.1 Protected Species and Habitat

The following threatened or endangered species have the potential to occur within the study area:

- Wood stork
- Bald eagle
- Least tern
- Little blue heron
- Roseate spoonbill
- Tricolored heron
- Eastern indigo snake
- Gopher tortoise

The above species have a low likelihood of occurrence within the study area, based on the habitat for that species found and the no species observations documented within one mile.

3.1.2 Wetlands and Other Surface Waters

The project area is mostly adjacent to developed land. However, there are two wetland areas near the Tuttle Avenue intersection that would be impacted by any roadway improvement. These areas are shown in **Figure 23**.

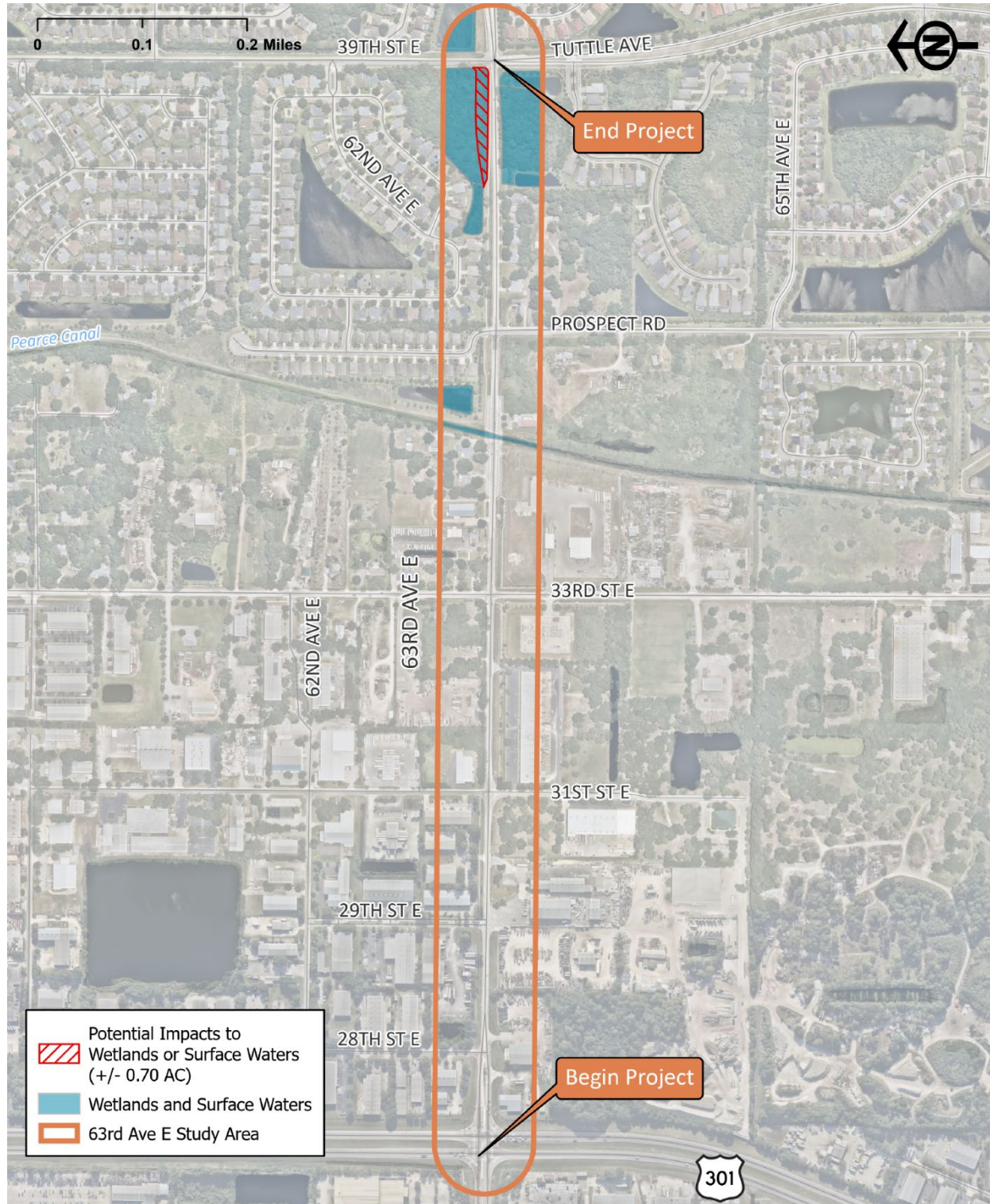
The project is located within the service areas of the Long Bar Pointe and Manatee Mitigation Banks. These banks have freshwater herbaceous and forested credits available and are within the South Coastal and Manatee River Drainage Basins.

There is no essential fish habitat within the project area.

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Figure 23: Potential Impacts to Wetlands and Surface Waters



3.2 Cultural Resources

This section summarizes the Cultural Resources Memo in **Appendix D**. Based on coordination with the State Historic Preservation Office (SHPO), there is one linear resource identified within the Area of Potential Effect (APE) of the 63rd Avenue project:

- Pearce Canal Segment (MA 01293)

However, this resource has been evaluated and determined ineligible for listing on the National Register of Historic Places (NRHP).

A search of buildings older than 40 years resulted in 16 structures within the APE. These structures have not been evaluated for NRHP eligibility.

3.3 Contamination

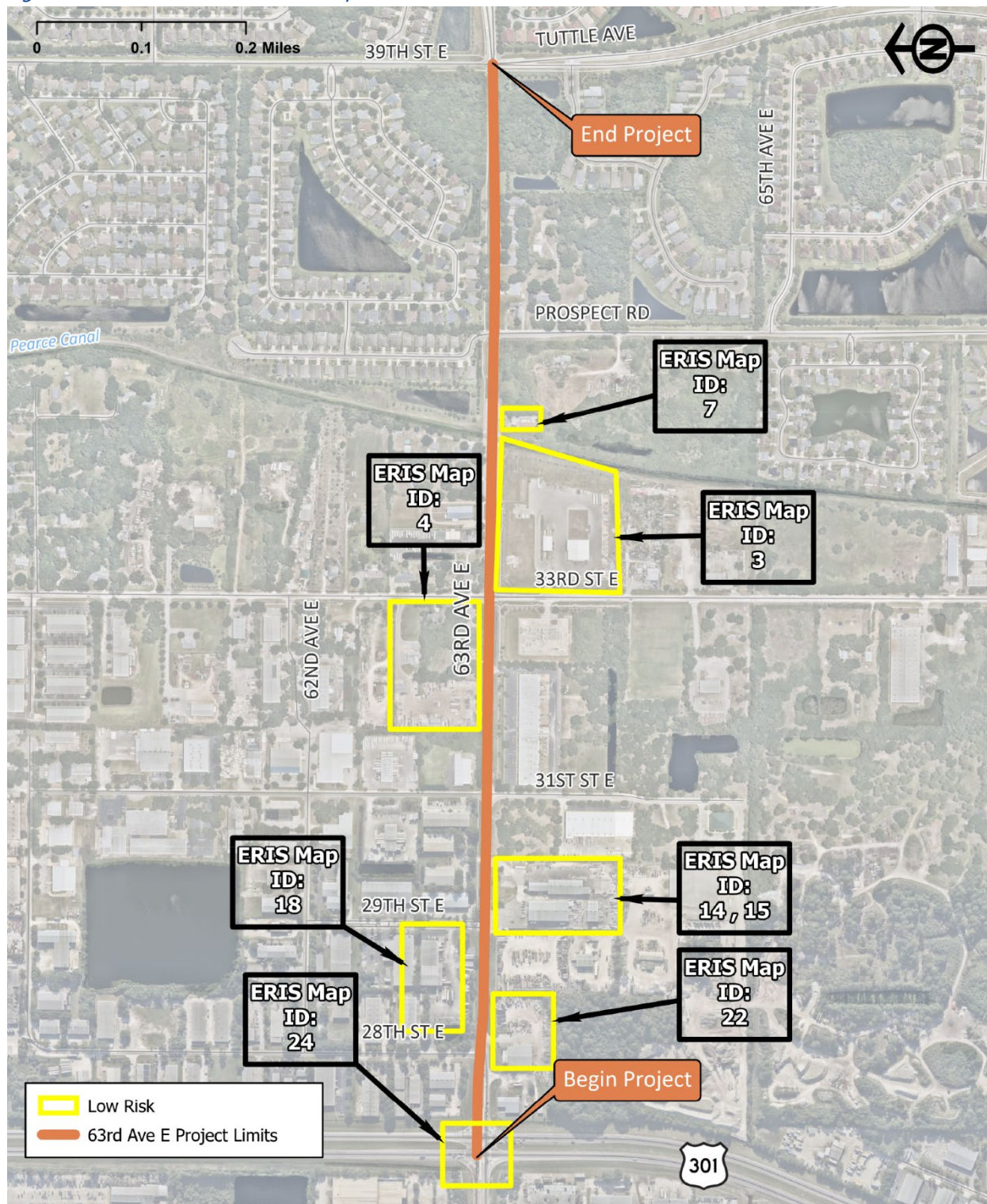
This section summarizes the Potential Contamination Screening Memo in **Appendix E**. Based on a review of available records, there are no documented sites within the study area with a medium or high risk of contamination. Low risk sites are present and shown on **Figure 24**.

- Map ID 24: Diesel fuel spill on 9/02/2014
- Map ID 22: Active above ground storage tanks for diesel fuel
- Map ID 18: Historic above ground storage tank that has been removed
- Map ID 14, 15: Waste tire collector and waste oil above ground storage tank
- Map ID 4: Active waste tire collector
- Map ID 3: Active waste processing area
- Map ID 7: Above ground storage tanks for polyethylene and diesel fuel

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Figure 24: Potential Contamination Map



4.0 Alternatives Analysis

4.1 Design Criteria

The project specific design criteria utilized the Manatee County Public Works Standards (PWS), Part 3. Highway & Traffic Standards Manual, Amended November 2016; Manatee County Comprehensive Plan, Element 5 - Transportation, Table 5-1 (PA-21-04); Florida Greenbook (FGB), Manual of Uniform Minimum Standards for Design, 2018 Edition; and the FDOT Design Manual (FDM), 2021 and is summarized in **Table 10**.

Table 10: Design Criteria

	Design Element	63rd Avenue East	Source
General	Access Management Class	N/A	
	Context	Industrial/Suburban	PWS Figure T-15
	Level of Service	D	Table 5-1 (PA-21-04)
	Design Period	20 years	FDOT Project Traffic Forecasting Handbook 2019
	Design Speed	40 mph	PWS Table 1, existing posted
	Design Vehicle	WB-62FL	FGB Chp. 3 C.2
	Roundabout Control Vehicle	WB-62FL	FDM 201.6.1, FDM 213.7
	Functional Classification	Arterial	Table 5-1 (PA-21-04)
	Posted Speed	40 mph	Existing posted
Typical Section	Number of Lanes	4	Table 5-1 (PA-21-04)
	Lane Width	12 ft. (11 ft. min)	PWS Table 3, FGB Chp. 3 Table 3-20
	Two-Way Left-Turn Lane Width	12 ft. (11 ft. min)	FGB Chp. 3 Table 3-20
	Median Width	18 ft. (15.5 ft. Min)	PWS Table 3, FGB Chp. 3 Table 3-23
	Bicycle Lane Width	7 ft. (5 ft. Min)	PWS Table 3, note e
	Buffer Width	8 ft. (6 ft. Min.)	PWS Table 3
	Clear Zone Width	4 ft.	PWS Detail Sheet 402.1
	Sidewalk Width	5 ft.	PWS Table 3
Horizontal	ROW Width	120 ft.	Table 5-1 (PA-21-04)
	Min. Stopping Sight Distance	305 ft.	FGB Chp. 3 Table 3-4
	Max. Deflection w/o Curve	2°	FGB Chp. 3 C.4.b
	Length of Curve	600 ft. (400 ft. Min)	FGB Chp. 3 Table 3-8
	Max. Curvature (Min. Radius)	10° 45' (533 ft.)	FGB Chp. 3 Table 3-12
Vertical	Max. Superelevation	0.05	FGB Chp. 3 C.4.c.2
	Max. Grade	7%	FGB Chp. 3 Table 3-16
	Max. Change in Grade w/o VC	0.80%	FGB Chp. 3 Table 3-17
	Base Clearance above BCWE	3 ft.	FDM 210.10.3(2)
	Min. Crest Curve K	44	FGB Chp. 3 Table 3-18
	Min. Sag Curve K	64	FGB Chp. 3 Table 3-18
	Vertical Clearance	16.5 ft.	FGB Chp. 3 C.7.j.4.(b)

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Through coordination with the County on the Bicycle Level of Comfort table shown in **Figure 25**, it was determined that the ideal bicycle lane width for 63rd Avenue was at least 6 feet wide.

Figure 25: Bicycle Level of Comfort (Source: Manatee County)

Configuration without bicycle facilities	AADT <10,000			AADT 10,000 - 15,000			AADT >15,000		
	<30mph	35mph	>40mph	<30mph	35mph	>40mph	<30mph	35mph	>40mph
1 x 1	1.1	1.4	1.7	1.1	1.8	2.1	2.0	2.3	2.6
1 x 1 (with median)	1.1	1.4	1.7	1.5	1.8	2.1	2.0	2.3	2.6
1 x 1 (with dual-left)	1.2	1.8	1.8	1.6	1.8	2.1	2.1	2.5	2.7
2 x 2	1.7	2.1	2.3	2.1	2.5	2.7	2.6	3.0	3.2
2 x 2 (with median)	2.4	2.4	2.7	2.5	2.8	3.1	3.0	3.3	3.6
2 x 2 (with dual left)	2.8	2.7	3.0	2.8	3.1	3.4	3.0	3.6	3.9
3 x 3 or larger	2.7	3.1	3.3	3.1	3.5	3.7	3.6	4.0	4.2

General recommendations	
1.0 - 1.4	No need
1.4 - 1.9	Shared streets ("sharrow") markings
2.0 - 2.4	Dedicated bike lane (4' - 6')
2.5 - 2.9	Dedicated bike lane (6')
3.0 - 3.4	Buffered bike lane (6' +)
3.5 - 3.9	Buffered bike lane with visual barrier
4.0 +	Physically separated shared path (10' +)

63rd Avenue
criteria range

4.2 No-Build Alternative

The No-Build Alternative assumes that 63rd Avenue remains a 2-lane undivided facility as it is in the existing condition. No improvements will be constructed other than routine maintenance. The No-Build Alternative provides a benchmark for comparative purposes with the build alternatives.

The advantages of the No-Build Alternative include:

- No impacts to the natural, physical, social, or cultural environments
- No utility impacts
- No cost for design, ROW acquisition, or construction

The disadvantages of the No-Build Alternative are:

- Not consistent with the Manatee County Comprehensive Plan
- Does not enhance pedestrian and bicycle accommodations

- Does not improve safety conditions
- Does not improve vehicular traffic operations

The No-Build Alternative remains a viable alternative throughout the study.

4.3 Initial Alternatives

The initial alternatives analysis consisted of a corridor analysis to establish the alignment, and typical section analysis to determine the viable typical sections, and an Intersection Control Evaluation (ICE).

4.3.1 Corridor Analysis

The initial corridor analysis considered the impacts of widening left (north) side only, on center, or right (south) side only, utilizing the 120-foot ROW corridor shown on the ROW Protection and Reservation map.⁶ The results in **Table 11** show that widening to the right side has similar ROW needs and relocations, but fewer parcels are impacted. Additionally, the right side widening avoids impacts to the FPL transmission poles that are along the north ROW line. Based on this analysis, the right-side widening is the most viable alignment for 63rd Avenue widening.

Table 11: Corridor Impact Comparison

	Left Side Widening			Center Widening			Right Side Widening		
	Parcels (no.)	ROW (ac.)	Relocations (no.)	Parcels (no.)	ROW (ac.)	Relocations (no.)	Parcels (no.)	ROW (ac.)	Relocations (no.)
Begin Project to Pearce Canal	18	2.0	3	22	2.0	2	9	2.3	2
Pearce Canal to End Project	16	1.9	7	24	1.8	6	13	1.9	7
Total	34	3.9	10	46	3.8	8	22	4.3	9

4.3.2 Typical Section Analysis

The Manatee County Public Works design standards contain several typical sections that were considered for the typical section analysis. The first typical section considered was the Index 401.2 Typical 4-Lane Divided Roadway. Through county coordination, the ideal section was determined to have 120 feet of ROW, 18-foot raised median, 12-foot travel lanes, 7-foot bike lanes, 5-foot sidewalks, and an optional 10-foot shared use path, shown in **Figure 26**.

The Boulevard typical section (**Figure 27**) accommodates all users and is more of a complete street concept. Although ideally in a 120-foot corridor, the flexibility of widths means this typical can be as narrow as 102 feet wide.

The Parkway typical section (**Figure 28**) is similar to the Boulevard, but with the option of a shared use path on one side of the roadway. The side without a sidewalk will not fit the urban context of 63rd Avenue.

⁶ Manatee County. 2009. Map 5-C. PA-09-07 / ORD 09-20

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Figure 26: Ideal 4-Lane Divided Roadway

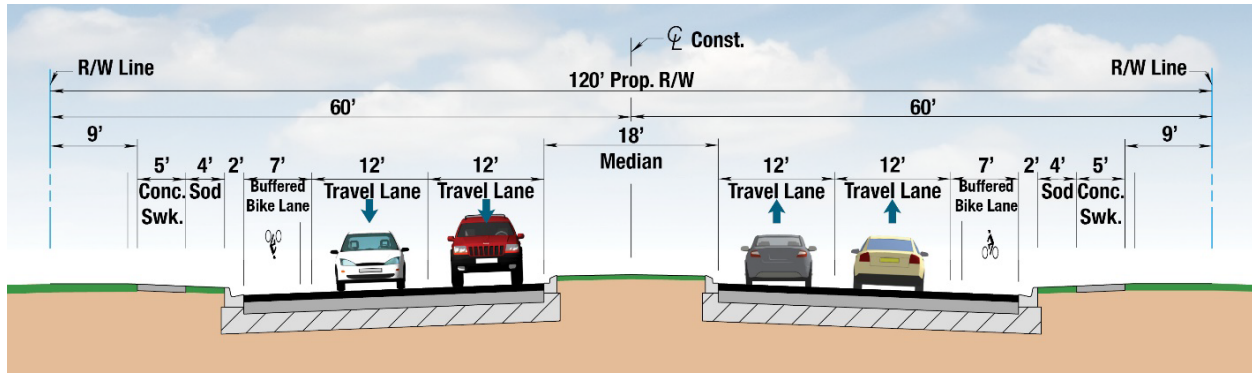


Figure 27: Boulevard Typical Section (Source: Manatee County)

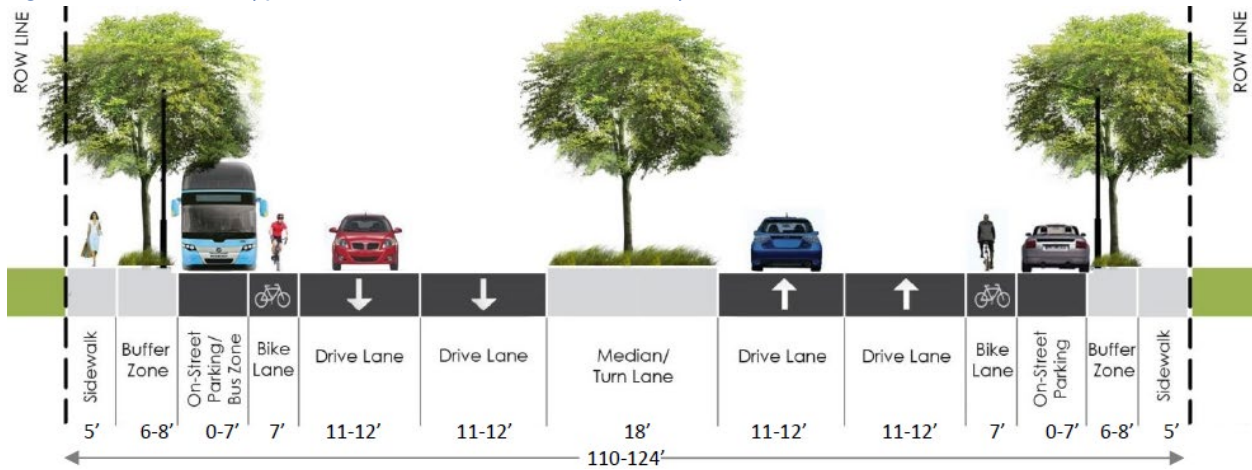
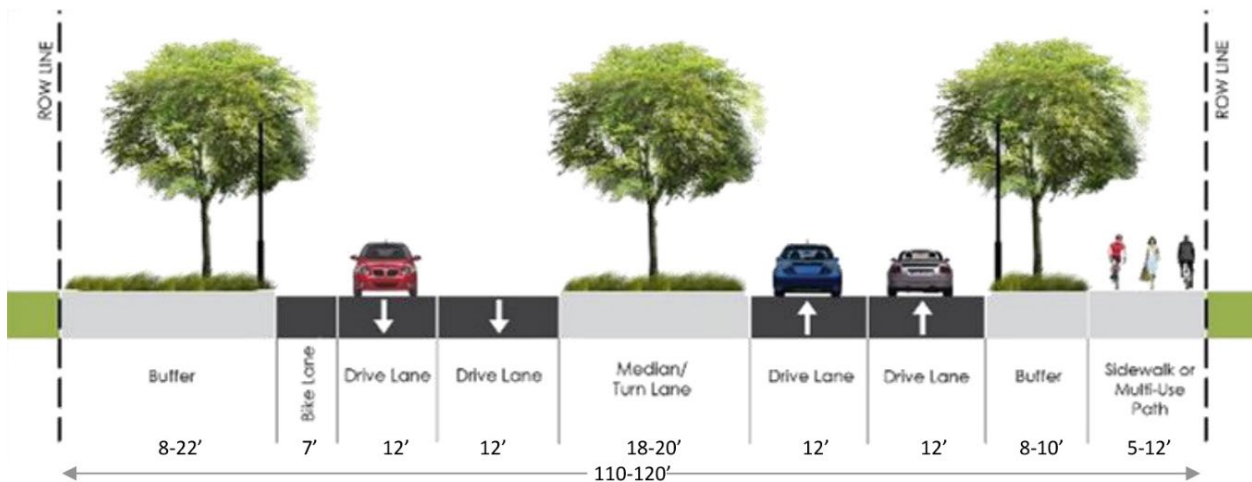


Figure 28: Parkway Urban Typical Section (Source: Manatee County)

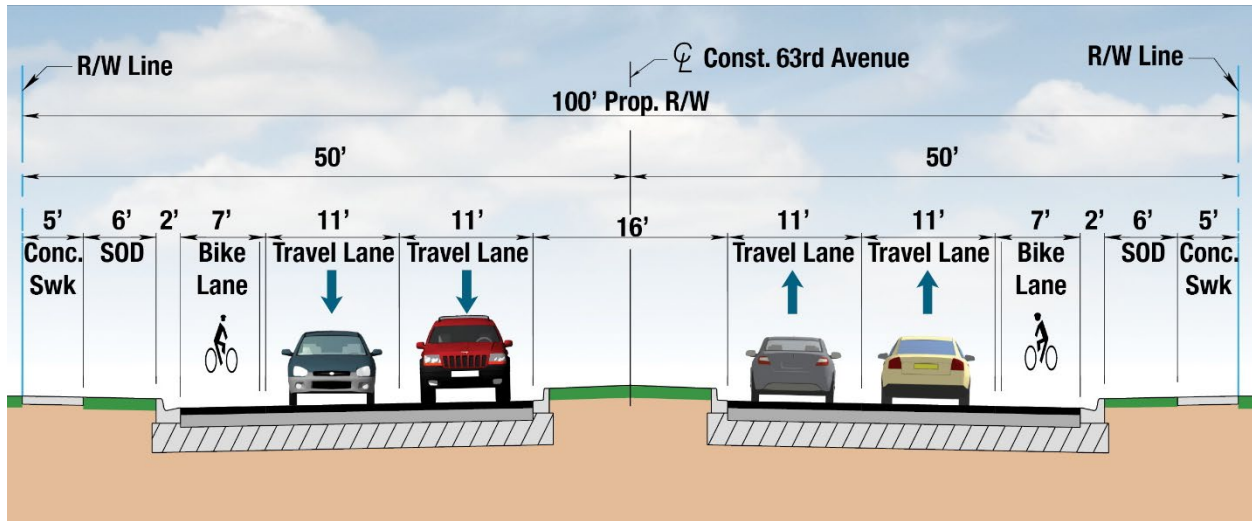


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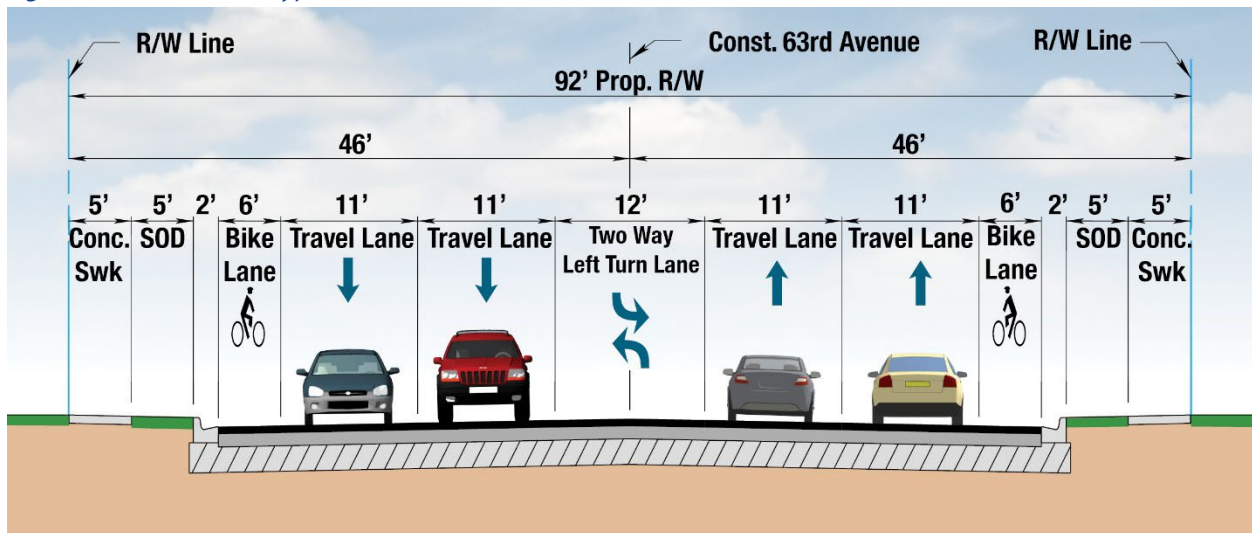
The 100-foot ROW typical section (**Figure 29**) was created to incorporate the complete street elements from the above typical sections, the applicable design criteria, and the project specific needs of the corridor. The typical section utilizes a 100-foot minimum ROW width with a 16-foot raised median, 7-foot buffered bicycle lanes, and 6-foot sod buffer between the back of curb and sidewalk.

Figure 29: 100-foot ROW Typical Section



To minimize ROW impacts, the 92-foot ROW typical section (**Figure 30**) was created. This section utilizes a 92-foot minimum ROW width, 12-foot Two-Way Left-Turn Lane (TWLTL), 6-foot buffered bicycle lanes, and 5-foot sod buffer between the back of curb and the sidewalk. Landscape opportunities areas will be more limited with this concept.

Figure 30: 92-foot ROW Typical Section



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A summary of the typical section analysis is shown in **Table 12**.

Table 12: Typical Section Analysis Summary

Typical section	Pros	Cons	Viable?
Standard 401.2	Utility corridor, wide median	Wide lanes, higher speeds	No
Boulevard	Complete street	Wide footprint	No
Parkway	Landscape opportunities	Wide lanes, higher speeds	No
100-Foot ROW	Complete street	Restricts access	Yes
92-Foot ROW	Narrow footprint	Limited landscape areas, limited physical separation between opposite traffic	Yes

4.3.3 Intersection Control Evaluation

The existing 4-way stop controlled intersection at 63rd Avenue and 33rd Street is forecasted to be over capacity by the design year. An Intersection Control Evaluation was conducted to determine the benefit-cost ratio by type of control (e.g., signal or roundabout, see **Table 13**). Although roundabout will operate with good level of service, there would be conflicts between passenger vehicles and frequent turning trucks. Based on the industrial context of the area, the recommended control is a traffic signal at 33rd Street intersection. See the Design Traffic Memo (**Appendix B**) for more information.

Table 13: ICE Results

	Traffic Signal 1 x 1 w/ Signal Improvements			Traffic Signal 2 x 1			Roundabout 2 x 1 (Build)		
	Overall B/C	Delay B/C	Safety B/C	Overall B/C	Delay B/C	Safety B/C	Overall B/C	Delay B/C	Safety B/C
63rd Ave & 33rd St	Base Case			3.71	3.74	-0.03	6.51	2.90	3.61

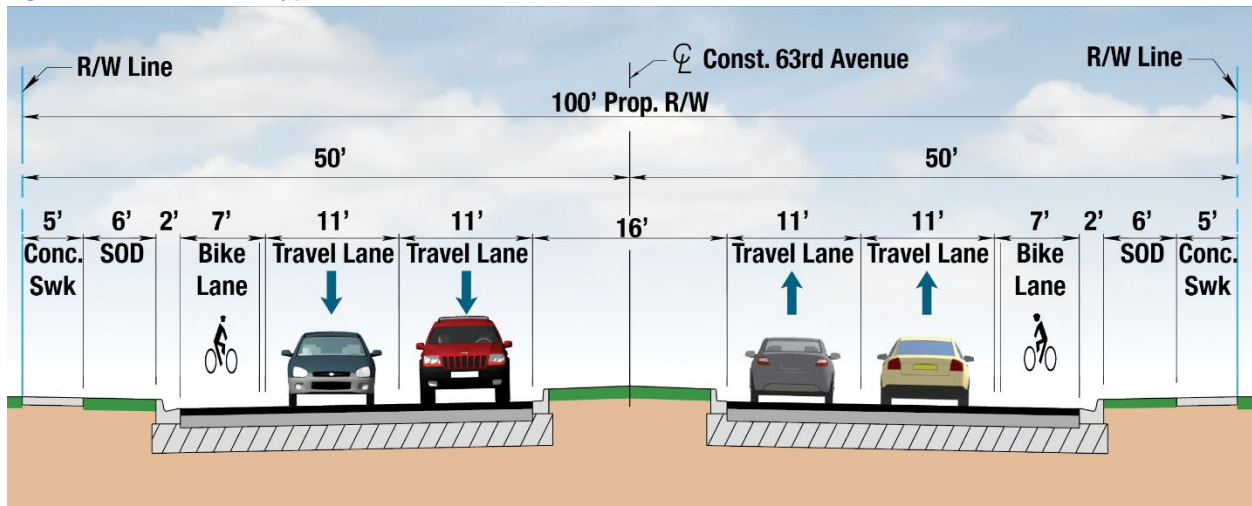
4.4 Viable Alternatives

The viable build alternatives are Alternative 1 and Alternative 2, as described below.

4.4.1 Alternative 1

Alternative 1 utilizes the 100-foot typical section (Figure 31) along a right-side widening alignment to avoid impacting the FPL transmission poles. Some additional ROW may be required to accommodate utilities and at intersections.

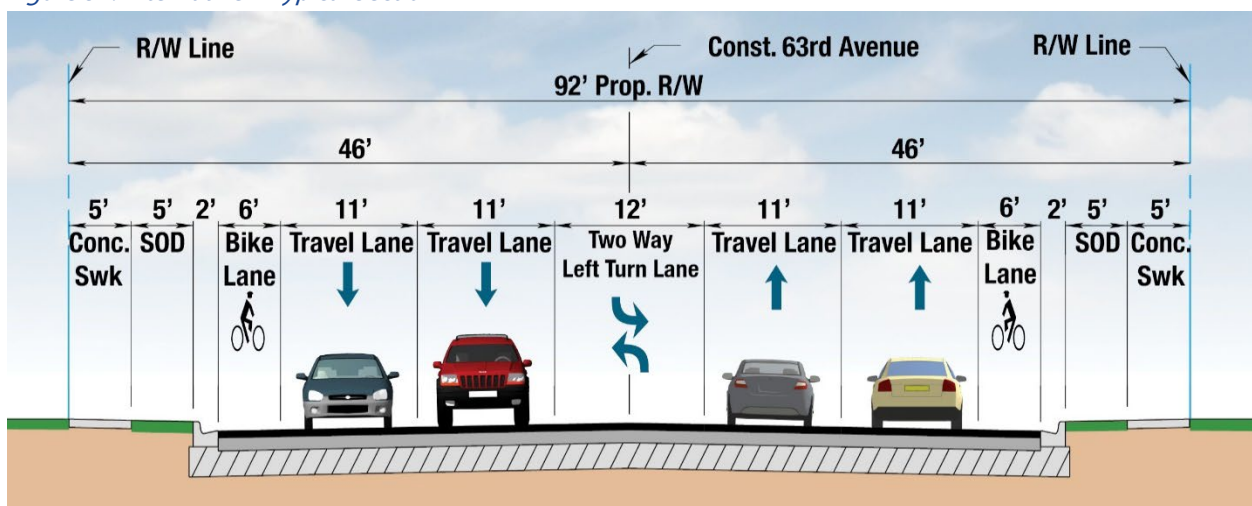
Figure 31: Alternative 1 Typical Section



4.4.2 Alternative 2

Alternative 2 utilizes the 92-foot typical section (Figure 32) along a right-side widening alignment to avoid impacting the FPL transmission poles. Alternative 2 requires less ROW than Alternative 1, but still requires some for utilities and corner clips at intersections. Alternative 2 does not require bridge widening over the Pearce Canal.

Figure 32: Alternative 2 Typical Section



4.5 Pond Siting

The proposed project is within the jurisdiction of the SWFWMD. Following SWFWMD guidelines for open basins, the critical event to be used is the 25-year-24-hour design storm. In this area, the 25-year, 24-hour event constitutes a rainfall depth of 8.90 inches.

The stormwater runoff will be attenuated using the 25-year, 24-hour event by the designed detention facility for open basin discharge. The post-development basin areas include all area within the proposed right-of-way. The detention facility includes a treatment volume of one inch over the proposed basin in addition to the attenuation volume. Off-site runoff affected by the proposed roadway design will be diverted to existing condition low points. See **Figure 33** for pond site locations.

Pond site area calculations considered the following minimal physical criteria:

- Existing elevations and the ability of the proposed basin to drain via stormwater conduit
- Interior pond slopes with a slope ratio of 4:1
- Maximum depth of 10 feet
- Minimum 15-foot level maintenance berm
- Area for back slopes and fencing
- Accessible directly from the road right-of-way an access easement

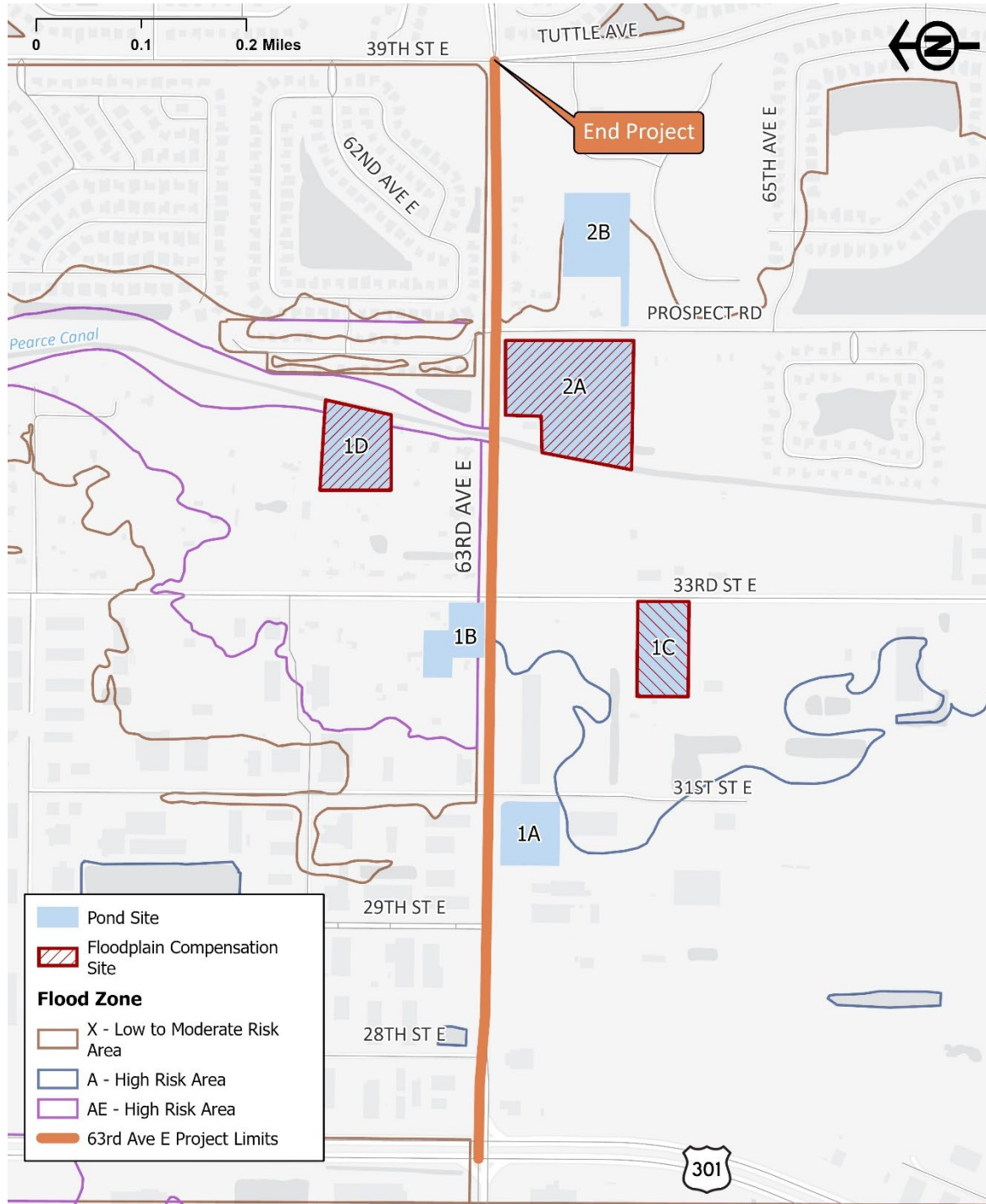
Basin 1

Basin 1 extends from approximately Sta. 102+00 to Sta. 136+50. The basin consists of 0.65 miles of roadway. The proposed stormwater system will convey the runoff by curb and gutter and closed conveyance to a detention facility. This basin discharges to an open basin, so treatment and attenuation will be provided. The basin falls within the Gap Creek established floodway and floodplain which will be impacted. All offsite areas will be bypassed. There are four pond sites and two alternatives for each sub-basin. The pond sites options are described in **Table 14**.

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Figure 33: Pond Site Alternatives



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Table 14: Basin 1 Pond Options

Factors	Sub-Basin 102+00 to 116+50		Sub-Basin 116+50 to 136+50	
	* Pond 1A	Pond 1B	*Pond 1C	Pond 1D
Location	115+30	127+00	127+00	135+00
Side	RT	LT	RT	LT
Distance from Corridor	65'	28'	738'	512'
Total Area	2.20 AC	1.88 AC	2.82 AC	3.34
FEMA Flood Zone	None	AE	A	AE
Hydrologic Soil Group	A/D	A/D & B/D	A/D	A/D
Parcel ID	1875910059, 1875910109	1874000001, 1873800005, 1874200007	1875900100	1870010269, 1870010004
Owner	LBD Properties	Private, FPL	LBD Properties	Privately Owned
Occupied/Vacant	Vacant	Occupied	Vacant	Vacant
Land Use	Industrial	Industrial	Industrial	Industrial
Contamination Sites	None	Low Risk	None	None
Wetland Impacts	No	No	No	No
Additional Remarks	-	-	Includes floodplain compensation	Includes floodplain compensation

* Recommended Site

Pond 1A is located south of 31st Street at approximately Sta. 115+30 (RT.) and is located on two vacant parcels. The basin spans from approximately station 102+00.00 to station 116+50. The pond is a wet detention facility and will be the single pond for the basin (Option 1 for first sub-basin).

Pond 1B is located south of 33rd Street at E approximately station 127+00 (LT.) and is located on three privately owned parcels. The pond site is a partial take on two of the parcels and full take on the third. The basin spans from approximately station 102+00.00 to station 116+50. The pond is a wet detention facility and will be the single pond for the basin (Option 2 for first sub-basin).

Pond 1C is located approximately 850 feet south of 63rd Avenue on 33rd Street E and is located on a privately owned parcel. The pond site is a partial take of the parcel. The basin spans from approximately station 116+50.00 to station 136+50. This pond is a wet detention facility and will be the single pond for the basin. Floodplain compensation has been included with this pond. This alternative will require additional piping to outfall the pond to the canal.

Pond 1D is located approximately 725 feet north of 63rd Avenue on 33rd Street and is located on two privately owned parcels. The pond site is a partial take of both parcels. The basin spans from approximately station 116+50.00 to station 136+50. This pond is a wet detention facility and will be the single pond for the basin (Option 2 for second sub-basin). A 50' wide, 500' long drainage easement (about 0.57 ac) will be required to outfall the proposed system to this pond. This site has additional area for floodplain compensation.

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The recommended alternatives for Basin 1 are Pond 1A and Pond 1C. Pond 1A is preferred due to its location outside of the floodplain and proximity to the corridor Pond 1C is preferred since it does not require an easement through private properties.

Basin 2

Basin 2 extends from approximately Sta. 136+50 to Sta. 155+00. The basin consists of 0.35 miles of roadway. The proposed stormwater system will convey the right-of-way runoff to a detention facility by curb and gutter and closed conveyance. This basin discharges to an open basin, so treatment and attenuation will be provided. All offsite areas will be bypassed. Two pond site alternatives are described in **Table 15**.

Table 15: Basin 2 Pond Options

Factors	Station 136+50 to 155+00	
	* Pond 2A	Pond 2B
Location	115+30	127+00
Side	RT	LT
Distance from Corridor	40'	336
Total Area	8.14 AC	3.44 AC
FEMA Flood Zone	A	A
Hydrologic Soil Group	A/D	A/D & B/D
Parcel ID	1870200609	1870500004
Owner	Privately Owned	Privately Owned
Occupied/Vacant	Occupied	Occupied
Land Use	Repair Service Shop	Residential Related Amenities
Contamination Sites	None	None
Wetland Impacts	No	No
Additional Remarks	Includes Floodplain Compensation	-

* Recommended Site

Pond 2A is located south of Prospect Road at approximately station 139+50 (RT.) and is located on a privately owned parcel. The pond site is a partial take of the parcel. The basin spans from approximately station 136+50.00 to station 155+00. This pond is a wet detention facility and will be the single pond for the basin (Option 1). This site has additional area for floodplain compensation.

Pond 2B is located approximately 650 feet south of 63rd Avenue on Prospect Road and is located on a privately owned parcel. The basin spans from approximately station 136+50.00 to station 155+00. This pond is a wet detention facility and will be the single pond for the basin (Option 2). Additional piping is required for this alternative so that it can outfall to the canal. However, no drainage easement is required for piping since the site is located along Prospect Rd which is a county owned road.

The recommended pond alternative is Pond 2A due to its proximity to the corridor and the Gap Creek Canal.

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4.6 Alternatives Evaluation

The project specific evaluation matrix considers the alternatives' benefits and costs as well as the impacts to the environment and property.

Table 16: Evaluation Matrix

	Evaluation Factors	No-Build	Alt. 1 - Median	Alt. 2 - TWLTL
Benefits	Pedestrian Accommodations	Some sidewalks	Sidewalk	Sidewalks
	Bicycle Accommodations	On-road	Buffered bike lanes	Buffered bike lanes
	Traffic	2-lane	4-lane	4-lane
	Safety	No improvement	Improvement	Improvement
Environmental Impacts	Archaeological/Historical Sites (potential)	None	Low	Low
	Parks/Recreational Areas	None	None	None
	Wetlands (acres)	0	0.7	0.7
	Surface Waters (acres)	0	0.01	0
	Floodplain (acres)	0	1.5	1.5
	Threatened and Endangered Species (potential)	None	Low	Low
	Contamination Sites Ranked High/Medium Risk (number)	0	0	0
Property Impacts	Utilities Relocated	None	Electric, Water	Electric, Water
	Right-of-way (acres)	0	15.9	15.3
	Parcels (number)	0	31	28
	Relocations (number)	0	8	1
Cost	Bridge Widening	No	Yes	No
	Total Estimated Project Costs* (in present day \$ Millions)	\$0	\$21.7 M	\$18.3 M

* Estimated project costs include engineering, right-of-way, and construction but do not include utility relocations, environmental permits, or contamination remediation.

4.7 Recommended Alternative

Based on the engineering and environmental comparative analysis documented in this report, the recommended alternative for 63rd Avenue includes a 12-foot Two-Way Left-Turn Lane (TWLTL), 11-foot travel lanes, 6-foot buffered bike lanes, and 5-foot sidewalks from US 301 to the Prospect Road. A 16-foot raised median is recommended from Prospect Road to Tuttle Avenue. The recommended alternative for 63rd Avenue is a combination of Alternative 1 and Alternative 2, with additional an additional 2-feet behind the sidewalk to accommodate utilities. Signal control is recommended at the 33rd Street intersection. This approach best meets the project purpose with:

- Sidewalks for pedestrians
- Buffer space between the road and sidewalk for pedestrian comfort
- Buffered bike lanes for cyclists
- TWLTL in the industrial area and raised median in the residential area
- Additional through lanes for rush hour traffic
- Improved safety
- Landscaping opportunities

The recommended alternative provides connectivity to the existing sidewalks and bike lanes to the east. The proposed traffic signal at 33rd Street provides a safe crossing opportunity and avoids potential roundabout conflicts with turning trucks. The Recommended Alternative Concept Plans are shown in **Appendix A**.

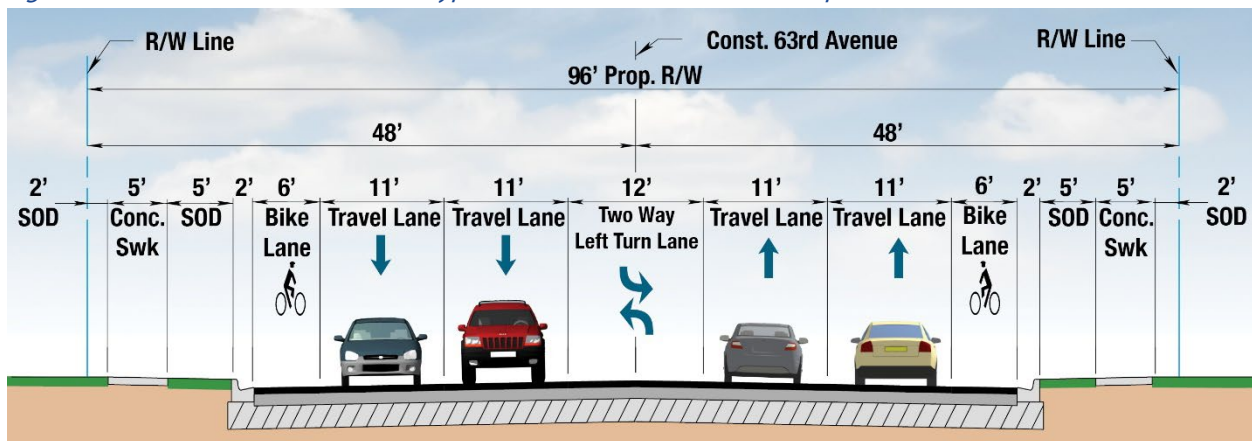
5.0 Details of the Recommended Alternative

This section contains additional details of the recommended alternative.

5.1 Typical Section

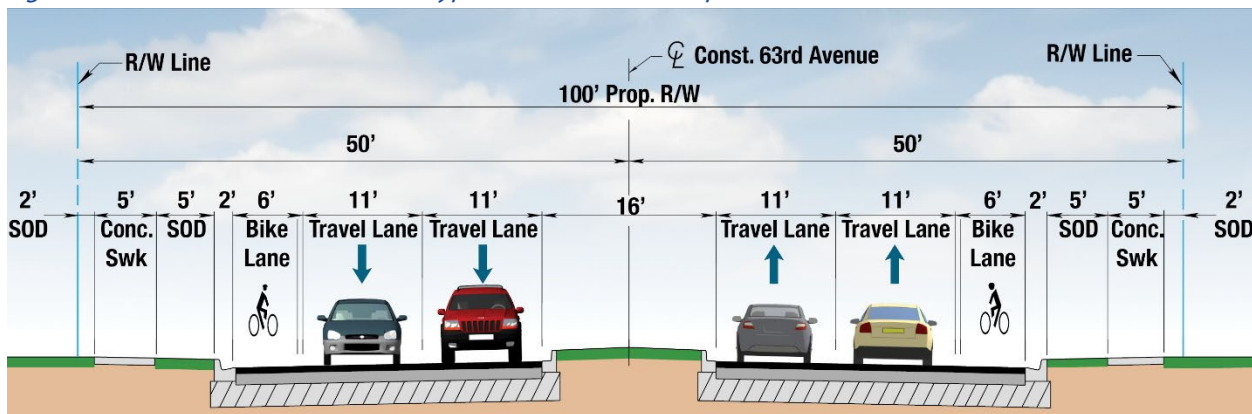
The recommended alternative consists of two typical sections within the project corridor. From US-301 to Prospect Road, the recommended typical section consists of two 11-foot lanes in each direction, a 12-foot center TWLTL, 6-foot buffered bike lanes, type F curb and gutter, a 5-foot sod/buffer strip between the curb and gutter and 5-foot sidewalks (Figure 34). The 2-feet behind the sidewalk is needed to accommodate utility and light poles.

Figure 34: Recommended Alternative Typical Section From US-301 to Prospect Road



From Prospect Road to Tuttle Avenue, the recommended typical section consists of two 11-foot lanes in each direction, a 16-foot median, 6-foot buffered bike lanes, type F curb and gutter, and 5-foot sidewalks (Figure 35). The 2-feet behind the sidewalk is needed to accommodate utility and light poles. The raised median will enhance safety and increase opportunity for landscaping.

Figure 35: Recommended Alternative Typical Section from Prospect Road to Tuttle Avenue



5.2 Horizontal and Vertical Geometry

Generally, the horizontal alignment consists of series of tangents within 2°00'00" deflection (complying design standards) and is controlled by the existing FPL transmission poles, existing right-of-way on the north side and existing bridge over Pearce Canal. Proposed alignment provides a minimum of 4-foot lateral clearance from the face of proposed curb at the FPL transmission poles location and a 6-foot sidewalk is proposed to be constructed behind the pole that will require right-of-way on the northside. A minimum of 35-foot curb return radius has been used at the signalized intersections, whereas 25-foot minimum curb return radius is proposed at the intersection with local road. At locations with entrance to industrial/commercial, 75-foot control radii and for entrances to residential areas only, 50-foot control radii have been considered.

A reverse curve is being proposed to connect proposed typical section at the east end of the project with currently under design intersection improvement project at Tuttle Avenue and 63rd Avenue intersection (CIP number 6065961). Raised medians have been proposed at the strategic locations to provide landscaping opportunities within the corridor without interrupting access to existing properties, driveways, and side streets.

To facilitate drainage on a curb and gutter facility, vertical alignment will require a minimum of 0.3% longitudinal slope to be maintained for 250 feet between high point and lows points along the roadway. This may require temporary easements for driveway harmonization.

5.3 Project Traffic Volumes

Table 17 summarizes the AADT volumes as well as the peak hour factor (K), directional (D) factor, and Truck (T) factor for the 63rd Avenue East study corridor. Traffic volume projections are rounded to the nearest five hundred vehicles per day.

Table 17: Project Traffic Summary

Current Year (2021) AADT	11,000
Opening Year (2025) AADT	11,500
Design Year (2045) AADT	15,000
Standard K	0.09
D Factor	0.55
T Daily	8.2%
Design Hour T	4.1%

5.4 Intersection Concepts

The intersection at US 301 will need a FDOT connection permit to construct the proposed westbound right turn lane. Between US 301 and 28th Street East, sidewalk is proposed next to the right-of-way to provide wider ditch area for drainage.

The intersection at 33rd Street East will accommodate eastbound and westbound right turning trucks (WB-62 FL). Additionally, exclusive northbound and southbound left turning lanes have been added to improve level of service and operations at this intersection. This is consistent with the previous concepts developed at this intersection for the canceled 2-lane signalization project.

A traffic signal is recommended to be installed at the existing 4-way stop controlled intersection of 63rd Avenue and 33rd Street. The purchase of additional right-of-way corner clips for the new traffic signal features will be required. The intersection is within the mast arm policy area,⁷ west of I-75, so mast arm supports are recommended for the signal. Additionally, the installation of a traffic signal at the existing 4-way stop controlled intersection of 63rd Avenue and Tuttle Avenue is currently under design (by Others). As there are no existing fiber optic features along 63rd Ave, and the two proposed signalized intersections are about ½ mile away from one another, proposed underground fiber optic features should be installed along with splice vaults, pull boxes, and other necessary fiber optic features to provide a complete and connected ITS system back to the TMC.

Implementation of features to enhance safety and operations should be considered at the existing signalized intersection as well as the proposed signalized intersections. The existing signalized intersection at US 301 already has retroreflective backplates, and pedestrian crossings on each approach, and does not require any additional modification related to these safety features. The FDOT Traffic Engineering Manual (TEM) section 3.2 recommends the use of a 4-section flashing yellow arrow (FYA) where applicable. Replacement of existing left turn signal heads with the FYA should be evaluated for implementation at the existing signalized intersection. At the proposed signalized intersections, retroreflective backplates and pedestrian crossings on each approach should be included in the design and evaluation of FYAs should be completed for all approaches.

5.5 Access Management Plan

Currently there is unrestricted access to properties on both sides of the existing roadway. Existing access to properties, driveway entrances and intersections will be maintained from US 301 to Prospect Road, with raised median islands proposed at locations that do not impact existing access. From Prospect Road to Tuttle Avenue, a continuous raised median has been proposed to improve safety and increase opportunity for landscaping. The designer should evaluate a directional median opening at the Prospect Road intersection as a potential safety enhancement. Connection spacing for Roadway Class 7 is recommended for new connections.

⁷ FDOT. 2009. *Mast Arm Structures Boundary Map*. District 1. Accessed August. 31, 2021 from <https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/traffic/trafficservices/pdfs/d1.pdf>

5.6 Bicycle and Pedestrian Accommodations

In addition to improving overall traffic operations, one of the key drivers of this project is to accommodate bicycle and pedestrian facilities that improve safety. Therefore, bicycle and pedestrian facilities have been given full consideration in the recommended alternative. Minimum 6-foot-wide buffered bicycle lanes have been included as part of recommended alternative.

Minimum 5-foot continuous sidewalks are being proposed on both sides of the project. Existing sidewalk segments that comply with ADA standards will remain and proposed sidewalk will be connected to those existing sidewalk segments. At locations where existing sidewalk has deficiencies such as excessive cross slope, differential settlement or broken sidewalk will be addressed through reconstruction. Minimum of 1:3 side slope, thickened edge, or gravity wall as deemed appropriate based on the site conditions may be used to connect/harmonize at the back of right-of-way. Missing ADA ramps or improperly located ADA ramps will be replaced to meet current ADA standards.

5.7 Right-of-Way Requirements

The recommended alternative requires additional ROW at pinch points along the 63rd Avenue corridor, corner clips at intersections, and for stormwater ponds. An additional 15 acres of ROW are required from 38 parcels, but only 1 relocation. The ROW impacts also include a conservation easement over the wetland area west of Tuttle Avenue.

5.8 Lighting

Lighting is recommended for the 63rd Avenue corridor as a safety enhancement. Lighting at signalized intersections is required per the Florida Greenbook⁸. Due to the existing overhead utilities throughout the corridor, placement of new light poles may be limited. Luminaires may need to be located on existing overhead power poles and coordination with FPL will be necessary to discuss these options. If existing overhead poles cannot structurally accommodate a new luminaire, discussions with FPL should take place to determine whether a new in-line overhead electric pole with a luminaire can be set. Adding luminaires to existing power poles can help save money and lower the overall project cost for the corridor. Design of light pole locations will comply with OSHA standards, and coordination with FPL and the County on fixture type, pole type, mounting heights and bracket arm lengths will be critical to ensure the lighting system complies with all agency preferences. Fixture spacing was analyzed in AGI32 using the Roadway Optimizer tool for a 268-watt ATB2 LED luminaire from FPL's LED lighting catalog. Results of the analysis show that fixtures should be spaced approximately 200 feet apart on both sides of the roadway to meet Florida Greenbook and FDOT standards. House shields are recommended for luminaires near residential properties to prevent light trespass.

There is one freestanding aluminum light pole on the north side of the roadway near the intersection of US 301 that will be impacted by the proposed typical section. This luminaire likely contributes to intersection lighting at US 301 and will need to be replaced. A full photometric review of the

⁸ FDOT. 2018. *Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways*. 2018 edition. Chp. 6.C.3. Accessed on August 31, 2021 from <https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/floridagreenbook/2018-florida-greenbook.pdf>

intersection of 63rd Avenue at US 301 is recommended to ensure that crosswalks meet FDOT lighting criteria. It is also recommended that crosswalks at the signalized intersections of 63rd Avenue at Tuttle Avenue be evaluated to ensure they are properly illuminated.

5.9 Utilities

For this study, utilities were located by utility records (quality level D) and were not field verified. Verified vertical and horizontal (VVH) locations are recommended during the design phase to identify or avoid utility conflicts with the proposed design.

Although the alignment avoids conflicting with the existing electric transmission poles, the smaller electric distribution poles will likely need to be relocated. Likewise, the water main was to be relocated as part of the canceled project to signalize the 33rd street intersection (FPID 435113-2) and so is anticipated to need relocation as well for this project.

5.10 Preliminary Drainage Analysis

The recommended alternative will utilize curb and gutter and a closed drainage system to convey runoff to the recommended stormwater management ponds. Most of the adjacent properties drain towards the 63rd Avenue ROW, so back of sidewalk inlets are anticipated to convey off-site flows and maintain existing drainage patterns. The project area outfalls to Gap Creek (Pearce Canal).

5.11 Floodplain Analysis

A portion of the project limits fall within FEMA Floodplain Zones A and AE and in the Gap Creek floodway. Floodplain impacts have been estimated to be 1.5 acre-feet. See Figure 33 for floodplain compensation alternatives. A culvert extension is anticipated over Gap Creek and will require a no rise certification from the County to demonstrate there is no net change in the flooding potential.

5.12 Structures

The existing bridge over the Pearce Canal (bridge no. 134117) can accommodate the recommended alternative without the need for widening. The existing bridge railing has a 42-inch vertical shape per Index 521-422 and does not appear to need retrofitting.

5.13 Cost Estimate

The estimate of probable project costs was based on limited quantity take-offs from the conceptual plans and utilizes FDOT historic unit cost averages from Area 10, which includes Manatee County. The construction cost estimate is included in **Table 18**. A high percentage of project unknowns is appropriate at this conceptual stage but will be reduced as the concept is further refined in the design phase.

Table 18: Recommended Alternative Construction Cost Estimate

Item	Cost
Structures	-
Roadway and Drainage	\$ 5,363,266
Signing & Pavement Markings	\$ 48,843
Lighting	\$ 294,455
Signalization	\$ 1,000,000
Landscape	\$ 250,000
MOT (10%)	\$ 695,657
Mobilization (10%)	\$ 765,222
Project Unknowns (50%)	\$ 4,208,721
Initial Contingency	\$ 73,836
Construction Cost Total (2021 Cost)	\$ 12,700,000

The estimated total project costs of the recommended alternative are shown in **Table 19**. Professional Services and ROW costs used in this analysis are approximate. Actual ROW values will be determined during the appraisal phase of the project.

Table 19: Recommended Alternative Cost Estimate

Item	Cost
Professional Services (Engineering, Legal, CEI = 27%)	\$ 3,400,000
Wetland Mitigation	\$ 125,000
ROW costs	\$ 2,475,000
Construction Costs	\$ 12,700,000
Estimated Total Project Costs (2021 Cost)	\$ 18,700,000

6.0 Summary of Permits and Mitigation

This section summarizes the permits and mitigation requirements of the recommended alternative.

6.1 Stormwater

SWFWMD requires an ERP when construction of any project results in the creation of a new or modification of an existing surface water management system or results in impacts to waters of the state. The road is partially permitted under ERP #19387.002 but SWFWMD will require an Individual ERP permit for the project. Pre-application meeting minutes are included in **Appendix F**.

6.2 Natural Resources

Both the Florida Department of Environmental Protection (FDEP) and SWFWMD regulate impacts to wetlands within the project area. Other agencies, including the United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), Environmental Protection Agency (EPA), and the Florida Fish and Wildlife Conservation Commission (FWC), review and comment on wetland permit applications. The recommended alternative will likely require wetland mitigation on-site or mitigation credits from the Long Bar Pointe or Manatee Mitigation Banks. These banks have freshwater herbaceous and forested credits available and are within the South Coastal and Manatee River Drainage Basins.

Manatee County will need to perform updated wildlife surveys during the project Design phase to ascertain the involvement, if any, of listed species. If needed, the FWC issues permit for gopher tortoise relocation activities and incidental takes for state protected avian species and the USFWS is the lead agency for eagle nest take permitting or coordination.

6.3 Cultural Resources

Based on a review of the Florida Master Site File, there are no currently listed National Register of Historic Places within the APE boundaries of the study roadway. Sixteen (16) structures within the APE are at or near historic age and should be evaluated for eligibility during the design phase. These findings should be coordinated with SHPO for concurrence.

6.4 Potential Contamination

Based on available information, the Project Site has a low risk to contain contamination. There are no apparent medium or high-risk sites that could affect the recommended alternative.

Any dewatering operations must obtain a National Pollutant Discharge Elimination System (NPDES) Generic Permit for Discharge of Groundwater. Dewatering operations in areas identified with contamination issues require treatment of effluent to limits and requirements specified in the NPDES Generic Permit. No further assessment/review for contamination appears warranted.

Appendices

Appendix A

Recommended Alternative Concept Plans

CONCEPT PLANS FOR 63RD AVENUE EAST

FROM US-301 TO TUTTLE AVE

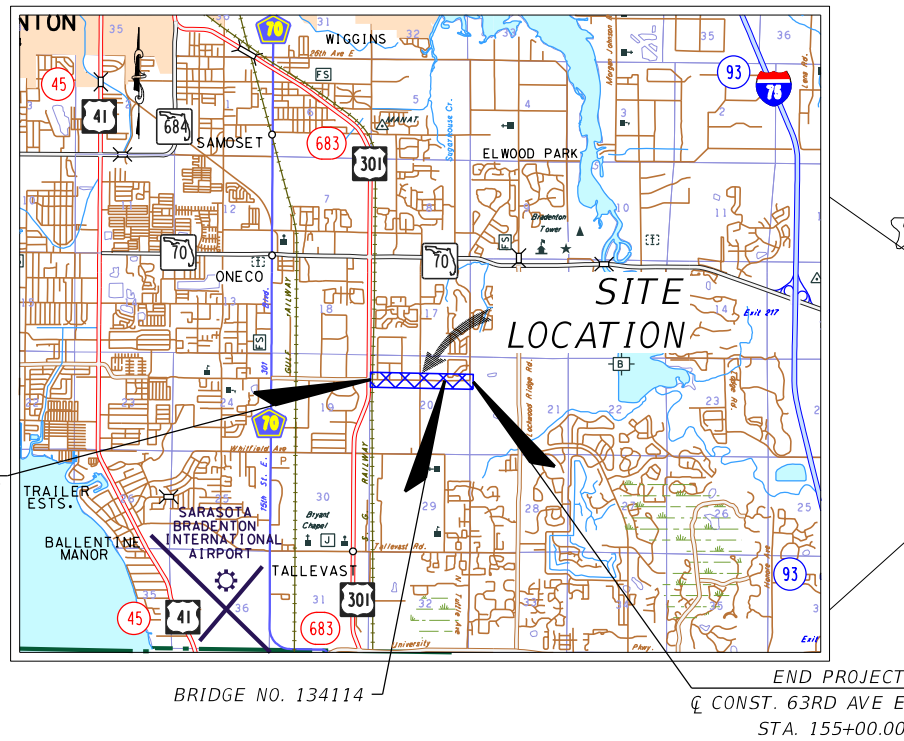
MANATEE COUNTY PROJECT # 6107860



PROJECT TEAM:

OWNER:
MANATEE COUNTY
1022 26TH AVE. E.
BRADENTON, FL 34206
CONTACT: ERIC SHROYER, P.E.
941-708-7450 ext. 7344

ENGINEER:
KIMLEY-HORN AND ASSOCIATES, INC.
1777 MAIN STREET, SUITE 200
SARASOTA, FL 34226
CONTACT: CRIS S. SCHOOLEY, P.E., AICP
941-379-7600



INDEX OF CONCEPT PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2-3	DRAINAGE MAP
4	TYPICAL SECTION 63RD AVENUE EAST
5-15	RECOMMENDED ALTERNATIVE

PROJECT VICINITY MAP
N.T.S.

OCTOBER 14, 2021
NOT FOR CONSTRUCTION

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Kimley»Horn

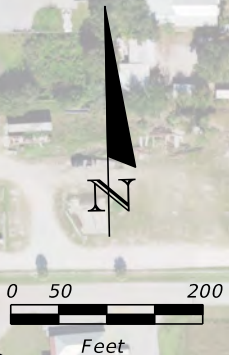
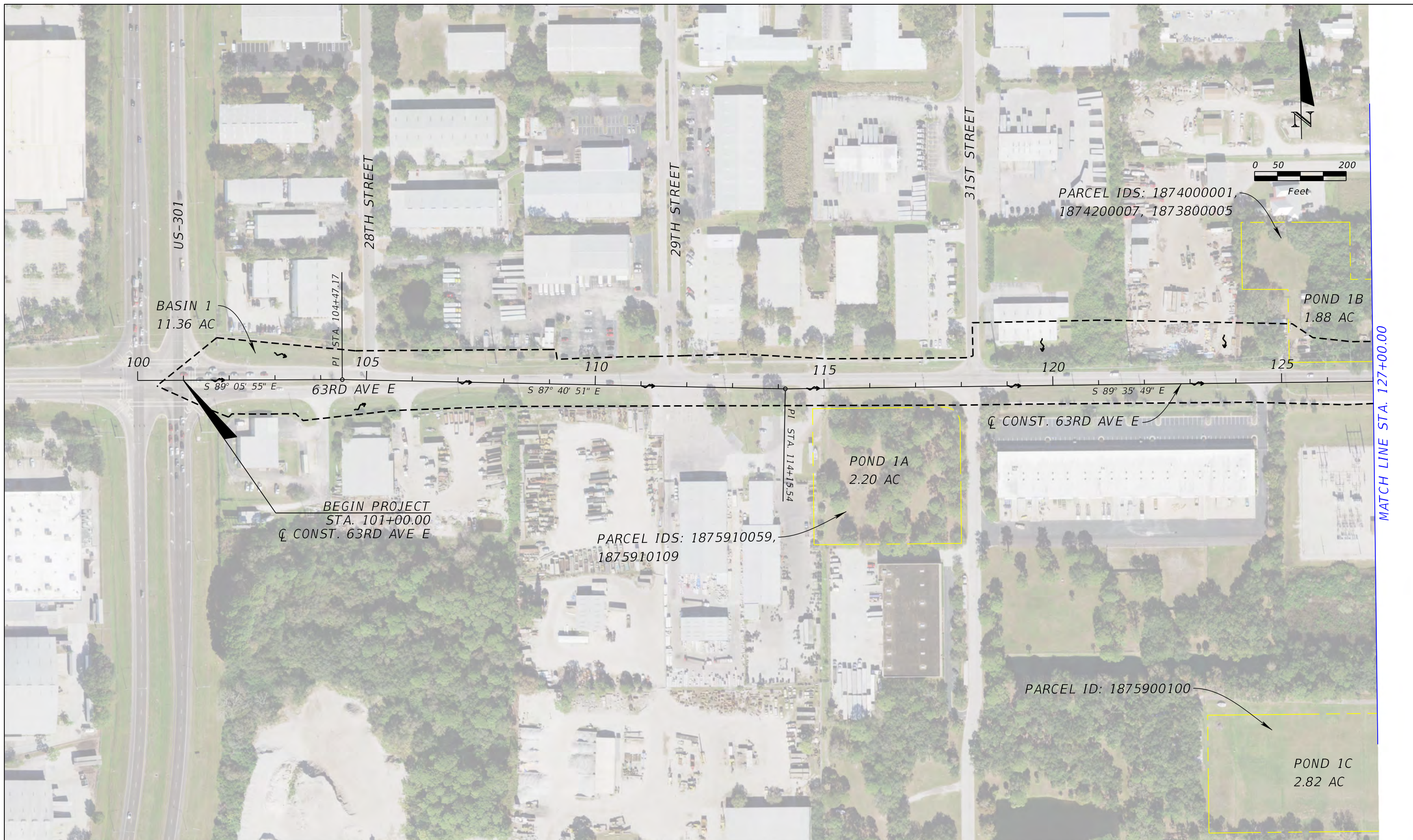
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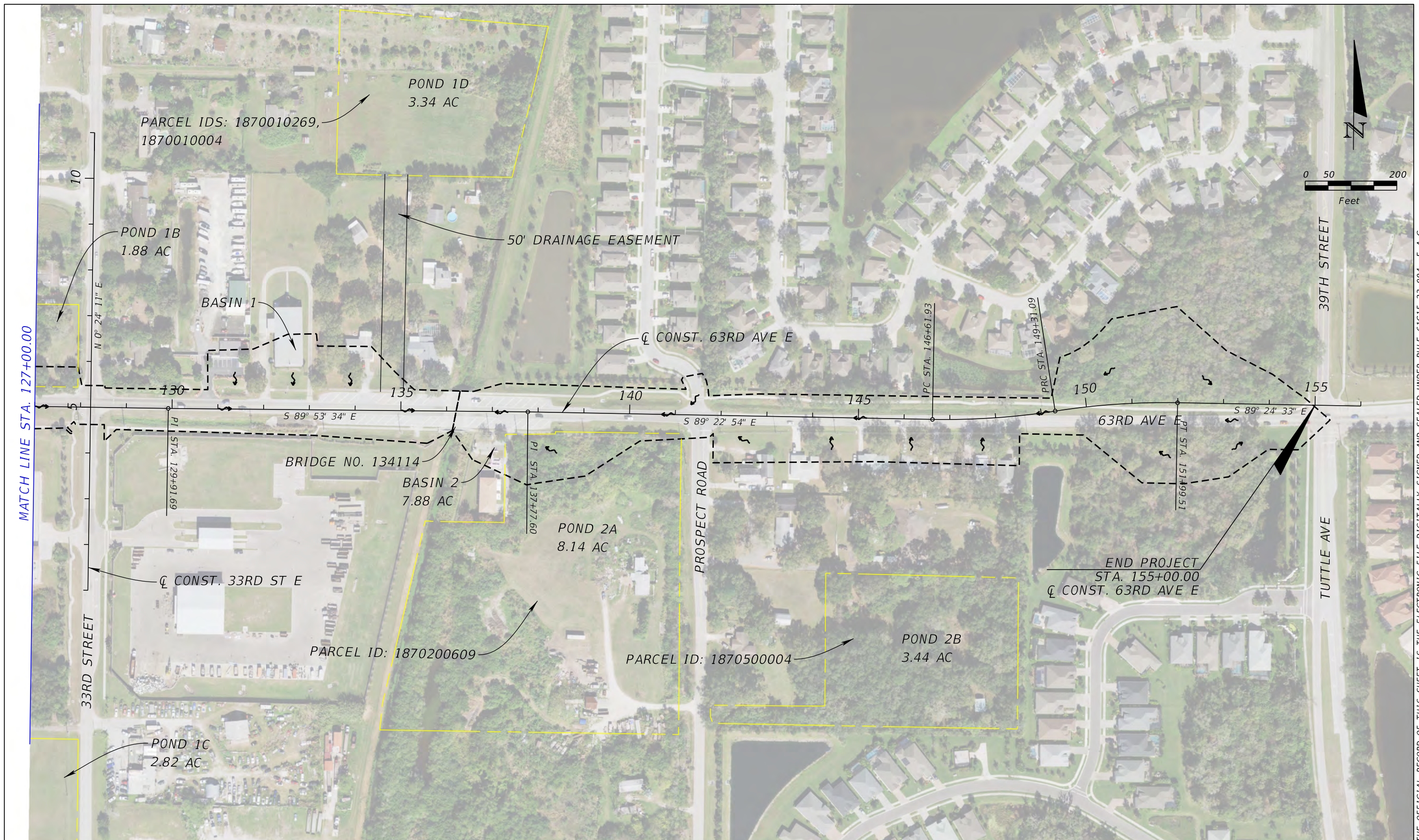

63RD AVENUE EAST
 MANATEE COUNTY
 Recommended Alternative

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DRAINAGE MAP

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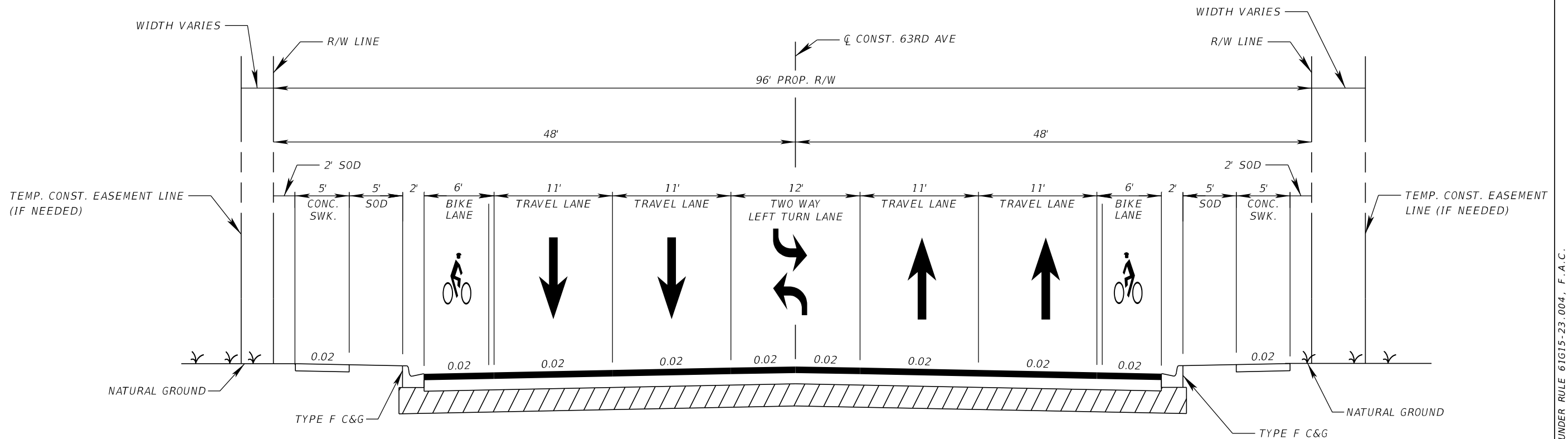
Manatee County
 63RD AVENUE EAST
 MANATEE COUNTY
 Recommended Alternative

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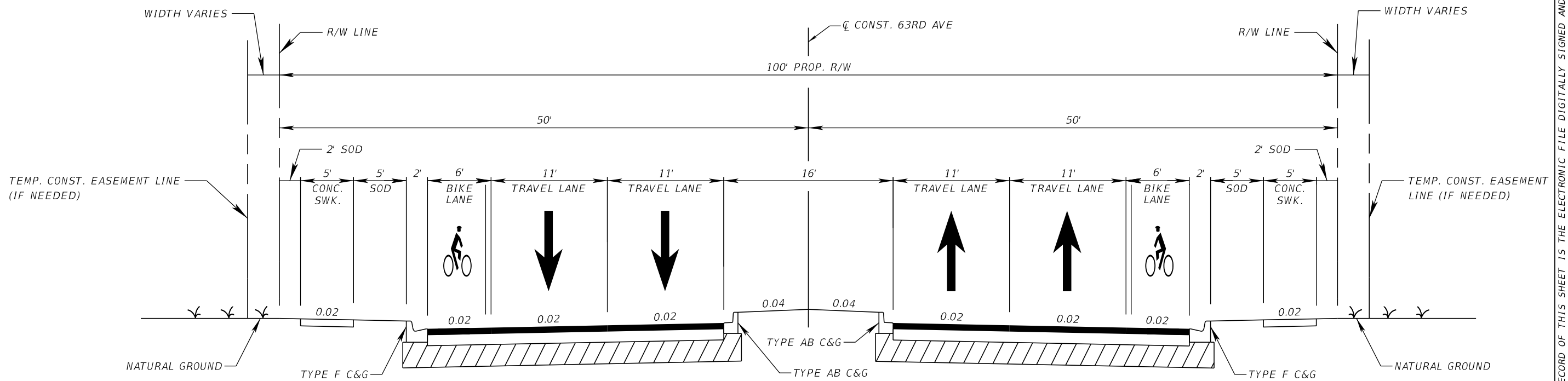
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TYPICAL SECTION RECOMMENDED ALTERNATIVE
63RD AVENUE EAST
FROM US-301 TO PEARCE CANAL BRIDGE



TYPICAL SECTION RECOMMENDED ALTERNATIVE
63RD AVENUE EAST
FROM PEARCE CANAL BRIDGE TO TUTTLE AVENUE

DESIGN SPEED = 40 MPH

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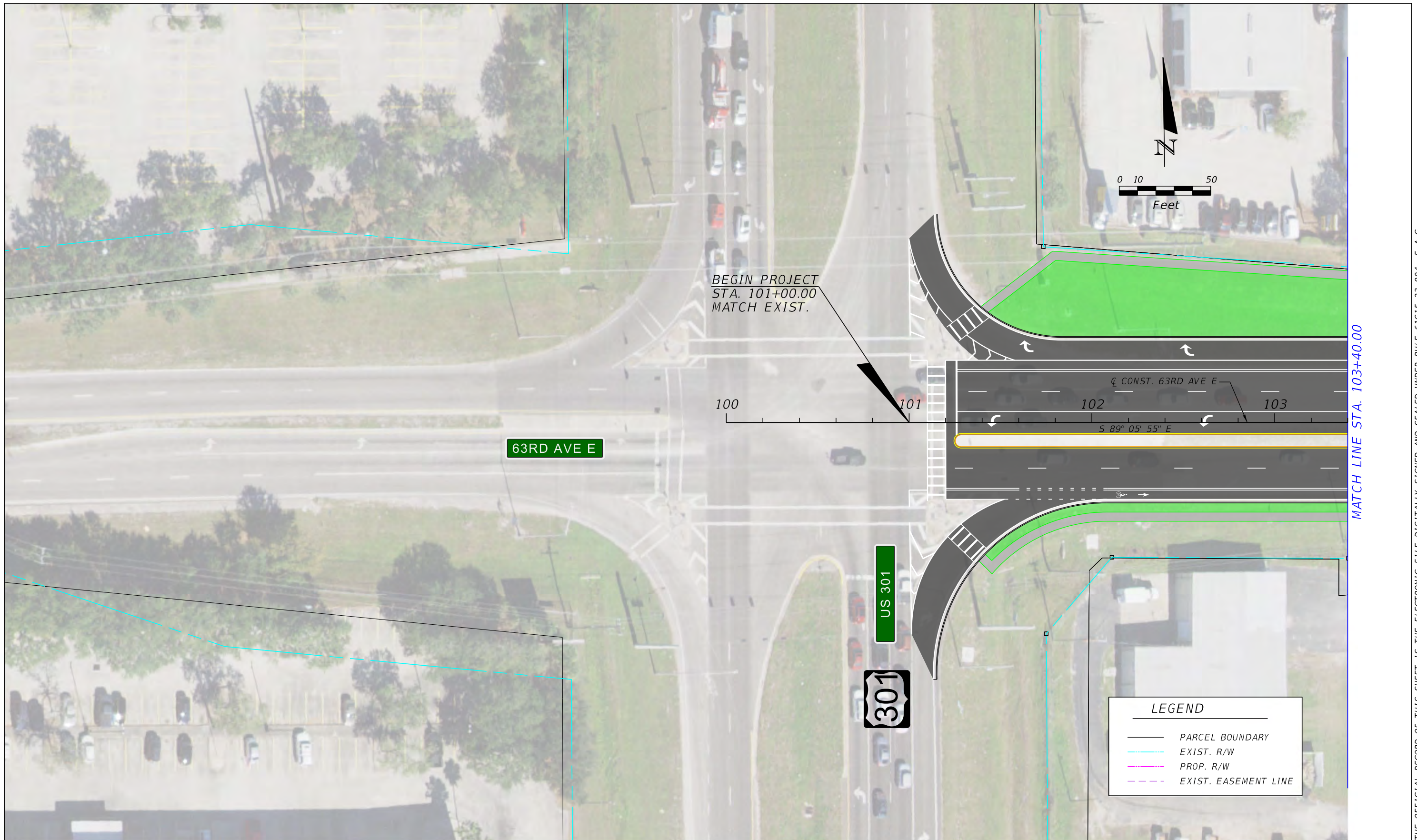
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TYPICAL SECTION
63RD AVENUE EAST

