

RaceTrac Petroleum, Inc.

11800, 11806, 11900, 11908 East Orell Road and
11705 Dixie Highway

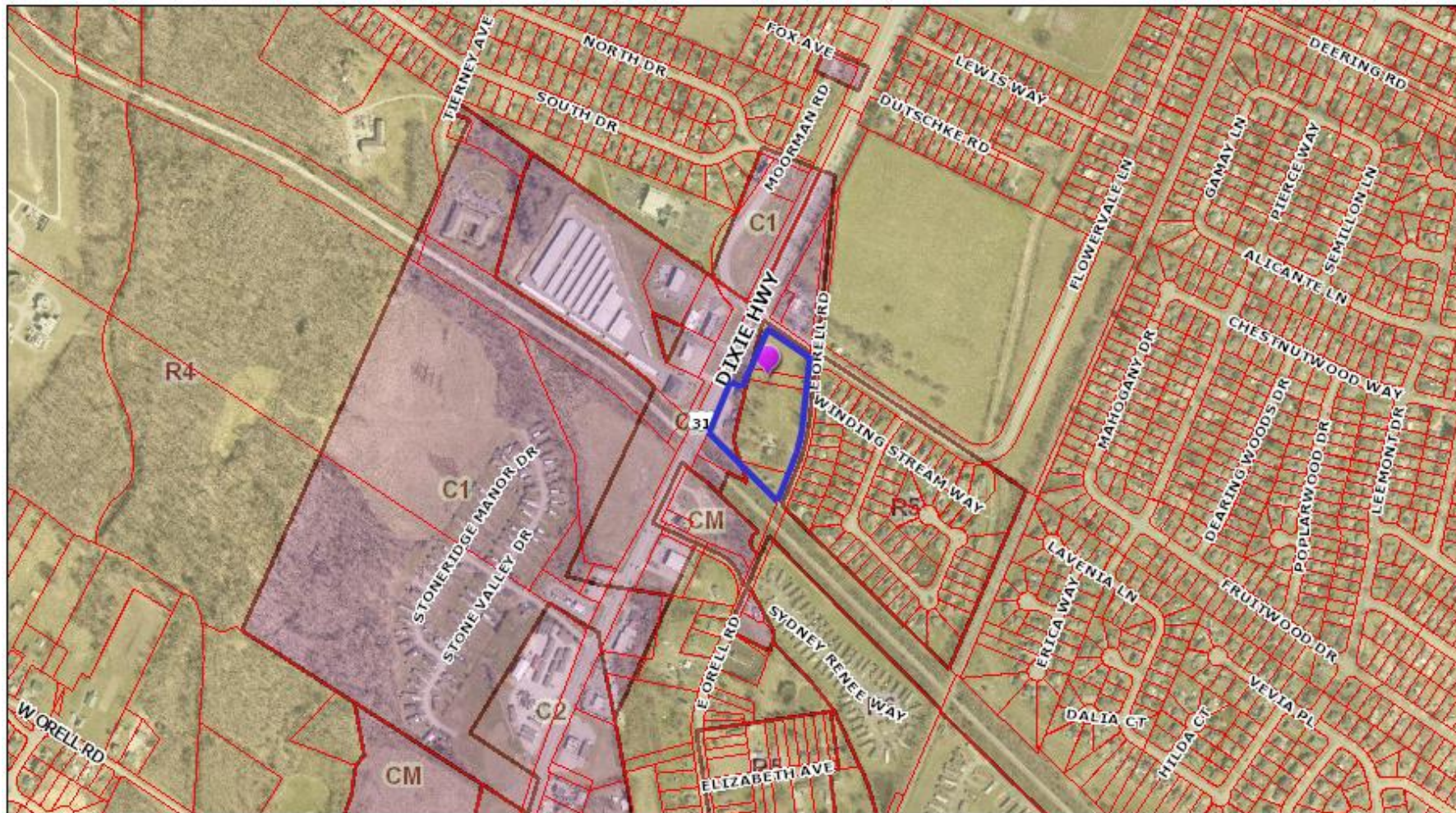
CASE NO: 20-ZONE-0034

- Zone Change from R-4 and C-2 to C-1
- Detailed District Development Plan
- Binding Elements

