

Agenda

Development Review Board

Norma Sutton
Stephen Withers
Frank Chase
Jennifer Roper
Molly Rose
Peter Fleck
Roger Heinz

Agenda

Council Liaison: Bill Martini

February 16, 2021 6:30 PM 520 Main St. Windermere, FL 34786

PLEASE NOTE: IN ACCORDANCE WITH F.S. 286.26: Person with disabilities needing assistance to participate in any such proceeding should contact the Office of the Town Clerk at least 48 hours beforehand at (407) 876-2563

Pursuant to Resolution No. 2005-12 adopted on December 13, 2005, the following Civility Code shall govern all proceedings before the Town of Windermere Town Council:

- 1. All electronic devices, including cell phones and pagers, shall be either turned off or otherwise silenced.
- Prolonged conversations shall be conducted outside Council meeting hall.
- 3. Whistling, heckling, gesturing, loud conversations, or other disruptive behavior is prohibited.
- 4. Only those individuals who have signed the speaker list and/or who have been recognized by the Mayor (or Chair) may address comments to the Council.
- 5. Comments at public hearings shall be limited to the subject being considered by the Council.
- Comments at Open Forums shall be directed to Town issues.
- All public comments shall avoid personal attacks and abusive language
- 8. No person attending a Town Council meeting is to harass, annoy, or otherwise disturb any other person in the room.

Any member of the public whose behavior is disruptive and violates the Town of Windermere Civility Code is subject to removal from the Town Council meeting by an officer and such other actions as may be appropriate. PLEASE NOTE: IN ACCORDANCE WITH F.S. 286.0105: Any person who desires to appeal any decision at this meeting will need a record of this proceeding. For this, such person may need to ensure that a verbatim record of such proceeding is made which includes the testimony and evidence upon which the appeal is to be based.

AGENDA

- THE MEETING IS CALLED TO ORDER BY THE CHAIRMAN
- 1. OPEN FORUM/PUBLIC COMMENT (3 Minute Limit):
- 2. NEW BUSINESS
 - a. MINUTES
 - i. November 10, 2020 Board Meeting Minutes (Attachments-Board Option)
 - b. GENERAL ITEMS FOR CONSIDERATION
 - i. <u>Z19-12 Rezone to Planned Unit Development and Approval of Preliminary</u>
 <u>Development Plan at the Northeast Corner of Main Street and E 6th Avenue –</u>
 Windermere Downtown Property, LLC (Attachments-Board Option)
- 3. ADJOURN:

TOWN OF WINDERMERE

Development Review Board Meeting Minutes

November 17, 2020

Present were Chair Frank Chase, Board Members; Norma Sutton, Roger Heinz (new member), Stephen Withers, Molly Rose (via Zoom), Jennifer Roper, and Peter Fleck. Town Manager Robert Smith, Liaison Bill Martini (via Zoom), Assistant Town Planner Amanda Warner, and Town Clerk Dorothy Burkhalter were also present.

Chair Chase called the meeting to order at 6:30pm. He then led everyone in the Pledge of Allegiance.

Chair Chase welcomed new member Roger Heinz to the Board.

1. OPEN FORUM/PUBLIC COMMENTS:

There were no public comments.

2. **NEW BUSINESS:**

a. MINUTES:

i. September 15, 2020 Meeting Minutes

Member Withers made a motion to approve the minutes. Member Fleck seconded the motion. All were in favor.

b. GENERAL ITEMS FOR CONSIDERATION:

i. Z21-01: 3229 Wauseon Drive – Christopher & Amy Rucki – Variance request to allow for the north side setback to be reduced from 13' to 11.32'

Chair Chase turned the floor over to Ms. Amanda Warner with Wade Trim. Ms. Warner presented variance Z21-01. She explained that the request is to allow a 11.32' side setback to the north side instead of the required 13'. Ms. Warner commented on the hardship requirements. She then stated that twenty (20) notices were mailed out with 8 returned all in approval. Ms. Warner then read into the record an email she received from Ms. Rachel Weston in support (attached). She completed her presentation. Chair Chase opened the floor to the owners. Mr. Chris Rucki, owner, introduced himself. He then explained that they are renovating their existing home that was originally built in 1965 to current standards. Mr. Rucki further commented on the request and stated that zero (0) disapprovals were received. Member Heinz commented on the professional and very informative submission by Mr. and Mrs. Rucki. After minimal discussion was made, Member Fleck made a motion to recommend approval of the variance request. Member Heinz seconded the motion. All were in favor.

Chair Chase questioned the 6th Avenue and Main Street submission. Manager Smith stated that the applicant missed the submission deadline, therefore, the item should be scheduled for the December 15th DRB meeting.

TOWN OF WINDERMERE

Development Review Board Meeting Minutes

November 17, 2020

4. <u>ADJOURN:</u>

Member Withers made a motion to adjourn. Member Heinz seconded the motion. All were in favor.

The meeting adjourned at 6:50pm.

Dorothy Burkhalter, Town Clerk

Frank Chase, Chair

Town of Windermere

614 Main Street Windermere, FL 34786 Office: (407) 876-2563 Fax: (407) 876-0103

Mayor
JIM O'BRIEN



Town Manager ROBERT SMITH

Clerk
DOROTHY BURKHALTER

Development Review Board February 16, 2021

1st Town Council March 23, 2021

2nd Town Council May 11, 2021

Case No.: Z19-12

Applicant/Representative: Jim Karr/Jim Hall

Property Owner: Windermere Downtown Property, LLC

Reguested Action: Rezoning and approval of Preliminary Development Plan (PDP)

Property Address: 517 Main St. (17-23-28-9336-02-430); 527 Main St. (17-23-28-

9336-02-470); 516 Oakdale St. (17-23-28-9336-02-510); 522 Oakdale St. (17-23-28-9336-02-500); 119 E 6th Ave. (17-23-28-9336-02-490), Windermere, FL 34786; and parcel no. 17-23-28-

9336-02-520

Legal Description: PLAT OF WINDERMERE G/36 LOTS 244 (LESS N 24.50 FT) &

LOTS 245 & 246; PLAT OF WINDERMERE G/36 LOTS 247 & 248; PLAT OF WINDERMERE G/36 LOT 251; PLAT OF WINDERMERE G/36 LOT 250; PLAT OF WINDERMERE G/36

LOT 249; and PLAT OF WINDERMERE G/36 LOT 252

Existing Future Land Use: Commercial/Single-Family Residential with Town Center Overlay

Existing Zoning: Commercial/Single-Family Residential with Town Center Overlay

Existing Use: Commercial/Residential

Proposed Use: Retail/Office/Restaurant

CASE SUMMARY:

The subject property is located at the northeast corner of Main Street and E 6th Avenue in Downtown Windermere. The subject property is within the Town Center Overlay District as adopted in the Town's Comprehensive Plan and must adhere to the Town Center Design Guidelines. The development of property within the Town Center Overlay District requires the property to be rezoned to PUD. The applicant is requesting a rezoning and a preliminary site plan, pursuant to Division 3.03.00 of the Town of Windermere Land Development Code. As required by the Comprehensive Plan, the applicant proposes to change the current zoning designation from Commercial/Single-Family Residential within the Town Center Overlay to Planned Unit Development (PUD) within the Town Center Overlay. Additionally, the applicant is requesting approval of a Preliminary Development Plan (PDP) that proposes two buildings for Office, Retail, and Restaurant uses.

The PUD zoning approval process involves three steps:

1. The **concept plan** provides a generalized plan of development. This plan is nonbinding on the developer. The concept plan is required to be submitted to individual Development Review Board (DRB) members for comments on the concept. The comments from the DRB om the concept plan are non-binding on the project but provide any comments or concerns of individual DRB members in the development of the plans for the next two steps of the process.

The concept plan for this project was submitted to individual DRB members on September 30, 2020. Comments from individual DRB members on the concept plan were provided to the applicant on October 12, 2020. The DRB members' comments on the conceptual plan are attached to this staff report as Attachment "A".

- 2. The **preliminary development plan** is a more detailed plan which conveys the PUD zoning to the parcel. The preliminary development plan is reviewed in a public hearing by the DRB and also by the Town Council at two public hearings. Approval of the preliminary development plan assigns the PUD zoning to the property. Approval of the preliminary development plan does not authorize development activity.
- 3. The final development plan is a detailed fully engineered site plan, and it represents the last step in the PUD approval process prior to the approval of construction plans. The DRB will hold a public hearing to consider the final development plan for a recommendation of approval to Town Council. After DRB recommendation on the final development plan, the final development plan will be considered at a public hearing by the Town Council for final approval.

To reiterate, this request is only related to the preliminary development plan. If the preliminary development plan is approved by Town Council, then the project will come back to the DRB and Town Council for approval of the final development plan.

For general information, a timeline of the review of the PUD rezoning and preliminary development plan is provided below:

- April 9, 2019 A pre-application meeting for the comprehensive plan amendment and PUD was held between Robert Smith, Town Manager; Brad Cornelius, Wade Trim - Contracted Town Planner; Jim Karr of Windermere Downtown Property, LLC (Applicant); and Jim Hall (Hall Development Services, Inc).
- June 5, 2019 The application was received by the Town. Original application included three buildings and was not consistent with Town Center Design Guidelines. Original submittal included a proposed comprehensive plan amendment to revise comprehensive plan requirements for the Town Center Overlay District.
- June 20, 2019 Wade Trim emailed sufficiency comments on submitted plans to Applicant.
- June 14, 2019 Wade Trim emailed Applicant and confirmed receipt of revised plans.
- June 20, 2019 Wade Trim emailed Applicant the first round of comments.
- August 23, 2019 Wade Trim received the proposed traffic study methodology from Luke Transportation Engineering Consultants.
- August 27, 2019 Wade Trim received updated plans.
- **September 5, 2019** Wade Trim emailed Luke Transportation Engineering Consultants the Kimley-Horn and Associates (KHA) comments for the required traffic study methodology.
- November 6, 2019 The Town received the traffic study prepared by Luke Transportation Engineering Consultants from Applicant.
- November 25, 2019 Wade Trim forwarded Applicant comments from KHA regarding the traffic study.
- January 10, 2020 Wade Trim received the updated traffic study from Applicant.
- January 10, 2020 Wade Trim forwarded the traffic study to KHA.
- January 27, 2020 KHA provides Wade Trim with final traffic study review comments and recommendation.
- February 19, 2020 Wade Trim forwarded Applicant Wade Trim's comments from August 27, 2019, submission and KHA comments on the traffic study received on January 10, 2020. Delay from August 2019 to February 2020 due to the preparation and review of the required traffic study.
- August 12, 2020 Wade Trim received revised plans from Applicant. Revised plans removed third building and request for comprehensive plan amendment. Revised plans intend to be consistent with Town Center Overlay District.
- September 3, 2020 Wade Trim sent Applicant updated comments based on plan received August 12, 2020.
- September 25, 2020 Wade Trim received updated plans from Applicant.
- September 30, 2020 Wade Trim emailed the Town the concept plans to send out to the Development Review Board (DRB) for their individual review.
- October 12, 2020 DRB comments on concept plans submitted to Applicant.
- October 15, 2020 Applicant sends email confirming receipt of DRB comments on concept plan.
- November 1, 2020 Wade Trim notifies Applicant that preliminary development plans have not been submitted and project cannot be scheduled for public hearings with DRB and Town Council until preliminary development plans are submitted.
- November 3, 2020 Applicant contacts Town for façade plans for new Town Administration Facilities.
- November 4, 2020 Town provides Applicant with façade plans for new Town Administration Facilities.

- **January 15, 2021** Wade Trim receives preliminary development plans from Applicant from the Town.
- **February 16, 2021** Scheduled DRB public hearing for PUD rezoning and preliminary development plans.
- March 23, 2021 Scheduled Town Council first public hearing for PUD rezoning and preliminary development plans.
- May 11, 2021 Scheduled Town Council second/final public hearing for PUD rezoning and preliminary development plans.

CASE ANALYSIS:

This review is the preliminary development plan (PDP) step in the PUD process. The following is an assessment of the preliminary development plan requirements, and if the requirements are met with the submitted PDP plans. The submitted PDP plans are provided in Attachment "B".

Requirement	Provided
Project Name	Missing project name
Legal Description	Yes
Total Acreage	Yes
Location Map	Yes
Contact information for the owners, developers and the consultants involved in the preliminary development plan	Yes
Plan legend including north arrow, scale, and date.	Yes
Preliminary survey information showing the existing tree dimensions and locations on the site. For six inches or greater caliper trees, a tree impact plan must be provided.	Survey provided is outdated. Tree impact plan is from a previous project from 2006 (Main Street Shoppes).
A traffic study may be requested by the town manager.	Traffic study completed by Luke Transportation Engineering Consultants, Inc. date December 19, 2019. Reviewed for Town by Kimley Horn. Right-turn lane from westbound E 6 th Avenue into project site required. Traffic study and Kimley Horn review attached as Attachment "B"
Existing topography at one-foot contours and other natural features including lakes, water bodies, conservation area, soils, and flood hazard areas.	Not provided. Applicant requests waiver to requirement.
Existing and proposed land uses, with each phase of the total development identified, if applicable.	Yes – Project one phase
Town Center Types of Uses	Yes – Retail/Office/Restaurant
Gross Floor Area	There are inconsistencies with the proposed gross floor areas. See staff report for discussion of inconsistencies.
Floor Area Ratio	Applicant provides the maximum limitations, but does not provide the proposed FAR.

Building Height	Applicant acknowledges the maximum 35 foot height limitation but does not provide the proposed height.
Setbacks	Provided, but not all setbacks are accurate due to poor quality of site plan document (property lines not easily visible).
Open Space	Not Applicable
Parking Spaces	Yes, but the site plan does not accurately reflect the stated amount of parking spaces, nor does it provide required handicapped parking, and the size of the spaces are inconsistent.
Service Access	Yes, loading zone shown.
Landscape Buffers	Yes, shows required 20 foot buffer and wall along Oakdale, but does not show detail. Acknowledges buffer requirement.
Identify the phasing of development and the manner in which each phase of development will exist as an independent development unit.	One phase.
The location of local streets proposed in the development, right-of-way widths, street setbacks, planned rights-of-way, the location of access points to abutting streets and projected traffic generation based on established International Traffic Engineer (ITE) standards. A traffic study may be required at the discretion of the town manager.	Traffic study completed by Luke Transportation Engineering Consultants, Inc. date December 19, 2019. Reviewed for Town by Kimley Horn. Right-turn lane from west-bound E 6th Avenue into project site required. Traffic study and Kimley Horn review attached as Attachment "B". The location of the streets is shown; however, a defined property line is not provided. Right-of-way width is not clearly illustrated on the site plan.
Buffer treatment to adjacent uses.	Yes, shows required 20 foot buffer and wall along Oakdale, but does not show detail
All building elevations and architectural character. Sketches at appropriate scale to provide sufficient detail for review.	No. Applicant provides example façade images and states the Town Center Design Guidelines will be met. No project specific sketches provided. Applicant requests a waiver for this requirement.
Water service (including fire flows), plus gallons per day requirement.	Yes
Sewage disposal, plus gallons per day generated, unless septic systems are used.	No. Applicant states that sewer will be a private septic. Does not show location of septic tank nor does it show location of drainfield.
Stormwater management concept.	Only the location of the stormwater retention area is provided. No calculations or design information provided.
Parks/recreation facilities.	Not Applicable
Waivers from this Land Development Code or the site development standards of the PUD district shall be indicated on the preliminary development plan and/or submitted in writing.	Topography and Elevation/façade waivers requested.

Since this property is within the Town Center Overlay district, it must adhere to the Town Center Design Guidelines. The Town Center Design Guidelines provide design standards for developments within the Town Center Overlay district. The following are the standards provided within the Town Center Design Guidelines:

Requirement	Compliant
Rear Building Setback: 120' from buffer zone	Information not provided; however, when scaled the buildings meet the 120' setback from buffer zone.
Building Frontage: 80% on Main St.	Information not provided; however, when scaled the buildings meet the 80% building frontage requirement.
Required off- street parking 4 parking spaces/every 1,000 square feet	Depends on accurate proposed gross floor area of buildings. Current plans say they are required 87 spaces, but the site plan only shows 85 spaces. No handicap spaces shown. Space size is inconsistent.
Storefront with entrance and display windows	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Expression line which delineates the transition between storefront and the upper façade	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Upper façade which contains horizontal area utilized for wall signage, canopies, or awnings (this area may also have windows if it is a two story building) and the cornice, which is the architectural feature that tops the building	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Store widths or building modules should be designed in 20' increments and proportions based on multiples of the same dimension.	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.

Awnings	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Canopies	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Arcades and Colonnades maximum of 8' wide (measured from outside wall to inside of column)	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Balcony Maximum Height: 35'	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Balcony Maximum Width: 5'	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Maximum Building Height: 35'	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Minimum Base building height: 12'	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Wall Materials	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Wall Configurations	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Storefront Materials and Window Treatment	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Storefront Configuration	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Trim Materials	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Trim Configurations	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Roof Materials	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Roof Configurations	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Signs	Façade design/Elevation information not provided. However, applicant states they will meet the Town Center Design Guideline standards.
Signage Materials	No information Provided. However, applicant states they will meet the Town Center Design Guideline standards.
Signage Configurations	No information Provided. However, applicant states they will meet the Town Center Design Guideline standards.
Lighting	No information Provided. However, applicant states they will meet the Town Center Design Guideline standards.
Screenwall Materials:	
Brick or stone	No information Provided. However, applicant states they will meet the Town Center Design Guideline standards.

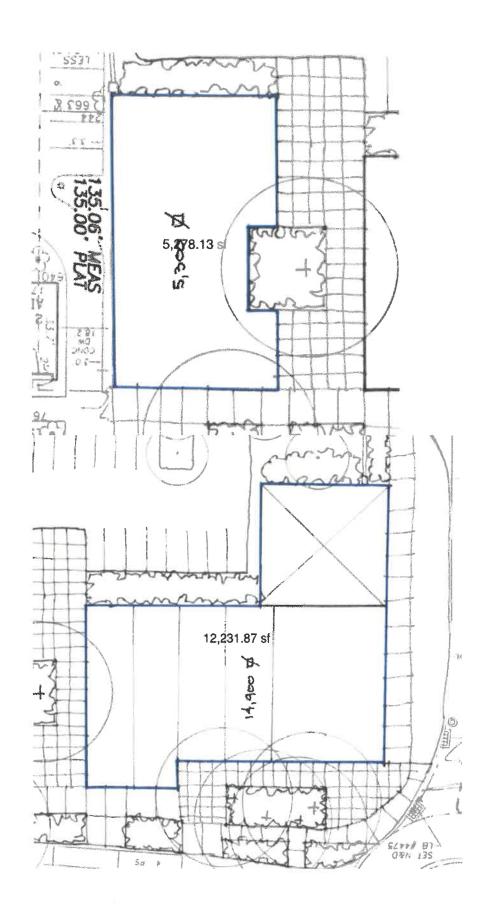
Stucco wall, consistent with character of new building	No information Provided. However, applicant states they will meet the Town Center Design Guideline standards.
Hedges shall be selected from the shrub list and shall be 36" in height.	No information Provided. However, applicant states they will meet the Town Center Design Guideline standards.
Screenwall Configuration:	
Shall be located at all parking lots in conjunctions with the 20' enhancement landscape buffer	Yes, as stated on site plan. Needs to be confirmed with the delineation of property lines.
Shall be 6' in height	Yes

Attachment "C" is the adopted Town Center Master Plan.

The following provides more specific information regarding the review of the preliminary development plans.

Sheet 03 of the preliminary development plans provides a breakdown of the building sizes by uses. When totaled, the square footage equals 21,850 square feet (Office 6,600 square feet, retail 11,500 square feet, restaurant 3,750 square feet). However, the proposed square footage stated under the "Required Parking" is 21,750 square feet. Additionally, the square footage of the buildings stated on the site plan equates to 20,200 (5,300 square feet and 14,900 square feet). Furthermore, when the buildings are scaled, the scaled area of buildings equates to approximately 17,510 square feet.

The following shows the buildings scaled from the preliminary development plan, which documents the discrepancy between the stated area of the buildings and the actual scaled size of the buildings. The difference between the stated area of the buildings and scaled areas of the buildings is approximately 2,690 square feet.



The numerous discrepancies in the stated area of the buildings in the site data table, area of the building for parking calculations, and the scaled versus stated area of the buildings on the preliminary development plan results in the inability to fully determine that the preliminary development plan is compliant with the Town's requirements for approval. Since the scaled area of the buildings on the preliminary development plan are approximately 2,690 square feet smaller than stated, it is uncertain if the larger stated area of the buildings on the site plan will appropriately fit on the project site. This area discrepancy also impacts the calculation of the required parking for the project.

The preliminary development plan does not clearly indicate the property lines. The proposed improvements are placed over the survey and obscure the surveyed property lines. Without defined property lines, it cannot be confirmed that the extent of the preliminary development plan is completely contained within the property boundary.

The preliminary development plan does not show any proposed handicap parking spaces. Furthermore, the preliminary development plan states that there are 87 parking spaces; however, the preliminary development plan only shows 85 parking spaces. The number of parking spaces will need to be determined based on the actual proposed building area. Additionally, the size of the parking spaces shown on the preliminary development plan are not consistent and cannot be verified to meet parking space size standards.

The preliminary site plan is required to include proposed façade designs. However, the applicant did not provide their proposed façade designs. The applicant states that the façade will comply with the Town Center Design Standards and is asking for a waiver to the requirement to submit proposed façade designs. As an example, the applicant provided the planned façades for the new Town Administration Facilities and the new commercial building approved on W 5th Avenue.

The tree survey and inventory submitted with the application is from 2006 and from a different proposed project (Main Street Shoppes). With the age of the survey and the disconnect of the tree schedule from the current project, there is no clear schedule on tree size, what trees are being removed, and what trees are being saved.

Another area of concern is the lack of space for the septic tank and septic drainfield. The applicant has not shown on the preliminary development plan the location of the proposed septic tank and septic drainfield. The proposed development does not appear to provide any open area for the installation of the septic tank and septic drainfield.

The applicant provided a traffic study for the proposed project. The traffic study was completed by Luke Transportation Engineering Consultants, Inc.. The development analyzed in the traffic study is slightly greater than the building areas currently proposed. However, the difference is not significant. Consistent with the requirements of the Town Center Overlay District requirements, the access to E 6th Avenue is limited to a right-in and right-out only. There is a full access on E 5th Avenue. The traffic study was reviewed for the Town by Kimley-Horn and Associates. Kimley-Horn and Associates recommended the installation of a right-turn lane from westbound E

6th Avenue into project site. The preliminary development plan shows the recommended right-turn lane into the project site. The proposed project will not impact the Town's planned changes to the existing roundabout at Main Street and E 6th Avenue. In addition, given the configuration of the roundabout, there is not a concern with impacts from the proposed project to site visibility at the intersection.

It is at the DRB's discretion to accept the preliminary development plan as proposed and move forward with a recommendation for approval, approval with conditions, or denial to the Town Council. However, if the DRB finds the preliminary development plan to be insufficient in information to provide a recommendation to Town Council, then the DRB may direct the applicant to provide additional information and to return to DRB, with the additional information, for further consideration of a recommendation by the DRB to Town Council.