SHEET NUMBER

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	EXIST. EASEMENT LINE

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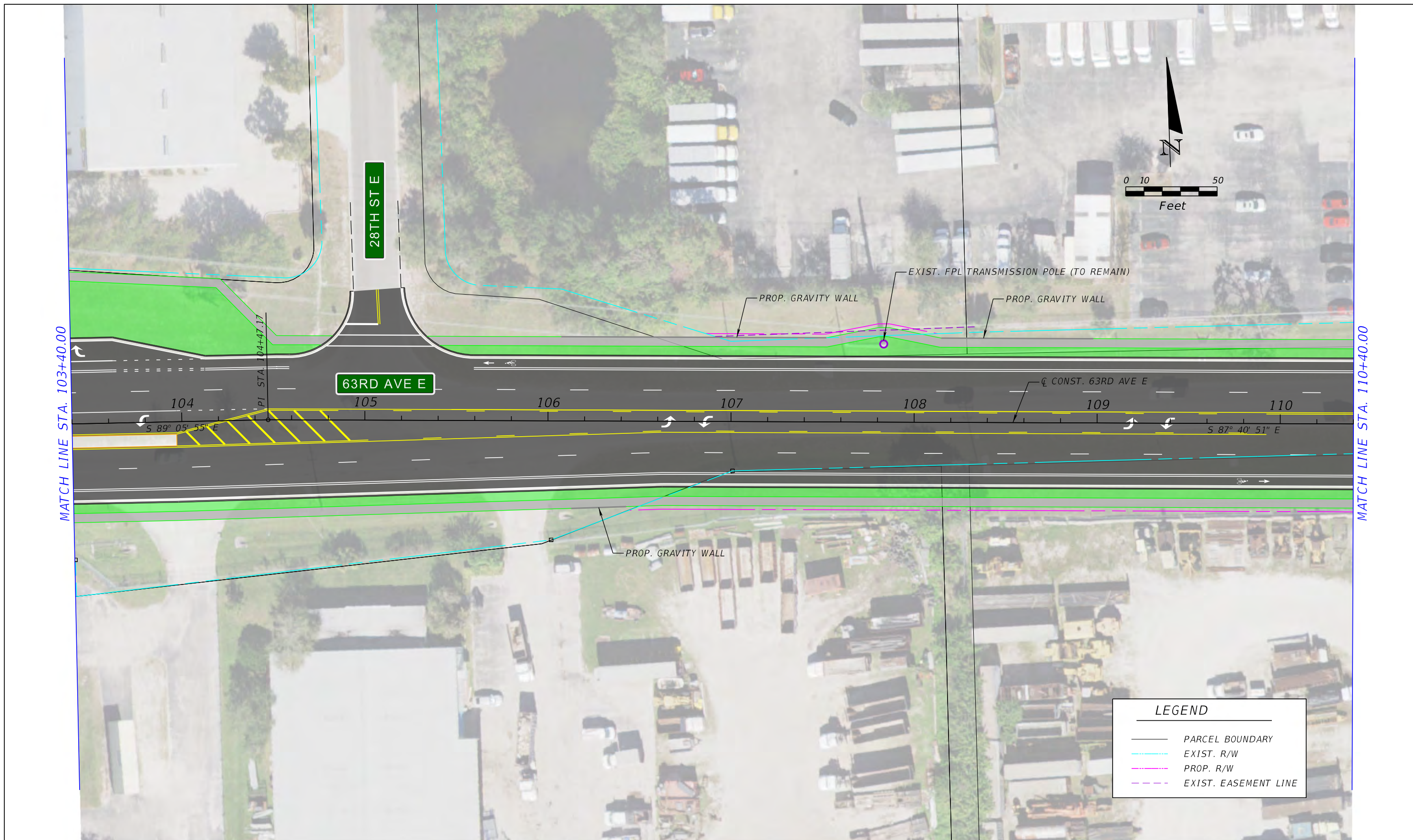
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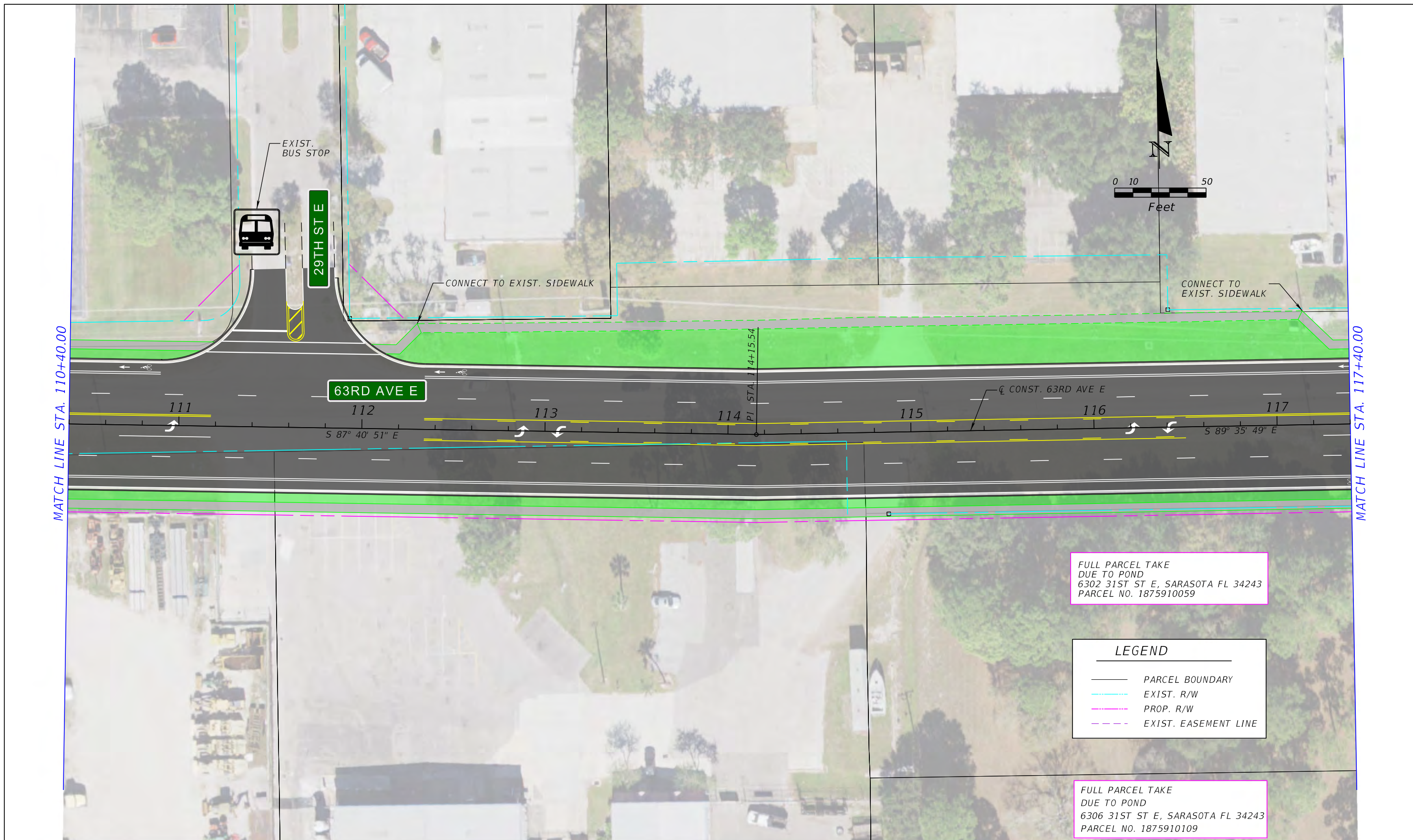
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FULL PARCEL TAKE
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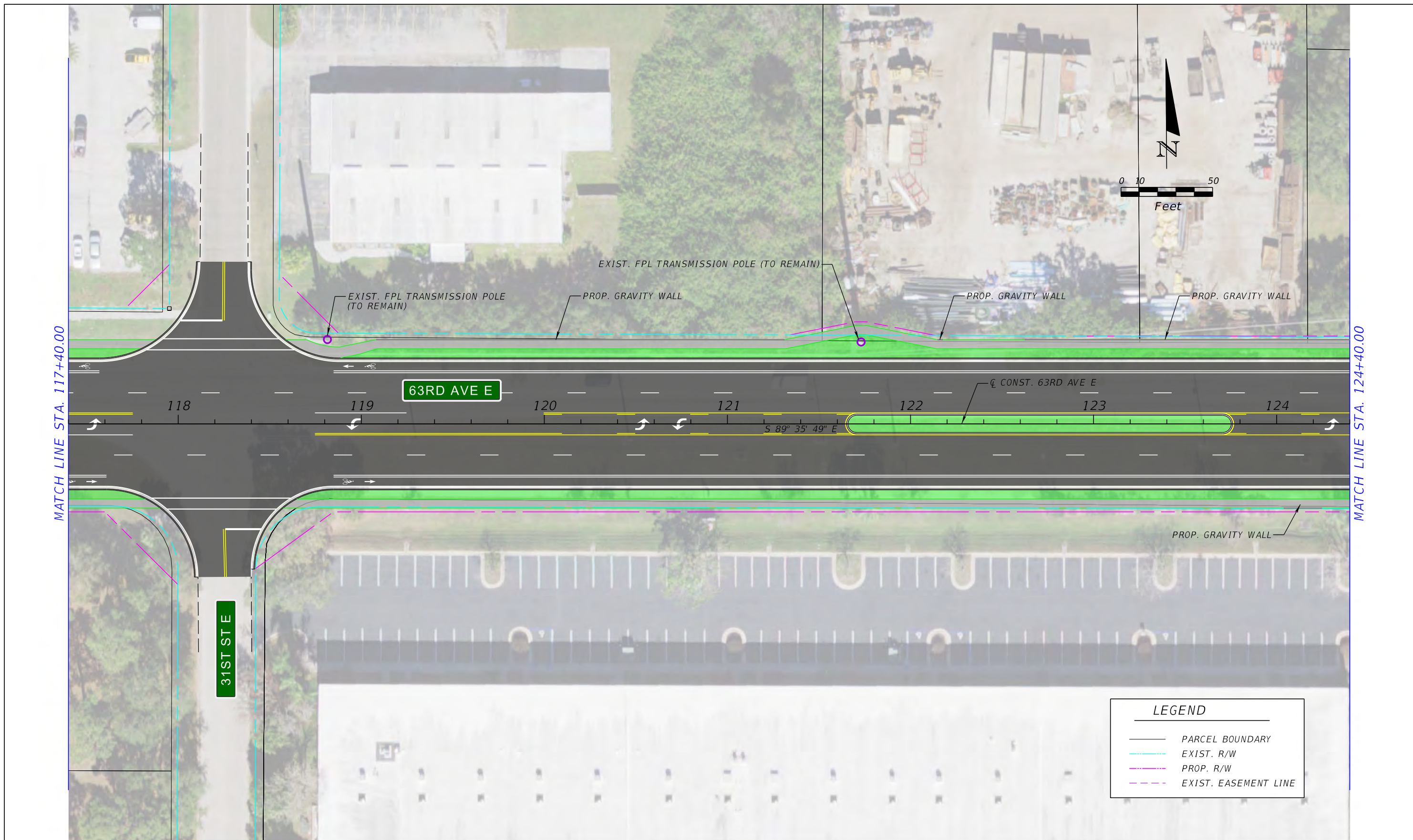
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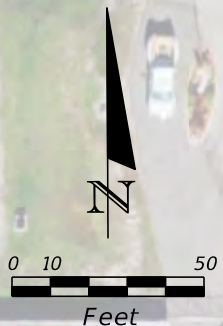
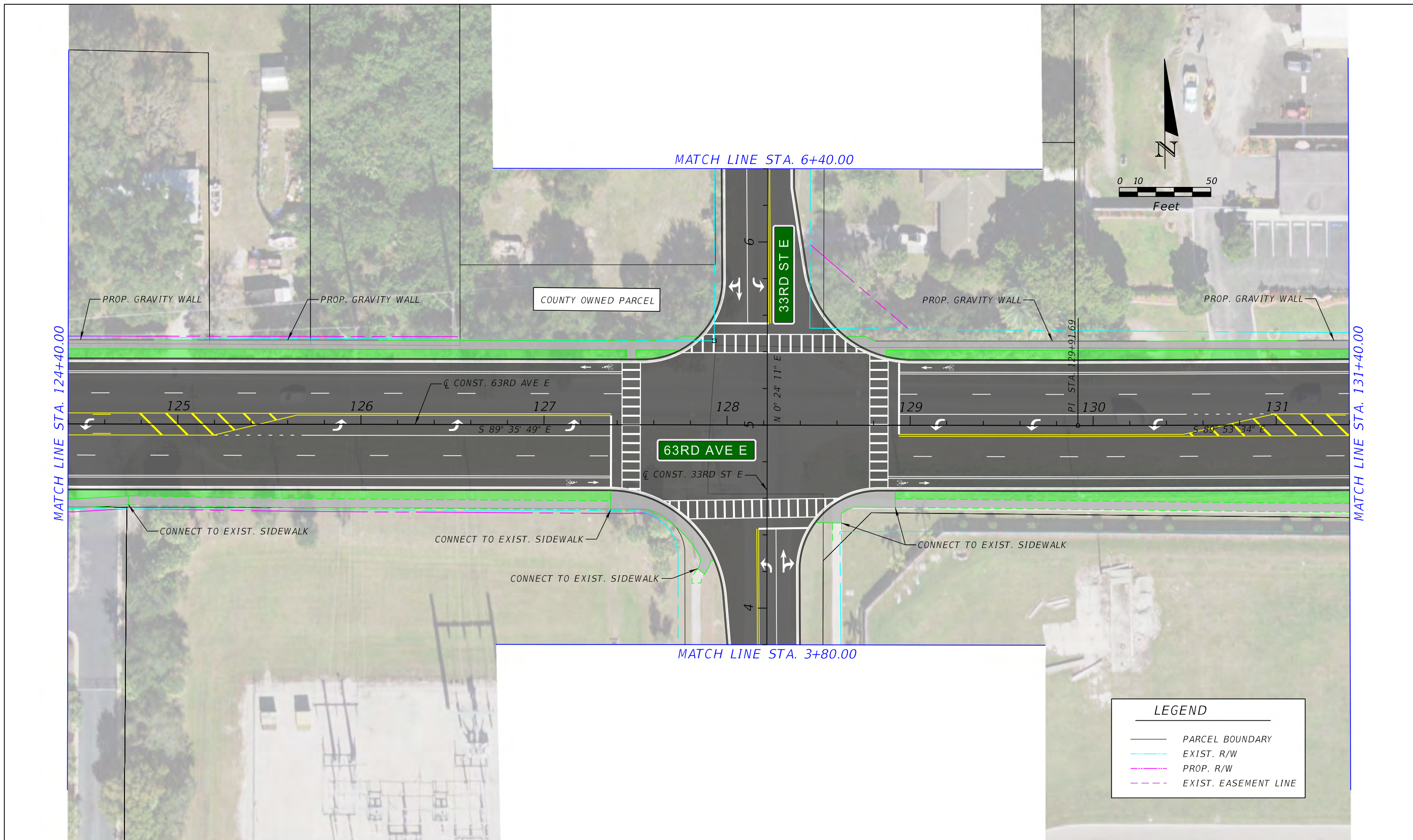
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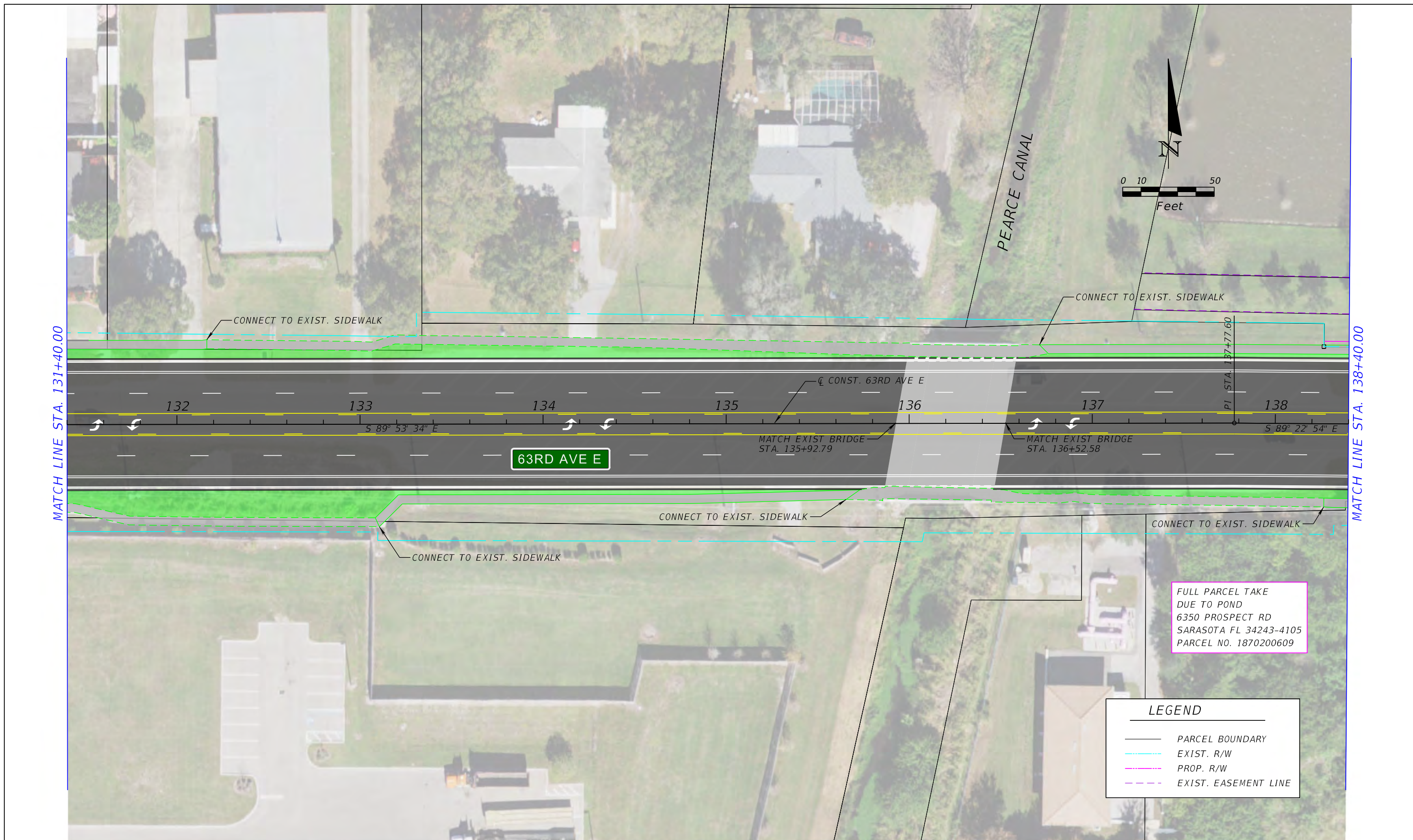
63RD AVENUE EAST
 MANATEE COUNTY
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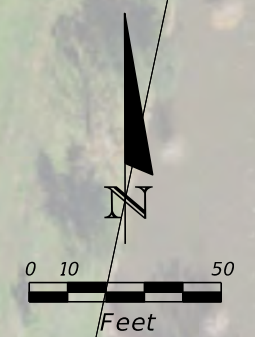
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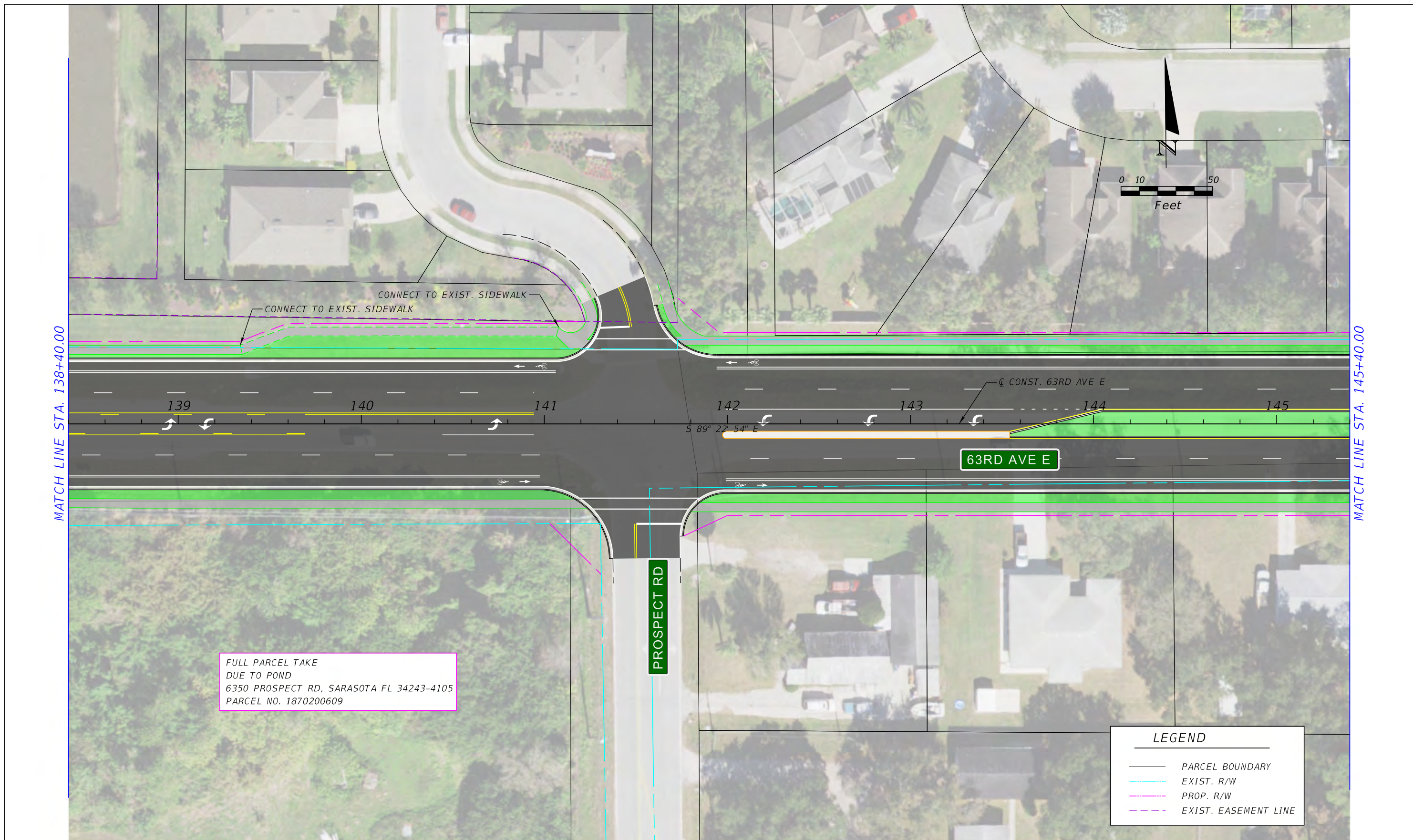
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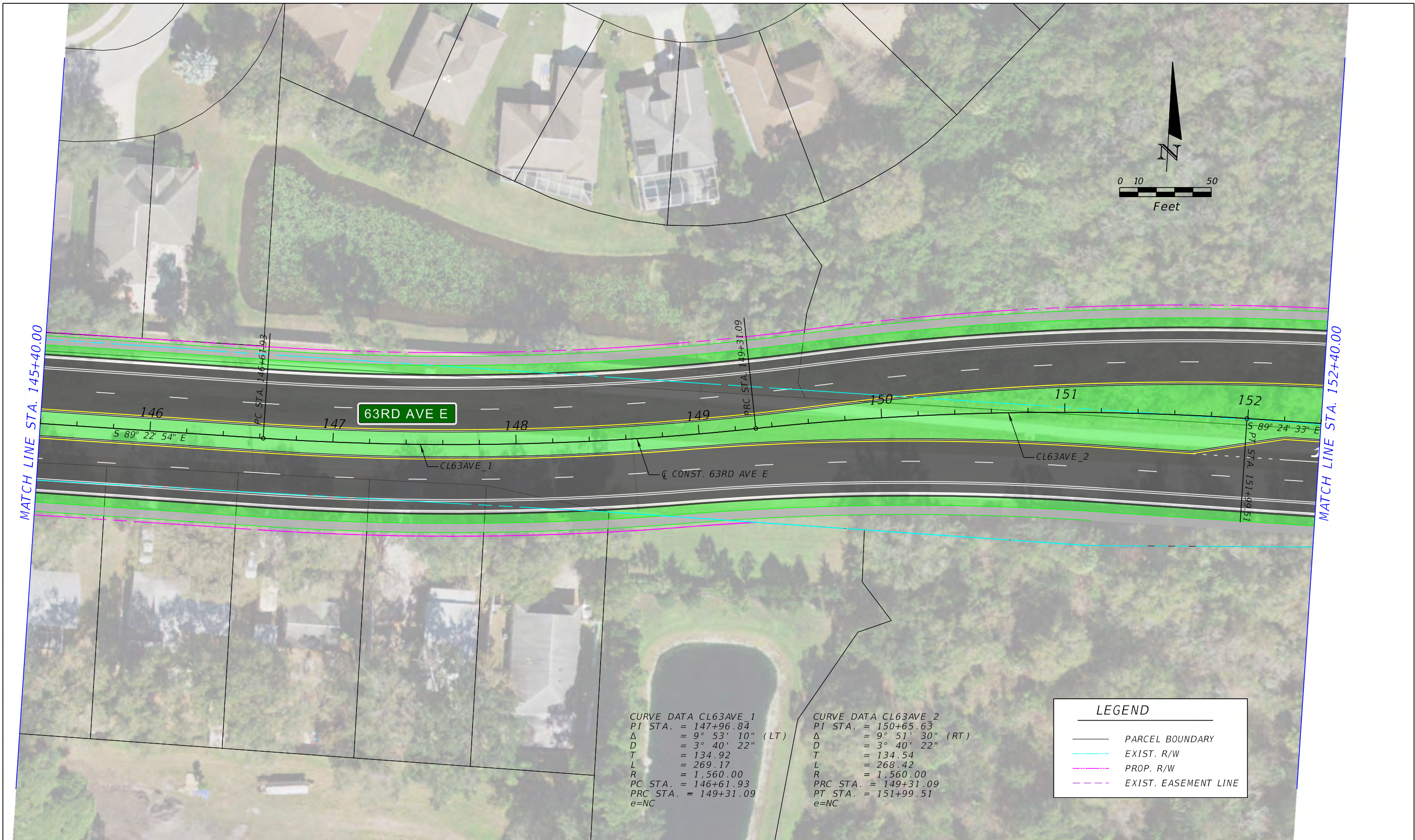
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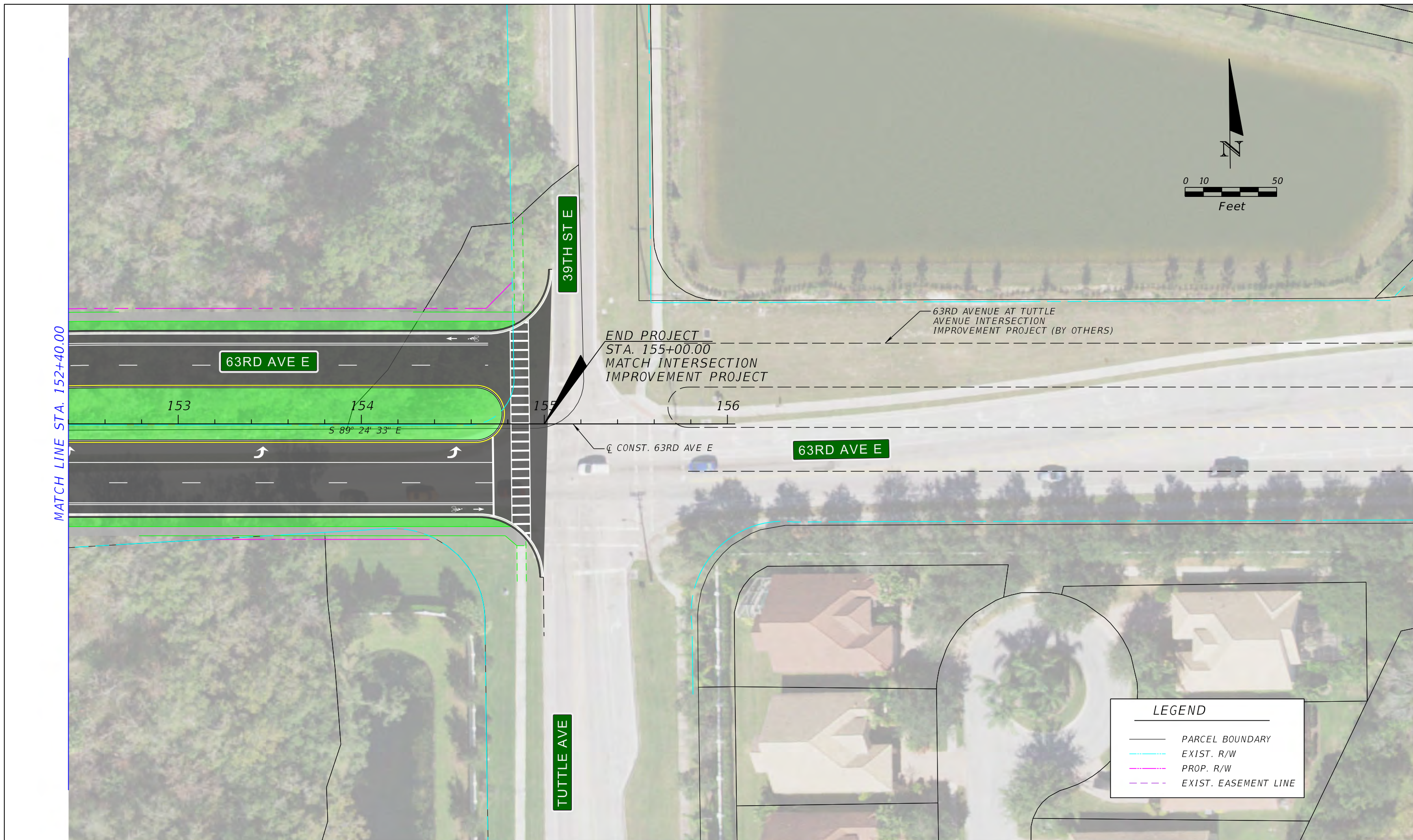
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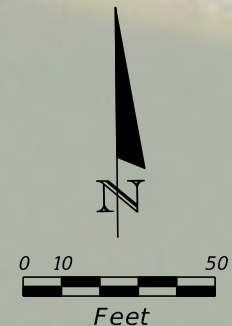
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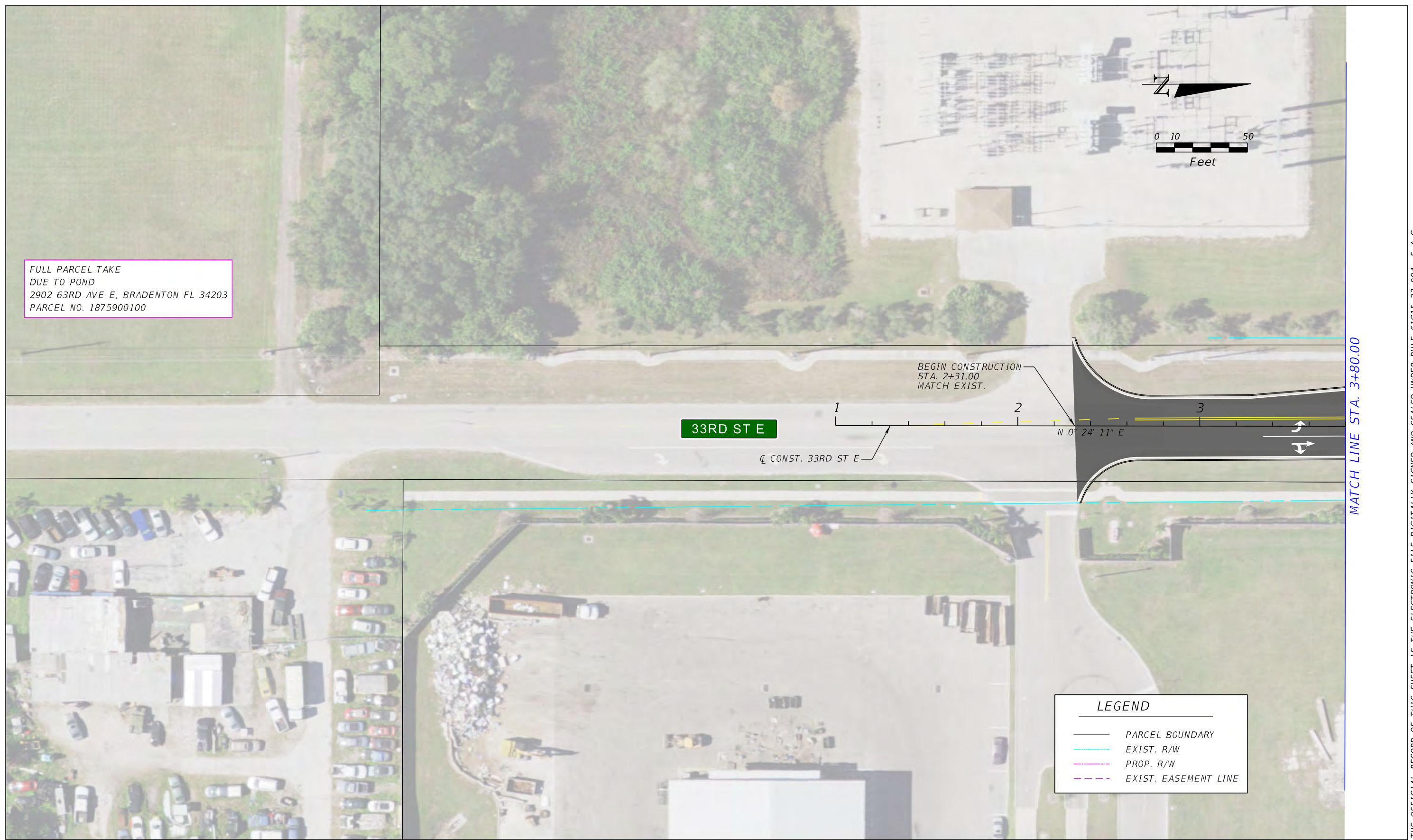
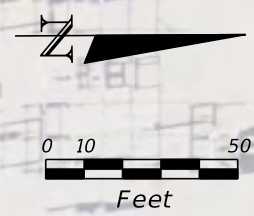
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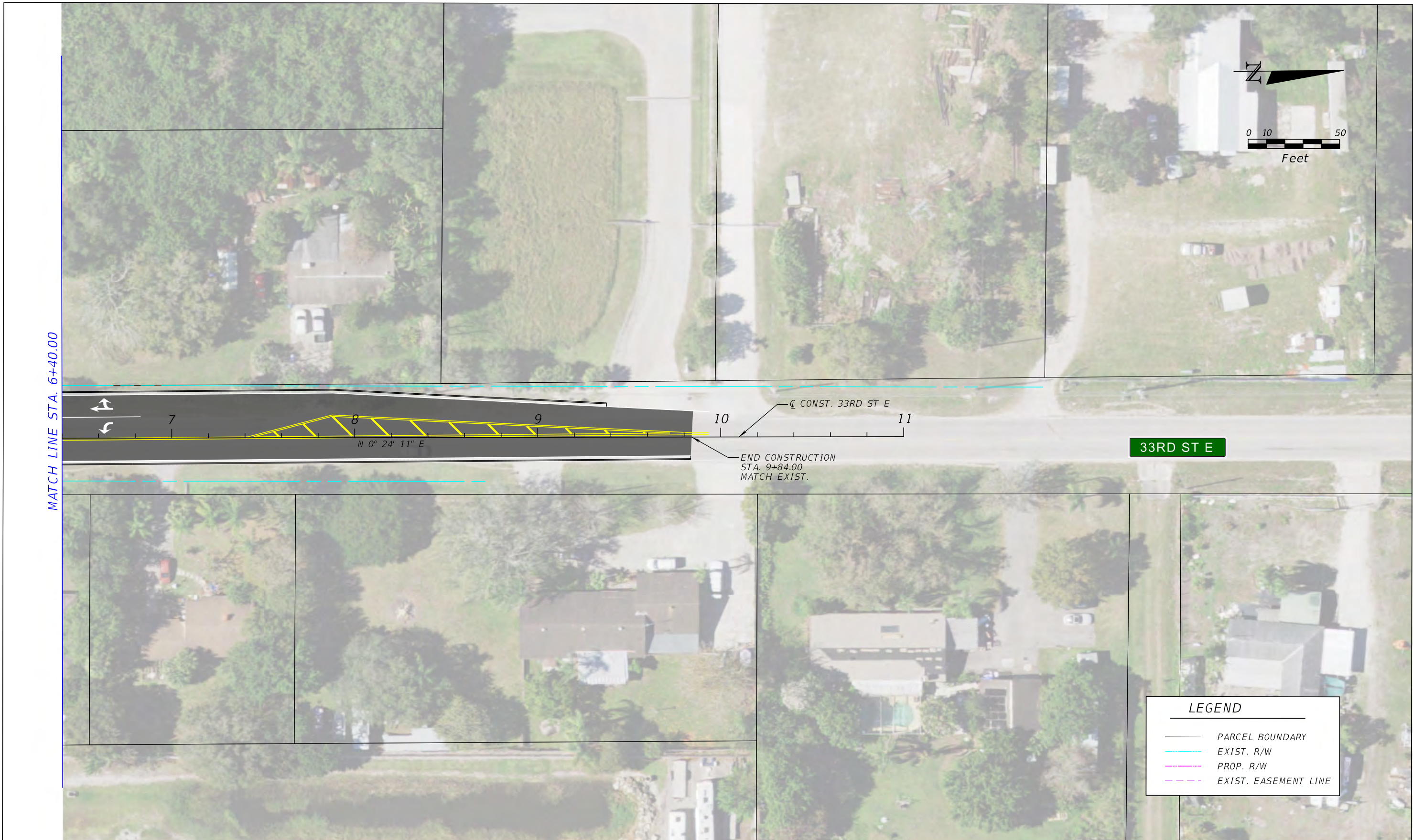
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Appendix B

Design Traffic Memo



Design Traffic Memorandum

63rd Avenue East – US 301 to Tuttle Avenue

CIP #: 6107860

REVISION ONE December 1, 2021



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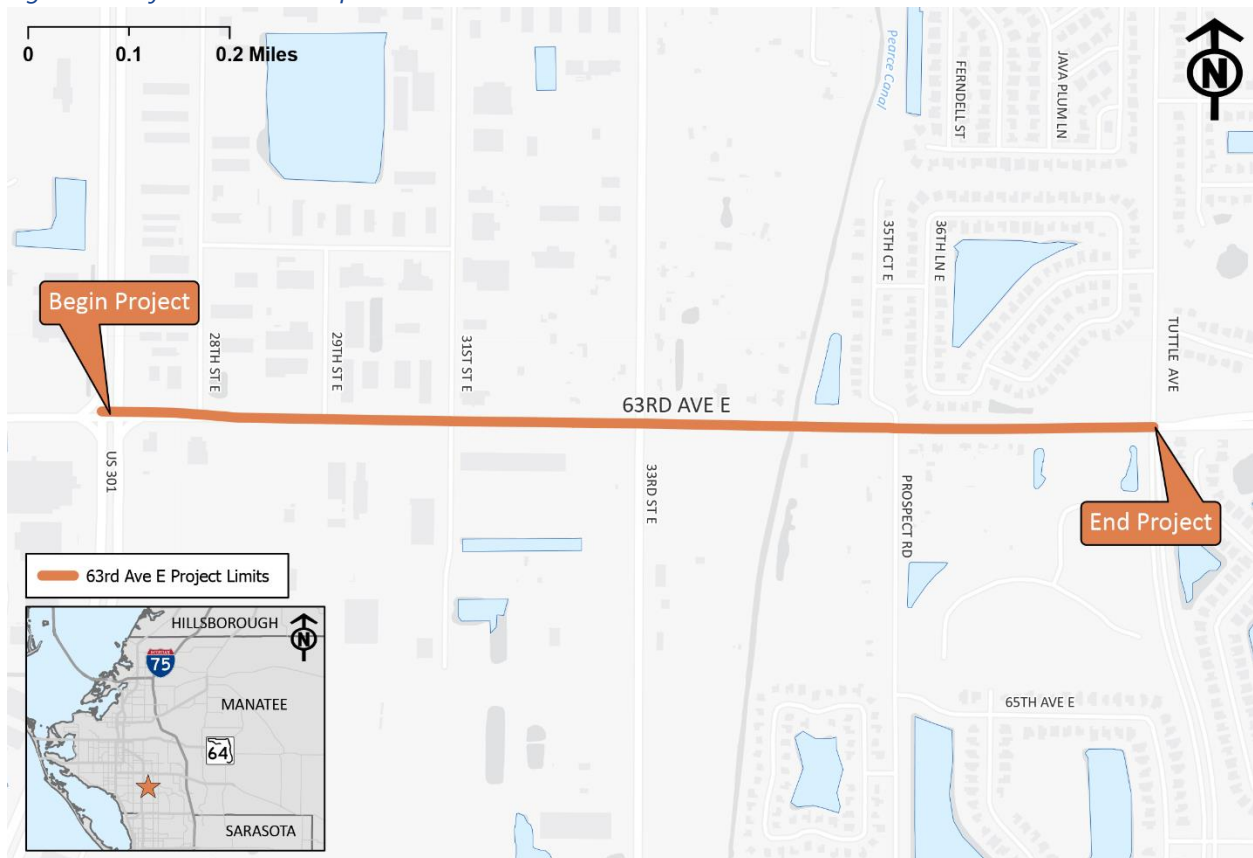
- Attachment A: Turning Movement Count Data
- Attachment B: Intersection Volume Development Worksheets
- Attachment C: FDOT Turns5 Worksheet
- Attachment D: Signal Timing Worksheets
- Attachment E: Synchro Outputs
- Attachment F: Intersection Control Evaluation

1.0 Introduction

Manatee County is conducting a Project Development & Corridor Study to evaluate improvements along a 1.1-mile segment of 63rd Avenue East from US 301 to Tuttle Avenue in Manatee County, Florida. The project study limits are shown in **Figure 1**.

As part of the Project Development and Corridor Study, this Design Traffic Memorandum (DTM) is provided to describe the existing corridor characteristics and existing traffic level of service (LOS) as well as to detail the methodologies employed to forecast future traffic demand, report the results of the traffic projections, and evaluate the anticipated performance of the 63rd Avenue corridor in the future. The DTM includes an analysis of the anticipated operational performance of the 63rd Avenue Corridor under future No Build (no improvements to the study corridor) and future Build scenarios for Opening Year 2025 and Design Year 2045.

Figure 1: Project Location Map



1.1 Memo Purpose

The purpose of this Design Traffic Memo is to document the existing traffic data, safety evaluation, future traffic analysis, and the recommended intersection control and geometry.

Based on anticipated deficiencies in the No Build scenario, potential corridor improvements are needed to improve safety and increase capacity along the corridor. In addition to the roadway segment capacity analysis, three major intersections along the corridor (US 301, 33rd Street, and Tuttle Avenue) were evaluated based on their crash history and operational performance. Crash history within the study limits was evaluated based on the most recent five years of available crash data from *Signal Four Analytics* (2016 through 2020). Operational analyses for the 63rd Avenue study corridor are conducted for the following scenarios:

- Existing Conditions (2021): 2021 traffic volumes on the existing roadway network.
- Future No Build (2025): Projected future traffic volumes on the existing roadway network. The No Build scenario includes planned improvements to the 63rd Avenue and Tuttle Avenue intersection, which are being implemented by Manatee County independent of this Study.
- Future Build (2025): Projected future traffic volumes on an improved roadway network. Improvements consist of widening 63rd Avenue to a 4-lane divided facility with two eastbound lanes and two westbound lanes.
- Future No Build (2045): Projected future traffic volumes on the existing roadway network. The No Build scenario includes planned improvements to the 63rd Avenue and Tuttle Avenue intersection, which are being implemented by Manatee County independent of this Study.
- Future Build (2045): Projected future traffic volumes on an improved roadway network. Improvements consist of widening 63rd Avenue to a 4-lane divided facility with two eastbound lanes and two westbound lanes.

2.0 Existing Traffic

2.1 Corridor Characteristics Roadway Geometry

Cross Section Elements

The majority of the 63rd Avenue study corridor features two vehicular travel lanes (one in each direction) without a median. Immediately east of US 301 for approximately 400 feet, the corridor features four vehicular travel lanes (two in each direction) and a raised median. The typical section does not feature paved shoulders except for a 500-foot segment on either side of the canal bridge between 33rd Street and Prospect Road, which is also the only portion of the study corridor with curb and gutter.

The typical sections of the 63rd Avenue segments beyond either terminus of the study segment include two lanes in each direction and a raised median. Part of the impetus for widening this segment of 63rd Avenue is to improve its viability as an alternative east-west corridor the State Road 70 (SR 70) to the north by creating a consistent 4-lane section along 63rd Avenue by eliminating the potential bottleneck between US 301 and Tuttle Avenue.

Horizontal and Vertical Alignment

The 63rd Avenue study corridor does not feature any significant horizontal or vertical curves within the study limits.

Intersection Configurations

Figure 2 illustrates the existing lane configurations for the one signalized and two all-way-stop-controlled (AWSC) intersections along the 63rd Avenue study corridor.

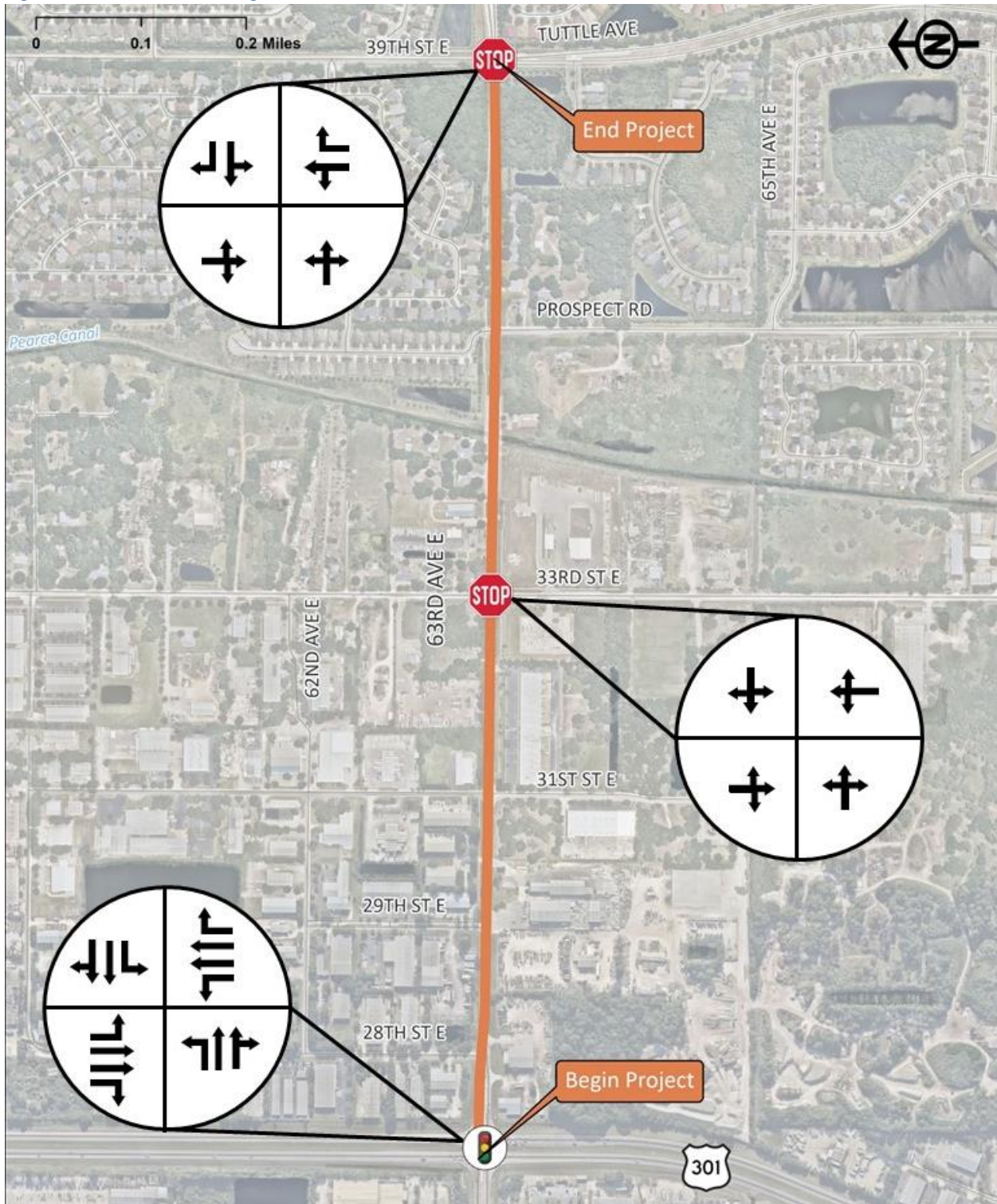
Speed Limit

The posted speed limit along the 63rd Avenue study corridor is 40 mph.

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

Figure 2: Intersection Configurations



2.2 Existing Traffic Analysis

Manatee County LOS Standards

The Manatee County adopted LOS standard for the 63rd Avenue study corridor is LOS D.

Segment Volumes

Annual Average Daily Traffic (AADT) volumes for the study corridor were gathered from Manatee County’s Online Traffic Counts Geographic Information System (GIS) application. A historical growth rate of 4.77%, based on historical AADT volumes, was used to grow 2019 AADT volumes to the existing year (2021) for existing conditions analyses. Year 2020 AADT volumes were less than the previous year due to the COVID-19 pandemic causing abnormal traffic patterns on roadways and were therefore disregarded from historical growth calculations. The AADT volumes for 63rd Avenue are summarized in **Table 1**.

Table 1: Existing AADT Volumes and 2021 Estimates

Count Station No.	Location	2019 AADT	2020 AADT	2021 AADT (Estimate)
MCTE 07-25	Bridge #134042	9,998	9,207	11,000

Turning Movement Counts

Historical turning movement counts (TMCs) were provided by Manatee County for the signalized intersection of US 301 and 63rd Avenue and the AWSC intersection of 63rd Avenue and Tuttle Avenue. TMC data is provided in **Attachment A**. The data collected was adjusted using seasonal factors from the FDOT 2019 Peak Season Category Factor Report for Manatee County. The application of seasonal factors is illustrated in the volume development worksheets provided in **Attachment B**. Turning movement volumes were estimated for the intersection of 63rd Avenue and 33rd Street using the Florida Department of Transportation (FDOT) *Turns5* worksheet with estimated existing year (2021) AADT volumes. The output of the FDOT *Turns5* worksheet is provided in **Attachment C**.

Segment Analysis

The 63rd Avenue study corridor is comprised of one study segment based on Table 5-1 in Manatee County’s latest Comprehensive Plan. Segment performance was analyzed using service capacities from the FDOT Quality/Level of Service (Q/LOS) Handbook (2020).

The LOS results of existing (2021) daily conditions segment analysis are shown in **Table 2**. The 63rd Avenue study corridor from US 301 to Tuttle Avenue operates within its adopted LOS service capacity.

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

Table 2: Existing (2021) Daily Segment LOS

Segment		AADT	Adopted Service Volume	LOS
West Limit	East Limit			
US 301	Tuttle Avenue	11,000	12,390	D

Intersection Analysis

The *Synchro 11* software package was utilized to evaluate existing conditions at the signalized and AWSC intersections on the 63rd Avenue corridor during the A.M. and P.M. peak hours. The latest traffic signal timings and phasing operations were provided by Manatee County (**Attachment D**) and used in the analysis. **Table 3** summarizes the overall intersection delay, LOS, and max v/c for the signalized and AWSC intersections on the 63rd Avenue study corridor. *Synchro* output reports are included in **Attachment E**.

Table 3: Existing (2021) Intersection LOS and Delay

Intersection	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
	LOS	Delay (s/veh)	Max v/c	LOS	Delay (s/veh)	Max v/c
US 301	E	77.1	1.05 (WBT/R)	F	116.7	1.21 (NBL)
33rd Street E	F	102.2	1.30 (WB)	F	103.2	1.35 (EB)
Tuttle Avenue	F	128.9	1.37 (EB)	F	171.7	1.72 (EB)

Under existing (2021) conditions, all study intersections operate with LOS E or LOS F during the A.M. peak hour and P.M. peak hour.

Several movements have peak hour volumes exceeding their available capacities (volume-to-capacity ratios exceed 1.00) at the intersection of US 301 and 63rd Avenue under existing (2021) conditions. During the AM peak hour, the southbound left-turn and the southbound through movements exceed their respective capacities. During the PM peak hour, the northbound left-turn, northbound through, and eastbound left-turn movements exceed their respective capacities.

The intersections with 33rd Street East and with Tuttle Avenue have previously been evaluated for signal warrants and both intersections met the warrants to be signalized. Improvements at the intersection of 63rd Avenue and Tuttle Avenue are planned and being designed independent of this Study, including signalization and widening of all approaches to two through lanes. Improvements at the intersection of 63rd Avenue and 33rd Street East will be designed based on the results of this Study.

3.0 Crash and Safety Analysis

Crash data for the years 2016 to 2020 were obtained from the University of Florida’s *Signal Four Analytics* web application within the 1.1-mile extents of the 63rd Avenue study corridor. Crash details including crash location, crash type, time of crash, lighting conditions, surface conditions, and other contributing factors were assessed to identify potential high-crash locations and trends.

A total of 249 crashes—including 1 fatal crash, 86 injury crashes, and 162 property damage only (PDO) crashes—were reported over the five-year period from January 1, 2016 to December 31, 2020. The annual crash frequency generally fell during the study period, beginning with 59 crashes in 2016 and falling to 49 crashes in 2019 and 48 crashes in 2020. **Figure 3** illustrates the crash locations along the corridor during the five-year analysis period.

3.1 Crash Severity

Crashes resulting in a fatality or injury accounted for nearly 35% of total crashes during the analysis period. **Table 4** summarizes the crashes that occurred in the study area by severity.

Table 4: Crash Severity Summary

Crash Severity	Year					Total
	2016	2017	2018	2019	2020	
Fatality	1	0	0	0	0	1
Injury	23	19	10	15	19	86
PDO	35	35	29	34	29	162
Total	59	54	39	49	48	249

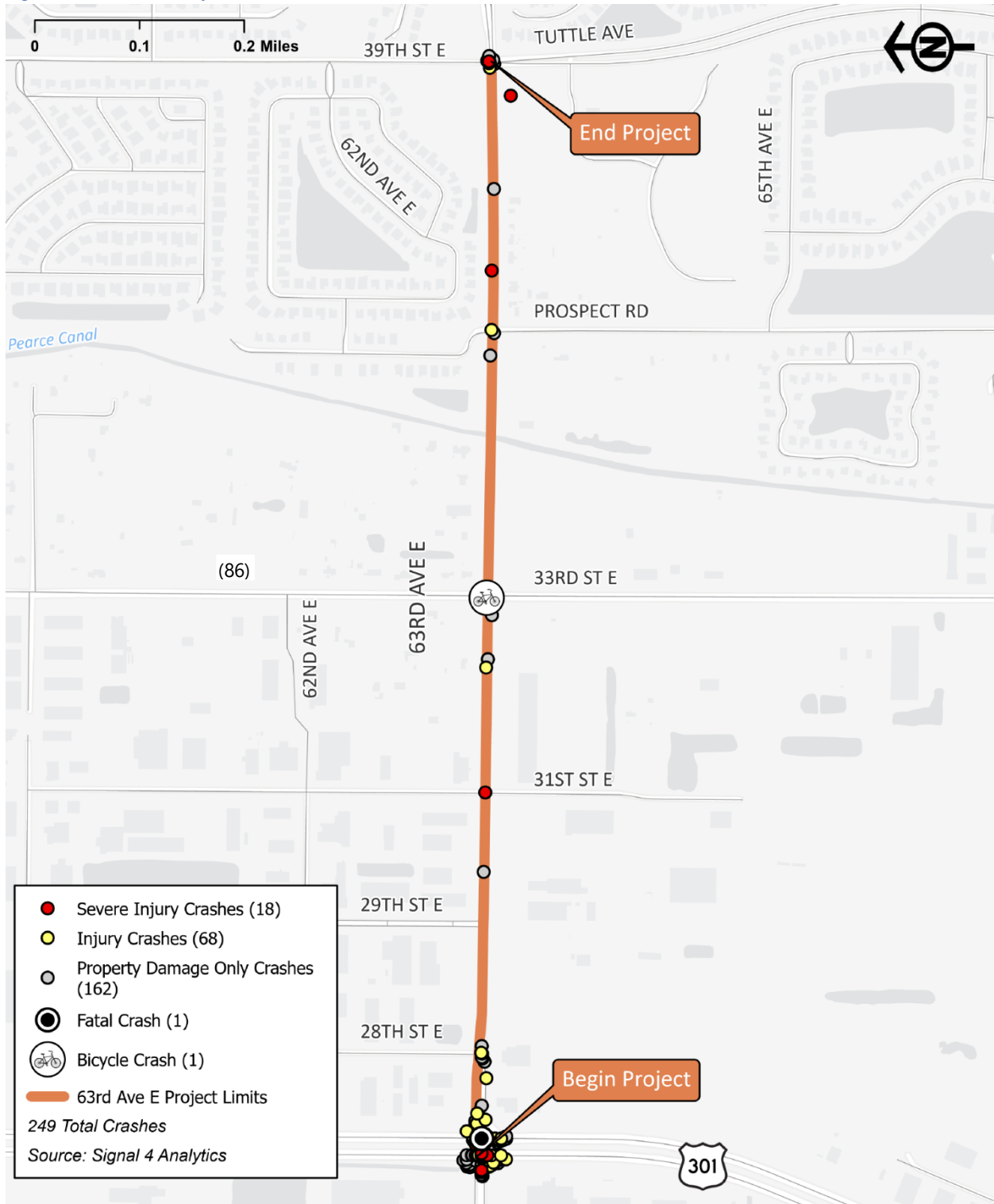
Though technically within the study limits, the fatal crash was on US 301, at the intersection with 63rd Avenue. The fatal crash occurred on February 3rd, 2016 at 2:49 AM, when a northbound vehicle ran a red light and struck the side of a southbound left-turning tractor trailer. The driver and passenger of the northbound vehicle expired due to injuries sustained in the crash. Lighting conditions were dark but lighted, the weather was clear, and the pavement was dry. It was determined after the crash that the driver of the northbound vehicle was under the influence of alcohol and drugs.

The bicycle crash that occurred on the 63rd Avenue study corridor was at the intersection of 63rd Avenue and 33rd Street East. The crash occurred on November 11th, 2019 at 2:42 PM, when a southbound bicyclist failed to stop for a stop sign and struck the side of a pick-up truck that had previously entered the intersection traveling in the westbound direction. The bicyclist was transported from the scene to Manatee Memorial Hospital. At the time of the crash conditions were clear and dry.

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

Figure 3: Crash History (2016–2020)



3.2 Crash Rate Analysis – Intersections

The crash data were also analyzed to determine prominent intersections along the corridor where crashes occurred during the five-year period. The criterion used to define a high crash intersection was an intersection experiencing more than 20 crashes over the analysis period. The limits of the area of influence for each intersection were extended 250 feet in each direction along 63rd Avenue to include crashes that were likely related to the intersection.

Table 5 summarizes the results of the crash rate analysis for signalized and AWSC intersections on 63rd Avenue. Intersection crash rates were calculated as the number of crashes per million entering vehicles (MEV). All three 63rd Avenue study intersections exhibited more than 20 crashes during the five-year analysis period.

Table 5: Intersection Crash Rates, 2016-2020

Intersection	Intersection Type		2016	2017	2018	2019	2020	Total
US 301	Signal	Total Crashes	47	33	21	24	31	156
		Crash Rate	2.759	1.899	1.150	1.384	1.838	1.796
33rd Street East	Unsignalized	Total Crashes	6	9	8	14	10	47
		Crash Rate	1.280	1.815	1.728	2.881	2.246	1.993
Tuttle Avenue	Unsignalized	Total Crashes	6	6	6	7	4	29
		Crash Rate	1.206	1.091	1.149	1.287	0.820	1.115

The highest quantity of crashes at any one intersection over the five-year period occurred at the intersection of 63rd Avenue and US 301. Approximately 63% (156 crashes) of all study area crashes occurred at this intersection over the five-year period. This intersection also had the second-highest crash rate among intersections in the study area at 1.796 crashes per MEV. The intersection of 63rd Avenue and 33rd Street East had the highest crash rate among intersections in the study area at 1.993 per MEV. None of the TWSC intersections on the corridor had greater than 10 crashes during the 5-year analysis period.

Crash histories at the high-crash intersections were further analyzed to determine any trends or prominent crash types that may warrant safety improvements. **Table 6** summarizes the most common crash types at each intersection.

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

Table 6: Intersection Crash Summary

63rd Avenue Intersection	Total Crashes	Crash Types			
		Type	Crashes	Percent of Intersection	Notes
US 301	156	Rear End	110	71%	NB/SB = 69%, EB/WB = 31%
		Left Turn	17	11%	EBL = 59%, SBL = 18%
		Other	29	18%	Sideswipe = 10% Off Road = 3%
33rd Street East	47	Angle	31	66%	SE = 35%, SW = 29% NW = 26%, NE = 10%
		Rear End	8	17%	6 EB, 1 WB, 1 SB
		Other	8	17%	2 Right Turn, 2 Left Turn
Tuttle Avenue	29	Angle	24	83%	SE/NW = 38%/33% SW/NE = 13%/13%
		Rear End	3	10%	2 EB, 1 NB
		Other	2	7%	1 Off Road, 1 Left Turn

At the intersection of US 301 and 63rd Avenue, rear end crashes were the most common crash type, accounting for nearly 71% of crashes at the intersection. Approximately 69% of rear end crashes occurred on the northbound and southbound US 301 approaches, while 31% occurred on the eastbound and westbound 63rd Avenue approaches. The second most common crash type was left turn crashes, which accounted for 11% of crashes at the intersection. There were more eastbound and westbound left-turn crashes (12) than northbound and southbound left-turn crashes (5) due to the permissive left-turn phases afforded to eastbound and westbound traffic; northbound and southbound left-turn phases are protected-only.

At the intersection of 33rd Street East and 63rd Avenue, angle crashes were the most common crash type, accounting for 66% of total crashes at the intersection. Approximately 35% of these crashes occurred between the southbound and eastbound movements and 29% occurred between the southbound and westbound movements. Signalization of the intersection can be expected to reduce the occurrence of angle crashes by approximately 67% according to the Federal Highway Administration Crash Modification Factor (CMF) Clearinghouse.

The second most common crash type at the intersection was rear end crashes, which accounted for 17% of crashes at the intersection. Six of the rear end crashes occurred on the eastbound 63rd Avenue approach.

At the intersection of Tuttle Avenue and 63rd Avenue, angle crashes were the most common crash type at nearly 83% of total crashes for the intersection. Of these crashes, 38% occurred between the southbound and eastbound movements and 33% occurred between northbound and westbound movements. Signalization of the intersection can be expected to reduce the

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

occurrence of angle crashes by approximately 67% according to the Federal Highway Administration CMF Clearinghouse.

The second most common crash type at the intersection was rear end crashes, which accounted for three of the crashes at the intersection.

3.3 Crash Conditions

Crash conditions were also analyzed. Crashes that occurred during dark conditions (including dawn and dusk conditions) accounted for 22.1% of crashes, crashes that occurred on wet surface conditions accounted for 12.9% of crashes, and alcohol was involved in 2.4% of crashes. **Table 7** summarizes these crash conditions in the study area.

Table 7: Crash Conditions Summary

Year	Total Crashes	Dark	Wet	Alcohol
2016	59	17	7	2
2017	54	11	3	4
2018	39	8	3	0
2019	49	6	8	0
2020	48	13	11	0
TOTAL	249	55	32	6
Percent of Total		22.1%	12.9%	2.4%

3.4 Crash Types

Rear end crashes were the most common crash type on 63rd Avenue, accounting for 125 crashes (50.2%) during the analysis period. Angle crashes were the second most common crash type, with 61 crashes (24.5%). Of the crashes resulting in fatalities or injuries, 52% were rear end crashes and 24% were angle crashes. **Table 8** details the crash data for each year by crash type.

Table 8: Crash Summary by Crash Type

Crash Type	Year					Total	Percentage
	2016	2017	2018	2019	2020		
Rear End	34	31	18	17	25	125	50.2%
Angle	10	11	12	20	8	61	24.5%
Left Turn	5	5	2	6	5	23	9.2%
Sideswipe	5	3	4	2	4	18	7.2%
Off Road	2	0	2	2	2	8	3.2%
All Other	3	4	1	2	4	14	5.6%

4.0 Traffic Forecasting Methodology

This section describes the methodologies employed to forecast future traffic demand on the 63rd Avenue study corridor.

Consistent with the FDOT *2019 Project Forecasting Handbook*, several tools were utilized to forecast future traffic projections. Historical trends, Manatee County population projections, and travel demand modeling were each reviewed to determine the most appropriate growth rates for forecasting future traffic projections.

4.1 Historical Growth

Historical AADT volumes on 63rd Avenue were utilized to calculate a historical growth rate. Manatee County collects traffic data at one location along the study corridor. Daily traffic volumes were collected each year from 2010 to 2020. Historical AADT volumes for a five-year period (2015 – 2019) and a ten-year period (2010–2019) were input into the FDOT *Trend* worksheet to calculate trend growth rates through the Design Year (2045). Traffic Data from the year 2020 was not used due to COVID-19 causing abnormal traffic patterns throughout the year.

The ten-year historical traffic trend yielded a higher R-squared value than the five-year historical traffic trend, indicating that the ten-year traffic trend analysis annual growth rate estimate more closely fits the data; therefore, the ten-year historical traffic annual growth rate of 4.77% was assumed on 63rd Avenue.

4.2 Population Projections

The University of Florida’s Bureau of Economic and Business Research (BEBR) analyzes the population growth in every county throughout Florida. Annually, BEBR publishes a range of projected county populations for each fifth year from 2025 to 2045. The growth rates implied by the BEBR projections for Manatee County through the Design Year (2045) were considered in determining growth rates for the study corridor.

Table 9 depicts the low, medium, and high population predictions for Manatee County, as well as the associated annual growth rates. For the purposes of this DTM, the BEBR low and high population growth rates are treated as bounds within which the selected growth rate should fall.

Table 9: Population Projections - Manatee County

2020	Projection	Year					Annual Percentages
		2025	2030	2035	2040	2045	
398,503	Low	401,400	419,000	431,900	442,600	449,600	0.46%
	Medium	437,600	470,000	498,000	522,600	522,600	1.21%
	High	470,200	520,600	566,100	611,400	611,400	1.92%

4.3 Model Growth Rates

The most recently adopted version of the District 1 Regional Planning Model (D1RPM) was utilized to determine model growth rates based on the anticipated future roadway network and planned developments through the Design Year (2045). Socioeconomic data provided by Manatee County was input into the future year (2045) ZDATA to reflect planned development within the county, and both a No Build (2-lane) and Build (4-lane) scenario were modeled for the 63rd Avenue study corridor. Model AADT volumes for future year 2045 were compared to those of the model base year (2015) to calculate the implied growth rate of 63rd Avenue for each scenario.

The average annual growth rate based on the No Build model scenario was 0.40% and the average annual growth rate based on the Build model scenario was 1.36%. The difference in growth rates indicates unmet demand on the 63rd Avenue study corridor when its capacity is constrained in the Design Year (2045) to the existing 2-lane capacity.

Traffic Re-Routed from SR 70

As SR 70 continues to serve the region and east-west traffic volumes continue to grow, SR 70 is expected to become more and more congested, causing drivers to search for alternate routes. Since 63rd Avenue is the nearest parallel facility to the south, it is anticipated that some of the existing and future traffic will re-route from SR 70 to 63rd Avenue. It is assumed that this re-routing traffic accounts for much of the difference in the model growth rates of the No Build scenario and the Build scenario.

4.4 Applied Growth Rate

Upon reviewing historical trends, Manatee County population projections, and the travel demand model with and without the widening of the 63rd Avenue study corridor, the model growth rate of 1.36% was selected for the forecasting of future traffic demand. The 1.36% growth rate is within the bounds of the BEBR low and high population growth rates.

5.0 Future Traffic Projections

Future traffic projections were developed as detailed in the following sections. The intersection of 63rd Avenue and Tuttle Avenue is assumed as a traffic signal under No Build conditions since it is being designed and implemented independent of this Study.

5.1 Forecasted AADT Volumes

Existing (2021) AADT volumes were grown from 2019 AADT volumes collected by Manatee County Traffic Engineering. 2021 AADT volumes were then used to forecast 2025 and 2045 AADT volume projections.

Table 10 summarizes the 2021 AADT volumes as well as the Opening Year 2025 and Design Year 2045 forecasted AADT volumes for the 63rd Avenue study corridor. These volume projections are rounded to the nearest five hundred vehicles per day.

Table 10: AADT Volume Summary

Limits		2021 AADT	2025 AADT	2045 AADT
West	East			
D1RPM Build Growth Rate: 1.36%				
US 301	Tuttle Avenue	11,000	11,500	15,000

5.2 Traffic Factors

The Standard K factor was applied to the projected AADT to calculate design hour volumes (DHV) per the FDOT *2019 Project Traffic Forecasting Handbook*. The Standard K for urban minor arterials, 9.0, will be used for the forecasting of the DHVs.

For comparison, the existing K factor was determined by calculating the proportion of daily traffic that occurs during the peak hour of the day. Using continuous 24-hour counts, existing K factors for the 63rd Avenue study corridor were calculated and are summarized in **Table 11**. The existing K factors were found to be higher than the 9.0 Standard K, indicating that daily traffic volumes on 63rd Avenue are more concentrated during the PM peak hour than might typically be expected on an urban minor arterial. In the future design hour analysis, the Standard K is applied, based on the assumption that traffic patterns will shift slightly to make the peak hour more consistent with other urban minor arterials.

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

Table 11: Calculated K factors

Intersecting Street	EB Approach	WB Approach	Combined Approaches
US 301	10.4%	9.2%	9.9%
33rd Street East	N/A	N/A	N/A
Tuttle Avenue	10.4%	9.8%	10.2%

N/A: 24-hour traffic counts were not available

The D-factor applied to future volumes is representative of the peak directional distribution of traffic during the peak hour on a given roadway segment. D-factors were calculated for the 63rd Avenue study corridor using the peak hour TMCs and are summarized in **Table 12**.

Table 12: Calculated D-Factors

Intersecting Street	Peak Direction	Calculated D-Factor
US 301	EB	0.54
33rd Street East	N/A	N/A
Tuttle Avenue	EB	0.55

The percentage of trucks using a corridor during the peak hour is the design hour truck (DHT) factor and the percentage of trucks using a corridor during a 24-hour period is the T-factor. DHT factors and T-factors were calculated from the TMC data provided by Manatee County Traffic Engineering. The calculated DHT factors and T-factors for 63rd Avenue at each signalized intersection are summarized in **Table 13**.

Table 13: Calculated DHT and T-Factor

Intersecting Street	DHT	T-Factor
US 301	4.1%	8.2%
33rd Street E	N/A	N/A
Tuttle Avenue	1.2%	2.3%

5.3 Design Hour Volume

For future year forecasts, DHVs are calculated based on the forecasted AADT volumes multiplied by the Standard K factor (0.09). DHVs for the Opening Year 2025 and Design Year 2045 conditions are summarized in **Table 14**. Volumes are rounded to the nearest 50 vehicles per hour.

Table 14: DHV Summary

Limits		2021 DHV	2025 DHV	2045 DHV
West	East			
D1RPM Build Growth Rate: 1.36%				
US 301	Tuttle Avenue	1,000	1,050	1,350

5.4 Design Turning Movement Volumes

The turning movement counts provided by Manatee County Traffic Engineering were grown to Existing (2021) year turning movement volumes using seasonal factors and the average historical growth rate of 4.77%. The Opening Year (2025) and Design Year (2045) turning movement volumes were then forecasted using the growth rate of 1.36%. Forecasted turning movement volumes are provided in **Attachment C**.

6.0 Future Traffic Analysis

The future traffic analyses were performed initially with the existing roadway facility (No Build condition) as a baseline for comparison of corridor improvement alternatives and to illustrate the impact of the anticipated background traffic growth. Corridor improvement alternatives to address deficiencies were then evaluated. In addition to the 63rd Avenue segment capacity, signalized intersections and AWSC intersections along the corridor were evaluated for operational performance, and improvements are recommended for the intersections where necessary. The intersection of 63rd Avenue and Tuttle Avenue was evaluated as a signalized intersection since the design and implementation are being completed independent of this study.

The FDOT Generalized Level of Service Tables were used to evaluate the capacity of the roadway and TrafficWare’s *Synchro 11* software was used to evaluate the intersection operations of projected Opening Year 2025 and Design Year 2045 scenarios. Operational analyses were performed for a future No Build scenario and a future 4-lane Build scenario.

6.1 Future No Build

For the future No Build scenario, all intersection geometry and timing characteristics were considered consistent with existing conditions, with the exception of the planned signalization of the intersection 63rd Avenue and Tuttle Avenue. The results of the segment analysis for the Opening Year and Design Year No Build scenario are shown in **Table 15**. The 63rd Avenue study corridor is expected to operate with LOS D in the Opening Year (2025) and with LOS F in the Design Year (2045) if no capacity improvements are implemented. The service volume threshold is based on the daily LOS D service volume from the FDOT Q/LOS Handbook of 12,744 vehicles per day for an urban 2-lane, interrupted flow, non-state facility without turn lanes.

Table 15: No Build Scenario Segment LOS

Segment		Opening Year, 2025		Design Year, 2045	
West Limit	East Limit	AADT	LOS	AADT	LOS
US 301	Tuttle Avenue	11,500	D	15,000	F

The results of the Synchro intersection analyses for the Opening Year and Design Year No Build scenario are shown in **Table 16**. Detailed Synchro reports for each intersection are included in **Attachment E**.

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63rd Ave East – US-301 to Tuttle Ave

Table 16: No Build Scenario Intersection LOS and Delay

Intersection	Opening Year 2025 Design Hour			Design Year 2045 Design Hour		
	LOS	Delay (s)	Max v/c	LOS	Delay (s)	Max v/x
US 301	F	127.6	1.28 (WBL)	F	188.7	1.68 (EBL)
33rd Street East	F	133.8	1.47 (EB)	F	277.4	2.08 (EB)
Tuttle Avenue	B	17.2	0.67 (WBT/R)	D	35.5	0.88 (NBT)

The intersection of US 301 and 63rd Avenue is anticipated to perform at LOS F during the Design Hour in the Opening Year 2025 and Design Year 2045 No Build scenarios. The eastbound left-turn, westbound through, and all northbound movements are expected to exceed their respective capacities in the Opening Year 2025. The eastbound left-turn, westbound through, and all northbound and southbound movements are expected to exceed their respective capacities in the Design Year 2045.

The intersection of 63rd Avenue and 33rd Street East is anticipated to perform at LOS F during the Design Hour in the Opening Year 2025 and Design Year 2045 No Build scenarios. The eastbound, westbound, and southbound approaches are expected to exceed their respective capacities in both Opening Year 2025 and Design Year 2045.

6.2 Intersection Control Evaluation

An intersection control evaluation (ICE) was undertaken at the intersection of 63rd Avenue and 33rd Street East. The ICE process considers the safety and delay benefits of various alternative intersection control types for comparison with the existing conditions on the study corridor and provides a mechanism for evaluating the associated benefit-to-cost ratio. The ICE worksheets available from FDOT were utilized to analyze the viability and potential benefit of signalization and intersection geometry improvements at the 63rd Avenue and 33rd Street East intersection.

Three alternatives were compared within the ICE framework: the existing AWSC as the no build scenario and base comparison case, a roundabout, and a signalized intersection with two through lanes in each direction and mainline left-turn lanes.

A comparison of the safety and delay benefit-to-cost (B/C) ratios for each alternative is summarized in **Table 17**. Within the ICE framework monetary costs are assigned to aspects such as construction and design, right-of-way acquisition, vehicle delay, and crashes. Benefits are calculated in terms of reduced costs of delay and crashes relative to the base case. Costs are calculated in a similar manner in terms of the difference in design, construction, and right-of-way costs of the alternative as compared to the base case. The B/C ratio is then calculated by

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

comparing the monetary benefits of delay reduction and crash reduction to the cost of construction and right-of-way acquisition of implementing that alternative.

Based upon the Safety Performance Intersection Control Evaluation (SPICE) analysis, the signalized intersection alternative is not anticipated to have significant safety benefits at the intersection; however, this in part could be due to limitations in the SPICE worksheet, which cannot consider historical crashes at an AWSC intersection when the forecasted AADT volumes are outside of the range of the Safety Performance Function associated with the AWSC. Signalizing an AWSC intersection is expected to reduce the incidence of angle crashes by approximately 33%, so the safety B/C is likely underestimated in **Table 17**.

Table 17: ICE Benefit-Cost Summary

Alternative	Delay B/C	Safety B/C	Total B/C
No Build (AWSC)	Base	Base	Base
Build (Roundabout)	76.15	1.51	77.67
Build (Signal)	152.28	-7.39	144.89

Both the Build scenarios would be expected to have a high B/C ratio due to significant reduction in delay at the intersection of 63rd Avenue and 33rd Street East. However, the roundabout alternative was removed from consideration due to the industrial nature of the land uses along 63rd Avenue and the associated heavy truck traffic on the corridor. The ICE forms and supporting documentation are provided in **Attachment F**.

6.3 Build Scenario

For the 4-lane Build scenario, intersection geometries along the study corridor were modified to reflect the widening of 63rd Avenue to include two through lanes in both the eastbound and westbound directions for all intersections and dedicated left-turn lanes for the mainline approaches. The results of the segment analysis for the 63rd Avenue study corridor segments in the future 4-lane build scenario are shown in **Table 18**.

Table 18: Build Scenario Segment LOS

Segment		Opening Year, 2025		Design Year, 2045	
West Limit	East Limit	AADT	LOS	AADT	LOS
US 301	Tuttle Avenue	11,500	C	15,000	C

The results of the Synchro intersection analysis for the 63rd Avenue study corridor intersections in the 4-lane Build scenario are shown in **Table 19**.

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63rd Ave East – US-301 to Tuttle Ave

Table 19: Build Operational Analysis Summary

Intersection	Opening Year 2025 Design Hour			Design Year 2045 Design Hour		
	LOS	Delay (s)	Max v/c	LOS	Delay (s)	Max v/c
US 301	F	127.6	1.28 (EBL)	F	188.7	1.68 (EBL)
33rd Street East	A	9.1	0.59 (SB)	B	11.2	0.68 (SB)
Tuttle Avenue	B	16.3	0.67 (WBT/R)	B	18.9	0.73 (WBT/R)

Operational analyses of the Build scenario indicated that the intersections of 63rd Avenue with 33rd Street East and Tuttle Avenue are expected to operate at acceptable LOS with no movements exceeding capacities through Design Year 2045.

No changes were made to the intersection of US 301 and 63rd Avenue since it already has two lanes per direction along 63rd Avenue. Significant capacity improvements along the US 301 mainline would be required to improve the operations to LOS D or better through Design Year 2045. Since US 301 is an FDOT roadway, these improvements are considered outside the scope of this Manatee County study. The intersection geometry and signal timings at the intersection of US 301 and 63rd Avenue are assumed to be consistent with existing conditions throughout this analysis.

7.0 Recommendations

Due to congestion on US 301, the intersection of US 301 and 63rd Avenue is anticipated to operate at LOS F under Opening Year 2025 and Design Year 2045 conditions, even if 63rd Avenue is widened. Addressing the intersection congestion would require FDOT to design and construct major capacity improvements to US 301, which are beyond the scope of this Manatee County study. The 63rd Avenue westbound turn lanes should be extended as far as possible in conjunction with the widening of the corridor to accommodate Design Year 2045 queues.

East of US 301, network consistency and potential future congestion justify widening the corridor to a 4-lane divided facility. The corridor is anticipated to operate acceptably under this Build scenario, which includes converting the 33rd Street intersection to signal control with mainline left-turn lanes in both directions. The recommended length for the eastbound left-turn lane is 230 feet (155 feet for deceleration plus 75 feet for the 95th percentile queue length). The recommended length for the westbound left-turn lane is 180 feet (155 feet for deceleration plus 25 feet for the 95th percentile queue length). Note that the signalization of the intersection of 63rd Avenue and Tuttle Avenue, as well as the widening of 63rd Avenue to a 4-lane roadway, are expected to change travel patterns along the corridor. As such, the recommended turn lane lengths may need updated after an assessment of the buildout conditions along the corridor.

Signalization of the intersection with Tuttle Avenue, which is scheduled to begin Design in 2021, will result in acceptable operations at that intersection through Design Year 2045. Conversion to signalized operations is expected to reduce congestion along 63rd Avenue.

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63rd Ave East – US-301 to Tuttle Ave

Attachments

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

Attachment A: Turning Movement Count Data



National Data & Surveying Services



N/S Street: **US 301**

Speed: **55 MPH**

Site Code: **19-3067-002**

Date: **01/30/2019**

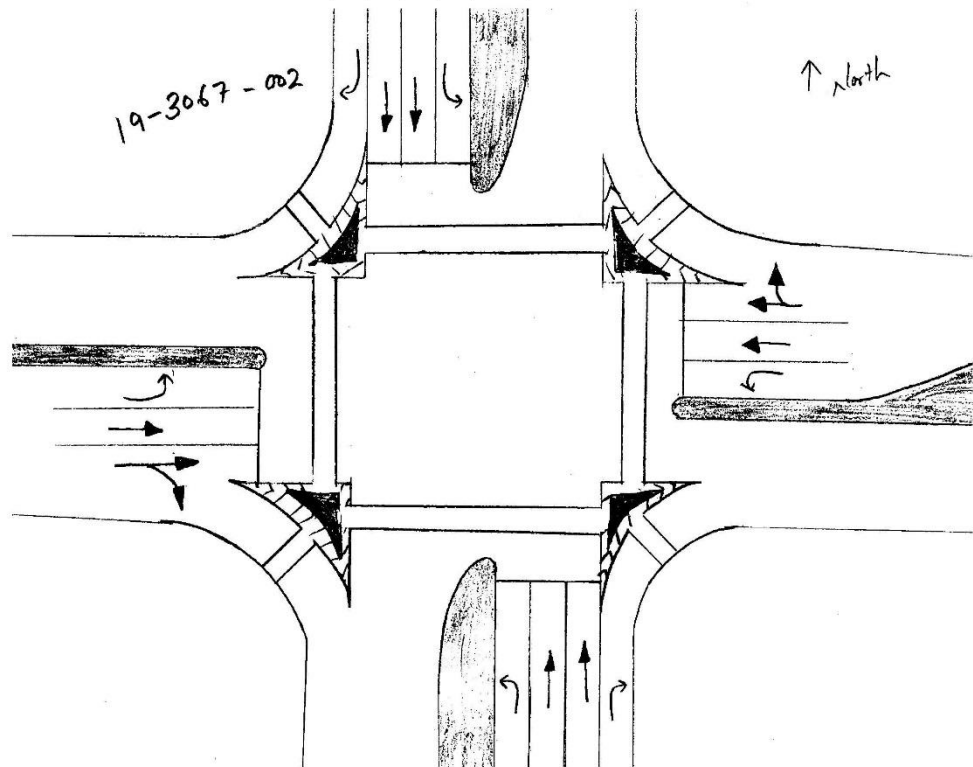
Weather: **Sunny**

City: **Bradenton**

County: **Manatee**

Count Times: **16:00-18:00**

Control: **Signalized**



SIGNAL TIMING

PHASES	1	2	3
SL/ST	0:00:18	0:00:16	0:00:14
ST/NT	0:00:50	0:00:53	0:00:56
NL/NT	0:00:37	0:00:35	0:00:36
EL/WL	0:00:17	0:00:22	0:00:15
EL/ET	0:00:26	0:00:20	0:00:31
ET/WT	0:00:30	0:00:33	0:00:29

E/W Street: **63rd Ave E**

Speed: **40 MPH**

Manatee County Public Works

63rd Ave E @ Tuttle Ave

Minus WB & NB Right Turns

Study Date : 01/10/17

Signal Warrants - Summary

Major Street Approaches

Eastbound: 63rd Ave E

Number of Lanes: 1
85% Speed < 40 MPH.
Total Approach Volume: 4,241

Westbound: 63rd Ave E

Number of Lanes: 1
85% Speed < 40 MPH.
Total Approach Volume: 3,679

Minor Street Approaches

Northbound: Tuttle Ave

Number of Lanes: 1
Total Approach Volume: 1,678

Southbound: Tuttle Ave

Number of Lanes: 1
Total Approach Volume: 2,495

Warrant Summary (Urban values apply.)

Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume	Not Satisfied
Required volumes reached for 7 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Not Satisfied
Required volumes reached for 1 hours, 8 are needed	
Warrant 1C - Combination of Warrants	Not Satisfied
Required 1A volumes reached for 10 hours, 8 are needed	
Required 1B volumes reached for 4 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Satisfied
Number of hours (4) volumes exceed minimum >= minimum required (4).	
Warrant 3 - Peak Hour	Not Evaluated
Warrant 3A - Peak Hour Delay	Not Evaluated
Warrant 3B - Peak Hour Volumes	Not Evaluated
Warrant 4 - Pedestrian Volumes	Not Evaluated
Warrant 5 - School Crossing	Not Evaluated
Warrant 6 - Coordinated Signal System	Not Evaluated
Warrant 7 - Crash Experience	Satisfied
Number of accidents (6) is more than minimum (5) and volume requirements are met.	
Warrant 8 - Roadway Network	Not Evaluated
Warrant 9 - Intersection Near a Grade Crossing	Not Evaluated

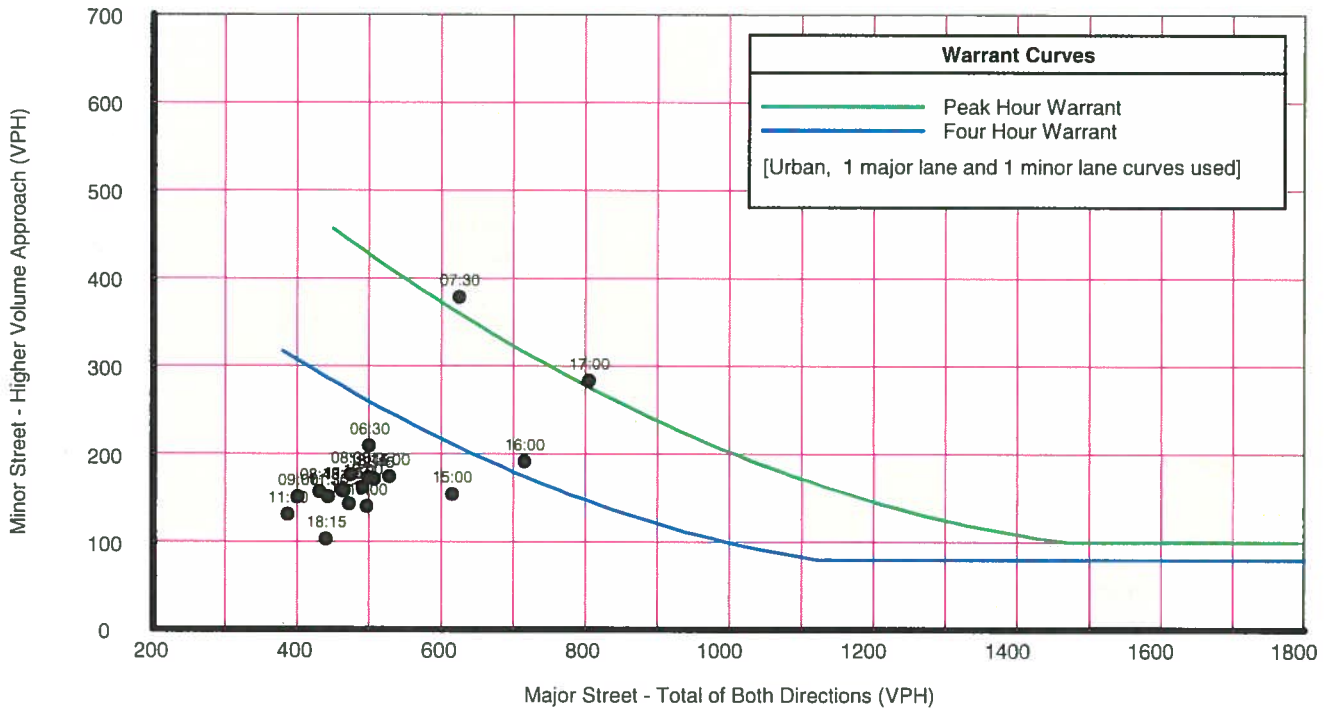
Manatee County Public Works

63rd Ave E @ Tuttle Ave

Minus WB & NB Right Turns

Signal Warrants - Summary

Study Date : 01/10/17



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

War 1B-Interruption of Traffic

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol Dir	Maj 500	Min 150	Hour Begin	Major Total	Minor Vol Dir	Maj 750	Min 75	Hour Begin	Major Total	Minor Vol Dir	1A Met	1B Met
17:00	805	283 NB	Yes	Yes	16:30	757	263 NB	Yes	Yes	16:45	784	278 NB	-	Yes
16:00	716	191 NB	Yes	Yes	16:15	743	219 NB	No	Yes	16:30	757	263 NB	Yes	-
07:30	625	378 SB	Yes	Yes	16:00	716	191 NB	No	Yes	15:45	704	169 NB	-	Yes
15:00	615	154 NB	Yes	Yes	15:00	615	154 NB	No	Yes	15:30	701	169 NB	Yes	-
14:00	528	174 SB	Yes	Yes	15:30	701	169 NB	No	Yes	17:30	684	205 NB	Yes	-
12:15	507	171 SB	Yes	Yes	17:30	684	205 NB	No	Yes	07:00	639	327 SB	-	Yes
06:30	500	209 SB	Yes	Yes	07:15	670	382 SB	No	Yes	07:30	625	378 SB	Yes	-
13:45	499	173 SB	No	Yes	15:15	643	155 NB	No	Yes	14:45	602	153 NB	-	Yes
18:00	497	140 NB	No	No	07:00	639	327 SB	No	Yes	14:30	584	167 SB	Yes	No
12:00	491	162 SB	No	Yes	07:30	625	378 SB	No	Yes	12:30	500	161 SB	Yes	No
08:30	474	176 SB	No	Yes	15:00	615	154 NB	No	Yes	06:30	500	209 SB	Yes	No
13:15	472	143 SB	No	No	07:45	607	324 SB	No	Yes	08:30	474	176 SB	Yes	No
11:45	465	158 SB	No	Yes	14:45	602	153 NB	No	Yes	13:30	462	158 SB	Yes	No
13:30	462	158 SB	No	Yes	17:45	586	176 NB	No	Yes	11:30	443	151 SB	Yes	No
11:30	443	151 SB	No	Yes	14:30	584	167 SB	No	Yes	17:45	586	176 NB	-	No
18:15	440	103 SB	No	No	06:45	584	266 SB	No	Yes	06:45	584	266 SB	-	No
08:45	431	157 SB	No	Yes	08:00	567	267 SB	No	Yes	08:00	567	267 SB	-	No
09:00	401	151 SB	No	Yes	14:15	562	185 SB	No	Yes	14:15	562	185 SB	-	No
11:00	387	131 SB	No	No	14:00	528	174 SB	No	Yes	14:00	528	174 SB	-	No
11:15	386	142 SB	No	No	08:15	517	213 SB	No	Yes	08:15	517	213 SB	-	No
06:15	384	159 SB	No	Yes	12:15	507	171 SB	No	Yes	12:15	507	171 SB	-	No
18:30	377	105 SB	No	No	12:30	500	161 SB	No	Yes	13:45	499	173 SB	-	No
10:45	376	139 SB	No	No	06:30	500	209 SB	No	Yes	18:00	497	140 NB	-	No
09:15	372	140 SB	No	No	13:45	499	173 SB	No	Yes	12:00	491	162 SB	-	No

Manatee County Government Traffic Design Division

24 Hour Volume
63rd Ave E @ Tuttle Ave
Miovision Data
Minus Right Turns WB & NB

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

Start Time	15-Sep-16 Thu	SB	NB	WB	EB	Total
12:00 AM		2	3	3	7	15
12:15		3	1	1	1	6
12:30		0	0	5	1	6
12:45		0	3	4	2	9
01:00		0	0	1	6	7
01:15		2	0	4	1	7
01:30		0	1	3	3	7
01:45		0	1	0	1	2
02:00		0	2	1	5	8
02:15		2	0	2	1	5
02:30		1	1	0	1	3
02:45		1	0	1	2	4
03:00		0	0	0	3	3
03:15		1	1	0	2	4
03:30		1	0	0	0	1
03:45		1	0	5	1	7
04:00		0	2	2	1	5
04:15		1	1	2	3	7
04:30		6	1	2	6	15
04:45		2	1	7	3	13
05:00		3	1	4	4	12
05:15		2	0	8	8	18
05:30		10	4	20	18	52
05:45		11	3	32	17	63
06:00		18	5	19	23	65
06:15		25	8	27	35	95
06:30		47	10	32	46	135
06:45		46	12	64	49	171
07:00		41	14	69	62	186
07:15		75	22	84	94	275
07:30		104	26	69	93	292
07:45		107	19	80	88	294
08:00		96	15	77	85	273
08:15		71	31	60	73	235
08:30		50	25	59	85	219
08:45		50	19	62	66	197
09:00		42	23	53	59	177
09:15		34	18	45	45	142
09:30		31	14	39	62	146
09:45		44	13	46	52	155
10:00		31	20	30	53	134
10:15		32	21	40	48	141
10:30		31	14	34	45	124
10:45		39	28	44	50	161
11:00		23	15	45	60	143
11:15		38	19	41	35	133
11:30		39	9	38	63	149
11:45		31	17	37	68	153
Total		1194	443	1301	1536	4474
Percent		26.7%	9.9%	29.1%	34.3%	
Peak		07:15	08:15	07:15	07:15	07:15
Vol.		382	98	310	360	1134
P.H.F.		0.893	0.790	0.923	0.957	0.964

Manatee County Government Traffic Design Division

24 Hour Volume
63rd Ave E @ Tuttle Ave
Miovision Data
Minus Right Turns WB & NB

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

Start Time	15-Sep-16 Thu	SB	NB	WB	EB	Total
12:00 PM		34	24	42	62	162
12:15		47	29	60	73	209
12:30		46	21	57	66	190
12:45		35	22	67	64	188
01:00		43	17	58	62	180
01:15		37	26	59	67	189
01:30		34	11	43	67	155
01:45		41	23	61	63	188
02:00		31	22	49	63	165
02:15		52	35	59	57	203
02:30		49	23	67	80	219
02:45		42	34	76	77	229
03:00		42	40	58	88	228
03:15		34	32	64	74	204
03:30		28	47	57	108	240
03:45		34	35	74	92	235
04:00		41	41	72	102	256
04:15		37	46	89	107	279
04:30		42	47	64	104	257
04:45		46	57	79	99	281
05:00		49	69	87	114	319
05:15		34	90	90	120	334
05:30		68	62	95	100	325
05:45		41	62	90	109	302
06:00		40	48	74	78	240
06:15		24	33	71	67	195
06:30		30	33	52	45	160
06:45		24	26	64	46	160
07:00		25	11	47	48	131
07:15		26	23	37	38	124
07:30		21	17	29	54	121
07:45		14	18	31	33	96
08:00		14	17	28	46	105
08:15		12	10	43	38	103
08:30		15	11	34	20	80
08:45		11	13	36	22	82
09:00		13	4	32	28	77
09:15		5	8	31	23	67
09:30		10	8	25	15	58
09:45		6	5	26	21	58
10:00		4	8	16	7	35
10:15		1	5	26	10	42
10:30		8	7	5	9	29
10:45		5	0	13	7	25
11:00		3	4	14	9	30
11:15		0	4	13	11	28
11:30		3	3	6	8	20
11:45		0	4	8	4	16
Total		1301	1235	2378	2705	7619
Percent		17.1%	16.2%	31.2%	35.5%	
Peak	-	16:45	17:00	17:00	17:00	17:00
Vol.	-	197	283	362	443	1280
P.H.F.		0.724	0.786	0.953	0.923	0.958
Grand Total		2495	1678	3679	4241	12093
Percent		20.6%	13.9%	30.4%	35.1%	

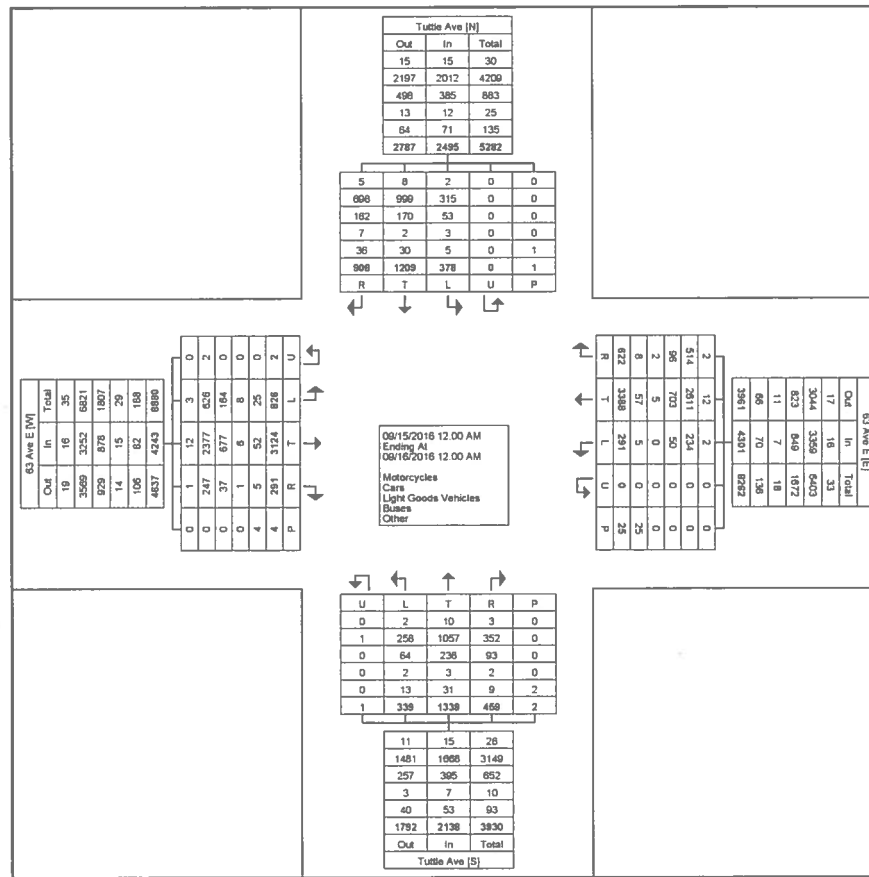
Manatee County Government
 2101 47th Terrace E
 Bradenton, Florida, United States 34203
 941-749-3500

Count Name: 63rd Ave E @ Tuttle Ave
 Site Code:
 Start Date: 09/15/2016
 Page No: 1

Turning Movement Data

Start Time	Tuttle Ave Southbound						63 Ave E Westbound						Tuttle Ave Northbound						63 Ave E Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App Total	Right	Thru	Left	U-Turn	Peds	App Total	Right	Thru	Left	U-Turn	Peds	App Total	Right	Thru	Left	U-Turn	Peds	App Total	
12:00 AM	1	1	0	0	0	2	0	2	1	0	0	3	0	3	0	0	0	3	0	3	4	0	0	7	15
12:15 AM	3	0	0	0	0	3	0	1	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	1	6
12:30 AM	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	1	6
12:45 AM	0	0	0	0	0	0	0	4	0	0	0	4	1	2	1	0	0	4	0	2	0	0	0	2	10
Hourly Total	4	1	0	0	0	5	0	12	1	0	0	13	1	6	1	0	0	8	0	7	4	0	0	11	37
1:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	3	2	0	0	6	7
1:15 AM	1	1	0	0	1	2	0	4	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	1	7
1:30 AM	0	0	0	0	0	0	0	3	0	0	0	3	0	1	0	0	0	1	0	2	1	0	0	3	7
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	2
Hourly Total	1	1	0	0	1	2	0	8	0	0	0	8	0	2	0	0	0	2	2	6	3	0	0	11	23
2:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	0	2	0	2	3	0	0	5	8
2:15 AM	1	1	0	0	0	2	1	1	1	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	6
2:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	3
2:45 AM	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	2	4
Hourly Total	3	1	0	0	0	4	1	3	1	0	0	5	0	2	1	0	0	3	0	5	4	0	0	9	21
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	3
3:15 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	0	2	4
3:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 AM	0	1	0	0	0	1	0	5	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	1	7
Hourly Total	1	1	1	0	0	3	0	5	0	0	0	5	0	1	0	0	0	1	0	5	1	0	0	6	15
4:00 AM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	2	0	0	2	0	0	1	0	0	1	5
4:15 AM	1	0	0	0	0	1	0	2	0	0	0	2	0	1	0	0	0	1	0	3	0	0	0	3	7
4:30 AM	3	2	1	0	0	6	0	2	0	0	0	2	0	0	1	0	0	1	1	4	1	0	0	6	15
4:45 AM	2	0	0	0	0	2	1	7	0	0	0	8	0	1	0	0	0	1	0	3	0	0	0	3	14
Hourly Total	6	2	1	0	0	9	1	13	0	0	0	14	0	2	3	0	0	5	1	10	2	0	0	13	41
5:00 AM	0	3	0	0	0	3	0	4	0	0	0	4	0	0	1	0	0	1	1	3	0	0	0	4	12
5:15 AM	1	0	1	0	0	2	0	8	0	0	0	8	1	0	0	0	0	1	0	8	0	0	0	8	19
5:30 AM	2	8	0	0	0	10	0	19	1	0	0	20	0	3	1	0	0	4	0	18	0	0	0	18	52
5:45 AM	7	3	1	0	0	11	0	30	2	0	0	32	3	2	1	0	0	6	0	17	0	0	0	17	66
Hourly Total	10	14	2	0	0	26	0	61	3	0	0	64	4	5	3	0	0	12	1	46	0	0	0	47	149
6:00 AM	8	8	2	0	0	18	0	19	0	0	0	19	1	3	2	0	0	6	4	17	2	0	0	23	66
6:15 AM	9	14	2	0	0	25	0	26	1	0	0	27	1	3	5	0	0	9	1	31	3	0	0	35	96
6:30 AM	20	26	1	0	0	47	3	32	0	0	0	35	9	7	3	0	0	19	0	41	5	0	0	46	147
6:45 AM	22	22	2	0	0	46	1	60	4	0	0	65	4	6	6	0	0	16	1	39	9	0	0	49	176
Hourly Total	59	70	7	0	0	136	4	137	5	0	0	146	15	19	16	0	0	50	6	128	19	0	0	153	485
7:00 AM	11	26	4	0	0	41	4	62	7	0	2	73	8	10	4	0	0	22	1	51	10	0	1	62	198
7:15 AM	30	38	7	0	0	75	3	77	7	0	2	87	5	15	7	0	0	27	4	80	10	0	0	94	283
7:30 AM	27	49	28	0	0	104	9	59	10	0	0	78	12	15	11	0	0	38	8	77	8	0	0	93	313
7:45 AM	47	48	12	0	0	107	7	75	5	0	1	87	7	12	7	0	0	26	4	80	4	0	1	88	308
Hourly Total	115	161	51	0	0	327	23	273	29	0	5	325	32	52	29	0	0	113	17	288	32	0	2	337	1102

% Pedestrians	-	-	-	-	100.0	-	-	-	-	84.0	-	-	-	-	0.0	-	-	-	-	100.0	-	-
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Turning Movement Data Plot

Manatee County Government
 2101 47th Terrace E
 Bradenton, Florida, United States 34203
 941-749-3500

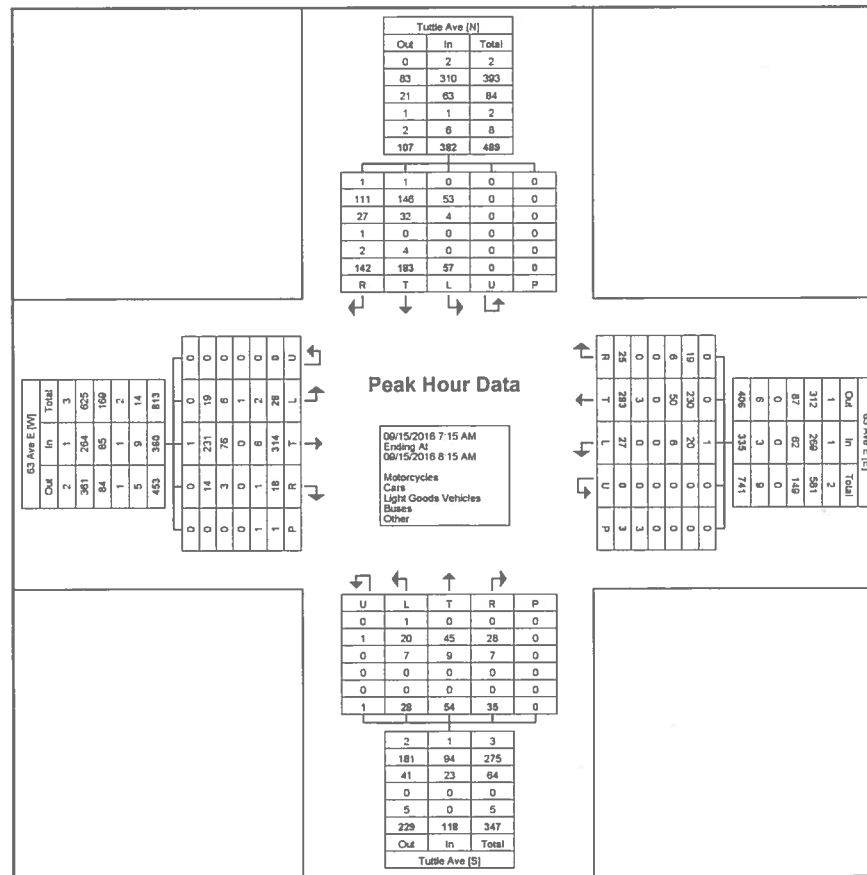
Count Name: 63rd Ave E @ Tuttle Ave
 Site Code:
 Start Date: 09/15/2016
 Page No: 6

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Tuttle Ave Southbound						63 Ave E Westbound						Tuttle Ave Northbound						63 Ave E Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:15 AM	30	38	7	0	0	75	3	77	7	0	2	87	5	15	7	0	0	27	4	80	10	0	0	94	283
7:30 AM	27	49	28	0	0	104	9	59	10	0	0	78	12	15	11	0	0	38	8	77	8	0	0	93	313
7:45 AM	47	48	12	0	0	107	7	75	5	0	1	87	7	12	7	0	0	26	4	80	4	0	1	88	308
8:00 AM	38	48	10	0	0	96	6	72	5	0	0	83	11	12	3	1	0	27	2	77	6	0	0	85	291
Total	142	183	57	0	0	382	25	283	27	0	3	335	35	54	28	1	0	118	18	314	28	0	1	360	1195
Approach %	37.2	47.9	14.9	0.0	-	-	7.5	84.5	8.1	0.0	-	-	29.7	45.8	23.7	0.8	-	-	5.0	87.2	7.8	0.0	-	-	-
Total %	11.9	15.3	4.8	0.0	-	32.0	2.1	23.7	2.3	0.0	-	28.0	2.9	4.5	2.3	0.1	-	9.9	1.5	26.3	2.3	0.0	-	30.1	-
PHF	0.755	0.934	0.509	0.000	-	0.893	0.694	0.919	0.675	0.000	-	0.963	0.729	0.900	0.636	0.250	-	0.776	0.563	0.981	0.700	0.000	-	0.957	0.954
Motorcycles	1	1	0	0	-	2	0	0	1	0	-	1	0	0	1	0	-	1	0	1	0	0	-	1	5
% Motorcycles	0.7	0.5	0.0	-	-	0.5	0.0	0.0	3.7	-	-	0.3	0.0	0.0	3.6	0.0	-	0.8	0.0	0.3	0.0	-	-	0.3	0.4
Cars	111	146	53	0	-	310	19	230	20	0	-	269	28	45	20	1	-	94	14	231	19	0	-	284	937
% Cars	78.2	79.8	93.0	-	-	81.2	76.0	81.3	74.1	-	-	80.3	80.0	83.3	71.4	100.0	-	79.7	77.8	73.6	67.9	-	-	73.3	78.4
Light Goods Vehicles	27	32	4	0	-	63	6	50	6	0	-	62	7	9	7	0	-	23	3	76	6	0	-	85	233
% Light Goods Vehicles	19.0	17.5	7.0	-	-	16.5	24.0	17.7	22.2	-	-	18.5	20.0	16.7	25.0	0.0	-	19.5	16.7	24.2	21.4	-	-	23.6	19.5
Buses	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	2
% Buses	0.7	0.0	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	3.6	-	-	0.3	0.2
Single-Unit Trucks	2	4	0	0	-	6	0	3	0	0	-	3	0	0	0	0	-	0	1	6	2	0	-	9	18
% Single-Unit Trucks	1.4	2.2	0.0	-	-	1.6	0.0	1.1	0.0	-	-	0.9	0.0	0.0	0.0	0.0	-	0.0	5.6	1.9	7.1	-	-	2.5	1.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Manatee County Government
 2101 47th Terrace E
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 941-749-3500

Count Name: 63rd Ave E @ Tuttle Ave
 Site Code:
 Start Date: 09/15/2016
 Page No: 7



Turning Movement Peak Hour Data Plot (7:15 AM)

Manatee County Government
 2101 47th Terrace E
 Bradenton, Florida, United States 34203
 941-749-3500

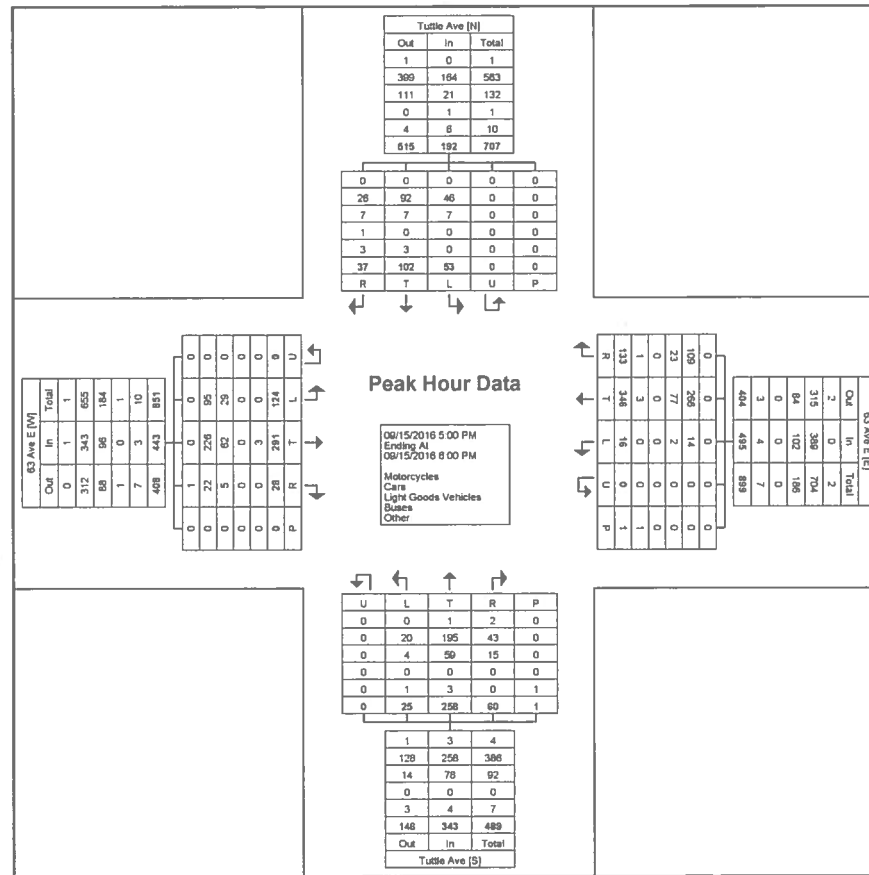
Count Name: 63rd Ave E @ Tuttle Ave
 Site Code:
 Start Date: 09/15/2016
 Page No: 8

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Tuttle Ave Southbound						63 Ave E Westbound						Tuttle Ave Northbound						63 Ave E Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App Total	Right	Thru	Left	U-Turn	Peds	App Total	Right	Thru	Left	U-Turn	Peds	App Total	Right	Thru	Left	U-Turn	Peds	App Total	
5:00 PM	10	19	20	0	0	49	26	83	4	0	0	113	18	67	2	0	0	87	6	73	35	0	0	114	363
5:15 PM	12	19	3	0	0	34	32	87	3	0	0	122	13	81	9	0	0	103	7	79	34	0	0	120	379
5:30 PM	11	39	18	0	0	68	39	91	4	0	0	134	17	52	10	0	1	79	5	62	33	0	0	100	381
5:45 PM	4	25	12	0	0	41	36	85	5	0	1	126	12	58	4	0	0	74	10	77	22	0	0	109	350
Total	37	102	53	0	0	192	133	346	16	0	1	495	60	258	25	0	1	343	28	291	124	0	0	443	1473
Approach %	19.3	53.1	27.6	0.0	-	-	26.9	69.9	3.2	0.0	-	-	17.5	75.2	7.3	0.0	-	-	6.3	65.7	28.0	0.0	-	-	-
Total %	2.5	6.9	3.6	0.0	-	13.0	9.0	23.5	1.1	0.0	-	33.6	4.1	17.5	1.7	0.0	-	23.3	1.9	19.8	8.4	0.0	-	30.1	-
PHF	0.771	0.654	0.663	0.000	-	0.706	0.853	0.951	0.800	0.000	-	0.924	0.833	0.796	0.625	0.000	-	0.833	0.700	0.921	0.886	0.000	-	0.923	0.967
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	2	1	0	0	-	3	1	0	0	0	-	1	4
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	3.3	0.4	0.0	-	-	0.9	3.6	0.0	0.0	-	-	0.2	0.3
Cars	26	92	46	0	-	164	109	266	14	0	-	389	43	195	20	0	-	258	22	226	95	0	-	343	1154
% Cars	70.3	90.2	86.8	-	-	85.4	82.0	76.9	87.5	-	-	78.6	71.7	75.6	80.0	-	-	75.2	78.6	77.7	76.6	-	-	77.4	78.3
Light Goods Vehicles	7	7	7	0	-	21	23	77	2	0	-	102	15	59	4	0	-	78	5	62	29	0	-	96	297
% Light Goods Vehicles	18.9	6.9	13.2	-	-	10.9	17.3	22.3	12.5	-	-	20.6	25.0	22.9	16.0	-	-	22.7	17.9	21.3	23.4	-	-	21.7	20.2
Buses	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	2.7	0.0	0.0	-	-	0.5	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.1
Single-Unit Trucks	3	3	0	0	-	6	1	2	0	0	-	3	0	3	1	0	-	4	0	3	0	0	-	3	16
% Single-Unit Trucks	8.1	2.9	0.0	-	-	3.1	0.8	0.6	0.0	-	-	0.6	0.0	1.2	4.0	-	-	1.2	0.0	1.0	0.0	-	-	0.7	1.1
Articulated Trucks	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-

Manatee County Government
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 941-749-3500

Count Name: 63rd Ave E @ Tuttle Ave
 Site Code:
 Start Date: 09/15/2016
 Page No: 9



Turning Movement Peak Hour Data Plot (5:00 PM)

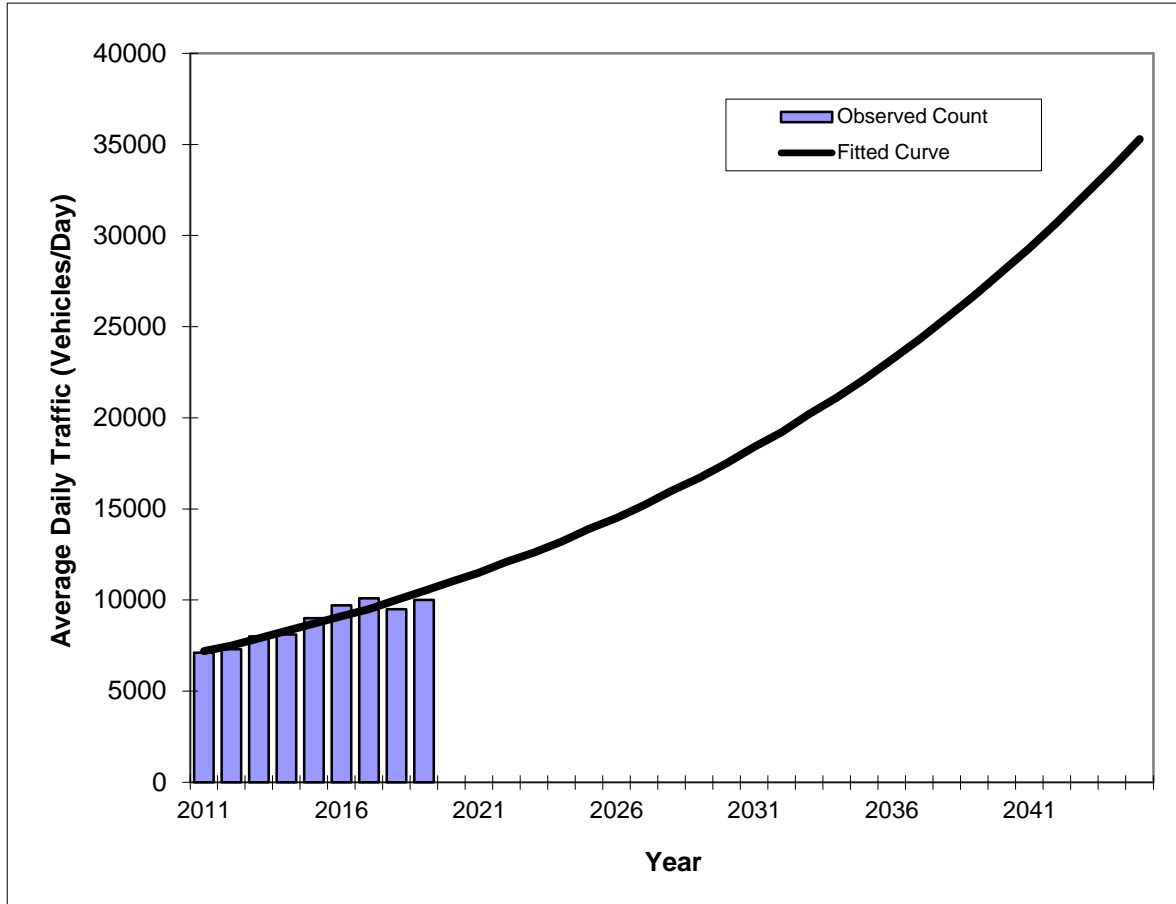
Manatee County Government
2101 47th Terrace E
Bradenton, Florida, United States 34203
941-749-3500

Count Name: 63rd Ave E @ Tuttle Ave
Site Code:
Start Date: 09/15/2016
Page No: 10

Traffic Trends - V03.a

FIN#	1234
Location	1

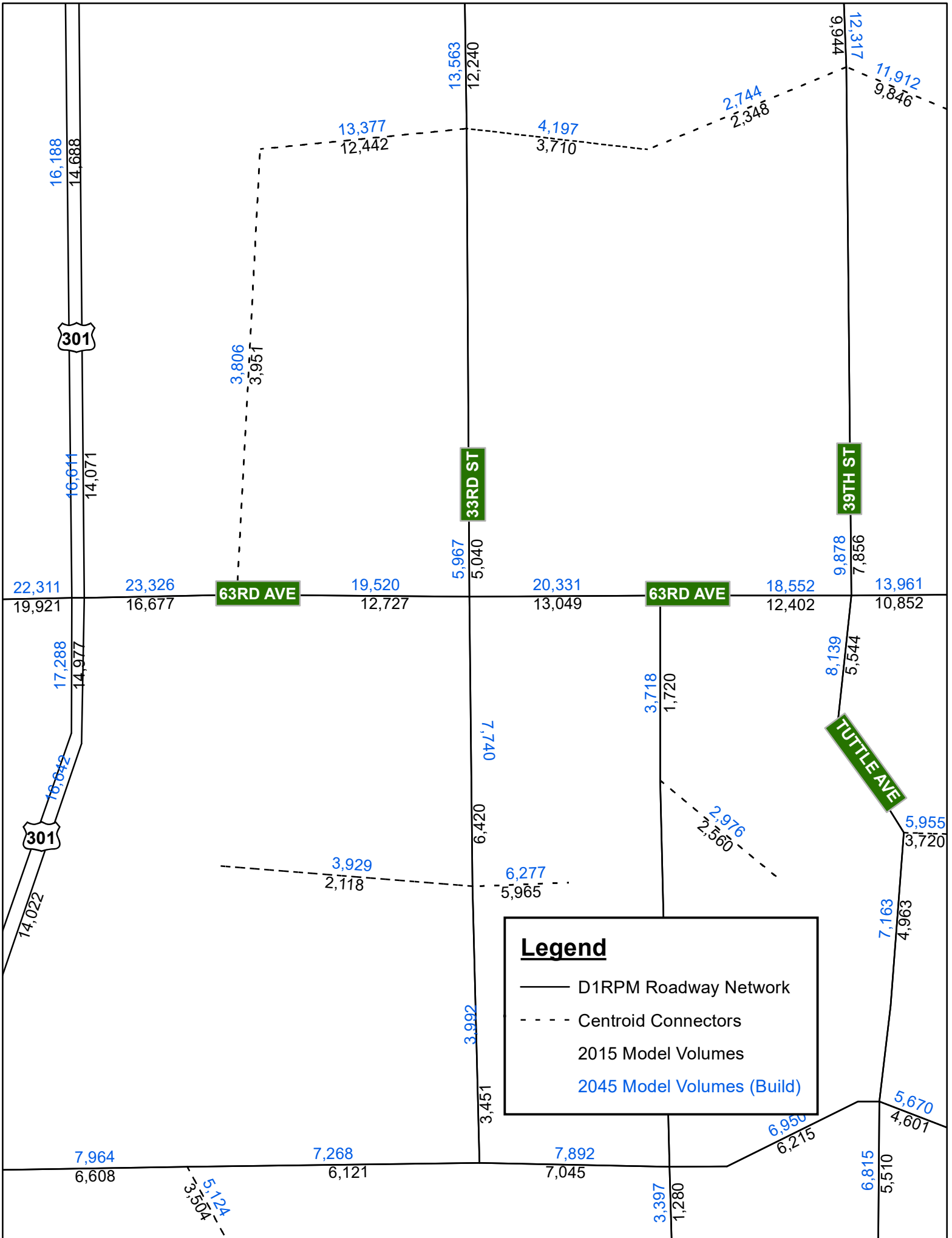
County:	Manatee (13)
Station #:	07-25
Highway:	63rd Avenue E



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2011	7100	7200
2012	7300	7500
2013	8000	7900
2014	8100	8300
2015	9000	8700
2016	9700	9100
2017	10100	9500
2018	9500	10000
2019	10000	10500
2025 Opening Year Trend		
2025	N/A	13900
2035 Mid-Year Trend		
2035	N/A	22100
2045 Design Year Trend		
2045	N/A	35300
TRANPLAN Forecasts/Trends		

Trend R-squared:	89.56%
Compounded Annual Historic Growth Rate:	4.83%
Compounded Growth Rate (2019 to Design Year):	4.77%
Printed:	8-Nov-21
Exponential Growth Option	

*Axle-Adjusted



Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

Attachment B: Intersection Volume Development Worksheets

EXISTING (2021) VOLUME DEVELOPMENT AT STUDY INTERSECTIONS

INTERSECTION: US 301 & 63rd Ave
COUNT DATE: February 22, 2018
AM PEAK HOUR FACTOR: 0.98
PM PEAK HOUR FACTOR: 0.93

"AM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM Raw Turning Movements	140	338	304	85	387	91	193	1,051	84	127	1,338	460
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AM EXISTING CONDITIONS	140	338	304	85	387	91	193	1,051	84	127	1,338	460
"PM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
PM Raw Turning Movements	384	361	363	79	356	211	282	1,555	57	59	900	204
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PM EXISTING CONDITIONS	384	361	363	79	356	211	282	1,555	57	59	900	204
"AM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
AM BACKGROUND TRAFFIC GROWTH	21	51	46	13	58	14	29	158	13	19	201	69
AM NON-PROJECT TRAFFIC	161	389	350	98	445	105	222	1,209	97	146	1,539	529
"PM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
PM BACKGROUND TRAFFIC GROWTH	58	54	54	12	53	32	42	233	9	9	135	31
PM NON-PROJECT TRAFFIC	442	415	417	91	409	243	324	1,788	66	68	1,035	235

EXISTING (2021) VOLUME DEVELOPMENT AT STUDY INTERSECTIONS

INTERSECTION: 63rd Ave & Tuttle Ave
COUNT DATE: September 15, 2016
AM PEAK HOUR FACTOR: 0.95
PM PEAK HOUR FACTOR: 0.97

"AM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM Raw Turning Movements	28	314	18	27	283	25	29	54	35	57	183	142
Seasonal Factor (Min. 1.00)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
AM EXISTING CONDITIONS	30	339	19	29	306	27	31	58	38	62	198	153
"PM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
PM Raw Turning Movements	124	291	28	16	346	133	25	258	60	53	102	37
Seasonal Factor (Min. 1.00)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
PM EXISTING CONDITIONS	134	314	30	17	374	144	27	279	65	57	110	40
"AM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
AM BACKGROUND TRAFFIC GROWTH	8	89	5	8	80	7	8	15	10	16	52	40
AM NON-PROJECT TRAFFIC	38	428	24	37	386	34	39	73	48	78	250	193
"PM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	5	5	5	5	5	5	5	5	5	5	5	5
Yearly Growth Rate	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
PM BACKGROUND TRAFFIC GROWTH	35	82	8	4	98	38	7	73	17	15	29	10
PM NON-PROJECT TRAFFIC	169	396	38	21	472	182	34	352	82	72	139	50

OY 2025 VOLUME DEVELOPMENT AT STUDY INTERSECTIONS

INTERSECTION: US 301 & 63rd Ave

COUNT DATE: January 1, 2021

AM PEAK HOUR FACTOR: 0.98

PM PEAK HOUR FACTOR: 0.93

"AM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM Raw Turning Movements	161	389	350	98	445	105	222	1,209	97	146	1,539	529
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AM EXISTING CONDITIONS	161	389	350	98	445	105	222	1,209	97	146	1,539	529
"PM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
PM Raw Turning Movements	442	415	417	91	409	243	324	1,788	66	68	1,035	235
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PM EXISTING CONDITIONS	442	415	417	91	409	243	324	1,788	66	68	1,035	235
"AM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
AM BACKGROUND TRAFFIC GROWTH	9	22	19	5	25	6	4	24	2	3	31	11
AM NON-PROJECT TRAFFIC	170	411	369	103	470	111	226	1,233	99	149	1,570	540
	170	415	370	105	470	115	230	1235	100	150	1570	540
"PM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
PM BACKGROUND TRAFFIC GROWTH	25	23	23	5	23	13	7	36	1	1	21	5
PM NON-PROJECT TRAFFIC	467	438	440	96	432	256	331	1,824	67	69	1,056	240
	470	440	440	100	435	260	335	1825	70	70	1060	240

OY 2025 VOLUME DEVELOPMENT AT STUDY INTERSECTIONS

INTERSECTION: 63rd Ave & Tuttle Ave

COUNT DATE: January 1, 2021

AM PEAK HOUR FACTOR: 0.95

PM PEAK HOUR FACTOR: 0.97

"AM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM Raw Turning Movements	38	428	24	37	386	34	39	73	48	78	250	193
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AM EXISTING CONDITIONS	38	428	24	37	386	34	39	73	48	78	250	193
"PM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
PM Raw Turning Movements	169	396	38	21	472	182	34	352	82	72	139	50
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PM EXISTING CONDITIONS	169	396	38	21	472	182	34	352	82	72	139	50
"AM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
AM BACKGROUND TRAFFIC GROWTH	2	24	1	2	21	2	1	1	1	2	5	4
AM NON-PROJECT TRAFFIC	40	452	25	39	407	36	40	74	49	80	255	197
	40	455	25	40	410	40	40	75	50	80	255	200
"PM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
PM BACKGROUND TRAFFIC GROWTH	9	22	2	1	26	10	1	7	2	1	3	1
PM NON-PROJECT TRAFFIC	178	418	40	22	498	192	35	359	84	73	142	51
	180	420	40	25	500	195	35	360	85	75	145	55

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: US 301 & 63rd Ave

COUNT DATE: January 1, 2021

AM PEAK HOUR FACTOR: 0.98

PM PEAK HOUR FACTOR: 0.93

"AM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM Raw Turning Movements	161	389	350	98	445	105	222	1,209	97	146	1,539	529
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AM EXISTING CONDITIONS	161	389	350	98	445	105	222	1,209	97	146	1,539	529
"PM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
PM Raw Turning Movements	442	415	417	91	409	243	324	1,788	66	68	1,035	235
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PM EXISTING CONDITIONS	442	415	417	91	409	243	324	1,788	66	68	1,035	235
"AM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	24	24	24	24	24	24	24	24	24	24	24	24
Yearly Growth Rate	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
AM BACKGROUND TRAFFIC GROWTH	62	149	134	38	170	40	28	154	12	19	196	67
AM NON-PROJECT TRAFFIC	223	538	484	136	615	145	250	1,363	109	165	1,735	596
	225	540	485	140	615	145	250	1365	110	165	1735	600
"PM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	24	24	24	24	24	24	24	24	24	24	24	24
Yearly Growth Rate	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
PM BACKGROUND TRAFFIC GROWTH	169	159	160	35	157	93	41	227	8	9	132	30
PM NON-PROJECT TRAFFIC	611	574	577	126	566	336	365	2,015	74	77	1,167	265
	615	575	580	130	570	340	365	2015	75	80	1170	265

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 63rd Ave & Tuttle Ave

COUNT DATE: January 1, 2021

AM PEAK HOUR FACTOR: 0.95

PM PEAK HOUR FACTOR: 0.97

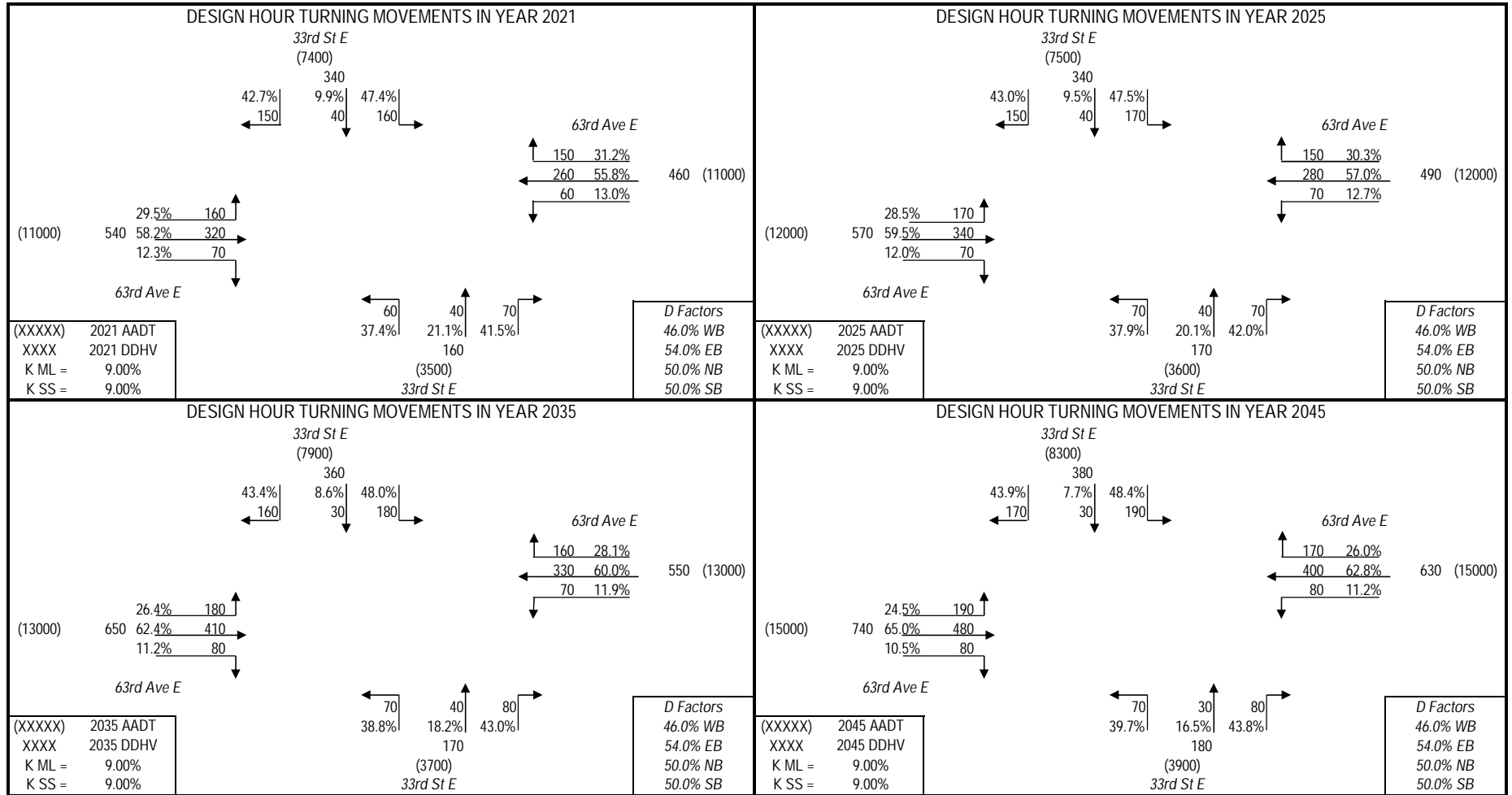
"AM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM Raw Turning Movements	38	428	24	37	386	34	39	73	48	78	250	193
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AM EXISTING CONDITIONS	38	428	24	37	386	34	39	73	48	78	250	193
"PM EXISTING TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
PM Raw Turning Movements	169	396	38	21	472	182	34	352	82	72	139	50
Seasonal Factor (Min. 1.00)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PM EXISTING CONDITIONS	169	396	38	21	472	182	34	352	82	72	139	50
"AM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	24	24	24	24	24	24	24	24	24	24	24	24
Yearly Growth Rate	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
AM BACKGROUND TRAFFIC GROWTH	15	164	9	14	148	13	5	9	6	10	32	25
AM NON-PROJECT TRAFFIC	53	592	33	51	534	47	44	82	54	88	282	218
	55	595	35	55	535	50	45	85	55	90	285	220
"PM BACKGROUND TRAFFIC"	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Years To Buildout	24	24	24	24	24	24	24	24	24	24	24	24
Yearly Growth Rate	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
PM BACKGROUND TRAFFIC GROWTH	65	152	15	8	181	70	4	45	10	9	18	6
PM NON-PROJECT TRAFFIC	234	548	53	29	653	252	38	397	92	81	157	56
	235	550	55	30	655	255	40	400	95	85	160	60

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

Attachment C: FDOT Turns5 Worksheet

PROJECT TRAFFIC FOR 63rd Ave E AT 33rd St E



Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

Attachment D: Signal Timing Worksheets

Station : 3104 - US 301 @ 63rd Ave. E (Upload File)

Phase [1.1.1]

	1 (NL)	2 (ST)	3 (EL)	4 (WT)	5 (SL)	6 (NT)	7 (WL)	8 (ET)	9	10	11	12	13	14	15	16
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clearance	0	22	0	37	0	22	0	37	0	0	0	0	0	0	0	0
Min Green	5	15	5	7	5	15	5	10	0	0	0	0	0	0	0	0
Passage	3	5	3	3	3	5	3	3	0	0	0	0	0	0	0	0
Max1	20	50	15	25	20	50	15	25	0	0	0	0	0	0	0	0
Max2	50	110	50	50	35	110	35	70	0	0	0	0	0	0	0	0
Yellow	5.6	5.6	4.9	4.9	5.6	5.6	4.5	4.9	0	0	0	0	0	0	0	0
Red	2.3	2	2	2	2.5	2	2	2	0	0	0	0	0	0	0	0
Red Revert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Exit		ON				ON										
Rest In Walk																

Phase Option [1.1.2]

	1 (NL)	2 (ST)	3 (EL)	4 (WT)	5 (SL)	6 (NT)	7 (WL)	8 (ET)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry				ON				ON								
Non Act1																
Non Act2																
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable																
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases								From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases								From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

Prepared By

Date Implemented

Reviewed By

Traffic Engineer

Sarasota-Manatee RTMC

Timing Sheet

6/25/2021 2:33:25 PM

Station : 3104 - US 301 @ 63rd Ave. E (Upload File)

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF		3	10	OFF		STD8	4PH		OFF	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
3104			OFF					

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	ON	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifier Phases	Type	Green	Yellow	Red
Overlap 1			NORMAL		3.5	1.5
Overlap 2			NORMAL		3.5	1.5
Overlap 3			NORMAL		3.5	1.5
Overlap 4			NORMAL		3.5	1.5
Overlap 5			NORMAL		3.5	1.5
Overlap 6			NORMAL		3.5	1.5
Overlap 7			NORMAL		3.5	1.5
Overlap 8			NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases	Conflicting Overlaps	Conflicting Peds
Overlap 1			OFF OFF
Overlap 2			OFF OFF
Overlap 3			OFF OFF
Overlap 4			OFF OFF
Overlap 5			OFF OFF
Overlap 6			OFF OFF
Overlap 7			OFF OFF
Overlap 8			OFF OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phase	1	6	6	2	2	5	3	8	8	4	4	7	0	0	0	0
Switch Phase	0	0	0	0	0	0	8	0	0	0	0	4	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	1	2	3	4	2	4	6	8	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2 V14	OFF	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13		1													
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac	Detector								MMU	Diag								
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8			
Present	ON	ON							ON									ON	
Peer to Peer																			

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

Station : 3104 - US 301 @ 63rd Ave. E (Upload File)

Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	
7	
8	
9	
10	
11	
12	ON
13	ON
14	ON
15	ON
16	ON
17	ON
18	ON
19	ON
20	ON
21	ON
22	ON
23	ON
24	ON
25	ON
26	ON
27	ON
28	
29	ON
30	ON
31	ON
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	ON
48	
49	ON
50	ON
51	ON
52	ON
53	ON
54	ON
55	
56	
57	
58	
59	ON
60	
61	
62	
63	
64	

Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	
2	ON
3	ON
4	ON
5	ON
6	
7	
8	
9	
10	
11	
12	ON
13	
14	ON
15	ON
16	ON
17	ON
18	ON
19	ON
20	ON
21	
22	ON
23	ON
24	ON
25	ON
26	
27	
28	
29	
30	ON
31	ON
32	
33	
34	
35	
36	
37	ON
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	ON
60	
61	
62	
63	
64	

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash						
Override Higher	ON					
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
45	10	VOT_MON	D-CONN

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
ON	ON

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases												
Overlaps												

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Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Coordination, Modes, + [2.1]

Modes

Operational	Correct	Maximum	Force-Off
	SHRT/LNG	MAX 2	FIXED

Modes+

Mode	Leave Before	Leave After	Recycle	Stop In Walk	External	Auto Reset	Latch Sec Foff	Coord Easy Float	Yield Value	Coord NTCIP Yield Sign	Closed Loop Active
FRC	TIMED	TIMED	P3478_INH	ON	OFF	ON	OFF	OFF	0	+	OFF

Coordination, Pattern 1-16 [2.1]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	180	140	180													
Offset Time	78	68	90													
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	3	2	3	1	1	1	1	1	1	1	1	3	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn

Coordination, Pattern 17-32 [2.1]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time			200												180	230
Offset Time			153												155	164
Split Number	17	18	19	20	21	22	23	24							31	20
Seq Number	1	1	3	1	1	1	1	1	1	1	1	1	1	1	2	3
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn

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Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	33	85	30	32	23	95	23	39								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	30	50	30	30	20	60	16	44								
Mode	MAX	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	37	70	43	30	16	91	18	55								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	53	22	21	24	53	19	24								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	34	44	35	27	17	61	30	32								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	30	65	20	25	25	70	20	25								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	33	120	30	32	23	120	23	39								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

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Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	MIN	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	34	70	35	27	17	80	30	32								
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	35	95	37	33	27	103	25	45								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	55	90	50	35	33	112	30	55								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	33	127	40	40	35	125	20	60								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	50	113	55	37	42	121	32	60								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode																
Coord-Ph																

Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 27

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 28

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 29

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 30

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 31

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	37	70	48	25	16	91	17	56								
Mode	NON	MAX	MIN	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 32

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

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Day Plan Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

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TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	25											
26	26											
27	27											
28	28											
29	29											
30	30											
31	31											
32	32											
33	33											
34	34											
35	35											
36	36											
37	37											
38	38											
39	39											
40	40											
41	41											
42	42											
43	43											
44	44											
45	45											
46	46											
47	47											
48	48											
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												
99	254											
100	255											

Attachment E: Synchro Outputs

E-1: Existing Conditions (2021)

E-2: No Build Conditions

E-3: Build Conditions

E-1: Existing Conditions (2021)

Lanes, Volumes, Timings
1: US 301 & 63rd Avenue E

DTM 63rd Avenue East
2021 - AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	389	350	98	445	105	222	1209	97	146	1539	529
Future Volume (vph)	161	389	350	98	445	105	222	1209	97	146	1539	529
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	135		325	300		300	285		0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1438			2766			1671			1906	
Travel Time (s)		24.5			47.1			20.7			23.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	8%	8%	8%	6%	6%	6%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	7.0		5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	11.9	24.9		11.5	24.9		12.9	25.6	25.6	13.1	25.6	25.6
Total Split (s)	30.0	39.0		23.0	32.0		33.0	95.0	95.0	23.0	85.0	85.0
Total Split (%)	16.7%	21.7%		12.8%	17.8%		18.3%	52.8%	52.8%	12.8%	47.2%	47.2%
Yellow Time (s)	4.9	4.9		4.5	4.9		5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	2.0	2.0		2.0	2.0		2.3	2.0	2.0	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.9	6.9		6.5	6.9		7.9	7.6	7.6	8.1	7.6	7.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	Max	Max

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 78 (43%), Referenced to phase 6:NBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated

Splits and Phases: 1: US 301 & 63rd Avenue E



HCM 6th Signalized Intersection Summary
 1: US 301 & 63rd Avenue E

DTM 63rd Avenue East
 2021 - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	161	389	350	98	445	105	222	1209	97	146	1539	529
Future Volume (veh/h)	161	389	350	98	445	105	222	1209	97	146	1539	529
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1811	1811	1811	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	164	397	0	100	454	0	227	1234	0	149	1570	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	8	8	8	6	6	6	2	2	2	5	5	5
Cap, veh/h	206	591		206	480		245	1726		144	1499	
Arrive On Green	0.09	0.17	0.00	0.06	0.14	0.00	0.14	0.49	0.00	0.08	0.43	0.00
Sat Flow, veh/h	1697	3474	0	1725	3532	0	1781	3554	1585	1739	3469	1547
Grp Volume(v), veh/h	164	397	0	100	454	0	227	1234	0	149	1570	0
Grp Sat Flow(s),veh/h/ln	1697	1692	0	1725	1721	0	1781	1777	1585	1739	1735	1547
Q Serve(g_s), s	14.6	19.7	0.0	8.9	23.5	0.0	22.7	49.3	0.0	14.9	77.8	0.0
Cycle Q Clear(g_c), s	14.6	19.7	0.0	8.9	23.5	0.0	22.7	49.3	0.0	14.9	77.8	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	591		206	480		245	1726		144	1499	
V/C Ratio(X)	0.79	0.67		0.48	0.95		0.93	0.72		1.04	1.05	
Avail Cap(c_a), veh/h	265	604		260	480		248	1726		144	1499	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.3	69.4	0.0	61.7	76.8	0.0	76.8	36.5	0.0	82.6	51.1	0.0
Incr Delay (d2), s/veh	12.0	2.8	0.0	1.8	28.0	0.0	37.9	2.6	0.0	84.6	36.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.3	13.6	0.0	7.2	18.0	0.0	18.6	28.7	0.0	15.3	52.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.3	72.3	0.0	63.5	104.8	0.0	114.7	39.1	0.0	167.2	87.8	0.0
LnGrp LOS	E	E		E	F		F	D		F	F	
Approach Vol, veh/h		561	A		554	A		1461	A		1719	A
Approach Delay, s/veh		72.0			97.3			50.8			94.6	
Approach LOS		E			F			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	32.6	85.4	23.7	32.0	23.0	95.0	17.4	38.3				
Change Period (Y+Rc), s	* 7.9	7.6	6.9	6.9	* 8.1	7.6	6.5	6.9				
Max Green Setting (Gmax), s	* 25	77.4	23.1	25.1	* 15	87.4	16.5	32.1				
Max Q Clear Time (g_c+I1), s	24.7	79.8	16.6	25.5	16.9	51.3	10.9	21.7				
Green Ext Time (p_c), s	0.0	0.0	0.2	0.0	0.0	9.7	0.1	1.7				

Intersection Summary

HCM 6th Ctrl Delay	77.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
2: 33rd St E & 63rd Avenue E

DTM 63rd Avenue East
2021 - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	150	270	60	70	310	160	70	40	60	150	40	160
Future Volume (vph)	150	270	60	70	310	160	70	40	60	150	40	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		2766			2691			1173			1058	
Travel Time (s)		47.1			45.9			17.8			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	102.2
Intersection LOS	F

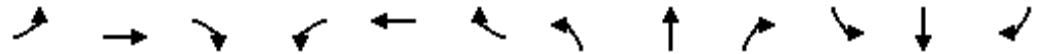
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	150	270	60	70	310	160	70	40	60	150	40	160
Future Vol, veh/h	150	270	60	70	310	160	70	40	60	150	40	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	163	293	65	76	337	174	76	43	65	163	43	174
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	112.8	154.8	21.8	45.4
HCM LOS	F	F	C	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	31%	13%	43%
Vol Thru, %	24%	56%	57%	11%
Vol Right, %	35%	12%	30%	46%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	480	540	350
LT Vol	70	150	70	150
Through Vol	40	270	310	40
RT Vol	60	60	160	160
Lane Flow Rate	185	522	587	380
Geometry Grp	1	1	1	1
Degree of Util (X)	0.465	1.131	1.249	0.848
Departure Headway (Hd)	10.221	8.451	8.096	8.927
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	355	433	452	411
Service Time	8.221	6.451	6.096	6.927
HCM Lane V/C Ratio	0.521	1.206	1.299	0.925
HCM Control Delay	21.8	112.8	154.8	45.4
HCM Lane LOS	C	F	F	E
HCM 95th-tile Q	2.4	17.4	22.9	8.1

Lanes, Volumes, Timings
 3: Tuttle Ave/39th St E & 63rd Avenue E

DTM 63rd Avenue East
 2021 - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕	↕		↕	
Traffic Volume (vph)	38	428	24	37	386	34	39	73	48	78	250	193
Future Volume (vph)	38	428	24	37	386	34	39	73	48	78	250	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		40			40			35				40
Link Distance (ft)		2691			1036			1000				1513
Travel Time (s)		45.9			17.7			19.5				25.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary

Area Type: Other
 Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	128.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕	↕		↕	
Traffic Vol, veh/h	38	428	24	37	386	34	39	73	48	78	250	193
Future Vol, veh/h	38	428	24	37	386	34	39	73	48	78	250	193
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	451	25	39	406	36	41	77	51	82	263	203
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	156.9	86.8	18.1	173.5
HCM LOS	F	F	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	35%	0%	8%	9%	0%	15%
Vol Thru, %	65%	0%	87%	91%	0%	48%
Vol Right, %	0%	100%	5%	0%	100%	37%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	112	48	490	423	34	521
LT Vol	39	0	38	37	0	78
Through Vol	73	0	428	386	0	250
RT Vol	0	48	24	0	34	193
Lane Flow Rate	118	51	516	445	36	548
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.324	0.127	1.237	1.049	0.077	1.285
Departure Headway (Hd)	11.455	10.53	9.725	9.883	9.101	9.225
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	316	343	377	370	396	400
Service Time	9.155	8.23	7.725	7.583	6.801	7.225
HCM Lane V/C Ratio	0.373	0.149	1.369	1.203	0.091	1.37
HCM Control Delay	19.5	14.8	156.9	92.8	12.6	173.5
HCM Lane LOS	C	B	F	F	B	F
HCM 95th-tile Q	1.4	0.4	19.7	13.1	0.2	22.3

Lanes, Volumes, Timings
1: US 301 & 63rd Avenue E

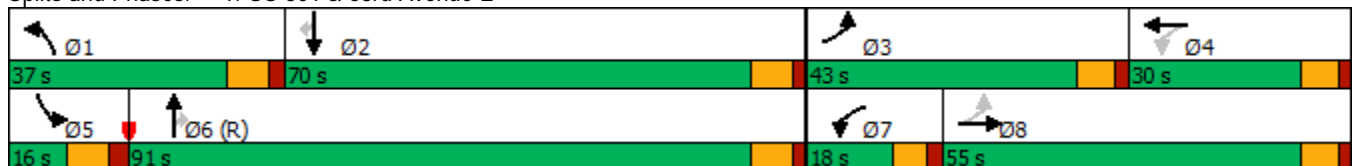
DTM 63rd Avenue East
2021 - PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	442	415	417	91	409	243	324	1788	66	68	1035	235
Future Volume (vph)	442	415	417	91	409	243	324	1788	66	68	1035	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	135		325	300		300	285		0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1438			2766			1671			1906	
Travel Time (s)		24.5			47.1			20.7			23.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	7.0		5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	11.9	24.9		11.5	24.9		12.9	25.6	25.6	13.1	25.6	25.6
Total Split (s)	43.0	55.0		18.0	30.0		37.0	91.0	91.0	16.0	70.0	70.0
Total Split (%)	23.9%	30.6%		10.0%	16.7%		20.6%	50.6%	50.6%	8.9%	38.9%	38.9%
Yellow Time (s)	4.9	4.9		4.5	4.9		5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	2.0	2.0		2.0	2.0		2.3	2.0	2.0	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.9	6.9		6.5	6.9		7.9	7.6	7.6	8.1	7.6	7.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	Max	Max

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 90 (50%), Referenced to phase 6:NBT, Start of Green
 Natural Cycle: 150
 Control Type: Actuated-Coordinated

Splits and Phases: 1: US 301 & 63rd Avenue E



HCM 6th Signalized Intersection Summary
 1: US 301 & 63rd Avenue E

DTM 63rd Avenue East
 2021 - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘		↗	↗↘	↗	↗	↗↘	↗
Traffic Volume (veh/h)	442	415	417	91	409	243	324	1788	66	68	1035	235
Future Volume (veh/h)	442	415	417	91	409	243	324	1788	66	68	1035	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1826	1826	1826	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	475	446	0	98	440	0	348	1923	0	73	1113	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	5	5	5	2	2	2	5	5	5
Cap, veh/h	396	958		261	445		288	1647		76	1203	
Arrive On Green	0.20	0.27	0.00	0.06	0.13	0.00	0.16	0.46	0.00	0.04	0.35	0.00
Sat Flow, veh/h	1767	3618	0	1739	3561	0	1781	3554	1585	1739	3469	1547
Grp Volume(v), veh/h	475	446	0	98	440	0	348	1923	0	73	1113	0
Grp Sat Flow(s),veh/h/ln	1767	1763	0	1739	1735	0	1781	1777	1585	1739	1735	1547
Q Serve(g_s), s	36.1	19.0	0.0	8.7	22.8	0.0	29.1	83.4	0.0	7.5	55.6	0.0
Cycle Q Clear(g_c), s	36.1	19.0	0.0	8.7	22.8	0.0	29.1	83.4	0.0	7.5	55.6	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	396	958		261	445		288	1647		76	1203	
V/C Ratio(X)	1.20	0.47		0.38	0.99		1.21	1.17		0.96	0.93	
Avail Cap(c_a), veh/h	396	958		269	445		288	1647		76	1203	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.6	54.6	0.0	62.9	78.3	0.0	75.5	48.3	0.0	85.9	56.6	0.0
Incr Delay (d2), s/veh	111.7	0.4	0.0	0.9	39.5	0.0	121.7	82.5	0.0	88.0	13.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	40.7	13.3	0.0	7.1	18.4	0.0	33.5	74.0	0.0	8.9	34.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	169.3	55.0	0.0	63.8	117.8	0.0	197.2	130.8	0.0	173.8	69.9	0.0
LnGrp LOS	F	D		E	F		F	F		F	E	
Approach Vol, veh/h		921	A		538	A		2271	A		1186	A
Approach Delay, s/veh		113.9			107.9			141.0			76.3	
Approach LOS		F			F			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.0	70.0	43.0	30.0	16.0	91.0	17.2	55.8				
Change Period (Y+Rc), s	* 7.9	7.6	6.9	6.9	* 8.1	7.6	6.5	6.9				
Max Green Setting (Gmax), s	* 29	62.4	36.1	23.1	* 7.9	83.4	11.5	48.1				
Max Q Clear Time (g_c+I1), s	31.1	57.6	38.1	24.8	9.5	85.4	10.7	21.0				
Green Ext Time (p_c), s	0.0	2.8	0.0	0.0	0.0	0.0	0.0	2.9				

Intersection Summary

HCM 6th Ctrl Delay	116.7
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
2: 33rd St E & 63rd Avenue E

DTM 63rd Avenue East
2021 - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	160	320	70	60	260	150	60	40	70	160	40	150
Future Volume (vph)	160	320	70	60	260	150	60	40	70	160	40	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		2766			2691			1173			1058	
Travel Time (s)		47.1			45.9			17.8			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	103.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	160	320	70	60	260	150	60	40	70	160	40	150
Future Vol, veh/h	160	320	70	60	260	150	60	40	70	160	40	150
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	174	348	76	65	283	163	65	43	76	174	43	163
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	171.2	96.2	21.6	45.5
HCM LOS	F	F	C	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	35%	29%	13%	46%
Vol Thru, %	24%	58%	55%	11%
Vol Right, %	41%	13%	32%	43%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	550	470	350
LT Vol	60	160	60	160
Through Vol	40	320	260	40
RT Vol	70	70	150	150
Lane Flow Rate	185	598	511	380
Geometry Grp	1	1	1	1
Degree of Util (X)	0.462	1.29	1.082	0.849
Departure Headway (Hd)	10.155	8.142	8.358	8.928
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	357	448	439	407
Service Time	8.155	6.142	6.358	6.928
HCM Lane V/C Ratio	0.518	1.335	1.164	0.934
HCM Control Delay	21.6	171.2	96.2	45.5
HCM Lane LOS	C	F	F	E
HCM 95th-tile Q	2.3	24.7	15.6	8.1

Lanes, Volumes, Timings
 3: Tuttle Ave/39th St E & 63rd Avenue E

DTM 63rd Avenue East
 2021 - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕	↕		↕	
Traffic Volume (vph)	169	396	38	21	472	182	34	352	82	72	139	50
Future Volume (vph)	169	396	38	21	472	182	34	352	82	72	139	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		40			40			35				40
Link Distance (ft)		2691			1036			1000				1513
Travel Time (s)		45.9			17.7			19.5				25.8
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary

Area Type: Other
 Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	171.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕	↕		↕	
Traffic Vol, veh/h	169	396	38	21	472	182	34	352	82	72	139	50
Future Vol, veh/h	169	396	38	21	472	182	34	352	82	72	139	50
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	4	4	4
Mvmt Flow	174	408	39	22	487	188	35	363	85	74	143	52
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	333.8	142.2	75.2	46.6
HCM LOS	F	F	F	E

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	9%	0%	28%	4%	0%	28%
Vol Thru, %	91%	0%	66%	96%	0%	53%
Vol Right, %	0%	100%	6%	0%	100%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	386	82	603	493	182	261
LT Vol	34	0	169	21	0	72
Through Vol	352	0	396	472	0	139
RT Vol	0	82	38	0	182	50
Lane Flow Rate	398	85	622	508	188	269
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	1.015	0.198	1.659	1.305	0.444	0.755
Departure Headway (Hd)	10.968	10.18	10.291	10.761	9.999	12.803
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	334	355	361	341	362	285
Service Time	8.668	7.88	8.291	8.461	7.699	10.803
HCM Lane V/C Ratio	1.192	0.239	1.723	1.49	0.519	0.944
HCM Control Delay	87.9	15.4	333.8	187.1	20.4	46.6
HCM Lane LOS	F	C	F	F	C	E
HCM 95th-tile Q	11.5	0.7	35	20.7	2.2	5.6

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

E-2: No Build Conditions

Lanes, Volumes, Timings
1: US 301 & 63rd Ave E

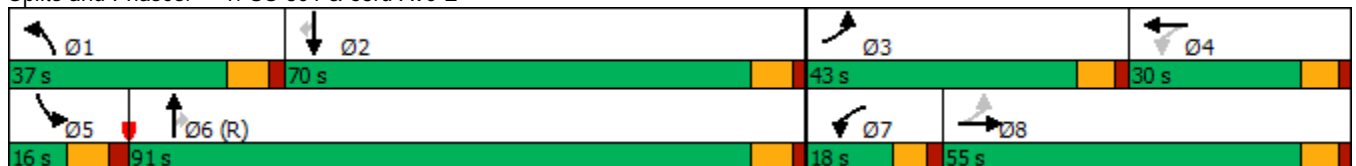
DTM 63rd Avenue East - No Build
2025 - Design Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	470	440	440	100	435	260	335	1825	70	70	1060	240
Future Volume (vph)	470	440	440	100	435	260	335	1825	70	70	1060	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	135		325	300		300	285		0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1438			2766			1671			1906	
Travel Time (s)		24.5			47.1			20.7			23.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	7.0		5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	11.9	24.9		11.5	24.9		12.9	25.6	25.6	13.1	25.6	25.6
Total Split (s)	43.0	55.0		18.0	30.0		37.0	91.0	91.0	16.0	70.0	70.0
Total Split (%)	23.9%	30.6%		10.0%	16.7%		20.6%	50.6%	50.6%	8.9%	38.9%	38.9%
Yellow Time (s)	4.9	4.9		4.5	4.9		5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	2.0	2.0		2.0	2.0		2.3	2.0	2.0	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.9	6.9		6.5	6.9		7.9	7.6	7.6	8.1	7.6	7.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	Max	Max

Intersection Summary























Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 90 (50%), Referenced to phase 6:NBT, Start of Green
 Natural Cycle: 150
 Control Type: Actuated-Coordinated

Splits and Phases: 1: US 301 & 63rd Ave E



HCM 6th Signalized Intersection Capacity Analysis
1: US 301 & 63rd Ave E

DTM 63rd Avenue East - No Build
2025 - Design Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	440	440	100	435	260	335	1825	70	70	1060	240
Future Volume (veh/h)	470	440	440	100	435	260	335	1825	70	70	1060	240
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856	1826	1826	1826	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	505	473	0	108	468	0	360	1962	0	75	1140	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	5	5	5	2	2	2	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	394	942		266	445		288	1647		76	1203	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.27	0.00	0.06	0.13	0.00	0.16	0.46	0.00	0.04	0.35	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	202.4	56.2	0.0	63.6	135.2	0.0	213.5	140.8	0.0	182.9	73.3	0.0
Ln Grp LOS	F	E		E	F		F	F		F	E	
Approach Vol, veh/h		978			576			2322			1215	
Approach Delay, s/veh		131.7			121.8			152.1			80.1	
Approach LOS		F			F			F			F	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	7	8			
Case No		2.0	3.0	1.1	4.0	2.0	3.0	1.1	4.0			
Phs Duration (G+Y+Rc), s		37.0	70.0	43.0	30.0	16.0	91.0	18.0	55.0			
Change Period (Y+Rc), s		* 7.9	7.6	6.9	6.9	* 8.1	7.6	6.5	6.9			
Max Green (Gmax), s		* 29	62.4	36.1	23.1	* 7.9	83.4	11.5	48.1			
Max Allow Headway (MAH), s		3.6	4.7	3.7	5.0	3.7	4.7	3.7	5.0			
Max Q Clear (g_c+I1), s		31.1	59.6	38.1	25.1	9.8	85.4	11.6	22.4			
Green Ext Time (g_e), s		0.0	1.8	0.0	0.0	0.0	0.0	0.0	3.0			
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00			
Prob of Max Out (p_x)		1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00			
Left-Turn Movement Data												
Assigned Mvmt		1		3		5		7				
Mvmt Sat Flow, veh/h		1781		1767		1739		1739				
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3469		3561		3554		3618			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1547		0		1585		0			
Left Lane Group Data												
Assigned Mvmt		1	0	3	0	5	0	7	0			
Lane Assignment		L (Prot)		L (Pr/Pm)		L (Prot)		L (Pr/Pm)				

HCM 6th Signalized Intersection Capacity Analysis
1: US 301 & 63rd Ave E

DTM 63rd Avenue East - No Build
2025 - Design Hour

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	360	0	505	0	75	0	108	0
Grp Sat Flow (s), veh/h/ln	1781	0	1767	0	1739	0	1739	0
Q Serve Time (g_s), s	29.1	0.0	36.1	0.0	7.8	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	29.1	0.0	36.1	0.0	7.8	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	918	0	0	0	899	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	25.1	0.0	0.0	0.0	23.1	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	23.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	288	0	394	0	76	0	266	0
V/C Ratio (X)	1.25	0.00	1.28	0.00	0.98	0.00	0.41	0.00
Avail Cap (c_a), veh/h	288	0	394	0	76	0	266	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.5	0.0	58.1	0.0	86.0	0.0	62.6	0.0
Incr Delay (d2), s/veh	138.0	0.0	144.4	0.0	96.9	0.0	1.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	213.5	0.0	202.4	0.0	182.9	0.0	63.6	0.0
1st-Term Q (Q1), veh/ln	13.0	0.0	16.0	0.0	3.4	0.0	4.3	0.0
2nd-Term Q (Q2), veh/ln	11.0	0.0	15.8	0.0	2.1	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.48	0.00	1.46	0.00	1.70	0.00	1.79	0.00
%ile Back of Q (95%), veh/ln	35.6	0.0	46.5	0.0	9.3	0.0	7.8	0.0
%ile Storage Ratio (RQ%)	3.02	0.00	4.25	0.00	0.85	0.00	1.49	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	18.0	0.0	27.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	1140	0	468	0	1962	0	473
Grp Sat Flow (s), veh/h/ln	0	1735	0	1735	0	1777	0	1763
Q Serve Time (g_s), s	0.0	57.6	0.0	23.1	0.0	83.4	0.0	20.4
Cycle Q Clear Time (g_c), s	0.0	57.6	0.0	23.1	0.0	83.4	0.0	20.4
Lane Grp Cap (c), veh/h	0	1203	0	445	0	1647	0	942
V/C Ratio (X)	0.00	0.95	0.00	1.05	0.00	1.19	0.00	0.50
Avail Cap (c_a), veh/h	0	1203	0	445	0	1647	0	942
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	57.2	0.0	78.4	0.0	48.3	0.0	55.8
Incr Delay (d2), s/veh	0.0	16.1	0.0	56.7	0.0	92.5	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	73.3	0.0	135.2	0.0	140.8	0.0	56.2
1st-Term Q (Q1), veh/ln	0.0	24.3	0.0	10.3	0.0	35.0	0.0	9.1
2nd-Term Q (Q2), veh/ln	0.0	2.7	0.0	3.5	0.0	21.2	0.0	0.1

HCM 6th Signalized Intersection Capacity Analysis
1: US 301 & 63rd Ave E

DTM 63rd Avenue East - No Build
2025 - Design Hour

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.32	0.00	1.48	0.00	1.39	0.00	1.54
%ile Back of Q (95%), veh/ln	0.0	35.5	0.0	20.3	0.0	77.8	0.0	14.1
%ile Storage Ratio (RQ%)	0.00	0.50	0.00	0.20	0.00	1.22	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	5.7	0.0	78.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1547	0	0	0	1585	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	536	0	0	0	734	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	536	0	0	0	734	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	127.6
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
2: 33rd St E & 63rd Ave E

DTM 63rd Avenue East - No Build
2025 - Design Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	170	340	70	70	280	150	70	40	70	170	40	150
Future Volume (vph)	170	340	70	70	280	150	70	40	70	170	40	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		2766			2691			1173			1058	
Travel Time (s)		47.1			45.9			17.8			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	133.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	170	340	70	70	280	150	70	40	70	170	40	150
Future Vol, veh/h	170	340	70	70	280	150	70	40	70	170	40	150
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	185	370	76	76	304	163	76	43	76	185	43	163
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	217.6	133.9	24.1	53.4
HCM LOS	F	F	C	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	39%	29%	14%	47%
Vol Thru, %	22%	59%	56%	11%
Vol Right, %	39%	12%	30%	42%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	180	580	500	360
LT Vol	70	170	70	170
Through Vol	40	340	280	40
RT Vol	70	70	150	150
Lane Flow Rate	196	630	543	391
Geometry Grp	1	1	1	1
Degree of Util (X)	0.497	1.4	1.186	0.886
Departure Headway (Hd)	10.838	8.531	8.784	9.459
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	335	429	418	387
Service Time	8.838	6.531	6.784	7.459
HCM Lane V/C Ratio	0.585	1.469	1.299	1.01
HCM Control Delay	24.1	217.6	133.9	53.4
HCM Lane LOS	C	F	F	F
HCM 95th-tile Q	2.6	28.8	19.1	8.9

Lanes, Volumes, Timings
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - No Build
 2025 - Design Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	420	40	25	500	195	35	360	85	75	145	55
Future Volume (vph)	180	420	40	25	500	195	35	360	85	75	145	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	200		120	200		120
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2691			1036			1000			1513	
Travel Time (s)		45.9			17.7			19.5			25.8	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		2			6		3	8		7		4
Permitted Phases	2			6			8		8	4		4
Detector Phase	2	2		6	6		3	8	8	7		4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0		5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5	22.5	9.5		22.5
Total Split (s)	125.0	125.0		125.0	125.0		11.0	38.0	38.0	17.0		44.0
Total Split (%)	69.4%	69.4%		69.4%	69.4%		6.1%	21.1%	21.1%	9.4%		24.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5		3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5		4.5
Lead/Lag							Lead	Lag	Lag	Lead		Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None		None	None		None	Min	Min	None		Min

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 76.4
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Tuttle Ave/39th St E & 63rd Ave E



HCM 6th Signalized Intersection Capacity Analysis
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - No Build
 2025 - Design Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	420	40	25	500	195	35	360	85	75	145	55
Future Volume (veh/h)	180	420	40	25	500	195	35	360	85	75	145	55
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	186	433	41	26	515	201	36	371	88	77	149	57
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	4	4	4
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	339	1004	95	520	764	298	333	576	257	254	633	282
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.60	0.60	0.60	0.60	0.60	0.60	0.04	0.16	0.16	0.05	0.18	0.18
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.4	0.0	8.2	11.0	0.0	10.6	23.9	29.5	27.6	24.2	25.5	25.5
Ln Grp LOS	C	A	A	B	A	B	C	C	C	C	C	C
Approach Vol, veh/h		660			742			495			283	
Approach Delay, s/veh		12.5			10.6			28.8			25.2	
Approach LOS		B			B			C			C	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2	3	4		6	7	8			
Case No			6.0	1.1	3.0		6.0	1.1	3.0			
Phs Duration (G+Y+Rc), s			47.6	7.1	17.6		47.6	8.4	16.2			
Change Period (Y+Rc), s			4.5	4.5	4.5		4.5	4.5	4.5			
Max Green (Gmax), s			120.5	6.5	39.5		120.5	12.5	33.5			
Max Allow Headway (MAH), s			5.3	3.8	4.7		5.1	3.7	4.9			
Max Q Clear (g_c+I1), s			38.1	3.2	4.6		21.6	4.6	9.1			
Green Ext Time (g_e), s			5.0	0.0	1.1		6.0	0.1	2.7			
Prob of Phs Call (p_c)			1.00	0.51	1.00		1.00	0.79	1.00			
Prob of Max Out (p_x)			0.00	1.00	0.00		0.00	0.01	0.00			
Left-Turn Movement Data												
Assigned Mvmt			5	3			1	7				
Mvmt Sat Flow, veh/h			735	1781			920	1753				
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1682		3497		1281		3554			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			159		1560		500		1585			
Left Lane Group Data												
Assigned Mvmt		0	5	3	0	0	1	7	0			
Lane Assignment			LL (Pr/Pm)				LL (Pr/Pm)					

HCM 6th Signalized Intersection Capacity Analysis
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - No Build
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Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	186	36	0	0	26	77	0
Grp Sat Flow (s), veh/h/ln	0	735	1781	0	0	920	1753	0
Q Serve Time (g_s), s	0.0	16.5	1.2	0.0	0.0	1.1	2.6	0.0
Cycle Q Clear Time (g_c), s	0.0	36.1	1.2	0.0	0.0	11.2	2.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	735	1176	0	0	920	918	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	43.1	11.7	0.0	0.0	43.1	11.7	0.0
Perm LT Serve Time (g_u), s	0.0	23.5	10.4	0.0	0.0	33.0	4.7	0.0
Perm LT Q Serve Time (g_ps), s	0.0	16.5	0.0	0.0	0.0	1.1	0.6	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	339	333	0	0	520	254	0
V/C Ratio (X)	0.00	0.55	0.11	0.00	0.00	0.05	0.30	0.00
Avail Cap (c_a), veh/h	0	1126	430	0	0	1505	462	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	22.0	23.7	0.0	0.0	11.0	23.6	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.1	0.0	0.0	0.0	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.4	23.9	0.0	0.0	11.0	24.2	0.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.5	0.0	0.0	0.2	1.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.80	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	4.8	0.9	0.0	0.0	0.4	1.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.61	0.11	0.00	0.00	0.01	0.24	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	149	0	0	0	371
Grp Sat Flow (s), veh/h/ln	0	0	0	1749	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	2.6	0.0	0.0	0.0	7.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.6	0.0	0.0	0.0	7.1
Lane Grp Cap (c), veh/h	0	0	0	633	0	0	0	576
V/C Ratio (X)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.64
Avail Cap (c_a), veh/h	0	0	0	1912	0	0	0	1648
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	25.3	0.0	0.0	0.0	28.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	25.5	0.0	0.0	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

HCM 6th Signalized Intersection Capacity Analysis
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - No Build
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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	1.9	0.0	0.0	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	474	0	57	0	716	0	88
Grp Sat Flow (s), veh/h/ln	0	1842	0	1560	0	1780	0	1585
Q Serve Time (g_s), s	0.0	10.1	0.0	2.2	0.0	19.6	0.0	3.6
Cycle Q Clear Time (g_c), s	0.0	10.1	0.0	2.2	0.0	19.6	0.0	3.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.09	0.00	1.00	0.00	0.28	0.00	1.00
Lane Grp Cap (c), veh/h	0	1099	0	282	0	1062	0	257
V/C Ratio (X)	0.00	0.43	0.00	0.20	0.00	0.67	0.00	0.34
Avail Cap (c_a), veh/h	0	3072	0	853	0	2970	0	735
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.9	0.0	25.1	0.0	9.8	0.0	26.8
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.3	0.0	0.8	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.2	0.0	25.5	0.0	10.6	0.0	27.6
1st-Term Q (Q1), veh/ln	0.0	3.0	0.0	0.8	0.0	5.7	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.67	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	5.6	0.0	1.4	0.0	9.9	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.31	0.00	0.26	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