Gresham Smith & Partners

Dinsmore & Shohl, LLP

Subject Property



0 500 1000ft

7/3/2020, 9:44:57 AM

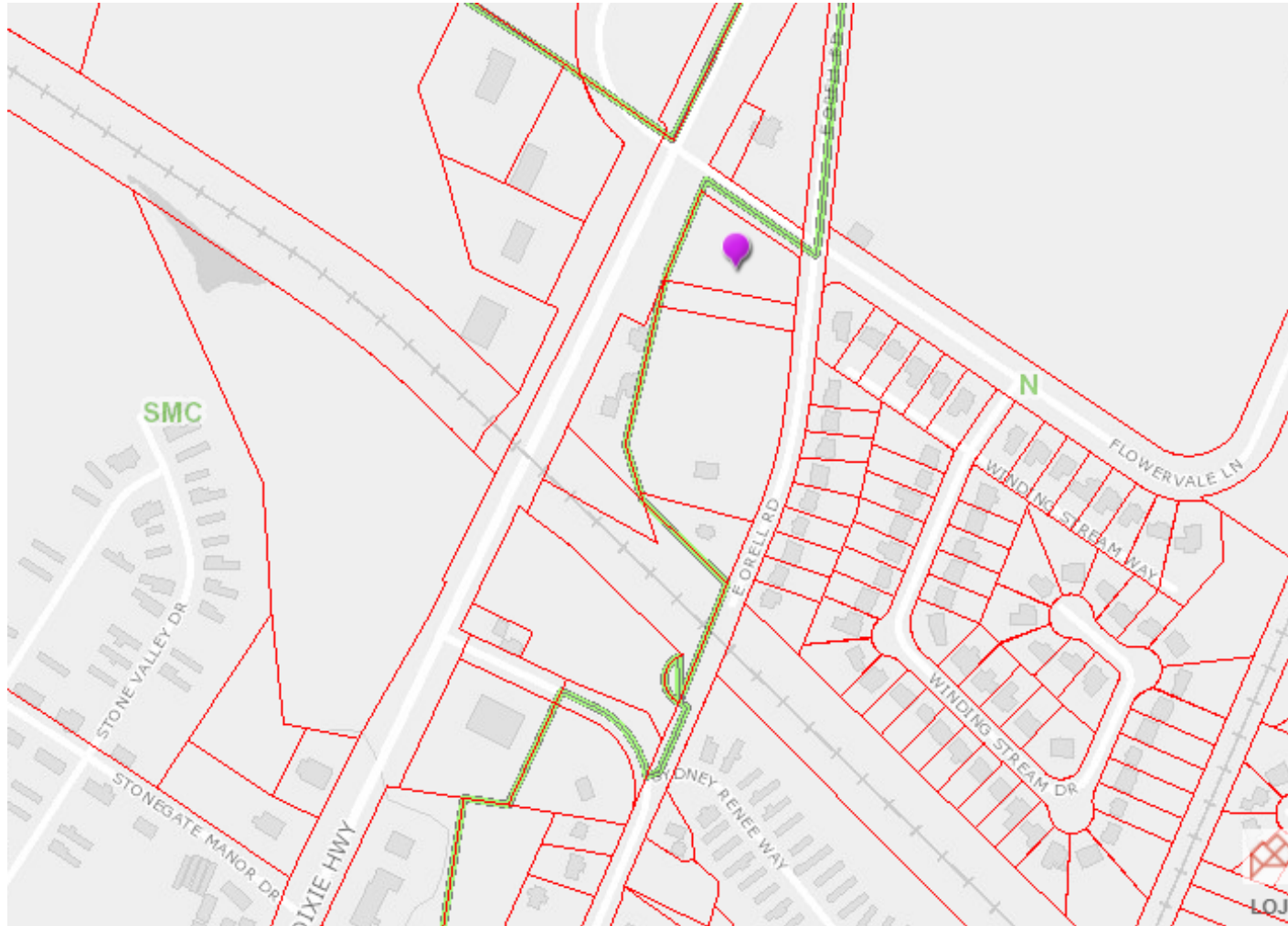


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This map is not a legal document and should only be used for general reference and identification.

Flowervale & Dixie Hwy.



Current Form District Boundary



Original Proposed Plan



Previously Proposed Plan



Current Plan



Noise Assessment

Noise Assessment

Proposed RaceTrac Facility

- The existing location is along a highly traveled US Highway with existing commercial operations of a similar type to the proposed RaceTrac facility. Data from the surrogate site indicates that the additive sound from the proposed RaceTrac would only increase the overall noise level of the area by 5-6 dB(A) during higher traffic times and that the levels at the residences would not exceed the levels of conversational speech at any measured time.

This study measured sound levels, determined the noise contribution of an operational gas station on the adjacent ambient noise environment, and calculated the potential increase of noise a new facility at the proposed site would create, all demonstrating that the proposed RaceTrac, while it may be audible, it will not meaningfully affect the sound levels of the surrounding residential properties.