PUBLIC NOTICE:

Public notices were mailed to property owners within 500 feet of the subject property on January 25, 2021 (45 notices sent). As of January 29, 2021, no responses were returned. An update to the response count after January 29, 2021 will be provided to the Development Review Board at the public hearing on February 16, 2021.

ATTACHMENT "A"

DRB Members Comments on Downtown Windermere Property Concept Plan

Peter Fleck

From: Pete Fleck < pkfleck@aol.com>

Sent: Friday, October 02, 2020 7:22 PM

To: Diane Edwards <dedwards@town.windermere.fl.us>; Robert Smith

<rsmith@town.windermere.fl.us>

Subject: Re: Downtown Windermere Property PUD Conceptual Plan for DRB Member Review and

Comment

I have reviewed the proposed and think this is great. It cleans up the entrance into the town and gives the downtown a needed upgrade. I assume they are able to satisfy the storm and septic needs for this plan and look forward to seeing it develop.

Pete Fleck

407 724 1550 Cell

The Real Estate Collection

Q-ICE Builders

www.q-icebuilders.com

CBC1252836

Stephen Withers

Please accept my comments as based on my understanding of the codes and issues facing the Town.

I would defer to Brad Cornelius as to the exact intent of the process and interpretation of the current standards.

Any errors I have inadvertently made in reading the codes and standards can be challenged.

The one point I believe should be considered and discussed is reducing parking and / or building area to save the heritage trees on the site. The survey and tree plan submitted appear to be out of date. An arborist should do a tree evaluation before trees are saved or removed.

As the preliminary development plan is non binding on the applicant, should the Town be held to any vote that may binds the Town?

Stephen

Stephen Withers, AIA WITHERS-LLC 712 Main St Windermere FL 34786 321-945-2501 sewarch@hotmail.com

October 1, 2020

Town of Windermere

Downtown Development Proposal dated August 6, 2020 Issued Sept 24, 2020

Applicant: Jim Hall with Hall Development Services, Inc for

Property Owner: Windermere Downtown Property, LLC

Review by: Stephen Withers AIA Development Review Board Member

(For reference I have worked with both Jim Hall and Libra Design Services and both are quality consultants from my experience.)

Sheet 01 Cover Sheet

One assumes the legal description is correct. No varication done.

Sheet 02 Environmental Conditions

This Sheet provides almost no information. Soils survey was done in 1989. No soils
contamination was investigated. There is no apparent flood Zone. The existing land use is
not defined as the current condition has multiple uses which are undistinguished on the
map.

Sheet 03 Notes, Waivers & Land Use Plan

Site Datum

- Current Land Use is Commercial and Residential which should be indicated on a plan drawing.
- "Current Future" seem contradictory and confusing. Is this what is being requested for future????
- Town Center District is what the Town has approved with guidelines. The District includes only Commercial in one area and buffered parking in another. A drawing should be provided to show these areas.
- Requested Land use Designation should be for a Planned Unit Development as indicated on the Cover Sheet. A PUD would have the restrictions of commercial and parking under the Town Center District following the guidelines established. No Single Family residential would be

- allowed unless the parcel was somehow subdivided and the existing single-family resident remained during
- Some phasing plan to be determined. The presumed phase or parcel excluding the existing single family house would have to meet all requirements of the Commercial and Parking restrictions including on site storm and sanitary sewer in that phase or parcel.
- Requested Zoning: PUD. What is Requested Land Use Designation if not PUD?
- Existing Commercial Use is 6,676 SF. Assume this is gross square feet from outside of wall to outside of wall.

Development Program

- The Program indicates 20,000 SF of gross commercial space. During the last developer's
 proposal, the agreement was made to allow 4 cars per 1000 SF of Commercial instead of the 5
 cars per standard county requirement. This would equate to 80 parking spaces on site, (not
 considering street parking or golf cart parking.)
- Loading space would be separate as indicated on the document. However, the previous developers plan did not address delivery trucks being simi-tractor trailers as serves establishments like Dixie Cream Café. The plan needs to address simi's serving the project but they can not park on Main St, 6th Ave, Oakdale or 5th Ave. Turn radiuses need to be adequate to allow trucks to enter the development parking lot and then exit the parking lot. If planned properly they could enter of 6th and exit off fifth. Any additional work required on 6th. 5th or Main Street should be the developers cost.
- The project projection is an additional 824 trips per day added to the current traffic congestion.
 The trips per day should be reviewed by time. As example the Office trips will most likely be at peak traffic periods while Restaurant will not.

Town Center Land Use Calculations

- What does the Windermere Union Church have to do with this project? If they own a parcel that the developer has an option on than that parcel needs to be identified.
- What is the intent of this chart? It would be helpful to see a chart showing everything that exist and then how much as a percentage is being added. What are the numbers at the bottom? Percentages? If yes of what?
- Currently there are two houses on the property. Reviewer does not think either are on 501 Main St.
- Section 2.02.02 and 2.02.03 Wade Trim please verify these are the current applicable and complete code requirement for the Town. It was my understanding that we also had restrictions that prohibited business that were part of a chain or franchise like McDonald's or CVS. The Down Town Overlay has different allowance and limits. An example it would not allow residential per the reviewer's understanding.

Building Setbacks

- Building setback to Oakdale is not 20 feet. That is the buffer zone for the parking not a building setback.
- What does "Build to Line' mean?

Why is Main St a 15' "minimum" to back of curb and 6th Ave is a 10' "maximum". Viewer question forcing the project to be close to 6th Ave especially at the intersection of the round about where the proposed building will block views. There is a 15' triangle at road intersections required for car visibility.

Building setback encroachments

No canopies or balconies were anticipated on 6th Ave.

Notes

- It is assumed that POA stands for "Property Owners Association". Is this implying that the Owner / Developer plans to sell off the project to different entities. Any Town agreement with a Property Owners Association needs to require bonds and insurance language in case the property is not maintained etc. Property Owners Associations typically did not build sewer or water system and cannot verify their life or know how to maintain them. Developers who built cheap as possible to flip are long gone as they are only a limited life corporation. Property Owners Associations never like to put money in for a reserve to fix something in the future. Therefore, the Town needs to be proactive to insure there are funds available when the sewage hits the streets.
- Plan showing Building Envelope is not the maximum envelope allowed but the portion of the property where building(s) could be placed. Same with parking. One restriction on the previous developer was the requirement to save trees as an example.

Sheet 04 Concept Plan

- The concept plan obliterates the survey information about the existing trees. The large heritage oaks need to be saved. Can the parking lot tree islands be at the location of existing large trees.
- The southwest corner of the building is way too close to the round about and appears
 it will block views. People are not required to stop and if they cannot see pedestrians
 there will be problems.
- It appears there is no sidewalk going down 6th Ave. I could not support a project that looked like so many retail developments that only have "architecture" on one face of the project. 6th Ave is the main entry into Windermere and this Façade needs to have a very appealing character. The design guide addresses the preferred architectural design appeal. This character was not meant for only Main St. Similarly, the parking side of this project should not look like a typical strip mall loading area. Currently there is not even a small landscape buffer between the parking and back of buildings.
- The Northeast corner of the project is not defined. One would assume this is the septic
 field and storm water retention. Please clarify. There currently a fence between this
 area and the oval park in front of the chapel. It might look nice facing Oakdale but not

- sure it would be great idea to imply it is an extension of the park and not part of the project. Need to understand safety, sanitary issues and design intent.
- What is the area of the footprint shown? It appears to be about 18000 SF. Leaving only 2000 Sf on a second permitted level. Need clarification on intent of height and number of stories intended. If the office 2000 SF went upstairs the corner of 6th and Main could be opened for visibility
- The intent of the Guidelines was to express a smaller scale project with a varied façade.
 No articulation in the plan suggest a very boxy unarticulated solution.

Sheet 05 Survey

Who did survey and when was it done?

Sheet 06 Tree List

- Who created tree list and when was it done?
- There needs to be more attention to the existing tree canopy.
- There a maximum allowed SF area. This does not mean that this number can be achieved if tree protection, parking, intersection site lines, storm water retention and septic system criteria are not meet.

NOTE: The Town has done a study to improve the roundabout at Main and 6th Ave. This may impact the development property at that corner. Any development plan needs to address this potential impact.

End of review of document "PD complete 9.24.20"

Roger Heinz

From: Roger Heinz <rheinz@town.windermere.fl.us>

Sent: Thursday, October 08, 2020 11:08 AM

To: Diane Edwards <dedwards@town.windermere.fl.us>; Robert Smith <rsmith@town.windermere.fl.us>

Subject: Fw: Downtown Windermere Property PUD Conceptual Plan for DRB Member Review and Comment

Diane and Robert,

At this point, the only comments I have are:

-Based on the attached set of drawings I am in support of this redevelopment project moving to the next phase.

Concerns:

- -The increase of pedestrian traffic with the development throughout the business district and keeping the pedestrians safe while crossing the road. My suggestion is that flashing light crosswalks are installed in the business district.
- -What do the traffic engineers think of making the entrance off of 6th a one way (no right turn back to 6th from parking lot) and pushing the traffic from the parking lot to exit on to 5th? This gets more visibility to other downtown establishments but also dumps the cars out near the round-a-bout at 5th and main, which rarely has standstill traffic. From living here, it just seems like that may help avoid more traffic build-up and congestion at 6th and main.

Best,

Roger

Norma Sutton

From: Norma Sutton <normasutton@outlook.com>

Sent: Friday, October 09, 2020 10:28 AM

To: Diane Edwards <dedwards@town.windermere.fl.us>; Robert Smith

<rsmith@town.windermere.fl.us>

Subject: RE: Downtown Windermere Property PUD Conceptual Plan for DRB Member Review and Comment

Sorry for the delay of my comments – I have been having email issues. I have reviewed the attachments and generally understand the response from the applicant. While I see a couple of questions that were not answered (sewage, drainage, facades) I basically approve the conceptual plans and believe we should move forward with this to the DBR. I don't understand the delay since 2019 and I think we should be prepared to accept the idea of this development without further delay.

ATTACHMENT "B"

Preliminary Development Plans Windermere Downtown Property, LLC 12/15/2020

and Use Plan

Town of Windermere December 15, 2020 Date Issued Issued for

Latest Issued

Applicant: Jim Hall, AICP, BLA Hall Development Services, Inc.

Windermere Downtown Property, LLC 9259 Point Cypress Drive Orlando, FL 32836-5480

SHEET INDEX

SHEET #	TITLE
01	COVER SHEET
02	ENVIROMENTAL CONDITIONS
03	NOTES, WAIVERS & LAND USE PLAN
04	CONCEPT PLAN
05	SURVEY PLAN
90	TREE LIST
07	TOWN DESIGN GUIDELINES AND ELE

Preliminary Development Plan

Windermere, FL

17-23-28-9336-02-490; 17-23-28-9336-02-470;

Parcel ID:

17-23-28-9336-02-430; 17-23-28-9336-02-520;

17-23-28-9336-02-510; 17-23-28-9336-02-500

LEGAL DESCRIPTION:

PLAT OF WINDERMERE G/36 LOTS 245, 246, 247, 248, 249, 250, 251, 252 and 244 (lesss N 24.5 ft); 2.17

Location Map



Hall Development Services Inc.

VATION DETAILS

1302 Osprey Avenue Orlando, FL 32803 Ph: (407) 257-9235 Planning, Real Estate, and Entitlement Strategies www.hallosi.com





Prior Park House St. James, Barbados Ph: (246) 421-6875 Geospatial Consulting www.geoorbis.com



Wetlands

Legend

Subject Property
Orange County Parcels

Notes: There are no wetlands on the subject property.

Topography & Floodplain

HDSi

Legend

Topography (5 ft.)
Subject Property
Fema Flood Zones

QUBRA

Source
Topograph, -GPAMD 8 ft
Property Appoints
Perodpian - Farra Flood Hazard Zove Lines
Floodpian - Farra Flood Hazard Zove Lines

Preliminary Development Plan WINDERMERE, FLORIDA



JOB NO.:
DESIGNED BY:
DRAWN BY:
CHECKED BY:
PROJECT APPROVAL:

EXISTING CONDITION PLAN

02 SHEET NO.

Aerial & Existing Land Use

Land Use Cover

Land Land Use Cover

Tot - Modium Density, Fixed Single Farnity Units

Source: Aerial - FDOT - 2017 Orange County Orthophotos FLUCFCS - Statewide Land Use Land Cover 2004-2017





DATE: FOR: 06.14.2019 REVIEW 06.14.2019 REVIEW 06.04.2020 REVIEW 04.04.2020 REVIEW 01.17.2020 REVIEW 11.17.2020 REVIEW 12.63.2020 REVIEW 12.63.2020 REVIEW



Subject Property Map Unit Symbol - Map Unit Name — 46 - Tavares-Urban land complex, 0 to 5 percent slopes

Soils Map

Legend

Source: Soil Survey of Orange County, Florida National Cooperative Soil Survey, Issued August 1809



C Public Schuld Concernment of the Schuldus.

d Government orfores and facilities.

d Single-Schuld Frederfelds and reddinguis alternative, but not concurrent use in a restricted commercial area (Ord. No. 98-1).

It Public represents any about the redowning uses are allowed in the planned unit development (inneed use). The Redowning uses are allowed in the planned unit development (inneed use). b. Restricted commercial.
c. Outdoor recreetion.
d. Public service.
e. Conservation.
f. Instructional.
f. Instructional.
f. Government offices and facilities.
h. Public middle and high school. Section 2.02.03 3115-0010

17.23.28.9336-02-500, 17.23-28.9336-02-400, 17.23-28.9336-02-400, 17.23-28.9336-03-500, 17.23-28.9386-03-500, 17.23-28.93 commercial and single family residential with town cen-PUD 6/6/55 2.17 actes 0.0 acres 0.0 acres 2.17 actes Current Zoning:
Requested Zoning:
Existing commercial uses:
Gross acres
Gross acres
Wetlands
Wetlands
Net Acres

cial. The following uses are allowed in the o others are prohibited.

QUBRA

DATE FOR: 05.19.2019 REVIEW 08.19.2019 REVIEW 08.05.2020 REVIEW 19.17.2020 REVIEW 11.17.2020 REVIEW 12.05.2020 REVIEW 12.05.2020 REVIEW

DEVELOPMENT PROGRAM

Limit Use
Office
Retail
Restaurant
Parking On Site
NA Arring on Main
Total Parking Pass by Trips Pedestrian Trips Total Trips New trips

Not to exceed 0.60 FAR on commercial land

Not to exceed 0.30 FAR on the subject

Non-Residential Intensity property

DEVELOPMENT STANDANDS Town Center Design Guidelines page 12
85/8 Building height

Building Setbacks

and behind the buildings) landig. In maniferential see per joinings staties en

Required Parking:87) parking spaces to reach 21,750 guare feet

Off Street Loading: Shall comply with Section 6.03.03 requiring one off street loading space.

67,016 TOTAL RESIDENTIAL 11,083 2,712 8,371 0.17 660 660 5,082 20,933 11,500 0.30 4,600 GENERAL OFFIC MEDICAL OFFICE 12,810 13,160 0.20 18,608 (600) 0.20 OWNER Windermere Union Church 422 Main St. 428 Main St. Subtotals 501 Main St. Permitted

nes page 13. minimum 20' on Oakdale Street and East half of 6th Avenue

LANDSCAPING Will comply with Town Center Guide

Oakdale Street and dumpster

6' Screen Wall

SIGNAGE Signs shall comply Article VIII - SIGNS, DIVISION 8.00.00

Shall comply with Section 6.03.05

Off Street Parking

80% (Sedtion 6.01.02) 40%

s' MIN; 8' MAX. 5' MIN; 8' MAX. 5' minimum 10' maximum

Section 2.02.02.

[2] Commercial. A wide variety of commercial uses are included in this category to include those listed and other substantially similar types of uses:

a 3-sopping centers.

In Section Service restribitionents, such as better-bridge, beauty partors, medical and dental dinks, restaurans, finantial institutions, professional and other filess, translationents, and service restribitionents, such as stations, learning packing and dry deaning pickup of center-bridge, such as stations, learning and dry deaning pickup center-bridge, such services as stations, learning and dry deaning pickup center-bridge shops, newsstands, photographic supplies and studios, catabilishments, show a restrict or gladious, hardware stores, book, stationers, dry man and believer to spores.

A cutomorbie regalar look of gladious, hardware stores, book, stationers, service for which are displayed and sold wholly within an enclosed building.

E flexis legists to wend meet materitations.

E flexis legists contemporal and meet materitations.

In flexis the contemporal point gladious and structures.

1,750 GPM per 2018 International Fire Code 1,300 GPD NA (Private Septic)

ADEQUATE PUBLIC FACILITIES
Fire How
Water
Sewer
N STORMWATER Shall comply with Section 6.05.

NOTES

1. Connexity of storm water management facilities shall be the OWNER.
2. Open space to be owned and maintained by the OWNER.

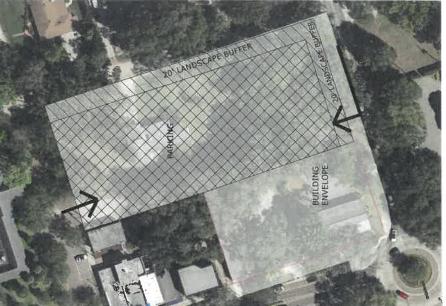
WAIVERS

1. 1'TOPO DEFERRED TO FDP.
2. ARCHITECTURAL ELEVATIONS DEFERED TO FDP.

I kend join of weldpass to note.

To represent a set of the control of the contro







SCALE IN FEET

KEY PLAN

DESIGNED BY: DRAWN BY: JOB NO.:

mε NOTES, WAIVERS, LANDUSE CHECKED BY:
PROJECT APPROVAL:

PLAN

03

SHEET NO.





MUBRA



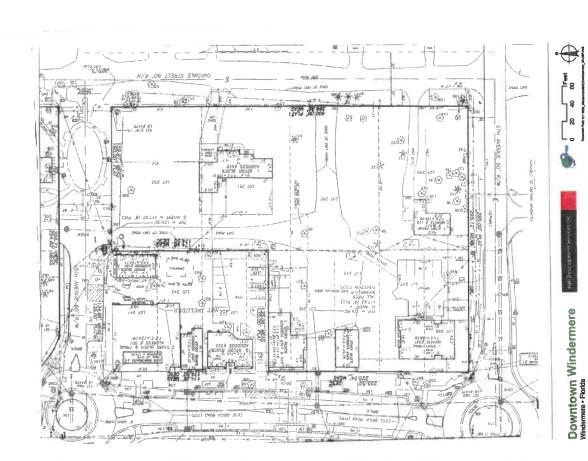
Preliminary Development Plan WINDERMERE, FLORIDA

JOB NO:
DESIGNED BY:
CHECKED BY:
PROJECT APPROVAL:

SURVEY PLAN

05

SHEET NO.









-toks	ISSUED		
	5	FOR	PENERAL PROPERTY OF THE PROPER
		DATE	8.19.2019 8.19.2019 8.06.2020 8.06.2020 9.24.2020

ш	Н	
SUED	П	
USSI	FOR	REVIEW R
	DATE	08.19.2019 08.19.2019 08.06.2020 08.26.2020 09.24.2020 11.77.2020

SUED	l.	
155	FOR	
	DATE	08.14.2019 08.14.2019 08.04.2020 09.24.2020 09.24.2020

ISSUED		
51	FOR	REVIEW REVIEW REVIEW REVIEW REVIEW
	DATE	05.14.2019 06.14.2019 06.04.2020 09.24.2020 09.24.2020 11.77.2020 12.6.2020

ш	
FOR	REVIEW REVIEW REVIEW REVIEW REVIEW REVIEW
DATE	06.19.2019 06.19.2019 06.06.2020 09.24.2020 09.24.2020 11.77.2020 12.75.2020
	DATE FOR

	- 1	
	- 11	

L CIIIIIII III	Development	Plan	WINDERMERE, FLORIDA
----------------	-------------	------	---------------------

Developme	Plan	WINDERMERE, F	

0.0	
n li	r
Ш	5
.ЧП	2 s
CI.	公田
C IS	7 2
. 12	~ =

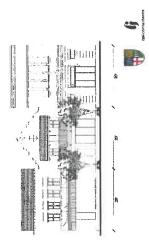
JOS NO.:
DESIGNED BY:
DRAWN BY:
CHECKED BY:
PROJECT APPROVAL:
THE
EXISTING
TREE
SCHEDULE

633			
217	i de		:
112			
15	25	1	I
151	-7		/
121			

90

	L						Ì		CHILDREN CONTRACTOR	-			
20	4			ķ		ş	j			Rent	They fell in section in date and	the return address to take all	
T	Ц	-		Martent		*	Fire III			Emone		the state in dead	
() ()	Ц			Sterioris			188			Kenne		Date III and a second	
13	٠			therape	Image Clarke	,	101			Temato	Then Challed and Indian and the state of the	All Action of Persons	
1346, 455			Yes	2905		28	t			14		Act at the Whitest	
			Yes	1.55		111	2 22	L		Between	The All to		
			Yes	State		L	t			1		Political de la company de la	
The H				Bersiens	The saving	1	t						N. DATE SUBBERGY ILTERAN
Ī		1		Berhank		ř	1			200			The second second second second
2. Life			Ya	Arm		6	the C			April			
22			Yes	Story			-			-			
Ì			20	Spine			-		-	1			
38,				2000		400	t						The same of the sa
24.2				SAC		ŀ	t						Amenical Victoria and Contractoria
4				Sac		L	t			acaston.	e Monthly a van	of by a cines notice if afraher inter	Committee of the party of the p
t				Bentan		Ļ	t	Į.				1 100	A shadded a consensus of commercial consensus of the cons
-				Montant	The state of the s	ļ	t	1		Reduver	Novaltables stand in the second of the second standard of the second	The Best day sample sample of	· recommendation and recommendation of the second
1	,	-				1	t	4		Namen	*		And the control of the second
1	1				ALTER ALTER PORT AT WINDOWS AND ADDRESS OF THE PARTY AND ADDRESS.	1	1			1			The second comment of the second comments of
*	1			Topas .	The EST is subjuly one say, her spale of sproving to object		1			Same			
2				any.	Not better of the sales framework nating ballburshingship is existent, when it is he manned	2	A			Pany			
K.				day			R			Rette	*	-	SAME, OCTOBER 2006
ĉų				Berna	Too Garden and the country and the country and the country and and the country and other	- W	10 6602			Mertane	3		RIBNO: 05-0316.1600
\$				- Films			民			Bernen	-		TST STOCKED OF
38	0		Yes	Nec	Bed may a dat a transportation of complicating between located local stone, were 6 mg to my and	63	2000			Domina			DRAWLEY BY
34	0		Yes	Mark	Approve to be discount by his time is by environ hand to a pulling	4	r			Yes			electron and DAB
12	٠		Yes	10	Read restate of not within a country or command to them to the manual for minimum, were of the to manual	L	T T					, and	The Change of the County of th
ħ	•			Sience	Road status of the Wilhing periodicities are made buildings in motivity to a second made to the second	12		•					Water to Chaire
*				Nec		490	8						title same
2	*			Silve		100	1			1		-	6
a				. Antr		164 164				5			
ě			You	Neve		495 Fee				200			CONTRACTOR DE LA COMP.
8		•	Yea	Nex		L	N.						A. A. T. A. T. C. P. C.
ā			44	Then		Ц	100			heart	the fifth is not a few and a second state of the last	the set own section to where	MALIN SINGE
2			Yen	e e		965	7		4	To See			SHOPPE
R	۰			Memory	and the will be wreth in the second of the s	418	-	L					CHICHE
\$8	Н			Serio		124	25			1			
23	٠		Yes	Sperce		474	7			- Part			WINDERMERE
ê	4		Yen	Register C	Annual and the seconds and the seconds and the converse removal of other una-	**	4			San			PARTNERS
10			Yes	Members	the state of the care of condition in alred	303	7.			State			
9.2			Yes	3960		-5	181			Share			
2.4			Yes	Seek		283	l			3			
2			3'09	Sast		1	ŀ			1			
19.	ď		Yes	Sher		229	t		'A'				
1/4			Yes	Seet		L	t	ŀ	1	Total Control	ON PACK BARNESS AND AND AND ADDRESS OF THE PACK AND AD	AND DESCRIPTION OF PERSONS IN PRINCIPLE AND PERSONS INC.	
ń				H	Time Side in on Mouter drivents - not at a to its in intend		t		ca .	1			
2				-	Tree GEA in redeaths distressing and an analysis of any same in place	200	t		- Van	ı	DATE TO SELECT THE PARTY OF THE	The second secon	
5	٠			Account	The Fifth is substituted that some a seal	1	t	L	13				WINDERMERP, FLORIDA
ñ	1			Hercheitt		L	t	1					Seritary.
ñ			Yes	Serv			t			Post Name	A CONTRACTOR OF THE PARTY OF TH		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7						1	t	1		Name of the last o			TREE DATA /
5			1	E			t	1				Colombia colombia colombia	INFORMATION
3.0							a			445	Mend evidence of two walks promette or hand sugal concess, in all company to expense	of the editions, sensing frog to deposited	
į	H					1	Ī	1	Yes				
	ļ		- 2				4	1		- Charles			
	4					1	1	П		ř	And the first property of the section of the sectio	of two decrees, principal tasks in the manufactured	Charleson.
1	+		0	1		848	7			Bann	Telephone Company		
1	4		-	1									C 3 L
1 2	Ļ	-						i	-				Lat-La
9	4			The same	Wanted Street St		1		-		- CLASS		SEAL
7	ļ.				problet to livrous and some state of the sta			-			The state of the Committee of the Commit		
1	4			-									30







HDS!

