



April 2, 2025
Revised May 6, 2025

Ms. Diana Spriggs, P.E.
Regulatory Division Director
City of St. Port Lucie Public Works Department
121 S.W. Port St. Lucie Blvd, Building B
Port St. Lucie, FL 34984

RE: *SG-7B- Panda Express Queuing Analysis*
Port St. Lucie, Florida

Dear Ms. Spriggs:

Kimley-Horn and Associates, Inc. has undertaken the following queuing analysis to evaluate anticipated drive-through queues for a proposed Panda Express just south of the intersection of SW Becker Road & SW Anthony F. Sansone Sr. Blvd in Port St. Lucie, Florida. The subject property will be incorporated into a larger mixed-use development that will include multifamily dwelling units, a gas station, a car dealership, and other commercial uses. The proposed Panda Express fast-food restaurant will be approximately 2,600 square feet with a drive through lane.

Kimley-Horn has prepared this stacking analysis to be included as a part of the site plan application to the City of Port St Lucie to determine if adequate stacking is provided on-site. The conceptual site plan for the project site is included in **Attachment A**.

Panda Express Drive-Through Queuing Calculations

Queuing data at local Panda Express locations is not currently available. However, once granted permission by the property owners, queuing counts will be collected at two nearby Panda Express locations from the hours of 11:00AM to 2:00PM.

In the absence of queuing data specific to Panda Express, queuing data from nearby Wendy's locations and Chipotle locations was utilized to verify the drive-through stacking area. Counts were collected at three nearby Chipotle locations and two nearby Wendy's locations from the hours of 11:00AM to 2:00PM. Data collection occurred on Tuesday, March 25, 2025. The queuing counts considered the maximum number of vehicles in the drive-through during five-minute intervals. The total number of queued cars were counted. Data from the Wendy's in the area include the addresses of 2210 Gatlin Blvd and 1790 St Lucie Blvd. Data from the Chipotle's in the area include the addresses of 5545 Okeechobee Rd, 10830 SW Traditional Pkwy, and 2421 NW Federal Hwy. The collected queuing counts are provided in **Attachment B**.

Proposed Panda Express

For this analysis, customer demand at the other drive-through restaurants surveyed was evaluated to determine a conservative queue that could form upon buildout. The capacity of the proposed drive-through design was evaluated for adequacy to provide for the highest 95th percentile queuing demand across the two sites. As shown in **Table 1** below, the highest observed 95th percentile queue across both sites was seven (7) vehicles. The proposed Panda Express drive-through includes space for 13 vehicles, providing enough stacking to adequately handle the highest observed 95th percentile queuing demand.

Table 1 – 95th Percentile Observed Queues and Proposed Stacking Area

Provided On-Site Drive-Through Vehicle Queuing (TOTAL)	Site 1: Chipotle 95th Percentile Queuing Demand (TOTAL)	Site 2: Chipotle 95th Percentile Queuing Demand (TOTAL)	Site 3: Chipotle 95th Percentile Queuing Demand (TOTAL)	Site 4: Wendy's 95th Percentile Queuing Demand (TOTAL)	Site 5: Wendy's 95th Percentile Queuing Demand (TOTAL)	Highest Observed 95th Percentile Queue (TOTAL)	Adequate Queuing Provided?
13	2	6	3	7	3	7	Yes

Conclusion

A queuing analysis was performed for a proposed Panda Express just south of the intersection of SW Becker Road & SW Anthony F Sansone Sr. Blvd in Port St. Lucie, Florida. The subject property will be incorporated into a larger mixed-use development that will include multifamily dwelling units, a gas station, a car dealership, and other commercial uses.

Queuing data at local Panda Express locations is not currently available. In the absence of queuing data specific to Panda Express, queuing data from nearby Wendy's locations and Chipotle locations was utilized to verify the drive-through stacking area. Based upon the queuing data from these fast food restaurants within a 10-mile radius, the highest observed 95th percentile queuing demand for existing fast food restaurants was seven (7) vehicles. The proposed Panda Express drive-through includes space for 13 vehicles, providing enough stacking to adequately handle the maximum observed 95th percentile queuing demand.

Please contact us if you have any questions or need additional information.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