Lanes, Volumes, Timings
1: US 301 & 63rd Ave E

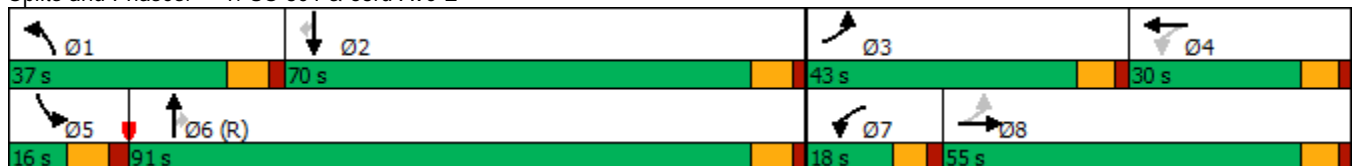
DTM 63rd Avenue East - No Build
2045 - Design Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	615	575	580	130	570	340	365	2015	75	80	1170	265
Future Volume (vph)	615	575	580	130	570	340	365	2015	75	80	1170	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	135		325	300		300	285		0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1438			2766			1671			1906	
Travel Time (s)		24.5			47.1			20.7			23.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	7.0		5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	11.9	24.9		11.5	24.9		12.9	25.6	25.6	13.1	25.6	25.6
Total Split (s)	43.0	55.0		18.0	30.0		37.0	91.0	91.0	16.0	70.0	70.0
Total Split (%)	23.9%	30.6%		10.0%	16.7%		20.6%	50.6%	50.6%	8.9%	38.9%	38.9%
Yellow Time (s)	4.9	4.9		4.5	4.9		5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	2.0	2.0		2.0	2.0		2.3	2.0	2.0	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.9	6.9		6.5	6.9		7.9	7.6	7.6	8.1	7.6	7.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	Max	Max

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 90 (50%), Referenced to phase 6:NBT, Start of Green
 Natural Cycle: 150
 Control Type: Actuated-Coordinated

Splits and Phases: 1: US 301 & 63rd Ave E



HCM 6th Signalized Intersection Capacity Analysis
1: US 301 & 63rd Ave E

DTM 63rd Avenue East - No Build
2045 - Design Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	615	575	580	130	570	340	365	2015	75	80	1170	265
Future Volume (veh/h)	615	575	580	130	570	340	365	2015	75	80	1170	265
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856	1826	1826	1826	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	661	618	0	140	613	0	392	2167	0	86	1258	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	5	5	5	2	2	2	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	394	942		239	445		288	1647		76	1203	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.27	0.00	0.06	0.13	0.00	0.16	0.46	0.00	0.04	0.35	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	373.1	60.3	0.0	67.9	261.7	0.0	258.9	195.0	0.0	227.6	97.6	0.0
Ln Grp LOS	F	E		E	F		F	F		F	F	
Approach Vol, veh/h		1279			753			2559			1344	
Approach Delay, s/veh		222.0			225.7			204.7			106.0	
Approach LOS		F			F			F			F	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	7	8			
Case No		2.0	3.0	1.1	4.0	2.0	3.0	1.1	4.0			
Phs Duration (G+Y+Rc), s		37.0	70.0	43.0	30.0	16.0	91.0	18.0	55.0			
Change Period (Y+Rc), s		* 7.9	7.6	6.9	6.9	* 8.1	7.6	6.5	6.9			
Max Green (Gmax), s		* 29	62.4	36.1	23.1	* 7.9	83.4	11.5	48.1			
Max Allow Headway (MAH), s		3.6	4.7	3.7	5.0	3.7	4.7	3.7	5.0			
Max Q Clear (g_c+I1), s		31.1	64.4	38.1	25.1	9.9	85.4	13.5	30.0			
Green Ext Time (g_e), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7			
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00			
Prob of Max Out (p_x)		1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.04			
Left-Turn Movement Data												
Assigned Mvmt		1		3		5		7				
Mvmt Sat Flow, veh/h		1781		1767		1739		1739				
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3469		3561		3554		3618			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1547		0		1585		0			
Left Lane Group Data												
Assigned Mvmt		1	0	3	0	5	0	7	0			
Lane Assignment		L (Prot)		L (Pr/Pm)		L (Prot)		L (Pr/Pm)				

HCM 6th Signalized Intersection Capacity Analysis
1: US 301 & 63rd Ave E

DTM 63rd Avenue East - No Build
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Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	392	0	661	0	86	0	140	0
Grp Sat Flow (s), veh/h/ln	1781	0	1767	0	1739	0	1739	0
Q Serve Time (g_s), s	29.1	0.0	36.1	0.0	7.9	0.0	11.5	0.0
Cycle Q Clear Time (g_c), s	29.1	0.0	36.1	0.0	7.9	0.0	11.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	803	0	0	0	786	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	25.1	0.0	0.0	0.0	23.1	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	20.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	288	0	394	0	76	0	239	0
V/C Ratio (X)	1.36	0.00	1.68	0.00	1.13	0.00	0.59	0.00
Avail Cap (c_a), veh/h	288	0	394	0	76	0	239	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	75.5	0.0	58.1	0.0	86.1	0.0	64.3	0.0
Incr Delay (d2), s/veh	183.4	0.0	315.1	0.0	141.6	0.0	3.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	258.9	0.0	373.1	0.0	227.6	0.0	67.9	0.0
1st-Term Q (Q1), veh/ln	13.0	0.0	16.0	0.0	3.5	0.0	5.8	0.0
2nd-Term Q (Q2), veh/ln	14.7	0.0	34.5	0.0	3.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.50	0.00	1.53	0.00	1.70	0.00	1.67	0.00
%ile Back of Q (95%), veh/ln	41.6	0.0	77.1	0.0	11.0	0.0	10.1	0.0
%ile Storage Ratio (RQ%)	3.52	0.00	7.05	0.00	1.01	0.00	1.94	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	26.0	0.0	66.6	0.0	2.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.4	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	1258	0	613	0	2167	0	618
Grp Sat Flow (s), veh/h/ln	0	1735	0	1735	0	1777	0	1763
Q Serve Time (g_s), s	0.0	62.4	0.0	23.1	0.0	83.4	0.0	28.0
Cycle Q Clear Time (g_c), s	0.0	62.4	0.0	23.1	0.0	83.4	0.0	28.0
Lane Grp Cap (c), veh/h	0	1203	0	445	0	1647	0	942
V/C Ratio (X)	0.00	1.05	0.00	1.38	0.00	1.32	0.00	0.66
Avail Cap (c_a), veh/h	0	1203	0	445	0	1647	0	942
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	58.8	0.0	78.4	0.0	48.3	0.0	58.6
Incr Delay (d2), s/veh	0.0	38.8	0.0	183.3	0.0	146.7	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	97.6	0.0	261.7	0.0	195.0	0.0	60.3
1st-Term Q (Q1), veh/ln	0.0	26.4	0.0	10.3	0.0	35.0	0.0	12.5
2nd-Term Q (Q2), veh/ln	0.0	6.5	0.0	11.3	0.0	33.5	0.0	0.2

HCM 6th Signalized Intersection Capacity Analysis
1: US 301 & 63rd Ave E

DTM 63rd Avenue East - No Build
2045 - Design Hour

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.33	0.00	1.53	0.00	1.44	0.00	1.46
%ile Back of Q (95%), veh/ln	0.0	43.6	0.0	33.2	0.0	99.0	0.0	18.5
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	0.32	0.00	1.55	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	13.8	0.0	41.9	0.0	130.1	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1547	0	0	0	1585	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	536	0	0	0	734	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	536	0	0	0	734	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

















HCM 6th Ctrl Delay	188.7
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
2: 33rd St E & 63rd Ave E

DTM 63rd Avenue East - No Build
2045 - Design Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	480	80	80	400	170	70	30	80	190	30	170
Future Volume (vph)	190	480	80	80	400	170	70	30	80	190	30	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	100		0	100		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		2766			2691			1173			1058	
Travel Time (s)		47.1			45.9			17.8			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											

Intersection	
Intersection Delay, s/veh	277.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	190	480	80	80	400	170	70	30	80	190	30	170
Future Vol, veh/h	190	480	80	80	400	170	70	30	80	190	30	170
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	207	522	87	87	435	185	76	33	87	207	33	185
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	420.4	303.3	29.2	73.7
HCM LOS	F	F	D	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	39%	25%	12%	49%
Vol Thru, %	17%	64%	62%	8%
Vol Right, %	44%	11%	26%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	180	750	650	390
LT Vol	70	190	80	190
Through Vol	30	480	400	30
RT Vol	80	80	170	170
Lane Flow Rate	196	815	707	424
Geometry Grp	1	1	1	1
Degree of Util (X)	0.502	1.863	1.591	0.955
Departure Headway (Hd)	13.398	9.513	9.912	11.083
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	272	391	374	331
Service Time	11.398	7.513	7.912	9.083
HCM Lane V/C Ratio	0.721	2.084	1.89	1.281
HCM Control Delay	29.2	420.4	303.3	73.7
HCM Lane LOS	D	F	F	F
HCM 95th-tile Q	2.6	46.5	33.3	9.9

Lanes, Volumes, Timings
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - No Build
 2045 - Design Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	550	55	30	655	255	40	400	95	85	160	60
Future Volume (vph)	235	550	55	30	655	255	40	400	95	85	160	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	200		120	200		120
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2691			1036			1000			1513	
Travel Time (s)		45.9			17.7			19.5			25.8	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		2			6		3	8		7		4
Permitted Phases	2			6			8		8	4		4
Detector Phase	2	2		6	6		3	8	8	7		4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0		5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5	22.5	9.5		22.5
Total Split (s)	137.8	137.8		137.8	137.8		9.6	29.0	29.0	13.2		32.6
Total Split (%)	76.6%	76.6%		76.6%	76.6%		5.3%	16.1%	16.1%	7.3%		18.1%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5		3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5		4.5
Lead/Lag							Lead	Lag	Lag	Lead		Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None		None	None		None	Min	Min	None		Min























Intersection Summary
 Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 146.7
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Tuttle Ave/39th St E & 63rd Ave E



HCM 6th Signalized Intersection Capacity Analysis
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - No Build
 2045 - Design Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	550	55	30	655	255	40	400	95	85	160	60
Future Volume (veh/h)	235	550	55	30	655	255	40	400	95	85	160	60
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	242	567	57	31	675	263	41	412	98	88	165	62
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	4	4	4
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	304	1225	123	521	939	366	226	470	210	153	553	247
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.73	0.73	0.73	0.73	0.73	0.73	0.03	0.13	0.13	0.05	0.16	0.16
Unsig. Movement Delay												
Ln Grp Delay, s/veh	54.8	0.0	9.1	14.0	0.0	14.0	59.9	84.3	67.7	62.7	61.5	61.3
Ln Grp LOS	D	A	A	B	A	B	E	F	E	E	E	E
Approach Vol, veh/h		866			969			551			315	
Approach Delay, s/veh		21.9			14.0			79.5			61.8	
Approach LOS		C			B			E			E	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2	3	4		6	7	8			
Case No			6.0	1.1	3.0		6.0	1.1	3.0			
Phs Duration (G+Y+Rc), s			125.1	9.0	30.5		125.1	13.2	26.3			
Change Period (Y+Rc), s			4.5	4.5	4.5		4.5	4.5	4.5			
Max Green (Gmax), s			133.3	5.1	28.1		133.3	8.7	24.5			
Max Allow Headway (MAH), s			5.6	3.8	4.7		5.1	3.7	4.9			
Max Q Clear (g_c+I1), s			114.3	5.3	8.9		51.0	9.0	20.7			
Green Ext Time (g_e), s			6.4	0.0	1.0		9.9	0.0	1.0			
Prob of Phs Call (p_c)			1.00	0.85	1.00		1.00	0.98	1.00			
Prob of Max Out (p_x)			0.22	1.00	0.00		0.00	1.00	1.00			
Left-Turn Movement Data												
Assigned Mvmt			5	3			1	7				
Mvmt Sat Flow, veh/h			597	1781			801	1753				
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1672		3497		1281		3554			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			168		1560		499		1585			
Left Lane Group Data												
Assigned Mvmt		0	5	3	0	0	1	7	0			
Lane Assignment			LL (Pr/Pm)				LL (Pr/Pm)					

HCM 6th Signalized Intersection Capacity Analysis
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - No Build
 2045 - Design Hour

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	242	41	0	0	31	88	0
Grp Sat Flow (s), veh/h/ln	0	597	1781	0	0	801	1753	0
Q Serve Time (g_s), s	0.0	63.3	3.3	0.0	0.0	2.7	7.0	0.0
Cycle Q Clear Time (g_c), s	0.0	112.3	3.3	0.0	0.0	25.2	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	597	1154	0	0	801	876	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	120.6	21.8	0.0	0.0	120.6	23.5	0.0
Perm LT Serve Time (g_u), s	0.0	71.7	19.2	0.0	0.0	98.1	3.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	63.3	0.1	0.0	0.0	2.7	2.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	304	226	0	0	521	153	0
V/C Ratio (X)	0.00	0.80	0.18	0.00	0.00	0.06	0.58	0.00
Avail Cap (c_a), veh/h	0	350	233	0	0	582	153	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	44.1	59.6	0.0	0.0	14.0	57.5	0.0
Incr Delay (d2), s/veh	0.0	10.7	0.4	0.0	0.0	0.0	5.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	54.8	59.9	0.0	0.0	14.0	62.7	0.0
1st-Term Q (Q1), veh/ln	0.0	9.1	1.5	0.0	0.0	0.5	3.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.52	1.80	0.00	0.00	1.80	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	15.2	2.7	0.0	0.0	0.9	6.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.94	0.34	0.00	0.00	0.02	0.77	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	165	0	0	0	412
Grp Sat Flow (s), veh/h/ln	0	0	0	1749	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	6.9	0.0	0.0	0.0	18.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.9	0.0	0.0	0.0	18.7
Lane Grp Cap (c), veh/h	0	0	0	553	0	0	0	470
V/C Ratio (X)	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.88
Avail Cap (c_a), veh/h	0	0	0	597	0	0	0	529
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	61.2	0.0	0.0	0.0	70.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	14.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	61.5	0.0	0.0	0.0	84.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	0.0	0.0	8.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9

HCM 6th Signalized Intersection Capacity Analysis
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - No Build
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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.00	0.00	1.53
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	5.5	0.0	0.0	0.0	14.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	624	0	62	0	938	0	98
Grp Sat Flow (s), veh/h/ln	0	1840	0	1560	0	1780	0	1585
Q Serve Time (g_s), s	0.0	22.6	0.0	5.7	0.0	49.0	0.0	9.4
Cycle Q Clear Time (g_c), s	0.0	22.6	0.0	5.7	0.0	49.0	0.0	9.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.09	0.00	1.00	0.00	0.28	0.00	1.00
Lane Grp Cap (c), veh/h	0	1349	0	247	0	1305	0	210
V/C Ratio (X)	0.00	0.46	0.00	0.25	0.00	0.72	0.00	0.47
Avail Cap (c_a), veh/h	0	1490	0	266	0	1442	0	236
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	60.8	0.0	12.4	0.0	66.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.5	0.0	1.6	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.1	0.0	61.3	0.0	14.0	0.0	67.7
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	2.3	0.0	17.6	0.0	3.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.56	0.00	1.80	0.00	1.38	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	13.2	0.0	4.1	0.0	25.1	0.0	7.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.89	0.00	0.65	0.00	1.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

E-3: Build Conditions

Lanes, Volumes, Timings
1: US 301 & 63rd Ave E

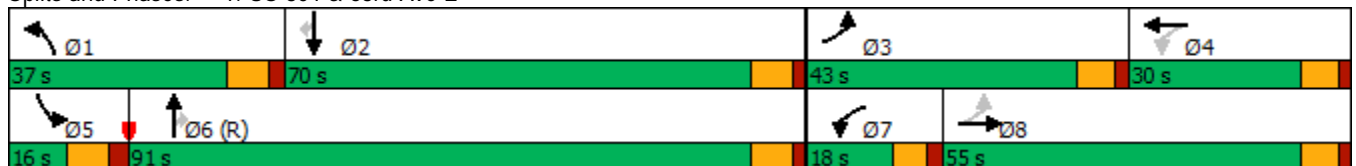
DTM 63rd Avenue East - Ultimate Build
2025 - Design Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	470	440	440	100	435	260	335	1825	70	70	1060	240
Future Volume (vph)	470	440	440	100	435	260	335	1825	70	70	1060	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	135		325	300		300	285		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1438			2766			1671			1906	
Travel Time (s)		24.5			47.1			20.7			23.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	7.0		5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	11.9	24.9		11.5	24.9		12.9	25.6	25.6	13.1	25.6	25.6
Total Split (s)	43.0	55.0		18.0	30.0		37.0	91.0	91.0	16.0	70.0	70.0
Total Split (%)	23.9%	30.6%		10.0%	16.7%		20.6%	50.6%	50.6%	8.9%	38.9%	38.9%
Yellow Time (s)	4.9	4.9		4.5	4.9		5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	2.0	2.0		2.0	2.0		2.3	2.0	2.0	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.9	6.9		6.5	6.9		7.9	7.6	7.6	8.1	7.6	7.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	Max	Max

Intersection Summary

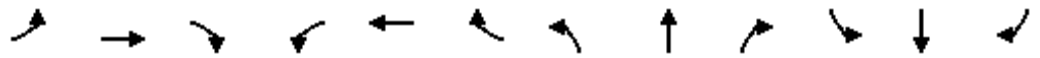
Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 90 (50%), Referenced to phase 6:NBT, Start of Green
 Natural Cycle: 150
 Control Type: Actuated-Coordinated

Splits and Phases: 1: US 301 & 63rd Ave E



HCM 6th Signalized Intersection Summary
1: US 301 & 63rd Ave E

DTM 63rd Avenue East - Ultimate Build
2025 - Design Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	470	440	440	100	435	260	335	1825	70	70	1060	240
Future Volume (veh/h)	470	440	440	100	435	260	335	1825	70	70	1060	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1826	1826	1826	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	505	473	0	108	468	0	360	1962	0	75	1140	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	5	5	5	2	2	2	5	5	5
Cap, veh/h	394	942		266	445		288	1647		76	1203	
Arrive On Green	0.20	0.27	0.00	0.06	0.13	0.00	0.16	0.46	0.00	0.04	0.35	0.00
Sat Flow, veh/h	1767	3618	0	1739	3561	0	1781	3554	1585	1739	3469	1547
Grp Volume(v), veh/h	505	473	0	108	468	0	360	1962	0	75	1140	0
Grp Sat Flow(s),veh/h/ln	1767	1763	0	1739	1735	0	1781	1777	1585	1739	1735	1547
Q Serve(g_s), s	36.1	20.4	0.0	9.6	23.1	0.0	29.1	83.4	0.0	7.8	57.6	0.0
Cycle Q Clear(g_c), s	36.1	20.4	0.0	9.6	23.1	0.0	29.1	83.4	0.0	7.8	57.6	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	394	942		266	445		288	1647		76	1203	
V/C Ratio(X)	1.28	0.50		0.41	1.05		1.25	1.19		0.98	0.95	
Avail Cap(c_a), veh/h	394	942		266	445		288	1647		76	1203	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	0.95	0.95	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.1	55.8	0.0	62.6	78.4	0.0	75.5	48.3	0.0	86.0	57.2	0.0
Incr Delay (d2), s/veh	144.4	0.4	0.0	0.9	55.7	0.0	138.0	92.5	0.0	96.9	16.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.8	9.1	0.0	4.3	13.7	0.0	24.1	56.2	0.0	5.5	27.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	202.4	56.2	0.0	63.6	134.1	0.0	213.5	140.8	0.0	182.9	73.3	0.0
LnGrp LOS	F	E		E	F		F	F		F	E	
Approach Vol, veh/h		978	A		576	A		2322	A		1215	A
Approach Delay, s/veh		131.7			120.9			152.1			80.1	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.0	70.0	43.0	30.0	16.0	91.0	18.0	55.0				
Change Period (Y+Rc), s	* 7.9	7.6	6.9	6.9	* 8.1	7.6	6.5	6.9				
Max Green Setting (Gmax), s	* 29	62.4	36.1	23.1	* 7.9	83.4	11.5	48.1				
Max Q Clear Time (g_c+l1), s	31.1	59.6	38.1	25.1	9.8	85.4	11.6	22.4				
Green Ext Time (p_c), s	0.0	1.8	0.0	0.0	0.0	0.0	0.0	3.0				

Intersection Summary

HCM 6th Ctrl Delay	127.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
2: 33rd St E & 63rd Ave E

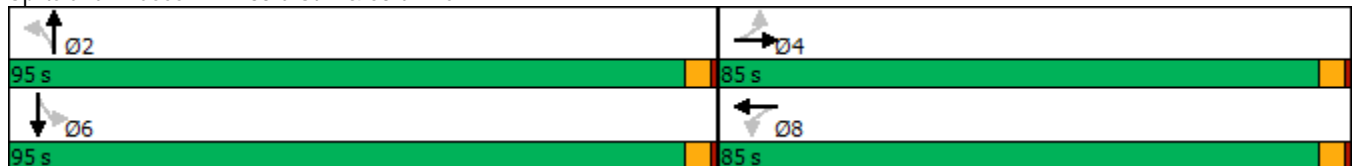
DTM 63rd Avenue East - Ultimate Build
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	340	70	70	280	150	70	40	70	170	40	150
Future Volume (vph)	170	340	70	70	280	150	70	40	70	170	40	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		2766			2691			1173			1058	
Travel Time (s)		47.1			45.9			17.8			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	85.0	85.0		85.0	85.0		95.0	95.0		95.0	95.0	
Total Split (%)	47.2%	47.2%		47.2%	47.2%		52.8%	52.8%		52.8%	52.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 62.2
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: 33rd St E & 63rd Ave E



HCM 6th Signalized Intersection Summary
 2: 33rd St E & 63rd Ave E

DTM 63rd Avenue East - Ultimate Build
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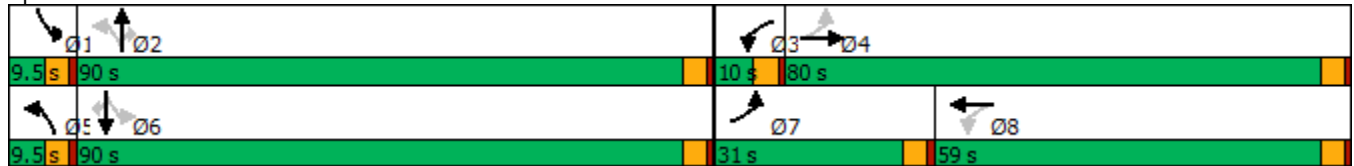
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	340	70	70	280	150	70	40	70	170	40	150
Future Volume (veh/h)	170	340	70	70	280	150	70	40	70	170	40	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	185	370	76	76	304	163	76	43	76	185	43	163
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	1232	250	507	944	494	294	176	215	355	90	217
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	926	2942	598	944	2255	1180	469	515	628	626	264	636
Grp Volume(v), veh/h	185	222	224	76	238	229	195	0	0	391	0	0
Grp Sat Flow(s),veh/h/ln	926	1777	1763	944	1777	1658	1612	0	0	1525	0	0
Q Serve(g_s), s	6.3	3.1	3.2	2.2	3.4	3.5	0.0	0.0	0.0	5.1	0.0	0.0
Cycle Q Clear(g_c), s	9.8	3.1	3.2	5.4	3.4	3.5	3.1	0.0	0.0	8.2	0.0	0.0
Prop In Lane	1.00		0.34	1.00		0.71	0.39		0.39	0.47		0.42
Lane Grp Cap(c), veh/h	493	744	738	507	744	694	684	0	0	662	0	0
V/C Ratio(X)	0.38	0.30	0.30	0.15	0.32	0.33	0.29	0.00	0.00	0.59	0.00	0.00
Avail Cap(c_a), veh/h	2089	3807	3777	2134	3807	3553	3658	0	0	3643	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.7	7.3	7.3	9.1	7.3	7.4	9.2	0.0	0.0	10.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.2	0.2	0.1	0.2	0.3	0.2	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.7	0.7	0.3	0.8	0.8	0.8	0.0	0.0	1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.2	7.5	7.5	9.2	7.6	7.6	9.4	0.0	0.0	11.5	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		631			543			195			391	
Approach Delay, s/veh		8.6			7.8			9.4			11.5	
Approach LOS		A			A			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		17.3		20.2		17.3		20.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		90.5		80.5		90.5		80.5				
Max Q Clear Time (g_c+I1), s		5.1		11.8		10.2		7.4				
Green Ext Time (p_c), s		1.2		3.9		2.7		3.4				
Intersection Summary												
HCM 6th Ctrl Delay				9.1								
HCM 6th LOS				A								

Lanes, Volumes, Timings
 3: Tuttle Ave/39th St E & 63rd Ave E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	420	40	25	500	195	35	360	85	75	145	55
Future Volume (vph)	180	420	40	25	500	195	35	360	85	75	145	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	200		120	200		120
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2691			1036			958			1513	
Travel Time (s)		45.9			17.7			18.7			25.8	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	31.0	80.0		10.0	59.0		9.5	90.0	90.0	9.5	90.0	90.0
Total Split (%)	16.4%	42.2%		5.3%	31.1%		5.0%	47.5%	47.5%	5.0%	47.5%	47.5%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min

Intersection Summary
 Area Type: Other
 Cycle Length: 189.5
 Actuated Cycle Length: 73.7
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Tuttle Ave/39th St E & 63rd Ave E



HCM 6th Signalized Intersection Summary
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - Ultimate Build
 2025 - Design Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕		↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	180	420	40	25	500	195	35	360	85	75	145	55
Future Volume (veh/h)	180	420	40	25	500	195	35	360	85	75	145	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	186	433	41	26	515	201	36	371	88	77	149	57
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	4	4	4
Cap, veh/h	415	1255	118	453	770	299	412	663	296	331	740	330
Arrive On Green	0.10	0.38	0.38	0.03	0.31	0.31	0.04	0.19	0.19	0.06	0.21	0.21
Sat Flow, veh/h	1781	3282	309	1781	2501	972	1781	3554	1585	1753	3497	1560
Grp Volume(v), veh/h	186	234	240	26	365	351	36	371	88	77	149	57
Grp Sat Flow(s),veh/h/ln	1781	1777	1815	1781	1777	1695	1781	1777	1585	1753	1749	1560
Q Serve(g_s), s	3.5	5.0	5.0	0.5	9.6	9.6	0.9	5.1	2.6	1.8	1.9	1.6
Cycle Q Clear(g_c), s	3.5	5.0	5.0	0.5	9.6	9.6	0.9	5.1	2.6	1.8	1.9	1.6
Prop In Lane	1.00		0.17	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	415	679	694	453	547	522	412	663	296	331	740	330
V/C Ratio(X)	0.45	0.34	0.35	0.06	0.67	0.67	0.09	0.56	0.30	0.23	0.20	0.17
Avail Cap(c_a), veh/h	1113	2514	2568	583	1815	1732	509	5694	2540	383	5604	2500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	11.7	11.7	11.9	16.1	16.1	16.3	19.7	18.7	15.9	17.3	17.2
Incr Delay (d2), s/veh	0.8	0.3	0.3	0.1	1.4	1.5	0.1	0.7	0.6	0.4	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.6	1.7	0.2	3.4	3.3	0.3	1.9	0.9	0.7	0.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.7	12.0	12.0	11.9	17.5	17.6	16.4	20.5	19.2	16.3	17.5	17.5
LnGrp LOS	B	B	B	B	B	B	B	C	B	B	B	B
Approach Vol, veh/h		660			742			495			283	
Approach Delay, s/veh		11.9			17.4			19.9			17.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.9	14.5	6.1	24.9	6.6	15.8	10.1	20.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	85.5	5.5	75.5	5.0	85.5	26.5	54.5				
Max Q Clear Time (g_c+I1), s	3.8	7.1	2.5	7.0	2.9	3.9	5.5	11.6				
Green Ext Time (p_c), s	0.0	2.9	0.0	2.9	0.0	1.1	0.5	4.8				

Intersection Summary

HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Lanes, Volumes, Timings
1: US 301 & 63rd Ave E

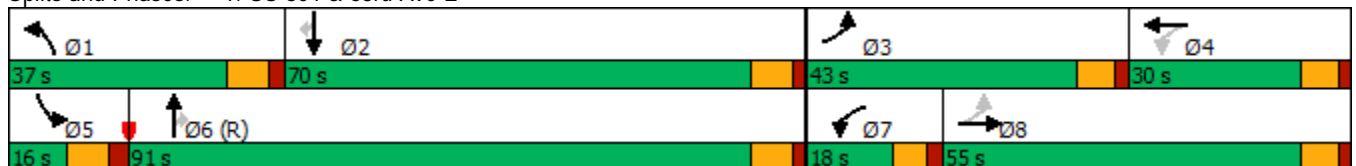
DTM 63rd Avenue East - Ultimate Build
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	615	575	580	130	570	340	365	2015	75	80	1170	265
Future Volume (vph)	615	575	580	130	570	340	365	2015	75	80	1170	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	135		325	300		300	285		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1438			2766			1671			1906	
Travel Time (s)		24.5			47.1			20.7			23.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4					6			2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	7.0		5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	11.9	24.9		11.5	24.9		12.9	25.6	25.6	13.1	25.6	25.6
Total Split (s)	43.0	55.0		18.0	30.0		37.0	91.0	91.0	16.0	70.0	70.0
Total Split (%)	23.9%	30.6%		10.0%	16.7%		20.6%	50.6%	50.6%	8.9%	38.9%	38.9%
Yellow Time (s)	4.9	4.9		4.5	4.9		5.6	5.6	5.6	5.6	5.6	5.6
All-Red Time (s)	2.0	2.0		2.0	2.0		2.3	2.0	2.0	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.9	6.9		6.5	6.9		7.9	7.6	7.6	8.1	7.6	7.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	Max	Max

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 90 (50%), Referenced to phase 6:NBT, Start of Green
 Natural Cycle: 150
 Control Type: Actuated-Coordinated

Splits and Phases: 1: US 301 & 63rd Ave E



HCM 6th Signalized Intersection Summary
 1: US 301 & 63rd Ave E

DTM 63rd Avenue East - Ultimate Build
 2045 - Design Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘		↗	↗↘	↗	↗	↗↘	↗
Traffic Volume (veh/h)	615	575	580	130	570	340	365	2015	75	80	1170	265
Future Volume (veh/h)	615	575	580	130	570	340	365	2015	75	80	1170	265
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1826	1826	1826	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	661	618	0	140	613	0	392	2167	0	86	1258	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	5	5	5	2	2	2	5	5	5
Cap, veh/h	394	942		239	445		288	1647		76	1203	
Arrive On Green	0.20	0.27	0.00	0.06	0.13	0.00	0.16	0.46	0.00	0.04	0.35	0.00
Sat Flow, veh/h	1767	3618	0	1739	3561	0	1781	3554	1585	1739	3469	1547
Grp Volume(v), veh/h	661	618	0	140	613	0	392	2167	0	86	1258	0
Grp Sat Flow(s),veh/h/ln	1767	1763	0	1739	1735	0	1781	1777	1585	1739	1735	1547
Q Serve(g_s), s	36.1	28.0	0.0	11.5	23.1	0.0	29.1	83.4	0.0	7.9	62.4	0.0
Cycle Q Clear(g_c), s	36.1	28.0	0.0	11.5	23.1	0.0	29.1	83.4	0.0	7.9	62.4	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	394	942		239	445		288	1647		76	1203	
V/C Ratio(X)	1.68	0.66		0.59	1.38		1.36	1.32		1.13	1.05	
Avail Cap(c_a), veh/h	394	942		239	445		288	1647		76	1203	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	0.92	0.92	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.1	58.6	0.0	64.3	78.4	0.0	75.5	48.3	0.0	86.1	58.8	0.0
Incr Delay (d2), s/veh	315.1	1.7	0.0	3.4	182.2	0.0	183.4	146.7	0.0	141.6	38.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	77.1	18.5	0.0	9.9	32.8	0.0	41.6	99.0	0.0	11.0	43.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	373.1	60.3	0.0	67.7	260.7	0.0	258.9	195.0	0.0	227.6	97.6	0.0
LnGrp LOS	F	E		E	F		F	F		F	F	
Approach Vol, veh/h		1279	A		753	A		2559	A		1344	A
Approach Delay, s/veh		222.0			224.8			204.7			106.0	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.0	70.0	43.0	30.0	16.0	91.0	18.0	55.0				
Change Period (Y+Rc), s	* 7.9	7.6	6.9	6.9	* 8.1	7.6	6.5	6.9				
Max Green Setting (Gmax), s	* 29	62.4	36.1	23.1	* 7.9	83.4	11.5	48.1				
Max Q Clear Time (g_c+l1), s	31.1	64.4	38.1	25.1	9.9	85.4	13.5	30.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7				

Intersection Summary

HCM 6th Ctrl Delay	188.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
2: 33rd St E & 63rd Ave E

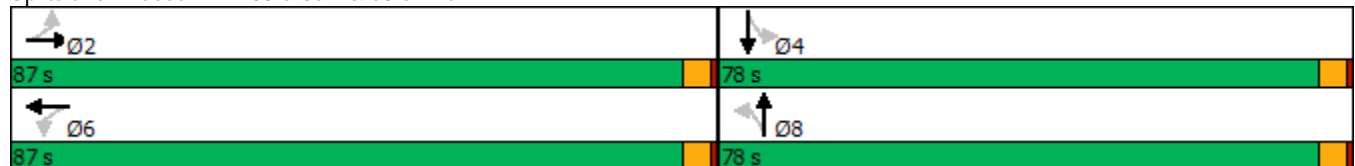
DTM 63rd Avenue East - Ultimate Build
2045 - Design Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	480	80	80	400	170	70	30	80	190	30	170
Future Volume (vph)	190	480	80	80	400	170	70	30	80	190	30	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		2766			2691			1173			1058	
Travel Time (s)		47.1			45.9			17.8			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	87.0	87.0		87.0	87.0		78.0	78.0		78.0	78.0	
Total Split (%)	52.7%	52.7%		52.7%	52.7%		47.3%	47.3%		47.3%	47.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	

Intersection Summary

Area Type: Other
 Cycle Length: 165
 Actuated Cycle Length: 88.1
 Natural Cycle: 50
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: 33rd St E & 63rd Ave E



HCM 6th Signalized Intersection Summary
 2: 33rd St E & 63rd Ave E

DTM 63rd Avenue East - Ultimate Build
 2045 - Design Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	480	80	80	400	170	70	30	80	190	30	170
Future Volume (veh/h)	190	480	80	80	400	170	70	30	80	190	30	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	207	522	87	87	435	185	76	33	87	207	33	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	437	1473	245	445	1177	496	256	127	228	338	60	227
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	804	3050	506	812	2436	1026	464	372	667	685	177	665
Grp Volume(v), veh/h	207	303	306	87	316	304	196	0	0	425	0	0
Grp Sat Flow(s),veh/h/ln	804	1777	1779	812	1777	1686	1503	0	0	1527	0	0
Q Serve(g_s), s	11.2	5.5	5.5	3.8	5.7	5.8	0.0	0.0	0.0	8.1	0.0	0.0
Cycle Q Clear(g_c), s	17.1	5.5	5.5	9.4	5.7	5.8	4.6	0.0	0.0	12.6	0.0	0.0
Prop In Lane	1.00		0.28	1.00		0.61	0.39		0.44	0.49		0.44
Lane Grp Cap(c), veh/h	437	858	860	445	858	814	611	0	0	626	0	0
V/C Ratio(X)	0.47	0.35	0.36	0.20	0.37	0.37	0.32	0.00	0.00	0.68	0.00	0.00
Avail Cap(c_a), veh/h	1339	2853	2857	1357	2853	2707	2159	0	0	2183	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.8	8.3	8.3	11.2	8.3	8.4	12.6	0.0	0.0	15.0	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.2	0.2	0.2	0.3	0.3	0.3	0.0	0.0	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	2.8	2.8	1.0	2.9	2.8	2.4	0.0	0.0	6.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.6	8.5	8.5	11.4	8.6	8.7	12.9	0.0	0.0	16.3	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		816			707			196			425	
Approach Delay, s/veh		10.1			9.0			12.9			16.3	
Approach LOS		B			A			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.3		22.1		29.3		22.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		82.5		73.5		82.5		73.5				
Max Q Clear Time (g_c+I1), s		19.1		14.6		11.4		6.6				
Green Ext Time (p_c), s		5.7		2.9		4.8		1.3				
Intersection Summary												
HCM 6th Ctrl Delay				11.2								
HCM 6th LOS				B								

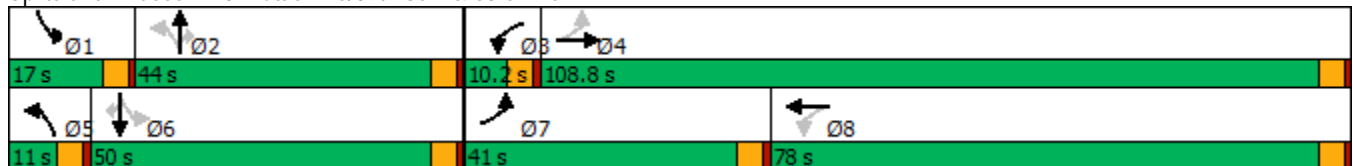
Lanes, Volumes, Timings
 3: Tuttle Ave/39th St E & 63rd Ave E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	550	55	30	655	255	40	400	95	85	160	60
Future Volume (vph)	235	550	55	30	655	255	40	400	95	85	160	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	200		120	200		120
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2691			1036			958			1513	
Travel Time (s)		45.9			17.7			18.7			25.8	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	41.0	108.8		10.2	78.0		11.0	44.0	44.0	17.0	50.0	50.0
Total Split (%)	22.8%	60.4%		5.7%	43.3%		6.1%	24.4%	24.4%	9.4%	27.8%	27.8%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 102.3
 Natural Cycle: 75
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Tuttle Ave/39th St E & 63rd Ave E



HCM 6th Signalized Intersection Summary
 3: Tuttle Ave/39th St E & 63rd Ave E

DTM 63rd Avenue East - Ultimate Build
 2045 - Design Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	550	55	30	655	255	40	400	95	85	160	60
Future Volume (veh/h)	235	550	55	30	655	255	40	400	95	85	160	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	242	567	57	31	675	263	41	412	98	88	165	62
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	4	4	4
Cap, veh/h	395	1473	148	436	923	359	370	654	292	282	715	319
Arrive On Green	0.12	0.45	0.45	0.03	0.37	0.37	0.04	0.18	0.18	0.06	0.20	0.20
Sat Flow, veh/h	1781	3261	327	1781	2499	973	1781	3554	1585	1753	3497	1560
Grp Volume(v), veh/h	242	308	316	31	480	458	41	412	98	88	165	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1811	1781	1777	1695	1781	1777	1585	1753	1749	1560
Q Serve(g_s), s	5.1	7.6	7.7	0.7	15.5	15.5	1.2	7.1	3.6	2.7	2.6	2.2
Cycle Q Clear(g_c), s	5.1	7.6	7.7	0.7	15.5	15.5	1.2	7.1	3.6	2.7	2.6	2.2
Prop In Lane	1.00		0.18	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	395	803	818	436	656	626	370	654	292	282	715	319
V/C Ratio(X)	0.61	0.38	0.39	0.07	0.73	0.73	0.11	0.63	0.34	0.31	0.23	0.19
Avail Cap(c_a), veh/h	1168	2790	2844	530	1966	1876	473	2113	943	506	2396	1069
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	12.1	12.1	12.1	18.1	18.1	20.5	25.0	23.6	20.4	22.1	21.9
Incr Delay (d2), s/veh	1.5	0.3	0.3	0.1	1.6	1.7	0.1	1.0	0.7	0.6	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	4.7	4.8	0.4	9.7	9.3	0.9	5.2	2.3	1.9	1.8	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.4	12.4	12.4	12.2	19.7	19.8	20.6	26.0	24.2	21.0	22.2	22.2
LnGrp LOS	B	B	B	B	B	B	C	C	C	C	C	C
Approach Vol, veh/h		866			969			551			315	
Approach Delay, s/veh		12.9			19.5			25.3			21.9	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	16.7	6.7	34.5	7.2	18.1	12.2	29.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	12.5	39.5	5.7	104.3	6.5	45.5	36.5	73.5				
Max Q Clear Time (g_c+I1), s	4.7	9.1	2.7	9.7	3.2	4.6	7.1	17.5				
Green Ext Time (p_c), s	0.1	3.1	0.0	4.0	0.0	1.2	0.7	7.0				

Intersection Summary

HCM 6th Ctrl Delay			18.9									
HCM 6th LOS			B									

Design Traffic Memorandum

63rd Ave East – US-301 to Tuttle Ave

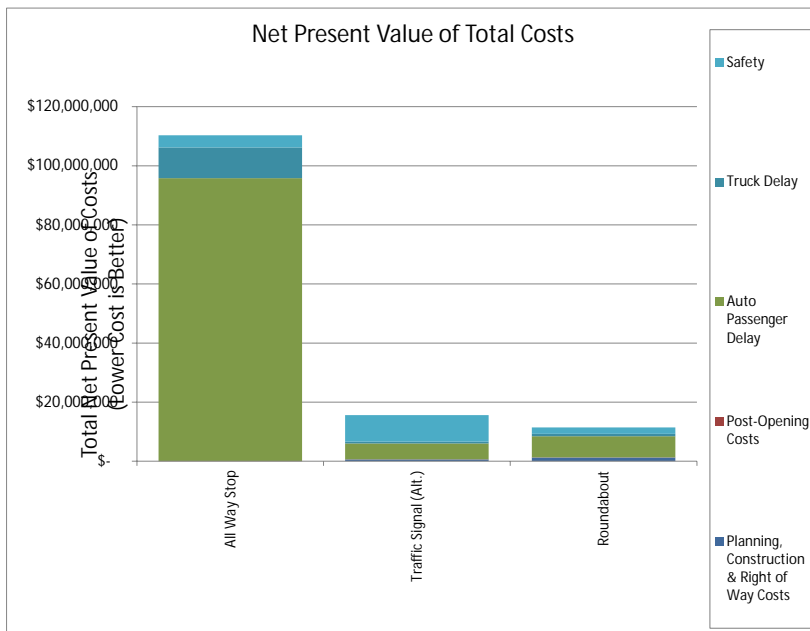
Attachment F: Intersection Control Evaluation

Agency:	Manatee County
Project Name:	63rd Ave E Project Development and Study Corridor
Project Reference:	-
Intersection:	63rd Ave E and 33rd St E
City:	-
State:	FL
Performing Department or Organization:	-
Date:	9/1/2021
Analyst:	KHA
Analysis Type	At-Grade Intersection

Analysis Summary

Cost Categories	Net Present Value of Costs		
	All Way Stop	Traffic Signal (Alt.)	Roundabout
Planning, Construction & Right of Way Costs	\$ -	\$ 575,000	\$ 1,232,224
Post-Opening Costs	\$ 14,590	\$ 98,229	\$ 72,952
Auto Passenger Delay	\$ 95,815,917	\$ 5,343,595	\$ 7,161,079
Truck Delay	\$ 10,406,811	\$ 580,381	\$ 777,783
Safety	\$ 4,118,305	\$ 8,987,722	\$ 2,164,673
Total cost	\$110,355,622	\$15,584,927	\$11,408,711

Select Base Case for Benefit-Cost Comparison: (Choose from list)	All Way Stop		
Benefit Categories	Net Present Value of Benefits Relative to Base Case		
	All Way Stop	Traffic Signal (Alt.)	Roundabout
Auto Passenger Delay		\$ 90,472,322	\$ 88,654,837
Truck Delay		\$ 9,826,429	\$ 9,629,028
Safety		\$ (4,869,418)	\$ 1,953,632
Net Present Value of Benefits		\$ 95,429,334	\$ 100,237,497
Net Present Value of Costs		\$ 658,638	\$ 1,290,585
Net Present Value of Improvement		\$ 94,770,695	\$ 98,946,912
Benefit-Cost (B/C) Ratio		144.89	77.67
Delay B/C		152.28	76.15
Safety B/C		preferred. Benefits are less than base case and cost is greater than base	1.51



Federal Highway Administration (FHWA)
 Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	63rd Avenue E Project Development & Study Corridor	Intersection Type	At-Grade Intersections
Intersection:	63rd Avenue E and 33rd Street E	Opening Year	2025
Agency:	Manatee County	Design Year	2045
Project Reference:	-	Facility Type	On Urban and Suburban Arterial
City:	Manatee County	Number of Legs	4-leg
State:	FL	1-Way/2-Way	2-way Intersecting 2-way
Date:	9/1/2021	# of Major Street Lanes (both directions)	5 or fewer
Analyst:	KHA	Major Street Approach Speed	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within Prediction Range?	Source of Prediction
Traffic Signal	Total	6.18	7.97	148.46	3	Yes	Calibrated SPF
	Fatal & Injury	2.01	2.63	48.75			
Traffic Signal (Alt)	Total	6.18	7.98	148.55	4	Yes	Calibrated SPF
	Fatal & Injury	2.02	2.64	48.83			
All Way Stop	Total	2.86	3.49	66.63	1	N/A	N/A
	Fatal & Injury	0.96	1.21	22.73			
2-lane Roundabout	Total	5.89	7.24	137.82	2	Yes	Uncalibrated SPF
	Fatal & Injury	1.04	1.30	24.57			



Design Traffic Memorandum

Prepared by: Vincent Spahr, P.E.
Kimley-Horn and Associates, Inc.
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Appendix C

Natural Resources Assessment Memo



Natural Resources Assessment Memo

63rd Avenue East – US 301 to Tuttle Avenue

CIP #: 6107860

FINAL October 14, 2021



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Introduction

Manatee County is conducting a Project Development & Corridor Study to evaluate a 1.12-mile segment of 63rd Avenue East from US 301 to Tuttle Avenue. The project limits are within Manatee County, Florida as shown in **Figure 1**. The study will evaluate options for widening the existing two-lane roadway to create additional capacity for about 10,000 vehicles per day which will help alleviate congestion on parallel sections of SR 70. This study will also seek to provide an enhanced mobility experience for all users.

For the purpose of this memorandum, the study area is considered the 1.1-mile segment of 63rd Avenue East and an additional 250-foot buffer from the roadway centerline totaling approximately 68 acres. The study area is located in Sections 19, 20, and 21 of Township 35 South and Range 18 East. A portion of the U.S. Geological Service (USGS) 7.5-Minute Bradenton, Florida quadrangle map depicting the location of the study area is attached as **Figure 2**.

Figure 1: Project Location Map

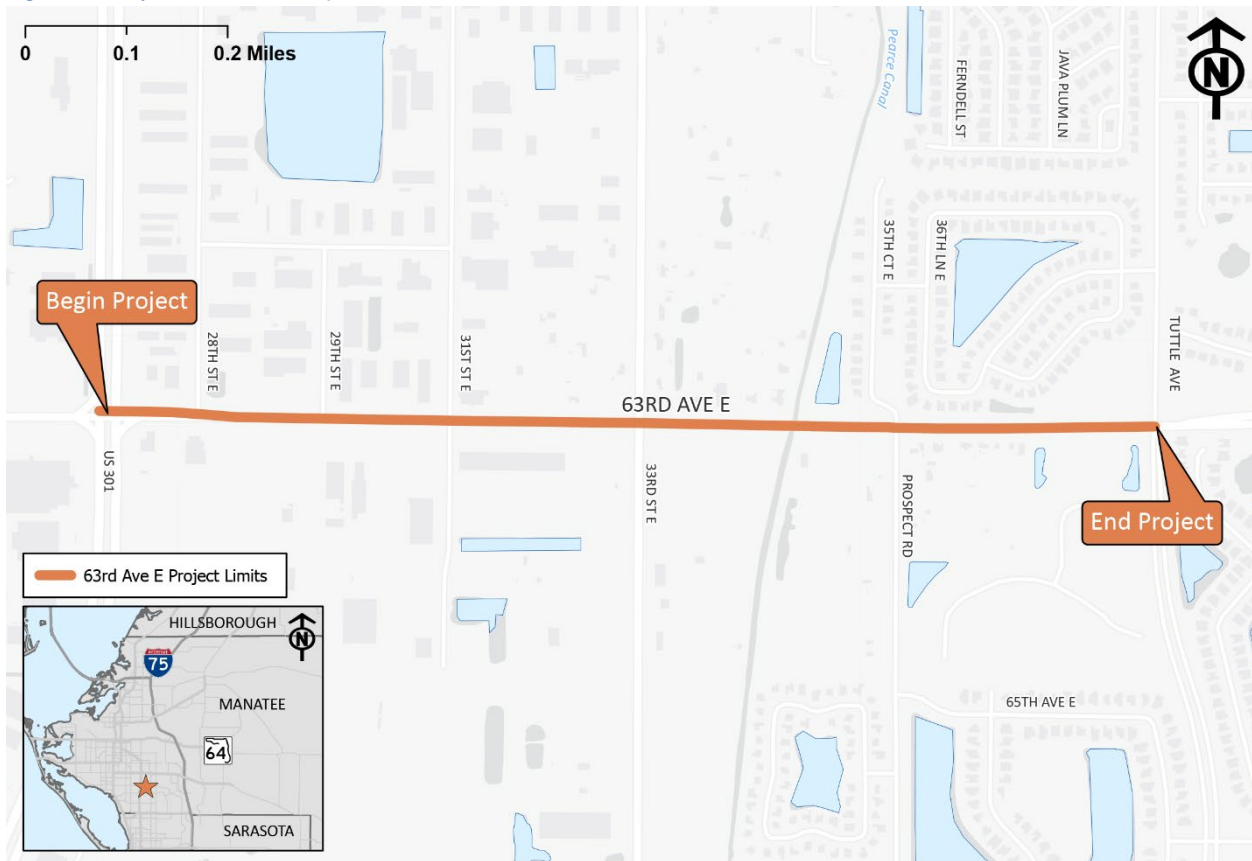
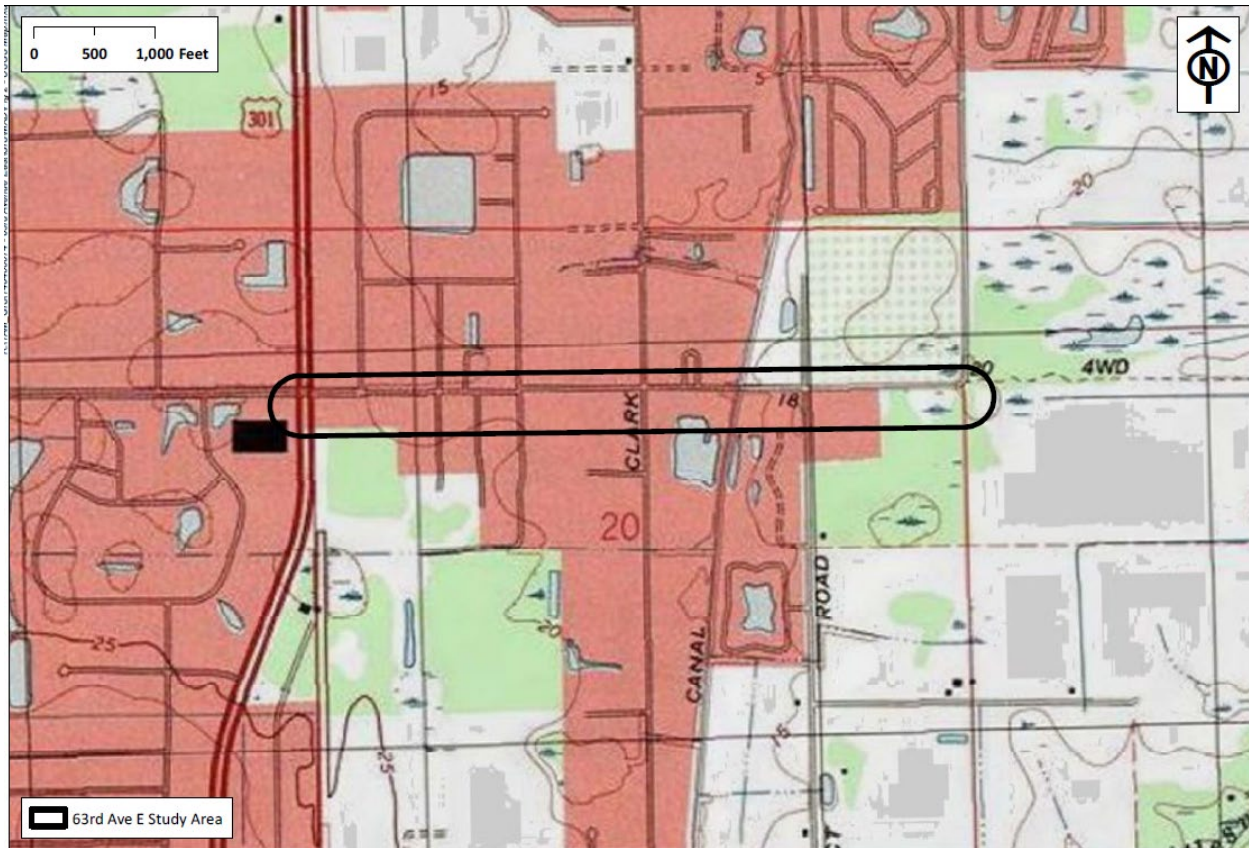


Figure 2: USGS Map



Methodology

To determine the approximate locations and boundaries of existing upland and wetland communities and protected species within the study area, available site-specific data was collected and reviewed.

The information reviewed included:

- *Florida Natural Areas Inventory (FNAI) Biodiversity Matrix* (<http://www.fnai.org/biointro.cfm>)
- *Various Geographic Information System (GIS) data layers from the U.S. Fish and Wildlife Service (USFWS), U.S. Geological Survey (USGS), Florida Fish and Wildlife Conservation Commission (FWC)* (<http://legacy.myfwc.com/bba/data/default.asp>)
- *USFWS IPaC data* [(<https://ecos.fws.gov/ipac/>)]
- *U.S. Department of Agriculture (USDA) / Natural Resources Conservation Service (NRCS) Soil Survey of Manatee County, Florida (Web Soil Survey)* (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>)
- *USFWS National Wetlands Inventory (NWI) Maps (Web-based maps available from* <http://www.fws.gov/wetlands/Data/mapper.html>)
- *USGS Quadrangle Maps, Land Boundary Information System (LABINS; <http://www.labins.org>)*

- *Audubon Florida EagleWatch Nest Map (Web-based maps available from <https://www.arcgis.com/apps/SimpleViewer/index.html?appid=75ea06f653f847658c908634ffc6f640>)*
- *Florida Water Permitting Portal, Southwest Florida Water Management District (SWFWMD) E-Permitting (<http://flwaterpermits.org> and <https://www.swfwmd.state.fl.us/business/epermitting>)*
- *Florida Department of Environmental Protection (FDEP) MapDirect GIS (<https://ca.dep.state.fl.us/mapdirect/>)*
- *Chapter 62-340, Florida Administrative Code (FAC) and the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual*
- *State Historic Preservation Officer (SHPO), Florida Master Site File (FMSF) (<http://www.flheritage.com>)*
- *Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Maps (FIRM; Web-based maps available from <http://msc.fema.gov/>)*
- *University of Florida Digital Collections. Aerial Photography: Florida Collection (<https://ufdc.ufl.edu/aerials/map>)*

Historic Review

A review of historic aerials of the study area is included as a part of this investigation. Historic aerials from 1948 show the study area as primarily upland pasture and row crops. Isolated wetland systems are visible in the eastern and western ends of the study area. 63rd Avenue, US 301, 33rd Street, and 39th Street are visible as dirt roads. A drainage canal is visible between what is now 33rd Street and Prospect Road. In the 1957 historic aerials, the previously mentioned dirt roads have been widened and a single-family residence is visible on the north side of the roadway. US 301 appears to be under construction for widening. Based on aerials from the 1970s, the north adjacent property has been cleared and graded and it appears to be in transition to become residential and/or commercial development. US 301, 33rd Street, and a portion of 63rd Avenue have been paved. The 1984 historic aerials show US 301 as a four-lane divided highway with a traffic interchange at the 63rd Avenue intersection. Additional development is visible both north and south of 63rd Avenue; however, the east end of the study area has not changed use. Based on a 1995 historic aerial, the general study area vicinity has transitioned to industrial use and additional roadways and buildings are visible throughout. 63rd Avenue has been paved and has roadway markings throughout. A 2003 aerial shows a residential development at the northwest corner of 63rd Avenue and 39th Street. With exception to small use changes, the study area appears to have remained unchanged from the 2003 condition to present.

Soils

The USDA / NRCS Soil Survey of Manatee County, Florida, maps the following soil within the study area: (5) Bradenton fine sand, limestone substratum, (15) Delray mucky loamy fine sand, (20) Eauggallie fine sand, 0 to 2 percent slopes, (22) Felda fine sand, 0 to 2 percent slopes, (25) Floridana fine sand, 0 to 2 percent slopes, (26) Floridana-Immokalee-Okeelanta association, (40) Pinellas fine sand, (47)

Natural Resources Assessment

63rd Ave East – US 301 to Tuttle Ave

Tomoka muck, and (48) Wabasso fine sand. **Figure 3** shows the mapped soils within the study area and **Table 1** provides details of each soil type.

Table 1: NRCS Soils Within the Study Area

Soil ID No. ¹	Soil Name	Occurrence	Characteristics	Drainage Class	Groundwater Depth	Hydric, Hydric Inclusions, or Non-Hydric ²
5	Bradenton fine sand, limestone substratum	Low ridges and on flood plains	Moderate permeability	Poorly drained	About 0 to 18 inches	Hydric
15	Delray mucky loamy fine sand	Broad flats, flood plains, and depressions	Moderate permeability	Very poorly drained	About 0 to 12 inches	Hydric
20	Eaugallie fine sand, 0 to 2 percent slopes	Flats, sloughs and depressional areas	Slow permeability	Very poorly or poorly drained	About 6 to 40 inches	Non-hydric
22	Felda fine sand, 0 to 2 percent slopes	Flatwoods, low broad flats, drainageways, sloughs, depressions, and flood plains	Rapid permeability in the A and E horizons and very slow or slow permeability in the Btg horizon	Very poorly and poorly drained	About 0 to 24 inches	Hydric
25	Floridana fine sand, 0 to 2 percent slopes	Low broad flats, flood plains, and in depressional areas	Very slow permeability	Very poorly drained	About 0 to 10 inches	Hydric
26	Floridana-Immokalee-Okeelanta association	Low broad flats, flood plains, and in depressional areas	Very slow permeability	Very poorly drained	About 0 to 10 inches	Hydric
40	Pinellas fine sand	Flats that border sloughs and depressions	Very rapid to rapid permeability	Poorly drained	About 0 to 40 inches	Non-Hydric
47	Tomoka muck	Broad low flats, fresh water marshes and swamps	Moderate permeability	Very poorly drained	0 inches	Hydric
48	Wabasso fine sand	Flatwoods, low broad flats, sloughs, depressions, and flood plains	Rapid permeability in the A and E horizons, slowly to very slowly permeability in the Bh, Bt, Btg, and Btk, and moderate permeable in the Cg horizons	Poorly drained and very poorly drained	About 10 to 40 inches	Non-Hydric

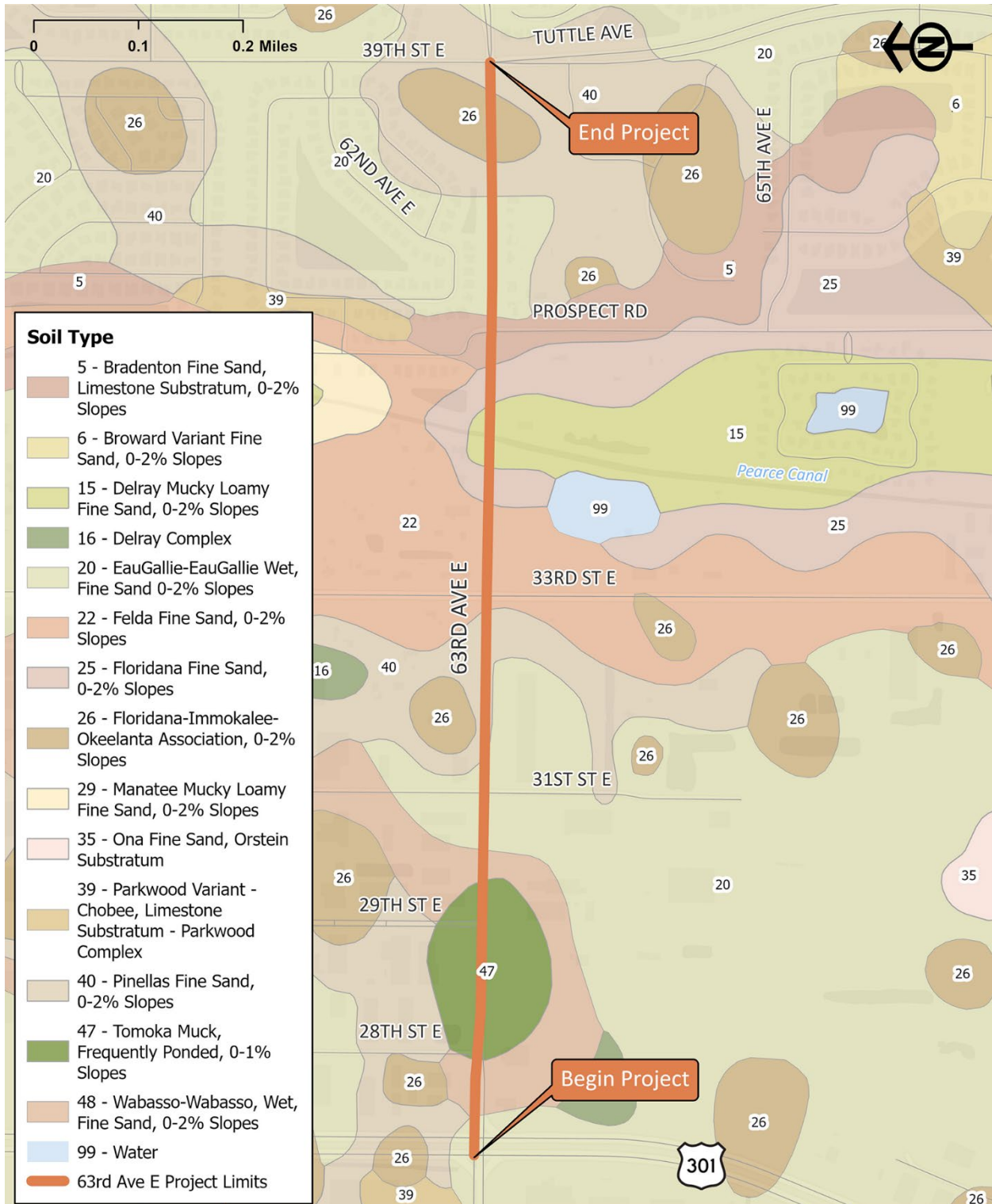
1: Reference: Soil Survey of Manatee County (Web Soil Survey) - <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

2: Reference: Hydric Soils of Florida Handbook, 4th Edition, March 2007

Natural Resources Assessment

63rd Ave East – US 301 to Tuttle Ave

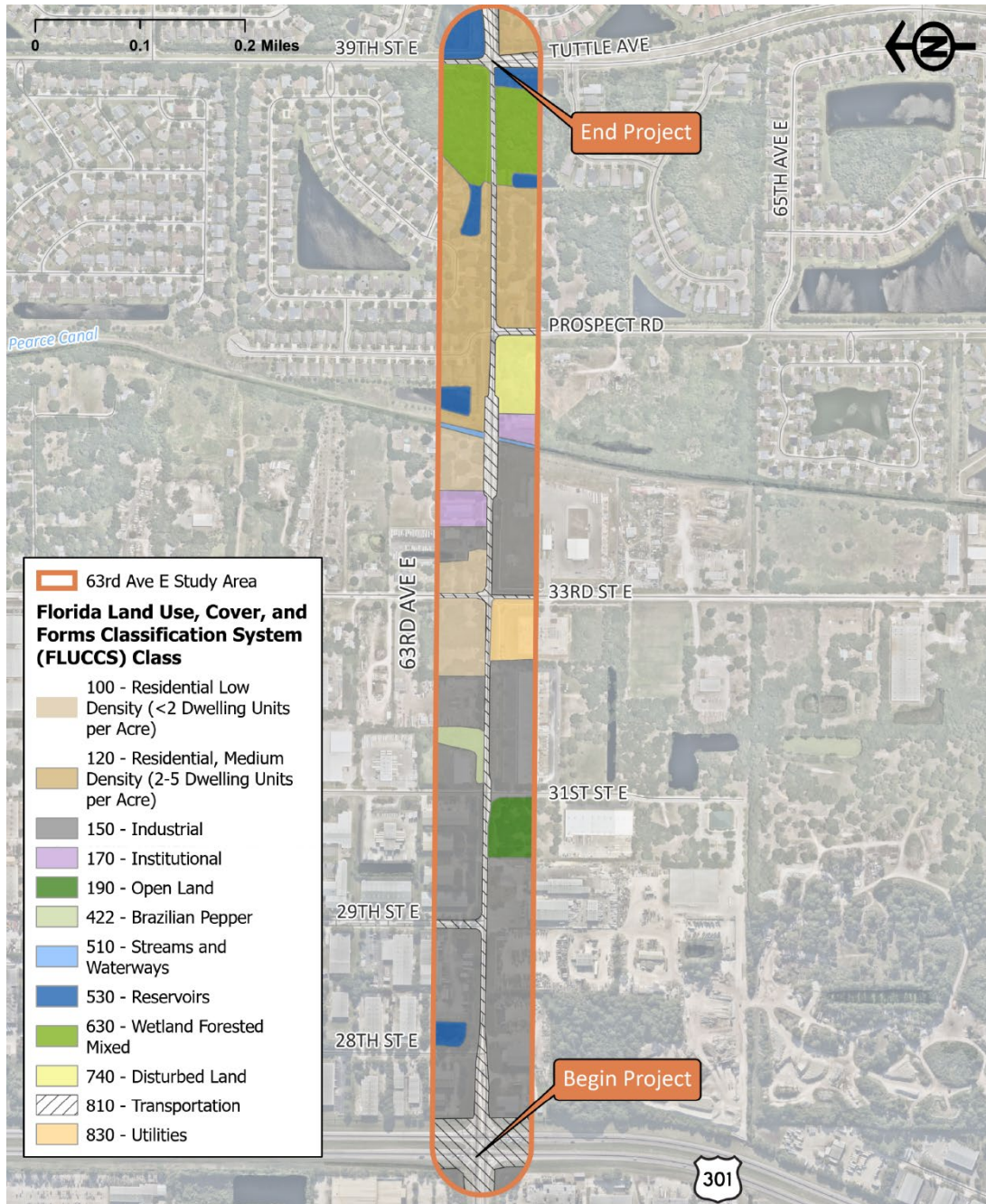
Figure 3: NRCS Soils Map



Land Cover and Natural Communities

Field reconnaissance was conducted on July 21, 2021 and vegetative communities within the proposed study area were identified through pedestrian transects and aerial photograph interpretation. Vegetative communities were classified using the Florida Land Use, Cover, and Forms Classification System (FLUCFCS, Florida Department of Transportation, 1999). A FLUCFCS map of the study area is attached as **Figure 4**.

Figure 4: FLUCFCS Map



Upland Land Cover Types

A description of the upland land cover types included below characterizes the dominant vegetation observed along random pedestrian transects and does not represent an all-inclusive vegetative inventory. The acreage provided for each land cover is approximate, based on aerial mapping.

FLUCFCS 110 – Residential Low Density (<2 Dwelling Units per Acre) (+/- 4.84 Acres)

This classification comprises the single-family residential housing at the northwest and northeast corners of the 63rd Avenue and 33rd Street intersection. Another area defined as FLUCFCS 110 exists at the northwest corner of the drainage canal crossing under 63rd Avenue. These areas consist of five (5) total parcels in approximately 4.84 acres of land. No remaining natural habitat exists in these areas.

FLUCFCS 120 – Residential Medium Density (2 to 5 Dwelling Units per Acre) (+/- 10.92 Acres)

This classification comprises the majority of residential development within the study area. All of these residential neighborhoods exist east of the crossing drainage canal. Approximately three to four houses per acre exists in these single-family home neighborhoods. No remaining natural habitat exists in these areas.

FLUCFCS 150 – Industrial (+/- 26.34 Acres)

This classification comprises the industrial properties within the study area. This includes pool supply companies, auto parts storage, warehouses, equipment storage, building materials suppliers, etc. These areas consist of commercial buildings and associated infrastructure such as parking lots and utilities. No remaining natural habitat exists in these areas.

FLUCFCS 170 – Institutional Facilities (+/- 1.66 Acres)

This classification comprises the institutional facilities within the study area including the Harbor Life Church and Manatee County building both located near the drainage canal crossing of 63rd Avenue. This also includes the associated infrastructure such as parking lots and utilities. No remaining natural habitat exists in these areas.

FLUCFCS 190 – Open Land (+/- 10.32 Acres)

This classification is comprised of an open parcel of land located at the southwest corner of 63rd Avenue and 31st Street. The area appears to be a useable area for the adjacent businesses. Bahiagrass (*Paspalum notatum*), St. Augustine grass (*Stenotaphrum secundatum*), slash pine (*Pinus elliottii*), and live oaks (*Quercus virginiana*) are located within this portion of the study area. Based on historic aerials, this property appears to never have been disturbed.

FLUCFCS 422 – Brazilian Pepper (+/- 0.74 Acres)

This classification consists of one stand of Brazilian pepper (*Schinus terebinthifolia*) located near the northeast corner of 63rd Avenue and 31st Street.

FLUCFCS 740 – Disturbed Land (+/- 1.93 Acres)

This classification represents an area at the southwest corner of 63rd avenue and Prospect Road. This area appears to be overgrown with air potato (*Dioscorea bulbifera*), ragweed (*Ambrosia spp.*), west

Indian marsh grass (*Hymenachne amplexicaulis*), and Brazilian pepper. Some cabbage palm (*Sabal palmetto*) and glossy privet (*Ligustrum lucidum*) were also located in this area.

FLUCFCS 810 – Transportation (+/- 9.02 Acres)

This classification consists of paved roadway, turn lanes, and medians within the study area. Roadside ditches were also located throughout this portion of the study area.

FLUCFCS 830 – Utilities (+/- 1.62 Acres)

This classification consists of a substation located at the southwest corner of 63rd Avenue and 33rd Street.

Wetland/Surface Water Land Cover Types

The presence of wetlands was evaluated based on the Florida unified wetland delineation methodologies in accordance with Chapter 62-340, Florida Administrative Code (FAC), and the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual. These methods consider prevalence of wetland vegetation, hydric soil indicators, and wetland hydrology. Surface waters include both natural and manmade bodies of water, such as streams, lakes, ponds, canals, and ditches. Two land cover types within the study area would be considered wetlands. A drainage canal which flows north to south through the study area approximately 775 feet east of 33rd Street (FLUCFCS 510) would be considered wetland due to the presence of wetland vegetation and hydrologic indicators such as flow lines and flowing water and a system located at the east end of 63rd Avenue (FLUCFCS 630) would be considered wetland due to the presence of vegetation, standing water, and hydric soils. Six surface waters which appear to be flood compensation ponds exist within the study area.

FLUCFCS 510 – Streams and Waterways (+/- 0.22 Acres)

This classification comprises a drainage canal which runs north to south through the study area approximately 775 feet east of 33rd Street. During the July 2021 visit, flowing water was observed in the canal. Vegetation within the flow way consisted of Peruvian primrose-willow (*Ludwigia peruviana*), torpedograss (*Panicum repens*), and pennyworts (*Hydrocotyle spp.*). Based on the current level of design, this system is not proposed to be impacted.

FLUCFCS 530 – Reservoirs (+/- 1.40 Acres)

This classification comprises six stormwater or flood compensation ponds. Vegetation noted within the ponds consists of Peruvian primrose-willow, Brazilian pepper, cattail (*Typha sp.*), torpedograss, and dog fennel (*Eupatorium capillifolium*). One pond located at the residential development at 35th Court was well maintained and has planted cypress (*Taxodium sp.*) along its bank. Wax myrtle (*Morella cerifera*) was noted at the pond located at the northeast corner of 63rd Avenue and 28th Street. Based on the current level of design, these systems are not proposed to be impacted.

FLUCFCS 630 – Wetland Forested Mixed (+/- 4.85 Acres)

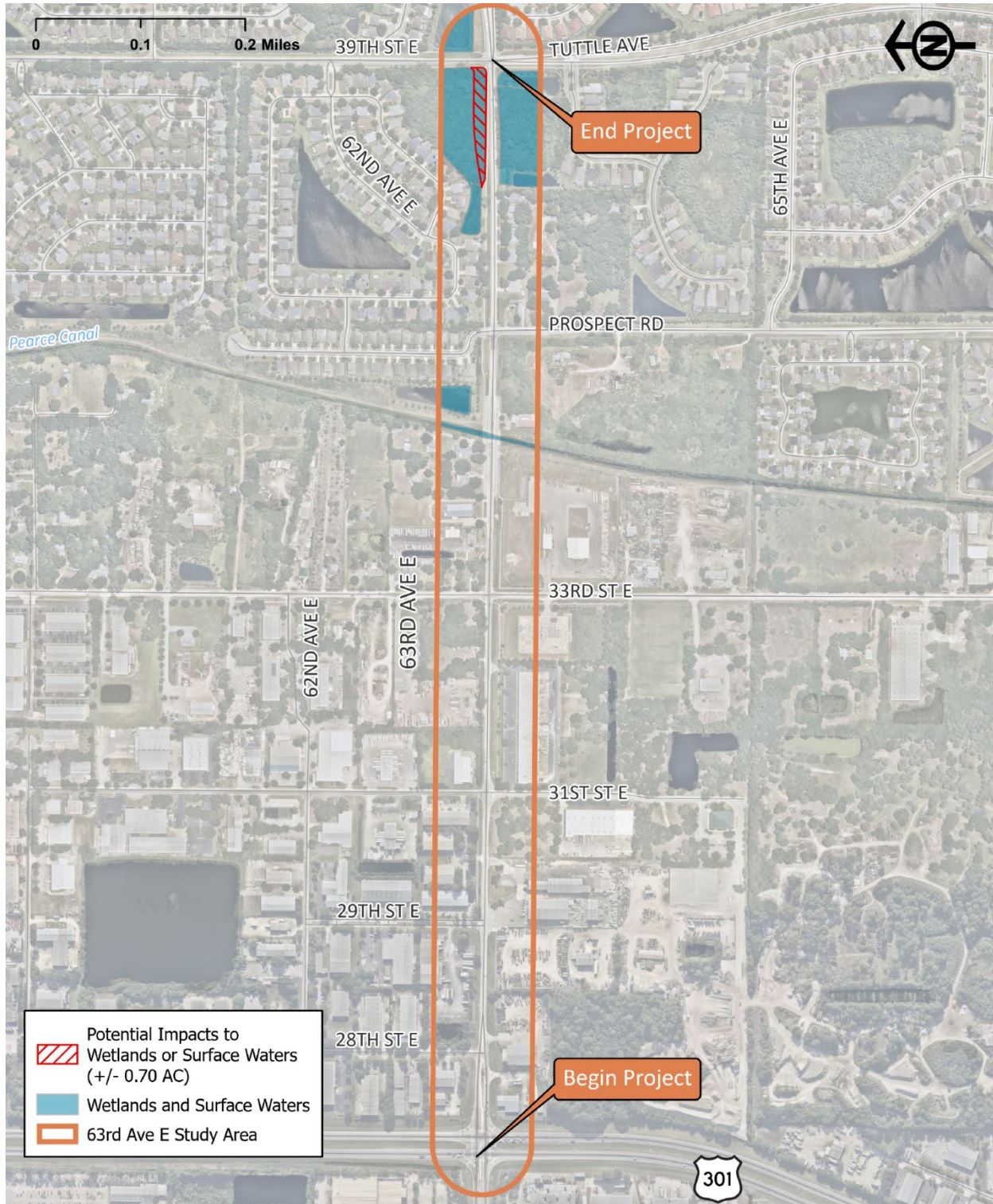
This classification comprises a forested wetland system located at the northwest and southwest corners of 63rd Avenue and Tuttle Avenue. The wetland canopy consists of red maple (*Acer rubrum*), cabbage palm, laurel oak (*Quercus laurifolia*), water oak (*Quercus nigra*), and slash pine. The remaining vegetation consists of Peruvian primrose-willow, Brazilian pepper, arrowhead (*Sagittaria lancifolia*),

Natural Resources Assessment

63rd Ave East – US 301 to Tuttle Ave

and torpedograss. A pipe was observed underneath 63rd Avenue which connects the northern and southern systems. Based on the current level of design, the proposed project would impact approximately 0.70 acres of this system (see **Figure 5**).

Figure 5: Wetland Impacts



Threatened and Endangered Species

In order to determine federal and state listed protected plant and animal species that have potential to occur within the study area, available site-specific data was collected and evaluated by a Kimley-Horn environmental scientist. In addition, a field review of the study area was conducted on July 21, 2021 to assess the potential for occurrence of protected species and to identify any critical habitat that might be located within or adjacent to the study area.

During this survey, the study area was reviewed for direct observations of listed species or signs of their presence, including trails, tracks, scats, nests (cavity or stick), burrows, or calls. No listed species or signs of listed species were observed during the survey. Mourning dove (*Zenaida macroura*) was the only wildlife observed during the survey.

The Florida Fish and Wildlife Conservation Commission (FWC) wading bird rookery database was searched for active wading bird rookeries within one (1) mile of the study area. According to this FWC database, there are no active wading bird rookeries within one (1) mile of the study area.

The FWC Wildlife Observations database and Florida Natural Area Inventory (FNAI) Biodiversity Matrix Map server were reviewed for documented occurrences of listed species within one (1) mile of the study area. Two (2) bald eagles' nests have been documented within the study area; no other documented wildlife observations were noted from the database.

The study area lies within the USFWS consultation area for Florida scrub-jay (*Aphelocoma coerulescens*). However, habitat for the scrub-jay does not exist within the study area.

Listed Species with the Potential to Occur Within the Study Area

Based on field reconnaissance and database reviews, a listing of the state and federally listed species potentially occurring within the immediate vicinity of the study area has been compiled. **Table 2** lists species that may occur and their likelihood of occurrence. Likelihood of occurrence is based on actual observation of the species, signs of the species (burrows, tracks, scat, etc.), observance of suitable habitat, or documented occurrences of the species within various databases. A Low ranking indicates that preferred habitat for that species was found within the study area, but the species has not been documented within one mile of the study area. A Moderate ranking indicates that suitable habitat exists, and the species has been documented within one (1) mile of the study area. A High ranking indicates that suitable habitat exists, and the species was observed during field reconnaissance.

Table 2: Listed Species with the Potential to Occur Within the Study Area

Common Name	Scientific Name	Status	Documented (<1 mile)	Habitat Present	Likelihood of Occurrence
Avian					
Florida scrub jay	<i>Aphelocoma coerulescens</i>	FT	Yes	No	Low
Wood stork	<i>Mycteria americana</i>	FT	No	Yes; foraging	Low
Bald eagle	<i>Haliaeetus leucocephalus</i>	NL*	Yes	Yes; foraging	Low
Least tern	<i>Sternula antillarum</i>	ST	Yes	No	Low
Little blue heron	<i>Egretta caerulea</i>	ST	No	Yes; foraging	Low
Roseate spoonbill	<i>Platalea ajaja</i>	ST	No	Yes; foraging	Low
Tricolored heron	<i>Egretta tricolor</i>	ST	No	Yes; foraging	Low
Reptilian					
Eastern indigo snake	<i>Drymarchon corais couperi</i>	FT	No	Yes, foraging and nesting	Low
Gopher tortoise	<i>Gopherus polyphemus</i>	C	No	Yes; foraging and burrowing	Low
Legend: FE - Federally Endangered; FT - Federally Threatened; FT(S/A) – Threatened due to Similarity of Appearance; C - Candidate for Listing SE - State Endangered; ST - State Threatened NL - Not Listed, but have other regulatory protections * The Bald eagle is still protected under the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act and FWC Management Plan regulations. Note: Coordination is not required with FWC for federally listed species					

All habitat types within the study area were evaluated to determine the presence or potential for occurrence of federal and/or state protected species. No signs or evidence of protected species were observed within the study area. While the proposed project has taken all practicable measures to avoid and minimize impacts to potentially occurring protected species habitats, unavoidable impacts may occur as a result of construction. A determination of the anticipated project “effect” on protected species was made based on their probability of occurrence within the study area, anticipated changes to their habitat quality, quantity and availability as a result of project construction, and how each species is expected to respond to anticipated habitat changes. Listed below are the “effect” determinations for each species.

Florida Scrub-Jay (Aphelocoma coerulescens)

The Florida scrub-jay is listed as **threatened** by **USFWS** and **FWC**. This species prefers low growing oak scrub habitats, including sand pine scrub and scrubby flatwoods found on sandy soils. The study area is located in the USFWS consultation area for the Florida scrub-jay. No potential habitat for the scrub jay was observed in the study area. The species was not observed during site reconnaissance. As a result, the probability of occurrence of the Florida scrub-jay within the study area has been

determined to be *low*. Based upon the lack of suitable habitat, it is anticipated that the project is “**not likely to adversely affect**” the Florida Scrub-Jay.

Wood stork (Mycteria americana)

This large, white, wading bird is listed as *threatened* by the USFWS. The wood stork is opportunistic and utilizes various habitat types, including freshwater marshes, swamps, lagoons, ponds, tidal creeks, flooded pastures and ditches. Water that is relatively calm, uncluttered by dense aquatic vegetation, and with a permanent or seasonal water depth between 2 and 15 inches deep is considered suitable foraging habitat for this species. Suitable foraging habitat is present within the study area for this species. The USFWS wood stork colony website was reviewed for active wood stork colonies located within 15 miles of the study area. This 15-mile distance corresponds to the core foraging area (CFA) established by the USFWS for the wood stork in the region. According to the USFWS wood stork colony website, the study area is located within the 15-mile CFA of the Ayers Point – Dot Dash wood stork nesting colony; however, there have been no documented sightings of the wood stork within one (1) mile of the study area, and it was not observed during the field review. As a result, the probability of occurrence of the wood stork within the study area has been determined to be *low*. Wetland impacts resulting from construction of this project will be minimal and under the threshold for required mitigation. Based on the assessment of the project utilizing the Effect Determination Key for the Wood Stork in South Florida (USFWS 2008), it is anticipated that the project will “**not likely to adversely affect**” the wood stork. The path to this determination followed the key steps A →B→C→NLAA.

Eastern indigo snake (Drymarchon corais couperi)

This large, glossy black snake is listed as *threatened* by the USFWS. The eastern indigo snake can be found in a variety of habitat types, including pine flatwoods, scrubby flatwoods, high pine, dry prairie, tropical hardwood hammocks, edges of freshwater marshes, agricultural fields, coastal dunes, as well as human-altered habitats. It may also utilize gopher tortoise burrows for shelter to escape hot or cold ambient temperatures within its range. Suitable habitat is present within the study area for this species; however, there have been no documented sightings of the eastern indigo snake within one (1) mile of the study area, and it was not observed during field reviews. As a result, the probability of occurrence of the eastern indigo snake within the study area has been determined to be *low*. However, it is possible that this species could utilize suitable habitat within the study area. Because there is suitable habitat for this species to occur, Standard Protection Measures for the Eastern Indigo Snake (USFWS, 2017) will be utilized during site preparation and construction of the project. Based upon assessment of the project utilizing the Eastern Indigo Snake Programmatic Effect Determination Key (USFWS 2013), it is anticipated that the project is “**not likely to adversely affect**” the eastern indigo snake. The path to this determination followed the key steps A →B→C→ D→ E→NLAA.

