

Impact Assessment Statement Form Answers

3119 County Road 547 N, Davenport, FL 33837

Land and Neighborhood Characteristics

1. The property is located in the unincorporated area of Davenport within Polk County, in a corridor that already supports tourism-related lodging due to its proximity to major transportation routes and regional attractions.

The property is conveniently located near major roadways including U.S. Route 27, Interstate 4, and Ernie Caldwell Boulevard, which provide direct access to Central Florida's primary tourism and employment centers. This accessibility allows visitors to reach the property without creating congestion in local residential streets.

In addition, the property is located within a short distance of established commercial services including shopping centers, restaurants, gas stations, and major healthcare facilities. This commercial infrastructure supports visitor needs and reduces pressure on purely residential areas.

The location is also approximately 30 minutes from Walt Disney World Resort, one of the region's primary tourism destinations. As a result, the property naturally serves visitors seeking temporary accommodations in proximity to the area's attractions.

The property includes its own private gated entrance, which enhances privacy, security, and controlled access for guests.

These characteristics help ensure the use is compatible with the surrounding area while maintaining orderly property management.

2. There are no incompatibilities between the proposed short-term rental and adjacent uses. The property remains residential in character, with private gated access and adherence to standard guest rules for parking, noise, and occupancy. No special mitigation measures are required.
3. Allowing this property to operate as a short-term rental provides several benefits to the county:
 - Supports tourism economy: Visitors contribute to the local economy through spending at nearby restaurants, retail centers, and service providers.
 - Tax revenue: Short-term rentals contribute to county and state revenues through tourist development taxes and sales taxes.
 - Utilization of existing housing stock: The use does not require new development or additional infrastructure.
 - Economic activity in nearby commercial corridors: Guests patronize nearby businesses along the US-27 and I-4 corridor.

Overall, the property's location, accessibility, proximity to tourism attractions, and surrounding commercial services make it suitable for short-term rental use while providing measurable economic benefits to Polk County.

Access to Roads and Highways

1. **Rationale for Reduced Trip Generation**

Occupancy duration: Airbnb/short-term rentals usually have guests staying multiple nights (3–7 days), so daily arrivals/departures are far fewer than a permanent resident household.

Limited vehicle use: Many guests share vehicles, use rental cars, or rely on rideshare, reducing actual trips.

Property limit: Your permit restricts occupancy to 2 vehicles, which caps maximum traffic regardless of ITE standard rates.

Methodology for a Conservative Estimate

ITE LUC 210 daily trip rate = 9.6 trips/day per dwelling unit.

Assume a typical short-term rental generates 50–60% of a permanent household's trips due to limited duration and shared stays.

$$\text{Adjusted daily trips} = 9.6 \times 0.5 = 4.8 \approx 5 \text{ trips/day}$$

PM peak hour trips scale proportionally:

$$\text{Adjusted PM peak} = 0.99 \times 0.5 = 0.495 \approx 0.5 \text{ trips}$$

The standard ITE trip generation rates for a single-family home assume permanent occupancy. Because this property will operate as a short-term rental with multi-night stays and a maximum of two vehicles, the estimated daily trips are reduced to approximately 5 trips/day, with about 0.5 trips during the PM peak hour. This estimate reflects actual use patterns and ensures minimal impact on Ernie Caldwell Boulevard, US-27, and I-4, while still providing convenient access to local amenities and supporting the tourism economy.

2. The low trip volume and location on major roadways means no modifications to the existing transportation system are required. Roadways have sufficient capacity, and neighboring streets will not be impacted.
3. Required parking spaces: 2 per dwelling unit
Provided parking spaces: 2 (maximum allowed for property)
Conclusion: No additional parking spaces are needed.
4. The property will have direct access via its existing driveway to Ernie Caldwell Boulevard, a public arterial roadway. No additional intersecting streets or frontage roads are required. Access is gated and controlled, ensuring privacy and safe ingress and egress for guests. This arrangement provides convenient and direct access to regional roadways including US-27 and I-4 while maintaining minimal impact on neighboring properties.

Septic Tank / Sewage

1. The proposed short-term rental is served by an on-site well and septic system. Based on Section 703.F of the Polk County Land Development Code, the property is expected to generate approximately 600 gallons per day (gpd) of wastewater, assuming a maximum occupancy of 8 persons. The septic system is appropriately sized to accommodate this flow, and no connection to public sewer is required.
2. The property will utilize an on-site septic system for wastewater treatment. The system provides standard residential treatment consistent with Polk County Health Department and Land Development Code requirements.

Method of Treatment: Conventional septic tank and drain field system.

Level of Treatment: Primary treatment of solids in the septic tank, followed by secondary treatment via soil absorption in the drain field.

Method of Effluent Disposal: Treated effluent is dispersed through the approved on-site drain field, where it percolates into the soil, meeting all applicable environmental and public health standards.