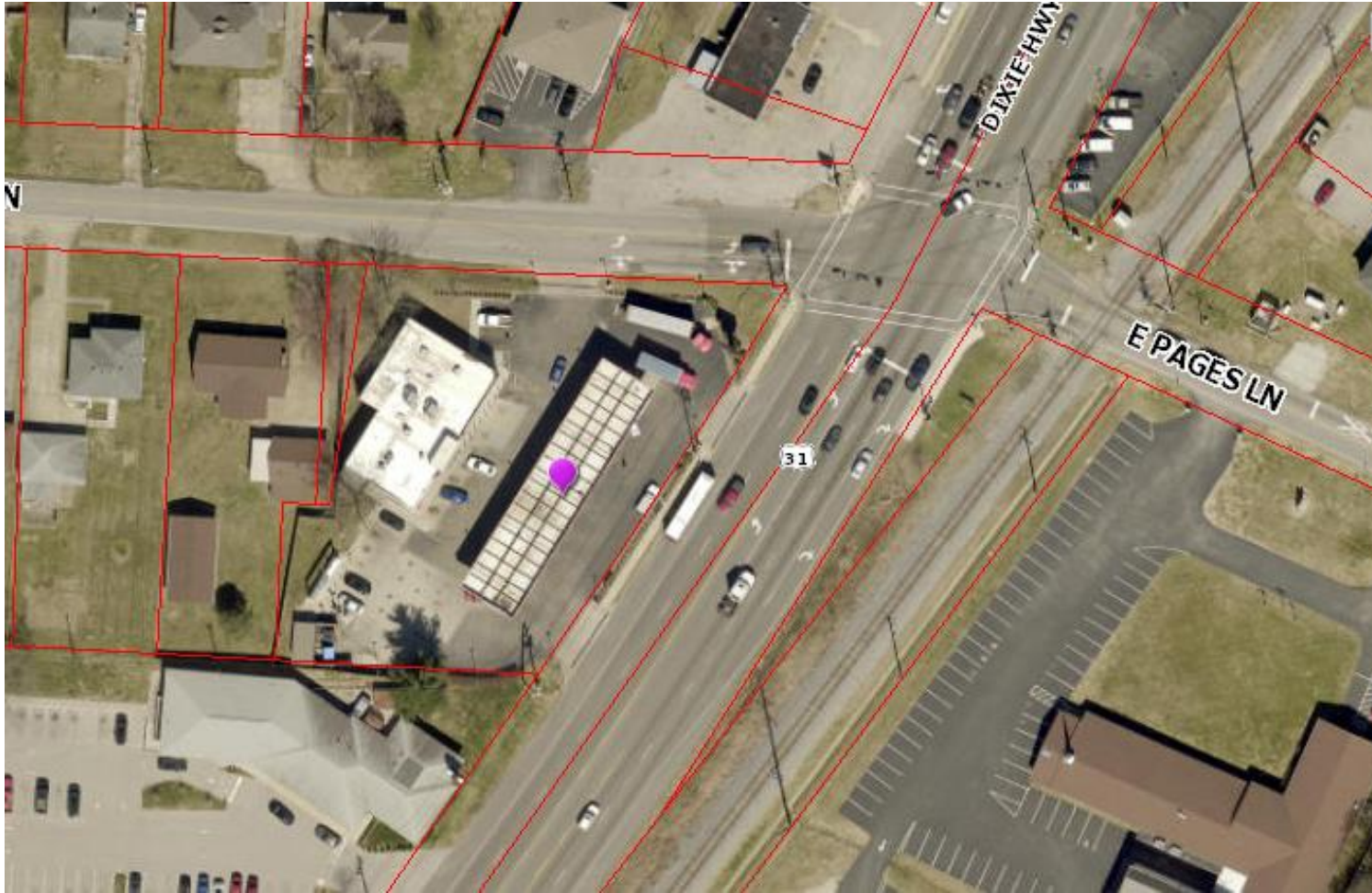
Barrier Analysis

The construction of an 8-foot barrier along the eastern boundary of the proposed RaceTrac site would be ineffective mitigating noise in the existing noise environment. It provides an average noise reduction of 0.7 dB(A) and a maximum noise reduction of 1.5 dB(A), which is not considered perceptible to the human ear. This is due to the fact that the noise wall would be too short to mitigate sound from the major noise generator in the area, the US 31W/Dixie Highway facility. The noise wall modeling cannot determine how much sound that is generated by the RaceTrac would be mitigated but as previously shown, a facility of this type, in this noise environment, only adds to the sound levels during high travel times.

Current Plan



Fuel Center-Dixie Hwy.