Gopher tortoise (Gopherus polyphemus)

This medium-sized land tortoise is listed as *threatened* by the FWC. The gopher tortoise prefers areas of well-drained loose soils that support adequate low-growing herbs and grasses for food. Gopher

tortoises are most often found in xeric oak, sandhills, dry pine flatwoods, scrub habitats as well as old fields, pastures and roadsides. Gopher tortoise burrows also provide refuge and home to numerous species (burrow commensals), including listed species, which are either partially or wholly reliant upon the burrow. Suitable habitat is present within the study area for this species; however, there have been no documented sightings of the gopher tortoise within one (1) mile of the study area, and it was not observed during field reviews. As a result, the probability of occurrence for the gopher tortoise within the study area has been determined to be *low*. Avoidance or relocation of gopher tortoises and their commensal species in accordance with FWC regulations will be conducted if a burrow is located within 25 ft of the limits of work. Due to the limited amount of suitable habitat and lack of occurrences during field reviews, and the commitment to avoid/relocate any gopher tortoises that may be impacted by the project, it has been determined that “**no adverse effect is anticipated**” for the gopher tortoise as a result of the project.

Little blue heron (Egretta caerulea)

The little blue heron is a medium-sized, slate-blue, wading bird is listed as *threatened* by the FWC. The little blue heron forages in shallow marine, brackish, or freshwater areas, including tidal ponds, sloughs, marshes, and human-created impoundments. It nests in colonies in woody shrubs that are separated from land by open water. Suitable habitat is present within the study area for this species; however, there have been no documented sightings of the little blue heron within one (1) mile of the study area, and it was not observed during field reviews. As a result, the probability of occurrence of the little blue heron within the study area has been determined to be *low*.

Roseate spoonbill (Platalea ajaja)

The roseate spoonbill is a bright pink bird with a spoon-like bill. This bird is listed as *threatened* by the FWC. Habitats such as freshwater mudflats and marshes, saltwater marshes, coastal flats, mangrove swamps, lagoons, wet prairies, and ditches are preferred by the roseate spoonbill for feeding. Suitable habitat is present within the study area for this species; however, there have been no documented sightings of the roseate spoonbill within one (1) mile of the study area and it was not observed during field reviews. As a result, the probability of occurrence of the roseate spoonbill within the study area has been determined to be *low*.

Tricolored heron (Egretta tricolor)

The tricolored heron is a medium-sized, two-toned, wading bird is listed as *threatened* by the FWC. The tricolored heron prefers both fresh- and saltwater habitats such as fresh- and saltwater marshes and mudflats, brackish marshes, coastal beaches, mangrove swamps, hardwood and cypress swamps, and wet prairies. Suitable habitat is present within the study area for this species; however, there have been no documented sightings of the tricolored heron within one (1) mile of the study area, and it was not observed during field reviews. As a result, the probability of occurrence of the tricolored heron within the study area has been determined to be *low*. It is reasonable to expect that these species could utilize suitable habitat within the study area.

The primary concern for impacts to these wading bird species is the loss of foraging habitat. Wetland impacts resulting from construction of this project will be minimal and under the threshold for required mitigation. It has been determined that “**no adverse effect**” is anticipated for the little blue heron, roseate spoonbill, or tricolored heron as a result of the project.

Bald eagle (Haliaeetus leucocephalus)

The bald eagle is a large raptor with a distinctive white head and yellow bill. The bald eagle has been de-listed by both the **USFWS** and **FWC**. However, it is still federally protected under the Bald and Golden Eagle Protection Act (BGEPA) in accordance with 16 United States Code 668 and the Migratory Bird Treaty Act of 1918. The bald eagle tends to utilize riparian habitat associated with coastal areas, lake shorelines, and riverbanks. Nests are generally located near water bodies that provide a dependable food source.

According to the FWC database, there are two (2) bald eagle nests located within one (1) mile of the study area (MN065 and MN004). According to the Audubon Florida Eagle Watch nest locator website, both nests were active during the 2021 season. Both nests were observed during the July 2021 visit; however, no activity was observed. The nests are located approximately 0.61 and 0.78 miles from the study area, respectively. As a result, the probability of occurrence of the bald eagle within the study area has been determined to be *low*. If any active nests are located within 660 ft of the project limits, coordination with the USFWS will be initiated. Based on this commitment, it has been determined that the project “**may affect, not likely to adversely affect**” the bald eagle.

Critical Habitat

The study area was also evaluated for the presence of Critical Habitat as defined by the Endangered Species Act of 1973, as amended and 50 CFR part 424. The USFWS is the authority, as a federal agency, to protect from destruction or adverse modification the biological or physical constituent elements essential to the conservation of listed species. Critical Habitat is defined as the specific areas within the geographical area occupied by a species on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection. No Critical Habitat or Proposed Critical Habitat for any federally listed species was identified within the study area.

Permitting Requirements and Coordination

Both the FDEP and SWFWMD regulate impacts to wetlands within the project area. Other agencies, including the USFWS, NMFS, EPA, and the FWC, review and comment on wetland permit applications. The FWC also issues permit for gopher tortoise relocation activities and incidental takes for state protected avian species and the USFWS is the lead agency for eagle nest take permitting or coordination. In addition, the FDEP regulates stormwater discharges from construction sites. The complexity of the permitting process will depend on the degree of the impact to jurisdictional areas. It is anticipated that the following permits will be required for this project:

<u>Permit</u>	<u>Issuing Agency</u>
Environmental Resource Permit (ERP)	SWFWMD
Section 404 State Assumption	FDEP
National Pollutant Discharge Elimination System (NPDES)	FDEP
Gopher Tortoise Relocation Permit, if needed	FWC

SWFWMD Environmental Resource Permit

SWFWMD requires an ERP when construction of any project results in the creation of a new or modification of an existing surface water management system or results in impacts to waters of the state. As with FDEP permits, the complexity associated with the ERP permitting process will depend on the size of the project and/or the extent of wetland impacts. Under current state rules, the SFWMD will likely require a standard or individual permit for this project.

FDEP State 404 Program

In 2018, FDEP was given the authority to begin the rulemaking process to assume the federal dredge and fill permitting program under section 404 of the Clean Water Act within state-assumed waters. This process was completed in July 2020 and created the State 404 Program within Chapter 62-330 and 62-331, F.A.C. to facilitate this assumption. This State 404 Program is responsible for overseeing permitting for any project proposing dredge or fill activities within state-assumed waters. The State 404 Program is a separate program from the existing SWFWMD ERP program, and projects within the state-assumed waters require both an ERP and a State 404 Program authorization. The wetlands and surface waters associated with this project would fall under the state-assumed waters definition and therefore would require a permit through this program.

NPDES

40 CFR Part 122 prohibits point source discharges of stormwater to waters of the U.S. without a NPDES permit. Under the State of Florida's delegated authority to administer the NPDES program, construction sites that will result in greater than one acre of disturbance must file for and obtain either coverage under an appropriate generic permit contained in Chapter 62-621, F.A.C., or an individual permit issued pursuant to Chapter 62-620, F.A.C. A major component of the NPDES permit is the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP identifies potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the site and discusses good engineering practices (i.e., best management practices) that will be used to reduce the pollutants.

FWC Gopher Tortoise Relocation Program

At the time of the site reviews, no gopher tortoise burrows were observed within or adjacent to the project limits. However, if gopher tortoises or burrows are found within the project area, Manatee County will coordinate with the FWC to secure all permits needed to relocate the tortoises and associated commensal species prior to construction. FWC requires the excavation and relocation of any gopher tortoise burrows and individuals within the project limits prior to construction. Permits to

excavate and relocate tortoises are issued through FWC and would be completed as either a 10 or Fewer Burrows permit or a Conservation permit.

Mitigation

In 2008 the USACE and the EPA issued regulations governing compensatory mitigation for activities authorized by the Department of the Army (Federal Register, 2008). These regulations, as promulgated in 33 Code of Federal Regulations (CFR) Part 332, establish a hierarchy for determining the type and location of compensatory mitigation. To briefly summarize, the rule establishes a preference for the use of mitigation bank credits if a mitigation bank has the appropriate number and resource type of credits available. If the permitted impacts are not in the service area of an approved mitigation bank, or if the appropriate number and resource type of credits are otherwise unavailable, then the rule establishes a preference for in-lieu fee program credits. If an approved mitigation bank or in-lieu fee program cannot be used to provide the required compensatory mitigation, the rule establishes a preference for permittee responsible mitigation conducted under a watershed approach. Wetland impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. §1344. Compensatory mitigation for this project will be completed through the use of mitigation banks and any other mitigation options that satisfy state and federal requirements.

Presently, the study area is located within the service areas of the Long Bar Pointe and Manatee Mitigation Banks. These banks have freshwater herbaceous and forested credits available and are within the South Coastal and Manatee River Drainage Basins. They service Charlotte, Hillsborough, Manatee, and Sarasota Counties. Should the purchase of credits from the Long Bar Pointe or Manatee Mitigation Banks be pursued as a mitigation option for this project, this option would be available to offset all direct impacts for the project.

Implementation Measures

Based on the field and literature reviews outlined in this report, federal- or state-listed protected species have the potential to occur within the project study area. To assure that the proposed project will not adversely impacts these species, Manatee County will adhere to the following:

- Manatee County will perform updated wildlife surveys for the species discussed in this report, and other wildlife species, during the project Design phase to ascertain the involvement, if any, of listed species.
- If gopher tortoises or burrows are found within the project area, Manatee County will coordinate with the FWC to secure all permits needed to relocate the tortoises and associated commensal species prior to construction.
- If a bald eagle nest is observed within 660 feet of the project area, Manatee County will coordinate with the USFWS to secure necessary approvals prior to constructing the project



Natural Resources Assessment

Prepared by: Jeff Hemphill
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Appendix D
Cultural Resources Memo



Cultural Resources Memo

63rd Avenue East – US 301 to Tuttle Avenue

CIP #: 6107860

FINAL October 14, 2021



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ATTACHMENTS

Attachment A - Structures Within APE Built in or Before 1981

Introduction

Manatee County is conducting a Project Development & Corridor Study to evaluate a 1.12-mile segment of 63rd Avenue East (63rd Avenue) from US 301 to Tuttle Avenue. The project limits are within Manatee County, Florida as shown in **Figure 1**. The study will evaluate options for widening the existing two-lane roadway to create additional capacity for about 10,000 vehicles per day which will help alleviate congestion on parallel sections of SR 70. This study will also seek to provide an enhanced mobility experience for all users

Memorandum Purpose

The purpose of this Cultural Resource Memorandum is to evaluate and summarize the cultural resources within the 63rd Avenue study corridor's Area of Potential Effects (APE) and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). As defined in Section 1.1 of the Florida Department of Transportation (FDOT) Cultural Resource Management Handbook, cultural resources are "archaeological sites, historic structures, objects, and districts, which are typically 50 or more years old".

For additional guidance on the analysis of cultural resources, this assessment referred to the National Historic Preservation Act of 1966, as amended, Chapter 267, FS, Chapter 1A-46, FAC (revised August 2002), and FDHR's Cultural Resources Standards and Operational Manual (FDHR 2003). It was also conducted with guidance from with Part 2, Chapter 8 (Archaeological and Historical Resources) of the FDOT PD&E Manual (FDOT, 2020).

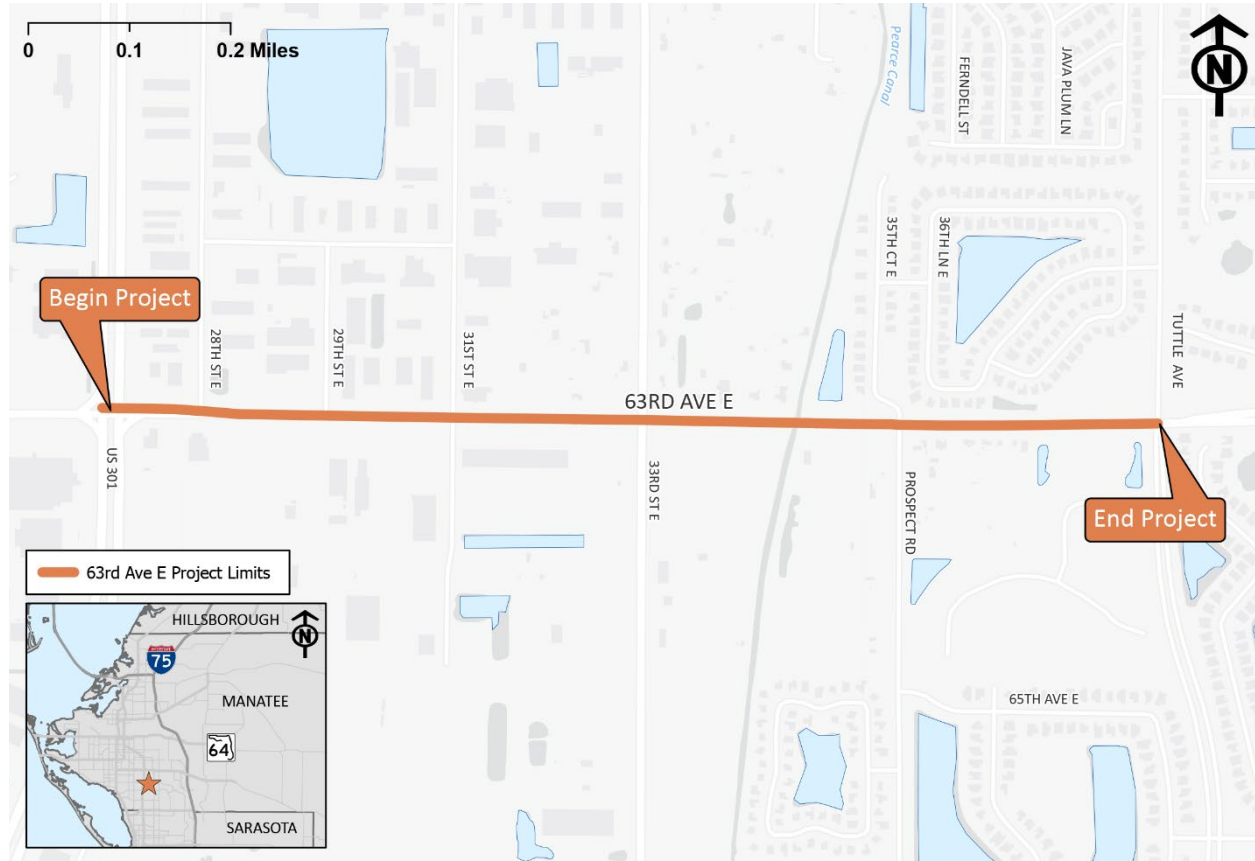
Resource Identification Methodology

In order to evaluate potential impacts on cultural resources near the 63rd Avenue project, an Area of Potential Effect (APE) was established. The APE serves as the geographic limits of the area surrounding the study corridor that have potential to be affected by the project. Within the APE, data was collected from Manatee County Property Appraiser, the Florida State Historic Preservation Office, and field analysis.

Cultural Resources Memo

63rd Ave East – US 301 to Tuttle Ave

Figure 1: Project Location Map



Area of Potential Impact Identification

As defined in 36 CFR Part § 800.16(d), and recognized by Chapter 267, FS, the APE is the “geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.” Based on the scale and nature of the proposed improvements, the project has a limited potential for any indirect (visual or audible) or cumulative effects outside the right of way footprint. Therefore, the archaeological and historic/architectural APE was defined as 0.25 mile from the centerline of the 63rd Avenue corridor as shown in **Figure 2**.

Figure 2: Area of Potential Effect (APE)



Methodology and Process

Background research was conducted to gather available information about the cultural resources that may have been identified within the APE of the 63rd Avenue corridor. The Florida State Historic Preservation Office (SHPO) was contacted for initial consideration of identifying cultural resources in the Florida Master Site File (FMSF) database, an inventory of significant historical and cultural resources throughout the state.

An inventory of potential eligible resources was developed using additional resources such as the Manatee County Open Data Portal, Manatee County Property Appraiser data, and field visits. Parcel information from the Manatee County Property Appraiser was utilized in order to identify buildings that may be 50 years of age or older by the buildout of this project. Geographic Information Systems (GIS) was used to add geographic data to the inventory and to spatially confirm the cultural resources located within the APE.

To be sure all structures at least 50 years when the project is complete are analyzed, structures built between 1971-1981 were included in the query as they may be over 50 years of age by the anticipated completion of the project. The historical buildings identified by the initial parcel query were then cross-referenced with satellite imagery to confirm the location and architectural style of each property.

The Manatee County Open Data Portal was accessed to collect GIS information about potential cultural resources within the APE of the 63rd Avenue corridor. This portal provided shapefiles that contained the location and details of topics such as the National Register of Historic Places (NRHP), Historical and Archaeological (HA) Overlay Districts, Cemeteries, Parks, and Preserves.

Resource Identification Results

It was determined by SHPO that there is one linear resource currently identified in the Florida Master Site File within the APE boundaries of the 63rd Avenue study corridor. This resource is a segment of the Pearce Canal, which is identified as a contributing linear resource and is not eligible for National Register listing. **Figure 3** shows a photograph of the canal.

As such, there are no currently-listed National Register of Historic Places within the APE boundaries of the study roadway. This was confirmed by georeferencing the NRHP GIS shapefile maintained by Manatee County as well as the NRHP database maintained by the U.S. National Park Service. A summary of the FMSF data is listed in **Table 1**.

Table 1: Florida Master Site File Cultural Resource Roster

ID	Name	Address	Type	Build Year	NRHP Eligibility
MA01293	Pearce Canal Segment	Bradenton, FL	Resource Group (Linear Resource)	N/A	N/A

Based on the GIS information available through the Manatee County Open Data Portal, none of the officially designated and protected Historical and Archaeological (HA) Overlay Districts fall within the APE of the 63rd Avenue corridor.

According to Section 6.1.3 of the FDOT *Cultural Resource Management Handbook*, cemeteries can contain important cultural and historic significance due to “graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.”¹ However, none of the 27 cemeteries located within Manatee County are located within the study corridor’s APE boundary.

Attachment A includes a list of the adjacent buildings within the project APE that were built in 1981 or prior. These properties are at least or nearing 50 years old and have not been evaluated for NRHP eligibility. None of the items included on this inventory are currently NRHP-recognized or included in the FMSF. Impacted properties should be evaluated during the design phase, and coordination should occur with SHPO. As such, there are no effects anticipated to culturally significant resources throughout the 63rd Avenue improvements.

¹ FDOT. 2013. Cultural Resources Handbook. Page 149. Accessed on July 29, 2021 from https://www.fdot.gov/docs/default-source/environment/pubs/cultmgmt/SEMO-CRM-Handbook_2013.pdf

Figure 3: Pearce Canal (looking north)



Recommendations

Manatee County's unique cultural and historical richness need to continue to be preserved to allow for reflection and education of the local community and beyond. One of the goals of this evaluation is to limit and ultimately not impact cultural resources along the 63rd Avenue corridor.

Based on coordination with the State Historic Preservation Office (SHPO), there is one linear resource identified within the Area of Potential Effect (APE) of the 63rd Avenue project:

- Pearce Canal Segment (MA 01293)

However, this resource has been evaluated and determined ineligible for listing on the National Register of Historic Places (NRHP).

A search of buildings older than 40 years resulted in 16 structures within the APE. These structures have not been evaluated for NRHP eligibility. These potentially historic properties should be evaluated by an architectural historian during the design phase. The NRHP eligibility finding can then be coordinated with the SHPO for concurrence.

Attachment A

Structures Within APE Built in or Before 1981

Cultural Resources Memo

63rd Ave East – US 301 to Tuttle Ave

Table A - Structures in APE Built in or Before 1981

	Parcel ID	Address	Year Built
1	1875100008	2702 63RD AVE E	1968
2	1875100008	2704 63RD AVE E	1968
3	1875100008	2712 63RD AVE E	1968
4	1874010000	3219 63RD AVE E	1963
5	1870010103	3315 63RD AVE E	1972
6	1870010202	3333 63RD AVE E	1979
7	1870010259	3415 63RD AVE E	1978
8	1870700059	3616 63RD AVE E	1974
9	1871000053	3708 63RD AVE E	1957
10	1871600001	3710 63RD AVE E	1958
11	1871000103	3712 63RD AVE E	1940
12	1875810051	6222 29TH ST E	1981
13	1875811158	6223 31ST ST E	1978
14	1869800001	6227 33RD ST E	1955
15	1870700000	6301 PROSPECT RD	1925
16	1870700000	6303 PROSPECT RD	1925



Cultural Resources Memo

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Appendix E
Potential Contamination Screening Memo



Potential Contamination Screening Memo

63rd Avenue East – US 301 to Tuttle Avenue

CIP #: 6107860

FINAL October 14, 2021



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ATTACHMENTS

Attachment A – Historic Aerials & City Directories

Attachment B – ERIS Database Report

Attachment C – FDEP’s Map Direct Database

Introduction

Manatee County is conducting a Project Development & Corridor Study to evaluate a 1.1-mile segment of 63rd Avenue East from US 301 to Tuttle Avenue in Manatee County, Florida. The project limits and general study area are shown in **Figure 1**. The study will evaluate options for widening the existing two-lane roadway to a four-lane roadway with bicycle lanes and sidewalks. This study will also seek to provide an enhanced mobility experience for all users

Memorandum Purpose

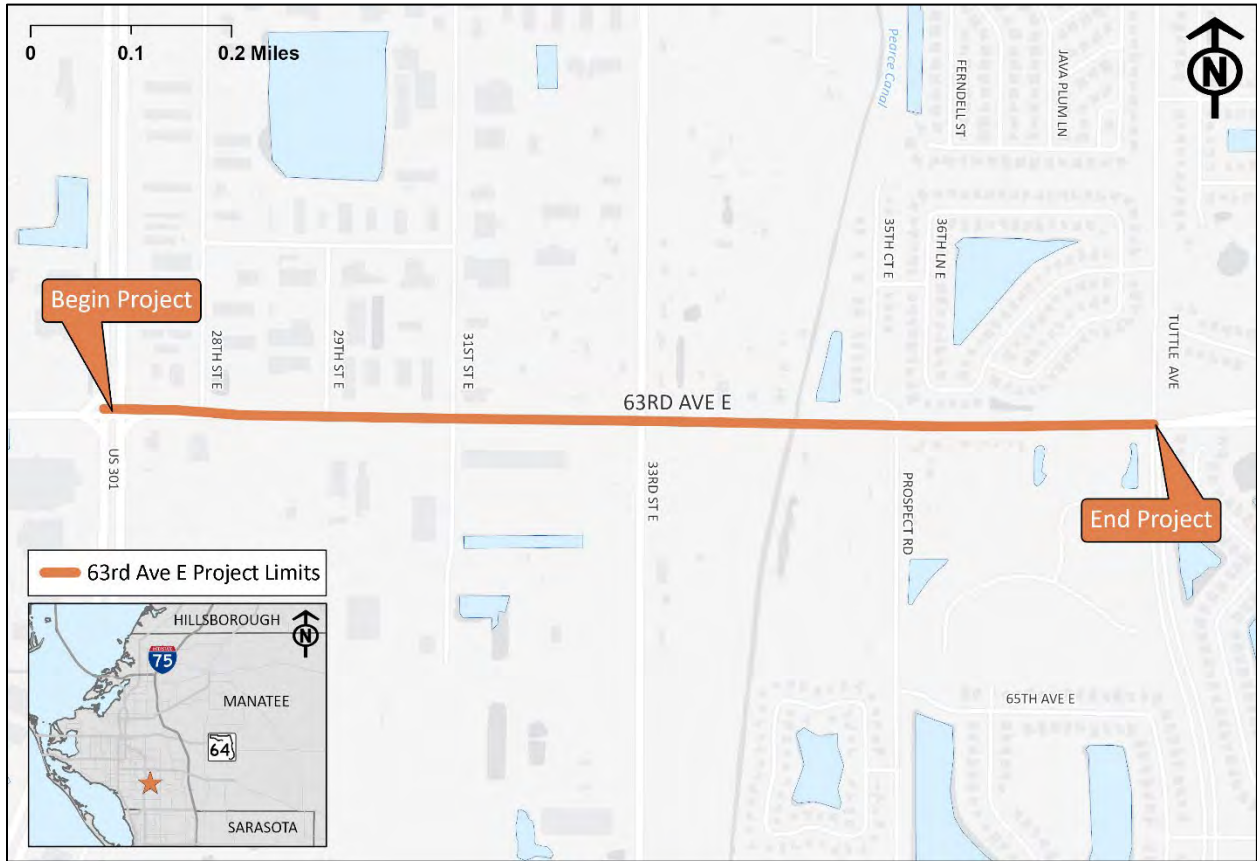
The purpose of this Potential Contamination Screening Memo is to document historical and environmental regulatory information that would be indicative of potential environmental hazards in connection with the project corridor. This is particularly important in areas where excavation activities would be most likely to occur (e.g., storm drainage modifications and traffic signal improvements). The scope of the evaluation consisted of the following tasks:

- Review of historical aerial photographs (1940, 1950, 1957, 1962, 1970, 1980, 1984, 1995, 1998, 2005, 2007, 2013, 2017 and 2019).
- Review of historical city reverse directories.
- Review of local, state, and federal records of known potentially hazardous waste sites or landfills, and sites currently under investigation for environmental violations, including any underground storage tanks (ERIS database report dated July 5, 2021)
- Review of Florida Department of Environmental Protection (FDEP) databases (Map Direct: <https://ca.dep.state.fl.us/mapdirect/>)
- Review other pertinent and readily available environmental records for adjacent properties.
- Conduct a site inspection.

Potential Contamination Screening Memo

63rd Ave East– US 301 to Tuttle Avenue

Figure 1: Project Location Map



Findings and Summary

Aerial Photograph and City Directory Review

Kimley-Horn reviewed aerial photographs and city directories provided by Environmental Resource Information Services (ERIS) for the project corridor. Prior to 1980, the project corridor appears to be mainly undeveloped land both north and south of 63rd Avenue. Since the 1980s, the project corridor has been developed as roadway with adjacent commercial, light industrial, and residential use. Development along 63rd Avenue has primarily been commercial and light industrial use to the west, and residential use to the east. City directories reviewed identified the following occupants that may be an environmental concern:

HISTORICAL USE OF ENVIRONMENTAL CONCERN	LOCATION
Powder Metal Parts Industrial, Special Dies, Industrial Molds	2951 63rd Avenue, Bradenton, FL
Carbide Coating for Tools	2953 63rd Avenue, Bradenton, FL
Automobile Body-Repairing and Painting	2704 63rd Avenue, Bradenton, FL
Refrigeration Equipment and Supplies	2910 63rd Avenue, Bradenton, FL
Scrap and Waste Materials	3125 63rd Avenue, Bradenton, FL
Construction and Mining Machinery	3706 63rd Avenue, Bradenton, FL

Copies of the Aerial Photographs and City Directories are provided in **Attachment A**.

Environmental Database Review

The environmental database (**Attachment B**) provided by ERIS was reviewed for facilities with identified contamination within 500 feet of the project corridor that could impact planned activities. Facilities identified in the database report are described below:

- **US Highway 301 & 63rd Street East Bradenton, FL, 34203 – Spill**
According to the ERIS database, a spill of 15 gallons of diesel fuel was reported on 09/02/2014, located near the intersection of US Highway 301 & 63rd Street, that was associated with a car accident. No other information was given. Based on the reported amount of diesel fuel, this is considered a Low Risk. (Map Key – 24, Incident No: 51450)

Potential Contamination Screening Memo

63rd Ave East– US 301 to Tuttle Avenue

- **3324 63rd Avenue East Bradenton, FL, 34203 – Renovo Resource Solutions Inc. – Solid Waste Facilities and Landfills (SWF/LF)**
According to the ERIS database, Renovo Resource Solutions Inc. operates as an active waste processing area. There are no reported discharges associated with this facility. Based on the regulatory status of this facility, it is considered a Low Risk. (Map Key – 3, Facility ID: 105807)
- **6212 33rd St. East Bradenton, FL, 34203 – ET Mackenzie of Florida Inc. – SWF/LF**
According to the ERIS database, this site, located on the northwest corner of 63rd avenue and 33rd, is an active waste tire collector. Based on the regulatory status of this facility, it is considered a Low Risk. (Map Key – 4, Facility ID: 101954)
- **2964 63rd Avenue East Bradenton, FL, 34203 – Earl W. Colvard - SWF/LF**
According to the ERIS database, the facility, located southeast of 63rd avenue and 29th street, is an inactive site that operated as a waste tire collector. Based on the regulatory status of this facility, it is considered a Low Risk. (Map Key – 14, Facility ID: 96826)
- **2712 63rd Avenue East Bradenton, FL, 34203 – Forristall Enterprises Inc. - SWF/LF, AST, Storage Tank/Contaminated Facility Search (STCS)**
According to the ERIS database, Forristall Enterprises Inc., located southeast of 63rd avenue and 29th street, is an active waste tire collector. Additionally, this facility contains two 1,000-gallon diesel fuel Aboveground Storage Tanks (ASTs) (Tank ID: 1 & 2) that were installed on 9/1/2016 and are currently in service. There are no reported discharges associated with this facility. Based on the regulatory status of this facility, it is considered a Low Risk. (Map Key – 22, Facility ID Nos.: 97539 and 9815271)
- **3550 63rd Avenue East Sarasota, FL, 34243 – Manatee County, 63rd Ave Booster Pump Station – Aboveground Storage Tanks (AST), STCS**
According to the ERIS database, this facility contains one 5,500-gallon polyethylene AST (Tank ID: 1) that was installed on 06/01/2008 (Map Key – 6, Facility ID: 9811514). This facility also contains one 4,000-gallon diesel fuel AST associated with an emergency generator. There are no reported discharges associated with this facility. Based on the regulatory status of this facility, it is considered a Low Risk. (Map Key – 7, Facility ID: 9807893)

Potential Contamination Screening Memo

63rd Ave East– US 301 to Tuttle Avenue

- **2930 63rd Avenue East Bradenton, FL, 34203 – Safety-Kleen Systems Inc – STCS/Spill**
According to the ERIS database, Safety-Kleen Systems Inc. reported a spill of 150 gallons of waste oil on May 29, 2007. No other details were provided (NRC Report No: 836749). Additionally, this facility contains five 5,000-gallon waste oil ASTs. There are no reported discharges associated with these tanks. Based on the limited amount of waste oil released and the regulatory status of this facility, it is considered a Low Risk. (Map Key -15, Facility ID: 9810420).
- **6222 East 29th Street Bradenton, FL, 34203 – Frito-Lay Distribution Center– (STCS)**
According to the ERIS database, Frito-Lay Distribution Center contained one 10,000-gallon UST that was removed from the site. The contents of the tank were unknown. There are no reported discharges associated with this facility. Based on the regulatory status of this facility, it is considered a Low Risk. (Map Key -18, Facility ID: 9200202).

Current Conditions

Kimley-Horn visited the project corridor on August 17, 2021 and no environmental concerns were identified during the site visit.

Review of Readily Available Environmental Reports

Kimley-Horn performed a desktop review of FDEP's Map Direct Database (**Attachment C**). Results of the review identified the following facility that was not listed in the ERIS database:

- **6450 31st Street East, Bradenton, FL, 34203 – Woodruff & Sons, Inc. – (PTCS)**
According to the FDEP Map Direct database, this facility reported a petroleum discharge which was cleaned up and approved by the FDEP in September 1994. Based on the regulatory status of this facility, it is considered a Low Risk. (Facility ID: 8626257).

Depth to Shallow Groundwater for the Project Corridor

Based on the topographic relief and location within Manatee County, groundwater is anticipated to be encountered 3-7 feet below land surface.

Should dewatering be required as part of the improvements proposed for this project, dewatering operations must obtain a National Pollution Discharge Elimination System (NPDES) Generic Permit for Discharge of Groundwater. Dewatering operations in areas identified with contamination issues require treatment of effluent to limits and requirements specified in the NPDES Generic Permit.

Conclusions

Based on available information, the project corridor is not likely to contain significant contamination. There does not appear to be any substantial environmental risks associated with the project corridor which could affect completing the planned improvements.

Potential Contamination Screening Memo

63rd Ave East– US 301 to Tuttle Avenue

Shallow groundwater at the project corridor is believed to range from 3-7 feet below land surface.

Recommendations

Any dewatering operations must obtain a NPDES Generic Permit for Discharge of Groundwater. Dewatering operations in areas identified with contamination issues require treatment of effluent to limits and requirements specified in the NPDES Generic Permit.

No further assessment/review for contamination appears warranted.

Potential Contamination Screening Memo

63rd Ave East– US 301 to Tuttle Avenue

Attachment A – Historic Aerials & City Directories



HISTORICAL **AERIALS**

Project Property: 63rd Ave Corridor
63rd Ave E
Florida FL

Requested By: Kimley-Horn & Associates, Inc

Order No: 21062500532

Data Completed: June 28,2021

Date	Source	Scale	Comments
2019	National Agriculture Information Program	1" to 800'	
2017	National Agriculture Information Program	1" to 800'	
2013	National Agriculture Information Program	1" to 800'	
2007	National Agriculture Information Program	1" to 800'	
2005	National Agriculture Information Program	1" to 800'	
1998	US Geological Survey	1" to 800'	
1995	US Geological Survey	1" to 800'	
1984	National High Altitude Photography	1" to 800'	
1980	US Department of Agriculture	1" to 800'	Best Copy Available
1970	Agriculture and Soil Conservation Service	1" to 800'	
1962	US Geological Survey	1" to 800'	
1957	Agriculture and Soil Conservation Service	1" to 800'	
1950	Army Mapping Service	1" to 800'	Best Copy Available
1940	Agriculture and Soil Conservation Service	1" to 800'	Best Copy Available

Environmental Risk Information Services

A division of Glacier Media Inc.

1.866.517.5204 | info@erisinfo.com | erisinfo.com

one inch



Year: 2019
Source: NAIP
Scale: 1" to 800'
Comment:

Address: 63rd Ave E, Florida, FL
Approx Center: -82.5217009,27.42906878

Order No: 21062500532



one inch



Year: 2017
Source: NAIP
Scale: 1" to 800'
Comment:

Address: 63rd Ave E, Florida, FL
Approx Center: -82.5217009,27.42906878

Order No: 21062500532



one inch



Year: 2013
Source: NAIP
Scale: 1" to 800'
Comment:

Address: 63rd Ave E, Florida, FL
Approx Center: -82.5217009,27.42906878

Order No: 21062500532



one inch



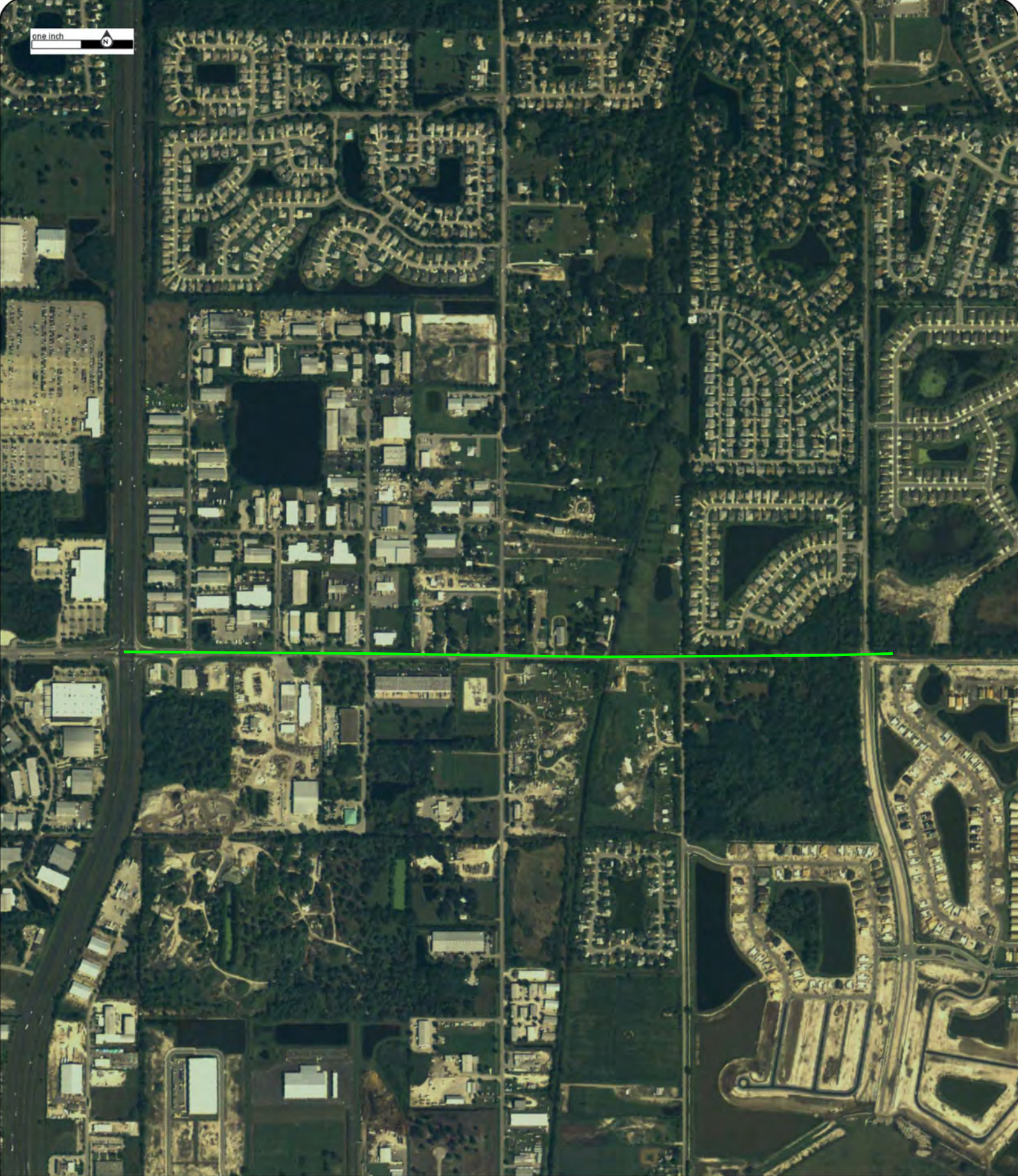
Year: 2007
Source: NAIP
Scale: 1" to 800'
Comment:

Address: 63rd Ave E, Florida, FL
Approx Center: -82.5217009,27.42906878

Order No: 21062500532



one inch



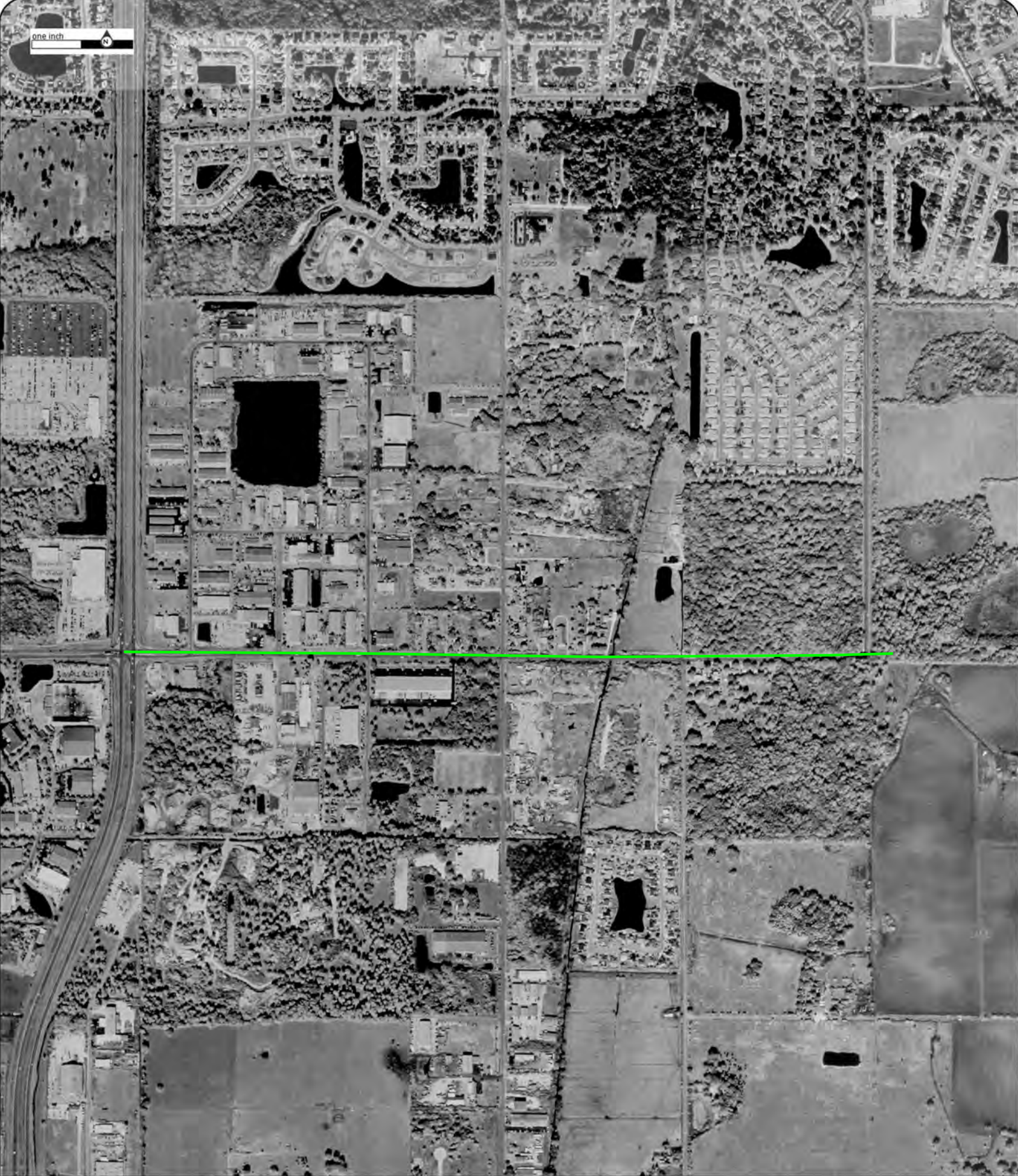
Year: 2005
Source: NAIP
Scale: 1" to 800'
Comment:

Address: 63rd Ave E, Florida, FL
Approx Center: -82.5217009,27.42906878

Order No: 21062500532



one inch



Year: 1998

Address: 63rd Ave E, Florida, FL

Order No: 21062500532

Source: USGS

Approx Center: -82.5217009,27.42906878

Scale: 1" to 800'

Comment:



one inch



Year: 1995
Source: USGS
Scale: 1" to 800'
Comment:

Address: 63rd Ave E, Florida, FL
Approx Center: -82.5217009,27.42906878

Order No: 21062500532



one inch



Year: 1984

Address: 63rd Ave E, Florida, FL

Order No: 21062500532

Source: NHAP

Approx Center: -82.5217009,27.42906878

Scale: 1" to 800'

Comment:



one inch



Year: 1980

Address: 63rd Ave E, Florida, FL

Order No: 21062500532

Source: USDA

Approx Center: -82.5217009,27.42906878

Scale: 1" to 800'

Comment: Best Copy Available



one inch



Year: 1970
Source: ASCS
Scale: 1" to 800'
Comment:

Address: 63rd Ave E, Florida, FL
Approx Center: -82.5217009,27.42906878

Order No: 21062500532



one inch



Year: 1962
Source: USGS
Scale: 1" to 800'
Comment:

Address: 63rd Ave E, Florida, FL
Approx Center: -82.5217009,27.42906878

Order No: 21062500532



one inch



Year: 1957
Source: ASCS
Scale: 1" to 800'
Comment:

Address: 63rd Ave E, Florida, FL
Approx Center: -82.5217009,27.42906878

Order No: 21062500532



one inch



Year: 1950

Address: 63rd Ave E, Florida, FL

Order No: 21062500532

Source: AMS

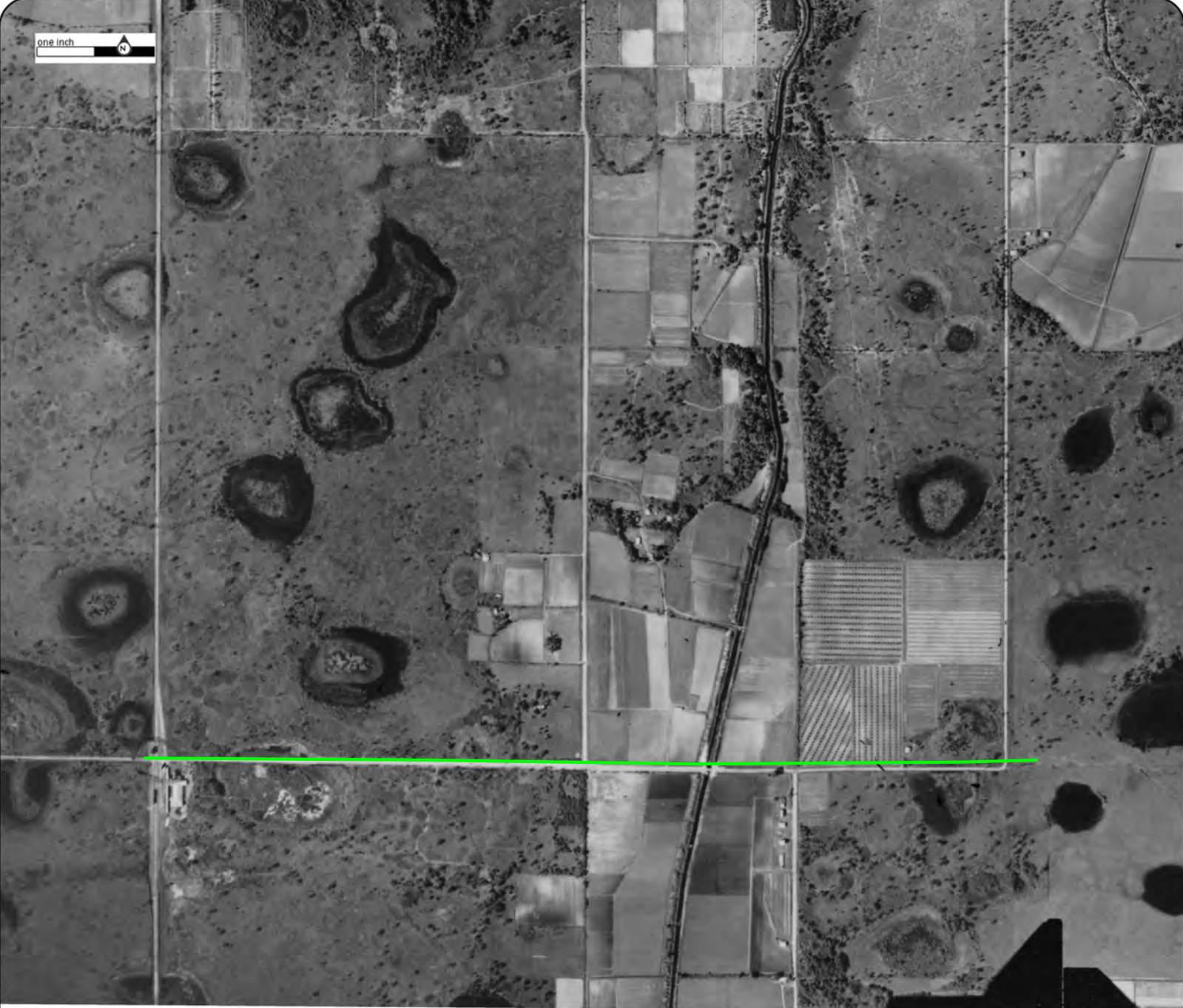
Approx Center: -82.5217009,27.42906878

Scale: 1" to 800'

Comment: Best Copy Available



one inch



Year: 1940

Address: 63rd Ave E, Florida, FL

Order No: 21062500532

Source: ASCS

Approx Center: -82.5217009,27.42906878

Scale: 1" to 800'

Comment: Best Copy Available





CITY DIRECTORY

Project Property: *63rd Ave Corridor
63rd Ave E
Bradenton, FL*

Project No: *148400074*

Requested By: *Kimley-Horn & Associates, Inc*

Order No: *21062500532*

Date Completed: *June 29, 2021*

June 29, 2021
RE: CITY DIRECTORY RESEARCH
63rd Ave Corridor
63rd Ave E Bradenton, FL

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:

2500-3300 of 63rd Avenue East

Search Results Summary

Date	Source	Comment
2020	DIGITAL BUSINESS DIRECTORY	
2016	DIGITAL BUSINESS DIRECTORY	
2012	DIGITAL BUSINESS DIRECTORY	
2008	DIGITAL BUSINESS DIRECTORY	
2003	DIGITAL BUSINESS DIRECTORY	
1998	DIGITAL BUSINESS DIRECTORY	
1992	POLKS	
1987	POLKS	
1981-1982	POLKS	
1977	POLKS	
1972	POLKS	
1967	POLKS	
1964	POLKS	
1960	POLKS	
1955	POLKS	
1950	POLKS	
1945	POLKS	
1939	POLKS	
1936	POLKS	
1931	POLKS	
1927	POLKS	

2501 SCHOOL DISTRICT OF MANATEE COU...Schools
 2501 SCHOOL DISTRICT OF MANATEE COU...Schools/universities & Colleges Academic
 2501 TAKE STOCK IN CHILD-MANATEE...Scholarship Programs
 2702 GRIND-ALL TOOL CO...Sharpening Service
 2702 GRIND-ALL TOOL CO...Sharpening Equipment & Stones (mfrs)
 2712 JUST STEEL INC...Steel-structural (mfrs)
 2910 SUPERIOR POOL PRODUCTS...Swimming Pool Equipment & Supls (whls)
 2910 SUPERIOR POOL PRODUCTS...Swimming Pool Equipment & Supls (whls)
 2910 SUPERIOR POOL PRODUCTS...Swimming Pool Contrs Dealers & Designers
 2930 TAMPA SPRING CO...Springs-automotive-sales & Service
 2951 LEXINGTON CUTTER INC...Cutting Tools/acces/measuring Dvcs (mfr)
 2951 LEXINGTON CUTTER INC...Toolscutting (whls)
 2951 LEXINGTON CUTTER INC...Powder Metal Parts/industrial (mfrs)
 2951 LEXINGTON CUTTER INC...Machine Tools-manufacturers
 2951 SUPER TOOL INC...Machine Shops (mfrs)
 2951 SUPER TOOL INC...Special Dies/tools Fxtrs/ind Molds (mfr)
 2953 ROCK RIVER TOOL INC...Tools-carbide-coating (mfrs)
 2964 BRIDGESTONE AMERICAS...Tire-dealers-retail
 2964 BRIDGESTONE CORP...Nonclassified Establishments
 2964 GCR TIRES SVC...Repair Shops & Related Services Nec
 3102 R 5 PARTNERS...Nonclassified Establishments
 3102 R F SUPPLY INC...Sewing Machines/industrial/coml (whls)
 3102 R F SUPPLY INC...Sewing Machines-household
 3130 SHAPE PRODUCTS...Glass-wholesale
 3219 GULFSIDE ROOFING INC...Roofing Contractors
 3219 GULFSIDE ROOFING INC...Metal Roofing Contractors
 3219 GULFSIDE ROOFING INC...General Contractors
 3219 GULFSIDE ROOFING INC...Roof Maintenance
 3315 SPECTRUM INSTALLATION...Floors-contractors & Builders
 3315 SPECTRUM INSTALLATION...Floor Laying Refinishing & Resurfacing
 3321 FELLOWSHIP BAPTIST CHURCH...Churches
 4027 DESOTO LOCK KEY...Locks & Locksmiths
 4027 DESOTO LOCK KEY...Taxicabs & Transportation Service
 4239 TDS CONSTRUCTION INC...Construction Management
 4239 TDS CONSTRUCTION INC...General Contractors
 5460 BILLINGS, SHARON M NP...Nurses-practitioners
 5460 FABRE, DAVID D DDS...Dentists
 5460 FAMILY HOME HEALTH SVC...Health Care Alternatives
 5460 FAMILY HOME HEALTH SVC...Home Health Service
 5460 FAMILY HOME PHYSICIANS...Senior Citizens Counseling
 5460 FAMILY HOME PHYSICIANS...Senior Citizens Service Organizations
 5460 FAMILY HOME PHYSICIANS...Health & Diet Foods/retail
 5460 FAMILY HOME PHYSICIANS...Health Care Alternatives
 5460 FAMILY HOME PHYSICIANS...Home Health Service
 5460 JASCH, KIMBERLY D...Nurses-practitioners
 5460 JONAS-LAZIN, SHERRI A MD...Medical & Surgical Svc Organizations
 5460 JONAS-LAZIN, SHERRI A MD...Physicians & Surgeons
 5460 MUDAFORT, ERIC S MD...Physicians & Surgeons
 5460 RUBINO, THOMAS DDS...Dentists
 5490 TARA GOLF & COUNTRY CLUB MNTNC...Golf Course Consultants
 6738 JERSEY SOUND & ENTERTAINMENT...Music & Live Entertainment
 9007 INVISIBLE FENCE...Fence (whls)
 9007 INVISIBLE FENCE OF GULF COAST...Fence Contractors
 9007 INVISIBLE FENCE-GULF COAST...Pet Supplies & Foods-retail
 9018 PALM POWER SWEEPING...Parking Area/lots Maintenance & Marking

2501 ERIN MEDIA LLC...Multimedia (mfrs)
 2501 MANATEE EDUCATIONAL TV...Education Centers
 2501 SCHOOL DISTRICT OF MANATEE COU...Schools
 2702 GRIND-ALL TOOL CO...Sharpening Equipment & Stones (mfrs)
 2704 ELECTRO-BAKE AUTO PAINTING...Automobile Body-repairing & Painting
 2712 JUST STEEL INC...Steel-structural (mfrs)
 2910 SUPERIOR POOL PRODUCTS...Swimming Pool Equipment & Supls (whls)
 2930 TAMPA SPRING CO...Springs-automotive-sales & Service
 2951 LEXINGTON CUTTER INC...Cutting Tools/acces/measuring Dvcs (mfr)
 2951 LEXINGTON CUTTER INC...Machine Tools-manufacturers
 2951 SUPER TOOL INC...Special Dies/tools Fxtrs/ind Molds (mfr)
 2953 ROCK RIVER TOOL INC...Cutting Tools/acces/measuring Dvcs (mfr)
 2953 ROCK RIVER TOOL INC...Tools-carbide-coating (mfrs)
 2964 BRIDGESTONE CORP...Nonclassified Establishments
 2964 GCR TIRE CTR...Tire-dealers-retail
 3102 R F SUPPLY INC...Sewing Machines-household
 3130 SHAPE PRODUCTS...Glass-wholesale
 3219 GULFSIDE ROOFING INC...Roof Maintenance
 3219 GULFSIDE ROOFING INC...Roofing Contractors
 3315 SPECTRUM INSTALLATION...Floor Laying Refinishing & Resurfacing
 3315 SPECTRUM INSTALLATION...Floors-contractors & Builders
 3315 U-HAUL NEIGHBORHOOD DEALER...Truck Renting & Leasing
 3315 U-HAUL NEIGHBORHOOD DEALER...Trailer Renting & Leasing
 3321 FELLOWSHIP BAPTIST CHURCH...Churches
 4027 DESOTO LOCK KEY...Locks & Locksmiths
 4115 ANDERSON EMERGENCY LOCKSMITH...Locks & Locksmiths
 4239 TDS CONSTRUCTION INC...General Contractors
 5460 BILLINGS, SHARON M NP...Nurses-practitioners
 5460 FABRE, DAVID D DDS...Dentists
 5460 FABRE, DAVID D DDS...Dentists
 5460 FAMILY HOME HEALTH SVC...Home Health Service
 5460 FAMILY HOME PHYSICIANS...Home Health Service
 5460 JONAS-LAZIN, SHERRI A MD...Physicians & Surgeons
 5460 MUDAFORT, ERIC S MD...Physicians & Surgeons
 5460 RUBINO, THOMAS DDS...Dentists
 5460 STRIMER, ADAM P DDS...Dentists
 5490 TARA GOLF & COUNTRY CLUB MNTNC...Golf Course Consultants
 6738 JERSEY SOUND & ENTERTAINMENT...Music & Live Entertainment
 6742 A A A A A A A A...Unclassified Establishments
 9007 INVISIBLE FENCE OF GULF COAST...Fence Contractors
 9007 INVISIBLE FENCE-GULF COAST...Pet Supplies & Foods-retail
 9018 PALM POWER SWEEPING...Sweeping Service-power
 9018 PALM POWER SWEEPING...Parking Area/lots Maintenance & Marking

97 total records. Part 1 of 2

2501 ACTERNA CORPORATION...Mfg Elec Measuring Instr Security System Svcs Whol
 2501 AUCTION BROADCASTING XCHANGE...Auctioneers
 2501 KIDS WILL BE KIDS...Child Day Care Svcs
 2501 MANATEE EDUCATIONAL TV...Education Centers
 2501 MANATEE EDUCATIONAL TELEVISION...Television Station
 2501 MANATEE EDUCATIONAL TV...Education Centers
 2501 MANATEE EDUCATIONAL TV...Sch Educatl Sv Nec
 2501 PARADISE CATERING...Caterers
 2501 TEMPUS ELECTRONIC LIFESTYLES...Radio Tv & Other Electronics Stores
 2509 +BP GROUP INC...Aircraft Leasing
 2509 ONE STOP TITLE AGENCY...Title Abstract & Settlement Offices
 2509 ONE STOP TITLE INC...Title Abstract Offs
 2702 GRIND-ALL TOOL CO...Sharpening Equipment & Stones (mfrs)
 2702 GRIND ALL TOOL CO...Repair Services
 2702 GRIND ALL TOOL CO...Saw Blades handsaws
 2702 GRIND ALL TOOL CO...Sharpening Service
 2702 GRIND ALL TOOL CO...Saw Blade & Handsaw Mfg
 2704 ELECTRO-BAKE AUTO PAINTING...Automobile Body-repairing & Painting
 2704 ELECTRO BAKE AUTO PAINTING...Automotive Body & Interior Repair
 2704 ELECTRO BAKE AUTO PAINTING...Auto Body Repair
 2704 ELECTRO BAKE AUTO PAINTING...Auto Body Repair/painting
 2712 HORTICULTURAL INDUSTRIES INC...Landscaping Design & Maintenance
 2712 TRUE GREEN LAND CARE...Lawn & Grounds Maintenance
 2910 SUPERIOR POOL PRODUCTS...Swimming Pool Equipment & Supls (whls)
 2910 SOUTH CENTRAL POOL 452...Whol Swimming Pools Equip Supplies
 2910 SUPERIOR POOL PRODUCTS...Swimg Pools Eq sups
 2910 SUPERIOR POOL PRODUCTS...Swimming Pool Equipment & Supls (whol)
 2910 SUPERIOR POOL PRODUCTS...Sporting Goods Merchant Whols
 2930 ATLANTIC INDUSTRIAL SVC...Services Nec
 2930 ATLANTIC INDUSTRIAL SVC...All Other Professional & Technical Svcs
 2930 ATLANTIC INDUSTRIAL SVC...Misc Services Nec
 2930 TAMPA SPRING CO...Truck Equipment & Parts-wholesale
 2951 LEXINGTON CUTTER INC...Cutting Tools/acces/measuring Dvcs (mfr)
 2951 LEXINGTON CUTTER INC...Cutting Tool & Machine Tool Accessory Mfg
 2951 LEXINGTON CUTTER INC...Machine Tool Acc
 2951 LEXINGTON CUTTER INC...Mfg Machine Tools-cutting Whol Industrial Equipmen
 2951 SUPER TOOL INC...Spc Dies Tls Jigs
 2953 ROCK RIVER TOOL INC...Tools-carbide-coating (mfrs)
 2953 ROCK RIVER TOOL INC...Power-driven Handtl
 2953 ROCK RIVER TOOL INC...Mfg Machine Tool Accessories Whol Industrial Suppl
 3102 AGI USA FABRICATIONS INC...Construction Mtls
 3102 AGI USA FABRICATIONS INC...Mirrors-manufacturers
 3102 R F SUPPLY INC...Sewing Machines-household
 3102 RF SUPPLY INC...Mirror Doors & Glass Fabrication
 3130 UNIVERSAL WINDOW SOLUTIONS...Windows
 3130 UNIVERSAL WINDOW...Mfr's Rep For Specialty Lumber And Windows
 3130 UNIVERSAL WINDOW SOLUTIONS LLC...Other Building Material Dealers
 3130 UNIVERSAL WINDOW SPECIALTIES...Windows
 3130 UNIVERSAL WINDOW SPECIALTIES...Door window Products
 3604 A TOUCH OF CLASS...Building Maintenance Services
 3612 BIO MED SERVICES...Refuse System
 4239 COAST GENERAL CONTRACTORS INC...Trade Contractor
 4239 TDS CONSTRUCTION INC...General Contractors

Part 2 of 2

4239 TDS CONSTRUCTION INC...New Single-family General Contrs
 5460 BRADENTON PERIO...Dentists
 5460 DE JONGH, JOSPEH DDS...Dentists
 5460 DE JONGH, L CARL DDS...Dentists
 5460 DE JONGH, L CARL DDS...Offices Of Dentists
 5460 FABRE, DAVID D DDS...Dentists
 5460 FAMILY HOME PHYSICIANS...Physicians & Surgeons
 5460 FABRE, DAVID D DDS...Offices Of Dentists
 5460 FAMILY HOME HEALTH SVC...Home Health Care Sv
 5460 HOWARD-PATTON, DEBORAH...Nurses-practitioners
 5460 MANATEE ENDODONTICS...Dentists
 5460 MANATEE ENDODONTICS...Endodontists (root Canals)
 5460 MANATEE ENDODONTICS...Offices Of Dentists
 5460 MANATEE FAMILY MEDICINE...Medical Grps & clnics
 5460 MANATEE FAMILY MEDICINE...Medical Doctor's Office
 5460 MONTANARO, ANTHONY J MD...Offices Of Physicians Except Mental Health
 5460 RUBINO, THOMAS DDS...Dentists
 5460 THOMAS G RUBINO PA...Dentists
 5460 URRUTIA, LUIS MD...Offices Of Physicians Except Mental Health
 5490 U S CABLE OF COSTAL TEXAS...Cable & Other Subscription Programming
 5804 POWER UNLIMITED GENERATORS...Generators Electric
 5804 POWER UNLIMITED GENERATORS...Generators-electric (wholesale)
 6618 INTERNET GLOBAL DEVELOPMENT...Internet Service
 6618 INTERNET GLOBAL DEVELOPMENT...Data Processing & Related Svcs
 6618 INTERNET GLOBAL DEVELOPMENT...Data Proc & Prep
 6631 DATAFORMAT.COM...Publishing Consultants
 6710 PORKIES BBQ INC...Barbeque Menu
 6722 KELLI HEALTH SERVICES...Direct Retail Sales
 6738 JERSEY SOUND & ENTERTAINMENT...Music & Live Entertainment
 6738 JERSEY SOUND & ENTERTAINMENT...Entertainers, Bands
 6738 JERSEY SOUND & ENTERTAINMENT...Music & Live Entertainment
 6738 JERSEY SOUND & ENTERTAINMENT...Independent Artists Writers & Performers
 9006 STARLIGHT...Weight Control Services
 9006 STARLIGHT...Weight Control Services
 9006 STARLIGHT...Diet & Weight Reducing Centers
 9007 INVISIBLE FENCE OF GULF COAST...Pet Supplies & Foods-retail
 9007 INVISIBLE FENCE OF GULF COAST...Fence (wholesale)
 9007 INVISIBLE FENCE OF GULF COAST...Other Construction Material Merchant Whols
 9007 INVISIBLE FENCE OF GULF COAST...Bldg Materials Ext
 9014 BAYSIDE ROOFING...Roofing Contractors
 9014 BAYSIDE ROOFING INC...Roofing Contractor
 9018 PALM POWER SWEEPING...Parking Area/lots Maintenance & Marking
 9018 PALM POWER SWEEPING...Highway Street & Bridge Construction
 9021 HANK BAD TRANSPORT INC...Transportation Services

2501 ACTERNA CORPORATION...Mfg Elec Measuring Instr Security System Svcs Whol Elec
 2501 AUCTION BROADCASTING XCHANGE...Auctioneers
 2501 ERIN MEDIA...Multimedia (manufacturers)
 2501 ERIN MEDIA LLC...Misc Publishing
 2501 KIDS WILL BE KIDS...Child Day Care Svcs
 2501 PARADISE CATERING...Caterers
 2509 +BP GROUP INC...Aircraft Leasing
 2509 ONE STOP TITLE INC...Title Abstract Offs
 2702 GRIND ALL TOOL CO...Repair Services
 2702 GRIND-ALL TOOL CO...Saw Blades, handsaws
 2702 GRIND-ALL TOOL CO...Sharpening Service
 2704 ELECTRO BAKE AUTO PAINTING...Auto Body Repair
 2704 ELECTRO-BAKE AUTO PAINTING...Auto Body Repair/painting
 2712 HORTICULTURAL INDUSTRIES INC...Landscaping Design & Maintenance
 2712 TRUE GREEN LAND CARE...Lawn & Grounds Maintenance
 2910 SOUTH CENTRAL POOL 452...Whol Swimming Pools Equip Supplies
 2910 SUPERIOR POOL PRODUCTS...Swimming Pool Equipment & Supls (whol)
 2910 SUPERIOR POOL PRODUCTS...Swimng Pools Eq, sups
 2930 ATLANTIC INDUSTRIAL SVC...Misc Services Nec
 2951 LEXINGTON CUTTER INC...Mfg Machine Tools-cutting Whol Industrial Equipment Mfg
 2951 LEXINGTON CUTTER INC...Machine Tool Acc
 2951 SUPER TOOL INC...Spc Dies, Tls, Jigs
 2953 ROCK RIVER TOOL INC...Power-driven Handtl
 2953 ROCK RIVER TOOL INC...Mfg Machine Tool Accessories Whol Industrial Supplies
 2964 UNITED RENTALS...Rental Ser-strs/yrds
 2964 UNITED RENTALS...Equipment Rental/leasing
 3102 AGI USA FABRICATIONS INC...Construction Mtls
 3102 AGI USA FABRICATIONS INC...Mirrors-manufacturers
 3102 RF SUPPLY INC...Mirror Doors & Glass Fabrication
 3114 FERGUSON ENTERPRISES INC...Plbg & Heating Eqp
 3130 UNIVERSAL WINDOW...Mfr's Rep For Specialty Lumber And Windows
 3130 UNIVERSAL WINDOW SPECIALTIES...Door, window Products
 3130 UNIVERSAL WINDOW SPECIALTIES...Windows
 3219 GULFSIDE ROOFING INC...Roofing/siding Contractor
 3219 GULFSIDE ROOFING INC...Roofg, Sheet Met Wk
 3315 SARASOTA TRUCKING INC...Dump Truck Haulage
 3321 FELLOWSHIP BAPTIST CHURCH...Baptist Church
 3604 A TOUCH OF CLASS...Building Maintenance Services
 3612 BIO MED SERVICES...Refuse System
 3612 BIO MEDICAL SVCS...Medical Doctor's Office
 4221 SCHERER INNOVATIONS...Nonclassified Establishments
 4239 COAST GENERAL CONTRACTORS INC...Trade Contractor
 4239 TDS CONSTRUCTION INC...General Contractors
 4239 TDS CONSTRUCTION INC...Gen Remod 1-fam House
 5460 HEALTHCARE AMERICA MEDICAL GRP...Medical Grps & clncls
 5460 MANATEE ENDODONTICS...Endodontists (root Canals)
 5460 MANATEE FAMILY MEDICINE...Medical Doctor's Office
 5460 MANATEE FAMILY MEDICINE...Medical Grps & clncls
 5490 U S CABLE OF COSTAL TEXAS...Cable & Pay Tv Svcs
 5804 POWER UNLIMITED GENERATORS...Generators Electric
 5804 POWER UNLIMITED GENERATORS...Generators-electric (wholesale)
 6618 INTERNET GLOBAL DEVELOPMENT...Data Proc & Prep
 6631 DATAFORMAT.COM...Publishing Consultants
 6722 KELLI HEALTH SERVICES...Direct Retail Sales
 6738 JERSEY SOUND & ENTERTAINMENT...Entertainers, Bands
 6738 JERSEY SOUND & ENTERTAINMENT...Music & Live Entertainment
 9006 STARLIGHT...Weight Control Services
 9007 INVISIBLE FENCE OF GULF COAST...Fence (wholesale)
 9007 INVISIBLE FENCE OF GULF COAST...Bldg Materials Ext
 9014 BAYSIDE ROOFING...Roofing Contractors
 9014 BAYSIDE ROOFING INC...Roofing Contractor
 9021 HANK BAD TRANSPORT INC...Transportation Services

2501 ACTERNA...
 2702 GRIND-ALL TOOL CO...Industrial Machinery And Equipment Nec
 2704 ARPCO AUTO PAINTING & BODY RPR...Interior Repair Services
 2704 ELECTRO-BAKE AUTO PAINTING...Interior Repair Services
 2712 UNITED RENTALS...
 2951 LEXINGTON CUTTER INC...
 2951 SUPER TOOL INC...
 2953 ROCK RIVER TOOL INC...
 2964 SAILTECH DESIGN INC...Motorized Boat Building And Repairing
 3102 GULFSTAR INDUSTRIES INC...Video And Audio Equipment
 3125 S & R CONSTRUCTION INC...
 3130 UNIVERSAL WINDOW SPECIALTIES...
 3219 GULFSIDE ROOFING INC...
 3321 FELLOWSHIP BAPTIST CHURCH...
 3601 DIAMOND HOMES OF SW FLORIDA...
 3706 S & S ENTERPRISES...
 4239 SCHERER GROUP INC...
 4239 TDS CONSTRUCTION INC...
 5460 MANATEE FAMILY MEDICINE...Internal Medicine Practitioners
 5460 URRUTIA LOUIS MD...Internal Medicine Practitioners
 5736 CARSON D COULTER FLOOR & WALL...
 6106 JIGGS LANDING...Gambling And Lottery Services
 9007 INVISIBLE FENCE OF GULF COAST...
 9014 BAYSIDE ROOFING...
 9018 PALM POWER SWEEPING...

2702 GRIND ALL TOOL CO...*Saw Blades And Handsaws*
 2704 ELECTRO BAKE AUTO PAINTING & BODY REPAIR...*Top And Body Repair And Paint Shops*
 2712 JOHNSTONE SUPPLY...*Warm Air Heating And Air Conditioning*
 2910 PAMECO...*Refrigeration Equipment And Supplies*
 2920 DOUGS MARINE SALES...*Boatbuilding And Repairing*
 2920 OUTBOARD MOTORS & MARINE PARTS INC...*Boatbuilding And Repairing*
 2951 LEXINGTON CUTTER INC...
 2953 ROCK RIVER TOOL INC...
 2964 G G SCHMITT & SONS INC...
 3125 MARCO INDUSTRIAL SALVAGE...*Scrap And Waste Materials*
 3130 HOME ADVANTAGE SOUTHEAST INC THE...
 3219 GULFSIDE ROOFING INC...*Roofing Siding And Sheetmetal Work*
 3321 FELLOWSHIP BAPTIST CHURCH...*Religious Organizations*
 3706 S & S ENTERPRISES...*Construction And Mining Machinery*
 4239 TDS CONSTRUCTION COMPANY...*Industrial Buildings And Warehouses*
 5006 NORTH AMERICAN FIBERGLASS...*Boatbuilding And Repairing*
 5006 SEA CAT BOATS...*Boatbuilding And Repairing*
 9210 PATTON K W INC...*Industrial Buildings And Warehouses*

2398 SIMES - SUTTON ASSOCIATES INC ELEC MFRS
 2509 LOWE'S OF BRADENTON HOME CNTR
 2702 GRIND ALL TOOL CO LTD SERV
 2704 CLUB CAR WEST FLORIDA GOLF CART SLS & REPR
 2712 JOHNSTONE SUPPLY MTRS - REF APPL PARTS
 2910 WOODRUFF & SONS INC (STGE)
 2915 HENSON INDUSTRIAL PARK
 2920 WOODRUFF & SONS INC SEWER-WATER LINE CONTR

2398 VACANT
2509 LOWES OF BRADENTON HOME CNTR
2620 VACANT
2702 GRIND - ALL TOOL CO LTD SERV
2702 WOOD D M
2704 CLUB CAR WEST FLORIDA GOLF CART SLS & REPR
2712 ROBBY'S IMPRINTED SPORTSWEAR INC
2910 NATIONAL MARINE INC SUPS
2915 HENSON INDUSTRIAL PARK
2920 VOSS EUGENE E
2920 WOODRUFF & SONS INC SEWER & WATER LINE CONTRS
2930 WOODRUFF LOUIS

2398 SCHOCK W D CO BOAT BLDRS
2620 FIBER GLASS REPAIR CO MFG BOATS
2704 CLUB CAR WEST FLORIDA (GOLF CART SLS & REPR)
2712 OLSON INDUSTRIES MARINE SUP
2915 HENSON INDUSTRIAL PARK WHSE
2915 O CONNOR NANCY K
2920 WOODRUFF & SONS INC SEWER & WATER LINE CONTRS

- 2219 SING-ORTH CORP
- 2620 FIBRE GLASS REPAIR CO MFG BOATS
- 2704 OLSON INDUSTRIES
- 2910 VACANT
- 2915 HENSON INDUSTRIAL PARK
- 2920 POLLARD ENTERPRISES INC BOAT MFG

STREET NOT LISTED

1967

SOURCE: POLKS

63RD AVENUE EAST

STREET NOT LISTED

1964

SOURCE: POLKS

63RD AVENUE EAST

STREET NOT LISTED

STREET NOT LISTED

STREET NOT LISTED

STREET NOT LISTED

STREET NOT LISTED

STREET NOT LISTED

STREET NOT LISTED

STREET NOT LISTED

STREET NOT LISTED

Attachment B – ERIS Database Report



DATABASE REPORT

Project Property: *63rd Ave Corridor
63rd Ave E
Florida FL*

Project No: *148400074*

Report Type: *Quote - Custom Radius - Linear Reports*

Order No: *21062500532*

Requested by: *Kimley-Horn & Associates, Inc*

Date Completed: *July 5, 2021*

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Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as database review of environmental records.

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Executive Summary

Property Information:

Project Property: 63rd Ave Corridor
63rd Ave E Florida FL

Project No: 148400074

Coordinates:

Latitude: 27.42906878
Longitude: -82.5217009
UTM Northing: 3,034,880.22
UTM Easting: 349,591.14
UTM Zone: 17R

Elevation: 13 FT

Order Information:

Order No: 21062500532
Date Requested: June 25, 2021
Requested by: Kimley-Horn & Associates, Inc
Report Type: Quote - Custom Radius - Linear Reports

Historicals/Products:

Aerial Photographs Historical Aerials (Boundaries)
City Directory Search CD - 1 Street Search
ERIS Xplorer [ERIS Xplorer](#)
Excel Add-On Excel Add-On

Executive Summary: Report Summary

<i>Database</i>	<i>Searched</i>	<i>Project Property</i>	<i>Within 0.095mi</i>	<i>Total</i>
<u>Standard Environmental Records</u>				
Federal				
DOE FUSRAP	Y	0	0	0
NPL	Y	0	0	0
PROPOSED NPL	Y	0	0	0
DELETED NPL	Y	0	0	0
SEMS	Y	0	0	0
ODI	Y	0	0	0
SEMS ARCHIVE	Y	0	0	0
CERCLIS	Y	0	0	0
IODI	Y	0	0	0
CERCLIS NFRAP	Y	0	0	0
CERCLIS LIENS	Y	0	0	0
RCRA CORRACTS	Y	0	0	0
RCRA TSD	Y	0	0	0
RCRA LQG	Y	0	0	0
RCRA SQG	Y	0	2	2
RCRA VSQG	Y	0	4	4
RCRA NON GEN	Y	1	0	1
FED ENG	Y	0	0	0
FED INST	Y	0	0	0
LUCIS	Y	0	0	0
ERNS 1982 TO 1986	Y	0	0	0
ERNS 1987 TO 1989	Y	0	0	0
ERNS	Y	1	0	1
FED BROWNFIELDS	Y	0	0	0
FEMA UST	Y	0	0	0
FRP	Y	0	0	0
HIST GAS STATIONS	Y	0	0	0

Database	Searched	Project Property	Within 0.095mi	Total
REFN	Y	0	0	0
BULK TERMINAL	Y	0	0	0
SEMS LIEN	Y	0	0	0
SUPERFUND ROD	Y	0	0	0

State

SHWS	Y	0	0	0
DELISTED SHWS	Y	0	0	0
CLEANUP DEP	Y	0	0	0
WCRPS	Y	0	0	0
DELISTED WCRPS	Y	0	0	0
SWF/LF	Y	0	4	4
LST	Y	0	0	0
DELISTED LST	Y	0	0	0
UST	Y	0	0	0
AST	Y	0	3	3
DEL UST AST TANK	Y	0	0	0
DEL STORAGE TANK	Y	0	0	0
FF TANKS	Y	0	0	0
STCS	Y	1	5	6
INST	Y	0	0	0
ENG	Y	0	0	0
VCP	Y	0	0	0
BROWNFIELDS	Y	0	0	0
BROWNFIELD AREA	Y	0	0	0

Tribal

INDIAN LUST	Y	0	0	0
INDIAN UST	Y	0	0	0
DELISTED ILST	Y	0	0	0
DELISTED IUST	Y	0	0	0

County

No County databases were selected to be included in the search.

Additional Environmental Records

Federal

PFAS NPL	Y	0	0	0
FINDS/FRS	Y	3	15	18
TRIS	Y	0	0	0
PFAS TRI	Y	0	0	0
PFAS WATER	Y	0	0	0

Database	Searched	Project Property	Within 0.095mi	Total
HMIRS	Y	0	0	0
NCDL	Y	0	0	0
TSCA	Y	0	0	0
HIST TSCA	Y	0	0	0
FTTS ADMIN	Y	0	0	0
FTTS INSP	Y	0	0	0
PRP	Y	0	1	1
SCRD DRYCLEANER	Y	0	0	0
ICIS	Y	0	4	4
FED DRYCLEANERS	Y	0	0	0
DELISTED FED DRY	Y	0	0	0
FUDS	Y	0	0	0
FORMER NIKE	Y	0	0	0
PIPELINE INCIDENT	Y	0	0	0
MLTS	Y	0	0	0
HIST MLTS	Y	0	0	0
MINES	Y	0	0	0
SMCRA	Y	0	0	0
MRDS	Y	0	0	0
URANIUM	Y	0	0	0
ALT FUELS	Y	0	0	0
SSTS	Y	1	0	1
PCB	Y	0	0	0

State

PRIORITYCLEAN	Y	0	0	0
DRYCLEANERS	Y	0	0	0
DELISTED DRYCLEANERS	Y	0	0	0
HISTORICAL DRYC	Y	0	0	0
SPILLS	Y	1	2	3
DWM CONTAM	Y	0	0	0
DEL CONTAM SITE	Y	0	0	0
PFAS AFFF	Y	0	0	0
PFAS	Y	0	0	0
UIC	Y	0	0	0
WELL SURVEILLANCE	Y	1	0	1
CDV SOUTHEAST	Y	0	0	0
TIER 2	Y	1	2	3
DELISTED COUNTY	Y	0	0	0

Tribal

No Tribal additional environmental record sources available for this State.

Database

Searched

Project
Property

Within
0.095mi

Total

County

No County additional environmental databases were selected to be included in the search.

