MEMORANDUM

From:	Alex Memering, P.E. Kimley-Horn and Associates, Inc.
Date:	March 20, 2024
Subject:	Trip Generation Statement – Walgreens

Introduction

Kimley-Horn has been retained to perform a trip generation statement in support of the proposed Walgreens located in the northwest quadrant of the intersection of Village Parkway and Marshall Parkway in the City of Port St Lucie, FL. The project site is currently vacant. The proposed development will consist of a ±10,000 square foot Walgreens and access will be provided via three driveways: one right-in/right-out on Village Parkway, one right-in/right-out on Marshall Parkway and one full-access driveway on Marshall Parkway aligned with a median opening. The full access driveway on Marshall Parkway will include an exclusive ingress left turn lane and the right-in/right-out driveway on Marshall Parkway will include an exclusive ingress right turn lane. The figure below shows the location of the proposed project and its driveways. The site plan showing the proposed development is included as an attachment.



Trip Generation Analysis

Trip generation estimates for the proposed development were generated using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition* trip rates. ITE Land Use Code (LUC) 881 – Pharmacy/Drugstore with Drive-Through Window was used to generate Daily, AM peak hour, and PM peak hour trips. As shown in **Table 1**, the trip generation potential for the development is anticipated to be 1,084 daily net new external trips, 91 AM peak hour net new external trips (46 in/45 out), and 112 PM peak hour net new external trips (56 in/56 out) upon buildout. Excerpts from the ITE Trip Generation Manual, 11th Edition is included as an attachment.

Land Lico	Intensity	Daily Trips	AM Peak Hour of Generator			PM Peak Hour of Generator		
Land Use	intensity		Total	In	Out	Total	In	Out
Proposed Development Pharmacy w Drive-Through Window	10 KSF	1,084	91	46	45	112	56	56
TOTAL NET EXTERNAL TRIPS		1,084	91	46	45	112	56	56
Note 1: Trip Generation was calculated using the data from ITE's Trip Generation Manual, 11th Edition Pharmacy/Drugstore with Drive-Through Window								
Daily T = 108.40*(X);		108.40*(X); (X is 1,000 square feet of gross floor area)						
AM Peak Hour of Generator $T = 9.08*(X); (X)$; (X is 1,000 square feet of gross floor area); (50% in/ 50% out)						
PM Peak Hour of Generator	T = 11.23*(X);	T = 11.23*(X); (X is 1,000 square feet of gross floor area); (50% in/ 50% out)						

Table 1: Trip	Generation	Summary
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Onsite Vehicle Stacking

Vehicle stacking for the development was analyzed per comments provided by City of Port St. Lucie staff. Approximately 56 ingress trips will occur during the PM peak hour based on the trip generation potential for the proposed development. Therefore, the rate of cars entering the site during the PM peak hour is approximately one car every minute. Information provided by the client shows that the drive-through will allow queuing for approximately 7 vehicles. It is understood that operations of the drive-through will not exceed the 7-vehicle queue length as cars will be processed at a rate equal or greater than the number of entering vehicles, which will allow for negligible stacking. Additionally, the number of customers who will utilize the drive-thru window will be minimal based upon typical operations of existing Walgreen locations.

Summary

This trip generation statement has been prepared in support of a proposed Walgreens located in the northwest quadrant of the intersection of Village Parkway and Marshall Parkway in the City of Port St Lucie, FL. The project site is currently vacant. The proposed development will consist of a ±10,000 square foot Walgreens and access will be provided via three driveways: one right-in/right-out on Village Parkway, one right-in/right-out on Marshall Parkway and one full-access driveway on Marshall Parkway aligned with a median opening. The full access driveway on Marshall Parkway will include an exclusive ingress left turn lane and the right-in/right-out driveway on Marshall Parkway will include an exclusive ingress right turn lane. The trip generation potential for the development is anticipated to be 1,084 daily net new external trips, 91 AM peak hour net new external trips (46 in/45 out), and 112 PM peak hour net new external trips (56 in/56 out) upon buildout.