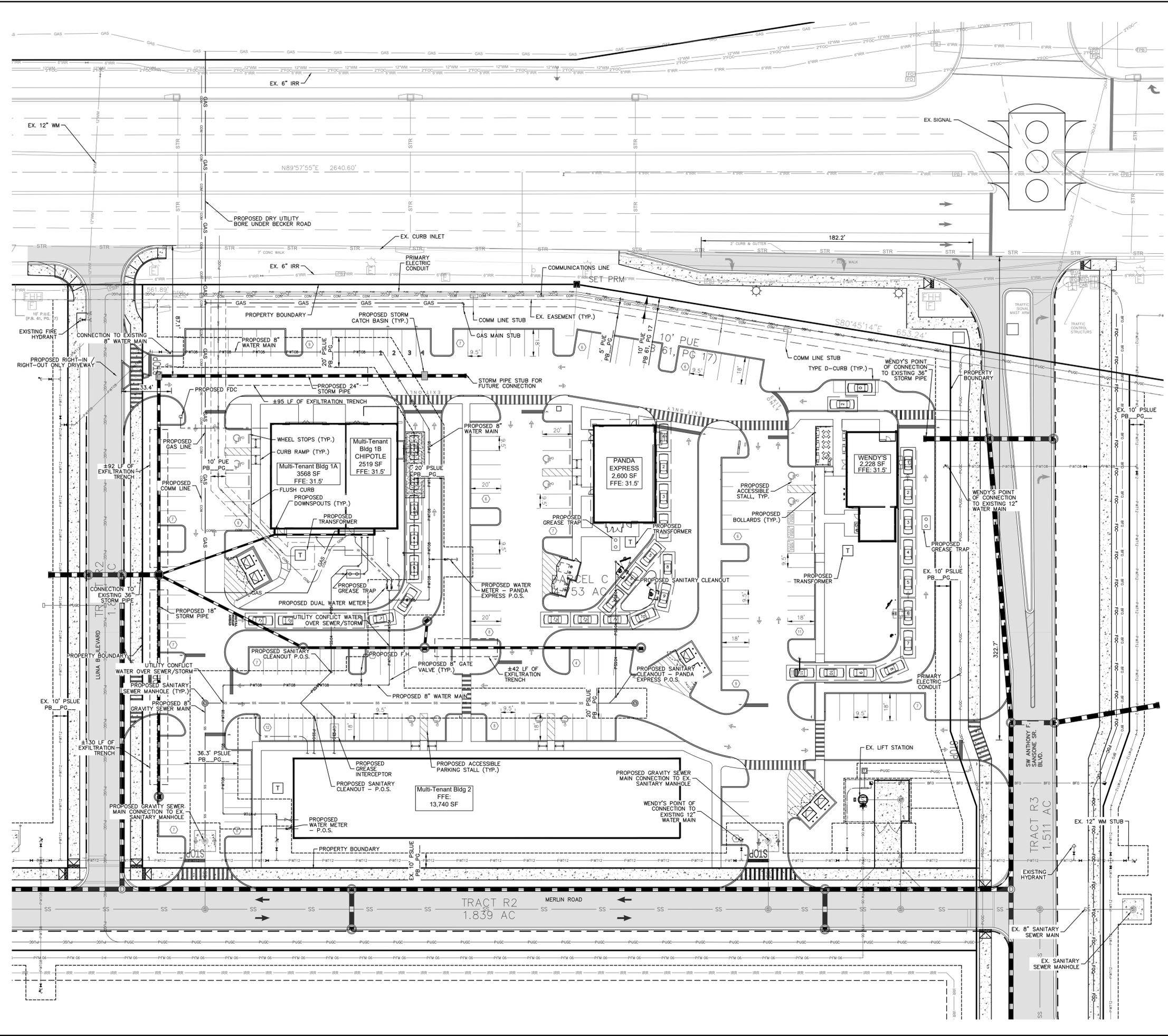
Stephanie A. Guerra, P.E.
Transportation Engineer

Florida Registration Number: 84302

Attachments: Conceptual Site Plan
Wendy's Queuing Data
Chipotle Queuing Data

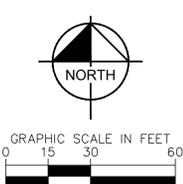
ATTACHMENT A
Conceptual Site Plan

Plotted By: Anderson, Sarah Sheet: Set: Mouhalis - S57 Parcel C - 249222002 Layout: C-100 PRELIMINARY ENGINEERING PLAN - 249222002 May 06, 2025 03:31:37pm K:\VRB\LEVA\249222002 - S57 Parcel C - Mouhalis\CAD\PlanSheets\C-100 PRELIMINARY ENGINEERING PLAN - 249222002.dwg
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND	
	PROPERTY LINE
	PROPOSED LOT LINE
	PROPOSED 12" WATER MAIN
	PROPOSED 8" WATER MAIN
	PROPOSED 6" WATER MAIN
	PROPOSED 4" WATER MAIN
	PROPOSED 3" WATER MAIN
	PROPOSED 2" WATER MAIN
	PROPOSED 1" WATER MAIN
	PROPOSED 0" WATER MAIN
	PROPOSED 5" WATER MAIN
	PROPOSED 7" WATER MAIN
	PROPOSED 9" WATER MAIN
	PROPOSED 10" WATER MAIN
	PROPOSED 11" WATER MAIN
	PROPOSED 13" WATER MAIN
	PROPOSED 14" WATER MAIN
	PROPOSED 15" WATER MAIN
	PROPOSED 16" WATER MAIN
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	PROPOSED 92" WATER MAIN
	PROPOSED 93" WATER MAIN
	PROPOSED 94" WATER MAIN
	PROPOSED 95" WATER MAIN
	PROPOSED 96" WATER MAIN
	PROPOSED 97" WATER MAIN
	PROPOSED 98" WATER MAIN
	PROPOSED 99" WATER MAIN
	PROPOSED 100" WATER MAIN