Total:	10	42	52
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Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
8	FINDS/FRS	RF SUPPLY	3102 63RD AVE. EAST BRADENTON FL 34203	W	0.00 / 1.38	5	22
15	ERNS		2930 63RD AVENUE EAST BRADENTON FL 34203	W	0.00 / 0.62	6	22
15	RCRA NON GEN	SAFETY-KLEEN SYSTEMS INC	2930 63RD AVE E BRADENTON FL 34203- 5307 <i>EPA Handler ID: FLR000120618</i>	W	0.00 / 0.62	6	25
15	SPILLS		2930 63rd Avenue East BRADENTON FL <i>Incident No Incident Date: 37354 05/29/2007</i>	W	0.00 / 0.62	6	29
15	FINDS/FRS	SAFETY-KLEEN SYSTEMS INC	2930 63RD AVE E BRADENTON FL 342035307	W	0.00 / 0.62	6	30
15	STCS	SAFETY-KLEEN SYSTEMS INC	2930 63 AVE EAST BRADENTON FL 34203 <i>Facility ID Facility Status (Open Data): 9810420 CLOSED</i>	W	0.00 / 0.62	6	31
16	FINDS/FRS	SUPERIOR POOL PRODUCTS, LLC	2910 63RD AVE E BRADENTON FL 34203	W	0.00 / 0.65	6	34
16	SSTS	SUPERIOR POOL PRODUCTS LLC #452A	2910 63RD AVE E - BRADENTON FL 34203	W	0.00 / 0.65	6	34
16	WELL SURVEILLANCE	WOODRUFF & SONS INC	2910 63RD AVE E BRADENTON FL 34243	W	0.00 / 0.65	6	35
16	TIER 2	S C P DISTRIBUTORS LLC - SUPERIOR POOL PRODUCTS BRADENTON # 452A	2910 63 AVENUE EAST BRADENTON FL 34203	W	0.00 / 0.65	6	35

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	FINDS/FRS	RENOVO	3300 63RD AVE E BRADENTON FL 34203	WSW	0.00 / 3.14	0	44
2	FINDS/FRS	MEYER & GABBERT STORAGE FACILITY	6325 33RD ST E SARASOTA FL 34243	SSW	0.03 / 183.33	0	45
3	SWF/LF	RENOVO RESOURCE SOLUTIONS INC	3324 63RD AVENUE EAST BRADENTON FL 34203	E	0.00 / 3.73	-1	46
4	SWF/LF	ET MACKENZIE OF FLORIDA INC	6212 33RD ST E BRADENTON FL 34203	NNW	0.07 / 377.39	1	47
5	TIER 2	Manatee County Clk Cir C - 40A (RTU #429) Pump Station, Evoqua Water	Technologies LLC, Operator 3550 63rd Ave E Bradenton FL 34203	E	0.00 / 6.99	0	48
5	TIER 2	63rd Avenue Booster Pump Station	3550 63rd Avenue East Bradenton FL 34243	E	0.00 / 6.99	0	49
6	STCS	40A	3550 63RD AVE E MANATEE FL 34243 <i>Facility ID Facility Status (Open Data):</i> 9811514 OPEN	ESE	0.03 / 161.10	-2	50
7	AST	MANATEE CNTY-63RD AVE BOOSTER PUMP STAT	3550 63RD AVE EAST SARASOTA FL 34243 <i>Facility ID Facility Status:</i> 9807893 OPEN <i>Tank Status Status Date:</i> U - In Service 01-JUL-2005	ESE	0.03 / 177.49	-2	52
7	STCS	MANATEE CNTY-63RD AVE BOOSTER PUMP STAT	3550 63RD AVE EAST SARASOTA FL 34243 <i>Facility ID Facility Status (Open Data):</i> 9807893 OPEN	ESE	0.03 / 177.49	-2	53
9	FINDS/FRS	WOODRUFF & SONS INC	6540 - 31ST STREET EAST BRADENTON FL 342820127	W	0.00 / 9.50	5	55
9	ICIS	WOODRUFF & SONS INC	6540 - 31ST STREET EAST BRADENTON FL 342820127	W	0.00 / 9.50	5	55
10	RCRA SQG	ETCO INC AUTOMOTIVE DIVISION	6223 31ST ST E BRADENTON FL 34203-5357 <i>EPA Handler ID:</i> FLR000021360	W	0.04 / 186.20	5	56

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
10	FINDS/FRS	ETCO INC AUTOMOTIVE DIVISION	6223 31ST ST E BRADENTON FL 342035357	W	0.04 / 186.20	5	58
11	FINDS/FRS	PROSPECT POINT	3515 63RD AVE E BRADENTON FL 34203	E	0.00 / 7.96	3	59
12	FINDS/FRS	ABF FREIGHT SYSTEM INC	6215 31ST ST E BRADENTON FL 34203	WNW	0.09 / 491.20	5	60
12	FINDS/FRS	ABF FREIGHT TERMINAL 226	6215 31ST ST E BRADENTON FL 34203	WNW	0.09 / 491.20	5	61
12	ICIS	ABF FREIGHT SYSTEM INC	6215 31ST ST E BRADENTON FL 34203	WNW	0.09 / 491.20	5	61
12	ICIS	ABF FREIGHT TERMINAL 226	6215 31ST ST E BRADENTON FL 34203	WNW	0.09 / 491.20	5	62
13	FINDS/FRS	PROSPECT POINTE	UNKNOWN BRADENTON FL 34203	E	0.01 / 70.73	4	62
14	SWF/LF	EARL W. COLVARD	2964 63RD AVE E BRADENTON FL 34203	W	0.01 / 56.35	6	63
17	RCRA VSQG	ACE METAL POLISHING CO INC	6223 29TH ST E BRADENTON FL 34203-5383 <i>EPA Handler ID: FLR000088765</i>	W	0.04 / 194.38	6	63
17	RCRA VSQG	EMERGENCY - ALADDIN POOLS FIRE	6223 29TH ST E BRADENTON FL 34203-5383 <i>EPA Handler ID: FLT950050260</i>	W	0.04 / 194.38	6	66
17	FINDS/FRS	EMERGENCY - ALADDIN POOLS FIRE	6223 29TH ST E BRADENTON FL 342035383	W	0.04 / 194.38	6	67
17	FINDS/FRS	ACE METAL POLISHING CO INC	6223 29TH ST E BRADENTON FL 342035342	W	0.04 / 194.38	6	68
18	FINDS/FRS	ROLLING FRITO-LAY - BRADENTON-SARASOTA	6222 29TH ST E BRADENTON FL 342035304	W	0.04 / 186.92	6	69
18	ICIS	BRADENTON/SARASOTA	6222 29TH ST E BRADEONTON FL 34203	W	0.04 / 186.92	6	70

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
18	STCS	FRITO-LAY SALES DISTRIBUTION CENTER	6222 E 29TH ST BRADENTON FL 34203 <i>Facility ID Facility Status (Open Data):</i> 9200202 CLOSED	W	0.04 / 186.92	6	70
19	RCRA VSQG	THYSSEN KRUPP ELEVATOR	6215 29TH ST E BRADENTON FL 34203-5315 <i>EPA Handler ID:</i> FLT030072383	WNW	0.09 / 495.75	6	72
19	FINDS/FRS	THYSSEN KRUPP ELEVATOR	6215 29TH ST E BRADENTON FL 342035315	WNW	0.09 / 495.75	6	73
20	FINDS/FRS	AMERICAN TORCH TIP COMPANY INC	6212 29TH ST E BRADENTON FL 342035304	WNW	0.09 / 499.56	6	73
20	RCRA SQG	AMERICAN TORCH TIP COMPANY	6212 29TH ST E BRADENTON FL 34203-5304 <i>EPA Handler ID:</i> FLD004320396	WNW	0.09 / 499.56	6	74
20	SPILLS		Bradenton 6212 29th Street East FL <i>Incident No Incident Date:</i> 60103 3/5/2018 12:00:00 PM <i>Incident Status:</i> Pending-DM, Pending-DM, Pending-DM, Pending-DM	WNW	0.09 / 499.56	6	84
21	PRP	AMERICAN TORCH TIP COMPANY	6212 29TH STE. BRADENTON FL 34203	WNW	0.08 / 425.32	6	85
22	SWF/LF	FORRISTALL ENTERPRISES, INC.	2712 63RD AVE E BRADENTON FL 34203	W	0.00 / 5.93	7	86
22	AST	FORRISTALL ENTERPRISES INC	2712 63RD AVE E BRADENTON FL 34203 <i>Facility ID Facility Status:</i> 9815271 OPEN <i>Tank Status Status Date:</i> U - In Service 01-SEP-2016, U - In Service 01-SEP-2016	W	0.00 / 5.93	7	86
22	STCS	FORRISTALL ENTERPRISES INC	2712 63RD AVE E BRADENTON FL 34203 <i>Facility ID Facility Status (Open Data):</i> 9815271 OPEN	W	0.00 / 5.93	7	88
23	RCRA VSQG	ELECTRO BAKE ENTERPRISES INC	2704 63RD AVE E BRADENTON FL 34203-5307 <i>EPA Handler ID:</i> FL0001007186	W	0.00 / 6.17	7	90
23	FINDS/FRS	ELECTRO BAKE ENTERPRISES INC	2704 63RD AVE E BRADENTON FL 34203-5307	W	0.00 / 6.17	7	94
24	SPILLS		US Hwy 301 & 63rd St East BRADENTON FL <i>Incident No Incident Date:</i> 51450 09/02/2014	W	0.00 / 6.50	6	95

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Direction</i>	<i>Distance (mi/ft)</i>	<i>Elev Diff (ft)</i>	<i>Page Number</i>
25	AST	FLOWERS BAKING CO OF BRADENTON	6490 PARKLAND DR BRADENTON FL 34243	W	0.09 / 482.05	7	96
			<i>Facility ID Facility Status:</i> 9809059 OPEN <i>Tank Status Status Date:</i> U - In Service 01-MAR-2007				
25	STCS	FLOWERS BAKING CO OF BRADENTON	6490 PARKLAND DR BRADENTON FL 34243	W	0.09 / 482.05	7	97
			<i>Facility ID Facility Status (Open Data):</i> 9809059 OPEN				
26	FINDS/FRS	HONORE TRAIL PARK	4012 & 4016 HONORE AVE SARASOTA FL 34230	E	0.08 / 422.57	5	99

Executive Summary: Summary by Data Source

Standard

Federal

RCRA SQG - RCRA Small Quantity Generators List

A search of the RCRA SQG database, dated Apr 5, 2021 has found that there are 2 RCRA SQG site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ETCO INC AUTOMOTIVE DIVISION	6223 31ST ST E BRADENTON FL 34203-5357	W	0.04 / 186.20	10
	<i>EPA Handler ID: FLR000021360</i>			
AMERICAN TORCH TIP COMPANY	6212 29TH ST E BRADENTON FL 34203-5304	WNW	0.09 / 499.56	20
	<i>EPA Handler ID: FLD004320396</i>			

RCRA VSQG - RCRA Very Small Quantity Generators List

A search of the RCRA VSQG database, dated Apr 5, 2021 has found that there are 4 RCRA VSQG site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ACE METAL POLISHING CO INC	6223 29TH ST E BRADENTON FL 34203-5383	W	0.04 / 194.38	17
	<i>EPA Handler ID: FLR000088765</i>			
EMERGENCY - ALADDIN POOLS FIRE	6223 29TH ST E BRADENTON FL 34203-5383	W	0.04 / 194.38	17
	<i>EPA Handler ID: FLT950050260</i>			
THYSSEN KRUPP ELEVATOR	6215 29TH ST E BRADENTON FL 34203-5315	WNW	0.09 / 495.75	19
	<i>EPA Handler ID: FLT030072383</i>			
ELECTRO BAKE ENTERPRISES INC	2704 63RD AVE E BRADENTON FL 34203-5307	W	0.00 / 6.17	23
	<i>EPA Handler ID: FL0001007186</i>			

RCRA NON GEN - RCRA Non-Generators

A search of the RCRA NON GEN database, dated Apr 5, 2021 has found that there are 1 RCRA NON GEN site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
SAFETY-KLEEN SYSTEMS INC	2930 63RD AVE E BRADENTON FL 34203-5307	W	0.00 / 0.62	15
	<i>EPA Handler ID: FLR000120618</i>			

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
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ERNS - Emergency Response Notification System

A search of the ERNS database, dated Nov 9, 2020 has found that there are 1 ERNS site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
	2930 63RD AVENUE EAST BRADENTON FL 34203	W	0.00 / 0.62	15

State

SWF/LF - Solid Waste Facilities and Landfills

A search of the SWF/LF database, dated Mar 24, 2021 has found that there are 4 SWF/LF site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
RENOVO RESOURCE SOLUTIONS INC	3324 63RD AVENUE EAST BRADENTON FL 34203	E	0.00 / 3.73	3
ET MACKENZIE OF FLORIDA INC	6212 33RD ST E BRADENTON FL 34203	NNW	0.07 / 377.39	4
EARL W. COLVARD	2964 63RD AVE E BRADENTON FL 34203	W	0.01 / 56.35	14
FORRISTALL ENTERPRISES, INC.	2712 63RD AVE E BRADENTON FL 34203	W	0.00 / 5.93	22

AST - Aboveground Storage Tanks

A search of the AST database, dated Mar 1, 2021 has found that there are 3 AST site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
MANATEE CNTY-63RD AVE BOOSTER PUMP STAT	3550 63RD AVE EAST SARASOTA FL 34243	ESE	0.03 / 177.49	7
	<i>Facility ID Facility Status: 9807893 OPEN Tank Status Status Date: U - In Service 01-JUL-2005</i>			
FORRISTALL ENTERPRISES INC	2712 63RD AVE E BRADENTON FL 34203	W	0.00 / 5.93	22
	<i>Facility ID Facility Status: 9815271 OPEN Tank Status Status Date: U - In Service 01-SEP-2016, U - In Service 01-SEP-2016</i>			
FLOWERS BAKING CO OF BRADENTON	6490 PARKLAND DR BRADENTON FL 34243	W	0.09 / 482.05	25
	<i>Facility ID Facility Status: 9809059 OPEN Tank Status Status Date: U - In Service 01-MAR-2007</i>			

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
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STCS - Storage Tank/Contaminated Facility Search

A search of the STCS database, dated Mar 2, 2021 has found that there are 6 STCS site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
40A	3550 63RD AVE E MANATEE FL 34243	ESE	0.03 / 161.10	<u>6</u>
<i>Facility ID Facility Status (Open Data): 9811514 OPEN</i>				
MANATEE CNTY-63RD AVE BOOSTER PUMP STAT	3550 63RD AVE EAST SARASOTA FL 34243	ESE	0.03 / 177.49	<u>7</u>
<i>Facility ID Facility Status (Open Data): 9807893 OPEN</i>				
SAFETY-KLEEN SYSTEMS INC	2930 63 AVE EAST BRADENTON FL 34203	W	0.00 / 0.62	<u>15</u>
<i>Facility ID Facility Status (Open Data): 9810420 CLOSED</i>				
FRITO-LAY SALES DISTRIBUTION CENTER	6222 E 29TH ST BRADENTON FL 34203	W	0.04 / 186.92	<u>18</u>
<i>Facility ID Facility Status (Open Data): 9200202 CLOSED</i>				
FORRISTALL ENTERPRISES INC	2712 63RD AVE E BRADENTON FL 34203	W	0.00 / 5.93	<u>22</u>
<i>Facility ID Facility Status (Open Data): 9815271 OPEN</i>				
FLOWERS BAKING CO OF BRADENTON	6490 PARKLAND DR BRADENTON FL 34243	W	0.09 / 482.05	<u>25</u>
<i>Facility ID Facility Status (Open Data): 9809059 OPEN</i>				

Non Standard

Federal

FINDS/FRS - Facility Registry Service/Facility Index

A search of the FINDS/FRS database, dated Nov 2, 2020 has found that there are 18 FINDS/FRS site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
RENOVO	3300 63RD AVE E BRADENTON FL 34203	WSW	0.00 / 3.14	<u>1</u>
MEYER & GABBERT STORAGE FACILITY	6325 33RD ST E SARASOTA FL 34243	SSW	0.03 / 183.33	<u>2</u>

Site	Address	Direction	Distance (mi/ft)	Map Key
RF SUPPLY	3102 63RD AVE. EAST BRADENTON FL 34203	W	0.00 / 1.38	<u>8</u>
WOODRUFF & SONS INC	6540 - 31ST STREET EAST BRADENTON FL 342820127	W	0.00 / 9.50	<u>9</u>
ETCO INC AUTOMOTIVE DIVISION	6223 31ST ST E BRADENTON FL 342035357	W	0.04 / 186.20	<u>10</u>
PROSPECT POINT	3515 63RD AVE E BRADENTON FL 34203	E	0.00 / 7.96	<u>11</u>
ABF FREIGHT TERMINAL 226	6215 31ST ST E BRADENTON FL 34203	WNW	0.09 / 491.20	<u>12</u>
ABF FREIGHT SYSTEM INC	6215 31ST ST E BRADENTON FL 34203	WNW	0.09 / 491.20	<u>12</u>
PROSPECT POINTE	UNKNOWN BRADENTON FL 34203	E	0.01 / 70.73	<u>13</u>
SAFETY-KLEEN SYSTEMS INC	2930 63RD AVE E BRADENTON FL 342035307	W	0.00 / 0.62	<u>15</u>
SUPERIOR POOL PRODUCTS, LLC	2910 63RD AVE E BRADENTON FL 34203	W	0.00 / 0.65	<u>16</u>
ACE METAL POLISHING CO INC	6223 29TH ST E BRADENTON FL 342035342	W	0.04 / 194.38	<u>17</u>
EMERGENCY - ALADDIN POOLS FIRE	6223 29TH ST E BRADENTON FL 342035383	W	0.04 / 194.38	<u>17</u>
ROLLING FRITO-LAY - BRADENTON-SARASOTA	6222 29TH ST E BRADENTON FL 342035304	W	0.04 / 186.92	<u>18</u>
THYSSEN KRUPP ELEVATOR	6215 29TH ST E BRADENTON FL 342035315	WNW	0.09 / 495.75	<u>19</u>
AMERICAN TORCH TIP COMPANY INC	6212 29TH ST E BRADENTON FL 342035304	WNW	0.09 / 499.56	<u>20</u>

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ELECTRO BAKE ENTERPRISES INC	2704 63RD AVE E BRADENTON FL 34203-5307	W	0.00 / 6.17	23
HONORE TRAIL PARK	4012 & 4016 HONORE AVE SARASOTA FL 34230	E	0.08 / 422.57	26

PRP - Potentially Responsible Parties List

A search of the PRP database, dated Apr 27, 2021 has found that there are 1 PRP site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
AMERICAN TORCH TIP COMPANY	6212 29TH STE. BRADENTON FL 34203	WNW	0.08 / 425.32	21

ICIS - Integrated Compliance Information System (ICIS)

A search of the ICIS database, dated Mar 24, 2021 has found that there are 4 ICIS site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
WOODRUFF & SONS INC	6540 - 31ST STREET EAST BRADENTON FL 342820127	W	0.00 / 9.50	9
ABF FREIGHT TERMINAL 226	6215 31ST ST E BRADENTON FL 34203	WNW	0.09 / 491.20	12
ABF FREIGHT SYSTEM INC	6215 31ST ST E BRADENTON FL 34203	WNW	0.09 / 491.20	12
BRADENTON/SARASOTA	6222 29TH ST E BRADEONTON FL 34203	W	0.04 / 186.92	18

SSTS - Registered Pesticide Establishments

A search of the SSTS database, dated Apr 13, 2021 has found that there are 1 SSTS site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
SUPERIOR POOL PRODUCTS LLC #452A	2910 63RD AVE E - BRADENTON FL 34203	W	0.00 / 0.65	16

State

SPILLS - Oil and Hazardous Materials Incidents

A search of the SPILLS database, dated May 18, 2021 has found that there are 3 SPILLS site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
	2930 63rd Avenue East BRADENTON FL	W	0.00 / 0.62	15
<i>Incident No Incident Date: 37354 05/29/2007</i>				
	Bradenton 6212 29th Street East FL	WNW	0.09 / 499.56	20
<i>Incident No Incident Date: 60103 3/5/2018 12:00:00 PM</i> <i>Incident Status: Pending-DM, Pending-DM, Pending-DM, Pending-DM</i>				
	US Hwy 301 & 63rd St East BRADENTON FL	W	0.00 / 6.50	24
<i>Incident No Incident Date: 51450 09/02/2014</i>				

WELL SURVEILLANCE - Well Surveillance Program Facilities

A search of the WELL SURVEILLANCE database, dated Apr 5, 2021 has found that there are 1 WELL SURVEILLANCE site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
WOODRUFF & SONS INC	2910 63RD AVE E BRADENTON FL 34243	W	0.00 / 0.65	16

TIER 2 - Tier 2 Report

A search of the TIER 2 database, dated Jun 24, 2020 has found that there are 3 TIER 2 site(s) within approximately 0.095 miles of the project property.

<u>Site</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
Manatee County Clk Cir C - 40A (RTU #429) Pump Station, Evoqua Water	Technologies LLC, Operator 3550 63rd Ave E Bradenton FL 34203	E	0.00 / 6.99	5
63rd Avenue Booster Pump Station	3550 63rd Avenue East Bradenton FL 34243	E	0.00 / 6.99	5
S C P DISTRIBUTORS LLC - SUPERIOR POOL PRODUCTS BRADENTON # 452A	2910 63 AVENUE EAST BRADENTON FL 34203	W	0.00 / 0.65	16



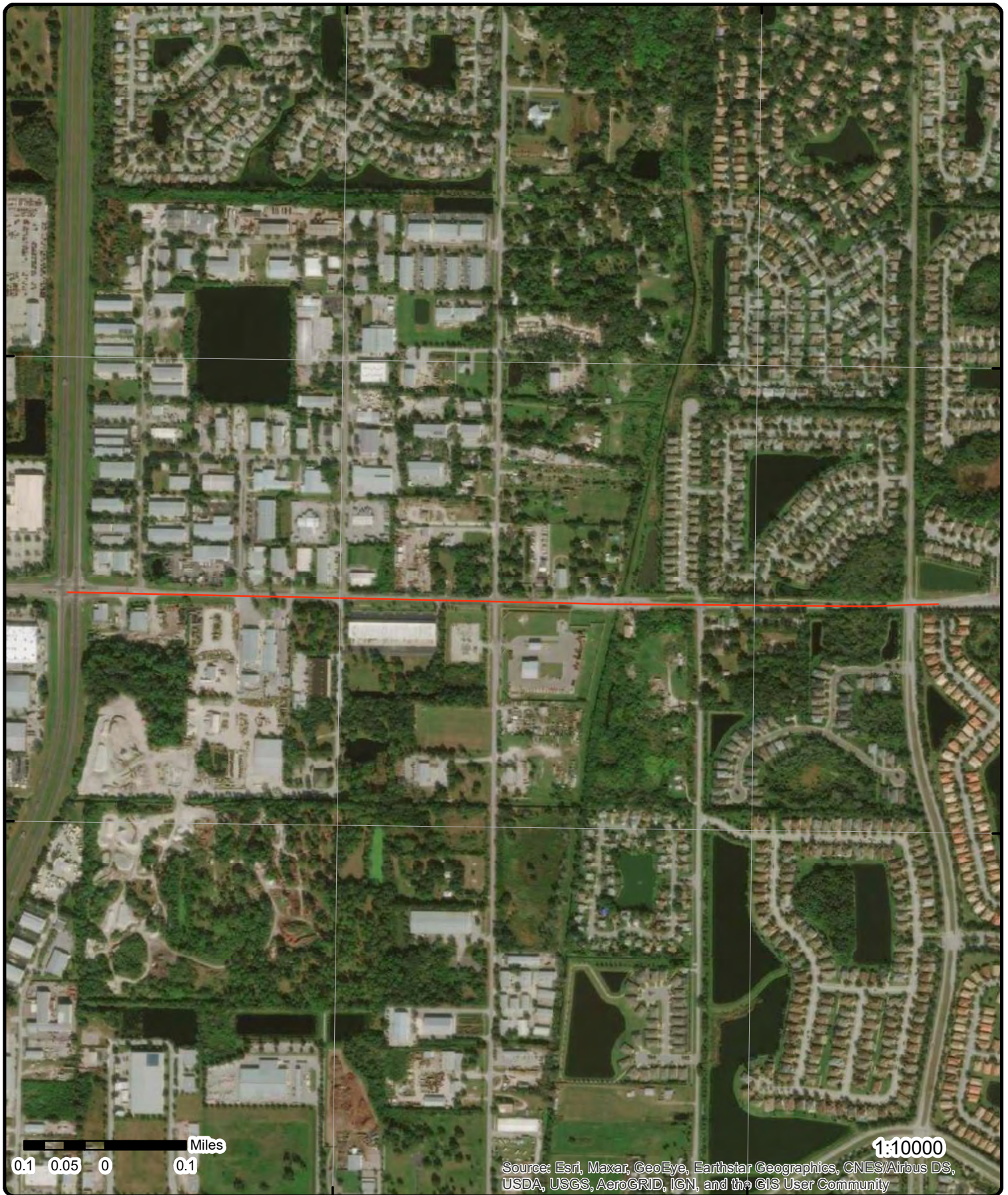
Map: 0.095 Mile Radius

Order Number: 21062500532

Address: 63rd Ave E, Florida, FL



Buffer Outline	Rails	State Boundary	FWS Special Designation Areas	Plume
Eris Sites with Higher Elevation	Major Highways	National Priority List Sites	State Brownfield Sites	
Eris Sites with Same Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas	
Eris Sites with Lower Elevation	Major Roads	Indian Reserve Land	State Superfund Areas: Dept. of Defense	
Eris Sites with Unknown Elevation	Major Roads Ramps	100 Year Flood Zone	State Superfund Areas: NPL	
County Boundary	Secondary Roads	500 Year Flood Zone	WQARF Areas	
	Secondary Roads Ramps	Historic Fill	Federal Lands: Dept. of Defense (owned/administered areas)	
	Local Roads and Ramps			



0.1 0.05 0 0.1 Miles

1:10000

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Aerial Year: 2020

Address: 63rd Ave E, Florida, FL

Source: ESRI World Imagery

Order Number: 21062500532

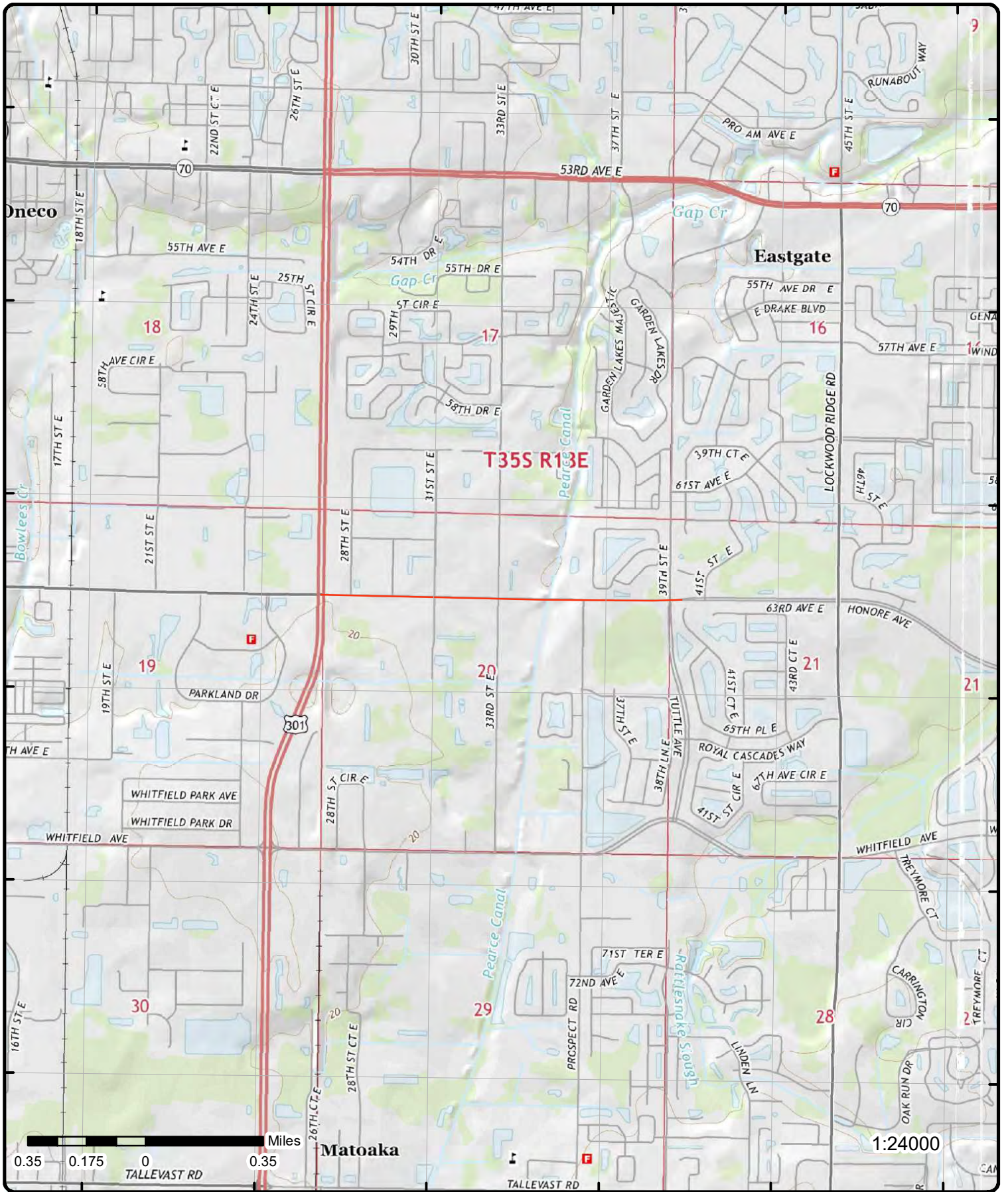


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82°32'30"W 82°32'W 82°31'30"W 82°31'W 82°30'30"W 82°30'W

27°27'N
27°26'30"N
27°26'N
27°25'30"N
27°25'N
27°24'30"N

27°27'N
27°26'30"N
27°26'N
27°25'30"N
27°25'N
27°24'30"N



Topographic Map

Year: 2015

Order Number: 21062500532

Address: 63rd Ave E, FL

Quadrangle(s): Lorraine, FL; Bradenton, FL

Source: USGS Topographic Map



© ERIS Information Inc.

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
<u>8</u>	1 of 1	W	0.00 / 1.38	17.71 / 5	RF SUPPLY 3102 63RD AVE. EAST BRADENTON FL 34203	FINDS/FRS

Registry ID: 110059624134
FIPS Code: 12081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 14-MAY-14
Update Date: 07-OCT-16
Interest Types: ICIS-NPDES NON-MAJOR, STORM WATER INDUSTRIAL
SIC Codes: 3231
SIC Code Descriptions: GLASS PRODUCTS, MADE OF PURCHASED GLASS
NAICS Codes: 327215
NAICS Code Descriptions: GLASS PRODUCT MANUFACTURING MADE OF PURCHASED GLASS.
Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008052033
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.42907
Longitude: -82.52392
Reference Point: CENTER OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 30
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110059624134
Program Acronyms:
 NPDES:FLR05H978

<u>15</u>	1 of 5	W	0.00 / 0.62	19.00 / 6	2930 63RD AVENUE EAST BRADENTON FL 34203	ERNS
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NRC Report No: 836749 **Latitude Degrees:**
Type of Incident: MOBILE **Latitude Minutes:**

Incident Cause:	EQUIPMENT FAILURE	Latitude Seconds:	
Incident Date:	5/29/2007 7:00:00 AM	Longitude Degrees:	
Incident Location:		Longitude Minutes:	
Incident Dtg:	DISCOVERED	Longitude Seconds:	
Distance from City:		Lat Quad:	
Distance Units:		Long Quad:	
Direction from City:		Location Section:	
Location County:	MANATEE	Location Township:	
Potential Flag:	No	Location Range:	
Year:	Year 2007 Reports		
Description of Incident:	CALLER STATED THAT DUE TO A LEAKING VALVE ON A TANKER TRUCK, THERE WAS A SPILL OF AN UNKNOWN AMOUNT OF MATERIALS FROM THE TRUCK ONTO THE GROUND. CALLER STATED THE MATERIALS WHICH MAY BE USED MOTOR OIL SPILLED ONTO HIS BUSINESS PROPERTY. IT IS UNKNOWN IF ANY OF THE MATERIALS WENT INTO THE STORM DRAIN SYSTEM AT THIS TIME.		

Material Spill Information

Chris Code:	OMT	Unit of Measure:	UNKNOWN AMOUNT
CAS No:	000000-00-0	If Reached Water:	UNKNOWN
UN No:		Amount in Water:	0
Name of Material:	OIL, MISC: MOTOR	Unit Reach Water:	UNKNOWN AMOUNT
Amount of Material:	0		

Calls Information

Date Time Received:	5/29/2007 8:01:30 AM	Responsible City:	BRADENTON
Date Time Complete:	5/29/2007 8:11:13 AM	Responsible State:	FL
Call Type:	INC	Responsible Zip:	34203
Resp Company:	ATLANTIC INDUSTRIAL	Source:	TELEPHONE
Resp Org Type:	PRIVATE ENTERPRISE		

Incident Information

Tank ID:		Building ID:	
Tank Regulated:	U	Location Area ID:	
Tank Regulated By:		Location Block ID:	
Capacity of Tank:		OCSG No:	
Capacity Tank Units:		OCSP No:	
Description of Tank:		State Lease No:	
Actual Amount:		Pier Dock No:	
Actual Amount Units:		Berth Slip No:	
Tank Above Ground:	ABOVE	Brake Failure:	U
NPDES:		Airbag Deployed:	U
NPDES Compliance:	U	Transport Contain:	U
Init Contin Rel No:		Location Subdiv:	
Contin Rel Permit:		Platform Rig Name:	
Contin Release Type:		Platform Letter:	
Aircraft ID:		Allision:	U
Aircraft Runway No:		Type of Structure:	
Aircraft Spot No:		Structure Name:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Aircraft Type:					Structure Oper:	U
Aircraft Model:					Transit Bus Flag:	
Aircraft Fuel Cap:					Date Time Norm Serv:	
Aircraft Fuel Cap U:					Serv Disrupt Time:	
Aircraft Fuel on Brd:					Serv Disrupt Units:	
Aircraft Fuel OB U:					CR Begin Date:	
Aircraft Hanger:					CR End Date:	
Road Mile Marker:					CR Change Date:	
Power Gen Facility:	U				FBI Contact:	
Generating Capacity:					FBI Contact Dt Tm:	
Type of Fixed Obj:					Passenger Handling:	
Type of Fuel:					Passenger Route:	XXX
DOT Crossing No:					Passenger Delay:	XXX
DOT Regulated:	U				Sub Part C Test Req:	XXX
Pipeline Type:					Conductor Test:	
Pipeline Abv Ground:	ABOVE				Engineer Test:	
Pipeline Covered:	U				Trainman Test:	
Exposed Underwater:	N				Yard Foreman Test:	
Railroad Hotline:					RCL Operator Test:	
Railroad Milepost:					Brakeman Test:	
Grade Crossing:	U				Train Dispat Test:	
Crossing Device Ty:					Signalman Test:	
Ty Vehicle Involved:					Oth Employee Test:	
Device Operational:	Y				Unknown Test:	

Incident Details Information

Release Secured:	U				State Agen Report No:	NONE
Release Rate:					State Agen on Scene:	NONE
Release Rate Unit:					State Agen Notified:	NONE
Release Rate Rate:					Fed Agency Notified:	NONE
Est Duration of Rel:					Oth Agency Notified:	
Desc Remedial Act:	CALLER STATED THE COMPANY IS USING ABSORBENT PADS AND A VACUUM TRUCK TO PICK UP THE MATERIALS.				Body of Water:	
Fire Involved:	N				Tributary of:	
Fire Extinguished:	U				Near River Mile Make:	
Any Evacuations:	N				Near River Mile Mark:	
No Evacuated:					Offshore:	N
Who Evacuated:					Weather Conditions:	SUNNY
Radius of Evacu:					Air Temperature:	80
Any Injuries:	N				Wind Direction:	
No. Injured:					Wind Speed:	
No. Hospitalized:					Wind Speed Unit:	
No. Fatalities:					Water Supp Contam:	U
Any Fatalities:	N				Water Temperature:	
Any Damages:	N				Wave Condition:	
Damage Amount:					Current Speed:	
Air Corridor Closed:	N				Current Direction:	
Air Corridor Desc:					Current Speed Unit:	
Air Closure Time:					EMPL Fatality:	
Waterway Closed:	N				Pass Fatality:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Waterway Desc:					Community Impact:	
Waterway Close Time:					Passengers Transfer:	NO
Road Closed:	N				Passenger Injuries:	
Road Desc:					Employee Injuries:	
Road Closure Time:					Occupant Fatality:	
Road Closure Units:					Sheen Size:	
Closure Direction:					Sheen Size Units:	
Major Artery:	No				Sheen Size Length:	
Track Closed:	N				Sheen Size Length U:	
Track Desc:					Sheen Size Width:	
Track Closure Time:					Sheen Size Width U:	
Track Closure Units:					Sheen Color:	
Track Close Dir:					Dir of Sheen Travel:	
Media Interest:	NONE				Sheen Odor Desc:	
Medium Desc:	LAND				Duration Unit:	
Addl Medium Info:					Additional Info:	CALLER DID NOT HAVE ANY ADDITIONAL INFORMATION.

15	2 of 5	W	0.00 / 0.62	19.00 / 6	SAFETY-KLEEN SYSTEMS INC 2930 63RD AVE E BRADENTON FL 34203-5307	RCRA NON GEN
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EPA Handler ID: FLR000120618
Gen Status Universe: No Report
Contact Name: JEFF CURTIS
Contact Address: 5610 ALPHA DR , , BOYNTON BEACH , FL, 33426-8329 , US
Contact Phone No and Ext: 561-523-4719
Contact Email: JEFF.CURTIS@SAFETY-KLEEN.COM
Contact Country: US
County Name: MANATEE
EPA Region: 04
Land Type: Private
Receive Date: 20100503
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: VIOLATION or UNDETERMINED: There are VIOLATION or UNDETERMINED details or records associated with this facility (EPA ID) in the Compliance Monitoring and Enforcement table dated April, 2021.

Violation Details

Citation: 279.44(a)
Violation Short Description: Used Oil - Transporter and Transfer Facility
Violation Type: 279.E
Violation Determined Date: 20080829
Scheduled Compliance Date:
Return to Compliance: Unverifiable
Actual Return to Compl: 20080829
Violation Responsible Agency: State

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Violation Details

Citation: UOG:279.22(c)
Violation Short Description: Used Oil - Generators
Violation Type: 279.C
Violation Determined Date: 20060216
Scheduled Compliance Date:
Return to Compliance: Unverifiable
Actual Return to Compl: 20060216
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 20060525
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Violation Details

Citation: UOG:62-710.600(2)(b) FAC
Violation Short Description: State Statute or Regulation
Violation Type: XXS
Violation Determined Date: 20060216
Scheduled Compliance Date:
Return to Compliance: Unverifiable
Actual Return to Compl: 20060614
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 20060525
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Violation Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Citation: UOG:62-710.510(2) FAC
Violation Short Description: State Statute or Regulation
Violation Type: XXS
Violation Determined Date: 20060216
Scheduled Compliance Date:
Return to Compliance: Unverifiable
Actual Return to Compl: 20060614
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 20060525
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Evaluation Details

Evaluation Start Date: 20080829
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Violation Short Description: Used Oil - Transporter and Transfer Facility
Return to Compliance Date: 20080829
Evaluation Agency: State

Evaluation Start Date: 20060810
Evaluation Type Description: COMPLIANCE SCHEDULE EVALUATION
Violation Short Description:
Return to Compliance Date:
Evaluation Agency: State

Evaluation Start Date: 20060216
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Violation Short Description: Used Oil - Generators
Return to Compliance Date: 20060216
Evaluation Agency: State

Evaluation Start Date: 20060216
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Violation Short Description: State Statute or Regulation
Return to Compliance Date: 20060614
Evaluation Agency: State

Handler Summary

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Importer Activity:		No				
Mixed Waste Generator:		No				
Transporter Activity:		No				
Transfer Facility:		No				
Onsite Burner Exemption:		No				
Furnace Exemption:		No				
Underground Injection Activity:		No				
Commercial TSD:		No				
Used Oil Transporter:		No				
Used Oil Transfer Facility:		No				
Used Oil Processor:		No				
Used Oil Refiner:		No				
Used Oil Burner:		No				
Used Oil Market Burner:		No				
Used Oil Spec Marketer:		No				

Hazardous Waste Handler Details

Sequence No: 200602
Receive Date: 20060216
Handler Name: SAFETY-KLEEN SYSTEMS INC
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Hazardous Waste Handler Details

Sequence No: 201005
Receive Date: 20100503
Handler Name: SAFETY-KLEEN SYSTEMS INC
Source Type: Notification
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner	Street No:
Type: Private	Street 1: 2930 63RD AVE E
Name: 63RD AVENUE ASSOCIATES	Street 2:
Date Became Current: 20050701	City: BRADENTON
Date Ended Current: 20050702	State: FL
Phone:	Country: US
Source Type: Implementer	Zip Code: 34203-5307

Owner/Operator Ind: Current Operator	Street No:
Type: Private	Street 1: 2930 63RD AVE E
Name: SAFETY-KLEEN SYSTEMS INC	Street 2:
Date Became Current: 20090123	City: BRADENTON
Date Ended Current:	State: FL
Phone: 561-523-4719	Country: US

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Source Type:	Notification				Zip Code: 34203-5307	
Owner/Operator Ind:	Current Operator				Street No:	
Type:	Private				Street 1: 2930 63RD AVE E	
Name:	SAFETY-KLEEN SYSTEMS INC				Street 2:	
Date Became Current:	20090123				City: BRADENTON	
Date Ended Current:					State: FL	
Phone:	561-523-4719				Country: US	
Source Type:	Implementer				Zip Code: 34203-5307	
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1: 6112 33RD ST E	
Name:	PHIL BURGHARDT				Street 2:	
Date Became Current:	19870115				City: BRADENTON	
Date Ended Current:					State: FL	
Phone:	941-756-5044				Country: US	
Source Type:	Implementer				Zip Code: 34203-5405	
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1: 2930 63RD AVE E	
Name:	63RD AVENUE ASSOCIATES				Street 2:	
Date Became Current:	20050701				City: BRADENTON	
Date Ended Current:	20050702				State: FL	
Phone:					Country: US	
Source Type:	Notification				Zip Code: 34203-5307	
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1: 6112 33RD ST E	
Name:	PHIL BURGHARDT				Street 2:	
Date Became Current:	19870115				City: BRADENTON	
Date Ended Current:					State: FL	
Phone:	941-756-5044				Country: US	
Source Type:	Notification				Zip Code: 34203-5405	

Historical Handler Details

Receive Dt: 20060216
Generator Code Description: Not a Generator, Verified
Handler Name: SAFETY-KLEEN SYSTEMS INC

15	3 of 5	W	0.00 / 0.62	19.00 / 6	2930 63rd Avenue East BRADENTON FL	SPILLS
Incident No:	37354				Incident Date: 05/29/2007	
Incident Type:	Inland				County: Manatee	

Spill Details

Incident Status:
Incident Party Type:
Incident Party Name:

Criminal Indicator:
Hurricane Indicator:
Description: AST leak/overfill

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Pollutant Name: Waste oil **On Scene Response:**
Pollutant Category:
Pollutant Actual Volume: 150
Pollutant Unit Measure: gallon

Spill Details

Incident Status:		Criminal Indicator:	
Incident Party Type:		Hurricane Indicator:	
Incident Party Name:		Description:	Spill
Pollutant Name: Waste oil		On Scene Response:	
Pollutant Category:			
Pollutant Actual Volume: 150			
Pollutant Unit Measure: gallon			

15	4 of 5	W	0.00 / 0.62	19.00 / 6	SAFETY-KLEEN SYSTEMS INC 2930 63RD AVE E BRADENTON FL 342035307	FINDS/FRS
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Registry ID: 110024251003
FIPS Code: 12081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 09-JAN-06
Update Date: 05-JUL-16
Interest Types: ICIS-NPDES NON-MAJOR, STATE MASTER, STORM WATER INDUSTRIAL, UNSPECIFIED UNIVERSE
SIC Codes: 5093
SIC Code Descriptions: SCRAP AND WASTE MATERIALS
NAICS Codes: 423930, 425110, 425120
NAICS Code Descriptions: BUSINESS TO BUSINESS ELECTRONIC MARKETS., RECYCLABLE MATERIAL MERCHANT WHOLESALEERS., WHOLESALE TRADE AGENTS AND BROKERS.
Conveyor: FRS-GEocode
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008052032
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.4291
Longitude: -82.52653
Reference Point: CENTER OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 30
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110024251003
Program Acronyms:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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FDM:3770, NPDES:FLRNEE387, RCRAINFO:FLR000120618

15	5 of 5	W	0.00 / 0.62	19.00 / 6	SAFETY-KLEEN SYSTEMS INC 2930 63 AVE EAST BRADENTON FL 34203	STCS
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Facility ID:	9810420	City (Map):	BRADENTON
Status (Map):	REVIEWED	County (Map):	41
Contam (Map):		Zip4 (Map):	
Fac Type (Map):	D	Zip5 (Map):	34203
Fac Stat (Map):	CLOSED	County:	41 - Manatee
Address (Map):	2930 63 AVE EAST	Type :	D - Bulk Storage Facility
Name (Map):	SAFETY-KLEEN SYSTEMS INC	Status:	Closed
Fac Name(OpenData):	SAFETY-KLEEN SYSTEMS INC		
Status (Open Data):	REVIEWED		
Facility Status (Open Data):	CLOSED		
Facility Type Code (Open Data):	D		
Facility Type (Open Data):	Bulk Storage Facility		
Fac Cleanup Stat Cd(OpenData):			
Fac Cleanup Status(OpenData):			
Cleanup Status Effective Date:	1970/01/01 00:00:00+00		
Address (Open Data):	2930 63 AVE EAST		
City (Open Data):	BRADENTON		
Zip5 (Open Data):	34203		
County (Open Data):	MANATEE		
CC County ID (Open Data):	41		

FDEP Storage Tank Monitoring Open Data Details

Object ID:	63081	Ver Prog:	TANKS-PETROLEUM CONTAMINATION
Regulated:	NO	Ver Date:	2010/12/08 08:28:57+00
OOIC:	FACILITY	Elevation:	
Rel Feat:	EXACT	EI Datum:	
ALB East:		EI Resolut:	
ALB North:		EI Units:	
Datum:	NAD83	Loc ID:	63806
Col Meth:	DPHO	Lat DD:	27
Col Name:	WILLIAMS_CA	Lat MM:	25
Col Date:	2010/10/25 00:00:00+00	Long DD:	82
Col Prog:	TANKS-PETROLEUM CONTAMINATION	Long MM:	31
Map Src:		Lat SS:	
Map Scale:		Long SS:	
Coord Acc:	4	X:	-82.5267162383522
Ver Meth:	DPHO	Y:	27.4275877664013
Ver Name:	WILLIAMS_CA		
Col Aff:	TKHQ		
Ver Aff:			
Direct:			

Documents: <https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9810420/gis-facility!search>

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	63806	Coord Acc:	4
Object ID:	63806	Ver Meth:	DPHO
OOIC:	FACILITY	Ver Name:	WILLIAMS_CA
Site Type:	Bulk Storage Facility	Ver Prog:	TANKS-PETROLEUM CONTAMINATION
Contam Ind:		Ver Date:	12/8/2010
Next action:		Elevation:	
Fin Respon:		EI Datum:	
Rel Feat:	EXACT	EI Resolut:	
Alb East:		EI Units:	
Alb North:		Office:	SWD
Datum:	NAD83	Phone:	5615234719
Col Meth:	DPHO	Operator:	JEFF CURTIS
Col Name:	WILLIAMS_CA	Lat DD:	27
Col Date:	10/25/2010	Lat MM:	25
Col Prog:	TANKS-PETROLEUM CONTAMINATION	Long DD:	82
Map Src:		Long MM:	31
Map Scale:			
Col Aff:	TKHQ		
Ver Aff:			
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9810420/gis-facility!search		

FDEP - Storage Tank Contamination Monitoring (STCM) Details

Contact:	Jeff Curtis	Latitude:	27:25:39.2978
Phone:	561-523-4719	Longitude:	82:31:36.1662
District:	SWD	LL Method:	DPHO
County 1:	41 - Manatee	Account Owner:	Safety-Kleen Systems Inc
Name:	Safety-Kleen Systems Inc 2930 63 Ave East Bradenton, FL 34203		

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	4	Installed:	09/01/2005
Placement:	ABOVE	Size:	5000
Status:	NonReg Construction	Content:	Waste Oil
Construction:	C - Steel K - Ast Containment P - Level Gauges/Alarms A - Abv, No Soil Contact B - Steel/Galvanized Metal		
Piping:	2 - Visual Inspect Pipe Sumps L - Automatic Tank Gauging - Usts Q - Visual Inspection Of Asts		
Monitoring:			

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	3	Installed:	09/01/2005
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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Placement:	ABOVE			Size:	5000	
Status:	NonReg Construction			Content:	Waste Oil	
Construction:		C - Steel K - Ast Containment				
Piping:		P - Level Gauges/Alarms A - Abv, No Soil Contact				
Monitoring:		B - Steel/Galvanized Metal 2 - Visual Inspect Pipe Sumps L - Automatic Tank Gauging - Usts Q - Visual Inspection Of Asts				

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	2			Installed:	09/01/2005	
Placement:	ABOVE			Size:	5000	
Status:	NonReg Construction			Content:	Waste Oil	
Construction:		C - Steel K - Ast Containment				
Piping:		P - Level Gauges/Alarms A - Abv, No Soil Contact				
Monitoring:		B - Steel/Galvanized Metal 2 - Visual Inspect Pipe Sumps L - Automatic Tank Gauging - Usts Q - Visual Inspection Of Asts				

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	5			Installed:	09/01/2005	
Placement:	ABOVE			Size:	5000	
Status:	NonReg Construction			Content:	Waste Oil	
Construction:		C - Steel K - Ast Containment P - Level Gauges/Alarms				
Piping:		Y - Polyethylene A - Abv, No Soil Contact B - Steel/Galvanized Metal				
Monitoring:		N - Approved Synthetic Material 2 - Visual Inspect Pipe Sumps L - Automatic Tank Gauging - Usts Q - Visual Inspection Of Asts				

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	1			Installed:	09/01/2005	
Placement:	ABOVE			Size:	5000	
Status:	NonReg Construction			Content:	Waste Oil	
Construction:		C - Steel K - Ast Containment				
Piping:		P - Level Gauges/Alarms A - Abv, No Soil Contact				
Monitoring:		B - Steel/Galvanized Metal 2 - Visual Inspect Pipe Sumps L - Automatic Tank Gauging - Usts Q - Visual Inspection Of Asts				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
16	1 of 4	W	0.00 / 0.65	19.00 / 6	SUPERIOR POOL PRODUCTS, LLC 2910 63RD AVE E BRADENTON FL 34203	FINDS/FRS

Registry ID: 110038275121
FIPS Code: 12081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 23-APR-09
Update Date:
Interest Types: PESTICIDE PRODUCER
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008052032
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.4291
Longitude: -82.52653
Reference Point: CENTER OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 30
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110038275121
Program Acronyms:
 SSTS:073890FL008

16	2 of 4	W	0.00 / 0.65	19.00 / 6	SUPERIOR POOL PRODUCTS LLC #452A 2910 63RD AVE E - BRADENTON FL 34203	SSTS
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EPA Region: 4
Establishment No: 73890-FL-8
Est Create Update Date:
Est Site County: Manatee
Est Site Country: USA
Est Mailing Address: 109 NORTHPARK BLVD 4TH FLOOR
Est Mailing Address Line 2: -

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
<i>Est Mail City:</i>		COVINGTON				
<i>Est Mail State:</i>		LA				
<i>Est Mail Zip:</i>		70433				
<i>Est Mail Country:</i>		USA				
<i>Company Name:</i>		-				
<i>Co Site Address Line 1:</i>		-				
<i>Co Site Address Line 2:</i>		-				
<i>Co Site City:</i>		-				
<i>Co Site State:</i>		-				
<i>Co Site Zip:</i>		-				
<i>Co Site Country:</i>		-				
<i>Co Mailing Address Line 1:</i>		-				
<i>Co Mail Address Line 2:</i>		-				
<i>Co Mail City:</i>		-				
<i>Co Mail State:</i>		-				
<i>Co Mail Zip:</i>		-				
<i>Co Mail Country:</i>		-				

16	3 of 4	W	0.00 / 0.65	19.00 / 6	WOODRUFF & SONS INC 2910 63RD AVE E BRADENTON FL 34243	WELL SURVEILLANC
<i>Facility ID:</i>	8624257			<i>County:</i>	MANATEE	
<i>Project ID:</i>	SUPER			<i>Longitude:</i>	-82.52645	
<i>Req No:</i>				<i>Latitude:</i>	27.428675	
<i>Loc ID:</i>	242919			<i>GPS Date:</i>	11/13/2009	
<i>GPS ID:</i>	242919			<i>Datum:</i>		
<i>Type:</i>	PETROLEUM			<i>Software:</i>		
<i>Insp CHD:</i>	DCEH			<i>Streetside:</i>		
<i>HAE:</i>				<i>Agency:</i>	DOH	
<i>Loc Method:</i>	DPHO - Digital Aerial Photos					
<i>Insp F Name:</i>	LARRY					
<i>Insp L Name:</i>	GORDON					
<i>Comment:</i>	Active Facility					

16	4 of 4	W	0.00 / 0.65	19.00 / 6	S C P DISTRIBUTORS LLC - SUPERIOR POOL PRODUCTS BRADENTON # 452A 2910 63 AVENUE EAST BRADENTON FL 34203	TIER 2
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Facility Name: S C P DISTRIBUTORS LLC - SUPERIOR POOL PRODUCTS BRADENTON # 452A

2018 Data

<i>Facility ID:</i>	6081812	<i>Filing Type:</i>	312
<i>Filing Year:</i>	2017(Tier2)	<i>First Submit Date:</i>	2018-02-07(Tier2)
<i>CAS No:</i>	7647145	<i>NAICS Code:</i>	423910
<i>Solid:</i>	True	<i>Dun Bradstreet:</i>	066142225
<i>Liquid:</i>	False	<i>Max Daily Qty:</i>	55000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Gas:	False				Avg Daily Qty:	25200
Pure:	True				EHS:	
Mixture:	False				Below Thresholds:	
Explosive:	False				Trade Secret:	
Chemical Name:	SODIUM CHLORIDE [SALT]					
Hazard Not Otherwise Classifie:	False					
Contact Name:	SCP DISTRIBUTORS LLC					
Contact Type:	Owner / Operator					
Contact Email:	annette.niemiec@poolcorp.com					
Contact Work Phone:	(985) 892-5521					
Contact 24 Hour Phone:	(985) 264-9868					
Contact Mobile Phone:						

2018 Data

Facility ID:	6081812	Filing Type:	312
Filing Year:	2017(Tier2)	First Submit Date:	2018-02-07(Tier2)
CAS No:	7681529	NAICS Code:	423910
Solid:	False	Dun Bradstreet:	066142225
Liquid:	True	Max Daily Qty:	76000
Gas:	False	Avg Daily Qty:	50000
Pure:	False	EHS:	
Mixture:	True	Below Thresholds:	
Explosive:	False	Trade Secret:	
Chemical Name:	Sodium hypochlorite		
Hazard Not Otherwise Classifie:	False		
Contact Name:	SCP DISTRIBUTORS LLC		
Contact Type:	Owner / Operator		
Contact Email:	annette.niemiec@poolcorp.com		
Contact Work Phone:	(985) 892-5521		
Contact 24 Hour Phone:	(985) 264-9868		
Contact Mobile Phone:			

2018 Data

Facility ID:	6081812	Filing Type:	312
Filing Year:	2017(Tier2)	First Submit Date:	2018-02-07(Tier2)
CAS No:	68855549	NAICS Code:	423910
Solid:	True	Dun Bradstreet:	066142225
Liquid:	False	Max Daily Qty:	50000
Gas:	False	Avg Daily Qty:	20000
Pure:	True	EHS:	
Mixture:	False	Below Thresholds:	
Explosive:	False	Trade Secret:	
Chemical Name:	DIATOMACEOUS EARTH		
Hazard Not Otherwise Classifie:	False		
Contact Name:	SCP DISTRIBUTORS LLC		
Contact Type:	Owner / Operator		
Contact Email:	annette.niemiec@poolcorp.com		
Contact Work Phone:	(985) 892-5521		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Contact 24 Hour Phone: (985) 264-9868
 Contact Mobile Phone:

2018 Data

Facility ID:	6081812	Filing Type:	312
Filing Year:	2017(Tier2)	First Submit Date:	2018-02-07(Tier2)
CAS No:	7647010	NAICS Code:	423910
Solid:	False	Dun Bradstreet:	066142225
Liquid:	True	Max Daily Qty:	56020
Gas:	False	Avg Daily Qty:	28800
Pure:	False	EHS:	
Mixture:	True	Below Thresholds:	
Explosive:	False	Trade Secret:	
Chemical Name:	HYDROCHLORIC ACID		
Hazard Not Otherwise Classifie:	False		
Contact Name:	SCP DISTRIBUTORS LLC		
Contact Type:	Owner / Operator		
Contact Email:	annette.niemiec@poolcorp.com		
Contact Work Phone:	(985) 892-5521		
Contact 24 Hour Phone:	(985) 264-9868		
Contact Mobile Phone:			

2018 Data

Facility ID:	6081812	Filing Type:	312
Filing Year:	2017(Tier2)	First Submit Date:	2018-02-07(Tier2)
CAS No:	144558	NAICS Code:	423910
Solid:	True	Dun Bradstreet:	066142225
Liquid:	False	Max Daily Qty:	50000
Gas:	False	Avg Daily Qty:	25000
Pure:	True	EHS:	
Mixture:	False	Below Thresholds:	
Explosive:	False	Trade Secret:	
Chemical Name:	SODIUM BICARBONATE		
Hazard Not Otherwise Classifie:	False		
Contact Name:	SCP DISTRIBUTORS LLC		
Contact Type:	Owner / Operator		
Contact Email:	annette.niemiec@poolcorp.com		
Contact Work Phone:	(985) 892-5521		
Contact 24 Hour Phone:	(985) 264-9868		
Contact Mobile Phone:			

2018 Data

Facility ID:	6081812	Filing Type:	312
Filing Year:	2017(Tier2)	First Submit Date:	2018-02-07(Tier2)
CAS No:	108805	NAICS Code:	423910
Solid:	True	Dun Bradstreet:	066142225
Liquid:	False	Max Daily Qty:	60000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Gas:	False				Avg Daily Qty:	25000
Pure:	True				EHS:	
Mixture:	False				Below Thresholds:	
Explosive:	False				Trade Secret:	
Chemical Name:	CYANURIC ACID					
Hazard Not Otherwise Classifie:	False					
Contact Name:	SCP DISTRIBUTORS LLC					
Contact Type:	Owner / Operator					
Contact Email:	annette.niemiec@poolcorp.com					
Contact Work Phone:	(985) 892-5521					
Contact 24 Hour Phone:	(985) 264-9868					
Contact Mobile Phone:						

2018 Data

Facility ID:	6081812				Filing Type:	312
Filing Year:	2017(Tier2)				First Submit Date:	2018-02-07(Tier2)
CAS No:	65997151				NAICS Code:	423910
Solid:	True				Dun Bradstreet:	066142225
Liquid:	False				Max Daily Qty:	32000
Gas:	False				Avg Daily Qty:	20800
Pure:	False				EHS:	
Mixture:	True				Below Thresholds:	
Explosive:	False				Trade Secret:	
Chemical Name:	Portland Cement					
Hazard Not Otherwise Classifie:	False					
Contact Name:	SCP DISTRIBUTORS LLC					
Contact Type:	Owner / Operator					
Contact Email:	annette.niemiec@poolcorp.com					
Contact Work Phone:	(985) 892-5521					
Contact 24 Hour Phone:	(985) 264-9868					
Contact Mobile Phone:						

2019 Data

Facility ID:	6372107				Filing Type:	312
Filing Year:	2018(Tier2)				First Submit Date:	2019-01-22(Tier2)
CAS No:	108805				NAICS Code:	423910
Solid:	True				Dun Bradstreet:	066142225
Liquid:	False				Max Daily Qty:	60000
Gas:	False				Avg Daily Qty:	25000
Pure:	True				EHS:	
Mixture:	False				Below Thresholds:	
Explosive:	False				Trade Secret:	
Chemical Name:	CYANURIC ACID					
Hazard Not Otherwise Classifie:	False					
Contact Name:	SCP DISTRIBUTORS LLC					
Contact Type:	Owner / Operator					
Contact Email:	annette.niemiec@poolcorp.com					
Contact Work Phone:	(985) 892-5521					

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Contact 24 Hour Phone: (985) 264-9868
 Contact Mobile Phone:

2019 Data

Facility ID:	6372107	Filing Type:	312
Filing Year:	2018(Tier2)	First Submit Date:	2019-01-22(Tier2)
CAS No:	68855549	NAICS Code:	423910
Solid:	True	Dun Bradstreet:	066142225
Liquid:	False	Max Daily Qty:	50000
Gas:	False	Avg Daily Qty:	20000
Pure:	True	EHS:	
Mixture:	False	Below Thresholds:	
Explosive:	False	Trade Secret:	
Chemical Name:	DIATOMACEOUS EARTH		
Hazard Not Otherwise Classifie:	False		
Contact Name:	SCP DISTRIBUTORS LLC		
Contact Type:	Owner / Operator		
Contact Email:	annette.niemiec@poolcorp.com		
Contact Work Phone:	(985) 892-5521		
Contact 24 Hour Phone:	(985) 264-9868		
Contact Mobile Phone:			

2019 Data

Facility ID:	6372107	Filing Type:	312
Filing Year:	2018(Tier2)	First Submit Date:	2019-01-22(Tier2)
CAS No:	7647145	NAICS Code:	423910
Solid:	True	Dun Bradstreet:	066142225
Liquid:	False	Max Daily Qty:	55000
Gas:	False	Avg Daily Qty:	25200
Pure:	True	EHS:	
Mixture:	False	Below Thresholds:	
Explosive:	False	Trade Secret:	
Chemical Name:	SODIUM CHLORIDE [SALT]		
Hazard Not Otherwise Classifie:	False		
Contact Name:	SCP DISTRIBUTORS LLC		
Contact Type:	Owner / Operator		
Contact Email:	annette.niemiec@poolcorp.com		
Contact Work Phone:	(985) 892-5521		
Contact 24 Hour Phone:	(985) 264-9868		
Contact Mobile Phone:			

2019 Data

Facility ID:	6372107	Filing Type:	312
Filing Year:	2018(Tier2)	First Submit Date:	2019-01-22(Tier2)
CAS No:	7681529	NAICS Code:	423910
Solid:	False	Dun Bradstreet:	066142225
Liquid:	True	Max Daily Qty:	76000

Gas:	False				Avg Daily Qty:	50000
Pure:	False				EHS:	
Mixture:	True				Below Thresholds:	
Explosive:	False				Trade Secret:	
Chemical Name:	Sodium hypochlorite					
Hazard Not Otherwise Classifie:	False					
Contact Name:	SCP DISTRIBUTORS LLC					
Contact Type:	Owner / Operator					
Contact Email:	annette.niemiec@poolcorp.com					
Contact Work Phone:	(985) 892-5521					
Contact 24 Hour Phone:	(985) 264-9868					
Contact Mobile Phone:						

2019 Data

Facility ID:	6372107				Filing Type:	312
Filing Year:	2018(Tier2)				First Submit Date:	2019-01-22(Tier2)
CAS No:	7647010				NAICS Code:	423910
Solid:	False				Dun Bradstreet:	066142225
Liquid:	True				Max Daily Qty:	56020
Gas:	False				Avg Daily Qty:	28800
Pure:	False				EHS:	
Mixture:	True				Below Thresholds:	
Explosive:	False				Trade Secret:	
Chemical Name:	HYDROCHLORIC ACID					
Hazard Not Otherwise Classifie:	False					
Contact Name:	SCP DISTRIBUTORS LLC					
Contact Type:	Owner / Operator					
Contact Email:	annette.niemiec@poolcorp.com					
Contact Work Phone:	(985) 892-5521					
Contact 24 Hour Phone:	(985) 264-9868					
Contact Mobile Phone:						

2019 Data

Facility ID:	6372107				Filing Type:	312
Filing Year:	2018(Tier2)				First Submit Date:	2019-01-22(Tier2)
CAS No:	65997151				NAICS Code:	423910
Solid:	True				Dun Bradstreet:	066142225
Liquid:	False				Max Daily Qty:	32000
Gas:	False				Avg Daily Qty:	20800
Pure:	False				EHS:	
Mixture:	True				Below Thresholds:	
Explosive:	False				Trade Secret:	
Chemical Name:	Portland Cement					
Hazard Not Otherwise Classifie:	False					
Contact Name:	SCP DISTRIBUTORS LLC					
Contact Type:	Owner / Operator					
Contact Email:	annette.niemiec@poolcorp.com					
Contact Work Phone:	(985) 892-5521					

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Contact 24 Hour Phone: (985) 264-9868
 Contact Mobile Phone:

2020 Data (Filed)

Facility ID:	6639449	Dun Bradstreet Code:	066142225
Filing Year:	2019(Tier2)	Max Daily Wty:	50,000
CAS Number:	68855549	Avg Daily Qty:	20,000
Filing Type:	312	EHS:	
First Submit Date:	2020-01-24(Tier2)	Below Thresholds:	
NAICS Code:	423910	Trade Secret:	
Explosive:	False		
Mixture:	False		
Pure:	True		
Liquid:	False		
Solid:	True		
Gas:	False		
Chemical Name:	DIATOMACEOUS EARTH		
Hazard Not Otherwise Classifi:	False		
Contact Name:	SCP DISTRIBUTORS LLC		
Contact Type:	Owner / Operator		
Contact Email:	annette.niemiec@poolcorp.com		
Contact Work Phone:	(985) 892-5521		
Contact 24 Hour Phone:	(985) 264-9868		
Contact Mobile Phone:			

2020 Data (Filed)

Facility ID:	6639449	Dun Bradstreet Code:	066142225
Filing Year:	2019(Tier2)	Max Daily Wty:	20,000
CAS Number:	65997151	Avg Daily Qty:	18,000
Filing Type:	312	EHS:	
First Submit Date:	2020-01-24(Tier2)	Below Thresholds:	
NAICS Code:	423910	Trade Secret:	
Explosive:	False		
Mixture:	True		
Pure:	False		
Liquid:	False		
Solid:	True		
Gas:	False		
Chemical Name:	Portland Cement		
Hazard Not Otherwise Classifi:	False		
Contact Name:	SCP DISTRIBUTORS LLC		
Contact Type:	Owner / Operator		
Contact Email:	annette.niemiec@poolcorp.com		
Contact Work Phone:	(985) 892-5521		
Contact 24 Hour Phone:	(985) 264-9868		
Contact Mobile Phone:			

2020 Data (Filed)

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Facility ID:	6639449				Dun Bradstreet Code:	066142225
Filing Year:	2019(Tier2)				Max Daily Wty:	10,200
CAS Number:	144558				Avg Daily Qty:	1,130
Filing Type:	312				EHS:	
First Submit Date:	2020-01-24(Tier2)				Below Thresholds:	
NAICS Code:	423910				Trade Secret:	
Explosive:		False				
Mixture:		False				
Pure:		True				
Liquid:		False				
Solid:		True				
Gas:		False				
Chemical Name:		Sodium bicarbonate				
Hazard Not Otherwise Classifi:		False				
Contact Name:		SCP DISTRIBUTORS LLC				
Contact Type:		Owner / Operator				
Contact Email:		annette.niemiec@poolcorp.com				
Contact Work Phone:		(985) 892-5521				
Contact 24 Hour Phone:		(985) 264-9868				
Contact Mobile Phone:						

2020 Data (Filed)

Facility ID:	6639449				Dun Bradstreet Code:	066142225
Filing Year:	2019(Tier2)				Max Daily Wty:	56,000
CAS Number:	7647145				Avg Daily Qty:	44,500
Filing Type:	312				EHS:	
First Submit Date:	2020-01-24(Tier2)				Below Thresholds:	
NAICS Code:	423910				Trade Secret:	
Explosive:		False				
Mixture:		False				
Pure:		True				
Liquid:		False				
Solid:		True				
Gas:		False				
Chemical Name:		SODIUM CHLORIDE [SALT]				
Hazard Not Otherwise Classifi:		False				
Contact Name:		SCP DISTRIBUTORS LLC				
Contact Type:		Owner / Operator				
Contact Email:		annette.niemiec@poolcorp.com				
Contact Work Phone:		(985) 892-5521				
Contact 24 Hour Phone:		(985) 264-9868				
Contact Mobile Phone:						

2020 Data (Filed)

Facility ID:	6639449				Dun Bradstreet Code:	066142225
Filing Year:	2019(Tier2)				Max Daily Wty:	10,000
CAS Number:	108805				Avg Daily Qty:	8,000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Filing Type:	312				EHS:	
First Submit Date:	2020-01-24(Tier2)				Below Thresholds:	
NAICS Code:	423910				Trade Secret:	
Explosive:		False				
Mixture:		False				
Pure:		True				
Liquid:		False				
Solid:		True				
Gas:		False				
Chemical Name:		CYANURIC ACID				
Hazard Not Otherwise Classifi:		False				
Contact Name:		SCP DISTRIBUTORS LLC				
Contact Type:		Owner / Operator				
Contact Email:		annette.niemiec@poolcorp.com				
Contact Work Phone:		(985) 892-5521				
Contact 24 Hour Phone:		(985) 264-9868				
Contact Mobile Phone:						

2020 Data (Filed)

Facility ID:	6639449				Dun Bradstreet Code:	066142225
Filing Year:	2019(Tier2)				Max Daily Wty:	30,000
CAS Number:	7647010				Avg Daily Qty:	20,000
Filing Type:	312				EHS:	
First Submit Date:	2020-01-24(Tier2)				Below Thresholds:	
NAICS Code:	423910				Trade Secret:	
Explosive:		False				
Mixture:		True				
Pure:		False				
Liquid:		True				
Solid:		False				
Gas:		False				
Chemical Name:		HYDROCHLORIC ACID				
Hazard Not Otherwise Classifi:		False				
Contact Name:		SCP DISTRIBUTORS LLC				
Contact Type:		Owner / Operator				
Contact Email:		annette.niemiec@poolcorp.com				
Contact Work Phone:		(985) 892-5521				
Contact 24 Hour Phone:		(985) 264-9868				
Contact Mobile Phone:						

2020 Data (Filed)

Facility ID:	6639449				Dun Bradstreet Code:	066142225
Filing Year:	2019(Tier2)				Max Daily Wty:	10,000
CAS Number:	109999				Avg Daily Qty:	5,000
Filing Type:	312				EHS:	
First Submit Date:	2020-01-24(Tier2)				Below Thresholds:	
NAICS Code:	423910				Trade Secret:	
Explosive:		False				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Mixture:		True				
Pure:		False				
Liquid:		True				
Solid:		False				
Gas:		False				
Chemical Name:		PVC Cement				
Hazard Not Otherwise Classifi:		False				
Contact Name:		SCP DISTRIBUTORS LLC				
Contact Type:		Owner / Operator				
Contact Email:		annette.niemiec@poolcorp.com				
Contact Work Phone:		(985) 892-5521				
Contact 24 Hour Phone:		(985) 264-9868				
Contact Mobile Phone:						

2020 Data (Filed)

Facility ID:	6639449	Dun Bradstreet Code:	066142225
Filing Year:	2019(Tier2)	Max Daily Wty:	76,000
CAS Number:	7681529	Avg Daily Qty:	60,000
Filing Type:	312	EHS:	
First Submit Date:	2020-01-24(Tier2)	Below Thresholds:	
NAICS Code:	423910	Trade Secret:	
Explosive:	False		
Mixture:	True		
Pure:	False		
Liquid:	True		
Solid:	False		
Gas:	False		
Chemical Name:	Sodium hypochlorite		
Hazard Not Otherwise Classifi:	False		
Contact Name:	SCP DISTRIBUTORS LLC		
Contact Type:	Owner / Operator		
Contact Email:	annette.niemiec@poolcorp.com		
Contact Work Phone:	(985) 892-5521		
Contact 24 Hour Phone:	(985) 264-9868		
Contact Mobile Phone:			

1 1 of 1 WSW 0.00 / 12.91 / 3.14 0 RENOVO 3300 63RD AVE E BRADENTON FL 34203 FINDS/FRS

Registry ID:	110069997362
FIPS Code:	12081
HUC Code:	03100202
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	07-DEC-16
Update Date:	
Interest Types:	ICIS-NPDES NON-MAJOR, STORM WATER CONSTRUCTION
SIC Codes:	
SIC Code Descriptions:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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NAICS Codes:

NAICS Code Descriptions:

Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008052025
EPA Region Code: 04
County Name: MANATEE COUNTY
US/Mexico Border Ind:
Latitude: 27.42906
Longitude: -82.52186
Reference Point: ENTRANCE POINT OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 50
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110069997362
Program Acronyms:
 NPDES:FLR10QI37

2	1 of 1	SSW	0.03 / 183.33	12.95 / 0	MEYER & GABBERT STORAGE FACILITY 6325 33RD ST E SARASOTA FL 34243	FINDS/FRS
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Registry ID: 110037326747
FIPS Code: 12081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 04-DEC-08
Update Date: 03-JUN-15
Interest Types: ICIS-NPDES NON-MAJOR, STATE MASTER, STORM WATER CONSTRUCTION
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008052041
EPA Region Code: 04
County Name: MANATEE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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US/Mexico Border Ind:

Latitude: 27.428619
Longitude: -82.521861
Reference Point: ENTRANCE POINT OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 50
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110037326747
Program Acronyms:
 FDM:85088, NPDES:FLR10GW09

3	1 of 1	E	0.00 / 3.73	11.82 / -1	RENOVO RESOURCE SOLUTIONS INC 3324 63RD AVENUE EAST BRADENTON FL 34203	SWF/LF
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Facility ID:	105807	LO Phone No:	
Resp Authority:		Fac Type (Geodata):	Solid Waste
RA Address:		Fac Status (Geodata):	Active
RA City:		Status Dt (Geodata):	2018/10/29 00:00:00+00
RA State:		Ownership (Geodata):	County
RA Zip:		City (Geodata):	Bradenton
RA Phone No.:		Zip4 (Geodata):	
RA Email:		Zip5 (Geodata):	34203
Site Supervisor:		District (Geodata):	SWD
SS Address:		Office (Geodata):	
SS City:		County ID (Geodata):	41
SS State:		County (Geodata):	Manatee
SS Zip:		County:	MANATEE
SS Phone No.:		District:	SWD
SS Email:		Section:	
Land Owner:		Township:	
LO Address:		Range:	
LO City:		Latitude:	27:25:44.6
LO State:		Longitude:	82:31:18.87
LO Zip:			
Facility Name (Geodata):	RENOVO RESOURCE SOLUTIONS INC		
Address (Geodata):	3324 63RD AVENUE EAST		
Documents (Geodata):	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/105807/gis-facility!search		
Reports (Geodata):	https://fldeloc.dep.state.fl.us/WWW_WACS/Reports/SW_Facility_Inventory_res2.asp?wacsid=105807		
Information Portal Facility URL:	http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=105807		
Oculus Docs Inventory URL:	https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=105807&CAT=8		
Data Source:	Solid Waste Facility Inventory Report; Florida DEP Geospatial Open Data		

Class details

Class: RECOVERED MATERIALS PROCESSING FACILITY (RMPF)
Class Status: ACTIVE (A)

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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SWF Inventory Report/ Geo Data class details

Object of Interest:	Waste Processing Area	Lat DD:	27
Coordinate Method:	Digital Aerial Photography	Lat MM:	25
Accuracy Level:		Lat SS:	
Accuracy:		Long DD:	82
QA Status:	Not Reviewed	Long MM:	31
Datum ID:	NAD83	Long SS:	
Proximity ID:			
X:	-82.5219117370121		
Y:	27.4290606002111		

Solid Waste Facility Inventory Geospatial Open Data

Object of Interest:	Facility	Lat DD:	27
Class:		Lat MM:	25
Class Status:		Lat SS:	
Coord Method ID:	Digital Aerial Photography	Long DD:	82
Accuracy Level:	3	Long MM:	31
Accuracy:	1.1 - 10 meters	Long SS:	
QA Status:	Not Reviewed	Datum ID:	NAD83
Proximity ID:	Approximate feature location		
X:	-82.5219117370121		
Y:	27.4290606002111		

4	1 of 1	NNW	0.07 / 377.39	14.04 / 1	ET MACKENZIE OF FLORIDA INC 6212 33RD ST E BRADENTON FL 34203	SWF/LF
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Facility ID:	101954	LO Phone No:	
Resp Authority:		Fac Type (Geodata):	
RA Address:		Fac Status (Geodata):	
RA City:		Status Dt (Geodata):	
RA State:		Ownership (Geodata):	
RA Zip:		City (Geodata):	
RA Phone No.:		Zip4 (Geodata):	
RA Email:		Zip5 (Geodata):	
Site Supervisor:		District (Geodata):	
SS Address:		Office (Geodata):	
SS City:		County ID (Geodata):	
SS State:		County (Geodata):	
SS Zip:		County:	MANATEE
SS Phone No.:		District:	SWD
SS Email:		Section:	
Land Owner:		Township:	
LO Address:		Range:	
LO City:		Latitude:	::
LO State:		Longitude:	::
LO Zip:			
Facility Name (Geodata):			
Address (Geodata):			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Documents (Geodata):

Reports (Geodata):

Information Portal Facility URL: <http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=101954>

Oculus Docs Inventory URL: <https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=101954&CAT=8>

Data Source: Solid Waste Facility Inventory Report

Class details

Class: WASTE TIRE COLLECTOR

Class Status: REGISTERED (R)

5	1 of 2	E	0.00 / 6.99	12.24 / 0	Manatee County Clk Cir C - 40A (RTU #429) Pump Station, Evoqua Water Technologies LLC, Operator 3550 63rd Ave E Bradenton FL 34203	TIER 2
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Facility Name: Manatee County Clk Cir C - 40A (RTU #429) Pump Station, Evoqua Water Technologies LLC, Operator

2018 Data

Facility ID:	6063994	Filing Type:	311 312
Filing Year:	2017(Tier2)	First Submit Date:	2018-01-17(Tier2)
CAS No:	7720787	NAICS Code:	333318
Solid:	False	Dun Bradstreet:	150795342
Liquid:	True	Max Daily Qty:	10000
Gas:	False	Avg Daily Qty:	5000
Pure:	False	EHS:	
Mixture:	True	Below Thresholds:	
Explosive:	False	Trade Secret:	
Chemical Name:	Odophos		
Hazard Not Otherwise Classifie:	False		
Contact Name:	Ryan Hansen		
Contact Type:	Owner / Operator		
Contact Email:	ryan.hansen@evoqua.com		
Contact Work Phone:	941-359-7942		
Contact 24 Hour Phone:			
Contact Mobile Phone:	813-503-0638		

2019 Data

Facility ID:	6369141	Filing Type:	311 312
Filing Year:	2018(Tier2)	First Submit Date:	2019-01-15(Tier2)
CAS No:	7720787	NAICS Code:	333318
Solid:	False	Dun Bradstreet:	150795342
Liquid:	True	Max Daily Qty:	10000
Gas:	False	Avg Daily Qty:	5000
Pure:	False	EHS:	
Mixture:	True	Below Thresholds:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Explosive: False **Trade Secret:**
Chemical Name: Odophos
Hazard Not Otherwise Classifie: False
Contact Name: Ryan Hansen
Contact Type: Owner / Operator
Contact Email: ryan.hansen@evoqua.com
Contact Work Phone: 941-359-7942
Contact 24 Hour Phone:
Contact Mobile Phone: 813-503-0638

2020 Data (Not Filed)

Facility ID:	6369141	Filing Type:	311 312
Filing Year:	2018(Tier2)	First Submit Date:	2019-01-15(Tier2)
CAS Number:	7720787	NAICS Code:	333318
Solid:	False	Dun Bradstreet Code:	150795342
Liquid:	True	Max Daily Qty:	10,000
Gas:	False	Avg Daily Qty:	5,000
Pure:	False	EHS:	
Mixture:	True	Below Thresholds:	
Explosive:	False	Trade Secret:	
Chemical Name:	Odophos		
Hazard Not Otherwise Classifi:	False		
Contact Name:	Ryan Hansen		
Contact Type:	Owner / Operator		
Contact Email:	ryan.hansen@evoqua.com		
Contact Work Phone:	941-359-7942		
Contact 24 Hour Phone:			
Contact Mobile Phone:	813-503-0638		

5	2 of 2	E	0.00 / 6.99	12.24 / 0	63rd Avenue Booster Pump Station 3550 63rd Avenue East Bradenton FL 34243	TIER 2
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Facility Name: 63rd Avenue Booster Pump Station

2020 Data (Filed)

Facility ID:	6631575	Dun Bradstreet Code:	596000727
Filing Year:	2019(Tier2)	Max Daily Wty:	26,000
CAS Number:	68476346	Avg Daily Qty:	24,999
Filing Type:	312	EHS:	
First Submit Date:	2020-01-10(Tier2)	Below Thresholds:	
NAICS Code:	221310	Trade Secret:	
Explosive:	True		
Mixture:	False		
Pure:	True		
Liquid:	True		
Solid:	False		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Gas:		False				
Chemical Name:		Fuels, diesel, no. 2				
Hazard Not Otherwise Classifi:		False				
Contact Name:		Christian Manatee County BOCC				
Contact Type:		Owner / Operator				
Contact Email:		chris.collins@mymanatee.org				
Contact Work Phone:						
Contact 24 Hour Phone:						
Contact Mobile Phone:		941 920-2083				

6	1 of 1	ESE	0.03 / 161.10	11.09 / -2	40A 3550 63RD AVE E MANATEE FL 34243	STCS
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Facility ID:	9811514	City (Map):	MANATEE
Status (Map):	REVIEWED	County (Map):	41
Contam (Map):		Zip4 (Map):	
Fac Type (Map):	L	Zip5 (Map):	34243
Fac Stat (Map):	OPEN	County:	41 - Manatee
Address (Map):	3550 63RD AVE E	Type :	L - Chemical User
Name (Map):	40A	Status:	Open
Fac Name(OpenData):	40A		
Status (Open Data):	REVIEWED		
Facility Status (Open Data):	OPEN		
Facility Type Code (Open Data):	L		
Facility Type (Open Data):	Chemical user		
Fac Clnup Stat Cd(OpenData):			
Fac Cleanup Status(OpenData):			
Cleanup Status Effective Date:	1970/01/01 00:00:00+00		
Address (Open Data):	3550 63RD AVE E		
City (Open Data):	MANATEE		
Zip5 (Open Data):	34243		
County (Open Data):	MANATEE		
CC County ID (Open Data):	41		

FDEP Storage Tank Monitoring Open Data Details

Object ID:	65415	Ver Prog:	TANKS-PETROLEUM CONTAMINATION
Regulated:	NO	Ver Date:	2012/08/22 08:43:49+00
OOIC:	FACILITY	Elevation:	
Rel Feat:	EXACT	EI Datum:	
ALB East:	546092.85	EI Resolut:	
ALB North:	381246.81	EI Units:	
Datum:	NAD83	Loc ID:	64896
Col Meth:	DPHO	Lat DD:	27
Col Name:	Williams_CA	Lat MM:	25
Col Date:	2012/08/22 08:43:49+00	Long DD:	82
Col Prog:	TANKS-PETROLEUM CONTAMINATION	Long MM:	31
Map Src:	imagery_04_09	Lat SS:	
Map Scale:	5000	Long SS:	
Coord Acc:	4	X:	-82.5193054029212

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Ver Meth:	DPHO			Y:	27.4288610446714	
Ver Name:	Williams_CA					
Col Aff:		DEPARTMENT OF ENVIRONMENTAL PROTECTION				
Ver Aff:		DEPARTMENT OF ENVIRONMENTAL PROTECTION				
Direct:						
Documents:		https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9811514/gis-facility!search				

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	64896	Coord Acc:	4
Object ID:	64896	Ver Meth:	DPHO
OOIC:	FACILITY	Ver Name:	Williams_CA
Site Type:	Chemical user	Ver Prog:	TANKS-PETROLEUM CONTAMINATION
Contam Ind:		Ver Date:	8/22/2012
Next action:		Elevation:	
Fin Respon:		EI Datum:	
Rel Feat:	EXACT	EI Resolut:	
Alb East:	546092.85	EI Units:	
Alb North:	381246.81	Office:	SWD
Datum:	NAD83	Phone:	9419200393
Col Meth:	DPHO	Operator:	NICK WAGNER
Col Name:	Williams_CA	Lat DD:	27
Col Date:	8/22/2012	Lat MM:	25
Col Prog:	TANKS-PETROLEUM CONTAMINATION	Long DD:	82
Map Src:	imagery_04_09	Long MM:	31
Map Scale:	5000		
Col Aff:		DEPARTMENT OF ENVIRONMENTAL PROTECTION	
Ver Aff:		DEPARTMENT OF ENVIRONMENTAL PROTECTION	
Documents:		https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9811514/gis-facility!search	

FDEP - Storage Tank Contamination Monitoring (STCM) Details

Contact:	Nick Wagner	Latitude:	27:25:43.8816
Phone:	941-920-0393	Longitude:	82:31:09.4872
District:	SWD	LL Method:	DPHO
County 1:	41 - Manatee	Account Owner:	Evoqua Water Technologies
Name:	40a 3550 63rd Ave E Manatee, FL 34243		

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	1	Installed:	06/01/2008
Placement:	ABOVE	Size:	5500
Status:	NonReg De-mimimus	Content:	Other Non Regulated
Construction:	Y - Polyethylene		
Piping:	N - Approved Synthetic Material		
Monitoring:	Q - Visual Inspection Of Asts		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
<u>7</u>	1 of 2	ESE	0.03 / 177.49	11.09 / -2	MANATEE CNTY-63RD AVE BOOSTER PUMP STAT 3550 63RD AVE EAST SARASOTA FL 34243	AST

Facility ID: 9807893 **Lat DD:**
Facility Status: OPEN **Lat MM:**
ASTS: 1 **Lat SS:**
USTS: 0 **Long DD:**
Tanks: 1 **Long MM:**
Facility Type: I **Long SS:**
Contact: BENJAMIN D WILLIAMS JR **Lat/Long Method:**
Facility Phone: 9417928811 **Bad Addr Indicator:**
Owner ID: 13457 **County:** MANATEE
Owner Phone: 9417087513 **Dep Co:** D
Owner: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address1: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City: BRADENTON
Owner State: FL
Owner Zip 5: 34208
Owner Zip 4:
Type Desc: County Government
Oculus Docs Inventory URL: <https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=9807893&CAT=11>
Information Portal Facility URL: <http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=9807893>
Information Portal Doc URL: <http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9807893/facility!search>

Tank Information

Tank ID: 46 **Determination:** Double Walled
Tank Status: U - In Service **Gallons:** 4000
Status Date: 01-JUL-2005 **Placement:** ABOVEGROUND
Installation Date: 01-JUL-2005 **Tank Vessel Indic:** TANK
Substance: G - Emerg Generator Diesel

Piping

Tank ID: 46 **Piping Description:** I-Suction piping system
Tkstat: U
Stat Date: 01-JUL-2005

Tank ID: 46 **Piping Description:** D-External protective coating
Tkstat: U
Stat Date: 01-JUL-2005

Tank ID: 46 **Piping Description:** A-Aby, no soil contact
Tkstat: U
Stat Date: 01-JUL-2005

Tank ID: 46 **Piping Description:** B-Steel/galvanized metal
Tkstat: U
Stat Date: 01-JUL-2005

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Monitoring						
Tkstat:	U				Stat Date:	01-JUL-2005
Monitoring Desc:		F-Monitor dbl wall tank space				
Tkstat:	U				Stat Date:	01-JUL-2005
Monitoring Desc:		1-Continuous electronic sensing				
Tkstat:	U				Stat Date:	01-JUL-2005
Monitoring Desc:		Q-Visual inspection of ASTs				

[7](#) 2 of 2 ESE 0.03 / 177.49 11.09 / -2 MANATEE CNTY-63RD AVE BOOSTER PUMP STAT 3550 63RD AVE EAST SARASOTA FL 34243 STCS

Facility ID: 9807893 **City (Map):** SARASOTA
Status (Map): REVIEWED **County (Map):** 41
Contam (Map): **Zip4 (Map):**
Fac Type (Map): I **Zip5 (Map):** 34243
Fac Stat (Map): OPEN **County:** 41 - Manatee
Address (Map): 3550 63RD AVE EAST **Type :** I - County Government
Name (Map): MANATEE CNTY-63RD AVE BOOSTER PUMP STAT **Status:** Open
Fac Name(OpenData): MANATEE CNTY-63RD AVE BOOSTER PUMP STAT
Status (Open Data): REVIEWED
Facility Status (Open Data): OPEN
Facility Type Code (Open Data): I
Facility Type (Open Data): County Government
Fac Clnup Stat Cd(OpenData):
Fac Cleanup Status(OpenData):
Cleanup Status Effective Date: 1970/01/01 00:00:00+00
Address (Open Data): 3550 63RD AVE EAST
City (Open Data): SARASOTA
Zip5 (Open Data): 34243
County (Open Data): MANATEE
CC County ID (Open Data): 41

FDEP Storage Tank Monitoring Open Data Details

Object ID: 61687 **Ver Prog:** TANKS-PETROLEUM CONTAMINATION
Regulated: YES **Ver Date:** 2012/08/22 08:44:41+00
OOIC: FACILITY **Elevation:**
Rel Feat: CENTR **EI Datum:**
ALB East: 546104.07 **EI Resolut:**
ALB North: 381214.03 **EI Units:**
Datum: NAD83 **Loc ID:** 61334
Col Meth: DPHO **Lat DD:** 27
Col Name: Williams_CA **Lat MM:** 25
Col Date: 2012/08/22 08:44:41+00 **Long DD:** 82
Col Prog: TANKS-PETROLEUM CONTAMINATION **Long MM:** 31

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Map Src:	imagery_04_09			Lat SS:		
Map Scale:	500			Long SS:		
Coord Acc:	4			X:	-82.5191957362135	
Ver Meth:	DPHO			Y:	27.4285646279346	
Ver Name:	Williams_CA					
Col Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION					
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION					
Direct:						
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9807893/gis-facility!search					

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	61334	Coord Acc:	4
Object ID:	61334	Ver Meth:	DPHO
OOIC:	FACILITY	Ver Name:	Williams_CA
Site Type:	County Government	Ver Prog:	TANKS-PETROLEUM CONTAMINATION
Contam Ind:		Ver Date:	8/22/2012
Next action:	PLACARD 11-JUN-2020	Elevation:	
Fin Respon:		El Datum:	
Rel Feat:	CENTR	El Resolut:	
Alb East:	546104.07	El Units:	
Alb North:	381214.03	Office:	SWD
Datum:	NAD83	Phone:	9417928811
Col Meth:	DPHO	Operator:	TOM BIRK EXT 5179
Col Name:	Williams_CA	Lat DD:	27
Col Date:	8/22/2012	Lat MM:	25
Col Prog:	TANKS-PETROLEUM CONTAMINATION	Long DD:	82
Map Src:	imagery_04_09	Long MM:	31
Map Scale:	500		
Col Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9807893/gis-facility!search		

FDEP - Storage Tank Contamination Monitoring (STCM) Details

Contact:	Tom Birk Ext 5179	Latitude:	27:25:42.8145
Phone:	941-792-8811	Longitude:	82:31:09.0924
District:	SWD	LL Method:	DPHO
County 1:	41 - Manatee	Account Owner:	Manatee Cnty - Fuel Srvc Office
Name:	Manatee Cnty-63rd Ave Booster Pump Stat 3550 63rd Ave East Sarasota, FL 34243		

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	46	Installed:	07/01/2005
Placement:	ABOVE	Size:	4000
Status:	In Service	Content:	Emerg Generator Diesel
Construction:	M - Spill Containment Bucket P - Level Gauges/Alarms R - Double Wall - Tank Jacket		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Piping:		X - Concrete A - Abv, No Soil Contact B - Steel/Galvanized Metal D - External Protective Coating				
Monitoring:		I - Suction Piping System 1 - Continuous Electronic Sensing F - Monitor Dbl Wall Tank Space Q - Visual Inspection Of Asts				

9	1 of 2	W	0.00 / 9.50	17.84 / 5	WOODRUFF & SONS INC 6540 - 31ST STREET EAST BRADENTON FL 342820127	FINDS/FRS
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Registry ID: 110039616243
FIPS Code: 12777
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 26-OCT-09
Update Date: 09-JAN-15
Interest Types: AIR MINOR
SIC Codes: 3272
SIC Code Descriptions: CONCRETE PRODUCTS, EXCEPT BLOCK AND BRICK
NAICS Codes: 327390
NAICS Code Descriptions: OTHER CONCRETE PRODUCT MANUFACTURING.
Conveyor: ICIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008032001
EPA Region Code: 04
County Name: PORTABLE SOURCE
US/Mexico Border Ind:
Latitude: 27.46557
Longitude: -82.52385
Reference Point:
Coord Collection Method:
Accuracy Value: 50
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110039616243
Program Acronyms:

AIR:FL0000001277705055, AIRS/AFS:1277705055

9	2 of 2	W	0.00 / 9.50	17.84 / 5	WOODRUFF & SONS INC 6540 - 31ST STREET EAST BRADENTON FL 342820127	ICIS
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EPA Region: 04 **Federal Facility ID:**

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Registry ID:	110039616243				Tribal Land Code:	
Pgm Sys ID:	FL0000001277705055				County:	Manatee
Pgm Sys Acnrm:	AIR				Latitude83:	27.46557
Permit Type:					Longitude83:	-82.52385

Record Details

EA Identifier:		EA Type Desc:	
Enf Act Forum Dsc:		Facility SIC Code:	3272
EA Type Code:		EA Name:	
Fac NAICS Code:	327390		

10	1 of 2	W	0.04 / 186.20	17.44 / 5	ETCO INC AUTOMOTIVE DIVISION 6223 31ST ST E BRADENTON FL 34203-5357	RCRA SQG
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EPA Handler ID:	FLR000021360
Gen Status Universe:	Small Quantity Generator
Contact Name:	BOB LEDUC
Contact Address:	6223 , 31ST ST E , , BRADENTON , FL, 34203-5357 , US
Contact Phone No and Ext:	941-756-8426
Contact Email:	
Contact Country:	US
County Name:	MANATEE
EPA Region:	04
Land Type:	Private
Receive Date:	19960827
Location Latitude:	27.451944
Location Longitude:	-82.524352

Violation/Evaluation Summary

Note: VIOLATION or UNDETERMINED: There are VIOLATION or UNDETERMINED details or records associated with this facility (EPA ID) in the Compliance Monitoring and Enforcement table dated April, 2021.