MUGRA

DATE FOR:

OS.19.2019 REVIEW
OS.19.2019 REVIEW
OS.05.2020 REVIEW
OS.05.2020 REVIEW
OS.05.2020 REVIEW
II.77.2020 REVIEW
II.75.2020 REVIEW
II.75.2020 REVIEW
II.75.2020 REVIEW





E

1 1111 18

gn

Preliminary Development Plan WINDERMERE, FLORIDA



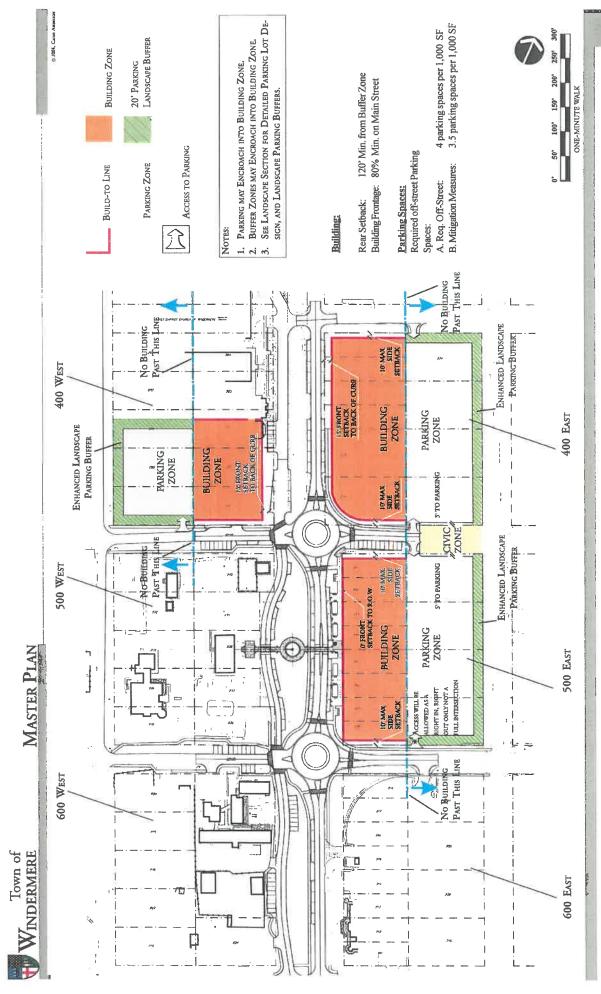
07

TOWN DESIGN GUIDELINES
AND ELEVATIONS

JOB NO.:
DESIGNED BY:
DRAWN BY:
CHECKED BY:
PROJECT APPROVAL:

ATTACHMENT "C"

Adopted Town Center Master Plan



Town Center Design Guidelines

CONTROL OSSOCIORES AUthren GIS Savreas Architectural Design

ATTACHMENT "D"

Traffic Study and Review

December 2019

WINDERMERE DOWNTOWN PROJECT Windermere, Florida Access Traffic Study



This Page Intentionally Left Blank	

WINDERMERE DOWNTOWN PROJECT Access Traffic Study Windermere, Florida

Prepared for:

Windermere Downtown Property, LLC 9259 Point Cypress Drive Orlando, FL 32836

Prepared by:

Luke Transportation Engineering Consultants, Inc.

P.O. Box 941556

Maitland, Florida 32794-1556

December 2019

Luke Transportation Engineering Consultants, Inc.		
This Page Intentionally Left Blank		

PROFESSIONAL ENGINEER ENDORSEMENT

I hereby certify that I am a registered engineer in the State of Florida, practicing with Luke Transportation Engineering Consultants, a corporation authorized to operate as an engineering business (#EB-0007429), by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for:

PROJECT: Windermere Downtown Project

LOCATION: Main Street and Sixth Avenue, Windermere, Florida

CLIENT: Windermere Downtown Property, LLC

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.

NAME: J. Anthony Luke, P.E.

P.E. NO.: 42642

ATE: December 6, 2019

Monde

Litare

45月前日本

Luke Transportat	ion Engineering Consultants, Inc.
This Page Intentionally Left Blank	

TABLE OF CONTENTS

INTRODUCTION	1
Study Methodology 1	
EXISTING TRAFFIC CONDITIONS	5
Study Intersections5	
Programmed/Planned Roadway Improvements5	
PROPOSED DEVELOPMENT AND TRAFFIC GENERATION	9
Trip Generation9	
Pedestrian Walk-up Trips9	
Pass-by Trips12	
Trip Distribution12	
Access Plan	
PROJECTED TRAFFIC CONDITIONS	15
Intersection Analysis15	Ū
Project Access and Auxiliary Turn Lanes15	
STUDY CONCLUSIONS	21
APPENDICES	23
Appendix A – Traffic Study Methodology25	
Appendix B – Turning Movement Summary Worksheet35	
Appendix C – Existing Synchro Analysis Summary Sheets41	
Appendix D – Pedestrian Walk-up Internal Capture Worksheets49	
Appendix E – Background Traffic Worksheet55	
Appendix F – Future 2021 Synchro Analysis Summary She59	
Appendix G – Auxiliary Right-Turn Worksheets71	

FIGURES

Figure 1- Study Location	2
Figure 2 – Conceptual Site Plan and Access Connections	3
Figure 3 – Existing Peak Hour Traffic Volumes	6
Figure 4 – Pedestrian Walk-up Radius	11
Figure 5 – Project Trip Distribution	13
Figure 6 - Projected A.M. Peak Hour Traffic Volumes	16
Figure 7 - Projected P.M. Peak Hour Traffic Volumes	17
TABLES	
Table 1 - Existing Intersection LOS	7
Table 2 – Estimated Trip Generation	10
Table 3 – Projected 2020 Study Intersection LOS	18

INTRODUCTION

This traffic study was undertaken to provide the required traffic data for the proposed Windermere Downtown Project in Windermere, Florida. As shown, the site is located in the northeast quadrant of Main Street and East Sixth Avenue in Windermere. The Windermere Downtown Project plan will consist of a mixed-use retail development.

Figure 1 shows the location of the development and the adjacent neighborhood. The proposed Windermere Downtown Project site will be developed within a ±2.17-acre parcel. The existing structures (3,592 square feet of commercial, 2,572 square feet office and 2 single family homes) within Lots 244 – 252 will be demolished. The proposed redevelopment plan will consist of a 26,000 square foot mixed-use development. The preliminary plan contains 5,000 square feet of office, 15,000 square feet of retail space and 6,000 square feet of quality restaurant space (with full-service wait-staff). Off street parking will be provided in the rear. **Figure 2** shows the general conceptual Windermere Downtown Project plan configuration.

Access for the Windermere Downtown Project site parking lot will be via a restricted right-in/right-out only access connection onto East Sixth Avenue and via a full access connection onto East Fifth Avenue. Build-out of the development is expected to occur by the end of 2020.

Study Methodology

Before conducting this study, the assumptions and procedures to be used in the traffic impact analysis were submitted to the City of Windermere. A copy of the submitted study methodology is included in **Appendix A**.

To perform the intersection analysis, traffic counts were collected by Luke Transportation Engineering Consultants, Inc. (LTEC) at the following study intersections:

- Main Street and East Fifth Avenue
- Main Street and East Sixth Avenue
- Main Street and Chase Road/East 12th Avenue

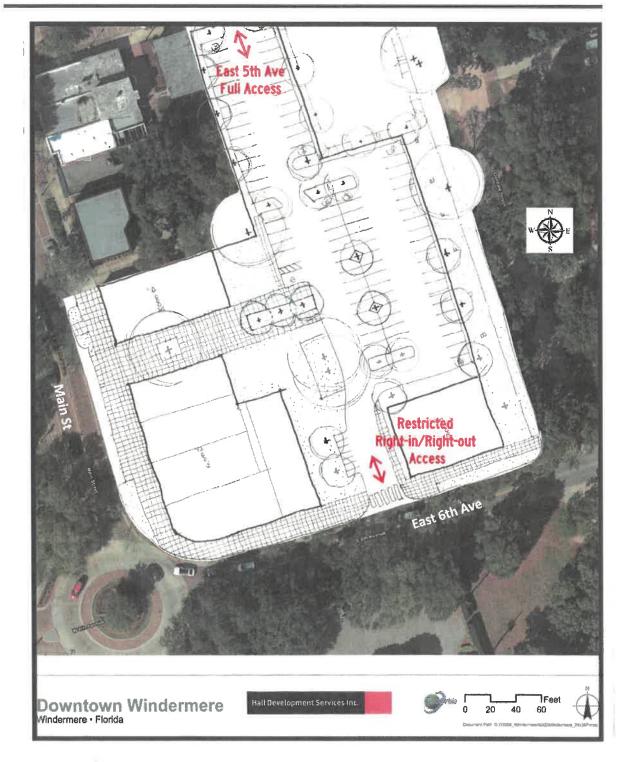
LTEC personnel conducted a field survey to obtain geometric and traffic operations data in the area.





SITE LOCATION

Figure 1





CONCEPTUAL SITE PLAN

Figure 2

Luke Transporta	tion Engineer	ing Consultant	ts, Inc.	
his Page Intentionally Left Blank				

EXISTING TRAFFIC CONDITIONS

The following section documents the existing intersection traffic operation in the vicinity of the proposed Windermere Downtown Project.

Study Intersections

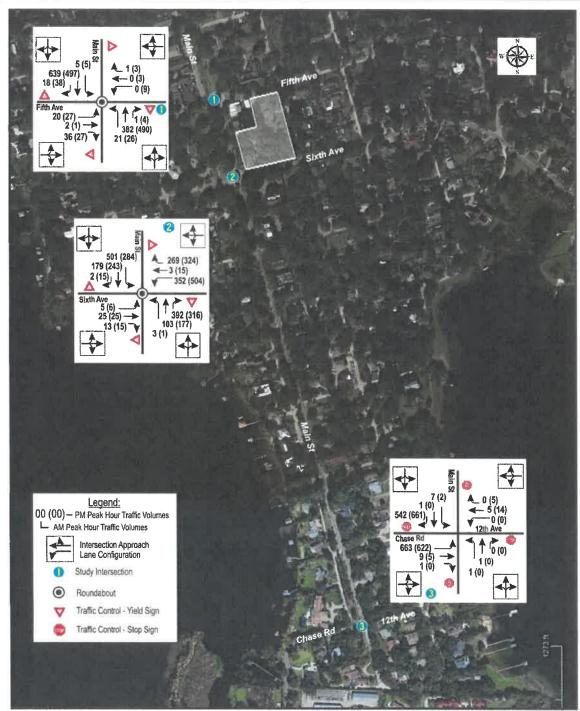
The study intersections were analyzed under existing conditions using the *Highway Capacity Manual*, 6th *Edition* procedures via *Synchro 10* software for unsignalized intersections. This analysis used existing traffic volumes and existing geometric conditions.

On Wednesday, September 21, 2019, A.M. and P.M. peak hour intersection turning movement traffic counts were conducted at the study intersections. See **Appendix B** for the turning movement summary worksheets. Follow Up Headway Adjustment Factors developed for the intersection of Main Street and Sixth Avenue, as part of a research and evaluation of roundabouts memorandum prepared for Orange County on September 10, 2012, were utilized in the analysis (see **Appendix B** for the Main Street and Sixth Avenue summary worksheet). Existing A.M. and P.M. peak hour traffic volumes are presented on **Figure 3**. The results of this analysis are shown in **Table 1** and included in computer printouts in **Appendix C**. The intersection Lane Group Delay, Lane Group V/C Ratio, Lane Group LOS, and 95th percentile queue length for the approach lanes of each study intersection are included in the analysis results table.

As can be seen, the Main Street roundabout intersections (both under Yield control) currently operate with adverse levels of service (LOS) with queues. However, it should be noted that during field observations, the two roundabout intersections had continuous vehicle movements traveling through the intersection. The critical westbound Sixth Avenue approach which had the longest queue was observed to be in continuous movement. As were the northbound and southbound movements. The study intersection of Main Street and Chase Road/12th Avenue (under Multi-way Stop control) currently operates at a deficient LOS condition. Should this intersection be converted to a roundabout intersection under Yield control, the intersection would operate at an acceptable LOS.

Programmed/Planned Roadway Improvements

No programmed roadway improvements are underway or scheduled within the next three years.





EXISTING PEAK HOUR TRAFFIC VOLUMES

Figure 3

TABLE 1
Study Intersections Existing (2019) Level of Service

			Study	Intersectio	ons Exis	ting (20					
	oach / ement	Lanes	Traffic Control	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)
							h Avenue				
	1		Roundabout		A.M. Pea	k Hour			P.M. Pea	k Hour	
EB	Left Thru	1	∇	10.4	0.144	В	25	7.5	0.102	A	0
	Right Left	>									
WB	Thru Right	1 <	V	6.9	0.002	A	О	6.6	0.028	A	o
	Left	>	5								
NB	Thru	1		16.6	0.626	С	100	12.8	0.604	В	100
	Right Left	>									
SB	Thru Right	1 <		63.5	1.020	F	425	13.6	0.631	В	125
Inte	rsection		nary	43.9		Е		12.8		В	
					in Street	and Six	th Avenue				
			Roundabout		A.M. Pea				P.M. Pea	k Hour	
	Left	>							11111100	IN IIOUI	
EB	Thru Right	1 <		13.5	0.142	В	О	11.8	0.131	В	О
	Left	>									
WB	Thru	1	V	68.3	1.030	F	425	85.0	1.102	F	600
	Right	<	7.								
NB	Left Thru	1	100	110.7	1.130	F	475	21.1	0.728	С	150
	Right Left	>	-								
SB	Thru Right	1 <	100	194.7	1.357	F	825	54.8	0.963	F	325
Inte	ersection		narv	125.1		F	7 7 2	58.4		F	
11144	JISCOLIO	II Suiii		- Main Str	eet and C		ad/12th A				
			All-Way	I I I I I I I I I I I I I I I I I I I	A.M. Pe			I	P.M. Pea	ak Hour	
	Left	>	III Way		120000 1 00	LA LAUUI			1 1 6		
EB	Thru	1	STOP	104.0	1.124	F	568	102.1	1.164	F	525
	Right										
WB	Left Thru	> 1	STOP	10.0	0.010	A	0	10.6	0.043	В	3
	Right	<							0.040	-	
	Left	>									
NB	Thru	1	STOP	10.5	0.004	В	0	10.7	0.000	A	0
	Right	<				-			-	-	
SB	Left Thru	> 1	STOP	31.4	0.885	D	233	73.6	1.099	F	458
	Right	<						0.5			
Inte	ersectio	n Sumi	nary	71.0		F		86.3		F	

Luke Transportation Engineering Consultants, In	Luke	Transportation	Engineering	Consultants.	Inc.
---	------	-----------------------	--------------------	--------------	------

This Page Intentionally Left Blank

PROPOSED DEVELOPMENT AND TRAFFIC GENERATION

As indicated earlier, the proposed Windermere Downtown Project will consist of a redevelopment of the existing structures (3,592 square feet of commercial, 2,572 square feet of office and 2 single family homes) within Lots 244 – 252 which will be demolished and replaced with a 26,000 square foot mixed-use development. The proposed mixed-use plan contains a 5,000 square foot office, 15,000 square feet of retail space and 6,000 square feet of quality restaurant space (with full-service wait-staff). Parking will be off street in the rear of the development parcel. To determine the impact of this redevelopment, an analysis of its traffic characteristics was made. This included the determination of the traffic generated by proposed development and the distribution/assignment of this traffic to the study intersections.

Trip Generation

The trip generation was calculated utilizing the 10th Edition, *ITE Trip Generation Report* data as summarized in **Table 2**. Utilizing the ITE trip generation rates, the proposed mixed-use land use plan will generate a total of 1,118 daily vehicle trip ends, 27 A.M. peak hour vehicle trip ends and 109 P.M. peak hour vehicle trip ends. These total trips will consist of pedestrian walk-up trips and pass-by trips that will be discussed below.

Pedestrian Walk-up Trips

Based on the location of the proposed development parcel within downtown Windermere, the Project trip generation will be made up of trips linked to other destinations in the immediate area and includes a component of "walk-up" customers from the nearby residential areas. Based on familiarity with the businesses on this property (surrounding area, available public parking, neighboring uses) the Applicant has estimated that 30% of the trip generation of the proposed uses will be made up of walk-up traffic from customers who link the trip to another destination proximate to the Project property.

In order to develop a rational for support of the 30% walk-up percentage, the *ITE Trip Generation Handbook*, 3rd Edition internal capture procedures were utilized. The typical walking distance is 0.25 miles. Within a 0.25-mile radius of the proposed development (see **Figure 3**), there are at least 118 single-family dwelling units and other commercial and office establishments. Should only 22 (18.6% of the homes within the 0.25-mile radius) of these single-family homes interact with the proposed development the internal capture would equal the 30% walk-up percentage. Copies of the ITE internal capture calculation worksheets are in **Appendix D**. **Table 2** includes the pedestrian walk-up calculations trip ends adjustment calculations at build-out.

TABLE 2

Proposed Land Use Estimated Trin Generation (1)

						Ţ	Trip Generation Rates	eratio	n Rate	Si				Traffic Volumes	: Volu	mes		
			ITE			A.M.	A.M. Peak Hour	Iour	P.M.	P.M. Peak Hour	Iour		A.M.	A.M. Peak Hour	Iour	P.M.	P.M. Peak Hour	Iour
Land Use	Size		Code (2)	0	Daily	Total	Total Enter	Exit		Total Enter	Exit	Daily	Total	Enter	Exit	Total	Total Enter	Exit
Proposed Land Use	nd Use																	
Office	5,000 SF		710 / R		9.74	1.56	1.34	0.22	1.15	0.18	0.97	49	8	7	1	9	1	Ŋ
Retail	15,000 SF		820 / R		37.70	0.94	0.58	0.36	3.81	1.83	1.98	266	14	6	5	57	27	30
Restaurant	6,000 SF		931 / R		83.84	0.73	0.58	0.15	7.80	5.23	2.57	503	5	4	1	46	31	15
										Total Trips	Trips	1,118	27	20	7	109	29	20
		Pede	Pedestrian Walk-up	alk-up		Pedest	Pedestrian Walk-up Reduction	alk-u	p Redu	ction				External Trips (4)	al Trip	s (4)		
		S S	Calculation	1(3)		A.M.	A.M. Peak Hour	Iour	P.M.	P.M. Peak Hour	lour		A.M.	A.M. Peak Hour	lour	P.M.	P.M. Peak Hour	Iour
Land Use	Size	Daily	Daily AM Pk I	PM Pk		Total	Daily Total Enter	Exit	Total	Total Enter Exit	Exit	Daily	Total	Total Enter Exit Total Enter	Exit	Total	Enter	Exit
Proposed Land Use	nd Use																	
Office	5,000 SF	14.3%	12.5%	16.7%	7	1	0	1	1	0	1	42	7	7	0	2	1	4
Retail	15,000 SF		7.1%	35.1%	167	1	1	0	20	10	10	399	13	oo.	2	37	17	20
Restaurant	6,000 SF		%0.0	26.1%	118	0	0	0	12	5	7	385	2	4	1	34	56	8
		1	Total	I Trips	262	લ	1	1	33	15	18	826	25	19	9	92	44	32
			Pass-by	1			Pass	Pass-by Trips	ips				Net N	Net New Traffic Volumes (6)	ffic Vc	Jume	(9)	
		ٽ 	Capture %	(2)		A.M.	A.M. Peak Hour	lour	P.M.	P.M. Peak Hour	lour		A.M.	A.M. Peak Hour	Tour	P.M.	P.M. Peak Hour	Iour
Land Use	Size	Daily	Daily AM Pk PM Pk	PM Pk	Daily	Total	Total Enter Exit		Total	Total Enter Exit	Exit	Daily	Total	Total Enter Exit		Total Enter	Enter	Exit
Proposed Land Use	nd Use																	
Office	5,000 SF	0.0%	%0.0	%0	0	0	0	0	0	0	0	42	7	7	0	2	1	4
Retail	15,000 SF	32.1%	17.0%	34%	128	2	1	1	14	7	7	271	11	7	4	23	10	13
Restaurant	6,000 SF	35.8%	%0.0	44%	138	0	0	0	14	7	7	247	2	4	1	50	19	
			Total	1 Trips	997	2	1	1	28	14	14	260	23	18	5	48	30	18

(1) Trip generation calculations from 10 th Edition of ITE Trip Generation Report.