Vehicle stacking for the development was analyzed per comments provided by City of Port St. Lucie staff. It is understood that operations of the drive-through will not exceed the 7-vehicle queue length as cars will be processed at a rate equal or greater than the number of entering vehicles, which will allow for negligible stacking. Additionally, the number of customers who will utilize the drive-thru window will be minimal based upon typical operations of existing Walgreen locations.

Attachments

Site Plan

ITE Trip Generation Manual, 11th Edition Excerpt

GENERAL NOTES:

HAZARODUS WASTE DISPOSAL SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS ALL LANDSCAPE AREAS ABUTING VEHICULAR USE AREAS SHALL BE CURBED OR PROTECTED BY CURB STOPS. ALL BUILDING, PARKING AND ACCESS AREAS SHALL DOCUMENT COMPLIANCE WITH THE REQUIREMENTS OF THE AMERICAN DISABILITIS ACT FRIOR TO THE ISUARCE OF BUILDING PERMIT. SOLE EROSION AND SEDMENT CONTROL DEVICES SHALL BE IN THE LANDSCAPING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS (CHAPTER 154 OF THE LANDSCAPE CODE OF THE CITY OF PORT ST. LUORE.

LUCIE. CALL BE A DATE OF BALL BE A DATE OF BALL BE LOCATED WITHIN NO LANDSCAPING OTHER THAN GRASSES SHALL BE A DATE OF THIN 10' OF A CITY UTILITY LINE OR APPURTENANCE. ALL OTHER UTILITIES SHALL BE A MINIMUM OF 5' HORIZONTAL SEPARATION FROM CITY UTILITY MAINS FOR PARALLEL INSTALLATIONS AND A MINIMUM 18' BELOW CITY MAINS. (ALL MEASUREMENTS ARE TAKEN FROM OUTSIDE TO OLITISTIES) OUTSIDE)

BELOW CITY MAINS, (ALL MEASUREMENTS ARE TAKEN FROM OUTSIDE TO OUTSIDE) NO LANDSCAPING SHALL BE PLACED IN A MANNER THAT WOULD CREATE CONFLICTS WITH HE INTENDED OPERATION AND MAINTENANCE OF ANY EXISTING UTILITY. THIS APPLICATION IS NOT VESTED FOR ANY MUNICIPAL FEES ALL FEES ARE CALCULATED AT TIME OF PAYMENT. THIS INCLUDES SPECIFICALLY MRACT FEES. UPLAND PRESERVE FEES AND ANY ADMINISTRATIVE REACT OF DESCRIPTION OF ANY MEMORY THIS INCLUDES SPECIFICALLY ON DATE OF CITY COUNCIL APPROVIM. SIGNS ARE NOT PART OF THIS REVIEW AND SHALL BE PERMITTED SEPARATELY FROM THE APPLICATION (SEE CHAPTER 155 (SIGN CODE) CITY OF PORT ST. LUCIE LAND DEVELOPMENT REGULATIONS). THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE CROVIDE PICKUP, REMOVAL, AND DISPOSAL OF DITTER MITHIN THE CITY'S RIGHT-OF-WAY IN ACCORDANCE OF THE AREA FROM THE EDDE OF PAYMENT THE LACED AND COT SHOULD AVIOD UTILITY'S SRIVCE LINES AT ALL TIMES.

UTILITY SERVICES CAN BE CONNECTED ONLY AFTER THE MAINS ARE INSTALLED AND TURNED OVER TO THE CITY.

DRAINAGE STATEMENT:

THE STORMWATER MANAGEMENT SYSTEM FOR THIS PROJECT IS PART OF THE SOUTHERN GROVE MASTER DRAINAGE SYSTEM AND IS DESIGNED TO BE CONSISTENT WITH THE CURRENT APPROVED CONCEPTUAL PERMIT. THE PROPOSED DRAINAGE SYSTEM CONSISTS OF AN ONSITE DRAINAGE SYSTEM THAT IS CONNECTED TO A CONVEYANCE SWALES THAT RUNS ALONG THE WESTERN PROPERTY LINE WHICH OUTFALLS TO EXISTING OFFSITE POND L23B.