- GENERAL NOTES:**
- THIS PRELIMINARY ENGINEERING PLAN IS PROVIDED FOR REFERENCE ONLY DURING THE SITE PLAN REVIEW APPLICATION. AFTER SITE PLAN APPROVAL, EACH TENANT WILL BE RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION PLANS TO THE CITY. FUTURE UTILITY POINTS OF CONNECTIONS ARE SHOWN ON THE PLAN TO DEMONSTRATE THAT THERE IS A FUTURE POINT OF CONNECTION FOR EACH TENANT AND THAT THERE IS THE ABILITY TO USE EXISTING WATER MAIN STUBS TO CREATE A LOOPED WATER MAIN THROUGH THE WENDY'S PARCEL. THE EXISTING AND PROPOSED HYDRANTS ON-SITE AND OFF-SITE MEET ST. LUCIE COUNTY FIRE HYDRANT COVER REQUIREMENTS FOR THE BUILDINGS PROPOSED ON THIS SITE PLAN.
 - NO GAS LINES SHALL BE PROVIDED FOR THE PROPOSED WENDY'S.



NO.	REVISIONS	DATE	BY

Kimley»Horn
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 445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
 PHONE: 772-794-4100
 WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

LICENSED PROFESSIONAL	SARAH ANDERSON, P.E.
KHA PROJECT	249222002
DATE	12/17/24
SCALE	AS SHOWN
DESIGNED BY	
DRAWN BY	
CHECKED BY	

PRELIMINARY ENGINEERING PLAN

MOUHALIS PARCEL C SOUTHERN GROVE 7
 CITY OF PORT ST. LUCIE FLORIDA

CALL 48 HOURS BEFORE YOU DIG
 IT'S THE LAW! DIAL 811
 Know what's below. Call before you dig.
 811

VERTICAL DATUM ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) SUBTRACT 1.50 FROM NAVD 29 ELEVATION TO GET THE NAVD 88 ELEVATION.
 CITY OF PORT ST. LUCIE PROJECT #
P25-023
 PSUSD PROJECT #
#5438C

SHEET NUMBER
C-100

ATTACHMENT B
Wendy's Queuing Data

	Site 1	Site 2
Time	Total #	Total #
11:00 AM	3	2
11:05 AM	2	2
11:10 AM	2	1
11:15 AM	2	0
11:20 AM	5	0
11:25 AM	5	3
11:30 AM	3	3
11:35 AM	3	1
11:40 AM	3	3
11:45 AM	6	2
11:50 AM	7	1
11:55 AM	6	3
12:00 PM	3	4
12:05 PM	3	6
12:10 PM	3	3
12:15 PM	2	6
12:20 PM	4	9
12:25 PM	3	6
12:30 PM	4	0
12:35 PM	2	3
12:40 PM	3	5
12:45 PM	3	4
12:50 PM	1	2
12:55 PM	2	3
01:00 PM	3	5
01:05 PM	2	4
01:10 PM	4	2
01:15 PM	4	5
01:20 PM	2	5
01:25 PM	4	6
01:30 PM	4	0
01:35 PM	6	5
01:40 PM	6	3
01:45 PM	7	2
01:50 PM	6	5
01:55 PM	6	2

Site 1 - 95th Percentile Queue 7
 Site 2 - 95th Percentile Queue 6
 Highest Observed 95th Percentile Queue 7

Site 1- 2210 Gatlin Blvd
 Site 2- 1790 St Lucie Blvd

ATTACHMENT C
Chipotle Queuing Data

Time	Site 1 Total #	Site 2 Total #	Site 3 Total #
11:00 AM	0	1	0
11:05 AM	0	1	0
11:10 AM	0	0	0
11:15 AM	2	0	1
11:20 AM	1	1	0
11:25 AM	1	0	1
11:30 AM	0	1	2
11:35 AM	2	1	2
11:40 AM	0	4	1
11:45 AM	1	3	1
11:50 AM	2	1	1
11:55 AM	0	1	0
12:00 PM	0	2	1
12:05 PM	1	2	0
12:10 PM	1	2	0
12:15 PM	1	1	1
12:20 PM	2	1	1
12:25 PM	2	0	0
12:30 PM	0	1	0
12:35 PM	1	4	2
12:40 PM	2	4	1
12:45 PM	1	4	0
12:50 PM	1	7	0
12:55 PM	1	8	1
01:00 PM	1	5	2
01:05 PM	2	3	0
01:10 PM	3	2	2
01:15 PM	1	2	4
01:20 PM	2	3	2
01:25 PM	1	3	4
01:30 PM	2	3	0
01:35 PM	2	3	1
01:40 PM	2	2	1
01:45 PM	2	1	1
01:50 PM	1	2	1
01:55 PM	1	0	0

Site 1- 95th Percentile Queue:	2	Site 1- 5545 Okeechobee Rd
Site 2- 95th Percentile Queue:	6	Site 2- 10830 SW Traditional Pkwy
Site 3- 95th Percentile Queue:	3	Site 3- 2421 NW Federal Hwy
Highest Observed 95th Percentile Queue	6	