(2) ITE Land Use Code Number / R = Average Trip Rate or E = Fitted Curve Equation

(3) Pedestrian Walk-up Percentage from ITE "Trip Generation Handbook, 3rd Edition," August 2014.

(4) Total Traffic Volumes minus Pedestrian Walk-up Reduction Trips = External Trips.

(5) Pass-by trips set to ITE Handbook Table E.9 LUC 820 Shopping Center - 34% pass-by percentage (P.M. peak). AM assumed to be 50% of PM. Pass-by trips set to ITE Handbook Table E.29 LUC 931 Quality Restaurant - 44% pass-by percentage (P.M. peak). AM assumed to be 0%.

Pass-By Check - (28 pass-by trips \div (843 EB Sixth Ave existing PM peak hour trips + 725 2-Way Main St) = 0.0178, use 1.8%)

(6) External Trips minus Pass-by Capture Trips = Net New (Primary) Trips. Luke Transportation Engineering Consultants, Inc., 2019





PEDESTRIAN WALK-UP AREA

Figure 4

Pass-by Trips

For the retail and restaurant components of the development program, a pass-by traffic proportion was calculated. Pass-by trips are defined as those trips from the passing roadway stream that would already be on the road. Therefore, pass-by traffic does not create additional impact on the surrounding roadways. For this site, the pass-by traffic will be drawn from Main Street and East Sixth Avenue. Pass-by percentages will be based upon pass-by information contained in the *ITE Trip Generation Handbook*, 3rd Edition. Pass-by trips calculated using the ITE P.M. peak hour percentages represent 1.8% of the existing P.M. peak hour traffic volumes on Main Street and East Sixth Avenue (see the calculation in footnote 5 in **Table 2**). **Table 2** also includes the pass-by trips which were assigned at the Project access driveways.

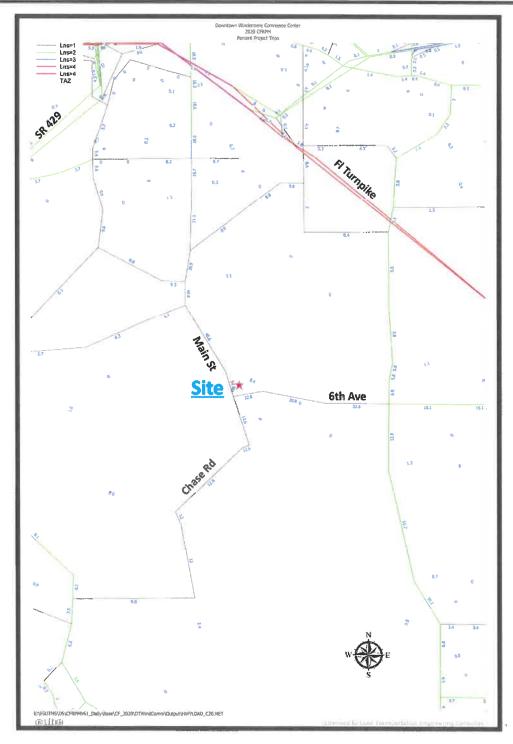
The trip generation at build-out for this redevelopment plan is estimated to result in a net increase, over the current trips generated by the existing development, of 420 net new weekday vehicle trip ends. Of this total, 9 vehicle net new trip ends will occur during the A.M. peak hour and 36 vehicle net new trip ends will occur during the P.M. peak hour (see **Appendix D** for the trip generation worksheet showing the calculations). However, the analysis will assign 100% of the proposed land use trips at the Project driveways. Which are 560 net new weekday vehicle trip ends, 23 vehicle net new A.M. peak hour trip ends and 48 vehicle net new P.M. peak hour trip ends (see **Table 2**).

Trip Distribution

Project trip distribution and assignment of projected Project trips will be based on a 2025 Cost Feasible CFRPM model assignment and the observed turning movement patterns at the adjacent roadways. The socioeconomic data was updated to reflect the proposed development in a separate traffic zone. Subsequently, a selected zone assignment was performed to determine distribution of site trips in the impact area to the adjacent roadway network. The CFRPM model plot of the Project trip distribution is shown in **Figure 5**.

Access Plan

As summarized earlier, the Windermere Downtown Project is proposed to be served by two (2) access driveways. A full access driveway connection onto East Fifth Avenue and a right-in/right-out access driveway connection on East Sixth Avenue.





PROJECT TRIP DISTRIBUTION

Figure 5

Luk	e Transportation E	ngineering Cons	ultants, Inc.	
This Page Intentionall	y Left Blank			

PROJECTED TRAFFIC CONDITIONS

Projected 2020 A.M. and P.M. peak hour traffic conditions at the study intersections were analyzed in accordance with the procedures of the *Highway Capacity Manual*, 6th *Edition* utilizing projected 2020 traffic volumes (see **Figure 6** for the projected A.M. peak hour volumes and **Figure 7** for the projected P.M. peak hour volumes) and planned access driveway geometry for the Project. Projected 2020 traffic volumes consist of background traffic and project traffic. A historical trend annual percentage from the current 2018 Orange County traffic counts on Chase Road, East Sixth Avenue and Main Street were used to develop the background traffic growth (the traffic count summary sheet is contained in **Appendix E**). Background traffic on Main Street and East Fifth Avenue was based on a 2% annual growth rate, a 3.4% annual growth rate on Chase Road and a 4.0% annual growth rate on East Sixth Avenue.

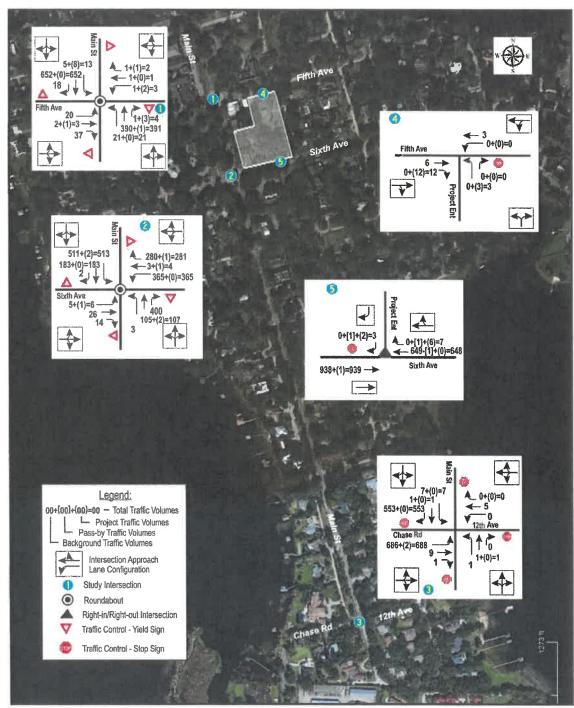
Intersection Analysis

To determine the projected Level of Service provided by the intersections to be impacted by the proposed redevelopment plan, a capacity analysis was conducted utilizing the procedures of the *Highway Capacity Manual*, 6th Edition for the unsignalized intersections. This analysis used projected background traffic volumes plus project traffic volumes and existing/proposed geometric conditions. Printouts of the intersection analyses may be found in **Appendix F**. The projected intersection LOS and delay, for each study intersection, are shown in **Table 3**.

As can be seen, at build-out of the proposed redevelopment plan all of the study intersections are projected to operate at levels of service similar to existing conditions. The intersection of Main Street and Chase Road/East 12th Avenue is projected to continue to operate at a deficient LOS during the A.M. and P.M. peak hour. Again, should this intersection be converted to a roundabout, the intersection would operate at an acceptable LOS. The proposed Project access connections are projected to operate at an acceptable level of service.

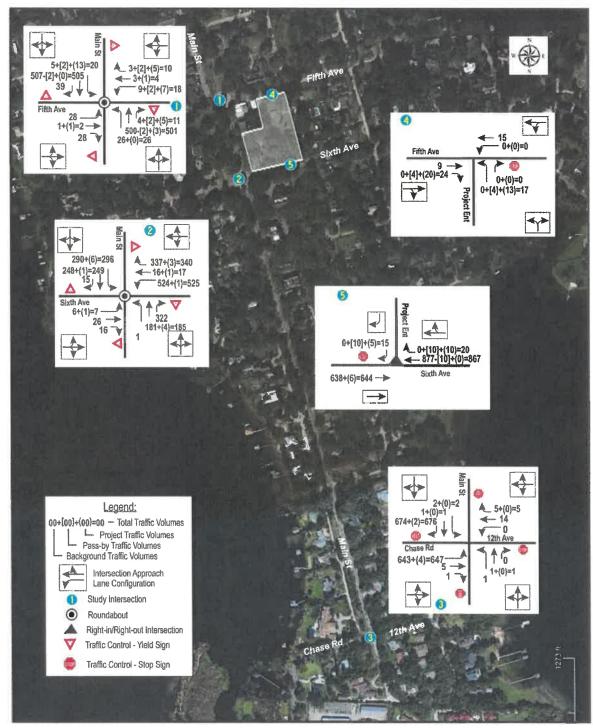
Project Access and Auxiliary Turn Lanes

An evaluation was conducted to determine if projected traffic volumes at the Project Entrance driveways on East Fifth Avenue and East Sixth Avenue would meet the minimum requirements for auxiliary turn lanes. Procedures documented in the NCHRP Report 457: Evaluating Intersection Improvements, 2001 and the projected traffic counts utilized in this analysis were used to evaluate the need for auxiliary turn lanes at the unsignalized access driveways.





PROJECTED A.M. PEAK HOUR TRAFFIC VOLUMES





PROJECTED P.M. PEAK HOUR TRAFFIC VOLUMES

Figure 7

TABLE 3 Study Intersections Projected (2020) Level of Service

Control Cont	InGrp //C atio LOS 1. Peak Hou 106 A 628 B 657 B B 1. Peak Hou	(Feet)								
	A. Peak Hou 106 A 059 A 628 B 657 B	(Feet)								
The section Summary The sum of the section Summary The secti	1. Peak Hou 106 A 059 A 628 B 657 B	0 0 125								
Roundabout A.M. Peak Hour P.M.	106 A 059 A 628 B 657 B	0 0 125								
EB	059 A 628 B 657 B	0 125								
Right	059 A 628 B 657 B	0 125								
Left >	628 B 657 B	125								
WB	628 B 657 B	125								
Right C	628 B 657 B	125								
Left >	657 B									
NB	657 B									
Right <	657 B									
Left >	В	125								
SB Thru Right 1 Right 67.3 1.033 F 450 14.6 0.0 Intersection Summary 46.1 E 13.6	В	125								
Right <	В	125								
The rection Summary 46.1 E 13.6										
Column C										
Roundabout A.M. Peak Hour P.M.	1. Peak Hou	_								
Left >	1. Peak Hou									
EB Thru 1	1	r								
Right <	-									
Left >	.146 B	25								
WB Thru 1 75.0 1.053 F 450 112.0 1 Right < 1 Left >		+								
Right < Left >										
Left >	175 F	725								
	_									
	760 C									
	.769 C	175								
Right < Left >		-								
	032 F	400								
SB Thru 1 199.1 1.368 F 825 73.0 1.0	032 F	400								
Intersection Summary 129.0 F 176.3	F									
3 - Main Street and Chase Road/12th Avenue										
All-Way A.M. Peak Hour P.M. Peak Hour										
Left >										
EB Thru 1 122.4 1.176 F 638 112.4 1.	.176 F	565								
Right <										
Left >										
WB Thru 1 10.1 0.010 B 0 10.6 0.	.041 B	3								
Right <										
Left >										
NB Thru 1 10.6 0.004 B 0 10.8 0.	.004 B	0								
Right <										
Left >										
	.100 F	445								
Right <	-									
Intersection Summary 82.5 F 90.3	F									
4 - Fifth Avenue and Project Entrance										
A.M. Peak Hour P.M		ır								
	M. Peak Hou									
FR Thru 1 Free Flow	M. Peak Hou									
EB Thru 1 Right < Free Flow		_								
EB Thru 1 Free Flow Left >	.000 A	o								
EB Thru 1 Free Flow	.000 A	-								
EB Thru Right 1 Free Flow Image: Control of the property of the prop		o 3								
EB Thru Right	.000 A	-								
EB Thru Right 1 Free Flow Image: Control of the property of the prop	.000 A	3								
EB Thru Right 1 Free Flow Image: Control of the property of the prop	.000 A	3								
EB Thru Right 1 Right Free Flow 0.0 0.000 A 0 0.0 0.0 0.0 0.000 A 0 0.0	.000 A	3								
EB Thru Right 1 Right Free Flow 0.0 0.000 A 0 0.0 0.0 0.0 0.000 A 0 0.0	.000 A	3								
EB Thru Right 1 Right Free Flow 0.0 0.000 A 0 0.0	.000 A	3								

Luke Transportation Engineering Consultants, Inc., 2019

The results of this analysis indicate that based on the projected traffic volumes, auxiliary right-turn lanes *are not* warranted at the Project Entrance on East Fifth Avenue or East Sixth Avenue. See **Appendix G** for the all the auxiliary turn lane warrant worksheets.

This Page Intentionally Left Blank

STUDY CONCLUSIONS

This study was conducted in order to evaluate existing and future traffic conditions in the vicinity of the proposed Windermere Downtown Project in Windermere, Florida. The ±2.17-acre parcel is located in the northeast quadrant of Main street and East Sixth Avenue in Windermere. The Windermere Downtown Project redevelopment plan will consist of a mixed-use development which will replace the existing 3,592 square feet of commercial space, 2,572 square feet of office space and 2 single family homes (within Lots 244 – 252 which will be demolished)

The proposed mixed-use plan contains a 5,000 square foot office, 15,000 square feet of retail space and 6,000 square feet of quality restaurant space (with full-service wait-staff). Parking will be off street in the rear of the development parcel. The results of the study as documented herein are summarized below:

- The trips to be generated by the proposed redevelopment were estimated to be 560 new daily vehicle trip ends, 23 new A.M. peak hour trip ends and 48 new P.M. peak hour vehicle trip ends.
- The Windermere Downtown Project is proposed to be served by a full access driveway on East Fifth Avenue and a right-in/right-out access driveway on East Sixth Avenue.
- Based upon this analysis, the two (2) existing roundabout study intersections under Yield control currently operate with poor levels of service but field observations show continuous vehicle travel through the intersections. The Multiway Stop control intersection of Main Street and Chase Road/East 12th Avenue currently operates at a deficient level of service. Should this intersection be converted to a roundabout under Yield control, it would operate at an acceptable level of service.
- At build-out of the proposed plan the existing roundabout study intersections are projected to continue to operate at levels of service similar to existing conditions. The Multi-way Stop control intersection of Main Street and Chase Road/East 12th Avenue is projected to continue to operate at a deficient LOS. Project trips represent 0.5% of the P.M. peak hour available approach lane capacity.
- The proposed Project Entrance with projected A.M. and P.M. peak hour traffic volumes *do not* meet the *NCHRP Report 457* warrant for right-turn lanes.
- The proposed Project Entrance access driveways should be designed to City of Windermere and FDOT design standards.

This Page Intentionally Left Blank

APPENDICES

Luke Transportati	on Engineering Consultants, Inc.
This Page Intentionally Left Blank	

Appendix A – Traffic Study Methodology

 ${\it This Page Intentionally Left Blank}$



transportation engineering + planning

MEMORANDUM

TO: FROM: **Brad Cornelius, AICP**

J. Anthony Luke, P.E.

DATE:

September 10, 2019 (Revised)

RE:

Traffic Impact Analysis Methodology: Windermere Downtown Project,

Windermere, Florida (LTEC № 19-2801)

Following up from our 8/22/19 phone conversation and the September 5, 2019 review comments, this summarizes the proposed traffic impact analysis methodology for the Windermere Downtown Project plan, located in the northeast quadrant of Main street and East Sixth Avenue in Windermere. The Windermere Downtown Project plan will consist of a mixed-use retail development. The site location showing the development parcel and the surrounding transportation area is shown in Figure 1.

1. Proposed Development

The proposed Windermere Downtown Project site will be developed within a ±2.17-acre parcel. The existing structures (3,592 square feet of commercial, 2,572 square feet office and 2 single family homes) within Lots 244 - 252 will be demolished. The proposed redevelopment plan will consist of a 26,000 square foot mixed-use development. The preliminary plan contains 5,000 square feet of office, 15,000 square feet of retail space and 6,000 square feet of restaurant space with off street parking in the rear. The number of spaces will be per applicable City code. Figure 2 shows the conceptual site plan.

Access for the Windermere Downtown Project site parking lot will be via a restricted rightin/right-out only access connection onto East Sixth Avenue and via a full access connection onto East Fifth Avenue.

3. Trip Generation

As discussed, the trip generation for both the existing and proposed uses is made up of trips linked to other destinations in the immediate area and includes a component of "walk-up" customers from the nearby residential areas.

The trip generation was calculated utilizing the 10th Edition, ITE Trip Generation Report data as summarized in Table 1. Based on familiarity with the businesses on this property (surrounding area, available public parking, neighboring uses) we estimate that 30% of trip generation for existing uses and proposed uses will be made up of walk-up traffic from customers who link the trip to another destination proximate to the Project property. In order to develop a rational for support of the 30% walk-up percentage, the ITE Trip Generation Handbook internal capture procedures were utilized. The typical walking distance is 0.25 miles. There are at least 118 single-family dwelling units within a 0.25-mile radius of the proposed development (see Figure 3). Should 22 (18.6% of the homes within the 0.25-mile radius) of these single-family homes interact with the

19-5801 Windermare Downtown Project TIA August 23, 2019

[mailing address] po box 941556 maitland florida 32794-1556 • 29 east pine street orlando florida 32801 [phone] 407 423 8055 [fax] 407 423 8022

proposed development the internal capture would equal the 30% walk-up percentage. The ITE internal capture calculation is attached.

The total driveway trips generated by the retail land use will comprise "new (primary)" and "pass-by" trips. Pass-by trips are defined as those trips from the passing roadway stream that would already be on the road. Therefore, pass-by traffic does not create additional impact on the surrounding roadways. For this site, the pass-by traffic will be drawn from Main Street and East Sixth Street. Pass-by percentages will be based upon pass-by information contained in the 3rd Edition, *ITE Trip Generation Handbook*, September 2017. Pass-by trips will be checked to ensure they do not exceed 10% of the adjacent street traffic in the final report.

The trip generation at build-out for this redevelopment plan is estimated to result in a net increase, over the current trips generated by the existing development, of 636 net new weekday vehicle trip ends. Of this total, 11 vehicle net new trip ends will occur during the A.M. peak hour with 10 trips entering and 1 trip exiting the development site and 40 vehicle net new trip ends will occur during the P.M. peak hour with 22 trips entering and 18 trips exiting the development site.

4. Trip Distribution/Assignment

Project trip distribution and assignment of projected Project trips will be based on a 2025 Cost Feasible CFRPM model assignment and the observed turning movement patterns at the adjacent roadways.

5. Study Roadways and Study Intersection

The list of proposed study intersections is as follows:

- Main Street and East Fifth Avenue
- Main Street and East Sixth Avenue
- Main Street and Chase Road/East 12th Avenue
- East Fifth Avenue and Project Entrance
- East Sixth Avenue and Project Entrance

6. Trip Distribution/Assignment

- Perform a single phase (2020) assessment for the Project.
- A review of historical traffic counts on the adjacent roadway segments (Main Street
 and East Sixth Avenue) indicates an annual growth rate 4.0% on Sixth Avenue and
 1.5% on Main Street (see Table 2 for the historical counts 2020 growth factor
 calculations). The Main Street minimum annual growth rate will be 2.0%.
- Combine project traffic with historically grown background traffic to obtain total traffic flows.
- Project traffic assignment for the study intersections for the A.M. and P.M. peak hour.
- An auxiliary turn lane analysis will be performed for the Project Entrances.
- Perform intersection traffic analysis utilizing the HCM Sixth Edition operational analysis procedures for unsignalized study intersections.

7. Traffic Report

A traffic report will be prepared summarizing the study procedures, analyses and recommendations per the City traffic impact analysis procedures. Three signed and sealed copies of the completed traffic study will be submitted to the City.

Please contact our office if you have any questions or comments.