The system is sized to accommodate a maximum occupancy of 8 persons (≈600 gpd) and is designed to ensure safe, compliant wastewater disposal without impact to neighboring properties or public infrastructure.

3. The property does not utilize offsite sewage treatment. All wastewater is managed on-site via a private septic system, and no external service provider is required.
4. The property is served by a private septic system. No public sewer lines are located within easements or rights-of-way per Section 702.E.3 of the Polk County LDC.
5. The property is served by a private septic system with capacity to accommodate up to 8 persons. This capacity is sufficient for the proposed short-term rental use.
6. No connection to public sewer is planned or required at this time.
7. No improvements to the septic system or public sanitary sewer are necessary.

Water Supply

1. The property's water is supplied by a private well. There is no municipal or utility service provider; the well fully serves the proposed short-term rental use.
2. The property has a private water/septic system designed for up to 8 persons. Using the standard domestic water usage rate of 75 gallons per person per day (Section 703, Polk County LDC) and assuming 50% occupancy typical for short-term rentals:

$$8 \times 75 \times 0.5 = 300 \text{ gallons per day (GPD)}$$

Conclusion: The estimated water consumption is approximately 300 GPD, which is within the capacity of the existing system.

3. There are no public reclaimed water lines on the property or within adjacent easements or rights-of-way.
4. The property's wastewater service is provided by the private septic system on-site, maintained by the property owner.
5. No connection to public sewer is planned.
6. The property's private septic system has capacity for up to 8 persons, which is sufficient for the proposed short-term rental use.
7. Existing Well: Yes, the property has a private well.
Type: Domestic/private well.
Permit Capacity: Not required for typical residential use; serves the short-term rental.
Location: Northeast side of the property.
Water Use Permit: Not applicable; private residential well.
Type of Use: Residential (not agricultural, public, or industrial/commercial).
Permit Daily Capacity: Not applicable; adequate for domestic use of the property.

Surface Water Management and Drainage

1. The property is primarily located in FEMA Flood Zone X, indicating minimal flood risk for the main structure. A portion of the rear yard lies within Flood Zone A due to the presence of wetland areas along the back property boundary, which function as a natural surface water storage and drainage feature.

Surface water on the site generally drains toward the rear of the property, following the natural grade toward the wetland area. This helps convey and temporarily store runoff from surrounding land.

Elevation data from the building measurement information indicates that the top of the bottom floor is approximately 1.067 ft above the highest adjacent grade (HAG) and 1.106 ft above the lowest adjacent grade (LAG). The attached garage slab is about 0.091 ft above HAG, and the top of equipment platform is about 0.503 ft above HAG (Elevation Certificate, Vision Land Service, Duncan, Ernest W, July 16, 2025). These elevations indicate the structure is slightly elevated relative to surrounding ground, helping reduce flood risk.

Overall, no known flooding issues affect the primary structure, and flood risk is limited to the rear wetland area within Zone A, which primarily serves as a natural drainage and water retention feature.

2. No alterations to the site's natural drainage features or wetlands are necessary for the proposed short-term rental. The existing conditions will remain intact.

Environmental Analysis

1. The property is primarily residential with a single-family home and a wetland along the rear boundary, which contributes to natural stormwater drainage. The house and main yard are outside flood-prone areas (FEMA Flood Zone X). Surrounding properties are mostly residential or undeveloped, with similar wetland and natural drainage features.
2. No development or alterations are planned for these areas; the lot will remain in its original, natural condition, preserving existing wetlands and drainage patterns.
3. The property is served by a private well located on the northeast side of the lot, providing water for domestic use. There are no nearby public well fields that could be affected by the proposed short-term rental. The well's location ensures no impact on surrounding potable water supplies, and use is limited to the property's domestic needs.
4. The site is primarily sandy soils typical of Davenport, which drain well and are compatible with the existing private septic system. The property will remain in its natural condition, so the soils will not adversely affect the proposed short-term rental use.

Infrastructure Impact Information

1. Parks and Recreation

- Tom Fellows Community Center / Wilson Park / Jamestown Park / Lewis W. Mathews Sports Complex – within ~3–4 miles (Davenport city parks).
- Northeast Regional Park – about 4.5 miles northwest via US-27 (public recreational fields and open space).
- Lake Eva Community Park (Winter Haven) – about 11–12 miles east (regional community park).

2. Educational Facilities

- Davenport School of the Arts (K–8) – approximately 1.8 miles southwest.
- Loughman Oaks Elementary School – approximately 2.1 miles southwest.

- Other nearby schools (middle & high) lie within ~4–7 miles.

3. Health Care

- AdventHealth Heart of Florida – primary hospital with emergency services located ~2.5–3 miles northwest on US-27.
- Additional care (urgent care, pharmacies) within ~2–5 miles.

4. Fire Protection

- Fire protection and EMS response are provided by Polk County Fire Rescue / Davenport Fire Department stations; the nearest staffed station (e.g., Station 20 – Loughman on US-17/92) is approximately 3–4 miles southwest.