Violation Details

Citation:	GGR:40 CFR 262.11
Violation Short Description:	Generators - General
Violation Type:	262.A
Violation Determined Date:	19960604
Scheduled Compliance Date:	
Return to Compliance:	U
Actual Return to Compl:	19960715
Violation Responsible Agency:	State

Enforcement Details

Enforcement Type:	105
Enforcement Type Description:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Enforcement Action Date: 19960604
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Evaluation Details

Evaluation Start Date: 19960604
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Violation Short Description: Generators - General
Return to Compliance Date: 19960715
Evaluation Agency: State

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 199606
Receive Date: 19960604
Handler Name: ETCO INC AUTOMOTIVE DIVISION
Federal Waste Generator Code: 3
Generator Code Description: Very Small Quantity Generator
Source Type: Implementer

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Hazardous Waste Handler Details

Sequence No: 199608
 Receive Date: 19960827
 Handler Name: ETCO INC AUTOMOTIVE DIVISION
 Federal Waste Generator Code: 2
 Generator Code Description: Small Quantity Generator
 Source Type: Notification

Owner/Operator Details

Owner/Operator Ind:	Current Owner	Street No:	
Type:	Private	Street 1:	6223 31ST ST E
Name:	BOB LEDUC	Street 2:	
Date Became Current:	19971112	City:	BRADENTON
Date Ended Current:		State:	FL
Phone:		Country:	US
Source Type:	Notification	Zip Code:	34203-5357

Owner/Operator Ind:	Current Owner	Street No:	
Type:	Private	Street 1:	6223 31ST ST E
Name:	BOB LEDUC	Street 2:	
Date Became Current:	19971112	City:	BRADENTON
Date Ended Current:		State:	FL
Phone:		Country:	US
Source Type:	Implementer	Zip Code:	34203-5357

Historical Handler Details

Receive Dt: 19960604
 Generator Code Description: Very Small Quantity Generator
 Handler Name: ETCO INC AUTOMOTIVE DIVISION

10	2 of 2	W	0.04 / 186.20	17.44 / 5	ETCO INC AUTOMOTIVE DIVISION 6223 31ST ST E BRADENTON FL 342035357	FINDS/FRS
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Registry ID: 110005637249
 FIPS Code: 12081
 HUC Code: 03100202
 Site Type Name: STATIONARY
 Location Description:
 Supplemental Location:
 Create Date: 01-MAR-00
 Update Date: 08-AUG-10
 Interest Types: SQG, STATE MASTER
 SIC Codes: 3714
 SIC Code Descriptions: MOTOR VEHICLE PARTS AND ACCESSORIES
 NAICS Codes: 336211, 336312, 336322, 336330, 336340, 336350, 336399
 NAICS Code Descriptions: ALL OTHER MOTOR VEHICLE PARTS MANUFACTURING., GASOLINE ENGINE AND ENGINE PARTS MANUFACTURING., MOTOR VEHICLE BODY MANUFACTURING., MOTOR VEHICLE BRAKE SYSTEM MANUFACTURING., MOTOR VEHICLE STEERING AND SUSPENSION COMPONENTS (EXCEPT SPRING)

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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MANUFACTURING., MOTOR VEHICLE TRANSMISSION AND POWER TRAIN PARTS MANUFACTURING., OTHER MOTOR VEHICLE ELECTRICAL AND ELECTRONIC EQUIPMENT MANUFACTURING.
RCRAINFO

Conveyor:

Federal Facility Code:

Federal Agency Name:

Tribal Land Code:

Tribal Land Name:

Congressional Dist No: 13

Census Block Code: 120810008052033

EPA Region Code: 04

County Name: MANATEE

US/Mexico Border Ind:

Latitude: 27.429924

Longitude: -82.524376

Reference Point: CENTER OF A FACILITY OR STATION

Coord Collection Method: INTERPOLATION-PHOTO

Accuracy Value: 4

Datum: NAD83

Source:

Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110005637249

Program Acronyms:

FDM:43749, RCRAINFO:FLR000021360

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7.96

15.86 /
3

**PROSPECT POINT
3515 63RD AVE E
BRADENTON FL 34203**

[FINDS/FRS](#)

Registry ID: 110040323735

FIPS Code: FL081

HUC Code: 03100202

Site Type Name: STATIONARY

Location Description:

Supplemental Location:

Create Date: 25-JAN-10

Update Date: 01-APR-16

Interest Types: ICIS-NPDES NON-MAJOR, STORM WATER CONSTRUCTION

SIC Codes:

SIC Code Descriptions:

NAICS Codes:

NAICS Code Descriptions:

Conveyor: FRS-GEOCODE

Federal Facility Code:

Federal Agency Name:

Tribal Land Code:

Tribal Land Name:

Congressional Dist No: 13

Census Block Code: 120810008053015

EPA Region Code: 04

County Name: MANATEE

US/Mexico Border Ind:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Latitude:		27.42903				
Longitude:		-82.51819				
Reference Point:		CENTER OF A FACILITY OR STATION				
Coord Collection Method:		ADDRESS MATCHING-HOUSE NUMBER				
Accuracy Value:		30				
Datum:		NAD83				
Source:						
Facility Detail Rprt URL:		https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110040323735				
Program Acronyms:		NPDES:FLR10IS99				

12	1 of 4	WNW	0.09 / 491.20	17.29 / 5	ABF FREIGHT SYSTEM INC 6215 31ST ST E BRADENTON FL 34203	FINDS/FRS
Registry ID:		110064429211				
FIPS Code:						
HUC Code:		03100202				
Site Type Name:		STATIONARY				
Location Description:						
Supplemental Location:						
Create Date:		05-JUN-15				
Update Date:		07-OCT-16				
Interest Types:		ICIS-NPDES NON-MAJOR, STORM WATER INDUSTRIAL				
SIC Codes:		4213				
SIC Code Descriptions:		TRUCKING, EXCEPT LOCAL				
NAICS Codes:		484121				
NAICS Code Descriptions:		GENERAL FREIGHT TRUCKING, LONG-DISTANCE, TRUCKLOAD.				
Conveyor:		FRS-GEocode				
Federal Facility Code:						
Federal Agency Name:						
Tribal Land Code:						
Tribal Land Name:						
Congressional Dist No:		13				
Census Block Code:		120810008052033				
EPA Region Code:		04				
County Name:						
US/Mexico Border Ind:						
Latitude:		27.43043				
Longitude:		-82.52492				
Reference Point:		CENTER OF A FACILITY OR STATION				
Coord Collection Method:		ADDRESS MATCHING-HOUSE NUMBER				
Accuracy Value:		30				
Datum:		NAD83				
Source:						
Facility Detail Rprt URL:		https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110064429211				
Program Acronyms:		NPDES:FLRNEF284				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
12	2 of 4	WNW	0.09 / 491.20	17.29 / 5	ABF FREIGHT TERMINAL 226 6215 31ST ST E BRADENTON FL 34203	FINDS/FRS

Registry ID: 110063617563
FIPS Code: FL081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 08-FEB-15
Update Date: 11-JAN-16
Interest Types: ICIS-NPDES NON-MAJOR, STORM WATER INDUSTRIAL
SIC Codes: 4213
SIC Code Descriptions: TRUCKING, EXCEPT LOCAL
NAICS Codes: 484121
NAICS Code Descriptions: GENERAL FREIGHT TRUCKING, LONG-DISTANCE, TRUCKLOAD.
Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008052033
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.43043
Longitude: -82.52492
Reference Point: CENTER OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 30
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110063617563
Program Acronyms:
 NPDES:FLR05H748

12	3 of 4	WNW	0.09 / 491.20	17.29 / 5	ABF FREIGHT SYSTEM INC 6215 31ST ST E BRADENTON FL 34203	ICIS
EPA Region:	04	Federal Facility ID:				
Registry ID:	110064429211	Tribal Land Code:				
Pgm Sys ID:	FLRNEF284	County:				
Pgm Sys Acnrm:	NPDES	Latitude83:	27.4304			
Permit Type:	General Permit Covered Facility	Longitude83:	-82.5244			

Record Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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EA Identifier:	EA Type Desc:
Enf Act Forum Dsc:	Facility SIC Code:
EA Type Code:	EA Name:
Fac NAICS Code:	

12	4 of 4	WNW	0.09 / 491.20	17.29 / 5	ABF FREIGHT TERMINAL 226 6215 31ST ST E BRADENTON FL 34203	ICIS
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EPA Region:	04	Federal Facility ID:	
Registry ID:	110063617563	Tribal Land Code:	
Pgm Sys ID:	FLR05H748	County:	Manatee
Pgm Sys Acnrm:	NPDES	Latitude83:	27.4304
Permit Type:	General Permit Covered Facility	Longitude83:	-82.5244

Record Details

EA Identifier:	EA Type Desc:
Enf Act Forum Dsc:	Facility SIC Code:
EA Type Code:	EA Name:
Fac NAICS Code:	

13	1 of 1	E	0.01 / 70.73	16.48 / 4	PROSPECT POINTE UNKNOWN BRADENTON FL 34203	FINDS/FRS
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Registry ID:	110056398704
FIPS Code:	FL081
HUC Code:	03100202
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	13-JAN-14
Update Date:	11-JAN-16
Interest Types:	ICIS-NPDES NON-MAJOR, STORM WATER CONSTRUCTION
SIC Codes:	
SIC Code Descriptions:	
NAICS Codes:	
NAICS Code Descriptions:	
Conveyor:	ICIS
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	13
Census Block Code:	120810008053015
EPA Region Code:	04
County Name:	MANATEE
US/Mexico Border Ind:	
Latitude:	27.429222
Longitude:	-82.517806

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Reference Point:

Coord Collection Method:

Accuracy Value:

Datum: NAD83

Source:

Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110056398704

Program Acronyms:

NPDES:FLR10NJ31

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1 of 1

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EARL W. COLVARD
2964 63RD AVE E
BRADENTON FL 34203

SWF/LF

Facility ID: 96826

Resp Authority:

RA Address:

RA City:

RA State:

RA Zip:

RA Phone No.:

RA Email:

Site Supervisor:

SS Address:

SS City:

SS State:

SS Zip:

SS Phone No.:

SS Email:

Land Owner:

LO Address:

LO City:

LO State:

LO Zip:

Facility Name (Geodata):

Address (Geodata):

Documents (Geodata):

Reports (Geodata):

Information Portal Facility URL: <http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=96826>

Oculus Docs Inventory URL: <https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=96826&CAT=8>

Data Source: Solid Waste Facility Inventory Report

LO Phone No:

Fac Type (Geodata):

Fac Status (Geodata):

Status Dt (Geodata):

Ownership (Geodata):

City (Geodata):

Zip4 (Geodata):

Zip5 (Geodata):

District (Geodata):

Office (Geodata):

County ID (Geodata):

County (Geodata):

County: SARASOTA

District: SD

Section:

Township:

Range:

Latitude: ::

Longitude: ::

Class details

Class: WASTE TIRE COLLECTOR

Class Status: INACTIVE (I)

[17](#)

1 of 4

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ACE METAL POLISHING CO INC
6223 29TH ST E
BRADENTON FL 34203-5383

RCRA VSQG

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
EPA Handler ID:		FLR000088765				
Gen Status Universe:		VSG				
Contact Name:		GLEN RAUSCH				
Contact Address:		6223 , 29TH ST E , , BRADENTON , FL, 34203-5383 , US				
Contact Phone No and Ext:		941-727-4807				
Contact Email:						
Contact Country:		US				
County Name:		MANATEE				
EPA Region:		04				
Land Type:		Private				
Receive Date:		20020516				
Location Latitude:		27.43923				
Location Longitude:		-82.527595				

Violation/Evaluation Summary

Note: VIOLATION or UNDETERMINED: There are VIOLATION or UNDETERMINED details or records associated with this facility (EPA ID) in the Compliance Monitoring and Enforcement table dated April, 2021.

Violation Details

Citation: GSC:261.5(g)(3)
Violation Short Description: Listing - General
Violation Type: 261.A
Violation Determined Date: 20020516
Scheduled Compliance Date:
Return to Compliance: Unverifiable
Actual Return to Compl: 20021127
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 20020726
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Violation Details

Citation: GGR:262.11
Violation Short Description: Generators - General
Violation Type: 262.A
Violation Determined Date: 20020516
Scheduled Compliance Date:

Return to Compliance: Unverifiable
Actual Return to Compl: 20030205
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 20020726
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Evaluation Details

Evaluation Start Date: 20020516
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Violation Short Description: Generators - General
Return to Compliance Date: 20030205
Evaluation Agency: State

Evaluation Start Date: 20020516
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Violation Short Description: Listing - General
Return to Compliance Date: 20021127
Evaluation Agency: State

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Sequence No:		200205				
Receive Date:		20020516				
Handler Name:		ACE METAL POLISHING CO INC				
Federal Waste Generator Code:		3				
Generator Code Description:		Very Small Quantity Generator				
Source Type:		Implementer				
<u>Waste Code Details</u>						
Hazardous Waste Code:		F003				
Waste Code Description:		THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.				
Hazardous Waste Code:		F005				
Waste Code Description:		THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.				
<u>Owner/Operator Details</u>						
Owner/Operator Ind:	Current Owner	Street No:				
Type:	Private	Street 1:	6223 29TH ST E			
Name:	ACE METAL POLISHING CO INC	Street 2:				
Date Became Current:	20020712	City:	BRADENTON			
Date Ended Current:		State:	FL			
Phone:		Country:	US			
Source Type:	Implementer	Zip Code:	34203-5383			

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19.06 /
6

**EMERGENCY - ALADDIN POOLS
FIRE
6223 29TH ST E
BRADENTON FL 34203-5383**

RCRA VSQG

EPA Handler ID: FLT950050260
Gen Status Universe: VSG
Contact Name:
Contact Address: US
Contact Phone No and Ext:
Contact Email:
Contact Country: US
County Name: MANATEE
EPA Region: 04
Land Type: Other
Receive Date: 19950302

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Location Latitude:		27.43923				
Location Longitude:		-82.527595				

Violation/Evaluation Summary

Note: NO RECORDS: As of April 2021, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 199503
Receive Date: 19950302
Handler Name: EMERGENCY - ALADDIN POOLS FIRE
Federal Waste Generator Code: 3
Generator Code Description: Very Small Quantity Generator
Source Type: Emergency

17	3 of 4	W	0.04 / 194.38	19.06 / 6	EMERGENCY - ALADDIN POOLS FIRE 6223 29TH ST E BRADENTON FL 342035383	FINDS/FRS
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Registry ID: 110035645727
FIPS Code: 12081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 24-APR-08
Update Date: 28-MAR-14
Interest Types: CESQG, STATE MASTER
SIC Codes:
SIC Code Descriptions:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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NAICS Codes:

NAICS Code Descriptions:

Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008052037
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.42962
Longitude: -82.52698
Reference Point: CENTER OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 30
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110035645727
Program Acronyms:

FDM:65754, RCRAINFO:FLT950050260

17	4 of 4	W	0.04 / 194.38	19.06 / 6	ACE METAL POLISHING CO INC 6223 29TH ST E BRADENTON FL 342035342	FINDS/FRS
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Registry ID: 110013302595
FIPS Code: 12081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 31-OCT-02
Update Date: 08-AUG-10
Interest Types: CESQG, STATE MASTER
SIC Codes: 3471
SIC Code Descriptions: ELECTROPLATING, PLATING, POLISHING, ANODIZING, AND COLORING
NAICS Codes: 332813
NAICS Code Descriptions: ELECTROPLATING, PLATING, POLISHING, ANODIZING, AND COLORING.
Conveyor: RCRAINFO
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008052032
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Latitude:		27.430012				
Longitude:		-82.526426				
Reference Point:		CENTER OF A FACILITY OR STATION				
Coord Collection Method:		INTERPOLATION-PHOTO				
Accuracy Value:		4				
Datum:		NAD83				
Source:						
Facility Detail Rprt URL:		https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110013302595				
Program Acronyms:						
FDM:35021, RCRAINFO:FLR000088765						

18	1 of 3	W	0.04 / 186.92	19.06 / 6	ROLLING FRITO-LAY - BRADENTON-SARASOTA 6222 29TH ST E BRADENTON FL 342035304	FINDS/FRS
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Registry ID:		110020068451				
FIPS Code:		12081				
HUC Code:		03100202				
Site Type Name:		STATIONARY				
Location Description:						
Supplemental Location:						
Create Date:		23-DEC-04				
Update Date:		07-OCT-16				
Interest Types:		ICIS-NPDES NON-MAJOR, STATE MASTER, STORM WATER INDUSTRIAL				
SIC Codes:		4213				
SIC Code Descriptions:		TRUCKING, EXCEPT LOCAL				
NAICS Codes:		484121				
NAICS Code Descriptions:		GENERAL FREIGHT TRUCKING, LONG-DISTANCE, TRUCKLOAD.				
Conveyor:		FRS-GEocode				
Federal Facility Code:						
Federal Agency Name:						
Tribal Land Code:						
Tribal Land Name:						
Congressional Dist No:		13				
Census Block Code:		120810008052037				
EPA Region Code:		04				
County Name:		MANATEE				
US/Mexico Border Ind:						
Latitude:		27.42961				
Longitude:		-82.52698				
Reference Point:		CENTER OF A FACILITY OR STATION				
Coord Collection Method:		ADDRESS MATCHING-HOUSE NUMBER				
Accuracy Value:		30				
Datum:		NAD83				
Source:						
Facility Detail Rprt URL:		https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110020068451				
Program Acronyms:						
FDM:15810, NPDES:FLR05F923						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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[18](#) 2 of 3 W 0.04 / 186.92 19.06 / 6 BRADENTON/SARASOTA
6222 29TH ST E ICIS
BRADEONTON FL 34203

EPA Region:	04	Federal Facility ID:	
Registry ID:	110020068451	Tribal Land Code:	
Pgm Sys ID:	FLR05F923	County:	Manatee
Pgm Sys Acnm:	NPDES	Latitude83:	27.428889
Permit Type:	General Permit Covered Facility	Longitude83:	-82.526667

Record Details

EA Identifier:		EA Type Desc:	
Enf Act Forum Dsc:		Facility SIC Code:	
EA Type Code:		EA Name:	
Fac NAICS Code:			

[18](#) 3 of 3 W 0.04 / 186.92 19.06 / 6 FRITO-LAY SALES DISTRIBUTION
CENTER STCS
6222 E 29TH ST
BRADENTON FL 34203

Facility ID:	9200202	City (Map):	BRADENTON
Status (Map):	REVIEWED	County (Map):	41
Contam (Map):		Zip4 (Map):	
Fac Type (Map):	C	Zip5 (Map):	34203
Fac Stat (Map):	CLOSED	County:	41 - Manatee
Address (Map):	6222 E 29TH ST	Type :	C - Fuel User/Non-Retail
Name (Map):	FRITO-LAY SALES DISTRIBUTION CENTER	Status:	Closed
Fac Name(OpenData):	FRITO-LAY SALES DISTRIBUTION CENTER		
Status (Open Data):	REVIEWED		
Facility Status (Open Data):	CLOSED		
Facility Type Code (Open Data):	C		
Facility Type (Open Data):	Fuel user/Non-retail		
Fac Clnup Stat Cd(OpenData):			
Fac Cleanup Status(OpenData):			
Cleanup Status Effective Date:	1970/01/01 00:00:00+00		
Address (Open Data):	6222 E 29TH ST		
City (Open Data):	BRADENTON		
Zip5 (Open Data):	34203		
County (Open Data):	MANATEE		
CC County ID (Open Data):	41		

FDEP Storage Tank Monitoring Open Data Details

Object ID:	39386	Ver Prog:	TANKS-PETROLEUM CONTAMINATION
Regulated:	NO	Ver Date:	2006/12/18 14:24:01+00
OOIC:	FACILITY	Elevation:	
Rel Feat:	ENTRA	El Datum:	
ALB East:	545248.74	El Resolut:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
ALB North:	381324.92			EI Units:		
Datum:	HARN			Loc ID:	36639	
Col Meth:	DPHO			Lat DD:	27	
Col Name:	BERNHARD_K			Lat MM:	25	
Col Date:	2006/12/18 14:24:01+00			Long DD:	82	
Col Prog:	TANKS-PETROLEUM CONTAMINATION			Long MM:	31	
Map Src:	2004 doqqs			Lat SS:		
Map Scale:	5000			Long SS:		
Coord Acc:	4			X:	-82.5278478220755	
Ver Meth:	DPHO			Y:	27.4296561279876	
Ver Name:	BERNHARD_K					
Col Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION					
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION					
Direct:						
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9200202/gis-facility!search					

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	36639	Coord Acc:	4
Object ID:	36639	Ver Meth:	DPHO
OOIC:	FACILITY	Ver Name:	BERNHARD_K
Site Type:	Fuel user/Non-retail	Ver Prog:	TANKS-PETROLEUM CONTAMINATION
Contam Ind:		Ver Date:	12/18/2006
Next action:		Elevation:	
Fin Respon:		EI Datum:	
Rel Feat:	ENTRA	EI Resolut:	
Alb East:	545248.74	EI Units:	
Alb North:	381324.92	Office:	SWD
Datum:	HARN	Phone:	
Col Meth:	DPHO	Operator:	FRITO-LAY
Col Name:	BERNHARD_K	Lat DD:	27
Col Date:	12/18/2006	Lat MM:	25
Col Prog:	TANKS-PETROLEUM CONTAMINATION	Long DD:	82
Map Src:	2004 doqqs	Long MM:	31
Map Scale:	5000		
Col Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9200202/gis-facility!search		

FDEP - Storage Tank Contamination Monitoring (STCM) Details

Contact:	Frito-Lay	Latitude:	27:25:46.7439
Phone:		Longitude:	82:31:40.2399
District:	SWD	LL Method:	DPHO - Address Matching
County 1:	41 - Manatee	Account Owner:	Frito Lay Inc
Name:	Frito-Lay Sales Distribution Center 6222 E 29th St Bradenton, FL 34203		

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Tank No:	1			Installed:		
Placement:	UNDER			Size:	10000	
Status:	Removed from Site			Content:	Unknown/Not Reported	
Construction:						
Piping:						
Monitoring:						

19	1 of 2	WNW	0.09 / 495.75	18.82 / 6	THYSSEN KRUPP ELEVATOR 6215 29TH ST E BRADENTON FL 34203-5315	RCRA VSQG
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EPA Handler ID:	FLT030072383
Gen Status Universe:	VSG
Contact Name:	
Contact Address:	US
Contact Phone No and Ext:	
Contact Email:	
Contact Country:	US
County Name:	MANATEE
EPA Region:	04
Land Type:	Other
Receive Date:	20030513
Location Latitude:	27.43923
Location Longitude:	-82.527595

Violation/Evaluation Summary

Note: NO RECORDS: As of April 2021, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Sequence No:		200305				
Receive Date:		20030513				
Handler Name:		THYSSEN KRUPP ELEVATOR				
Federal Waste Generator Code:		3				
Generator Code Description:		Very Small Quantity Generator				
Source Type:		Emergency				

19	2 of 2	WNW	0.09 / 495.75	18.82 / 6	THYSSEN KRUPP ELEVATOR 6215 29TH ST E BRADENTON FL 342035315	FINDS/FRS
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Registry ID: 110035561950
FIPS Code: 12081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 23-APR-08
Update Date: 28-MAR-14
Interest Types: CESQG, STATE MASTER
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008052038
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.43045
Longitude: -82.52697
Reference Point: CENTER OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 30
Datum: NAD83
Source:
Facility Detail Rprt URL: https://fmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110035561950
Program Acronyms:

FDM:65756, RCRAINFO:FLT030072383

20	1 of 3	WNW	0.09 / 499.56	18.88 / 6	AMERICAN TORCH TIP COMPANY INC 6212 29TH ST E BRADENTON FL 342035304	FINDS/FRS
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Registry ID: 110002526598

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
FIPS Code:		12081				
HUC Code:		03100202				
Site Type Name:		STATIONARY				
Location Description:						
Supplemental Location:						
Create Date:		01-MAR-00				
Update Date:		10-AUG-14				
Interest Types:		OSHA ESTABLISHMENT, SQG, STATE MASTER				
SIC Codes:						
SIC Code Descriptions:						
NAICS Codes:		333992				
NAICS Code Descriptions:		WELDING AND SOLDERING EQUIPMENT MANUFACTURING.				
Conveyor:		RCRAINFO				
Federal Facility Code:						
Federal Agency Name:						
Tribal Land Code:						
Tribal Land Name:						
Congressional Dist No:		13				
Census Block Code:		120810008052030				
EPA Region Code:		04				
County Name:		MANATEE				
US/Mexico Border Ind:						
Latitude:		27.430573				
Longitude:		-82.527298				
Reference Point:		CENTER OF A FACILITY OR STATION				
Coord Collection Method:		INTERPOLATION-PHOTO				
Accuracy Value:		4				
Datum:		NAD83				
Source:						
Facility Detail Rprt URL:		https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110002526598				
Program Acronyms:						

FDM:54318, OSHA-OIS:339385833, OSHA-OIS:341147478, RCRAINFO:FLD004320396

20	2 of 3	WNW	0.09 / 499.56	18.88 / 6	AMERICAN TORCH TIP COMPANY 6212 29TH ST E BRADENTON FL 34203-5304	RCRA SQG
EPA Handler ID:		FLD004320396				
Gen Status Universe:		Small Quantity Generator				
Contact Name:		JOSHUA YOUNG				
Contact Address:		6212 29TH ST E , , BRADENTON , FL, 34203-5304 , US				
Contact Phone No and Ext:		941-753-7557				
Contact Email:		JYOUNG@ATTCUSA.COM				
Contact Country:		US				
County Name:		MANATEE				
EPA Region:		04				
Land Type:		Private				
Receive Date:		20180326				
Location Latitude:		27.430422				
Location Longitude:		-82.526996				

Violation/Evaluation Summary

Note: VIOLATION or UNDETERMINED: There are VIOLATION or UNDETERMINED details or records associated with this facility (EPA ID) in the Compliance Monitoring and Enforcement table dated April, 2021.

Violation Details

Citation: 262.11
Violation Short Description: Generators - General
Violation Type: 262.A
Violation Determined Date: 20171116
Scheduled Compliance Date:
Return to Compliance: U
Actual Return to Compl: 20171214
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 20180611
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Enforcement Type: 312
Enforcement Type Description: DEP SHORT FORM CONSENT ORDER
Enforcement Action Date: 20180817
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount: 19166.38
Paid Amount: 19166.38

Enforcement Type: 115
Enforcement Type Description: DEP MEETING
Enforcement Action Date: 20180810
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Violation Details

Citation: 268.7
Violation Short Description: LDR - General
Violation Type: 268.A
Violation Determined Date: 20171116
Scheduled Compliance Date:
Return to Compliance: U
Actual Return to Compl: 20180413
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 20180611
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Enforcement Type: 115
Enforcement Type Description: DEP MEETING
Enforcement Action Date: 20180810
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Enforcement Type: 312
Enforcement Type Description: DEP SHORT FORM CONSENT ORDER
Enforcement Action Date: 20180817
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount: 19166.38
Paid Amount: 19166.38

Violation Details

Citation: 273.11(a)
Violation Short Description: Universal Waste - Small Quantity Handlers
Violation Type: 273.B
Violation Determined Date: 20171116
Scheduled Compliance Date:

Return to Compliance: U
Actual Return to Compl: 20171116
Violation Responsible Agency: State

Violation Details

Citation: 279.22(c)(1)
Violation Short Description: Used Oil - Generators
Violation Type: 279.C
Violation Determined Date: 20171116
Scheduled Compliance Date:
Return to Compliance: U
Actual Return to Compl: 20171226
Violation Responsible Agency: State

Violation Details

Citation: 62-710.401(6)
Violation Short Description: State Statute or Regulation
Violation Type: XXS
Violation Determined Date: 20171116
Scheduled Compliance Date:
Return to Compliance: U
Actual Return to Compl: 20180102
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 115
Enforcement Type Description: DEP MEETING
Enforcement Action Date: 20180810
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 20180611
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Enforcement Type: 312
Enforcement Type Description: DEP SHORT FORM CONSENT ORDER

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Enforcement Action Date:		20180817				
Enf Disposition Status:						
Disposition Status Date:						
Enforcement Lead Agency:		State				
Proposed Penalty Amount:						
Final Amount:		19166.38				
Paid Amount:		19166.38				
 <u>Violation Details</u>						
Citation:		62-710.401(6)				
Violation Short Description:		State Statute or Regulation				
Violation Type:		XXS				
Violation Determined Date:		20171116				
Scheduled Compliance Date:						
Return to Compliance:		U				
Actual Return to Compl:		20171226				
Violation Responsible Agency:		State				
 <u>Violation Details</u>						
Citation:		62-710.850(5)(a)				
Violation Short Description:		State Statute or Regulation				
Violation Type:		XXS				
Violation Determined Date:		20171116				
Scheduled Compliance Date:						
Return to Compliance:		U				
Actual Return to Compl:		20180108				
Violation Responsible Agency:		State				
 <u>Violation Details</u>						
Citation:		GGR:				
Violation Short Description:		Generators - General				
Violation Type:		262.A				
Violation Determined Date:		19860702				
Scheduled Compliance Date:						
Return to Compliance:		U				
Actual Return to Compl:		19861003				
Violation Responsible Agency:		State				
 <u>Enforcement Details</u>						
Enforcement Type:		125				
Enforcement Type Description:		DEP WARNING LETTER				
Enforcement Action Date:		19860819				
Enf Disposition Status:						
Disposition Status Date:						
Enforcement Lead Agency:		State				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Proposed Penalty Amount:
 Final Amount:
 Paid Amount:

Evaluation Details

Evaluation Start Date: 20180827
Evaluation Type Description: NOT A SIGNIFICANT NON-COMPLIER
Violation Short Description:
Return to Compliance Date:
Evaluation Agency: State

Evaluation Start Date: 20180402
Evaluation Type Description: SIGNIFICANT NON-COMPLIER
Violation Short Description: Generators - General
Return to Compliance Date: 20171214
Evaluation Agency: State

Evaluation Start Date: 20180402
Evaluation Type Description: SIGNIFICANT NON-COMPLIER
Violation Short Description: Used Oil - Generators
Return to Compliance Date: 20171226
Evaluation Agency: State

Evaluation Start Date: 20180402
Evaluation Type Description: SIGNIFICANT NON-COMPLIER
Violation Short Description: Generators - General
Return to Compliance Date: 19861003
Evaluation Agency: State

Evaluation Start Date: 20180402
Evaluation Type Description: SIGNIFICANT NON-COMPLIER
Violation Short Description: State Statute or Regulation
Return to Compliance Date: 20171226
Evaluation Agency: State

Evaluation Start Date: 20180402
Evaluation Type Description: SIGNIFICANT NON-COMPLIER
Violation Short Description: Universal Waste - Small Quantity Handlers
Return to Compliance Date: 20171116
Evaluation Agency: State

Evaluation Start Date: 20180402
Evaluation Type Description: SIGNIFICANT NON-COMPLIER
Violation Short Description: State Statute or Regulation
Return to Compliance Date: 20180102
Evaluation Agency: State

Evaluation Start Date: 20180402
Evaluation Type Description: SIGNIFICANT NON-COMPLIER
Violation Short Description: State Statute or Regulation

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Return to Compliance Date:		20180108				
Evaluation Agency:		State				
Evaluation Start Date:		20180402				
Evaluation Type Description:		SIGNIFICANT NON-COMPLIER				
Violation Short Description:		LDR - General				
Return to Compliance Date:		20180413				
Evaluation Agency:		State				
Evaluation Start Date:		20171116				
Evaluation Type Description:		COMPLIANCE EVALUATION INSPECTION ON-SITE				
Violation Short Description:		State Statute or Regulation				
Return to Compliance Date:		20171226				
Evaluation Agency:		State				
Evaluation Start Date:		20171116				
Evaluation Type Description:		COMPLIANCE EVALUATION INSPECTION ON-SITE				
Violation Short Description:		Generators - General				
Return to Compliance Date:		20171214				
Evaluation Agency:		State				
Evaluation Start Date:		20171116				
Evaluation Type Description:		COMPLIANCE EVALUATION INSPECTION ON-SITE				
Violation Short Description:		State Statute or Regulation				
Return to Compliance Date:		20180102				
Evaluation Agency:		State				
Evaluation Start Date:		20171116				
Evaluation Type Description:		COMPLIANCE EVALUATION INSPECTION ON-SITE				
Violation Short Description:		State Statute or Regulation				
Return to Compliance Date:		20180108				
Evaluation Agency:		State				
Evaluation Start Date:		20171116				
Evaluation Type Description:		COMPLIANCE EVALUATION INSPECTION ON-SITE				
Violation Short Description:		Universal Waste - Small Quantity Handlers				
Return to Compliance Date:		20171116				
Evaluation Agency:		State				
Evaluation Start Date:		20171116				
Evaluation Type Description:		COMPLIANCE EVALUATION INSPECTION ON-SITE				
Violation Short Description:		State Statute or Regulation				
Return to Compliance Date:						
Evaluation Agency:		State				
Evaluation Start Date:		20171116				
Evaluation Type Description:		COMPLIANCE EVALUATION INSPECTION ON-SITE				
Violation Short Description:		LDR - General				
Return to Compliance Date:		20180413				
Evaluation Agency:		State				
Evaluation Start Date:		20171116				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Violation Short Description: Used Oil - Generators
Return to Compliance Date: 20171226
Evaluation Agency: State

Evaluation Start Date: 19860702
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Violation Short Description: Generators - General
Return to Compliance Date: 19861003
Evaluation Agency: State

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 198607
Receive Date: 19860702
Handler Name: AMERICAN TORCH TIP COMPANY INC
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Hazardous Waste Handler Details

Sequence No: 198809
Receive Date: 19880909
Handler Name: AMERICAN TORCH TIP COMPANY INC
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified
Source Type: Notification

Hazardous Waste Handler Details

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction</i>	<i>Distance (mi/ft)</i>	<i>Elev/Diff (ft)</i>	<i>Site</i>	<i>DB</i>
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Sequence No: 201711
Receive Date: 20171116
Handler Name: AMERICAN TORCH TIP COMPANY
Federal Waste Generator Code: 2
Generator Code Description: Small Quantity Generator
Source Type: Implementer

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: D008
Waste Code Description: LEAD

Hazardous Waste Code: D035
Waste Code Description: METHYL ETHYL KETONE

Hazardous Waste Handler Details

Sequence No: 201803
Receive Date: 20180326
Handler Name: AMERICAN TORCH TIP COMPANY
Federal Waste Generator Code: 2
Generator Code Description: Small Quantity Generator
Source Type: Notification

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: D008
Waste Code Description: LEAD

Hazardous Waste Code: D035
Waste Code Description: METHYL ETHYL KETONE

Owner/Operator Details

Owner/Operator Ind: Current Owner	Street No:
Type: Private	Street 1: 6212 29TH ST E
Name: JACK WALTERS	Street 2:
Date Became Current: 19971112	City: BRADENTON
Date Ended Current:	State: FL
Phone:	Country: US
Source Type: Notification	Zip Code: 34203-5304

Owner/Operator Ind: Current Owner **Street No:**

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction</i>	<i>Distance (mi/ft)</i>	<i>Elev/Diff (ft)</i>	<i>Site</i>	<i>DB</i>
Type:	Private				Street 1:	6212 29TH ST E
Name:	DANIEL WALTERS				Street 2:	
Date Became Current:	19960101				City:	BRADENTON
Date Ended Current:					State:	FL
Phone:					Country:	US
Source Type:	Implementer				Zip Code:	34203-0000
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	6212 29TH ST E
Name:	JACK WALTERS				Street 2:	
Date Became Current:	19961018				City:	BRADENTON
Date Ended Current:	19971112				State:	FL
Phone:					Country:	US
Source Type:	Notification				Zip Code:	34203-5304
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	6212 29TH ST E
Name:	JACK WALTERS				Street 2:	
Date Became Current:	19971112				City:	BRADENTON
Date Ended Current:	20180420				State:	FL
Phone:					Country:	US
Source Type:	Notification				Zip Code:	34203-5304
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	6212 29TH ST E
Name:	DANIEL WALTERS				Street 2:	
Date Became Current:	19960101				City:	BRADENTON
Date Ended Current:					State:	FL
Phone:					Country:	US
Source Type:	Notification				Zip Code:	34203-0000
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	6212 29TH ST E
Name:	JACK WALTERS				Street 2:	
Date Became Current:	19971112				City:	BRADENTON
Date Ended Current:					State:	FL
Phone:					Country:	US
Source Type:	Implementer				Zip Code:	34203-5304
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	6212 29TH ST E
Name:	WALTERS JACK				Street 2:	
Date Became Current:	19971112				City:	BRADENTON
Date Ended Current:					State:	FL
Phone:					Country:	US
Source Type:	Notification				Zip Code:	34203-5304
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	6212 29TH ST E
Name:	JACK WALTERS				Street 2:	
Date Became Current:	19961018				City:	BRADENTON
Date Ended Current:	19971112				State:	FL

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Phone:				Country:	US	
Source Type:	Implementer			Zip Code:	34203-5304	
Owner/Operator Ind:	Current Operator			Street No:		
Type:	Private			Street 1:	6212 29TH ST E	
Name:	AMERICAN TORCH TIP COMPANY			Street 2:		
Date Became Current:	19800101			City:	BRADENTON	
Date Ended Current:				State:	FL	
Phone:	941-753-7557			Country:	US	
Source Type:	Notification			Zip Code:	34203-5304	
Owner/Operator Ind:	Current Operator			Street No:		
Type:	Private			Street 1:	6212 29TH ST E	
Name:	AMERICAN TORCH TIP COMPANY			Street 2:		
Date Became Current:	19800101			City:	BRADENTON	
Date Ended Current:				State:	FL	
Phone:	941-753-7557			Country:	US	
Source Type:	Implementer			Zip Code:	34203-5304	
Owner/Operator Ind:	Current Owner			Street No:		
Type:	Private			Street 1:	6212 29TH ST E	
Name:	JACK WALTERS			Street 2:		
Date Became Current:	19971112			City:	BRADENTON	
Date Ended Current:	20180420			State:	FL	
Phone:				Country:	US	
Source Type:	Implementer			Zip Code:	34203-5304	
Owner/Operator Ind:	Current Owner			Street No:		
Type:	Private			Street 1:	6212 29TH ST E	
Name:	WALTERS JACK			Street 2:		
Date Became Current:	19971112			City:	BRADENTON	
Date Ended Current:				State:	FL	
Phone:				Country:	US	
Source Type:	Implementer			Zip Code:	34203-5304	

Historical Handler Details

Receive Dt:	20171116
Generator Code Description:	Small Quantity Generator
Handler Name:	AMERICAN TORCH TIP COMPANY
Receive Dt:	19880909
Generator Code Description:	Not a Generator, Verified
Handler Name:	AMERICAN TORCH TIP COMPANY INC
Receive Dt:	19860702
Generator Code Description:	Not a Generator, Verified
Handler Name:	AMERICAN TORCH TIP COMPANY INC

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Incident No:	60103	Incident Date:	3/5/2018 12:00:00 PM
Incident Type:	Inland	County:	Manatee

Spill Details

Incident Status:	Pending-DM	Criminal Indicator:	No
Incident Party Type:	Agency	Hurricane Indicator:	No
Incident Party Name:	DEP District Office	Description:	Sampling
Pollutant Name:	None	On Scene Response:	Yes
Pollutant Category:	None		
Pollutant Actual Volume:	0		
Pollutant Unit Measure:	gallon		

Spill Details

Incident Status:	Pending-DM	Criminal Indicator:	No
Incident Party Type:	Reporting Party	Hurricane Indicator:	No
Incident Party Name:	FDEP Southwest District Office	Description:	Sampling
Pollutant Name:	None	On Scene Response:	Yes
Pollutant Category:	None		
Pollutant Actual Volume:	0		
Pollutant Unit Measure:	gallon		

Spill Details

Incident Status:	Pending-DM	Criminal Indicator:	No
Incident Party Type:	Responsible Party	Hurricane Indicator:	No
Incident Party Name:	American Torch Tips	Description:	Sampling
Pollutant Name:	None	On Scene Response:	Yes
Pollutant Category:	None		
Pollutant Actual Volume:	0		
Pollutant Unit Measure:	gallon		

Spill Details

Incident Status:	Pending-DM	Criminal Indicator:	No
Incident Party Type:	Local Agent	Hurricane Indicator:	No
Incident Party Name:	FDEP Southwest District Office	Description:	Sampling
Pollutant Name:	None	On Scene Response:	Yes
Pollutant Category:	None		
Pollutant Actual Volume:	0		
Pollutant Unit Measure:	gallon		

21	1 of 1	WNW	0.08 / 425.32	19.09 / 6	AMERICAN TORCH TIP COMPANY 6212 29TH STE. BRADENTON FL 34203	PRP
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Site EPA ID: FLD982109761
Site Name: BCX FACILITY

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Site NPL Status: Not on the NPL
 Site Non NPL Status: Removal Only Site (No Site Assessment Work Needed)

Noticed Party Action Information

Action Type Seq: AC-1
 Action Name: ADM ORDR
 Action Date: SETTLEMENT DATE 07/02/2008

22	1 of 3	W	0.00 / 5.93	19.55 / 7	FORRISTALL ENTERPRISES, INC. 2712 63RD AVE E BRADENTON FL 34203	SWF/LF
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Facility ID:	97539	LO Phone No:	
Resp Authority:		Fac Type (Geodata):	
RA Address:		Fac Status (Geodata):	
RA City:		Status Dt (Geodata):	
RA State:		Ownership (Geodata):	
RA Zip:		City (Geodata):	
RA Phone No.:		Zip4 (Geodata):	
RA Email:		Zip5 (Geodata):	
Site Supervisor:		District (Geodata):	
SS Address:		Office (Geodata):	
SS City:		County ID (Geodata):	
SS State:		County (Geodata):	
SS Zip:		County:	MANATEE
SS Phone No.:		District:	SWD
SS Email:		Section:	
Land Owner:		Township:	
LO Address:		Range:	
LO City:		Latitude:	::
LO State:		Longitude:	::
LO Zip:			
Facility Name (Geodata):			
Address (Geodata):			
Documents (Geodata):			
Reports (Geodata):			
Information Portal Facility URL:	http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=97539		
Oculus Docs Inventory URL:	https://eriservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=97539&CAT=8		
Data Source:	Solid Waste Facility Inventory Report		

Class details

Class: WASTE TIRE COLLECTOR
 Class Status: REGISTERED (R)

22	2 of 3	W	0.00 / 5.93	19.55 / 7	FORRISTALL ENTERPRISES INC 2712 63RD AVE E BRADENTON FL 34203	AST
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Facility ID: 9815271 Lat DD:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Facility Status:	OPEN				Lat MM:	
ASTS:	2				Lat SS:	
USTS:	0				Long DD:	
Tanks:	2				Long MM:	
Facility Type:	C				Long SS:	
Contact:	DENNIS BACON				Lat/Long Method:	
Facility Phone:	9417298150				Bad Addr Indicator:	
Owner ID:	4594				County:	MANATEE
Owner Phone:	5616443326				Dep Co:	P
Owner:	PORT CONSOLIDATED INC					
Owner Address1:	PO BOX 350430					
Owner Address2:	ATTN: DENNIS BACON					
Owner City:	FORT LAUDERDALE					
Owner State:	FL					
Owner Zip 5:	33335					
Owner Zip 4:						
Type Desc:	Fuel user/Non-retail					
Oculus Docs Inventory URL:	https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=9815271&CAT=11					
Information Portal Facility URL:	http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=9815271					
Information Portal Doc URL:	http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9815271/facility!search					

Tank Information

Tank ID:	2	Determination:	Singled Walled
Tank Status:	U - In Service	Gallons:	1000
Status Date:	01-SEP-2016	Placement:	ABOVEGROUND
Installation Date:	01-SEP-2016	Tank Vessel Indic:	TANK
Substance:	D - Vehicular Diesel		

Monitoring

Tkstat:	U	Stat Date:	01-SEP-2016
Monitoring Desc:	Q-Visual inspection of ASTs		
Tkstat:	U	Stat Date:	01-SEP-2016
Monitoring Desc:	F-Monitor dbl wall tank space		

Tank Information

Tank ID:	1	Determination:	Singled Walled
Tank Status:	U - In Service	Gallons:	1000
Status Date:	01-SEP-2016	Placement:	ABOVEGROUND
Installation Date:	01-SEP-2016	Tank Vessel Indic:	TANK
Substance:	D - Vehicular Diesel		

Monitoring

Tkstat:	U	Stat Date:	01-SEP-2016
Monitoring Desc:	Q-Visual inspection of ASTs		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Tkstat:	U				Stat Date:	01-SEP-2016
Monitoring Desc:		F-Monitor dbl wall tank space				

[22](#) 3 of 3 W 0.00 / 5.93 19.55 / 7 **FORRISTALL ENTERPRISES INC** STCS
2712 63RD AVE E
BRADENTON FL 34203

Facility ID: 9815271 **City (Map):** BRADENTON
Status (Map): REVIEWED **County (Map):** 41
Contam (Map): **Zip4 (Map):**
Fac Type (Map): C **Zip5 (Map):** 34203
Fac Stat (Map): OPEN **County:** 41 - Manatee
Address (Map): 2712 63RD AVE E **Type :** C - Fuel User/Non-Retail
Name (Map): FORRISTALL ENTERPRISES INC **Status:** Open
Fac Name(OpenData): FORRISTALL ENTERPRISES INC
Status (Open Data): REVIEWED
Facility Status (Open Data): OPEN
Facility Type Code (Open Data): C
Facility Type (Open Data): Fuel user/Non-retail
Fac Cleanup Stat Cd(OpenData):
Fac Cleanup Status(OpenData):
Cleanup Status Effective Date: 1970/01/01 00:00:00+00
Address (Open Data): 2712 63RD AVE E
City (Open Data): BRADENTON
Zip5 (Open Data): 34203
County (Open Data): MANATEE
CC County ID (Open Data): 41

FDEP Storage Tank Monitoring Open Data Details

Object ID: 68295 **Ver Prog:** TANKS-PETROLEUM CONTAMINATION
Regulated: YES **Ver Date:** 2016/10/24 14:55:09+00
OOIC: FACILITY **Elevation:**
Rel Feat: CENTR **EI Datum:**
ALB East: 545132.94 **EI Resolut:**
ALB North: 381206 **EI Units:**
Datum: NAD83 **Loc ID:** 68614
Col Meth: DPHO **Lat DD:** 27
Col Name: williams_ca **Lat MM:** 25
Col Date: 2016/10/24 14:55:09+00 **Long DD:** 82
Col Prog: TANKS-PETROLEUM CONTAMINATION **Long MM:** 31
Map Src: imagery_11_13 **Lat SS:**
Map Scale: 5000 **Long SS:**
Coord Acc: 4 **X:** -82.5290384057194
Ver Meth: DPHO **Y:** 27.4285970443675
Ver Name: williams_ca
Col Aff: DEPARTMENT OF ENVIRONMENTAL PROTECTION
Ver Aff: DEPARTMENT OF ENVIRONMENTAL PROTECTION
Direct:
Documents: <https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9815271/gis-facility!search>

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	68614	Coord Acc:	4
Object ID:	68614	Ver Meth:	DPHO
OOIC:	FACILITY	Ver Name:	williams_ca
Site Type:	Fuel user/Non-retail	Ver Prog:	TANKS-PETROLEUM CONTAMINATION
Contam Ind:		Ver Date:	10/24/2016
Next action:	PLACARD 05-JUN-2020	Elevation:	
Fin Respon:		EI Datum:	
Rel Feat:	CENTR	EI Resolut:	
Alb East:	545132.94	EI Units:	
Alb North:	381206	Office:	SWD
Datum:	NAD83	Phone:	9417298150
Col Meth:	DPHO	Operator:	STEVE FORRISTALL
Col Name:	williams_ca	Lat DD:	27
Col Date:	10/24/2016	Lat MM:	25
Col Prog:	TANKS-PETROLEUM CONTAMINATION	Long DD:	82
Map Src:	imagery_11_13	Long MM:	31
Map Scale:	5000		
Col Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9815271/gis-facility!search		

FDEP - Storage Tank Contamination Monitoring (STCM) Details

Contact:	Steve Forristall	Latitude:	27:25:42.9312
Phone:	941-729-8150	Longitude:	82:31:44.5260
District:	SWD	LL Method:	DPHO
County 1:	41 - Manatee	Account Owner:	Port Consolidated Inc
Name:	Forristall Enterprises Inc 2712 63rd Ave E Bradenton, FL 34203		

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	2	Installed:	09/01/2016
Placement:	ABOVE	Size:	1000
Status:	In Service	Content:	Vehicular Diesel
Construction:	C - Steel I - Double Wall M - Spill Containment Bucket P - Level Gauges/Alarms		
Piping:			
Monitoring:	F - Monitor Dbl Wall Tank Space Q - Visual Inspection Of Asts		

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	1	Installed:	09/01/2016
Placement:	ABOVE	Size:	1000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Status:	In Service				Content:	Vehicular Diesel
Construction:		C - Steel I - Double Wall M - Spill Containment Bucket P - Level Gauges/Alarms				
Piping:						
Monitoring:		F - Monitor Dbl Wall Tank Space Q - Visual Inspection Of Asts				

23	1 of 2	W	0.00 / 6.17	19.53 / 7	ELECTRO BAKE ENTERPRISES INC 2704 63RD AVE E BRADENTON FL 34203-5307	RCRA VSQG
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EPA Handler ID: FL0001007186
Gen Status Universe: VSG
Contact Name: JOHN P BARRETT
Contact Address: 11220 5TH ST E , , TREASURE ISLAND , FL, 33706-3020 , US
Contact Phone No and Ext: 941-751-4372
Contact Email:
Contact Country: US
County Name: MANATEE
EPA Region: 04
Land Type:
Receive Date: 19981110
Location Latitude: 27.429092
Location Longitude: -82.529735

Violation/Evaluation Summary

Note: VIOLATION or UNDETERMINED: There are VIOLATION or UNDETERMINED details or records associated with this facility (EPA ID) in the Compliance Monitoring and Enforcement table dated April, 2021.

Violation Details

Citation: GPT:262.34(A)(3)
Violation Short Description: Generators - Pre-transport
Violation Type: 262.C
Violation Determined Date: 19981110
Scheduled Compliance Date: 19981218
Return to Compliance: Unverifiable
Actual Return to Compl: 19990412
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 19981116
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Proposed Penalty Amount:
 Final Amount:
 Paid Amount:

Violation Details

Citation: GPT:262.34(c)(1)(i)
Violation Short Description: Generators - Pre-transport
Violation Type: 262.C
Violation Determined Date: 19981110
Scheduled Compliance Date: 19981218
Return to Compliance: Unverifiable
Actual Return to Compl: 19990412
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 19981116
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Violation Details

Citation: GPT:262.34(c)(2)
Violation Short Description: Generators - Pre-transport
Violation Type: 262.C
Violation Determined Date: 19981110
Scheduled Compliance Date: 19981218
Return to Compliance: Unverifiable
Actual Return to Compl: 19990412
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 19981116
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Violation Details

Citation: GPT:262.34(c)(1)(ii)
Violation Short Description: Generators - Pre-transport
Violation Type: 262.C
Violation Determined Date: 19981110
Scheduled Compliance Date: 19981218
Return to Compliance: Unverifiable
Actual Return to Compl: 19990412
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 125
Enforcement Type Description: DEP WARNING LETTER
Enforcement Action Date: 19981116
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Evaluation Details

Evaluation Start Date: 19981110
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Violation Short Description: Generators - Pre-transport
Return to Compliance Date: 19990412
Evaluation Agency: State

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 199709
Receive Date: 19970923
Handler Name: ELECTRO BAKE ENTERPRISES INC
Federal Waste Generator Code: 3
Generator Code Description: Very Small Quantity Generator
Source Type: Notification

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: F003
Waste Code Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Hazardous Waste Code: F005
Waste Code Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Hazardous Waste Handler Details

Sequence No: 199811
Receive Date: 19981110
Handler Name: ELECTRO BAKE ENTERPRISES INC
Federal Waste Generator Code: 3
Generator Code Description: Very Small Quantity Generator
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	Street No:	
Type:	Private	Street 1:	11220 5TH ST E
Name:	BARRETT JOHN	Street 2:	
Date Became Current:	19971113	City:	TREASURE ISLAND
Date Ended Current:		State:	FL
Phone:		Country:	US
Source Type:	Notification	Zip Code:	33706-3020

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	PO BOX 967
Name:	DAVID ARP				Street 2:	
Date Became Current:	19970923				City:	VENICE
Date Ended Current:	19971113				State:	FL
Phone:					Country:	US
Source Type:	Notification				Zip Code:	34284-9670
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	11220 5TH ST E
Name:	JOHN BARRETT				Street 2:	
Date Became Current:	19971113				City:	TREASURE ISLAND
Date Ended Current:					State:	FL
Phone:					Country:	US
Source Type:	Implementer				Zip Code:	33706-3020
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	11220 5TH ST E
Name:	BARRETT JOHN				Street 2:	
Date Became Current:	19971113				City:	TREASURE ISLAND
Date Ended Current:					State:	FL
Phone:					Country:	US
Source Type:	Implementer				Zip Code:	33706-3020
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	11220 5TH ST E
Name:	JOHN BARRETT				Street 2:	
Date Became Current:	19971113				City:	TREASURE ISLAND
Date Ended Current:					State:	FL
Phone:					Country:	US
Source Type:	Notification				Zip Code:	33706-3020
Owner/Operator Ind:	Current Owner				Street No:	
Type:	Private				Street 1:	PO BOX 967
Name:	DAVID ARP				Street 2:	
Date Became Current:	19970923				City:	VENICE
Date Ended Current:	19971113				State:	FL
Phone:					Country:	US
Source Type:	Implementer				Zip Code:	34284-9670

Historical Handler Details

Receive Dt: 19970923
Generator Code Description: Very Small Quantity Generator
Handler Name: ELECTRO BAKE ENTERPRISES INC

23 2 of 2 **W** 0.00 / 6.17 19.53 / 7 **ELECTRO BAKE ENTERPRISES INC** **FINDS/FRS**
2704 63RD AVE E
BRADENTON FL 34203-5307

Registry ID: 110008317641

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
FIPS Code:		12081				
HUC Code:		03100202				
Site Type Name:		STATIONARY				
Location Description:						
Supplemental Location:						
Create Date:		01-MAR-00				
Update Date:		08-AUG-10				
Interest Types:		CESQG, STATE MASTER				
SIC Codes:		7532				
SIC Code Descriptions:		TOP, BODY, AND UPHOLSTERY REPAIR SHOPS AND PAINT SHOPS				
NAICS Codes:		811121				
NAICS Code Descriptions:		AUTOMOTIVE BODY, PAINT, AND INTERIOR REPAIR AND MAINTENANCE.				
Conveyor:		RCRAINFO				
Federal Facility Code:						
Federal Agency Name:						
Tribal Land Code:						
Tribal Land Name:						
Congressional Dist No:		13				
Census Block Code:		120810008052014				
EPA Region Code:		04				
County Name:		MANATEE				
US/Mexico Border Ind:						
Latitude:		27.42988				
Longitude:		-82.529617				
Reference Point:		POINT WHERE WATER OR OTHER SUBSTANCE COULD BE DRAWN FROM ENVIRONMENT FOR DELIVERY TO A FACILITY OR DISTRIBUTION SYSTEM (SUBSTANCE DESTINATION COULD RANGE FROM A SINGLE RESIDENCE TO A LARGE FACILITY)				
Coord Collection Method:		INTERPOLATION-PHOTO				
Accuracy Value:		4				
Datum:		NAD83				
Source:						
Facility Detail Rprt URL:		https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110008317641				
Program Acronyms:						
FDM:44847, RCRAINFO:FL0001007186						

[24](#)

1 of 1

W

0.00 /
6.50

19.04 /
6

US Hwy 301 & 63rd St East
BRADENTON FL

SPILLS

Incident No: 51450
Incident Type: Inland

Incident Date: 09/02/2014
County: Manatee

Spill Details

Incident Status:
Incident Party Type:
Incident Party Name:
Pollutant Name: Diesel fuel
Pollutant Category:
Pollutant Actual Volume: 15
Pollutant Unit Measure: gallon

Criminal Indicator:
Hurricane Indicator:
Description: Fuel Leak/Overflow
On Scene Response:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Spill Details

Incident Status:		Criminal Indicator:	
Incident Party Type:		Hurricane Indicator:	
Incident Party Name:		Description:	Vehicle Accident
Pollutant Name:	Diesel fuel	On Scene Response:	
Pollutant Category:			
Pollutant Actual Volume:	15		
Pollutant Unit Measure:	gallon		

25	1 of 2	W	0.09 / 482.05	19.70 / 7	FLOWERS BAKING CO OF BRADENTON 6490 PARKLAND DR BRADENTON FL 34243	AST
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Facility ID:	9809059	Lat DD:	
Facility Status:	OPEN	Lat MM:	
ASTS:	1	Lat SS:	
USTS:	0	Long DD:	
Tanks:	1	Long MM:	
Facility Type:	C	Long SS:	
Contact:	JAY JOHNSON	Lat/Long Method:	
Facility Phone:	9415048096	Bad Addr Indicator:	
Owner ID:	60540	County:	MANATEE
Owner Phone:	2059430010	Dep Co:	C
Owner:	SNL DISTRIBUTION SERVICES CORP		
Owner Address1:	244 GOODWIN CREST DR #100		
Owner Address2:	ATTN: JAY JOHNSON		
Owner City:	BIRMINGHAM		
Owner State:	AL		
Owner Zip 5:	35209		
Owner Zip 4:			
Type Desc:	Fuel user/Non-retail		
Oculus Docs Inventory URL:	https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=9809059&CAT=11		
Information Portal Facility URL:	http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=9809059		
Information Portal Doc URL:	http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9809059/facility!search		

Tank Information

Tank ID:	1	Determination:	Double Walled
Tank Status:	U - In Service	Gallons:	10000
Status Date:	01-MAR-2007	Placement:	ABOVEGROUND
Installation Date:	01-MAR-2007	Tank Vessel Indic:	TANK
Substance:	D - Vehicular Diesel		

Piping

Tank ID:	1	Piping Description:	B-Steel/galvanized metal
Tkstat:	U		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Stat Date:		01-MAR-2007				
Tank ID:	1				Piping Description:	A-Abv, no soil contact
Tkstat:		U				
Stat Date:		01-MAR-2007				
Tank ID:	1				Piping Description:	I-Suction piping system
Tkstat:		U				
Stat Date:		01-MAR-2007				
Monitoring						
Tkstat:		U			Stat Date:	01-MAR-2007
Monitoring Desc:		F-Monitor dbl wall tank space				
Tkstat:		U			Stat Date:	01-MAR-2007
Monitoring Desc:		Q-Visual inspection of ASTs				

[25](#) 2 of 2 **W** 0.09 / 482.05 19.70 / 7 **FLOWERS BAKING CO OF BRADENTON 6490 PARKLAND DR BRADENTON FL 34243** **STCS**

Facility ID: 9809059 **City (Map):** BRADENTON
Status (Map): REVIEWED **County (Map):** 41
Contam (Map): **Zip4 (Map):**
Fac Type (Map): C **Zip5 (Map):** 34243
Fac Stat (Map): OPEN **County:** 41 - Manatee
Address (Map): 6490 PARKLAND DR **Type :** C - Fuel User/Non-Retail
Name (Map): FLOWERS BAKING CO OF BRADENTON **Status:** Open
Fac Name(OpenData): FLOWERS BAKING CO OF BRADENTON
Status (Open Data): REVIEWED
Facility Status (Open Data): OPEN
Facility Type Code (Open Data): C
Facility Type (Open Data): Fuel user/Non-retail
Fac Clnup Stat Cd(OpenData):
Fac Cleanup Status(OpenData):
Cleanup Status Effective Date: 1970/01/01 00:00:00+00
Address (Open Data): 6490 PARKLAND DR
City (Open Data): BRADENTON
Zip5 (Open Data): 34243
County (Open Data): MANATEE
CC County ID (Open Data): 41

FDEP Storage Tank Monitoring Open Data Details

Object ID: 61330 **Ver Prog:** TANKS-PETROLEUM CONTAMINATION
Regulated: YES **Ver Date:** 2007/04/11 09:34:03+00
OOIC: FACILITY **Elevation:**
Rel Feat: OFFST **El Datum:**
ALB East: 544954.33 **El Resolut:**

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
ALB North:	381119.62				EI Units:	
Datum:	HARN				Loc ID:	62501
Col Meth:	DPHO				Lat DD:	27
Col Name:	REEDER_J				Lat MM:	25
Col Date:	2007/04/11 09:34:03+00				Long DD:	82
Col Prog:	TANKS-PETROLEUM CONTAMINATION				Long MM:	31
Map Src:	2004 doqs				Lat SS:	
Map Scale:	2100				Long SS:	
Coord Acc:	4			X:		-82.5308589617764
Ver Meth:	DPHO			Y:		27.427838377471
Ver Name:	REEDER_J					
Col Aff:		DEPARTMENT OF ENVIRONMENTAL PR				
Ver Aff:		DEPARTMENT OF ENVIRONMENTAL PR				
Direct:						
Documents:		https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9809059/gis-facility!search				

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	62501	Coord Acc:	4
Object ID:	62501	Ver Meth:	DPHO
OOIC:	FACILITY	Ver Name:	REEDER_J
Site Type:	Fuel user/Non-retail	Ver Prog:	TANKS-PETROLEUM CONTAMINATION
Contam Ind:		Ver Date:	4/11/2007
Next action:	PLACARD 22-MAY-2020	Elevation:	
Fin Respon:		EI Datum:	
Rel Feat:	OFFST	EI Resolut:	
Alb East:	544954.33	EI Units:	
Alb North:	381119.62	Office:	SWD
Datum:	HARN	Phone:	9415048096
Col Meth:	DPHO	Operator:	DON SINGLTON
Col Name:	REEDER_J	Lat DD:	27
Col Date:	4/11/2007	Lat MM:	25
Col Prog:	TANKS-PETROLEUM CONTAMINATION	Long DD:	82
Map Src:	2004 doqs	Long MM:	31
Map Scale:	2100		
Col Aff:		DEPARTMENT OF ENVIRONMENTAL PR	
Ver Aff:		DEPARTMENT OF ENVIRONMENTAL PR	
Documents:		https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9809059/gis-facility!search	

FDEP - Storage Tank Contamination Monitoring (STCM) Details

Contact:	Don Singleton	Latitude:	27:25:40.2000
Phone:	941-504-8096	Longitude:	82:31:51.0800
District:	SWD	LL Method:	DPHO
County 1:	41 - Manatee	Account Owner:	Snl Distribution Services Corp
Name:	Flowers Baking Co Of Bradenton 6490 Parkland Dr Bradenton, FL 34243		

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Tank No:	1				Installed: 03/01/2007	
Placement:	ABOVE				Size: 10000	
Status:	In Service				Content: Vehicular Diesel	
Construction:		C - Steel I - Double Wall M - Spill Containment Bucket N - Flow Shut-Off O - Tight Fill				
Piping:		P - Level Gauges/Alarms A - Abv, No Soil Contact B - Steel/Galvanized Metal				
Monitoring:		I - Suction Piping System F - Monitor Dbl Wall Tank Space Q - Visual Inspection Of Asts				

[26](#) 1 of 1 E 0.08 / 422.57 17.64 / 5 HONORE TRAIL PARK 4012 & 4016 HONORE AVE SARASOTA FL 34230 [FINDS/FRS](#)

Registry ID: 110056994953
FIPS Code: FL115
HUC Code: 03100102
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 09-FEB-14
Update Date: 11-JAN-16
Interest Types: ICIS-NPDES NON-MAJOR
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: ICIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 121150027131012
EPA Region Code: 04
County Name: SARASOTA
US/Mexico Border Ind:
Latitude: 27.2977
Longitude: -82.3494
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110056994953
Program Acronyms:

NPDES:FLR10HP40

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction</i>	<i>Distance (mi/ft)</i>	<i>Elev/Diff (ft)</i>	<i>Site</i>	<i>DB</i>
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Unplottable Summary

Total: 12 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
DWM CONTAM	WELLCRAFT MARINE	67TH AVENUE EAST & 67TH STREET	BRADENTON FL		874810433
DWM CONTAM	PROSPECT ROAD CATTLE DIP VAT	PROSPECT ROAD	SARASOTA FL		877511739
ERNS		38TH STREET MAIN LINE, PALMETTO SUB	BRADENTON FL		807125259
FINDS/FRS	JARMARC INDUSTRIAL PARK	W OF 21ST ST E, 59TH AVE E	BRADENTON FL	34203	816408104
FINDS/FRS	33RD ST - MINI WAREHOUSE	33RD ST	BRADENTON FL	34201	816407712
FINDS/FRS	WOODLANDS TRACE	63RD AVENUE E.	BRADENTON FL	34203	825953767
FINDS/FRS	THE GLENRIDGE ON PALMER RANCH	INTERSECTION OF HONORE AVE & P	SARASOTA FL	34238	817301521
FINDS/FRS	HONORE AVENUE WEST EXTENSION	39TH ST E/63RD AVE E	BRADENTON FL	34282	816408646
HMIRS		LOCKWOOD RIDGE RD	SARASOTA FL		818404823
HMIRS		TUTTLE RD	SARASOTA FL		818490993
RCRA NON GEN	FLORIDA DEP SIS WELLCRAFT STUDY	T35S R18E S19 67TH AVE	SARASOTA FL	32399	810060317
SPILLS		Honore Avenue - Development	BRADENTON FL		875488872

Unplottable Report

Site: WELLCRAFT MARINE
67TH AVENUE EAST & 67TH STREET BRADENTON FL

DWM CONTAM

Facility ID: 65189
Facility Type:
Program Area: Responsible Party
Rank:
Operator:
Phone:
Name Changed:
Addr Changed:
Method:
Datum:
County: Manatee
Range:
Township:
Section:

Related Party ID:
Primary RP Role:
RP Begin Date:
RP Name:
RP Address1:
RP Address2:
RP City:
RP State:
RP Zip5:
RP Zip4:
Contact:
RP Phone:
RP Extension:
Rp Bad Addr Ind:

Program Details

Facility Status: OPEN
Priority Score: 27
Score Effective Dt:
Score When Ranked:
Offsite Contam: N
Program Eligible:
Ineligible:
District: SWD
Method: GGPS
Project Coordinator: CORE_S

Lat DD: 27.00
Lat MM: 25.00
Lat SS: 16.2594
Long DD: 82.00
Long MM: 32.00
Long SS: 37.7124
Datum: 83
Staff Assigned:
Priority:

Site: PROSPECT ROAD CATTLE DIP VAT
PROSPECT ROAD SARASOTA FL

DWM CONTAM

Facility ID: 373955
Facility Type:
Program Area: Storage Tanks
Rank:
Operator:
Phone:
Name Changed:
Addr Changed:
Method:
Datum:
County: MANATEE
Range:
Township:
Section:

Related Party ID:
Primary RP Role:
RP Begin Date:
RP Name:
RP Address1:
RP Address2:
RP City:
RP State:
RP Zip5:
RP Zip4:
Contact:
RP Phone:
RP Extension:
Rp Bad Addr Ind:

Program Details

Facility Status: OPEN
Priority Score:
Score Effective Dt:
Score When Ranked:
Offsite Contam:
Program Eligible:
Ineligible:
District: SWD

Lat DD: 27
Lat MM: 24
Lat SS: 22.9415
Long DD: 82
Long MM: 31
Long SS: 2.3412
Datum: 27
Staff Assigned: CROSS_JL

Method: UNVR
Project Coordinator:

Priority:

Site: 38TH STREET MAIN LINE,PALMETTO SUB BRADENTON FL ERNS

NRC Report No: 315142
Type of Incident: RAILROAD NON-RELEASE
Incident Cause: UNKNOWN
Incident Date: 11/24/1995 2:30:00 AM
Incident Location:
Incident Dtg: OCCURRED
Distance from City:
Distance Units:
Direction from City:
Location County: MANATEE
Potential Flag:
Year: Year 1995 Reports
Description of Incident: FREIGHT TRAIN STRUCK BY A PICK-UP TRUCK AT A GRADE CROSSING

Latitude Degrees:
Latitude Minutes:
Latitude Seconds:
Longitude Degrees:
Longitude Minutes:
Longitude Seconds:
Lat Quad:
Long Quad:
Location Section:
Location Township:
Location Range:

Calls Information

Date Time Received: 11/24/1995 3:38:46 AM
Date Time Complete: 11/24/1995 3:44:25 AM
Call Type: INC
Resp Company:
Resp Org Type: UNKNOWN

Responsible City:
Responsible State: XX
Responsible Zip:
Source: UNAVAILABLE

Incident Information

Tank ID:
Tank Regulated: U
Tank Regulated By:
Capacity of Tank:
Capacity Tank Units:
Description of Tank:
Actual Amount:
Actual Amount Units:
Tank Above Ground: ABOVE
NPDES:
NPDES Compliance: U
Init Contin Rel No:
Contin Rel Permit:
Contin Release Type:
Aircraft ID:
Aircraft Runway No:
Aircraft Spot No:
Aircraft Type: UNKNOWN
Aircraft Model:
Aircraft Fuel Cap:
Aircraft Fuel Cap U:
Aircraft Fuel on Brd:
Aircraft Fuel OB U:
Aircraft Hanger:
Road Mile Marker:
Power Gen Facility: U
Generating Capacity:
Type of Fixed Obj: UNKNOWN
Type of Fuel:
DOT Crossing No:
DOT Regulated: U
Pipeline Type: UNKNOWN
Pipeline Abv Ground: ABOVE
Pipeline Covered: U
Exposed Underwater: U
Railroad Hotline: No
Railroad Milepost: 916
Grade Crossing: Y

Building ID:
Location Area ID:
Location Block ID:
OCSG No:
OCSP No:
State Lease No:
Pier Dock No:
Berth Slip No:
Brake Failure: N
Airbag Deployed:
Transport Contain: U
Location Subdiv:
Platform Rig Name:
Platform Letter:
Allision: N
Type of Structure:
Structure Name:
Structure Oper: Y
Transit Bus Flag:
Date Time Norm Serv:
Serv Disrupt Time:
Serv Disrupt Units:
CR Begin Date:
CR End Date:
CR Change Date:
FBI Contact:
FBI Contact Dt Tm:
Passenger Handling:
Passenger Route: XXX
Passenger Delay: XXX
Sub Part C Test Req: XXX
Conductor Test:
Engineer Test:
Trainman Test:
Yard Foreman Test:
RCL Operator Test:
Brakeman Test:
Train Dispat Test:

Crossing Device Ty:
Ty Vehicle Involved: UNKNOWN
Device Operational: Y

Signalman Test:
Oth Employee Test:
Unknown Test:

Incident Details Information

Release Secured:	U	State Agen Report No:	
Release Rate:		State Agen on Scene:	
Release Rate Unit:		State Agen Notified:	
Release Rate Rate:		Fed Agency Notified:	
Est Duration of Rel:		Oth Agency Notified:	
Desc Remedial Act:	NONE	Body of Water:	
Fire Involved:	N	Tributary of:	
Fire Extinguished:	U	Near River Mile Make:	
Any Evacuations:	N	Near River Mile Mark:	
No Evacuated:		Offshore:	N
Who Evacuated:		Weather Conditions:	
Radius of Evacu:		Air Temperature:	
Any Injuries:	U	Wind Direction:	
No. Injured:		Wind Speed:	
No. Hospitalized:		Wind Speed Unit:	
No. Fatalities:	1	Water Supp Contam:	U
Any Fatalities:	Y	Water Temperature:	
Any Damages:	N	Wave Condition:	
Damage Amount:		Current Speed:	
Air Corridor Closed:	N	Current Direction:	
Air Corridor Desc:		Current Speed Unit:	
Air Closure Time:		EMPL Fatality:	
Waterway Closed:	N	Pass Fatality:	
Waterway Desc:		Community Impact:	N
Waterway Close Time:		Passengers Transfer:	UNK
Road Closed:	N	Passenger Injuries:	
Road Desc:		Employee Injuries:	
Road Closure Time:		Occupant Fatality:	
Road Closure Units:		Sheen Size:	
Closure Direction:		Sheen Size Units:	
Major Artery:	No	Sheen Size Length:	
Track Closed:	N	Sheen Size Length U:	
Track Desc:		Sheen Size Width:	
Track Closure Time:		Sheen Size Width U:	
Track Closure Units:		Sheen Color:	
Track Close Dir:		Dir of Sheen Travel:	
Media Interest:		Sheen Odor Desc:	
Medium Desc:	RAIL REPORT (N/A)	Duration Unit:	
Addl Medium Info:		Additional Info:	TRAIN STOPPED AT CROSSING/TRUCK RAN THROUGH FLASHERS/FATALITY TO DRIVER OF TRUCK

Site: JARMARC INDUSTRIAL PARK
W OF 21ST ST E, 59TH AVE E BRADENTON FL 34203

[FINDS/FRS](#)

Registry ID: 110021021188
FIPS Code: 12081
HUC Code: 03100201
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 06-MAY-05
Update Date: 05-MAR-13
Interest Types: ICIS-NPDES NON-MAJOR, STATE MASTER, STORM WATER CONSTRUCTION
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: ICIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:

Congressional Dist No: 13
Census Block Code: 120810008051026
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.434722
Longitude: -82.538056
Reference Point:
Coord Collection Method: INTERPOLATION-PHOTO
Accuracy Value: 30
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110021021188
Program Acronyms:

FDM:4030, NPDES:FLR10Z845

Site: 33RD ST - MINI WAREHOUSE
33RD ST BRADENTON FL 34201

[FINDS/FRS](#)

Registry ID: 110032814747
FIPS Code: 12081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 02-DEC-07
Update Date: 05-MAR-13
Interest Types: ICIS-NPDES NON-MAJOR, STATE MASTER, STORM WATER CONSTRUCTION
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008032001
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.47671
Longitude: -82.52198
Reference Point: ENTRANCE POINT OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 30
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110032814747
Program Acronyms:

FDM:81399, NPDES:FLR10FT37

Site: WOODLANDS TRACE
63RD AVENUE E. BRADENTON FL 34203

[FINDS/FRS](#)

Registry ID: 110060363761
FIPS Code: FL081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 05-SEP-14
Update Date: 07-OCT-16

Interest Types: ICIS-NPDES NON-MAJOR, STORM WATER CONSTRUCTION
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: ICIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 120810008072050
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.426457
Longitude: -82.515115
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110060363761
Program Acronyms:

NPDES:FLR100A60

Site: THE GLENRIDGE ON PALMER RANCH
INTERSECTION OF HONORE AVE & P SARASOTA FL 34238

[FINDS/FRS](#)

Registry ID: 110015626740
FIPS Code: FL115
HUC Code: 03100201
Site Type Name: STATIONARY
Location Description:
Supplemental Location: ALMER RANC
Create Date: 21-AUG-03
Update Date: 05-DEC-16
Interest Types: ICIS-NPDES NON-MAJOR, STORM WATER CONSTRUCTION
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: ICIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 13
Census Block Code: 121150020103002
EPA Region Code: 04
County Name: SARASOTA
US/Mexico Border Ind:
Latitude: 27.238806
Longitude: -82.478472
Reference Point:
Coord Collection Method:
Accuracy Value: 3
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110015626740
Program Acronyms:

NPDES:FLR10J932

Site: HONORE AVENUE WEST EXTENSION

Registry ID: 110035715839
FIPS Code: 12081
HUC Code: 03100202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 24-APR-08
Update Date:
Interest Types: STATE MASTER
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code: 120810020032031
EPA Region Code: 04
County Name: MANATEE
US/Mexico Border Ind:
Latitude: 27.49945
Longitude: -82.51433
Reference Point: ENTRANCE POINT OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-NEAREST INTERSECTION
Accuracy Value: 200
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110035715839
Program Acronyms:

FDM:4070

Site: LOCKWOOD RIDGE RD SARASOTA FL HMIRS

Incident County: SARASOTA

HMIR Incident Reports

<p> Report No: I-1993100719 Report Type: A hazardous material incident Date of Incident: 1993-09-29 Time of Incident: 1030 Haz Class Code: Hazardous Class: 3 Commodity Short Nm: GASOLINE INCLUDES GASOLI Commodity Long Nm: GASOLINE INCLUDES GASOLINE MIXED WITH ETHYL ALCOHOL, WITH NOT MORE THAN 10% ALCOHOL Trade Name: GASOLINE ID No: UN1203 Haz Waste Ind: No Haz Waste EPA No: HMIS Tox Inhalation?: No TIH Hazard Zone: Qty Released: 10 Unit of Measure: Liquid - Gallon What Failed: What Failed Desc: How Failed Code: How Failed Desc: Failure Cause Code: 529 Failure Cause Desc: Overfilled </p>	<p> Fed DOT Agency Nm: Fed DOT Report No: Report Submit Src: Paper Inc Multiple Rows: No Inc Non US State: Mode Transport: Highway Transport Phase: Loading Incident Occrrnce: Mat Ship Approval?: No Mat Ship Approv No: Undecl Hazmat Ship?: No Packaging Type: Portable Tank Packing Group: Carrier Reporter: FLORIDA ROCK & TANK LINES INC CR Street Name: 155 EAST 21ST STREET CR City: JACKSONVILLE CR State: FL CR Postal Code: 32206 CR Non US State: CR Fed DOT ID: 29628 CR Hazmat Reg ID: CR Country: US </p>
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Ident. Markings:
Cont1 Pkging Type:
Cont1 Const Mat:
Cont1 Head Type:
Cont1 Pkg Capacity: 9000
C1 Capacity UOM: LGA
Cont1 Pkg Amt: 0
C1 Pkg Amt UOM:
Cont1 Pkg No: 1
C1 Pkg NO Failed: 1
Cont1 Pkg Mnfrctr: HEIL COMPANY
Cont1 Pkg Mnfrct Dt: 0-00-00 00:00:00
Cont1 Pkg Serial NO: IHLA3A7B6M
C1 Pkg Last Test Dt: 0-00-00 00:00:00
C1 Test Const Mat:
C1 Pkg Dsign Pres.: 0
C1 Dsign Press UOM:
C1 Pkg Shell Thick: 0
C1 Shell Thick UOM:
C1 Head Thickness: 0
C1 Head Thick UOM:
C1 Pkg Srvc Pres.: 0
C1 Srvc Press UOM:
C1 Valve/Device Fail?: No
C1 Device Type:
C1 Device Mnfrctr:
C1 Device Model:
NRC No:

RAM Pkg Category:
RAM Pkg Cert.: FALSE
RAM Pkg Cert. NBR:
RAM Nuclide S:
RAM Transport Index:
RAM UOM:
RAM Activity Rpted: 0
RAM UOM Rpted:
RAM Activity: 0
RAM Activity UOM:
RAM Mat Safety:
Spillage Result: Yes
Fire Result: No
Explosion Result: No
Water Sewer Result: No
Gas Dispersion: No
Environment Damage: No
No Release Result: No
Fire EMS Report: No
Fire EMS EMS Report:
Police Report: No
Police Report No:
In House Cleanup: No
Other Cleanup: No
Damage > 500: No
Material Loss: 10
Carrier Damage: 0
Property Damage: 0
Response Cost: 0
Remediation Cost: 75
Damage Old Form: 0
Total Damages Amt: 85
Hazmat Fatality: No
Haz Fatal Employees: 0
Haz Fatal Respndrs: 0
Haz Fatal Gen Public: 0
Tot Hazmat Fatalities: 0
Non Hazmat Fatality: No
Non Hazmat Fatals: 0
Hazmat Injury: No
Haz Hospital Empl: 0
Haz Hospital Resp: 0

Shipper Name: CHEVRON USA
Shipper Street Name:
Shipper City: PORT TAMPA CITY
Shipper State: FL
Shipper Postal:
Shipper Non US St:
Shipper Country: US
Shipper Waybill: 614932
Ship Hazmat Reg ID:
Origin City:
Origin State:
Origin Postal:
Origin Non US St:
Origin Country: US
Destination City: SARASOTA
Destination State: FLORIDA
Destination Postal:
Destination Non US:
Destination Country: US
Cont2 Package Type:
Cont2 Const Mat:
Cont2 Pkg Capacity: 0
Cont2 Capacity UOM:
Cont2 Pkg Amount: 0
Cont2 Pkg Amt UOM:
Cont2 Pkg No: 0
Cont2 Pkg No Failed: 0

Haz NonHosp Public: 0
Haz NonHosp Old:
Tot Haz Non Hosp Inj:
Total Hazmat Injuries: 0
Evacuation Indicator: No
Public Evacuated: 0
Employees Evac: 0
Total Evacuated: 0
Total Evacuation Hrs: 0
Major Artery Closed: No
Mjr Artery Hrs Closed: 0
Material Involved: No
Estimated Speed: 0
Weather Conditions:
Vehicle Overturn: No
Vehicle Left Roadway: No
Passenger Aircraft: No
Cargo Baggage:
Ship Non Transport: No
Ship Air First Flight: No
Ship Air Subflight: No
Ship Init Transport: No
Ship Phase Transfer: No
Contact Name: LUC CLEYMAN
Contact Title: DIRECTOR OF SAFETY
Contact Business:
Contact Street:
Contact City:
Contact State:
Contact Postal:
Contact Non US St:
Contact Country: US
Inc. Report Prepared:
HMIS Serious Incidnt: No
HMIS Serious Fatality: No
HMIS Serious Injury: No
HMIS Flight Plan: No
HMIS Serious Evacs: No
HMIS Major Artery: No
HMIS Bulk Release: No
HMIS Marine Pollutnt: No
HMIS Radioactive: No

Haz Hosp Gen Public:	0	HMIS Gen Pkg Type:	TANK
Haz Hosp Old Form:	0	HMIS Container Code:	TANK TRK
Total Haz Hosp Inj:	0	HMIS Container Desc:	Tank truck, tank mounted on truck chassis
Haz Non Hosp Empl:	0	HMIS Bulk Incident:	Yes
Haz Non Hosp Resp:	0	Undeclared Shipment:	No
Description of Events:	WHILE PUMPING OUT UNDERGROUND TANK, STORAGE COMPARTMENT OVERFILLED CAUSING A SPILL OF APPROX. FIVE TO TEN GALLONS OF GASOLINE. SITE CLEANED UP BY FIRE DEPARTMENT. NO RELEASE TO THE ENVIRONMENT.		