TRAFFIC STATEMENT:

AN ANALYSIS OF THE TRAFFIC IMPACTS RESULTING FROM THE SG-11 COMMERCIAL PARCEL WITHIN THE SOUTHER GROVE DRI HAS BEEN CONDUCTED. THE PROJECT IS LOCATED IN THE NORTHWEST CORNER OF THE SW VILLAGE PARKWAY AND OPEN VIEW ROAD INTERSECTION IN PORT ST. LUCIE. THE APPLICANT PROPOSES: 10,000 SQUARE FEET OF COMMERCIAL USE

THE ANALYSIS WAS CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF PORT ST. LUCIE FOR A PROJECT WITHIN AN APPROVED DEVELOPMENT OF REGIONAL IMPACT (SOUTHERN GROVE DRI)

THE PROPOSED PROJECT IS EXPECTED TO GENERATE THE FOLLOWING NET NEW EXTERNAL TRIPS: 1,984 DAILY, 91 AM PEAK HOUR (46 IN/45 OUT), AND 112 PM PEAK HOUR (56 IN/56 OUT)

THE ANALYSIS SHOWS THAT THE ROADWAYS ARE PROJECTED TO OPERATE ACCEPTABLY WITH THE ADDITION OF THE PROPOSED DEVELOPMENT. BECAUSE THE PROJECT IS PART OF THE APPROVED SOUTHERN GROVE DRI, CONCURRENCY IS SATISFIED.

ENVIRONMENTAL ASSESSMENT:

THE SITE IS UNDEVELOPED, COMPRISED PREDOMINANTLY OF LANDS PREVIOUSLY CONVERTED TO CITRUS GROVES, WHICH ARE NO LONGER IN OPERATION.

A REVIEW OF HISTORIC AERIAL IMAGERY INDICATES THAT THE PROPERTY HAS BEEN IN AGRICULTURAL USE FOR MORE THAN 20 YEARS. THE PATTERN OF DITCHES THAT WERE CONSTRUCTED FOR DRAINAGE AND IRRIGATION OF THE FORMER CITRUS GROVE REMAIN I PLACE ON THE SITE. SURFACE WATER AND VEGETATION INDICATIVE OF WET ARES WAS OBSERVED BUT THE SUBJECT SITE IS NOT DESCRIBED ON THE U.S. FISH AND WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY INTERACTIVE DATABASE AS A MAPPED WETLANDS AREA.

ROPOS TYPE CURB

PROPOSED VALLEY GUTTER

EX. FIRE

PROPOSED LEFT TURN LANE

195

191





Land Use: 881 Pharmacy/Drugstore with Drive-Through Window

Description

A pharmacy/drugstore is a retail facility that primarily sells prescription and non-prescription drugs. A pharmacy/drugstore also typically sells cosmetics, toiletries, medications, stationery, personal care products, limited food products, and general merchandise. The pharmacy/ drugstores in this category have a drive-through window. Pharmacy/drugstore without a drive-through window (Land Use 880) is a related use.

Additional Data

Several study sites have two drive-through windows.

To assist in the future analysis of this land use, it is important that the number of drive-through lanes at the study site be reported.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1990s, the 2000s, and the 2010s in California, Colorado, Florida, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Texas, Vermont, and Wisconsin.

Source Numbers

369, 418, 436, 547, 550, 552, 563, 568, 573, 599, 621, 716, 727, 728, 734, 810, 870, 883, 1004, 1053



Pharmacy/Drugstore with Drive-Through Window (881)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 16

Avg. 1000 Sq. Ft. GFA: 13

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
108.40	65.05 - 180.63	33.82

Data Plot and Equation





Pharmacy/Drugstore with Drive-Through Window (881)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

AM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 23

Avg. 1000 Sq. Ft. GFA: 12

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.08	4.91 - 21.11	3.25

Data Plot and Equation





Pharmacy/Drugstore with Drive-Through Window (881)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

PM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 15

Avg. 1000 Sq. Ft. GFA: 13

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.23	6.51 - 25.69	3.82

Data Plot and Equation