Page 2 of 8





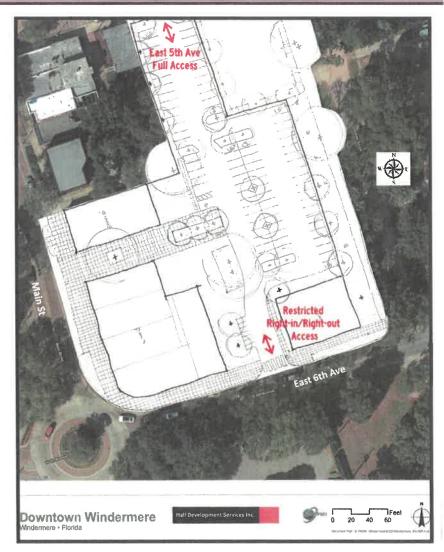
WINDERMERE DOWNTOWN PROJECT TRAFFIC IMPACT ANALYSIS SITE LOCATION

Figure 1

19-5801 Windermore Downtown Project TIA August 23, 2019

Page 3 of 8

[mailing address] po box 941556 maitland florida 32794-1556 • 29 east pine street orlando florida 32801 [phone] 407 423 8055 [fax] 407 423 8022





WINDERMERE DOWNTOWN PROJECT TRAFFIC IMPACT ANALYSIS

CONCEPTUAL SITE PLAN

Figure 2

19-5801 Windermore Downtown Project TIA August 23, 2019

Page 4 of 8

[mailing address] po box 941556 maitland florida 32794-1556 - 29 east pine street orlando florida 32801 [phone] 407 423 8055 [fax] 407 423 8022





WINDERMERE DOWNTOWN PROJECT TRAFFIC IMPACT ANALYSIS

PEDESTRIAN WALK-UP AREA

Figure 3

19-58m Windermore Downtown Project TIA August 23, 2019

Page 5 of 8

[mailing address] po box 941556 maitland florida 32794 1556 + 29 east pine street orlando florida 32801 [phone] 407 423 8055 [fax] 407 423 8022

Traffic 1

		п	ΤE			rip Ger			n Rates	(1)	_		Tenff	ic Volu	mor				
			Use			. Peak I			Peak	down		A 88	. Peak I			Peak !	Harra		
Land Use	Size		le (2)	Daily		Enter			Enter		Daily		Enter			Enter			
Proposed Lan	d Use														1000		-		
Office	5.000 SF	710)/R	9.74	1.56	1.34	0.22	1.15	0.18	0.97	49	8	7	1	6	1	5		
Retail	15,000 SF	820)/R	37.70	0.94	0.58	0.38	3.81	1.83	1.98	566	14	8	6	57	27	30		
Restaurant	6.000 SF	931	I/R	83.84	0.73	0.58	0.15	7.80	5.23	2.57	503	5	4	1	46	31	15		
										Total	1,118	27	19	8	109	59	50		
		P	ed	P	edestria	n Traff	ic Volu	mes Re	ductio	n		Ext	ernal To	affic V	olumes	131			
		Tra	iffic		A.M	. Peak l	Hour	P.M.	Peak I	lour			. Peak I			Peak	Hour		
Land Use	Size	Redu	ection	Daily		Enter			Enter		Daily		Enter	Exit		Enter			
Proposed Lan	d Use							-			-				10				
Office	5.000 SF	30	3%	15	2	2	0	2	0	2	34	6	5	1	4	1	3		
Retail	15.000 SF		0%	170	4	2	2	17	В	9	396	10	6	4	40	19	21		
Restaurant	6.000 SF		0%	151	1	1	0	14	9	5	352	4	3	1	32	22	10		
T. COLOURI CO. I.	0,000		otal	336	7	5	2	33	17	16	782	20	14	6	76	42	34		
			s-by		P,	ss-by							New Tr	_			-		
			re % (4)			. Peak			Peak !	iour			. Peak I			. Peak	House		
Land Use	Size	AM	PM	Daily		Enter			Enter		Daily		Enter	Exit	Total	Enter	Exit		
Proposed Lan		7 0.00	1.10	Dung	1000	CARO	LAIL	TOTAL	Litto	LAIL	Dusty	TOMA	C11001	LACIL	1000	L-III,GI	LAII		
Office	5.000 SF	0%	0%	0	0	0	0	0	0	0	34	6	5	1	4	1	3		
Retail	15,000 SF	5%	34%	20	ō	0	0	13	6	7	376	10	6	4	27	13	14		
Restaurant	6.000 SF	0%	44%	0	0	0	0	14	10	4	352	4	3	1	18	12	6		
//estaulant	0,000 SF		otal	20	0	D	0	27	16	11	762	20	14	6	49	26	23		
		ITE		20		Trip Ge					702	20		ic Volu		20	23		
						. Peak			Peak I	سندان			. Peak i			Deski !			
Land Use	Size	Land Use				Dally		Enter			Enter		Dally		Enter			Peak Enter	
Existing Land		Code (2)		Dany	TOWN	Enter	EAR	TOTAL	Enter	EXIT	Daily	IOTAL	Enter	Exit	IOTAL	Enter	Exit		
				44.00		D 700				-							100		
Single Family	2 DU		3/E	14.22		0.78		1.19	0.75	0.44	28	7	2	5	2	- 1	1		
Office	2,572 SF)/R	9.74	1.56		0.22	1.15	0.18	0.97	25	4	3	1	2	0	2		
Retail	3,592 SF	820)/R	37.70	0.94	0.58	0.36	3.81	1.83	1.98	135	_3	2	1	14	7	7		
												Total	188	14	7	7	18	8	10
			ed	P					eductio				ternal Traffic Volumes (3)						
		Traffic						. Peak		,	. Peak I		i		. Peak l			, Peak	
Land Use	Size	Redu	sction	Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter	Exit		
Existing Land																			
Single Family	2 DU	30	D%	8	3	1	2	0	0	0	20	4	1	3	2	1	1		
Office	2,572 SF	30	0%	8	1	-1	0	1	0	1	17	3	2	1	1	0	1		
Retail	3.592 SF		0%	41	1	1	0	4	2	2	94	2	1	1	10	5	5		
		To	otal	67	5	3	2	5	2	3	131	9	4	. 5	13	6	7		
		Pas	s-by		PI	ass-by	Traffic	Volume	18			Net	New T	raffic V	olumes	(5)			
		Captu	re % (4)		A.M	. Peak	Hour	P.M	. Peak l	Hour		A.M	. Peak l	Hour	P.M	. Peak	Hour		
Land Use	Size	AM	PM	Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter			
Existing Land	Use																		
Single Family	2 DU	0%	0%	0	0	. 0	0	D	0	0	20	4	1	3	2	1	1		
Office	2,572 SF	0%	0%	0	0	0	0	0	0	0	17	3	2	1	1	0	1		
Retail	3,592 SF	5%	34%	5	0	0	0	4	2	2	89	2	1	1	6	3	3		
		To	otal	5	0	0	0	4	2	2	126	9	4	5	9	4	5		

- (1) Trip generation calculations from 10th Edition of ITE Trip Generation Report.
 (2) ITE Land Use Code Number / E = Fitted Curve Equation, R = Average Rate
 (3) Total trips minus Pedestrian reduction trips = External Trips
 (4) Pass-by trips from 3rd Edition of ITE Trip Generation Handbook
 (5) External Trips minus Pess-by Capture Trips = Net New (Primary) Trips.
 Luke Transportation Engineering Consultants, Inc., 2019

Table 2

Pandumu	Segment	Station			0	Countr	AADT (1)				Trends An	alysis - V2.0	Destanted	2020	Annuai
From	To	Number	2012	2013	2014	2015	2016	2017	2018	RSQ	Slope	Intercept	Projected 2020	Growth Factor	Rate
East 6th A	venue														
Main St	Lake St	7078.0	18.681	19,709	22,104	22,756	23,089	24,587	24,227	0.908	977.8214	18,253,4286	27,100	1.08	4.0%
Main Stree	rt														
6th St	8th St	7.080.0	14,812	15.242	16,431	16,084	16,284	14.726	17,676	0.297	264.7500	14.834.5714	17.200	1.03	1.5%

From 2018 AADT Orange County Treffic Counts

Luke Transportation Engineering Consultants, Inc., 2019

19-5801 Windermere Downtown Project TIA August 23, 2019

Page 6 of 8

[mailing address] go box 941556 maitland florida 32794-1556 - 29 east pine street orlando florida 32801 [phone] 407 423 8055 [fax] 407 423 8022

Luke Transportation Engineering Consultants

Project Name:	- D	owntown Winde	(mere	Organization:	LTE	r.
Project Location:		Van St Winder		Performed By:	JIT	-
Scenario Description:		TOTAL DE THE NUMBER	HINNO	Date:		
	Bu Mout	2020			6/10/2019	
Analysia Year:				Checked By:		
Analysis Poriod:		M Street Peak	Hour	Date:		
				M-11		
				Estimates (Single-Lise Site		
Land Lise			lonnation Orly)		Estimated Vehice-Trips	
	ITE LUCs'	Quantity	Units	Total	Entering	Exting
Office	710	5,000	SF	. 8	7	
Tetail	820	15,680	SF	14	9	5
Restaurant	831	6,000	SF .	5	3	2
Cinema/Entertainment				0	0	0
teadential	210	22	DU	20	5	15
totel				0	6	6
W Other Land Usus ²				0	0	0
Total .	11.117		Tivil Single	47	24	23
			33111-341-46			
		Table 2.4+	Maria Salit and Mate	icle Occupancy Estimates		
		Entering Tri		ore excupating manuality	Exiting Trips	
Land Use	Man Out			Alle Dec		OF 10 HE-7 .
	Van. Occ	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motoriza
Office Control						
Retail						
Resteurant						
Cinema/Entariainment						
Residentabl						
Hemai						
All Coner Land Lines*						
OF THE STREET,						
	Toblo 1	Ar Assessans I :	and Hea Interchane	o Distances (Feet Walking	Distance	
	14000	- A A THE BUYER	nin des intercents	Destination (To)	Dispersion	
Origin (Frem)	Office	Retail	Containent	Cinema/Entertainment	Manhiambal	- Order
Office Control	CAF GC	Picani	Rostaurent		Residential	Holes
Retall						22-11-11-11-1
Restaurant						
Cenema/Entertainment	44114				The state of the s	
Residential			11711 177 14			
Hotel		11 81		2018:11-1-50		
		"	W =			11
		Table 4-A: h	nternal Person-Trip	Origin-Destination Matrix		
				Destination (To)		
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	g	0	0
Retall	0	- 1111.111	1	0	0	0
Restaurant	1	0		0	0	0
			- B		9	
Cinema/Entertainment	0	0		100000000000000000000000000000000000000		. 0
Residential	0	0	1		-700.3707.761	0
Hotel	0	0	D	0	0	
Table 6-A	: Computation	нь Зиявнагу		Table 6-A; Intern	d Trip Capture Percents	ges by Land Use
	Total	Critering	Exiting	Land Use	Entering Trips	Catting Trips
All Person-Tilpin	47	24	23	Office	14%	0%
Internal Capture Persentage	13%	13%	-3%	Retail	0%	20%
		,		Restaurant	67%	50%
National Marieta Stand	41	21	20	Cinema/Entc tainment	CCDL Transpage territoria de una concesso de	N/A
External Vesible-Tribs*	41				N/A	
External Transit-Trips*	0	0	0	Res dental	0%	7%
External Non-Molorized Time*	0	0	0	Hotel	N/A	N/A
Land Use Codes (LUCs) from				the institute of Transportation internal trip campure computers		

Page 7 of 8

Luke Transportation Engineering Consultants

Project Name: Project Location:						
		owntown Winds		Organization:	LTE	
		Vals St Winder	mere	Performed By:	m	
Scenario Deccription:	5. No.			Date:	6/10/2019	
Analysia Year:		anan		Checked By:		
Analysis Period:	P	M Street Peak	Hour	Date:		
				stimates (Single-Use Site		
Lend Lise			formation Only)		Estimated Vehic e-Trips	-
	TIE LUCs1	Quantity	Units	Total	Entering	Exiting
Office	710	5,000	SF	8		- 6
Retail	820	15,600	SF	117	78	39
Restaurant	931	6,000	87	23	11	12
Cirrenne/Entertainment				0	0	0
(eardential	210	22	DU	24	15	¥
ficitel				0	0	0
VI O. for Land Usins ²				0	0	0
fotal			2012-121-15	170	105	88
				cie Occupancy Estimates		
Land Lse		Entering Trip			Exiting Trips	
	Van. Occ.	% Transil	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motoria
Office						
Retail						
Restourant						
Cineme/Entertainment						
Residential						
Hotel						
HOME						
NI Omer Land Uses*						
			L			
	Table 3	-P: Average L	and the Interchange	Distances (Feet Walking	Distance)	
NI Omer Land Uses ⁴	Table 3	I-P: Average Li	and Use Interchange	Distances (Feet Walking	Distance)	
				Destination (To)		Hotel
NI Omer Land Lises ⁸ . Origin (From)	Office	I-P: Average Li Retell	nd Use Interchang	Destination (To) Cinema/Entertainment	Distance) Residential	Hotal
Origin (From)	Office		Rostauront	Destination (To) Cinema/Enterlainment		
AB Omer Land Uses ⁶ Origin (From) Office Retail	Office	Retall	Rostauront	Clesination (To) Cinema/Entertainment		
Origin (From) Origin (From) Origin (From) Retail	Office	Retail	Rostauront	Dealination (To) Cinema/Entertainment	Plasidontial	
Origin (From; Or	Office	Retall	Rostauront	Dealination (To) Cinema/Entertainment	Plasidontial	
Origin (From) Origin (From) Origin	Office	Retail	Rostauront	Destination (To) Ginema/Enterlainment	Plasidontial	
Origin (From; Or	Office	Retail	Rostauront	Dealination (To) Cinema/Entertainment	Plasidontial	
Origin (From) Origin (From) Origin	Office	Retail	Restourent	Destination (To) Ginema/Entertainment	Plasidontial	
Origin (From) Origin (From) Origin	Office	Retail	Restourent	Destination (To) Cinema/Entertainment Cinema/Entertainment Cinema/Entertainment Cinema/Entertainment Cinema/Entertainment Cinema/Entertainment	Plasidontial	
N Omer Land Uses* Origin (From)	Office	Retoil Table 4-P: b	Rostourant	Destination (To) Cinoma/Entertainment Cinoma/Entertainment Origin-Destination Matrix* Destination (To)	Residential	
Origin (From) Origin (From) Origin (From) Origin (From) Relation Residuates to the state of	Office Office	Retail Table 4-P: 8	Rostautant nternal Person-Trip Restaurant	Destination (To) Cinema®Entertainment Origin-Destination Hielatur Origin-Destination Hielatur Oestination (To) Cinema®Entetainment	Residential Residential	Holel
N Omer Land Uses* Origin (From)	Office	Retoil Table 4-P: b	Rostourant	Destination (To) Cinoma/Entertainment Cinoma/Entertainment Origin-Destination Matrix* Destination (To)	Residential	
Origin (From)	Office Office	Table 4-P: h	Rostouront Ilemai Person-Trip Restaurent 0 5	Destination (To) Cinema/Entertainment Crigin-Destination Matrix Origin-Destination Matrix Destination Matrix Origin-Destination Matrix Origin-Destination Matrix 3	Residential Residential 0 7	Hotel 0 0
M Omer Land Uses* Origin (From; Office Residuars Residuars Residuars Residuars Residuars Grigin (From; Origin (From; Origin (From; Origin (From;	Off-ac	Retail Table 4-P: b Retail	Rostouront Internal Person-Trip Restaurant 0	Destination (To) Cinema/Entertainment Origin-Destination Matrix Destination (To) Cinema/Entertainment	Residential Residential O	Hotel 0
Origin (From)	Office Office	Table 4-P: h	Rostourent Ilernal Person-Trip Restaurant 0 3	Desination (To) Cinema/Entotainment Cinema/Entotainment Origin-Destination Matrix* Destination (To) Cinema/Entetainment 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential Residential 0 7 2 0	Hotel 0 0
Origin (From)	Office	Table 4-P: 8 Retail 1	Rostouront Ilemai Person-Trip Restaurent 0 5	Destination (To) Cinema/Entertainment Crigin-Destination Matrix Origin-Destination Matrix Destination Matrix Origin-Destination Matrix Origin-Destination Matrix 3	Residential Residential 0 7 2 0	Hotel 0 0 0
Origin (From) Origin (From) Origin (From) Origin (From) Residuates Residuates Residuates Residuates Origin (From) Origin (From) Origin (From) Conscientiates Residuates Residuates Residuates	Office Office	Table 4-P: a Pateil 1 3 0	Rostouront Iternal Person-Trip Rostourant 0 3 0 2	Desilvation (To) Cinoma/Entertainment Cinoma/Entertainment Origin-DestInation Milatrix Desilvation (To) Cinoma/Entertainment 0 0 0 0	Residential Residential 0 7 2 0	Hotel 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
M Cher Land Uses* Origin (From)	Office Office	Table 4-P: 8 Pertoil 1 1 0 4	Rostouroni Iternal Person-Trip Rostouroni 0 5	Desination (To) Cinema/Entotainment Cinema/Entotainment Origin-Destination Matrix* Destination (To) Cinema/Entetainment 0 0 0 0	Residential Residential Residential 0 7 2 0	Hotel 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Origin (From) Origin (From) Origin (From) Origin (From) Restaurant Restaurant Americal enthericamment Architectural Origin (From) Origin (From) Origin (From) Restaurant Origin (From) Restaurant Origin (From) Restaurant Origin (From)	Office:	Table 4-P: 1 Retail 1 0 4	Rostouront Iternal Person-Trip Rostourant 0 3 0 2	Desilvation (To) Cinema/Entertainment Origin-Destination Matrix* Destilvation (To) Cinema/Entertainment 0 0 0 0 0	Residential Residential O 7 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Hotel 0 0 0 0 0 0
Origin (From) Origin (From) Origin (From) Origin (From) Restaurant Restaurant Americal enthericamment Architectural Origin (From) Origin (From) Origin (From) Restaurant Origin (From) Restaurant Origin (From) Restaurant Origin (From)	Office Of	Rotall Table 4-P: 8 Ratall 1 0 0 0	Rostouront Idental Person-Trip Rostauront 0 2 0 0 0 0 0 0 0 0 0 0 0	Destination (Te) Cinema/Entertainment Cinema/Entertainment Origin-Destination Matrix Oestination (Te) Cinema/Entertainment 0 0 0 Table 8-P: Interna	Residential Residential Residential 0 0 17-0 0 17-0	Hotel 0 0 0 0 0 0 0 use by Land Use
Origin (From) Origin (From) Origin (From) Origin (From) Reseaure of Lamenus Installations or the Constitution of the Constitu	Office:	Table 4-P: 8 Retail 1 1 0 0 0 0 Table 5-P: 8 Retail 1 Companies	Rostouxont Iternal Person-Top Restaurent 0 3 3 0 2 0 Cktling	Desilvation (To) Cinema/Entetainment Origin-Destination Matrix Destination Matrix Destination for Cinema/Entesiamment 0 0 0 0 Table 8-P: Interna Land Use	Residential Residential O 7 2 U U U U U U U U U U U U U U U U U U U	Hotel 0 0 0 0 0 0 0 Coding Trip
Origin (From; Origin	Office Of	Retail Table 4-P: 8 Retail 1 0 4 0 Creating Creating 105	Rostouxont Residurant O S O Cathing 66	Desination (To) Cinema/Entotainment Cinema/Entotainment Origin-Destination Matrix* Destination (To) Cinema/Entotainment 0 0 0 Table 8-P: Interna Land Use Land Use Cottice	Residential Residential Residential 0 7 2 0 1 Trips Capture Percentia	Hotel O O O O College Trip Scaling Trip College Trip College Trip
Origin (From; Origin	Office Office Office 0 0 0 0 0 0 Total	Table 4-P: 8 Retail 1 1 0 0 0 0 Table 5-P: 8 Retail 1 Companies	Rostouxont Iternal Person-Top Restaurent 0 3 3 0 2 0 Cktling	Desination (To) Cinoma/Entertainment Crigin-Destination Matrix Destination (To) Cinoma/Entertainment 0 0 0 0 Table 8-P: Informa Land Use Office Information Residual Control Res	Residential Residential O 7 2 0 1 Trip Capture Persentia Energy Trip 0% 13%	Hotel O O O O O Casing Trip 20% 20%
Origin (From; Or	Office Of	Tuble 4-P: 8 Retail 1 1 3 0 4 0 Unsaffing Unsaffing 105 2356	Rostouront Iternal Person-Trip Restaurant 0 3 0 2 0 Catting 66 37%	Desination (To) Cinema/Entertainment Origin-Destination filatria: Destination (To) Cinema/Entertainment 0 0 0 0 0 Table 8-P: Informa Land Use Office Citters Rushis Rushis	Residential Residential Residential 0 7 2 0 17tip Supture Percentia Energy Trips 0% 13% 45%	Hotel 0 0 0 0 0 0 Compared to the second sec
Origin (From; Or	Office Of	Table 4-P: 8 Retail 11	Rostouront Residuation Residuation O Customa O Customa Cust	Desilvation (To) Cinoma/Entertainment Crigin-Destination Matrix Destination Matrix Destination Matrix Destination (To) Cinoma/Entertainment 0 0 0 0 0 Table 9-P: Informa Land Use Office Platial Reseaument Cinomarent Cinoma	Residential Residential O 7 2 0 O 117tg Cupture Percentia Endewig Tipe O% 1355 4557 NA	Hotel O O O O O O O O O O O O O O O O O O O
Oner Land Uses* Origin (From; Origin (From; Origin (From) Origin (Redaurar) Redaurar) Origin (From) Origin (From) Origin (From) Origin (From) Origin (From) Origin (From) All Person-Tripin Internal Capture Partornlage	Office Of	Tuble 4-P: 8 Retail 1 1 3 0 4 0 Unsaffing Unsaffing 105 2356	Rostouront Iternal Person-Trip Restaurant 0 3 0 2 0 Catting 66 37%	Desination (To) Cinema/Entertainment Origin-Destination filatria: Destination (To) Cinema/Entertainment 0 0 0 0 0 Table 8-P: Informa Land Use Office Citters Rushis Rushis	Residential Residential Residential 0 7 2 0 17tip Supture Percentia Energy Trips 0% 13% 45%	Hotel 0 0 0 0 0 0 Compared to the second sec

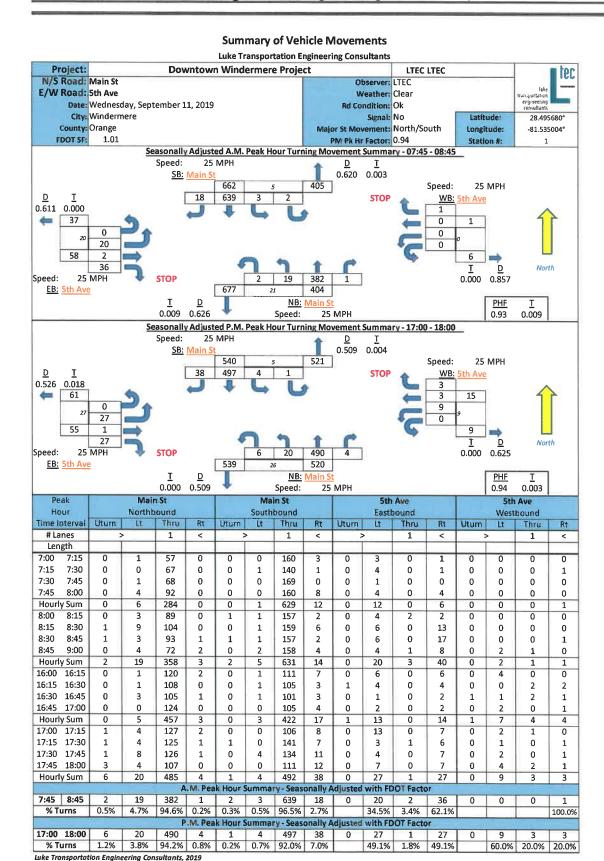
19-5801 Windermere Downtown Project TIA August 23, 2019

Page 8 of 8

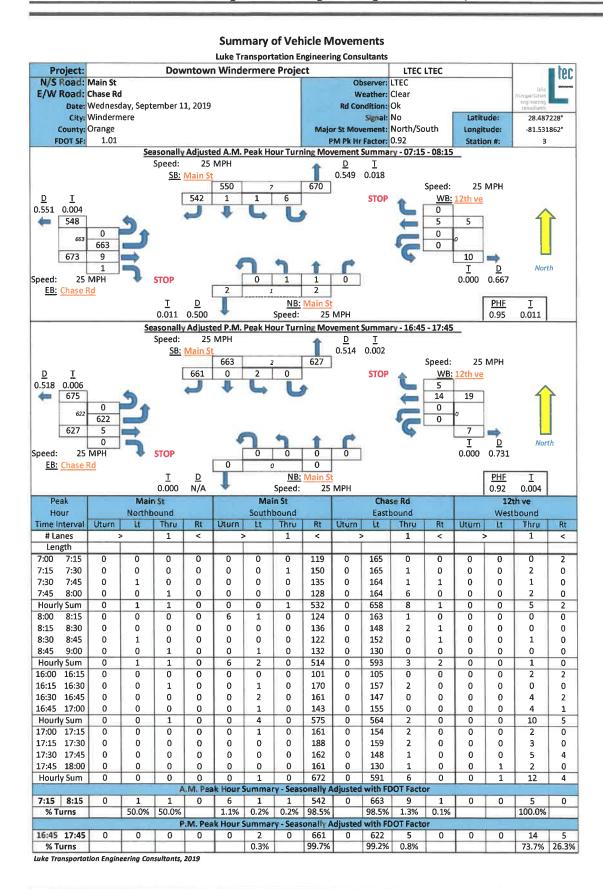
[mailing address] po box 941556 maitland florida 32794-1556 + 29 east pine street orlando florida 32801 [phone] 407 423 8055 [fax] 407 423 8022

Appendix B – Turning Movement Summary Worksheet

	Luke Tran	sportation l	Engineering	g Consultan	its, Inc.	
his Page Inte	ntionally Left .	Blank				