Recommend Actions Taken:

Site: TUTTLE RD SARASOTA FL HMIRS

Incident County: SARASOTA

HMIR Incident Reports

Report No:	I-2001021106	Fed DOT Agency Nm:	
Report Type:	A hazardous material incident	Fed DOT Report No:	
Date of Incident:	2001-02-13	Report Submit Src:	Paper
Time of Incident:	1035	Inc Multiple Rows:	No
Haz Class Code:		Inc Non US State:	
Hazardous Class:	3	Mode Transport:	Highway
Commodity Short Nm:	FLAMMABLE LIQUIDS, N.O.S.	Transport Phase:	In Transit
Commodity Long Nm:	FLAMMABLE LIQUIDS, N.O.S.	Incident Occrrnce:	
Trade Name:	TOLUENE XYLENE ACETO	Mat Ship Approval?:	No
ID No:	UN1993	Mat Ship Approv No:	
Haz Waste Ind:	Yes	Undecl Hazmat Ship?:	No
Haz Waste EPA No:		Packaging Type:	Non-Bulk
HMIS Tox Inhalation?:	No	Packing Group:	
TIH Hazard Zone:		Carrier Reporter:	ONYX ENVIRONMENTAL SERVICES
Qty Released:	0.25	CR Street Name:	1 EDEN LANE
Unit of Measure:	Liquid - Gallon	CR City:	FLANDERS
What Failed:	103	CR State:	NJ
What Failed Desc:	Basic Material	CR Postal Code:	07852
How Failed Code:	309	CR Non US State:	
How Failed Desc:	Punctured	CR Fed DOT ID:	609181
Failure Cause Code:		CR Hazmat Reg ID:	
Failure Cause Desc:		CR Country:	US
Ident. Markings:		Shipper Name:	COAST CADILLAC COMPANY
Cont1 Pkging Type:		Shipper Street Name:	2200 BEE RIDGE RD
Cont1 Const Mat:		Shipper City:	SARASOTA
Cont1 Head Type:		Shipper State:	FL
Cont1 Pkg Capacity:	55	Shipper Postal:	34239
C1 Capacity UOM:	LGA	Shipper Non US St:	
Cont1 Pkg Amt:	0	Shipper Country:	US
C1 Pkg Amt UOM:		Shipper Waybill:	MMI0089176
Cont1 Pkg No:	37	Ship Hazmat Reg ID:	
C1 Pkg NO Failed:	1	Origin City:	
Cont1 Pkg Mnfctr:	NOT REPORTED BY CARRIER	Origin State:	
Cont1 Pkg Mnfc Dt:	0-00-00 00:00:00	Origin Postal:	
Cont1 Pkg Serial NO:		Origin Non US St:	
C1 Pkg Last Test Dt:	0-00-00 00:00:00	Origin Country:	US
C1 Test Const Mat:		Destination City:	REECE CITY
C1 Pkg Dsign Pres.:	0	Destination State:	ALABAMA
C1 Dsign Press UOM:		Destination Postal:	35954
C1 Pkg Shell Thick:	0	Destination Non US:	
C1 Shell Thick UOM:		Destination Country:	US
C1 Head Thickness:	0	Cont2 Package Type:	
C1 Head Thick UOM:		Cont2 Const Mat:	
C1 Pkg Srvc Pres.:	0	Cont2 Pkg Capacity:	0
C1 Srvc Press UOM:		Cont2 Capacity UOM:	
C1 Valve/Device Fail?:	No	Cont2 Pkg Amount:	0
C1 Device Type:		Cont2 Pkg Amt UOM:	
C1 Device Mnfctr:		Cont2 Pkg No:	0
C1 Device Model:		Cont2 Pkg No Failed:	0
NRC No:		Haz NonHosp Public:	0
RAM Pkg Category:			

RAM Pkg Cert.: FALSE
RAM Pkg Cert. NBR:
RAM Nuclide S:
RAM Transport Index:
RAM UOM:
RAM Activity Rpted: 0
RAM UOM Rpted:
RAM Activity: 0
RAM Activity UOM:
RAM Mat Safety:
Spillage Result: Yes
Fire Result: No
Explosion Result: No
Water Sewer Result: No
Gas Dispersion: No
Environment Damage: No
No Release Result: No
Fire EMS Report: No
Fire EMS EMS Report:
Police Report: No
Police Report No:
In House Cleanup: No
Other Cleanup: No
Damage > 500: No
Material Loss: 0
Carrier Damage: 100
Property Damage: 0
Response Cost: 0
Remediation Cost: 100
Damage Old Form: 0
Total Damages Amt: 200
Hazmat Fatality: No
Haz Fatal Employees: 0
Haz Fatal Respndrs: 0
Haz Fatal Gen Public: 0
Tot Hazmat Fatalities: 0
Non Hazmat Fatality: No
Non Hazmat Fataals: 0
Hazmat Injury: No
Haz Hospital Empl: 0
Haz Hospital Resp: 0
Haz Hosp Gen Public: 0
Haz Hosp Old Form: 0
Total Haz Hosp Inj: 0
Haz Non Hosp Empl: 0
Haz Non Hosp Resp: 0
Description of Events:

Haz NonHosp Old:
Tot Haz Non Hosp Inj:
Total Hazmat Injuries: 0
Evacuation Indicator: No
Public Evacuated: 0
Employees Evac: 0
Total Evacuated: 0
Total Evacuation Hrs: 0
Major Artery Closed: No
Mjr Artery Hrs Closed: 0
Material Involved: No
Estimated Speed: 0
Weather Conditions:
Vehicle Overturn: No
Vehicle Left Roadway: No
Passenger Aircraft: No
Cargo Baggage:
Ship Non Transport: No
Ship Air First Flight: No
Ship Air Subflight: No
Ship Init Transport: No
Ship Phase Transfer: No
Contact Name: DAVID L HEMMING
Contact Title: FLLET SUPERVISOR
Contact Business:
Contact Street:
Contact City:
Contact State:
Contact Postal:
Contact Non US St:
Contact Country: US
Inc. Report Prepared:
HMIS Serious Incidnt: No
HMIS Serious Fatality: No
HMIS Serious Injury: No
HMIS Flight Plan: No
HMIS Serious Evacs: No
HMIS Major Artery: No
HMIS Bulk Release: No
HMIS Marine Pollutnt: No
HMIS Radioactive: No
HMIS Gen Pkg Type: DRUM METAL
HMIS Container Code: 1A1
HMIS Container Desc: Non-removable head steel drum
HMIS Bulk Incident: No
Undeclared Shipment: No

PICKED UP COAST CAD AT 10:15 TUESDAY 2-13-01. PICKED UP 4 DRUMS AT SITE....>I HAVE TO BACK INTO THE DEALERSHIP TO GET TO THE BODYSHOP, IN DOING SO I BLOCK IN CUSTOMERS CARS, AFTER TWO DRUMS ON THE LIFT A CUSTOMER ASKED ME TO MOVE, I TOLD HIM THAT I WOULD BE ABOUT 10 MIN. WELL EVERY TWO MIN. HE WOULD ASK OR TELL ME HE HAD TO LEAVE, SO I HURRIED UP AND LOADED THE LAST TWO DRUMS, THEN THE MANAGER CAME OUT AND TOLD ME HE MIGHT HAVE ONE MORE DRUM, SO I LEFT THE DRUM DOLLY LYING ON ITS WHEELS, WAITING ON HIM, I FINISHED PUTTING MY SHIPPING LABELS ON THE DRUMS AND WRITING MY MANIFEST, THE MANGER TOLD ME HE DID NOT HAVE ANOTHER DRUM SO I PUT MY DRUM BAR IN PLACE AND SHUT THE BACK DOOR. WENT TO THE OFFICE AND HAD MANIFEST SIGNED, FORGETTING TO FLIP THE DOLLY OVER. IN DOING SO I LEFT THE DEALERSHIP AT 10:35, MAKE A RIGHT TURN ON TO THE FOURLANE HIGHWAY WENT 1/4 MILE TO TUTTLE RD. STOPPED AT LIGHT TO MAKE LEFT TURN. MADE TURN AT LIGHT WENT ABOUT 1/2 MILE STOPPED AT R/R WHEN A MOTORIST FLAGGED ME SOMETHING WAS WRONG AT THE BACK OF MY TRAILER, THAT MUST HAVE BEEN WHEN DRUM DOLLY WENT FORWARD AND HIT DRUM PUTTING A 1 INCH HOLE IN DRUM ABOUT 4 INCH ABOVE FLOOR, WENT OVER R/R AND PULLED INTO THE MED OF THE ROAD. FLASHERS ON, AT BACK OF TRAILER SAW SPILLAGE, GRABBED MY MASK OUT OF SIDE BOX, OPENED BACK DOOR SAW HOLE IN DRUM AND KNEW WHAT HAD HAPPENED. LAYED DRUM ON ITS SIDE, PUT SOME PUTTY IN THE HOLE TO DETAIN SPILL TILL I COULD OPEN OVERPACK DRUM. OPENED OVERPACK, PUT OVERPACK DRUM OVER LEAKING DRUM, TOOK DRUM FLIP BAR AND STOOD DRUM UP, LID AND RING AND 7/8 WRENCH IT WAS DONE, THEN THE FIRE DEPT, SHOWED UP AND THE SARASOTA POLICE, THEN I TOOK FLOOR DRY AND COVERED SPILL IN TRAILER AND ON THE ASPHALT, THEN I WENT TO THE CAB OF TRUCK AND CALLED DAVE HEMMING. ESTIMATED DURATION OF TIME ABOUT 2-3 MIN OF SPILLAGE. SPILLAGE TIME - 10:30 TO 10:41 ABOUT 20-25 GALS OF PRODUCT. (EXACT LOCATION - 200 BLOCK OF TUTTLE RD. SARASOTA, FLA.) FIRE DEPT. CHECKED THE SPILL SAW I HAD IT DETAINED, SO WE STOOD AROUND WAITING ON THE LOCAL EPA TO SHOW UP. WHEN HE GOT THEIR, HE LET THE FIRE DEPT. GO THEN HE TOLD ME TO PUT SOME MORE FLOOR DRY DOWN ON THE ASPHALT, I BROOMED IT INTO THE PAVEMENT AND HE HELPED ME CLEAN IT UP INTO A 5 GAL BUCKET

WHICH I PUT IN THE TRAILER AND I LEFT, AT 1:00PM. TWO HOURS LATER I GOT TO FREEHOLD IN BARTOW, FLA. OFFLOADED 37 DRUMS. CLEANED INTERIOR OF TRAILER AND TOOK THE RAGS AND THE FLOOR DRY AND THE FLOOR DRY FROM THE SPILL SITE AND PUT IN THE 85 GAL OVEPACK DRUM. GOT TO BARTOW AT 3:00 LEFT AT 5:30 GOT HOME AT 7:00PM 1/2 POST=7:30 NO ONE GAVE ME ANY NAMES OR #, S OR ANYONE TO CONTACT..WHEN EPA LEFT HE SAID TO HAVE A NICE DAY

Recommend Actions Taken:

Site: FLORIDA DEP SIS WELLCRAFT STUDY
T35S R18E S19 67TH AVE SARASOTA FL 32399

RCRA NON GEN

EPA Handler ID: FL0000002741
Gen Status Universe: No Report
Contact Name: DAVID PHILLIPS
Contact Address: 2600 , BLAIRSTONE RD , , TALLAHASSEE , FL, 32399-6516 , US
Contact Phone No and Ext: 904-488-0190
Contact Email:
Contact Country: US
County Name: MANATEE
EPA Region: 04
Land Type: State
Receive Date: 20000908
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of April 2021, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 199310
Receive Date: 19931018
Handler Name: FLORIDA DEP SIS WELLCRAFT STUDY
Source Type: Notification
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: D002
Waste Code Description: CORROSIVE WASTE

Hazardous Waste Handler Details

Sequence No: 200009
Receive Date: 20000908
Handler Name: FLORIDA DEP SIS WELLCRAFT STUDY
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Private
Name: DAVID PHILLIPS
Date Became Current: 19991026
Date Ended Current:
Phone:
Source Type: Notification

Street No:
Street 1: 2600 BLAIRSTONE RD
Street 2:
City: TALLAHASSEE
State: FL
Country: US
Zip Code: 32399-6516

Owner/Operator Ind: Current Owner
Type: Private
Name: DAVID PHILLIPS
Date Became Current: 19991026
Date Ended Current:
Phone:
Source Type: Implementer

Street No:
Street 1: 2600 BLAIRSTONE RD
Street 2:
City: TALLAHASSEE
State: FL
Country: US
Zip Code: 32399-6516

Historical Handler Details

Receive Dt: 19931018
Generator Code Description: Large Quantity Generator
Handler Name: FLORIDA DEP SIS WELLCRAFT STUDY

Site: **Honore Avenue - Development BRADENTON FL** **SPILLS**

Incident No: 62577 **Incident Date:** 2/27/2019
Incident Type: Inland **County:** Manatee

Spill Details

Incident Status: Saved **Criminal Indicator:** No
Incident Party Type: -- **Hurricane Indicator:** No
Incident Party Name: -- **Description:** --
Pollutant Name: -- **On Scene Response:** No
Pollutant Category: --
Pollutant Actual Volume: --
Pollutant Unit Measure: --

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

Formerly Utilized Sites Remedial Action Program:

[DOE FUSRAP](#)

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

Government Publication Date: Mar 4, 2017

National Priority List:

[NPL](#)

National Priorities List (Superfund)-NPL: EPA's (United States Environmental Protection Agency) list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action.

Government Publication Date: Apr 27, 2021

National Priority List - Proposed:

[PROPOSED NPL](#)

Includes sites proposed (by the EPA, the state, or concerned citizens) for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.

Government Publication Date: Apr 27, 2021

Deleted NPL:

[DELETED NPL](#)

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Government Publication Date: Apr 27, 2021

SEMS List 8R Active Site Inventory:

[SEMS](#)

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

Government Publication Date: Mar 23, 2021

Inventory of Open Dumps, June 1985:

[ODI](#)

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites:

[SEMS ARCHIVE](#)

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Government Publication Date: Mar 23, 2021

Comprehensive Environmental Response, Compensation and Liability Information System -

[CERCLIS](#)

CERCLIS:

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

EPA Report on the Status of Open Dumps on Indian Lands:

[IODI](#)

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

CERCLIS - No Further Remedial Action Planned:

[CERCLIS NFRAP](#)

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens:

[CERCLIS LIENS](#)

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action:

[RCRA CORRACTS](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Apr 5, 2021

RCRA non-CORRACTS TSD Facilities:

[RCRA TSD](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Government Publication Date: Apr 5, 2021

RCRA Generator List:

[RCRA LQG](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Apr 5, 2021

RCRA Small Quantity Generators List:

[RCRA SQG](#)

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Apr 5, 2021

RCRA Very Small Quantity Generators List:

[RCRA VSQG](#)

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Apr 5, 2021

RCRA Non-Generators:

[RCRA NON GEN](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Apr 5, 2021

Federal Engineering Controls-ECs:

[FED ENG](#)

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Feb 23, 2021

Federal Institutional Controls- ICs:

[FED INST](#)

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

Government Publication Date: Feb 23, 2021

Land Use Control Information System:

[LUCIS](#)

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Emergency Response Notification System:

[ERNS 1982 TO 1986](#)

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System:

[ERNS 1987 TO 1989](#)

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System:

[ERNS](#)

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Nov 9, 2020

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database:

[FED BROWNFIELDS](#)

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 6, 2021

FEMA Underground Storage Tank Listing:

[FEMA UST](#)

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan:

[FRP](#)

List of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Dec 2, 2020

Historical Gas Stations:

[HIST GAS STATIONS](#)

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries:

[REFN](#)

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

Government Publication Date: Jul 10, 2020

Petroleum Product and Crude Oil Rail Terminals:

[BULK TERMINAL](#)

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

Government Publication Date: Apr 28, 2020

LIEN on Property:

[SEMS LIEN](#)

The EPA Superfund Enterprise Management System (SEMS) provides LIEN information on properties under the EPA Superfund Program.

Government Publication Date: Mar 23, 2021

Superfund Decision Documents:

[SUPERFUND ROD](#)

This database contains a listing of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD), along with other associated memos and files. This information is maintained and made available by the US EPA (Environmental Protection Agency).

Government Publication Date: Jun 28, 2021

State

Superfund Waste Cleanup & State-Funded Action Sites:

[SHWS](#)

List of hazardous waste cleanup sites participating in various federal and state funded cleanup programs. Florida's State-Funded Action Sites and Superfund Waste Cleanup Sites lists are maintained and made available by the Florida Department of Environmental Protection (FDEP). This database is state equivalent CERCLIS.

Government Publication Date: May 18, 2021

Delisted State-Funded Action Sites:

[DELISTED SHWS](#)

This database contains a list of closed hazardous waste sites of various federal and state funded cleanup programs that were removed from the Florida Department of Environmental Protection (FDEP).

Government Publication Date: May 18, 2021

Florida Department of Environmental Protection Cleanup Sites:

[CLEANUP DEP](#)

The Cleanup Sites layer feeds the FDEP's Contamination Locator Map (CLM). It provides locations and document links for sites currently in the cleanup process and sites awaiting cleanup funding. Cleanup programs include: Brownfields, Petroleum, EPA Superfund (CERCLA), Drycleaning, Responsible Party Cleanup, State Funded Cleanup, State Owned Lands Cleanup and Hazardous Waste Cleanup.

Government Publication Date: Oct 28, 2020

Waste Cleanup Responsible Party Sites:

[WCRPS](#)

List of Open, Closed, and Inactive Waste Cleanup Responsible Party sites made available by the Florida Department of Environmental Protection.

Government Publication Date: Apr 11, 2021

Delisted Waste Cleanup Responsible Party Sites:

[DELISTED WCRPS](#)

List of sites which once appeared on - and have since been removed from - the list of Waste Cleanup Responsible Party Sites made available by the Florida Department of Environmental Protection.

Government Publication Date: Apr 11, 2021

Solid Waste Facilities and Landfills:

[SWF/LF](#)

The Solid Waste Facility Inventory Report made available by the Florida Department of Environmental Protection (FDEP) includes all types of authorized and unauthorized facilities: municipal solid waste, landfills, dumps, construction and demolition disposal, recycling facilities, and more.

Government Publication Date: Mar 24, 2021

Leaking Tanks:

[LST](#)

The Storage Tank Regulation Section is part of the Petroleum Restoration Program in the Florida Department of Environmental Protection (FDEP)'s Division of Waste Management. In 1983, Florida was one of the first states in the union to pass legislation and adopt rules for underground and aboveground storage tank systems. Since then, over 28,000 facilities have reported discharges of petroleum products from storage tank systems. Florida relies on groundwater for about 92 percent of its drinking water needs, and has some of the most stringent rules in the country.

Government Publication Date: May 17, 2021

Delisted Leaking Tanks:

[DELISTED LST](#)

Whereas Leaking Tanks (LST) includes only facilities which currently have contamination as recorded by the Florida Department of Environmental Protection, this list contains facilities which were once included in LST data but no longer appear on the list made available by FDEP. Facilities may be removed from the current LST list because the discharge has been cleaned up, or the discharge is not required for 62-770.

Government Publication Date: May 17, 2021

Underground Storage Tanks:

[UST](#)

List of underground storage tank locations made available by the Florida Department of Environmental Protection (FDEP). In an effort to minimize the occurrence and environmental risks of releases and discharges, FDEP administers standards pertaining to the construction, installation, operation, maintenance, repair, closure, and disposal of underground storage tank systems that store regulated substances.

Government Publication Date: Mar 1, 2021

Aboveground Storage Tanks:

[AST](#)

The Florida Department of Environmental Protection (FDEP) provides standards for aboveground storage tanks (ASTs) that have individual storage tank capacities greater than 550 gallons. The state also regulates the registration, construction, installation, operation, maintenance, repair, closure, and disposal of storage tank systems that store regulated substances. The listing of regulated aboveground storage tank facilities is maintained by FDEP.

Government Publication Date: Mar 1, 2021

Delisted AST UST Storage Tanks:

[DEL UST AST TANK](#)

This database contains a list of closed UST and AST storage tank sites that were removed from the Florida Department of Environmental Protection (FDEP) storage tank database.

Government Publication Date: Jul 2, 2015

Delisted Storage Tanks:

[DEL STORAGE TANK](#)

This database contains a list of closed storage tank sites that were removed from the Florida Department of Environmental Protection (FDEP) storage tank database.

Government Publication Date: Jun 24, 2021

Federal Facilities Listing:

[FF TANKS](#)

The Florida Department of Environmental Protection (FDEP) Storage Tank Program registers facilities and storage tanks where aboveground or underground storage tanks store pollutants, hazardous substances, and/or mineral acid substances regulated by Chapter 62-761, Florida Administrative Code, or when aboveground storage tanks or compression vessels store a hazardous substance which requires registration according to Chapter 376, Florida Statutes.

Government Publication Date: Jun 24, 2021

Storage Tank/Contaminated Facility Search:

[STCS](#)

List of facilities and tanks in the Florida Department of Environmental Protection (FDEP) Bureau of Petroleum Storage Systems Storage Tank/Contaminated Facility Search which do not currently have active, regulated underground or aboveground storage tanks (USTs or ASTs) containing petroleum. Note that tank details do not appear for facilities for which all tanks have been removed.

Government Publication Date: Mar 2, 2021

Institutional Controls Registry:

[INST](#)

The Institutional Controls registry is maintained by the Florida Department of Environmental Protection (FDEP). The registry aims to help preserve adequate protection of contaminated soil regions and help to minimize any chances of exposure.

Government Publication Date: Dec 10, 2020

Engineering Controls:

[ENG](#)

A listing of all engineering controls that are in place to eliminate or reduce the potential for contaminant migration and exposure to contaminants. These controls may include caps, barriers, guards or fences. The list is maintained by the Florida Department of Environmental Protection (FDEP).

Government Publication Date: Dec 10, 2020

Voluntary Cleanup Sites:

[VCP](#)

A listing of active and closed voluntary cleanup sites registered by the Florida Department of Environmental Protection (FDEP).

Government Publication Date: Dec 31, 2020

Brownfield Sites:

[BROWNFIELDS](#)

Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. This is a list of sites within designated Brownfield Areas within Florida where Brownfield Site Rehabilitation Agreement (BSRA)s have been executed between FDEP and a responsible party.

Government Publication Date: May 24, 2021

Brownfield Areas:

[BROWNFIELD AREA](#)

Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. This is a list of Brownfield Areas, defined by the FDEP as contiguous areas of one or more brownfield sites, some of which may not be contaminated, that have been designated as such by a local government resolution. Such areas may include all or portions of community redevelopment areas, enterprise zones, empowerment zones, other such designated economically deprived communities and areas, and Environmental Protection Agency (EPA) designated brownfield pilot projects. Because a variety of sources and methods were used to derive information for this data, locations are approximate.

Government Publication Date: May 28, 2021

Tribal

Leaking Underground Storage Tanks (LUSTs) on Indian Land:

[INDIAN LUST](#)

Leaking Underground Storage Tanks (LUSTs) on Tribal/Indian Lands in EPA Region 4, which includes Florida.

Government Publication Date: Apr 14, 2020

Underground Storage Tanks (USTs) on Indian Lands:

[INDIAN UST](#)

Listing of underground storage tanks (USTs) on Tribal/Indian Lands in EPA Region 4, which includes Florida.

Government Publication Date: Apr 14, 2020

Delisted Tribal Leaking Storage Tanks:

DELISTED ILST

Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.

Government Publication Date: Apr 14, 2020

Delisted Tribal Underground Storage Tanks:

DELISTED IUST

Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.

Government Publication Date: Apr 14, 2020

County

No County databases were selected to be included in the search.

Additional Environmental Record Sources

Federal

PFOA/PFOS Contaminated Sites:

PFAS NPL

List of sites where PFOA or PFOS contaminants have been found in drinking water or soil. Made available by the Federal Environmental Protection Agency (EPA).

Government Publication Date: Mar 1, 2021

Facility Registry Service/Facility Index:

FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Nov 2, 2020

Toxics Release Inventory (TRI) Program:

TRIS

The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

Government Publication Date: Feb 19, 2020

Perfluorinated Alkyl Substances (PFAS) Releases:

PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances. The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment.

Government Publication Date: Feb 19, 2020

Perfluorinated Alkyl Substances (PFAS) Water Quality:

PFAS WATER

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.

Government Publication Date: Jul 20, 2020

Hazardous Materials Information Reporting System:

HMIRS

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

Government Publication Date: Sep 1, 2020

National Clandestine Drug Labs:

NCDL

The U.S. Department of Justice ("the Department") provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Toxic Substances Control Act:

[TSCA](#)

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).

Government Publication Date: Apr 11, 2019

Hist TSCA:

[HIST TSCA](#)

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing:

[FTTS ADMIN](#)

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing:

[FTTS INSP](#)

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List:

[PRP](#)

Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.

Government Publication Date: Apr 27, 2021

State Coalition for Remediation of Drycleaners Listing:

[SCRD DRYCLEANER](#)

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS):

[ICIS](#)

The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.

Government Publication Date: Mar 24, 2021

Drycleaner Facilities:

[FED DRYCLEANERS](#)

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) online search. The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: May 5, 2021

Delisted Drycleaner Facilities:

[DELISTED FED DRY](#)

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: May 5, 2021

Formerly Used Defense Sites:

FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.

Government Publication Date: Jan 28, 2020

Former Military Nike Missile Sites:

FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 1, 1984

PHMSA Pipeline Safety Flagged Incidents:

PIPELINE INCIDENT

A list of flagged pipeline incidents made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types.

Government Publication Date: Jul 7, 2020

Material Licensing Tracking System (MLTS):

MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites:

HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File:

MINES

The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.

Government Publication Date: Nov 3, 2020

Surface Mining Control and Reclamation Act Sites:

SMCRA

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of Abandoned Mine Land (AML) impacts, as well as information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Government Publication Date: Dec 18, 2020

Mineral Resource Data System:

MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2006

Uranium Mill Tailings Radiation Control Act Sites:

[URANIUM](#)

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

Government Publication Date: Mar 4, 2017

Alternative Fueling Stations:

[ALT FUELS](#)

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

Government Publication Date: Apr 27, 2021

Registered Pesticide Establishments:

[SSTS](#)

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.

Government Publication Date: Apr 13, 2021

Polychlorinated Biphenyl (PCB) Notifiers:

[PCB](#)

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: Nov 19, 2020

State

Priority Ranking List:

[PRIORITYCLEAN](#)

The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a drycleaning facility or wholesale supply facility (Chapter 376, Florida Statutes). The program is administered by the Florida Department of Environmental Protection (FDEP). The statute was sponsored by the drycleaning industry to address environmental, economic, and liability issues resulting from drycleaning solvent contamination. The program provides limited liability protection to the owner, operator and real property owner of drycleaning or wholesale supply facilities for cleanup of drycleaning solvent contamination if the parties meet the eligibility conditions stated in the law.

Government Publication Date: Apr 21, 2021

Dry Cleaning Facilities:

[DRYCLEANERS](#)

A listing of dry cleaning facilities registered with the Florida Department of Environmental Protection (FDEP). The information contains facility identification number, site location information, related party (owner) information, and facility type and status. Data is taken from the Storage Tank & Contamination Monitoring database, the registration repository of dry cleaner facility data.

Government Publication Date: Mar 9, 2021

Delisted Dry Cleaning Facilities:

[DELISTED DRYCLEANERS](#)

List of sites removed from the drycleaners database made available by the Florida Department of Environmental Conservation (DEC).

Government Publication Date: Mar 9, 2021

Historical Dry Cleaners:

[HISTORICAL DRYC](#)

The Florida Department of Environmental Protection (FDEP) provided this historical database of regulated and non-regulated dry cleaning facilities. These facilities were at one time tracked and registered by the FDEP OCULUS Electronic Document Management System as "drums" in the underground storage tank database.

Government Publication Date: Aug 2, 2013

Oil and Hazardous Materials Incidents:

[SPILLS](#)

Statewide listing of oil and hazardous materials spills and incidents recorded by the Florida Department of Environmental Protection (FDEP).

Government Publication Date: May 18, 2021

Contaminated Sites:

DWM CONTAM

Florida Department of Environmental Protection (FDEP) Division of Waste Management (DWM) listing of active or known sites that include sites requiring cleanup but are not actively being worked on due to the agency's lack of funding (primarily petroleum and drycleaning).

Government Publication Date: Mar 12, 2020

Delisted Contaminated Sites:

DEL CONTAM SITE

List of sites which were once included on the Florida Department of Environmental Protection (FDEP) Division of Waste Management (DWM)'s Contaminated Sites list. As sites on the Contaminated Sites (CS) list are cleaned up or closed under risk based corrective action, they are removed from the CS list.

Government Publication Date: Sep 30, 2015

Aqueous Film Forming Foam (AFFF):

PFAS AFFF

A list of fire fighter training facilities that use or possibly used Aqueous Film Forming Foam (AFFF). This list is made available by the Florida Department of Environmental Protection (DEP).

Government Publication Date: Aug 20, 2020

PFAS Investigation at Federal Facilities:

PFAS

List of Federal facilities in Florida with confirmed or suspected usage of Aqueous Film Forming Foam (AFFF) made available by the Florida Department of Environmental Protection (DEP). Investigative work for AFFF source areas at DOD facilities in Florida is in the early stages with some preliminary sampling completed to confirm perfluorooctanoic acid (PFOA) and/or perfluorooctane sulfonate (PFOS) presence and some sampling to be completed at suspected AFFF potential release areas. DEP will continue to work closely with the Department of Defense (DOD), as well as other federal facilities, in order to investigate and mitigate for PFOA and PFOS introduced due to use of AFFF or other sources, with an emphasis to identify and protect drinking water resources.

Government Publication Date: Apr 20, 2020

Underground Injection Control Wells:

UIC

Class I Underground Injection Control (UIC) wells that are currently or were previously active, as well as proposed sites, regulated by the Florida Department of Environmental Protection (FDEP). Class I UIC wells are used to inject nonhazardous waste, hazardous waste (new hazardous waste wells were banned in 1983), or municipal waste below the lowermost underground source of drinking water.

Government Publication Date: May 18, 2021

Well Surveillance Program Facilities:

WELL SURVEILLANCE

List of facilities made available by the Florida Health Well Surveillance group. The Well Surveillance group manages several programs to identify and monitor areas in Florida where contaminated drinking water is suspected and may pose a threat to public health. The section coordinates with the County Health Departments (CHDs) to locate potable wells and conduct water sampling for contaminants of concern. The Well Surveillance Section is composed of the State Underground Petroleum Environmental Response Act (SUPER Act), Drinking Water Toxics Program (Toxics), Drycleaner Solvent Cleanup Program (DSCP). Includes locations of known cattle dipping vats.

Government Publication Date: Apr 5, 2021

Cattle Dip Vats:

CDV SOUTHEAST

A list of Cattle Dip Vats in Southeast Florida made available by the Florida Department of Environmental Protection.

Government Publication Date: Jan 19, 2017

Tier 2 Report:

TIER 2

A list of Tier 2 facilities in the state of Florida. The list tracks the inventory of chemicals within a particular facility. This list is provided by the Florida Division of Emergency Management.

Government Publication Date: Jun 24, 2020

Delisted County Records:

DELISTED COUNTY

Records removed from county databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Apr 13, 2021

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental databases were selected to be included in the search.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

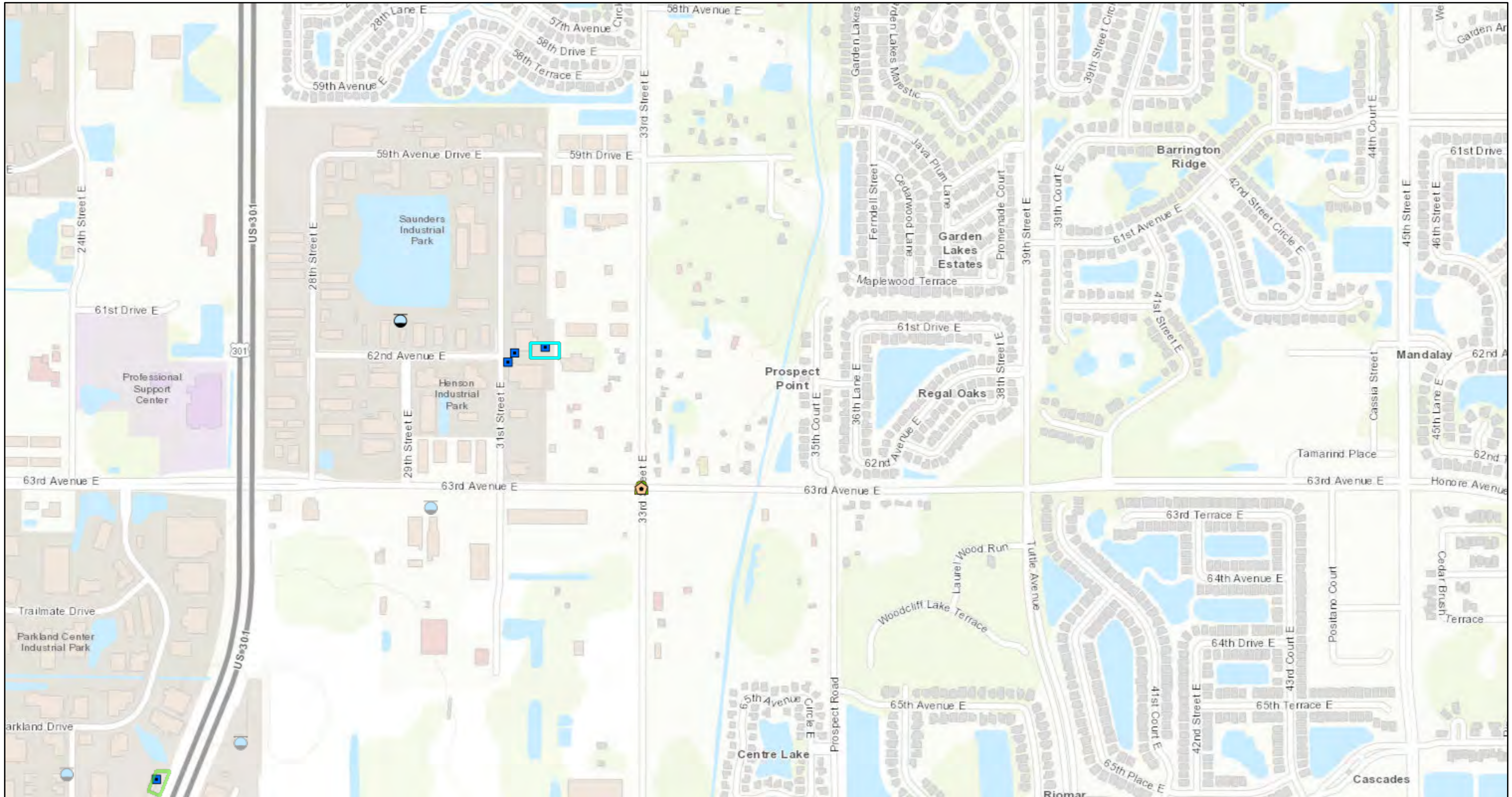
Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

Potential Contamination Screening Memo

63rd Ave East– US 301 to Tuttle Avenue

Attachment C - FDEP Map Direct Database

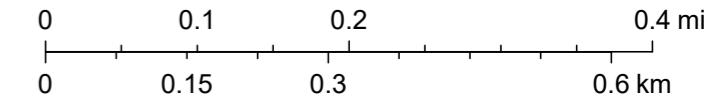
Standard Map



July 22, 2021

1:9,028

- ERIC Waste Cleanup
- Solid Waste Facilities
- Facility
- Waste Processing Area
- Petroleum Contamination Monitoring (PCTS) Discharges from STCM
- ELIGIBLE DISCHARGES COMPLETED
- INELIGIBLE DISCHARGES COMPLETED
- Florida Institutional Controls Registry



FDEP, DWM, FDEP/DWM, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, FDEP/DWM/BWC



Potential Contamination Screening Memo

Prepared by: Bill Spinner, P.G.

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Appendix F

Drainage Information

THIS FORM IS INTENDED TO FACILITATE AND GUIDE THE DIALOGUE DURING A PRE-APPLICATION MEETING BY PROVIDING A PARTIAL "PROMPT LIST" OF DISCUSSION SUBJECTS. IT IS NOT A LIST OF REQUIREMENTS FOR SUBMITTAL BY THE APPLICANT.



**SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
RESOURCE REGULATION DIVISION
PRE-APPLICATION MEETING NOTES**

**FILE
NUMBER:

PA 408890**

Date:	10/06/2021		
Time:	15:00		
Project Name:	63rd Ave E from SR 301		
District Engineer:	Scott VanOrsdale		
District ES:	Russell Martin		
Attendees:	Cris Schooley, Victor Gallo, Manatee County, Gloria Manriquez		
County:	Manatee County	Sec/Twp/Rge:	20/35/18
Total Land Acreage:		Project Acreage:	TBD acres

Prior On-Site/Off-Site Permit Activity:

- ERP – 19387.002; Multiple ERPs adjacent to project area. Applicant to review and determine if impacts will result. Must modify or accommodate any impacts to existing permits.

Project Overview:

- Manatee County is conducting this Project Development & Corridor Study to evaluate a 1.1-mile segment of 63rd Avenue East (63rd Avenue) from US 301 to Tuttle Avenue in Manatee County, Florida. The study evaluates options for widening the existing 2-lane roadway to a 4-lane roadway with bicycle lanes and sidewalks to provide an enhanced mobility experience for all users. As part of the study, pond site locations are being evaluated.
- New Individual permit.
- Additional comments and requirements mentioned below:

Environmental Discussion: (Wetlands On-Site, Wetlands on Adjacent Properties, Delineation, T&E species, Easements, Drawdown Issues, Setbacks, Justification, Elimination/Reduction, Permanent/Temporary Impacts, Secondary and Cumulative Impacts, Mitigation Options, SHWL, Upland Habitats, Site Visit, etc.)

- Possible wetland impacts near the intersection of 63rd Ave and 39th St. from road widening, but might be handled under a separate phase or permit. No impacts to existing canal crossing from proposed widening.
- Provide the limits of jurisdictional wetlands and surface waters. Roadside ditches or other water conveyances, including permitted and constructed water conveyance features, can be claimed as surface waters per Chapter 62-340 F.A.C. if they do not meet the definition of a swale as stated under Rule 403.803 (14) F.S.
- Provide appropriate mitigation using UMAM for impacts, if applicable.
- For an interactive map of permitted mitigation banks and their service areas, use this [LINK](#).
- If the wetland mitigation is appropriate and the applicant is proposing to utilize mitigation bank credit as wetland mitigation, the following applies: Provide letter or credit availability or, if applicable, a letter of reservation from the wetland mitigation bank. The wetland mitigation bank current credit ledgers can be found out the following link: <https://www.swfwmd.state.fl.us/business/epermitting/environmental-resource-permit>, Go to "ERP Mitigation Bank Wetland Credit Ledgers"
- Demonstrate elimination and reduction of wetland impacts. The elimination and reduction criteria can be found in subsection 10.2.1 of Applicant's Handbook Volume 1. Be advised that the use of subsection 10.2.1.2 of the handbook may put the project in conflict with the state's 404 program. Coordination with the DEP, the during application review process, is recommended if the applicant wishes to use subsection 10.2.1.2.
- Maintain minimum 15 foot, average 25 foot wetland conservation area setback or address secondary impacts.
- Please note, the Florida Department of Environmental Protection (FDEP) has assumed the Federal dredge and fill permitting program under section 404 of the Federal Clean Water Act within certain waters. State 404 Program streamlining intentions direct Agency staff to coordinate joint site visits for overall consistency between the two State programs. As such, District staff and the FDEP will need to conduct a joint site visit for evaluation of the wetland/surface water systems proposed for impact. District staff will coordinate with

FDEP staff on determining dates/times of joint Agency availability. Upon determination of joint availability, staff will provide the applicant's representative with site visit scheduling options.

Site Information Discussion: (SHW Levels, Floodplain, Tailwater Conditions, Adjacent Off-Site Contributing Sources, Receiving Waterbody, etc.)

- Watersheds – Pearce Drain/ Gap Creek
- WBIDs need to be independently verified by the consultant - WBID 1899 – Gap Creek; impaired for nutrients.
- Document/justify SHWE's at pond locations, wetlands, and OSWs.
- Determine normal pool elevations of wetlands.
- Determine 'pop-off' locations and elevations of wetlands.
- Provide documentation to support tailwater conditions for quality and quantity design
- Proposed control structures in wetlands should be consistent with existing 'pop-off' elevations of wetlands; demonstrate no adverse impacts to wetland hydroperiod for up to 2.33yr mean annual storm.
- Minimum flows and levels of receiving waters shall not be disrupted.
- Contamination issues need to be resolved with the FDEP. Check FDEP MapDirect layer for possible contamination points within/adjacent to the project area. [FDEP MapDirect Link](#)
 - Multiple FDEP Site ID Nos. located within or adjacent to site. Please verify with FDEP if any have current contamination issues.

For known contamination within the site or within 500' beyond the proposed stormwater management system:

- after the application is submitted, please contact FDEP staff listed below and provide them with the ERP Application ID # along with a mounding analysis (groundwater elevation versus distance) of the proposed stormwater management system that shows the proposed groundwater mound will not adversely impact the contaminated area. FDEP will review the plans submitted to the District and mounding analysis to determine any adverse impacts. Provide documentation from FDEP that the proposed construction will not result in adverse impacts. This is required prior to the ERP Application being deemed complete.

For known offsite contamination between 500' and 1500' beyond the site:

- FDEP may also require a mounding analysis (groundwater elevation versus distance) for the proposed stormwater systems. SWFWMD will issue the permit when contamination sites are located outside the 500 ft radius prior to concurrence from DEP, however, it is the Permittee's responsibility to resolve contaminated site assessment concerns with the FDEP prior to beginning any construction activities. A permit condition will be used to reiterate this. You are advised to contact DEP as soon as possible, preferably during permit application period.

FDEP Contacts:

- For projects located within Citrus, Hernando, Pasco, Hillsborough, Pinellas, Manatee, Polk and Hardee Counties: Yanisa Angulo yanisa.angulo@floridadep.gov
- Check for District owned lands over and adjacent to project area.
- Stormwater retention and detention systems are classified as moderate sanitary hazards with respect to public and private drinking water wells. Stormwater treatment facilities shall not be constructed within 100 feet of an existing public water supply well and shall not be constructed within 75 feet of an existing private drinking water well. Subsection 4.2, A.H.V.II.
- District data collection site may be impacted by proposed construction. Pearce Drain surface water and atmospheric sites may be impacted. Contact data.maps@watermatters.org to coordinate relocation of District data collection site.

Water Quantity Discussions: (Basin Description, Storm Event, Pre/Post Volume, Pre/Post Discharge, etc.)

- Insert general discussion or details of system that receives project discharges – with respect to quantity design – discharges to a ditch system/overland sheet flow/other, open, closed, volume sensitive, etc
- Demonstrate that post development peak discharges from proposed project area will not cause an adverse impact for a 25-year, 24-hour storm event.
- For projects or portions of projects that discharge to a closed basin, limit the post-development 100-year discharge volume to the pre-development 100-year, 24-hour volume.
- Demonstrate that site will not impede the conveyance of contributing off-site flows.
- Demonstrate that the project will not increase flood stages up- or down-stream of the project area(s).
- Watershed Model information may be available for download using the following link: Pearce Drain / Gap Creek model – Contact the watershed management group for more information. WMP@WaterMatters.org
- <https://watermatters.sharefile.com/d-s8c9019e00fd243908654e733a6b2016c>

- Provide equivalent compensating storage for all 100-year, 24-hour riverine floodplain impacts if applicable. Providing cup-for-cup storage in dedicated areas of excavation is the preferred method of compensation if no impacts to flood conveyance are proposed and storage impacts and compensation occur within the same basin. In this case, tabulations should be provided at 0.5-foot increments to demonstrate encroachment and compensation occur at the same levels. Otherwise, storage modeling will be required to demonstrate no increase in flood stages will occur on off-site properties, using the mean annual, 10-year, 25-year, and 100-year storm events for the pre- and post-development conditions.
- Please be aware that if there is credible historical evidence of past flooding or the physical capacity of the downstream conveyance or receiving waters indicates that the conditions for issuance will not be met without consideration of storm events of different frequency or duration, applicants shall be required to provide additional analyses using storm events of different duration or frequency than the 25-year 24-hour storm event, or to adjust the volume, rate or timing of discharges. [Section 3.0 Applicant's Handbook Volume II]

Water Quality Discussions: (Type of Treatment, Technical Characteristics, Non-presumptive Alternatives, etc.)

- Applicant must demonstrate a net improvement for the parameters of concern by performing a pre/post pollutant loading analysis based on existing land use and the proposed land use.
- Also, replace treatment function of existing ditches to be filled.
- Presumptive Water Quality Treatment for Alterations to Existing Public Roadway Projects:
 - Refer to Section 4.5 A.H.V.II for Alterations to Existing Public Roadway Projects.
 - Refer to Sections 4.8, 4.8.1 and 4.8.2 A.H.V.II for Compensating Stormwater Treatment, Overtreatment, and Offsite Compensation.
 - All co-mingled existing & new impervious that is proposed to be connected to a treatment pond will require treatment for an area equal to the co-mingled existing & new impervious (times ½" for dry treatment or 1" for wet treatment). This applies whether or not equivalent treatment concepts are used.
 - However, if equivalent treatment concepts are used it is possible to strategically locate the pond(s) so that the minimum treatment requirement may be for an area equivalent to the new impervious area only. That is, co-mingled existing & new impervious that is not connected to a treatment pond may bypass treatment (as per Section 4.5(2), A.H.V.II); if the 'total impervious area' that is connected to the treatment pond(s) is at least equivalent to the area of new impervious only. The 'total impervious area' that is connected to the pond(s) may be composed of co-mingled existing & new impervious.
 - Offsite impervious not required to be treated; but may be useful to be treated when using equivalent treatment concepts.
 - Existing treatment capacity displaced by any road project will require additional compensating volume. Refer to Subsection 4.5(c), A.H.V.II.
- Will acknowledge compensatory treatment to offset pollutant loads associated with portions of the project area that cannot be physically treated.
- Provide additional 50% treatment for any direct discharges to OFW. Refer to ERP Applicant's Handbook Vol. II Subsection 4.1(f).
- Please be advised that although use of isolated wetlands for ERP treatment purposes is permissible as per Section 4.1(a)(3), A.H.V.II, use of isolated wetlands for treatment purposes may not necessarily meet US Army Corps criteria.
- Net improvement
 - Refer to rule 62-330.301(2), F.A.C.
 - The application must demonstrate a net improvement for nutrients. Applicant may demonstrate a net improvement for the parameters of concern by performing a pre/post pollutant loading analysis based on existing land use and the proposed land use. Refer to ERP Applicant's Handbook Vol. II Subsection 4.1(g).
 - Effluent filtration is known to be ineffective for treating nutrient related impairments, unless special nutrient adsorption media provided. However, please note special nutrient adsorption media has extremely low conductivity values compared to typical sand type effluent filtration filter media. Note: if treatment volume required for net improvement is less than the treatment volume required for 'presumptive' treatment, then use of effluent filtration is ok.

Sovereign Lands Discussion: (Determining Location, Correct Form of Authorization, Content of Application, Assessment of Fees, Coordination with FDEP)

- No SSL issues.

Operation and Maintenance/Legal Information: (Ownership or Perpetual Control, O&M Entity, O&M Instructions, Homeowner Association Documents, Coastal Zone requirements, etc.)

- The permit must be issued to entity that owns or controls the property.
- Provide evidence of ownership or control by deed, easement, contract for purchase, etc. Evidence of ownership or control must include a legal description. A Property Appraiser summary of the legal description is NOT acceptable.

Application Type and Fee Required:

- SWERP – Sections A, C, and E of the ERP Application.
- < 40 acres of project area and < 3 acres wetland or surface water impacts - \$2491.50 Online Submittal
- Consult the [fee schedule](#) for different thresholds.

Other: (Future Pre-Application Meetings, Fast Track, Submittal Date, Construction Start Date, Required District Permits – WUP, WOD, Well Construction, etc.)

- An application for an individual permit to construct or alter a dam, impoundment, reservoir, or appurtenant work, requires that a notice of receipt of the application must be published in a newspaper within the affected area. Provide documentation that such noticing has been accomplished. Note that the published notices of receipt for an ERP can be in accordance with the language provided in Rule 40D-1.603(10), F.A.C.
- Provide a copy of the legal description (of all applicable parcels within the project area) in one of the following forms:
 - a. Deed with complete Legal Description attachment.
 - b. Plat.
 - c. Boundary survey of the property(ies) with a sketch.
- The plans and drainage report submitted electronically must include the appropriate information required under Rules 61G15-23.005 and 61G15-23.004 (Digital), F.A.C. The following text is required by the Florida Board of Professional Engineers (FBPE) to meet this requirement when a digitally created seal is not used and must appear where the signature would normally appear:

ELECTRONIC (Manifest): *[NAME] State of Florida, Professional Engineer, License No. [NUMBER] This item has been electronically signed and sealed by [NAME] on the date indicated here using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies*

DIGITAL: *[NAME] State of Florida, Professional Engineer, License No. [NUMBER]; This item has been digitally signed and sealed by [NAME] on the date indicated here; Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.*

- Provide soil erosion and sediment control measures for use during construction. Refer to ERP Applicant's Handbook Vol. 1 Part IV Erosion and Sediment Control.
- Demonstrate that excavation of any stormwater ponds does not breach an aquitard (see Subsection 2.1.1, A.H.V.II) such that it would allow for lesser quality water to pass, either way, between the two systems. In those geographical areas of the District where there is not an aquitard present, the depth of the pond(s) shall not be excavated to within two (2) feet of the underlying limestone which is part of a drinking water aquifer. [Refer to Subsection 5.4.1(b), A.H.V.II]
- If lowering of SHWE is proposed, then burden is on Applicant to demonstrate no adverse onsite or offsite impacts as per Subsection 3.6, A.H.V.II. Groundwater drawdown 'radius of influence' computations may be required to demonstrate no adverse onsite or offsite impacts. Please note that new roadside swales or deepening of existing roadside swales may result in lowering of SHWE. Proposed ponds with control elevation less than SHWE may result in adverse lowering of onsite or offsite groundwater.
- On December 17, 2020, the Environmental Protection Agency (EPA) formally transferred permitting authority under CWA Section 404 from the U.S. Army Corps of Engineers (Corps) to the State of Florida for a broad range of water resources within the State. The primary State 404 Program rules are adopted by the Florida Department of Environmental Protection (FDEP) as Chapter 62-331 of the Florida Administrative Code (F.A.C.). While the State 404 Program is a separate permitting program from the Environmental Resource Permitting program (ERP) under Chapter 62-330, F.A.C., and agency action for State 404 Program verifications, notices, or permits shall be taken independently from ERP agency action, the FDEP and the Southwest Florida Water Management District (SWFWMD) will be participating in a Joint application Process. Upon submittal of an ERP application that proposes dredge/fill activities in wetlands or surface waters within state assumed waters, the SWFWMD will forward a copy of your application to the FDEP for activities under State 404 jurisdiction. The applicant may choose to have the State 404 Program and ERP

agency actions issued concurrently to help ensure consistency and reduce the need for project modifications that may occur when the agency actions are issued at different times. Additional information on the FDEP's 404 delegation can be found at: <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/state-404-program>

Additionally, for those projects located in areas where the Corps retains jurisdiction, the applicant is advised that the District will not send a copy of an application that does not qualify for a State Programmatic General Permit (SPGP) to the U.S. Army Corps of Engineers. If a project does not qualify for a SPGP, you will need to apply separately to the Corps using the appropriate federal application form for activities under federal jurisdiction. Please see the Corps' Jacksonville District Regulatory Division Sourcebook for more information about federal permitting. Please call your local Corps office if you have questions about federal permitting. Link: <http://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/>

Disclaimer: The District ERP pre-application meeting process is a service made available to the public to assist interested parties in preparing for submittal of a permit application. Information shared at pre-application meetings is superseded by the actual permit application submittal. District permit decisions are based upon information submitted during the application process and Rules in effect at the time the application is complete.

Curve Number and Runoff Volume Calculation (25YR/24HR)

Basin 1A:

Pre-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	1.18	acres	98	115
Sod/Grass	20, 47, 48	A/D, B/D	2.39	acres	45	108
Additional ROW			0.00	acres	45	0
Pond Site			1.99	acres	39	78
Totals:			5.56	acres		301
Pre-Condition Composite Curve Number:					54.1	

Pre-Condition Runoff Volume Calculation

$$25\text{-yr/24-hr Rainfall Depth (P)} = \frac{8.90}{1} \text{ IN}$$

$$\text{CN} = \frac{54.1}{1}$$

$$\text{Drainage Area (A)} = \frac{5.56}{1} \text{ AC}$$

Potential maximum retention after runoff begins (S) and S is:

$$(S) = \frac{1000}{\text{CN}-10} = \frac{8.49}{1} \text{ IN}$$

$$\text{Runoff Depth (Q)} = \frac{(P-0.2S)^2}{(P+0.8S)} = \frac{3.31}{1} \text{ IN}$$

$$\text{Pre-Condition Runoff Volume (V}_{\text{PRE}}) = A \times Q = \frac{1.53}{1} \text{ AC-FT}$$

Post-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	3.03	acres	98	297
Sod/Grass	20, 47, 48	A/D, B/D	0.54	acres	45	24
Subtotal:			3.57	acres		
Pond Impervious	--	--	1.21	acres	100	121
Pond Pervious	20, 47, 48	A/D, B/D	0.78	acres	39	30
Totals:			5.56	acres		473
Post-Condition Composite Curve Number:					85.1	

Post-Condition Runoff Volume Calculation

$$25\text{-yr/24-hr Rainfall Depth (P)} = \frac{8.90}{1} \text{ IN}$$

$$\text{CN} = \frac{85.1}{1}$$

$$\text{Drainage Area (A)} = \frac{5.56}{1} \text{ AC}$$

Potential maximum retention after runoff begins (S) and S is:

$$(S) = \frac{1000}{\text{CN}-10} = \frac{1.75}{1} \text{ IN}$$

$$\text{Runoff Depth (Q)} = \frac{(P-0.2S)^2}{(P+0.8S)} = \frac{7.10}{1} \text{ IN}$$

$$\text{Post-Condition Runoff Volume (V}_{\text{POST}}) = A \times Q = \frac{3.29}{1} \text{ AC-FT}$$

Required Attenuation Volume = V_{POST} - V_{PRE} =	1.76 AC-FT
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Pond 1A: Wet Pond

Treatment Volume Calculation

Drainage Area = 5.56 Acres
 Treatment Volume Required = 1.0 Inch
 Treatment Volume Required = 0.46 Acre-Feet

Pond Size Estimation

Soil Data

NRCS Soils at Pond Site: 20 - EauGallie

Average High Water Depth = 1.0 Ft (From Manatee County Soil Survey)

Pond Vertical Constraints

Roadway Edge of Pavement Low Elevation = 16.0 Feet
 Average Existing Ground Elevation at Pond Site = 16.0 Feet
 Seasonal High Water Table Elevation at Pond Site = 15.0 Feet
 Available Depth for Treatment and Attenuation = 1.0 Feet
 Actual Depth of Treatment and Attenuation = 1.8 Feet

Pond Elevations

Bottom of Treatment Volume Elevation = 13.2 Feet (Liner Required)
 Top of Treatment Volume Elevation = 13.6 Feet
 Top of Attenuation Volume Elevation = 15.0 Feet
 Proposed Bottom of Berm Elevation = 16.0 Feet
 Proposed Top of Berm Elevation = 17.5 Feet

Pond Size

Square Dimension at Bottom of Treatment Depth = 230 Feet
 Square Dimension at Top of Treatment Depth = 233 Feet
 Square Dimension at Top of Attenuation Depth = 244 Feet
 Square Dimension Bottom of Berm = 252 Feet
 Square dimension at top berm = 282 Feet
 Outside pond dimensions (including tie-down) = 294 Feet

Minimum Total Area Required = 2.19 Acres (10% SAFETY FACTOR)

Stage-Storage Calculation

Elevation	Area	Area	Incremental Volume	Total Volume	Total Volume	REMARKS
(ft)	(sf)	(ac)	(cf)	(cf)	(ac-ft)	
13.20	52900	1.21	0	0	0.00	
13.60	54382	1.25	21456	21456	0.49	<i>Top of TV</i>
15.00	59731	1.37	79880	101336	2.33	<i>Top of AV</i>
16.00	63706	1.46	61719	163055	3.74	<i>Bottom of Berm</i>

Required Treatment Volume = 0.46 Acre-Feet
Provided Treatment Volume = 0.49 Acre-Feet ✓

Required Attenuation Volume = 1.76 Acre-Feet
Provided Attenuation Volume = 1.84 Acre-Feet ✓

Curve Number and Runoff Volume Calculation (25YR/24HR)

Basin 1B:

Pre-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	1.18	acres	98	115
Sod/Grass	20, 22, 40, 47, 48	A/D, B/D	2.39	acres	45	108
Additional ROW			0.00	acres	45	0
Pond Site			1.69	acres	48	81
Totals:			5.26	acres		304
Pre-Condition Composite Curve Number:					57.8	

Pre-Condition Runoff Volume Calculation

$$\begin{aligned}
 \text{25-yr/24-hr Rainfall Depth (P)} &= \underline{8.90 \text{ IN}} \\
 \text{CN} &= \underline{57.8} \\
 \text{Drainage Area (A)} &= \underline{5.26 \text{ AC}} \\
 \text{Potential maximum retention after runoff begins (S) and S is:} \\
 \text{(S)} &= 1000/\text{CN}-10 = \underline{7.29 \text{ IN}} \\
 \text{Runoff Depth (Q)} &= (P-0.2S)^2/(P+0.8S) = \underline{3.76 \text{ IN}} \\
 \text{Pre-Condition Runoff Volume (V}_{\text{PRE}}\text{)} &= A \times Q = \underline{1.65 \text{ AC-FT}}
 \end{aligned}$$

Post-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	3.03	acres	98	297
Sod/Grass	20, 22, 40, 47, 48	A/D, B/D	0.54	acres	45	24
Subtotal:			3.57	acres		
Pond Impervious	--	--	0.96	acres	100	96
Pond Pervious	20, 22, 40, 47, 48	A/D, B/D	0.72	acres	51	37
Totals:			5.26	acres		455
Post-Condition Composite Curve Number:					86.5	

Post-Condition Runoff Volume Calculation

$$\begin{aligned}
 \text{25-yr/24-hr Rainfall Depth (P)} &= \underline{8.90 \text{ IN}} \\
 \text{CN} &= \underline{86.5} \\
 \text{Drainage Area (A)} &= \underline{5.26 \text{ AC}} \\
 \text{Potential maximum retention after runoff begins (S) and S is:} \\
 \text{(S)} &= 1000/\text{CN}-10 = \underline{1.56 \text{ IN}} \\
 \text{Runoff Depth (Q)} &= (P-0.2S)^2/(P+0.8S) = \underline{7.27 \text{ IN}} \\
 \text{Post-Condition Runoff Volume (V}_{\text{POST}}\text{)} &= A \times Q = \underline{3.18 \text{ AC-FT}}
 \end{aligned}$$

Required Attenuation Volume = V_{POST} - V_{PRE} =	1.54 AC-FT
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Pond 1B: Wet Pond

Treatment Volume Calculation

Drainage Area = 5.26 Acres
 Treatment Volume Required = 1.0 Inch
 Treatment Volume Required = 0.44 Acre-Feet

Pond Size Estimation

Soil Data

NRCS Soils at Pond Site: 22 - Felda
40 - Pinellas

Average High Water Depth = 0.5 Ft (From Manatee County Soil Survey)

Pond Vertical Constraints

Roadway Edge of Pavement Low Elevation = 16.0 Feet
 Average Existing Ground Elevation at Pond Site = 16.0 Feet
 Seasonal High Water Table Elevation at Pond Site = 15.5 Feet
 Available Depth for Treatment and Attenuation = 0.5 Feet
 Actual Depth of Treatment and Attenuation = 2.0 Feet

Pond Elevations

Bottom of Treatment Volume Elevation = 13.0 Feet (Liner Required)
 Top of Treatment Volume Elevation = 13.45 Feet
 Top of Attenuation Volume Elevation = 15.0 Feet
 Proposed Bottom of Berm Elevation = 16.0 Feet
 Proposed Top of Berm Elevation = 17.5 Feet

Pond Size

Square Dimension at Bottom of Treatment Depth = 205 Feet
 Square Dimension at Top of Treatment Depth = 209 Feet
 Square Dimension at Top of Attenuation Depth = 221 Feet
 Square Dimension Bottom of Berm = 229 Feet
 Square dimension at top berm = 259 Feet
 Outside pond dimensions (including tie-down) = 271 Feet

Minimum Total Area Required = 1.85 Acres (10% SAFETY FACTOR)

Stage-Storage Calculation

Elevation	Area	Area	Incremental Volume	Total Volume	Total Volume	REMARKS
(ft)	(sf)	(ac)	(cf)	(cf)	(ac-ft)	
13.00	42025	0.96	0	0	0.00	
13.45	43514	1.00	19246	19246	0.44	<i>Top of TV</i>
15.00	48841	1.12	71575	90821	2.08	<i>Top of AV</i>
16.00	52441	1.20	50641	141462	3.25	<i>Bottom of Berm</i>

Required Treatment Volume = 0.44 Acre-Feet
Provided Treatment Volume = 0.44 Acre-Feet ✓

Required Attenuation Volume = 1.54 Acre-Feet
Provided Attenuation Volume = 1.64 Acre-Feet ✓

Curve Number and Runoff Volume Calculation (25YR/24HR)

Basin 1C:

Pre-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	1.32	acres	98	130
Sod/Grass	15, 20, 22, 25, 40	A/D, B/D, CD	2.69	acres	50	134
Additional ROW			0.00	acres	50	0
Pond Site			2.59	acres	51	132
Totals:			6.61	acres		396
Pre-Condition Composite Curve Number:					60.0	

Pre-Condition Runoff Volume Calculation

$$25\text{-yr}/24\text{-hr Rainfall Depth (P)} = \frac{8.90}{1} \text{ IN}$$

$$\text{CN} = \frac{60.0}{1}$$

$$\text{Drainage Area (A)} = \frac{6.61}{1} \text{ AC}$$

Potential maximum retention after runoff begins (S) and S is:

$$(S) = \frac{1000}{\text{CN}-10} = \frac{6.66}{1} \text{ IN}$$

$$\text{Runoff Depth (Q)} = \frac{(P-0.2S)^2}{(P+0.8S)} = \frac{4.02}{1} \text{ IN}$$

$$\text{Pre-Condition Runoff Volume (V}_{\text{PRE}}) = A \times Q = \frac{2.22}{1} \text{ AC-FT}$$

Post-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	3.41	acres	98	334
Sod/Grass	15, 20, 22, 25, 40	A/D, B/D, CD	0.60	acres	50	30
Subtotal:			4.01	acres		
Pond Impervious	--	--	1.74	acres	100	174
Pond Pervious	15, 20, 22, 25, 40	A/D, B/D, CD	0.86	acres	51	44
Totals:			6.61	acres		582
Post-Condition Composite Curve Number:					88.0	

Post-Condition Runoff Volume Calculation

$$25\text{-yr}/24\text{-hr Rainfall Depth (P)} = \frac{8.90}{1} \text{ IN}$$

$$\text{CN} = \frac{88.0}{1}$$

$$\text{Drainage Area (A)} = \frac{6.61}{1} \text{ AC}$$

Potential maximum retention after runoff begins (S) and S is:

$$(S) = \frac{1000}{\text{CN}-10} = \frac{1.36}{1} \text{ IN}$$

$$\text{Runoff Depth (Q)} = \frac{(P-0.2S)^2}{(P+0.8S)} = \frac{7.46}{1} \text{ IN}$$

$$\text{Post-Condition Runoff Volume (V}_{\text{POST}}) = A \times Q = \frac{4.10}{1} \text{ AC-FT}$$

Required Attenuation Volume = V_{POST} - V_{PRE} =	1.89 AC-FT
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Pond 1C: Wet Pond

Treatment Volume Calculation

Drainage Area = 6.61 Acres
 Treatment Volume Required = 1.0 Inch
 Treatment Volume Required = 0.55 Acre-Feet

Pond Size Estimation

Soil Data

NRCS Soils at Pond Site: 22 - Felda
26 - Floridana

Average High Water Depth = 0.5 Ft (From Manatee County Soil Survey)

Pond Vertical Constraints

Roadway Edge of Pavement Low Elevation = 16.0 Feet
 Average Existing Ground Elevation at Pond Site = 16.0 Feet
 Seasonal High Water Table Elevation at Pond Site = 15.5 Feet
 Available Depth for Treatment and Attenuation = 0.5 Feet
 Actual Depth of Treatment and Attenuation = 1.4 Feet

Pond Elevations

Bottom of Treatment Volume Elevation = 13.6 Feet (Liner Required)
 Top of Treatment Volume Elevation = 14.0 Feet
 Top of Attenuation Volume Elevation = 15.0 Feet
 Proposed Bottom of Berm Elevation = 16.0 Feet
 Proposed Top of Berm Elevation = 17.5 Feet

Pond Size

Square Dimension at Bottom of Treatment Depth = 275 Feet
 Square Dimension at Top of Treatment Depth = 278 Feet
 Square Dimension at Top of Attenuation Depth = 286 Feet
 Square Dimension Bottom of Berm = 294 Feet
 Square dimension at top berm = 324 Feet
 Outside pond dimensions (including tie-down) = 336 Feet

Minimum Total Area Required = 2.85 Acres (10% SAFETY FACTOR)

Stage-Storage Calculation

Elevation	Area	Area	Incremental Volume	Total Volume	Total Volume	REMARKS
(ft)	(sf)	(ac)	(cf)	(cf)	(ac-ft)	
13.60	75625	1.74	0	0	0.00	
13.95	77173	1.77	26740	26740	0.61	<i>Top of TV</i>
15.00	81910	1.88	83519	110258	2.53	<i>Top of AV</i>
16.00	86554	1.99	84232	194490	4.46	<i>Bottom of Berm</i>

Required Treatment Volume = 0.55 Acre-Feet
Provided Treatment Volume = 0.61 Acre-Feet ✓

Required Attenuation Volume = 1.89 Acre-Feet
Provided Attenuation Volume = 1.92 Acre-Feet ✓

Curve Number and Runoff Volume Calculation (25YR/24HR)

Basin 1D:

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Pre-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	1.32	acres	98	130
Sod/Grass	15, 20, 22, 25, 29, 40	A/D, B/D, CD	2.69	acres	48	129
Additional ROW			0.00	acres	48	0
Pond Site			2.61	acres	43	112
Totals:			6.62	acres		371

Pre-Condition Composite Curve Number: 56.0

Pre-Condition Runoff Volume Calculation

25-yr/24-hr Rainfall Depth (P) = $\frac{8.90}{1}$ IN

CN = $\frac{56.0}{1}$

Drainage Area (A) = $\frac{6.62}{1}$ AC

Potential maximum retention after runoff begins (S) and S is:

(S) = $\frac{1000}{CN-10} = \frac{7.85}{1}$ IN

Runoff Depth (Q) = $\frac{(P-0.2S)^2}{(P+0.8S)} = \frac{3.54}{1}$ IN

Pre-Condition Runoff Volume (V_{PRE}) = A x Q = $\frac{1.95}{1}$ AC-FT

Post-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	3.41	acres	98	334
Sod/Grass	15, 20, 22, 25, 29, 40	A/D, B/D, CD	0.60	acres	53	32
Subtotal:			4.01	acres		
Pond Impervious	--	--	1.74	acres	100	174
Pond Pervious	15, 20, 22, 25, 29, 40	A/D, B/D, CD	0.87	acres	43	37
Totals:			6.62	acres		577

Post-Condition Composite Curve Number: 87.2

Post-Condition Runoff Volume Calculation

25-yr/24-hr Rainfall Depth (P) = $\frac{8.90}{1}$ IN

CN = $\frac{87.2}{1}$

Drainage Area (A) = $\frac{6.62}{1}$ AC

Potential maximum retention after runoff begins (S) and S is:

(S) = $\frac{1000}{CN-10} = \frac{1.47}{1}$ IN

Runoff Depth (Q) = $\frac{(P-0.2S)^2}{(P+0.8S)} = \frac{7.35}{1}$ IN

Post-Condition Runoff Volume (V_{POST}) = A x Q = $\frac{4.05}{1}$ AC-FT

Required Attenuation Volume = V_{POST} - V_{PRE} =	2.10 AC-FT
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Pond 1D: Wet Pond

Treatment Volume Calculation

Drainage Area = 6.62 Acres
 Treatment Volume Required = 1.0 Inch
 Treatment Volume Required = 0.55 Acre-Feet

Pond Size Estimation

Soil Data

NRCS Soils at Pond Site: 22 - Felda
29 - Manatee

Average High Water Depth = 0.5 Ft (From Manatee County Soil Survey)

Pond Vertical Constraints

Roadway Edge of Pavement Low Elevation = 14.0 Feet
 Average Existing Ground Elevation at Pond Site = 14.0 Feet
 Seasonal High Water Table Elevation at Pond Site = 13.5 Feet
 Available Depth for Treatment and Attenuation = 0.5 Feet
 Actual Depth of Treatment and Attenuation = 1.5 Feet

Pond Elevations

Bottom of Treatment Volume Elevation = 11.5 Feet (Liner Required)
 Top of Treatment Volume Elevation = 11.9 Feet
 Top of Attenuation Volume Elevation = 13.0 Feet
 Proposed Bottom of Berm Elevation = 14.0 Feet
 Proposed Top of Berm Elevation = 15.5 Feet

Pond Size

Square Dimension at Bottom of Treatment Depth = 275 Feet
 Square Dimension at Top of Treatment Depth = 278 Feet
 Square Dimension at Top of Attenuation Depth = 287 Feet
 Square Dimension Bottom of Berm = 295 Feet
 Square dimension at top berm = 325 Feet
 Outside pond dimensions (including tie-down) = 337 Feet

Minimum Total Area Required = 2.87 Acres (10% SAFETY FACTOR)

Stage-Storage Calculation

Elevation	Area	Area	Incremental Volume	Total Volume	Total Volume	REMARKS
(ft)	(sf)	(ac)	(cf)	(cf)	(ac-ft)	
11.50	75625	1.74	0	0	0.00	
11.85	77173	1.77	26740	26740	0.61	<i>Top of TV</i>
13.00	82369	1.89	91737	118476	2.72	<i>Top of AV</i>
14.00	87025	2.00	84697	203173	4.66	<i>Bottom of Berm</i>

Required Treatment Volume = 0.55 Acre-Feet
Provided Treatment Volume = 0.61 Acre-Feet ✓

Required Attenuation Volume = 2.10 Acre-Feet
Provided Attenuation Volume = 2.11 Acre-Feet ✓

Curve Number and Runoff Volume Calculation (25YR/24HR)

Basin 2A:

Pre-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	1.38	acres	98	135
Sod/Grass	5, 15, 20, 25, 26, 40	A/D, B/D, CD	2.93	acres	55	161
Additional ROW			0.00	acres	55	0
Pond Site			2.53	acres	58	147
Totals:			6.85	acres		444
Pre-Condition Composite Curve Number:					64.8	

Pre-Condition Runoff Volume Calculation

$$\begin{aligned}
 \text{25-yr/24-hr Rainfall Depth (P)} &= \underline{8.90} \text{ IN} \\
 \text{CN} &= \underline{64.8} \\
 \text{Drainage Area (A)} &= \underline{6.85} \text{ AC} \\
 \text{Potential maximum retention after runoff begins (S) and S is:} \\
 \text{(S)} &= 1000/\text{CN}-10 = \underline{5.44} \text{ IN} \\
 \text{Runoff Depth (Q)} &= (P-0.2S)^2/(P+0.8S) = \underline{4.61} \text{ IN} \\
 \text{Pre-Condition Runoff Volume (V}_{\text{PRE}}\text{)} &= A \times Q = \underline{2.63} \text{ AC-FT}
 \end{aligned}$$

Post-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	3.71	acres	98	364
Sod/Grass	5, 15, 20, 25, 26, 40	A/D, B/D, CD	0.60	acres	55	33
Subtotal:			4.32	acres		
Pond Impervious	--	--	1.67	acres	100	167
Pond Pervious	5, 15, 20, 25, 26, 40	A/D, B/D, CD	0.86	acres	58	50
Totals:			6.85	acres		614
Post-Condition Composite Curve Number:					89.7	

Post-Condition Runoff Volume Calculation

$$\begin{aligned}
 \text{25-yr/24-hr Rainfall Depth (P)} &= \underline{8.90} \text{ IN} \\
 \text{CN} &= \underline{89.7} \\
 \text{Drainage Area (A)} &= \underline{6.85} \text{ AC} \\
 \text{Potential maximum retention after runoff begins (S) and S is:} \\
 \text{(S)} &= 1000/\text{CN}-10 = \underline{1.15} \text{ IN} \\
 \text{Runoff Depth (Q)} &= (P-0.2S)^2/(P+0.8S) = \underline{7.65} \text{ IN} \\
 \text{Post-Condition Runoff Volume (V}_{\text{POST}}\text{)} &= A \times Q = \underline{4.37} \text{ AC-FT}
 \end{aligned}$$

Required Attenuation Volume = V_{POST} - V_{PRE} =	1.74 AC-FT
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Pond 2A: Wet Pond

Treatment Volume Calculation

Drainage Area = 6.85 Acres
 Treatment Volume Required = 1.0 Inch
 Treatment Volume Required = 0.57 Acre-Feet

Pond Size Estimation

Soil Data

NRCS Soils at Pond Site: 5 - Bradenton
15 - Delray
25 - Floridana

Average High Water Depth = 0.0 Ft (From Manatee County Soil Survey)

Pond Vertical Constraints

Roadway Edge of Pavement Low Elevation = 16.0 Feet
 Average Existing Ground Elevation at Pond Site = 16.0 Feet
 Seasonal High Water Table Elevation at Pond Site = 16.0 Feet
 Available Depth for Treatment and Attenuation = 0.0 Feet
 Actual Depth of Treatment and Attenuation = 1.5 Feet

Pond Elevations

Bottom of Treatment Volume Elevation = 13.5 Feet (Liner Required)
 Top of Treatment Volume Elevation = 14.0 Feet
 Top of Attenuation Volume Elevation = 15.0 Feet
 Proposed Bottom of Berm Elevation = 16.0 Feet
 Proposed Top of Berm Elevation = 17.5 Feet

Pond Size

Square Dimension at Bottom of Treatment Depth = 270 Feet
 Square Dimension at Top of Treatment Depth = 274 Feet
 Square Dimension at Top of Attenuation Depth = 282 Feet
 Square Dimension Bottom of Berm = 290 Feet
 Square dimension at top berm = 320 Feet
 Outside pond dimensions (including tie-down) = 332 Feet

Minimum Total Area Required = 2.78 Acres (10% SAFETY FACTOR)

Stage-Storage Calculation

Elevation	Area	Area	Incremental Volume	Total Volume	Total Volume	REMARKS
(ft)	(sf)	(ac)	(cf)	(cf)	(ac-ft)	
13.50	72900	1.67	0	0	0.00	
14.00	75076	1.72	36994	36994	0.85	<i>Top of TV</i>
15.00	79524	1.83	77300	114294	2.62	<i>Top of AV</i>
16.00	84100	1.93	81812	196106	4.50	<i>Bottom of Berm</i>

Required Treatment Volume = 0.57 Acre-Feet
Provided Treatment Volume = 0.85 Acre-Feet ✓

Required Attenuation Volume = 1.74 Acre-Feet
Provided Attenuation Volume = 1.77 Acre-Feet ✓

Curve Number and Runoff Volume Calculation (25YR/24HR)

Basin 2B:

Pre-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	1.38	acres	98	135
Sod/Grass	5, 15, 20, 25, 26, 40	A/D, B/D, CD	2.93	acres	55	161
Additional ROW			0.00	acres	55	0
Pond Site			2.64	acres	57	151

Totals: 6.96 acres 447

Pre-Condition Composite Curve Number: 64.3

Pre-Condition Runoff Volume Calculation

$$25\text{-yr/24-hr Rainfall Depth (P)} = \frac{8.90}{1} \text{ IN}$$

$$\text{CN} = \frac{64.3}{1}$$

$$\text{Drainage Area (A)} = \frac{6.96}{1} \text{ AC}$$

Potential maximum retention after runoff begins (S) and S is:

$$(S) = \frac{1000}{\text{CN}-10} = \frac{5.55}{1} \text{ IN}$$

$$\text{Runoff Depth (Q)} = \frac{(P-0.2S)^2}{(P+0.8S)} = \frac{4.55}{1} \text{ IN}$$

$$\text{Pre-Condition Runoff Volume (V}_{\text{PRE}}) = A \times Q = \frac{2.64}{1} \text{ AC-FT}$$

Post-Condition Curve Number Calculation

Land Use Description	Soil Map Unit	Hydrologic Group	Area		CN	Product
Impervious Roadway	--	--	3.71	acres	98	364
Sod/Grass	5, 15, 20, 25, 26, 40	A/D, B/D, CD	0.60	acres	55	33
Subtotal:			4.32	acres		
Pond Impervious	--	--	1.67	acres	100	167
Pond Pervious	5, 15, 20, 25, 26, 40	A/D, B/D, CD	0.97	acres	57	55

Totals: 6.96 acres 619

Post-Condition Composite Curve Number: 89.0

Post-Condition Runoff Volume Calculation

$$25\text{-yr/24-hr Rainfall Depth (P)} = \frac{8.90}{1} \text{ IN}$$

$$\text{CN} = \frac{89.0}{1}$$

$$\text{Drainage Area (A)} = \frac{6.96}{1} \text{ AC}$$

Potential maximum retention after runoff begins (S) and S is:

$$(S) = \frac{1000}{\text{CN}-10} = \frac{1.23}{1} \text{ IN}$$

$$\text{Runoff Depth (Q)} = \frac{(P-0.2S)^2}{(P+0.8S)} = \frac{7.58}{1} \text{ IN}$$

$$\text{Post-Condition Runoff Volume (V}_{\text{POST}}) = A \times Q = \frac{4.39}{1} \text{ AC-FT}$$

Required Attenuation Volume = V_{POST} - V_{PRE} =	1.76 AC-FT
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Pond 2b: Wet Pond Treatment Volume Calculation

Drainage Area = 6.96 Acres
 Treatment Volume Required = 1.0 Inch
 Treatment Volume Required = 0.58 Acre-Feet

Pond Size Estimation

Soil Data

NRCS Soils at Pond Site: 26 - Floridana
40 - Pinellas

Average High Water Depth = 0.0 Ft (From Manatee County Soil Survey)

Pond Vertical Constraints

Roadway Edge of Pavement Low Elevation = 17.0 Feet
 Average Existing Ground Elevation at Pond Site = 16.0 Feet
 Seasonal High Water Table Elevation at Pond Site = 16.0 Feet
 Available Depth for Treatment and Attenuation = 1.0 Feet
 Actual Depth of Treatment and Attenuation = 1.4 Feet

Pond Elevations

Bottom of Treatment Volume Elevation = 14.6 Feet (Liner Required)
 Top of Treatment Volume Elevation = 15.0 Feet
 Top of Attenuation Volume Elevation = 16.0 Feet
 Proposed Bottom of Berm Elevation = 17.0 Feet
 Proposed Top of Berm Elevation = 18.5 Feet

Pond Size

Square Dimension at Bottom of Treatment Depth = 270 Feet
 Square Dimension at Top of Treatment Depth = 273 Feet
 Square Dimension at Top of Attenuation Depth = 281 Feet
 Square Dimension Bottom of Berm = 289 Feet
 Square dimension at top berm = 319 Feet
 Outside pond dimensions (including tie-down) = 339 Feet

Minimum Total Area Required = 2.91 Acres (10% SAFETY FACTOR)

Stage-Storage Calculation

Elevation	Area	Area	Incremental Volume	Total Volume	Total Volume	REMARKS
(ft)	(sf)	(ac)	(cf)	(cf)	(ac-ft)	
14.60	72900	1.67	0	0	0.00	
15.00	74638	1.71	29508	29508	0.68	<i>Top of TV</i>
16.00	79073	1.82	76856	106363	2.44	<i>Top of AV</i>
17.00	83637	1.92	81355	187719	4.31	<i>Bottom of Berm</i>

Required Treatment Volume = 0.58 Acre-Feet
Provided Treatment Volume = 0.68 Acre-Feet ✓
 Required Attenuation Volume = 1.76 Acre-Feet
Provided Attenuation Volume = 1.76 Acre-Feet ✓



Project Development and Corridor Study Report

County Project Manager: Eric S. Shroyer, P.E.

Manatee County Public Works

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