5. Police Protection and Security

- Law enforcement is provided by the Polk County Sheriff's Office and local Davenport police. The nearest sheriff's district office for this part of unincorporated Polk County is generally within 5–7 miles.

6. Emergency Medical Services (EMS)

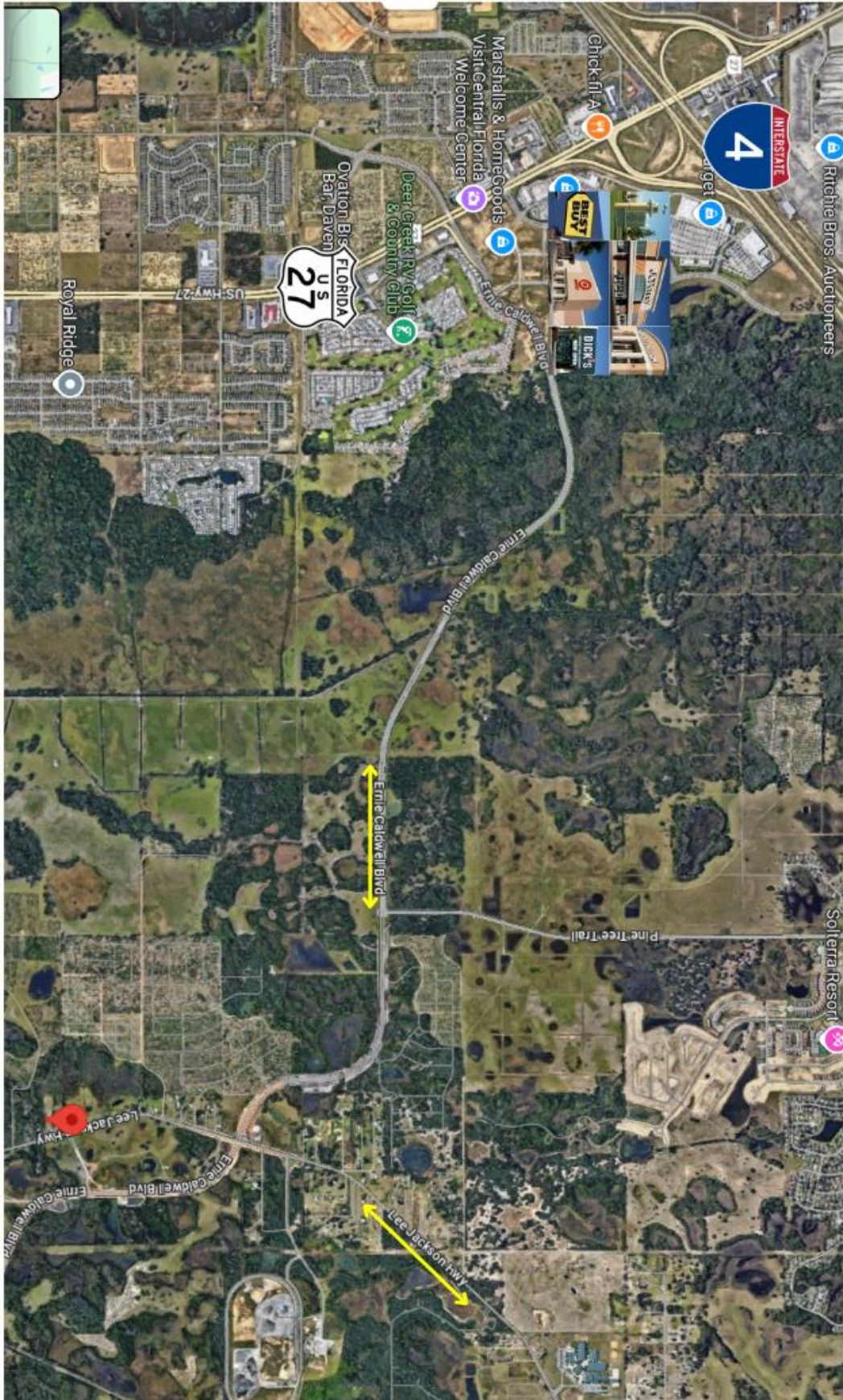
- EMS is integrated with Polk County Fire Rescue response units based in stations near Davenport (as noted above for fire protection). Standard EMS response coverage extends from these stations typically within ~3–6 miles.

7. Solid Waste

- Residential solid waste (trash/yard waste) is collected by Polk County Solid Waste Division; the nearest waste transfer station/landfill (North Central Landfill) is approximately 15–18 miles northeast of the property. Collection is curbside based on county schedule.

- 8.** The proposed short-term rental provides additional lodging options in a highly accessible area near shopping, restaurants, medical facilities, and regional attractions. It supports tourism and local businesses, contributes to county tax revenue, and utilizes an existing residential property without creating new development or burdening infrastructure. This enhances the neighborhood's economic and service capacity while maintaining the residential character of the area.

Map A.



Map C.