Summary of Vehicle Movements Luke Transportation Engineering Consultants Project: **Downtown Windermere Project** LTEC LTEC tec N/S Road: Main St Observer: LTEC E/W Road: 6th Ave Weather: Clear Date: Wednesday, September 11, 2019 Rd Condition: Ok Signal: No City: Windermere Latitude 28.494437 County: Orange Major St Movement: North/South -81.534571° Longitude: FDOT SF: 1.01 PM Pk Hr Factor: 0.96 Station #: Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 08:00 - 09:00 Speed: 25 MPH 0.644 0.004 SB: Main S 25 MPH Speed: STOP WB: 6th Ave 0.878 0.000 I D 0.008 0.596 Speed: 25 MPH EB: 6th Ave NB: Main PHF 0.006 0.523 25 MPH 0.006 Speed: Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 17:00 - 18:00 0.517 0.002 SB: Main : Speed: 25 MPH WB: 0.605 0.000 D North STOP 0.001 0.574 Speed: 25 MPH EB: 6th Ave NB: PHF 0.000 0.607 25 MPH 0.001 Speed: 0.96 Main St Northbound Southbound Eastbound Hour Westbound Uturn Time Interval Lt Thru Rt Uturn Lt Thru Rit Utum Lt Theu Rt Uturn Lŧ Thru Length 7:00 7:15 7:15 7:30 7:45 7:45 8:00 **Hourly Sum** 8:00 8:15 8:15 8:30 8:30 8:45 8:45 9:00 Hourly Sum 16:00 16:15 16:15 16:30 n Λ O 16:30 16:45 16:45 17:00 Hourly Sum 17:00 17:15 Ð 17:15 17:30 17:30 17:45 17:45 18:00 Hourly Sum .M. Pea ith FDOT Facto 8:00 9:00 103 392 501 179 % Turns 0.4% 0.2% 20.7% 78.7% 73.5% 26.2% 0.3% 11.6% 58.1% 30.2% 0.2% 56.3% 0.5% 43.1% P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor 17:00 18:00 177 316 284 243 0.2% 35.8% 64.0% 52.4% 44.8% 2.8% 13.0% 54.3% 32.6% 59.8% 38.4% % Turns 1.8% Luke Transportation Engineering Consultants, 2019



- 7	FA.	D	

					Main	Street &	6th Stree	et Rounda	bout					
				Seas	onally Adju	usted Peal	k Hour Turi	ning Moven	nent Sum	mary				
Inte	rsection	North	bound - 25	mph	Souti	hbound - 3	0 mph	East	bound - 15	mph	Wes	thound - 3) mph	
Cou	nt Date			Maln	Street					6th :	Street			1
	2/2012 dnesday	4	1	r	1	1	P	7	1	r	7	1	~	PHF
AM Pk:	7:15-8:15	3	118	420	402	177	4	0	18	5	300	14	189	0.90
	AM Total		541			583			23			503		1,650
Off Pk:	3:00-4:00	3	148	279	179	142	1	0	16	2.0	357	22	320	0.89
	Off Peak Total		430			322			36			699		1,487
PM Pk:	4:45-5:45	9	225	366	191	143	6	5	38	25	335	19	361	0.92
	PM Total		600			340			68			715		1,723

1 56 16 0 65 2 35 10 1 25 3 12 5 0 22 4 13 14 1 30 5 6 6 62 92 2 73 7 248 357 12 194 8 677 630 18 547 9 845 755 18 36 37 12 194 8 547 9 845 755 18 536 10 464 463 18 469 11 396 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 5772	_	Count Pe	riod - May 1	-3, 2012	77	Approach
2 35 10 1 25 3 12 5 0 22 4 13 14 1 30 5 18 37 2 43 6 62 92 2 73 7 248 357 12 194 8 677 630 18 547 9 845 755 18 536 10 464 463 18 469 11 386 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 488 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	lour	NB	SB	EB	WB	Total
3 12 5 0 22 4 13 14 1 30 5 18 37 2 43 6 62 92 2 73 7 248 357 12 194 8 677 630 18 547 9 845 755 18 536 10 464 463 18 469 11 386 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772	1	56	16	0	65	137
4 13 14 1 30 5 18 37 2 43 6 62 92 2 73 7 248 357 12 194 8 677 630 18 547 9 845 755 18 536 10 464 463 18 469 11 386 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 <td>2</td> <td>35</td> <td>10</td> <td></td> <td>25</td> <td>71</td>	2	35	10		25	71
5 18 37 2 43 6 62 92 2 73 7 248 357 12 194 8 677 630 18 547 9 845 755 18 536 10 464 463 18 469 11 336 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 488 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 47	3	12	5	0	22	39
6 62 92 2 73 7 248 357 12 194 8 677 630 18 547 9 845 755 18 536 10 464 463 18 469 11 386 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	4	13	14	1	30	58
7 248 357 12 194 8 677 630 18 547 9 845 755 18 536 10 464 463 18 469 11 398 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 412 28 772 20 313 338 34 566 21 198 249 14 472 22 116 153 10 353	5	18	37	2	43	100
8 677 630 18 547 9 845 755 18 536 10 464 463 18 469 11 386 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 488 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	6	62	92	2	73	229
9 845 755 18 536 10 464 463 18 469 111 386 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	7	248	357	12	194	811
10 464 463 18 469 11 386 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 461 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	8	677	630	18	547	1,872
11 386 371 25 401 12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	9	845	755	18	536	2,154
12 377 400 22 433 13 428 388 21 489 14 460 332 25 559 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	10	464	463	18	469	1,414
13 428 388 21 489 14 460 332 25 559 15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	11	386	371	25	401	1,183
14 460 332 25 559 15 488 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	12	377	400	22	433	1,232
15 498 434 22 649 16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	13	428	388	21	489	1,326
16 626 560 25 751 17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	14	460	332	25	559	1,376
17 706 480 34 734 18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	15	498	434	22	649	1,603
18 668 491 39 831 19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	16	626	560	25	751	1,962
19 488 422 28 772 20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	17	706	480	34	734	1,954
20 313 338 24 566 21 198 249 14 472 22 116 153 10 353	18	668	491	39	831	2,029
21 198 249 14 472 22 116 153 10 353	19	488	422	28	772	1,710
22 116 153 10 353	20	313	338	24	566	1,241
The second secon	21	198	249	14	472	933
23 114 66 4 236	22	116	153	10	353	632
	23	114	66	4	236	420
74 107 22 0 142 Total 7,915 7,085 365 9,392 2	775		C. 5267			271



Time		Percent Hea	vy Vehicle			Number of	Pedestrian	5	Travel Time 5p	eed Throu	gh Roundat	out, 5/1/2	012
Period	NB	SB	E8	WB	NB	58	EB	WB	Approach	NB	SB	68	WB
AM	1.1%	1.0%	0.0%	1.5%	0	0	0	0	AM Speed (mph)	14.2	17.0		13.1
Off Peak	1.9%	0.0%	0.0%	0.9%	5	5	9	0	Off Pk Speed (mph)	16.1	12.7		13.8
PM	0.7%	0.3%	0.0%	0.3%	3	3	2	8	PM Speed (mph)	14.2	13.6		14.4

Nouthabout Approa	ru sroh neu	ah weenire t	St of EATE!		HINES DEPTION	nouseauou	r wishingn	I HIGACH SHILL	e nesums, a	MYLSOTY (1	i)
AM Pk: 7:30-7:45	NB	SB	EB	WB	Total	Approach		NB	SB	EB	WB
Total Approaching Vehicles	194	124	7	128	453	AM Travel Time (Sec's	5)	65.0	24.5		78.3
Total Non Stopped Vehicles	138	84	2	93	317	AM Approach Delay (Sec's)	28.8	15.2		33.3
Total Stopped Vehicles	56	40	5	35	136	Number of Stops		3.0	0.7		3.5
Percent Stopped Vehicles	28.9%	32.3%	71.4%	27.3%	30.0%	Off Pk Travel Time (Se	ec's)	51.5	31.6		65.5
Avg Stopped Delay (Sec's)	4.52	2.98	10.24	3.09	3.87	Off Pk Delay (Sec's)	1. 3/20/2019-1	15.5	23.5		20.5
Approach Vehicle Delay (Sec's)	3.54	2.30	8.78	1.59	2.73	Number of Stops		1.0	4.0		2.5
Max Queue Length (Veh's)	18	5	0	7		PM Travel Time (Sec's	:)	66.2	28,5		93.2
Maximum Number of Observed	/ehicles in R	oundabout			6	PM Delay (Sec's)	2.	29.8	19.5		48.2
Off Pk: 3:45-4:00	NB	SB	EB	WB	Total	Number of Stops		3.0	1.7		4.0
Total Approaching Vehicles	179	114	11	169	473	(1) Delay & Speed bases	d on 30 MPI	4 & Stops has	ed on a Stop	Speed of 4 I	MPH
Total Non Stopped Vehicles	126	79	3	117	325						
Total Stopped Vehicles	53	35	8	52	148						
Percent Stopped Vehicles	29.6%	30.7%	72.7%	30.8%	31.3%	Roundabo	ut Level o	Service (20	10 HCS Call	ibrated) (2)	5
Avg Stopped Delay (Sec's)	4.28	3.23	5.48	3.53	3.84		NB	SB	EB	WB	Overail
Approach Vehicle Delay (Sec's)	1.27	0.99	3.99	1.09	1.20	AM LOS	D	C	С	D	D
Max Queue Length (Veh's)	9	0	0	7	1000	AM Delay (Sec's)	28.80	15.21	16.56	33.22	25.17
Maximum Number of Observed	Vehicles in R	oundabout			5	95th % Queue	9.2	5.7	0.3	9.7	
PM Pk: 5:15-5:30	NB	58	83	WB	Total	Off Pk LOS	c	c	В	С	С
Total Approaching Vehicles	182	142	17	211	552	Off Pk Delay (Sec's)	15.54	23.52	14.22	20.54	19.58
Total Non Stopped Vehicles	131	95	5	161	392	95th % Queue	4.5	5.2	0.5	8.8	1
Total Stopped Vehicles	51	47	12	50	160	PM LOS	D	C	B	E	D
Percent Stopped Vehicles	28.0%	33.1%	70.6%	23.7%	29.0%	PM Delay (Sec's)	29.89	19.55	10.21	48.37	34.90
Avg Stopped Delay (Sec's)	3.49	3.87	6.36	2.49	3.50	95th % Queue	10.2	4.5	0.5	15.8	

Maximum Number of Observed Vehicles in Roundabout Luke Transportation Engineering Consultants, 2012

12

Approach Vehicle Delay (Sec's)

Max Queue Length (Veh's)

Averaged Follow Up Headway Adjustment Factors: AM - 4.985, Mid-Day - 5.289 & PM - 3.737

Luke	Transp	ortation	Engine	erina (Consultants	Inc.
Munc	II WIWD	OI LULLOIL	LINGUILL	CI LILLY 1	DOILGHELLINE	

Appendix C – Existing Synchro Analysis Summary Sheets

Lı	ıke Transportation	Engineering Co	nsultants, Inc.	
This Page Intentiona	lly Left Blank			

HCM 6th Roundabout 1: Main St & Fifth Ave

Existing AM Peak Hour Revised 12/05/2019

Intersection				
Intersection Delay, s/veh	43.9			
Intersection LOS	E			
Approach	EB	WB	NB	SB
Entry Lanes		1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	63	-1	435	711
Demand Flow Rate, veh/h	64	1	443	725
Vehicles Circulating, veh/h	706	464	29	23
Vehicles Exiting, veh/h	42	8	741	442
Ped Vol Crossing Leg. #/h	0	0	(0)	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.4	6.9	18.6	63.5
Approach LOS	В	Α	C	F
Lane	Lett	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1 000	1.000	1.000
Follow-Up Headway, s	4.985	4.985	4.985	4.985
Critical Headway, s	4.978	4.976	4.976	4.976
Entry Flow, veh/h	64	1	443	725
Cap Entry Lane, veh/h	444	524	708	711
Entry HV Adj Factor	0.984	1.000	0.981	0.981
Flow Entry, veh/h	63	1	435	711
Cap Entry, veh/h	437	524	695	697
V/C Ratio	0.144	0 002	0.626	1.020
Control Delay, s/veh	10.4	6.9	16.6	63.5
LOS	В	A	C	F
95th %tile Queue, veh	1	0	4	17

Existing 10/24/2019 AM Peak Hour JTR

HCM 6th Roundabout 2: Main St & Sixth Ave

Existing AM Peak Hour Revised 12/05/2019

ntersection Delay, s/veh	125.1			
ntersection LOS	F			
Approach	EB	WB	NB	SB
Entry Lanes	1	1		1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	46	670	536	733
Demand Flow Rate, veh/h	47	684	546	748
Vehicles Circulating, veh/h	1132	121	583	392
Vehicles Exiting, veh/h	8	1008	596	413
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	13.5	68.3	110.7	194.7
Approach LOS	В	F	F	F
ane	Lett	Lelt	Left	Leit
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	4.985	4.985	4.985	4.985
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	47	684	546	748
Cap Entry Lane, veh/h	331	864	483	551
Entry HV Adj Factor	0.988	0.979	0.981	0.980
Flow Entry, veh/h	46	670	536	733
Cap Entry, veh/h	327	651	474	540
V/C Ratio	0.142	1.030	1.130	1.357
Control Delay, s/veh	13.5	68.3	110.7	194.7
LOS	В	F	F	F
95th %tile Queue, veh	0	17	19	33

Existing 10/24/2019 AM Peak Hour

HCM 6th AWSC 3: Main St & Chase Rd/12th Ave

Existing AM Peak Hour 10/24/2019

Intersection												
Intersection Delay, s/veh	71											
Intersection LOS	F											14
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations		4			4			4			स्कि	
Traffic Vol, veh/h	663	9	- 1	0	5	0	1	1	0	7	1	543
Future Vol, veh/h	663	9	1	0	5	0	1	1	0	7	1	542
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	0.98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	- 2
Mymt Flow	698	9	1	0	5	0	- 1	1	0	7	1	57
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	(
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	104				10		10.5			31.4		
HCM LOS	F				A		В			D		
Lane		NBLn1	EBLn1	WBLn1	SBLn1							
Vol Left, %		50%	99%	0%	1%							
Vol Thru, %		50%	1%	100%	0%							
Vol Right, %		0%	0%	0%	99%							
Sign Control		Stop	Stop	Stop	Stop							
Traffic Vol by Lane		2	673	5	550							
LTVal		- 1	663	0	7							
Through Vol		1	9	5	1							
RT Vol		0	1	0	542							
Lane Flow Rate		2	708	5	579							
Geometry Grp		1	1	4	1							
Degree of Util (X)		0.004	1.142	0.01	0.844							
Departure Headway (Hd)		7.426	5.804	6.973	5.59							
Convergence, Y/N		Yes	Yes	Yes	Yes							
Сар		485	630	516	654							
Service Time		5.426	3.805	4.973	3.59							
HCM Lane V/C Ratio		0.004	1.124	0.01	0.885							
HCM Control Delay		10.5	104	10	31.4							
HCM Lane LOS		В	F	A	D							
HCM 95th-tile Q		0	22.7	0	9.3							

Existing 10/24/2019 AM Peak Hour JTR

HCM 6th Roundabout 1: Main St & Fifth Ave

Existing PM Peak Hour Revised 12/05/2019

ntersection Delay, s/veh	12.8			
Intersection LOS	В			
Approach	EB	WB	NB	SB
Entry Lanes	1	1		1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	59	16	553	574
Demand Flow Rate, veh/h	61	16	564	586
Vehicles Circulating, veh/h	555	590	36	42
Vehicles Exiting, veh/h	73	10	580	564
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.5	6.6	12.8	13.6
Approach LOS	A	Α	В	В
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	3.737	3.737	3.737	3.737
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	61	16	564	586
Cap Entry Lane, veh/h	597	579	934	929
Entry HV Adj Factor	0.967	0.996	0.980	0.980
Flow Entry, veh/h	59	16	553	574
Cap Entry, veh/h	577	577	915	911
V/C Ratio	0.102	0.028	0.604	0.631
Control Delay, s/veh	7.5	6.6	12.8	13.6
LOS	A	A	8	В
95th %tile Queue, veh	0	0	4	5

Existing 10/24/2019 PM Peak Hour JTR

HCM 6th Roundabout 2: Main St & Sixth Ave

Existing PM Peak Hour Revised 12/05/2019

nlersection				
ntersection Delay, s/veh	58.4			
Intersection LOS	F			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	48	879	514	565
Demand Flow Rate, veh/h	49	897	525	576
Vehicles Circulating, vehilh	1095	195	335	552
Vehicles Exiting, veh/h	33	665	809	539
Ped Vol Crossing Leg. #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.8	85.0	21.1	54.8
Approach LOS	В	F	C	F
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	3.737	3.737	3.737	3.737
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	49	897	525	576
Cap Entry Lane, veh/h	374	814	721	598
Entry HV Adj Factor	0.989	0.980	0.980	0.981
Flow Entry, veh/h	48	879	514	565
Cap Entry, veh/h	370	797	707	587
V/C Ratio	0.131	1.102	0.728	0.963
Control Delay, s/veh	11.8	85.0	21.1	54.8
LOS	В	F	C	F
95th %tile Queue, veh	0	24	6	13

Existing 10/24/2019 PM Peak Hour JTR

HCM 6th AWSC 3: Main St & Chase Rd/12th Ave

Existing PM Peak Hour 10/24/2019

Intersection											-	
Intersection Delay, s/veh	86.3											
Intersection LOS	F											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations		47			4			44	- Children		ela.	
Traffic Vol. veh/h	622	5	0	0	14	5	0	0	0	2	0	66
Future Vol. veh/h	622	5	0	0	14	5	0	0	0	2	0	66
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	-
Mymt Flow	676	5	0	0	15	5	0	0	0	2	0	71
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	(
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	102.1				10.6			0		73.6		
HCM LOS	F				В			- 6		F		
***************************************								-		711		
Lane		NBLn1	EBLn1	WBLn1	SBLn1							
Vol Left, %		0%	99%	0%	0%							
Vol Thru, %		100%	1%	74%	0%							
Vol Right, %		0%	0%	26%	100%							
Sign Control		Stop	Stop	Stop	Stop							
Traffic Vol by Lane		0	627	19	663							
LT Vol		0	622	0	2							
Through Vol		0	5	14	0							
RT Vol		0	0	5	661							
Lane Flow Rate		0	682	21	721							
Geometry Grp		1	1	1	1							
Degree of Util (X)		0	1.13	0.039	1.054							
Departure Headway (Hd)		7.657	6.266	7.3	5.579							
Convergence, Y/N		Yes	Yes	Yes	Yes							
Cap		0	586	493	655							
Service Time		5.657	4.266	5.3	3.579							
HCM Lane V/C Ratio		0	1.164	0.043	1.099							
LICH Control Dolore		10.7	102.1	10.6	73.6							
HCM Control Delay												
HCM Lane LOS		N 0	F 21	0.1	18.3							

Existing 10/24/2019 PM Peak Hour JTR

	uke Transportation Engine	eering Consultants, Inc.	
Appendix D -	– Pedestrian Walk-up	o Internal Capture Worksh	ieets

Luke Transportation Engineering Consultants, Inc.					
his Page Intentionally Left Blank					

	NCHRP 8-51 Internal Trip	Cap	ture Estimation Tool	
Project Name:	Downtown Windermere		Organization:	LTEC
Project Location:	Main St Windermere		Performed By:	JTR
Scenario Description:	Build-out		Date:	9/10/2019
Analysis Year:	2020		Checked By:	
Analysis Period:	AM Street Peak Hour		Date:	

Land Use	Developme	ent Data (For Infor	rmation Only)	Estimated Vehicle-Trips			
Land Use	ITE LUCs1	Quantity	Units	Total	Entering	Exiting	
Office	710	5,000	SF	8	7	1	
Retail	820	15,000	SF	14	9	5	
Restaurant	931	6,000	SF	5	3	2	
Cinema/Entertainment				0	0	0	
Residential	210	22	DU	20	5	15	
Hotel				0	0	0	
All Other Land Uses ²				0	0	0	
Total	110 40 1		0.04 0.00 0.00 0.00	47	24	23	

		Table 2-A:	Mode Split and Vehicle	Occupancy Estimates				
Land Use		Entering Tr	ips	Exiting Trips				
Land Use	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized		
Office								
Retail								
Restaurant								
Cinema/Entertainment								
Residential								
Hotel								
All Other Land Uses ²								

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)												
Origin (France)		Destination (To)										
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel						
Office	1 1 1 1 1	4 10	4 9 1	u rar w daven a	3 4 4 3 4 4 4 4 4							
Retail	4 4 4 4 4 4	1 1 6	4 4		1 4 4 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4							
Restaurant			the second second to			F4=3 8.4 # - 8.4 F7						
Cinema/Entertainment		Herrick			*********	14-0						
Residential	[T 4 * F 1 T]		10,17,000,000		THE PERSON NAMED IN COLUMN	4 4						
Hotel			2 - 1 - 1 - 2 - 1	pr to the total	1 m = 1	e a er						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*											
Origin (Farm)		Destination (To)									
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel					
Office	3 .	0	0	0	0	0					
Retail	0		1	0	0	0					
Restaurant	1	0	иния — разния	0	0	0					
Cinema/Entertainment	0	0	0	I see that a graph of	0	0					
Residential	0	0	1	0	Делез вето ц и в сез	0					
Hotel	0	0	0	0	0	*****					

Table 5-A: Computations Summary								
	Total	Entering	Exiting					
All Person-Trips	47	24	23					
Internal Capture Percentage	13%	13%	13%					
External Vehicle-Trips ³	41	21	20					
External Transit-Trips ⁴	0	0	0					
External Non-Motorized Trips ⁴	0	0	0					

Table 6-A: Internal	Trip Capture Percentag	ges by Land Use
Land Use	Entering Trips	Exiting Trips
Office	14%	0%
Retail	0%	20%
Restaurant	67%	50%
Cinema/Entertainment	N/A	N/A
Residential	0%	7%
Hotel	N/A	N/A

Land Use Codes (LUCs) from Trip Generation Informational Report, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

	NCHRP 8-51 Internal Trip	Capture Estimation Tool	
Project Name:	Downtown Windermere	Organization:	LTEC
Project Location:	Main St Windermere	Performed By:	JTR
Scenario Description:	Build-out	Date:	9/10/2019
Analysis Year:	2020	Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

i and the	Developme	ent Data (For Info	rmation Only)	Estimated Vehicle-Trips						
Land Use	ITE LUCs1	Quantity	Units	Total	Entering	Exiting				
Office	710	5,000	SF	6	1	5				
Retail	820	15,000	SF	117	78	39				
Restaurant	931	6,000	SF	23	11	12				
Cinema/Entertainment				0	0	0				
Residential	210	22	DU	24	15	9				
Hotel				0	0	0				
All Other Land Uses ²				0	0	0				
Total	, t. a			170	105	65				