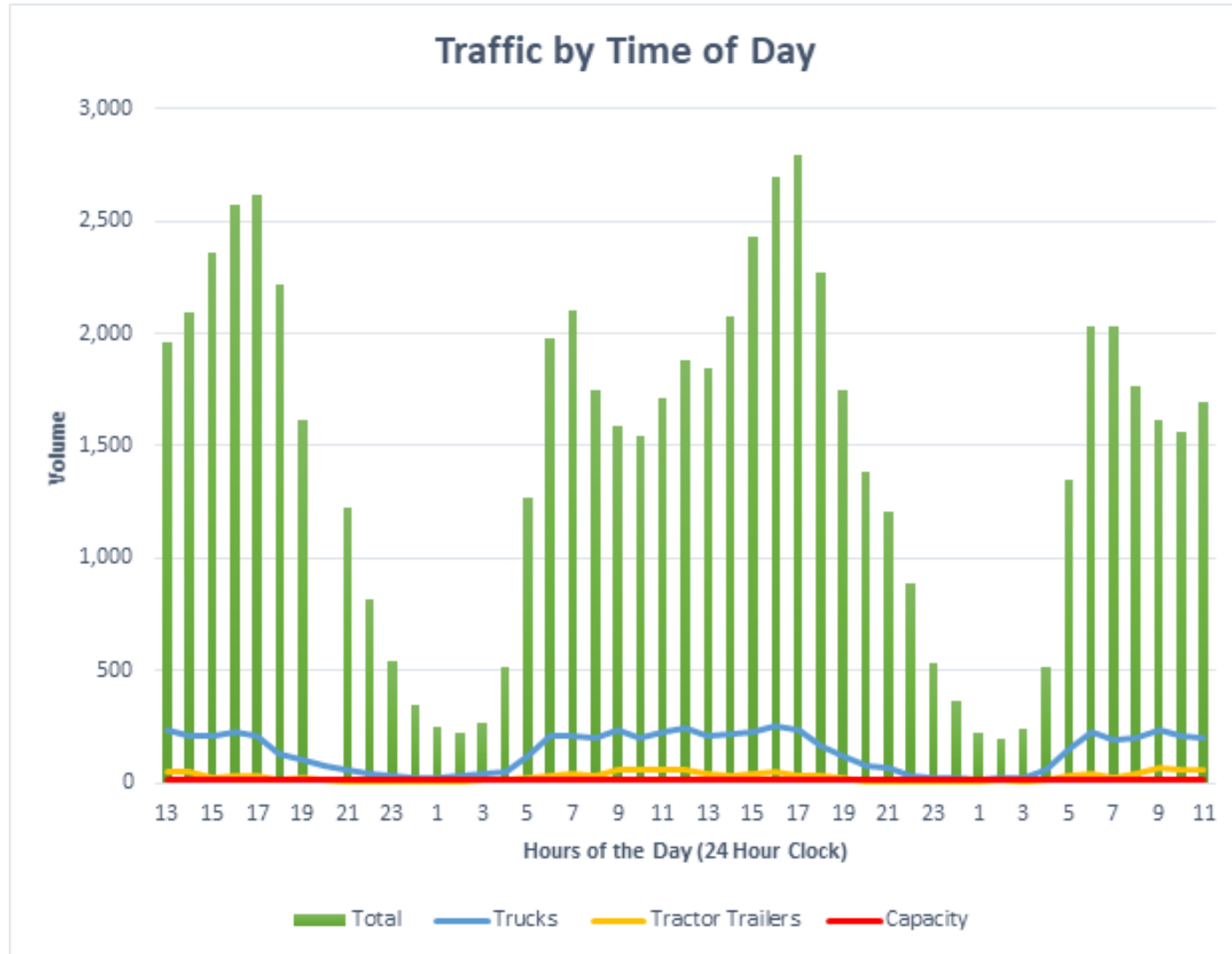
Travel Center Example



Travel Center Example



Truck Volume



Chapter 10 Buffer Standards

Table 10.2.3 Buffer Yard Widths and Multipliers		
Landscape Buffer Area Type	Width Options (in feet)	Planting Density Multiplier ²
A	5 ¹	2
	10	1.5
	15	1
B	10 ¹	1.5
	15	1.5
	20	1
C	15 ¹	1.5
	25	1.5
	35	1
D	25 ¹	1.5
	35	1.5
	50	1

STEP 3

Select Buffer Yard width option and associated planting multiplier.

- 1 This option is only available in the Traditional Neighborhood, Traditional Workplace and Traditional Marketplace Corridor and Town Center Form Districts.
2. The Planting Density Multiplier allows for a reduction in the size of Landscape Buffer Areas with a provision of an increased number of trees to offset the reduction in buffer width. (A "2" multiplier requires twice the number of trees to be planted as required in Table 10.2.4.)

Proposal Highlights

- ▶ Lighted Intersection on Dixie Highway
- ▶ Intersection marked as a major intersection in Dixie Highway
- ▶ Proposed Development Designed Toward Dixie Highway
- ▶ 8' Sound Wall included
- ▶ Buffers a minimum of 84' to E. Orell

Current Plan

