



TRAFFIC ASSESSMENT

August 19, 2025

Town of Bluffton
Growth Management
Development Plan Permitting

Re: 1271 May River Road Professional Building, Bluffton South Carolina

General Site Description

Size: 0.34 Acres / 14,812 SF

Zoning: Neighborhood General – Historic District (NG-HD)

Proposed Land Use: Mixed-Use (Residential and Professional Services or Boutique Retail)

Project Description:

The proposed development consists of a 2.5 story Mixed-Use Professional Building (5,259 GSF) and a 2-story Carriage House (1,200 GSF), also mixed-use. The Professional Building includes first floor professional services (1,944 SF) and four residential units above. The Carriage House provides professional services on the first floor (600 SF) and a residential unit above.

Adjacent Property Land Uses:

- North/ West: Old Village Square (AKA Palmetto Square) – Mixed Use
 - Zoned NG-HD
 - Located on two parcels
 - Building 1 is two stories, located at 6 Shults Road on a 0.53 Acre Site. The other 4 buildings are 2.5 stories and are located on the 1.21 acre parcel adjacent to the proposed development. Building areas are as follows: 10 Marianna (5,328 sf), 5 Marianna (5,423 sf), 6 Marianna (5,328 sf), 4 Shults Road (5,355 sf)
 - The development is served by a course aggregate drive aisle and parking
- West: May River Realty
 - Zone NG-HD
 - General Office Structure (489 sf), 0.21 acre lot
 - Does not share common property boundary with the proposed development
- South: May River Road (SCDOT) - Minor Arterial Road
 - May River Road has 15,200 AADT according to SCDOT traffic counts
 - The roadway is level and has no unusual geometric constraints.
- East: The Bluffton Market – Commercial
 - Zoned NG-HD
 - Property is adjacent to Neighborhood Core – Historic District (NC-HD) zoning
 - Primary building is 3,966 sf and has 4 gas pumps
 - The building is used for Texaco Gas Station and Convenience Center, King of Kings Barber, Taqueria El Primo (to-go only restaurant).
 - Property has non-conforming site plan and building type
 - Site has 15 parking spaces; only 9 spaces are required. Parking provided exceeds the required parking on site.
 - Bluffton Market will serve as the access drive to the proposed development

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COMPREHENSIVE LAND PLANNING ■ LANDSCAPE ARCHITECTURE

Trip Generation

Trip generation was calculated using data from the **ITE Trip Generation Manual, 11th Edition**, using the following:

Land Use Code (LUC) 826 – Specialty Retail

1,944 sf Professional Building
600 sf Carriage House
 2,544 sf Total

Land Use Code (LUC) 220 – Residential Apartment

4 DU Professional Building
1 DU Carriage House
 5 DU Total

ITE-Based Trip Generation Summary:

<u>Land Use</u>	<u>Size/Units</u>	<u>Trip Rate (ITE)</u>	<u>Total Trips</u>
Specialty Retail (LUC 826)	2,544 sf	44.32 vehicle trips/ 1,000 SF GFA (ADT)	113 daily trips
	2,544 sf	2.71 vehicle trips/ 1,000 SF GFA (AM peak hour)	7 trips (4 in / 3 out)
	2,544 sf	5.11 vehicle trips/ 1,000 SF GFA (PM peak hour)	13 trips (6 in / 7 out)
<u>Land Use</u>	<u>Size/Units</u>	<u>Trip Rate (ITE)</u>	<u>Total Trips</u>
Residential Apartment (LUC 220)	5 units	6.65 vehicle trips/ apartment unit (ADT)	33 daily trips
	5 units	0.51 vehicle trips per apartment unit (AM peak hour)	3 trips (1 in / 2 out)
	5 units	0.62 vehicle trips per apartment unit (PM peak hour)	3 trips (2 in / 1 out)

Notes:

- For calculation purposes, the highest use is assumed for the first floor of each building type. While the owner intends to rent spaces for professional service or general office, a space could be rented to a specialty retail shop.
- Specialty Retail includes small scale retail focused on unique or niche products, which generates higher trip rates compared to general office due to customer-oriented traffic.
- The residential rates are based on Low Rise Apartment (1-3 stories), which applies to general urban/suburban settings.
- The rates assume no adjustments for pass-by trips, internal capture, or transit use, which may reduce actual trips.
- Mixed-Use developments often have internal capture, where trips between on-site uses do not add to external roadway trips. The ITE Trip Generation Handbook provides methodology for estimating internal capture rates, ranging between 5-30%.
- Trip counts include both in and out

Roadway Conditions and Access Potential

Roadway Classification (SCDOT Traffic Analysis & Data Application (TADA)):

- **May River Road Details:**
 - Type: Minor Arterial (Urban)
 - Cross-section: 2-lane
 - 66' R/W
 - Posted Speed: 30 mph
- **Analysis Summary:**
 - AADT: 15,200 (Station Id: 07-0157; S- 29 (Buck Island Rd) TO S- 120 (Bruin Rd), L- 66)
 - Single Unit AADT: 682
 - Combo Unit AADT: 43
 - Truck%: 5%

Level of Service (LOS) Assessment:

Although detailed LOS calculations require full intersection geometry, existing AADT volumes on May River Road remain below capacity thresholds for a 2-lane Minor Arterial. Using Highway Capacity Manual (HCM) 7th Edition, May River Road currently operates at LOS C or better for a Class I two-lane highway. The projected peak hour trips are negligible compared to the AADT for May River Road. The impact from this site specifically would be less than 1% of AADT, which is below thresholds typically requiring mitigation.

Sight Distance Analysis:

- According to the Access and Roadside Management Standards (ARMS) Manual, the access drive would be considered a Medium Volume Driveway.
- For 30 mph roadway, the site distance is 335 feet.
- This development will access May River Road from an existing driveway located at The Bluffton Market property. The Bluffton Market has two existing driveway encroachments (36' & 39' wide).
- The proposed site development does not propose any features (bike rack, sign, vegetation) impediments within the site triangle

Conclusions

Based on the above analysis, the proposed development at 1271 May River Road is expected to:

- Provide housing and commercial infill within the Old Town, creating a more walkable, pedestrian friendly community, consistent with the Old Town Master Plan and Comprehensive Plan.
- Generate negligible traffic volumes and peak hour trips
- Benefit from existing infrastructure (on-street parking and existing driveway access)
- Provide shared overflow parking for the adjacent Bluffton Market property
- Be located on roadways currently operating at acceptable LOS.

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