		Table 2-P:	Mode Split and Vehicle	Occupancy Estimates						
Land Use		Entering Tr	ips	Exiting Trips						
Land Ose	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized				
Office										
Retail										
Restaurant										
Cinema/Entertainment										
Residential										
Hotel										
All Other Land Uses ²										

	Table	3-P: Average La	and Use Interchan	ge Distances (Feet Walking	Distance)	
Origin (Espen)				Destination (To)		
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office	· 1 ½ b			* * * * * * * * * * *		* * * * * * * * * *
Retail			11111111	at the value of agrand		
Restaurant	5 4 5 6 6 B	8 B F	***	* 0 # 0 * Kind 6 0 # 6		
Cinema/Entertainment		si e o a i	: п к ч ј	* = 1		* 1 4 5 5 5 7 7 7
Residential	= = = ± = 0			ar a di a a a		4 1 1 1 1 1 1 1 1
Hotel	.4 1 5 6					

		Table 4-P: I	nternai Person-Tri	p Origin-Destination Matrix	C*	
Origin (Fram)				Destination (To)		
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office	NE CALL	1	0	0	0	0
Retail	0	i. i	3	0	7	0
Restaurant	0	5	1 4 5 9 1 F 4 F	0	2	0
Cinema/Entertainment	0	0	0	4 10 1 10 1 1 1	0	0
Residential	0	4	2	0		0
Hotel	0	0	0	0	0	F - F

Table 5-P:	Computatio	ns Summary	
	Total	Entering	Exiting
All Person-Trips	170	105	65
Internal Capture Percentage	28%	23%	37%
External Vehicle-Trips3	122	81	41
External Transit-Trips4	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use Land Use Entering Trips Exiting Trips Office 0% 20% Retail 13% 26% Restaurant 45% 58%									
Land Use	Entering Trips	Exiting Trips							
Office	0%	20%							
Retail	13%	26%							
Restaurant	45%	58%							
Cinema/Entertainment	N/A	N/A							
Residential	60%	67%							
Hotel	N/A	N/A							

Land Use Codes (LUCs) from Trip Generation Informational Report, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

³Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

		Tı	rip Gen	eratio	on Rate	es		Traffic Volumes							
ITE		A.M. Peak Hour			P.M.	P.M. Peak Hour			A.M.	Peak F	Iour	P.M. Peak Hou			
Code (2)	Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter	Exit	
210 / E	14.22	3.11	0.78	2.33	1.19	0.75	0.44	28	-		-	9			

Existing Land	d Use																	
Single Family	2 DU		210 / F		14.22	3.11	0.78	2.33	1.19	0.75	0.44	28	7	2	5	2	1	1
Office	2,572 SF		710 / R	1	9.74	1.56	1.34	0.22	1.15	0.18	0.97	25	4	3	1	2	0	2
Retail	3,592 SF		820 / F	₹	37.70	0.94	0.58	0.36	3.81	1.83	1.98	135	3	2	1	14	7.	7
	***************************************									Total	Trips	188	14	7	7	18	8	10
		1	Pedestri	ian	Ped	lestria	n Traffi	ic Vol	umes I	Reducti	ion			Externa	al Tri	ps (4)		
			Capture	(3)		A.M.	Peak I	lour	P.M.	Peak I	lour		A.M. Peak Hour P.M. Pe			. Peak J	Hour	
Land Use	Size	Daily	AM Pk	PM Pk	Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter	Exit
Existing Lane	d Use																	
Single Family	2 DU	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	28	7	2	5	2	1	1
Office	2,572 SF	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	25	4	3	1	2	0	2
Retail	3,592 SF	23.7%	0.0%	28.6%	32	0	0	0	4	2	2	103	3	2	1	10	5	5
	Total Trip			al Trips	32	0	0	0	4	2	2	156	14	7	7	14	6	8
		1	Pass-b	y		•	Pass	by T	rips				Net N	ew Tra	ffic V	olume	s (6)	-
		Ca	apture 9	6 (5)		A.M.	Peak I	Iour	P.M.	Peak I	Iour		A.M.	Peak I	lour	P.M	. Peak I	Hour
Land Use	Size	Daily	AM Pk	PM Pk	Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter	Exit
Existing Land	d Use																	
Single Family	2 DU	0.0%	0.0%	0%	0	0	0	0	0	0	0	28	7	2	5	2	1	1
Office	2,572 SF	0.0%	0.0%	0%	0	0	0	0	0	0	0	25	4	3	1	2	0	2
Retail	3,592 SF	15.5%	5.0%	34%	16	0	0	0	2	1	1	87	3	2	1	8	4	4
			Tota	al Trips	16	0	0	0	2	1	1	140	14	7	7	12	5	7

				Propos	sed La	and U	se Esti	mate	ed Tri	p Gen	erati	on (1)						
						T	rip Gen	eratio	n Rat	es				Traffic	: Vol	ımes		
			ITI	3		A.M.	Peak I	lour	P.M. Peak Hour				A.M.	Peak F	Iour	P.M	. Peak l	Hour
Land Use	Size		Code	(2)	Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter	Exit
Proposed L	and Use																	
Office	5,000 SF		710 /	R	9.74	1.56	1.34	0.22	1.15	0.18	0.97	49	8	7	1	6	1	5
Retail	15,000 SF		820	R	37.70	0.94	0.58	0.36	3.81	1.83	1.98	566	14	9	5	57	27	30
Restaurant	6,000 SF		931	R	83.84	0.73	0.58	0.15	7.80	5.23	2.57	503	5	4	1	46	31	15
										Total	Trips	1,118	27	20	7	109	59	50
		Pedes	strian	Walk-up	Pedestrian Walk-up Reduction									Externa	al Tri	ps (4)	-	
Calculation (3				ion (3)		A.M. Peak Hour P.M. Peak Hour					Hour		A.M. Peak Hour P.M. Peak He			Hour		
Land Use	Size	Daily	AM I	k PM Pk	Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter	Exit
Proposed L	and Use																	
Office	5,000 SF	14.3%	12.5	6 16.7%	7	1	0	1	1	0	1	42	7	7	0	5	1	4
Retail	15,000 SF	29.5%	7.1%	35.1%	167	1	1	0	20	10	10	399	13	8	5	37	17	20
Restaurant	6,000 SF	23.5%	0.09	6 26.1%	118	0	0	0	12	5	7	385	5	4	1	34	26	8
			To	tal Trips	292	2	1	1	33	15	18	826	25	19	6	76	44	32
	Pass-by				-	Pass	by T	rips			Net New Traffic Volumes (6)							

		urreps	292	2		1	33	15	10	020	25	19	U	70	44	32				
			Pass-b	y	Pass-by Trips								Net New Traffic Volumes (6)							
		Ca	pture %	6 (5)	A.M. Peak Hour P.M. Peak Hour						A.M. Peak Hour			P.M. Peak Hour						
Land Use	Size	Daily	AM Pk	PM Pk	Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter	Exit		
Proposed L	and Use																			
Office	5,000 SF	0.0%	0.0%	0%	0	0	0	0	0	0	0	42	7	7	0	5	1	4		
Retail	15,000 SF	32.1%	17.0%	34%	128	2	1	1	14	7	7	271	11	7	4	23	10	13		
Restaurant	6,000 SF	35.8%	0.0%	44%	138	0	0	0	14	7	7	247	5	4	1	20	19	1		
			Tota	ıl Trips	266	2	1	1	28	14	14	560	23	18	5	48	30	18		
Net Increase in Traffic over Existing Development				250	2	1	1	26	13	13	420	9	11	(2)	36	25	11			

⁽¹⁾ Trip generation calculations from 10 th Edition of ITE Trip Generation Report.

Land Use

Size

⁽²⁾ ITE Land Use Code Number /R = Average Trip Rate or E = Fitted Curve Equation

⁽³⁾ Pedestrian Walk-up Percentage from ITE "Trip Generation Handbook, 3rd Edition," August 2014.

⁽⁴⁾ Total Traffic Volumes minus Pedestrian Walk-up Reduction Trips = External Trips.

 $^{(5) \} Pass-by \ trips \ set \ to \ ITE \ Handbook \ Table \ E.9 \ LUC \ 820 \ Shopping \ Center - 34\% \ pass-by \ percentage \ (P.M. \ peak). \ AM \ assumed \ to \ be \ 50\% \ of \ PM.$

Pass-by trips set to ITE Handbook Table E.29 LUC 931 Quality Restaurant - 44% pass-by percentage (P.M. peak). AM assumed to be 0%.

 $Pass-By\ Check-(28\ pass-by\ trips\ \div (843\ EB\ Sixth\ Ave\ existing\ PM\ peak\ hour\ trips+725\ 2-Way\ Main\ St)=0.0178,\ use\ 1.8\%)$

⁽⁶⁾ External Trips minus Pass-by Capture Trips = Net New (Primary) Trips.

Luke Transportation Engineering Consultants, Inc., 2019

 ${\it This Page Intentionally Left Blank}$

Luke Transportation Engineering Consultants, Inc.
Appendix E – Background Traffic Worksheet

	ts, Inc.
This Page Intentionally Left Blank	

Roadway Segment Station Or Or From To Number 2012 2013 2 Chase Road Tallavana Ti Main St 7103.0 13,674 14,495 14 East Sixth Avenue Main St Lake St 7078.0 18,681 19,709 2	$^{\circ}$				FDOT	Trends And	FDOT Trends Analysis - V2.0			Annual
Number 2012 2013 7103.0 13,674 14,495 7078.0 18,681 19,709	+	nty AADT (1)		Γ	Linear Regression	ession	Projected Growth Growth	Growth	Growth
7103.0 13,674 14,495 7078.0 18,681 19,709		2014 2015 2016 2017 2018 RSQ	2017	2018	RSQ	Slope	Slope Intercept		Factor Rate	Rate
7103.0 13,674 14,495 7078.0 18,681 19,709										
7078.0 18,681 19,709	5 14,904 15,094 16,025 17,148 17,268 0.963	16,025	17,148	17,268	-	614.6071	614.6071 13,057.0000 18,600		1.07	3.4%
7078.0 18,681 19,709										
	9 22,104 22,756 23,089 24,587 24,227 0.908	756 23,089	24,587	24,227	806.0	977.8214	977.8214 18,253.4286	27,100	1.08	4.0%
Main Street										
Sixth Ave Chase Rd 7080.0 14,812 15,242 16		16,284	14,726	17,676	0.297	264.7500	16,431 16,084 16,284 14,726 17,676 0.297 264,7500 14,834,5714 17,200 1.03 1.5%	17,200	1.03	1.5%

1. From 2018 AADT Orange County Traffic Counts Luke Transportation Engineering Consultants, Inc., 2019

	Luke Tr	ansportat	ion Engin	eering Co	nsultants	, Inc.	
his Page Inte	entionally Le	eft Blank					

Luke Transportation Engineering Consultants, Inc.
Annondin E. Entres cool Creschus Anchesis Communicate Ch
Appendix F – Future 2021 Synchro Analysis Summary She

Luke Trans	portation Enginee	ering Consultants	, Inc.	
This Page Intentionally Left I	Blank			

HCM 6th Roundabout 1: Main St & Fifth Ave

2020 AM Peak Hour Reviaed 12/04/2019

Intersection				
Intersection Delay, s/veh	17.6			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	63	6	438	719
Demand Flow Rate, veh/h	64	6	446	733
Vehicles Circulating, veh/h	747	463	38	26
Vehicles Exiting, veh/h	42	21	743	443
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.9	5.9	10.5	22.7
Approach LOS	A	Α	В	С
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	3.884	3.884	3.884	3.884
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	64	6	446	733
Cap Entry Lane, veh/h	507	627	896	907
Entry HV Adj Factor	0.983	0.997	0.982	0.981
Flow Entry, veh/h	63	6	438	719
Cap Entry, veh/h	498	625	881	890
V/C Ratio	0.126	0.010	0.497	0.808
Control Delay, s/veh	8.9	5.9	10.5	22.7
LOS	A	A	В	C
	0		3	9

2020 Build-out 10/24/2019 AM Peak Hour JTR

HCM 6th Roundabout 2: Main St & Sixth Ave

2020 AM Peak Hour Reviaed 12/04/2019

Intersection	1040					
Intersection Delay, s/	en61.9					
Intersection LOS	F					
Approach		В	WB	NB	SB	
Entry Lanes		1	1	1	1	
Conflicting Circle Lan	es	1	1	1	1	
Adj Approach Flow, v	eh/h	18	684	537	735	
Demand Flow Rate, v	eh/h	19	698	547	750	
Vehicles Circulating,	/eh/h 11	10	124	585	399	
Vehicles Exiting, veh/	h	9 1	800	604	423	
Ped Vol Crossing Leg	, #/h	0	0	0	0	
Ped Cap Adj	1.00	00 1.	.000	1.000	1.000	
Approach Delay, s/ve	h 12	.6	26.6	57.3	101.3	
Approach LOS		В	D	F	F	
Lane	Left	Left	Lei	1	Leti	
Designated Moves	LTR	LTR	LTF	{	LTR	
Assumed Moves	LTR	LTR	LTF	3	LTR	
RT Channelized						
Lane Util	1.000	1.000	1.00		1,000	
Follow-Up Headway,	s 3.884	3.884	3.884	1	3.884	
Critical Headway, s	4.976	4.976	4.97	3	4.976	
Entry Flow, veh/h	49	698	54	7	750	
Cap Entry Lane, veh/	h 355	835	58	3	662	
Entry HV Adj Factor	0.989	0.980	0.98	1	0.980	
Flow Entry, veh/h	48	684	53	7	735	
Cap Entry, veh/h	351	818	55	3	649	
V/C Ratio	0.138	0.836	0.96	6	1.133	
Control Delay, s/veh	12.6	26.6	57.	3	101.3	
LOS	В	D			E	
95th %tile Queue, vel	n 0	10	1:	3	23	

2020 Build-out 10/24/2019 AM Peak Hour JTR

HCM 6th AWSC 3: Main St & Chase Rd/12th Ave

2020 AM Peak Hour 10/24/2019

													- 2	
Intersection Delay, s/ve														
Intersection LOS	F													
Movement	EBL	EBT	FBR	WBL	WBT	WBR	NBL.	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	EDL	4	EDIN	WDL	44	MADIA	INDL	4	IADIX	ODL	4	SOIL		
Traffic Vol. veh/h	688	9	1	Ô	5	0	*	1	0	7	1	553		
Future Vol. veh/h	688	9	1	0	5	0	1	1	0	7	1	553		
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, %	2	2	2	0.00	0.93	2	0.93	2	0.95	0.93	2	0.93		
Mymt Flow	724	9	1	0	5	0	1	1	0	7	1	582		
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0		
Number of Laries	•	'	V	U		U		1	U	. 0		U		
Approach	EB				WB		NB			SB				
Opposing Approach	WB				EB		SB			NB				
Opposing Lanes	- 1				1		1			1				
Conflicting Approach Le	eft SB				NB		EB			WB				
Conflicting Lanes Left	1				1		1			1				
Conflicting Approach R	ighNB				SB		WB			EB				
Conflicting Lanes Right	1				1		1			1				
HCM Control Delay	122.4				10.1		10.6			33.8				
HCM LOS	F				В		В			D				
AMOUNT OF THE PARTY OF THE PART							1,00							
Lane	1	IRI ni I	EBLn1V	VRI n1	SRI m1	-	15.0			-	-			
Vol Left, %		50%	99%	0%	1%	_				_	_			
Vol Thru, %		50%												-
			1 V/La	2101397	694									
Vol Right %			3.14	100%	99%									
Vol Right, %		0%	0%	0%	99%									
Sign Control		0% Stop	0% Stop	0% Slop	99% Stop									
Sign Control Traffic Vol by Lane		0% Stop 2	0% Stop 698	0% Stop 5	99% Stop 561									
Sign Control Traffic Vol by Lane LT Vol		0% Stop 2	0% Stop 698 688	0% Slop 5	99% Stop 561									
Sign Control Traffic Vol by Lane LT Vol Through Vol		0% Stop 2 1	0% Stop 698	0% Slop 5 0 5	99% Stop 561 7									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		0% Stop 2 1 1	0% Stop 698 688 9	0% Stop 5 0 5	99% Stop 561 7 1 553									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate		0% Stop 2 1	0% Stop 698 688 9	0% Slop 5 0 5	99% Stop 561 7									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		0% Stop 2 1 1 0 2	0% Stop 698 688 9 1 735	0% Slop 5 0 5 0 5	99% Stop 561 7 1 553 591									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		0% Stop 2 1 1 0 2 1	0% Stop 698 688 9 1 735 1	0% Slop 5 0 5 0 5 1 0.01	99% Stop 561 7 1 553 591 1 0.861									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (H		0% Stop 2 1 1 0 2 1 0.004 7.564	0% Stop 698 688 9 1 735 1 1.191 5.838	0% Slop 5 0 5 0 5 1 0.01 7.074	99% Stop 561 7 1 553 591 1 0.861 5.685									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (H Convergence, Y/N		0% Stop 2 1 1 0 2 1 0.004 7.564 Yes	0% Stop 698 688 9 1 735 1 1.191 5.838 Yes	0% Slop 5 0 5 1 0.01 7.074 Yes	99% Stop 561 7 1 553 591 1 0.861 5.685 Yes									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (H Convergence, Y/N Cap		0% Stop 2 1 1 0 2 1 0.004 7.564 Yes 476	0% Stop 698 688 9 1 735 1 1.191 5.838 Yes 625	0% Slop 5 0 5 1 0.01 7.074 Yes 509	99% Stop 561 7 1 553 591 1 0.861 5.685 Yes 644									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (H Convergence, Y/N Cap Service Time		0% Stop 2 1 1 0 2 1 0.004 7.564 Yes 476 5.564	0% Stop 698 688 9 1 735 1 1.191 5.838 Yes 625 3.839	0% Stop 5 0 5 1 0.01 7.074 Yes 509 5.074	99% Stop 561 7 1 553 591 1 0.861 5.685 Yes 644 3.685									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (H Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		0% Stop 2 1 1 0 2 1 0.004 7.564 Yes 476 5.564 0.004	0% Stop 698 688 9 1 735 1 1.191 5.838 Yes 625 3.839	0% Stop 5 0 5 1 0.01 7.074 Yes 509 5.074 0.01	99% Stop 561 7 1 553 591 1 0.861 5.685 Yes 644 3.685 0.918									
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (H Convergence, Y/N Cap Service Time		0% Stop 2 1 1 0 2 1 0.004 7.564 Yes 476 5.564	0% Stop 698 688 9 1 735 1 1.191 5.838 Yes 625 3.839	0% Stop 5 0 5 1 0.01 7.074 Yes 509 5.074	99% Stop 561 7 1 553 591 1 0.861 5.685 Yes 644 3.685									

2020 Build-out 10/24/2019 AM Peak Hour JTR

HCM 6th TWSC 4: Project Ent & Fifth Ave

2020 AM Peak Hour 10/24/2019

Int Delay, s/veh	1.1					
		cor	MID	MAIDT	NDI	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	Ţa		(4)	4	W	
Traffic Vol., veh/h	6	12	0	3	3	0
Future Vol, veh/h	6	12	0	3	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None	-	None	-	None
Storage Length	-		-	-	0	-
Veh in Median Storage	# 0	-		0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	6	13	0	3	3	0
	- 7			-	- 20	
Variable Control of the Control of t	************		Name and Post of Street,			
	Major 1		Major2		Minort	
Conflicting Flow All	0	0	19	0	16	13
Stage 1			7.7		13	
Stage 2	-				3	
Critical Hdwy	is in		4.12	4	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2			(*)		5.42	-
Follow-up Hdwy		-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver		-	1597		100000	1067
Stage 1	-			٠.		
Stage 2	76	-	16	7.0	1020	
Platoon blocked, %			10		1650	i.
			ARMY		1000	1067
Mov Cap-1 Maneuver	1.7	12	1597		1002	100000000000000000000000000000000000000
Mov Cap-2 Maneuver			-	-	1000	
Stage 1	***		74	10.	1010	
Stage 2	•	*	•	•	1020	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.6	
HCM LOS					Ä	
Tom Loo						
		EXECUTION 1	No. 10	-	4 1 1 1 1	Veller
Minor Lane/Major Myn	ti	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		1002			1597	
HCM Lane V/C Ratio		0.003				
HCM Control Delay (s		8.6			0	
HCM Lane LOS		A			A	
HCM 95th %tile Q(veh	1	0			0	
Lead of the same of Acts	7	L/F			-	

2020 Build-out 10/24/2019 AM Peak Hour JTR

HCM 6th TWSC 5: Sixth Ave & Project Ent

2020 AM Peak Hour 10/24/2019

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	1			F
Traffic Vol, veh/h	0	939	648	7	0	3
Future Vol, veh/h	0	939	648	7	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None		None		None
Storage Length			-	-		0
Veh in Median Storag	e.# -	0	0		0	140
Grade, %	E4(9)	0	0		0	
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	988	682	7	0	3
MAILE LIOM	O	300	002		U	J
			_			
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2.5	0		0		686
Stage 1		-	*	(4)	7.	-
Stage 2	-		-	-	-	-
Critical Hdwy	- %		1 3	- 3		6.22
Critical Hdwy Stg 1	-	-	_	-	-	-
Critical Howy Stg 2	141					
Follow-up Hdwy						3.318
Pot Cap-1 Maneuver	0				0	447
Stage 1	Ď				Ō	441
	0	10			0	
Stage 2	Ű				U	-
Platoon blocked, %		-	-			994
Mov Cap-1 Maneuver					- 1	447
Mov Cap-2 Maneuver				-	-	-
Stage 1					-	-
Stage 2		•	•	-	•	-
Approach	EB		WB		SB	
HCM Control Delay, s			0		13.1	
HCM LOS	U		U	4	13.1 B	
HOW LOS					В	
Minor Lane/Major My	mi	EBT	WBT	WBR	SBLnt	
Capacity (veh/h)					447	
HCM Lane V/C Ratio		-	-		0.007	
HCM Control Delay (s		00			13.1	
HCM Lane LOS					В	
HCM 95th %tile Q(ve	h)	- 52	- 14	- 2	0	
and the same of the	7.				-	

2020 Build-out 10/24/2019 AM Peak Hour JTR

HCM 6th Roundabout 1: Main St & Fifth Ave

Build-out 2020 PM Peak Hour Revised 12/04/2019

Intersection				
Intersection Delay, s/veh	14.8			
Intersection LOS	В			
Approach	EB	WB	NB	SB
Entry Lanes		1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	60	34	566	594
Demand Flow Rate, veh/h	62	34	578	606
Vehicles Circulating, veh/h	583	596	53	51
Vehicles Exiting, veh/h	74	35	592	579
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.9	7.2	14.8	15.9
Approach LOS	A	A	В	C
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	3.884	3.884	3.884	3.884
Critical Headway. s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	62	34	578	606
Cap Entry Lane, veh/h	567	561	886	888
Entry HV Adj Factor	0.967	0.998	0.980	0.981
Flow Entry, veh/h	60	34	566	594
Cap Entry, veh/h	548	560	869	871
V/C Ratio	0.109	0.061	0.652	0.683
Control Delay, s/veh	7.9	7.2	14.8	15.9
LOS	A	A		C
95th %tile Queue, veh	0	0	5	6

2020 Build-out 10/24/2019 PM Peak Hour JTR

HCM 6th Roundabout 2: Main St & Sixth Ave

Build-out 2020 PM Peak Hour Revised 12/04/2019

Intersection	mh 90 O				
Intersection Delay, s/v	enoo.9				
intersection LUS					
Approach	EB	WB	NB.	SB	
Entry Lanes	1	1	1	1	
Conflicting Circle Land	es 1	1	1	1	
Adj Approach Flow, ve		929	535	590	
Demand Flow Rate, v		947	546	601	
Vehicles Circulating, v	veh/h 1149	207	353	583	
Vehicles Exiting, veh/l		692	848	571	
Ped Vol Crossing Leg	,#/h 0	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	1.000	
Approach Delay, s/vel	h 129	128.8	26.6	82.1	
Approach LOS	В	F	D	F	
Lane	Left	Left	Left	Left	
Designated Moves	LTR	LTR	LTR	LTR	
Assumed Moves	LTR	LTR	LTR	LTR	
RT Channelized					
Lane Util	1.000	1.000	1.000	1.000	
Follow-Up Headway,	s 3.884	3.884	3.884	3.884	
Critical Headway, s	4.976	4 878	4.976	4.976	
Entry Flow, veh/h	52	947	546	601	
Cap Entry Lane, veh/l	h 352	778	688	567	
Entry HV Adj Factor	0.989	0.981	0.980	0.981	
Flow Entry, veh/h	51	929	535	590	
Cap Entry, veh/h	348	763	675	556	
V/C Ratio	0.148	1.216	0.793	1.060	
Control Delay, s/veh	12.9	128.8	26.6	82.1	
LOS	В	F	9	E	
95th %tile Queue, veh	1 1	32	8	17	

2020 Build-out 10/24/2019 PM Peak Hour JTR

HCM 6th AWSC 3: Main St & Chase Rd/12th Ave

Build-out 2020 PM Peak Hour 10/24/2019

Intersection												
Intersection Delay, s/veh												
Intersection LOS	F											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL.	NBT	NBR	SBL	5	BT
Lane Configurations		क्रीक			44.			4			4	4
Traffic Vol, veh/h	647	5	1	0	14	5	1	1	0	2		1
Future Vol, veh/h	647	5	1	0	14	5	1	1	0	2		1
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	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	
Mymt Flow	681	5	- 1	0	15	5	1	- 1	0	2	1	
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	
Approach	EB				WB		NB			SB		
Opposing Approach	WB				EB		SB			NB		_
Opposing Lanes	1				1		1			1		
Conflicting Approach Le	ft SB				NB		EB			WB		
Conflicting Lanes Left	1				4		1			1		
Conflicting Approach Ric	hNB				SB		WB			EB		
Conflicting Lanes Right	1				1		1			- 1		
	112.4				10.6		10.8			71.6		
HCM LOS	F				В		В			F		
Lane	. 1	IBLn1	EBLniv	VBLn1:	SBLn1		4.7					
Vol Left, %		50%	99%	0%	0%							
Vol Thru, %		50%	1%	74%	0%							
Vol Right, %		0%	0%	26%	100%							
Sign Control		Stop	Stop	Stop	Stop							
Traffic Vol by Lane		2	653	19	679							
LT Vol		1	647	0	2							
Through Val		1	5	14	1							
RT Vol		0	1	5	676							
Lane Flow Rate		2	687	20	715							
Geometry Grp		- 1	1	1	1							
		0.004	1.159	0.038	1.046							
Degree of Util (X)		***	0.04	7.329	5.647							
	1)	7.818	6.24	10000								
Degree of Util (X)	1)	7.818 Yes	Yes	Yes	Yes							
Degree of Util (X) Departure Headway (Ho	1)	-	4 4		Yes 650							
Degree of Util (X) Departure Headway (Ho Convergence, Y/N	i)	Yes	Yes 584	Yes	650							
Degree of Util (X) Departure Headway (Ho Convergence, Y/N Cap	1)	Yes 461 5.818	Yes 584	Yes 491 5.329	650							
Degree of Util (X) Departure Headway (Ho Convergence, Y/N Cap Service Time	1)	Yes 461 5.818 0.004	Yes 584 4.24	Yes 491 5.329	650 3.647							
Degree of Util (X) Departure Headway (Ho Convergence, Y/N Cap Service Time HCM Lane V/C Ratio	1)	Yes 461 5.818 0.004	Yes 584 4.24 1.176	Yes 491 5.329 0.041	650 3.647 1.1							

2020 Build-out 10/24/2019 PM Peak Hour .ITR

HCM 6th TWSC 4: Project Ent & Fifth Ave

Build-out 2020 PM Peak Hour 10/24/2019

Intersection						
Int Delay, s/veh	2.3					
Movement	EBT	FRR	WBL	WBT	NBL	NBR
Lane Configurations	fa.	LUIS	HOL	सै	W	HOIL
Traffic Vol., veh/h	9	24	0	15	17	0
Future Vol. veh/h	9	24	0	15	17	0
Conflicting Peds. #/hr	0	0	0	10	0	0
	Free	Free	Free	Free		
Sign Control RT Channelized	-ree		Free		Stop	Stop
		None		None	-	None
Storage Length			-	-	0	•
Veh in Median Storage,				0	0	
Grade, %	0	-	-	0	0	
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	25	0	16	18	0
Major/Minor A	Aajori	- 1	Vajor2		dinort	
Conflicting Flow All	0	ō	34	Õ	38	22
Stage 1	0	U	34	U	22	22
					_	
Stage 2	-		1.40		16	
Critical Hdwy			4.12	•	6.42	6.22
Critical Hdwy Stg 1		-	-	-	5.42	-
Critical Howy Stg 2	- 4				5.42	
Follow-up Hdwy	-	-	2.218	-	3.518	
Pot Cap-1 Maneuver		15	1578	14	974	1055
Stage 1	-	-	-		1001	•
Stage 2	18	1 12	-		1007	(4.0
Platoon blocked, %						
Mov Cap-1 Maneuver	- 4		1578		974	1055
Mov Cap-2 Maneuver		_			974	1000
Stage 1					1001	100
					1007	
Stage 2	•		-		1007	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.8	
HCM LOS					A	
TION COO		_	-		- '	
Minor Lane/Major Mym	1 1	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		974			1578	10
HCM Lane V/C Ratio		0.018		-		
HCM Control Delay (s)		8.8			0	
HCM Lane LOS		A			A	
HCM 95th %tile Q(veh)		0.1	1/4		0	(4)
The second section of the state of						

2020 Build-out 10/24/2019 PM Peak Hour JTR

Synchro 10 Report Page 4

HCM 6th TWSC 5: Sixth Ave & Project Ent

Build-out 2020 PM Peak Hour 10/24/2019

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	ĵ _o			1
Traffic Vol. veh/h	0	644	867	20	0	15
Future Vol. veh/h	0	644	867	20	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	- 100	None		None	- C.OP	
Storage Length			_	***************************************		0
Veh in Median Storage		0	0		0	
Grade, %	1111	0	0		0	_
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	678	913	21	0	16
MVIREFIOW	Ü	010	913	21	U	10
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0		0	-	924
Stage 1	(6)					
Stage 2	-		•	-	-	-
Critical Howy	- 0					6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Howy Stg 2		10		7.0	-	
Follow-up Hdwy				-	-	3.318
Pot Cap-1 Maneuver	0				0	327
Stage 1	0	149		-	0	OL.
Stage 2	0			i i	0	-
Platoon blocked, %	U				U	
		•	-/-			327
Mov Cap-1 Maneuver		18	-			A 200 CO. C.
Mov Cap-2 Maneuver						
Stage 1		74				
Stage 2		•	•	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s			0		18.6	
HCM LOS	V		v		C	
I TOM LOO						
					Carlton	
Minor Lane/Major Mvi	71	EBT		_	SBLn1	
Capacity (veh/h)						
HCM Lane V/C Ratio				-	0.048	
HCM Control Delay (s)				16.6	
HCM Lane LOS					C	
					0.2	
HCM 95th %tile Q(veh	1)				64.E	

2020 Build-out 10/24/2019 PM Peak Hour .TR

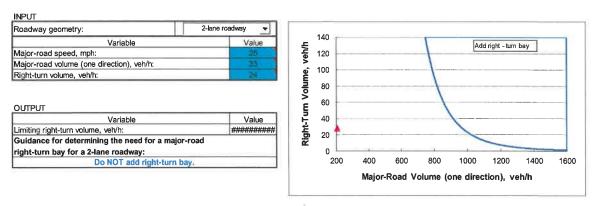
Synchro 10 Report Page 5

Luke Transportation Engineering Consultants, Inc.					
Appendix G – Auxiliary Right-Turn Worksheets					

Luke Transportation Engineering Consultants, Inc.						
This Page Intentionally Left Blank						

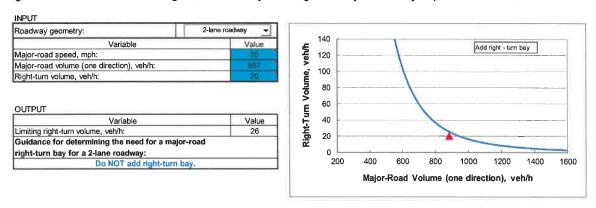
East Fifth Avenue & Project Entrance Eastbound Right-Turn Lane Analysis

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

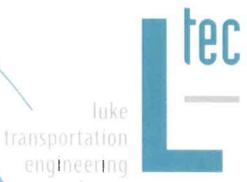


East Sixth Avenue & Project Entrance Westbound Right-Turn Lane Analysis

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.



Luke Transporta	tion Engineering Consultants, Inc.
This Page Intentionally Left Blank	



[mailing address] po box 941556 maitland florida 32794-1556

transportation engineering + planning

> 29 east pine street orlando florida 32801 [phone] 407 423 8055 [fax] 407 423 8022



MEMORANDUM

To: Robert Smith, Town Manager

From: Mike Woodward, P.E.

Kimley-Horn and Associates, Inc.

Date: January 27, 2020

Subject: Revised TIA - Karr Property

PURPOSE

This is intended to document our review and comments associated with the Traffic Impact Analysis (TIA) for the "Windermere Downtown Property", as proposed by LTEC in a report dated December 2019.

BACKGROUND

The proposed project will redevelop a site along Main Street between 5th Avenue and 6th Avenue, extending back to Oakdale Street, with 26,000 square feet of mixed commercial uses. A right-in / right-out driveway is proposed on 6th Avenue, and a full access driveway is proposed on 5th Avenue, connecting to Main Street. Comments were previously issued on the methodology (September 2019) and previous version of this TIA (November 2019).

REVIEW COMMENTS

Our review comments are provided below:

• Right-Turn Lane on 6th Avenue: While the NCHRP Report 457 shows that the turn lane is not needed based on projected volumes, it misses the threshold by a very slim margin. A slight increase in turning traffic or through volumes will change the results. Given that there are several assumptions related to trip generation, internal / walk capture, and trip distribution, it is not clear whether the actual volumes will trigger the need for a turn lane (per the volume criteria in NCHRP Report 457). Further, the proposed driveway is located within the influence area of the Main Street / 6th Avenue roundabout. The proximity creates safety concerns due to potential rear-end collisions caused by people that aren't sure if the car in front of them is slowing down for the roundabout or for the driveway. Due to these factors, a right-turn lane into the project driveway is required.

K:\ORL_TPTO\149563000_Windermere\PM and Tasks\Old Contract IPOs\Karr Prop\Karr Prop TIA Comments -rev.docx

614 Main Street Windermere, FL 34786 Office: (407) 876-2563 Fax: (407) 876-0103

Wade Trim

Mayor
JIM O'BRIEN



Town Manager ROBERT SMITH

Clerk DOROTHY BURKHALTER

January 25, 2021

PARK RESIDENTIAL RENTALS LLC 4 PINE ST WINDERMERE, FL 34786

RE: Public Notice of Rezoning and Preliminary Development Plan Review Public Hearing for 517 Main St. Z19-12

Windermere Downtown Property LLC, owner 517 Main Street, represented by Jim Hall, submitted a request for approval of a rezoning and a preliminary site plan, pursuant to Division 3.03.00 of the Town of Windermere Land Development Code. The purpose of the rezoning request is to change the current zoning designation from Commercial/Single-Family Residential within the Town Center Overlay to Plan Unit Development (PUD) within the Town Center Overlay. Development within the Town Center Overlay is required to obtain PUD approval. Additionally, the applicant is requesting approval of a Preliminary Development Plan (PDP) that proposes two buildings for Office, Retail, and Restaurant uses.

Enclosed is additional information regarding this request.

Pursuant to the Town of Windermere Code of Ordinances, you as a surrounding property owner are entitled to comment on this matter. If you wish to comment, this form must be received by the Town of Windermere with the use of the enclosed stamped envelope to Wade Trim, Inc. by February 12, 2021.

This matter will be presented to the Development Review Board on Tuesday, February 16, 2021, at 6:30 p.m. Their recommendation will be heard by the Town Council twice, first on Tuesday, March 28, 2021, at 6:00 p.m. and second on Tuesday April 13, 2021, at 6:00 p.m. At this time, it is anticipated that all meetings will be held in person at Town Hall located at 620 Main Street. However, the meetings may also be provided virtually on ZOOM. Please check the Town's website at https://town.windermere.fl.us/ or call Town Administration at 407-876-2563 to verify meeting locations and ZOOM availability. All meetings are open to the public, and you are welcome to participate. Feel free to contact me if you have any questions.

Sincerely,
Brad Cornelius, AICP, Town Planner
Wade Trim, Inc.
813.882.4373
tow@wadetrim.com
Encl.

RECOMMEND - Z19-12 (517 Main Street)
APPROVAL: DISAPPROVAL
COMMENTS: It would be nice to have the facade/Exterior
to look like "multiple shops" as a "down-town USA" look.
Will the restaurant be a "non-brand" restavant? Love the Parking off signature: Vally Lacker P. DATE: 1/21/2021 of main street
SIGNATURE: Vally Lacker 6. DATE: 1/28/2021

614 Main Street Windermere, FL 34786 Fax: (407) 876-0103

Mayor JIM O'BRIEN



Office: (407) 876-2563

Town Manager ROBERT SMITH

Clerk DOROTHY BURKHALTER

January 25, 2021

D M HUBER FAMILY L P **PO BOX 730** WINDERMERE, FL 34786

RE: Public Notice of Rezoning and Preliminary Development Plan Review Public Hearing for 517 Main St. Z19-12

Windermere Downtown Property LLC, owner 517 Main Street, represented by Jim Hall, submitted a request for approval of a rezoning and a preliminary site plan, pursuant to Division 3.03.00 of the Town of Windermere Land Development Code. The purpose of the rezoning request is to change the current zoning designation from Commercial/Single-Family Residential within the Town Center Overlay to Plan Unit Development (PUD) within the Town Center Overlay. Development within the Town Center Overlay is required to obtain PUD approval. Additionally, the applicant is requesting approval of a Preliminary Development Plan (PDP) that proposes two buildings for Office, Retail, and Restaurant uses.

Enclosed is additional information regarding this request.

Pursuant to the Town of Windermere Code of Ordinances, you as a surrounding property owner are entitled to comment on this matter. If you wish to comment, this form must be received by the Town of Windermere with the use of the enclosed stamped envelope to Wade Trim, Inc. by February 12, 2021.

This matter will be presented to the Development Review Board on Tuesday, February 16, 2021, at 6:30 p.m. Their recommendation will be heard by the Town Council twice, first on Tuesday, March 28, 2021, at 6:00 p.m. and second on Tuesday April 13, 2021, at 6:00 p.m. At this time, it is anticipated that all meetings will be held in person at Town Hall located at 620 Main Street. However, the meetings may also be provided virtually on ZOOM. Please check the Town's website at https://town.windermere.fl.us/ or call Town Administration at 407-876-2563 to verify meeting locations and ZOOM availability. All meetings are open to the public, and you are welcome to participate. Feel free to contact me if you have any questions.

Sincerely, Brad Cornelius, AICP, Town Planner Wade Trim, Inc. 813.882.4373 tow@wadetrim.com Encl.

RECOMMEND -	Z19-12 (517 Main	Street)		
APPROVAL:		SAPPROVAL		
COMMENTS:_				
SIGNATURE:_	alla, B1.	ally	DATE: 1/29/201	21_
D M HUBER FA	MILY L P	0		

614 Main Street Windermere, FL 34786 Office: (407) 876-2563 Fax: (407) 876-0103 Received

Mayor
JIM O'BRIEN



Town Manager ROBERT SMITH

Wade Trim

Clerk
DOROTHY BURKHALTER

January 25, 2021

FITZGIBBON JOHN P 615 OAKDALE ST WINDERMERE, FL 34786

RE: Public Notice of Rezoning and Preliminary Development Plan Review Public Hearing for 517 Main St. Z19-12

Windermere Downtown Property LLC, owner 517 Main Street, represented by Jim Hall, submitted a request for approval of a rezoning and a preliminary site plan, pursuant to Division 3.03.00 of the Town of Windermere Land Development Code. The purpose of the rezoning request is to change the current zoning designation from Commercial/Single-Family Residential within the Town Center Overlay to Plan Unit Development (PUD) within the Town Center Overlay. Development within the Town Center Overlay is required to obtain PUD approval. Additionally, the applicant is requesting approval of a Preliminary Development Plan (PDP) that proposes two buildings for Office, Retail, and Restaurant uses.

Enclosed is additional information regarding this request.

Pursuant to the Town of Windermere Code of Ordinances, you as a surrounding property owner are entitled to comment on this matter. If you wish to comment, this form must be received by the Town of Windermere with the use of the enclosed stamped envelope to Wade Trim, Inc. by February 12, 2021.

This matter will be presented to the Development Review Board on Tuesday, February 16, 2021, at 6:30 p.m. Their recommendation will be heard by the Town Council twice, first on Tuesday, March 28/2021, at 6:00 p.m. and second on Tuesday April 13, 2021, at 6:00 p.m. At this time, it is anticipated that all meetings will be held in person at Town Hall located at 620 Main Street. However, the meetings may also be provided virtually on ZOOM. Please check the Town's website at https://town.windermere.fl.us/ or call Town Administration at 407-876-2563 to verify meeting locations and ZOOM availability. All meetings are open to the public, and you are welcome to participate. Feel free to contact me if you have any questions.

Sincerely,
Brad Cornelius, AICP, Town Planner
Wade Trim, Inc.
813.882.4373
tow@wadetrim.com
Encl.

RECOMMEND -	Z19-12 (517 Main Street)		
APPROVAL:	DISAPPROVAL	NOT ENOUGH	IN FORMATION &
COMMENTS:	SIDE ATTACHED)		
	1.		
SIGNATURE:	DATE:	1/29/204	

FITZGIBBON JOHN P



Comment on Public Notice or Rezoning for 517 Main St. Z19-12

Wade Trim

From: John Fitzgibbon, 615 Oakdale St

Brad,

While I certainly support development of the 517 Main St property, at this time, I cannot provide approval or disapproval due to the lack of information and inconsistency on the submitted plan. Some brief comments on quick initial assessment:

Appears to be a landscape plan and not a proper plan for PUD submission due to lack of details

The scale of the buildings seems to be misrepresented based on scale and do not match the SF shown on the plans

No Septic or sanitary is shown. If septic is being submitted for waste water it should be shown on the plans which will affect number of parking spaces and total allowable SF

Are buildings single story or two stories? Appears SF is for the footprint of the buildings. Need clarification on number of stories and SF allocation

No property lines, set backs or dimensions are shown to ensure the plans meet or exceed requirement

No indication of height of buffer wall along east and south of property

Existing Large heritage Live oak trees are not accounted for in the plan, which will reduce parking or at least provide a mitigation plan to save the oaks

Should sidewalk continue to Oakdale St on south property line

Please note that these are highlights and have some more questions but at this point I think plan is lacking in information for a proper PUD submittal

Thank you for reaching out to the surrounding residents.

Sincerely John and Cindy FItzgibbon

614 Main Street Windermere, FL 34786 Office: (407) 876-2563 Fax: (407) 876-0103



Mayor лм O'BRIEN



Town Manager ROBERT SMITH

Clerk DOROTHY BURKHALTER

January 25, 2021

NABERS JOHN M PO BOX 6 WINDERMERE, FL 34786

RE: Public Notice of Rezoning and Preliminary Development Plan Review Public Hearing for 517 Main St. Z19-12

Windermere Downtown Property LLC, owner 517 Main Street, represented by Jim Hall, submitted a request for approval of a rezoning and a preliminary site plan, pursuant to Division 3.03.00 of the Town of Windermere Land Development Code. The purpose of the rezoning request is to change the current zoning designation from Commercial/Single-Family Residential within the Town Center Overlay to Plan Unit Development (PUD) within the Town Center Overlay. Development within the Town Center Overlay is required to obtain PUD approval. Additionally, the applicant is requesting approval of a Preliminary Development Plan (PDP) that proposes two buildings for Office, Retail, and Restaurant uses.

Enclosed is additional information regarding this request.

Pursuant to the Town of Windermere Code of Ordinances, you as a surrounding property owner are entitled to comment on this matter. If you wish to comment, this form must be received by the Town of Windermere with the use of the enclosed stamped envelope to Wade Trim, Inc. by February 12, 2021.

This matter will be presented to the Development Review Board on Tuesday, February 16, 2021, at 6:30 p.m. Their recommendation will be heard by the Town Council twice, first on Tuesday, March 28, 2021, at 6:00 p.m. and second on Tuesday April 13, 2021, at 6:00 p.m. At this time, it is anticipated that all meetings will be held in person at Town Hall located at 620 Main Street. However, the meetings may also be provided virtually on ZOOM. Please check the Town's website at https://town.windermere.fl.us/ or call Town Administration at 407-876-2563 to verify meeting locations and ZOOM availability. All meetings are open to the public, and you are welcome to participate. Feel free to contact me if you have any questions.

Sincerely,
Brad Cornelius, AICP, Town Planner
Wade Trim, Inc.
813.882.4373
tow@wadetrim.com
Encl.

APPROVAL:

DISAPPROVAL

COMMENTS:

I AM NOT NEWESSARILY OPPOSED BUT

L CANNOT MAKE HO INTELLEGENT DECISION,

WITHOUT MORE INFORMATION, IS, ELEVATIONS HEIGHT, ETC

SIGNATURE:

NABERS JOHN M

Enci.	Received
RECOMMEND - Z19-12 (517 Main Street)	FED "1 2021
APPROVAL: DISAPPROVAL	Wade Trim
COMMENTS: We do not approve the rezoning change	AAAAAA HIBBE
For those business and parking This plan	/ 41
encroaches on our residential community. Please	Vote No
SIGNATURE: Wask f. Hoffms DATE: 1/20/202/	
HUFFMAN MARK P Carline Huffman	·
	GKIEK DYAID W
DATE: 1-28-21	SIGNATURE
Received	
LEB . I 5051 mg cio no 2 mas . Lean & Como cio no	Next.
Mage Little Low of to down on that way as	COMMENTS:

ÁNOSAAASIG _

RECOMMEND - Z19-12 (217 Main Street)