City of Bunnell
Small-scale Future Land Use Map Amendment
Data and Analysis
US-1 Industrial Park

Status

This amendment is initiated by the applicant Tara Tedrow, Esq. with Lowndes Law Firm on behalf of the property owners Brown & Johnston & Joly & Durshimer. The intent of this amendment is to change the City's Future Land Use Map for approximately 1,842± acres of land from the "Agriculture & Silviculture" designation to the "Industrial" and "Agricultural Community Industrial" designations. There are no development plans at this time for the subject property and is not considered to be a proposed development pursuant to §380.06, *Florida Statutes*, and is not subject to the state coordinated review process for comprehensive plan amendments.

Below is a summary of information for evaluation.

Data

Location
The subject area is generally located between Old Haw Creek Road, US Highway 1, and County Road 304. The property is currently vacant and unaddressed. See Exhibit "A" for the property location.

Existing Use of the Subject Property
The parcels are currently vacant, undeveloped timberland and is classified by the Flagler County Property Appraiser's office as Timberland 80-89.

Size
The total area of the subject area is approximately 1,842± acres.

Land Use

Existing FLUM
The existing Future Land Use designation for the subject area is Agriculture & Silviculture (AG&S). This is shown in Exhibit "B".

The current Future Land Use allows:

- 1,842± acres of Agricultural & Silviculture use at 1.0 units per 5.0 acres = 368 units

Total Allowable Density: 368 units

Adjacent Properties
The Future Land Use designations for the properties adjacent to the subject area at the time of the City's proposed amendment are:

North: Single Family-Low Density (SF-L); Unincorporated Agriculture & Timberlands (AG-Timber);

South: Agriculture & Silviculture (AG&S); Unincorporated Agriculture & Timberlands (AG-Timber)

East: Industrial (IND); Palm Coast Residential; Palm Coast Institutional; Palm Coast Mixed Use; Palm Coast Greenbelt; Palm Coast Canals

West: Agriculture & Silviculture (AG&S)

Existing Conditions

The existing property uses abutting the subject area at the time of the City's proposed amendment are:

North: Vacant

South: Rural Single Family Residential

East: Residential

West: vacant timberland; Single-Family residences

The proposed amendment will ensure compatibility and harmony with the adjacent property uses through acceptable engineering and site development practices enforced through the City's Land Development Code.

Proposed FLUM

The proposed Future Land Use designation is shown in Exhibit "B". The proposed zoning for the subject area will be "L-2, Heavy Industrial District" and "ACI, Agricultural Community Industrial District" and will have additional zoning/development criteria for this area beyond the comprehensive plan policies adopted for the land uses.

The proposed Future Land Uses would allow:

- 459± acres of Agricultural Community Industrial intensity at 0.5 FAR = 9,997,020 square feet.
- 1,383± acres of Industrial Intensity at 0.5 FAR = 30,121,740 Square feet

Total Allowable Intensity: 40,118,760 square feet

The change in the designations for the subject area would result in a loss of residential density and an increase in commercial/industrial intensity. The area would be further limited through FLU Policy 15 and FLU Policy 10.1 by ensuring the area designated "Agricultural Community Industrial" is limited to 50% maximum impervious coverage and the area designated "Industrial" is limited to 70% maximum impervious coverage.

Population Analysis

Given the loss of residential density in the amount of 368 dwelling units, which equates to an approximate possible population of 868 individuals (2.36 people/dwelling unit [*BEBR Households and Average Household Size in Florida April 1, 2024*]), there is no population increase relative to this location.

Impacts on Public Facilities and Services

Any future development of the property, all site engineering, drainage and required infrastructure improvements will be reviewed pursuant to the City review process to ensure that the development complies with all applicable federal, state, and local regulations and permitting requirements. No development may take place prior to compliance with all applicable regulations.

Sanitary Sewer Impacts

The City currently has an adopted Level of Service (LOS) for sanitary sewer capacity at 102.3 gallons per capita per day. There is currently no adopted LOS for commercial/industrial usage for sanitary sewer. The City's Wastewater Treatment Facility (WWTF) currently operates under FDEP permit number FL0020907.

To determine the estimated impacts on the WWTF from this large-scale amendment, the demand of 0.0049 gpd per square foot will be used as determined by the adopted Bunnell Wastewater Master Plan, prepared by Kimley-Horn and Associates, Inc. in February 2020.

Estimated Sanitary Sewer Capacity Calculations

Existing Demand = 368du * 2.36 people/unit * 102.3 gpd per capita = 0.089 MGD

Estimated Demand = 40,118,760sqft (allowable intensity) * 0.0049 gpd per square foot (determined LOS) = 196,581.924 gpd / 1,000,000 = 0.197 MGD

Demand Difference = Increase of 0.108 MGD

Permitted Capacity = 0.600 MGD Annual Average Daily Flow (AADF).

Current AADF Capacity = 0.415 MGD

Reserved Allocations = 0.138 MGD

Yearly Projected Demand = 0.011 MGD (2025 – 2035 = 0.110 MGD)

Total Capacity = (Current AADF Capacity + Reserved Allocations + Projected Demand) = 0.663 MGD

Available Capacity = (Permitted Capacity – Total Capacity) = -0.063 MGD

Available Capacity with Amendment Demand = -0.260 MGD

The analysis shows there is not sufficient capacity for sanitary sewer; However, the City of Bunnell is currently constructing a new advanced WWTF, with a targeted completion date of the 3rd quarter of 2026, that will increase the permitted capacity to 1.200 MGD. With the increased capacity after completion, there will be adequate capacity for sanitary sewer to satisfy the needs for the subject area. The remaining capacity with this accounted for is projected to be 0.340 MGD assuming all variables remain the same.

Potable Water Impacts

The City currently has an adopted LOS for potable water capacity at 120 gallons per capita per day. There is currently no adopted LOS for commercial/industrial usage for potable water. The City's Water Treatment Facility (WTF) currently operates under SJRWMD Consumptive Use Permit (CUP) number 1982-6 for raw water supply and FDEP permit number 2180134

To determine the estimated impacts on the water supplies and facilities from this small-scale amendment, the demand of 0.0058 gpd per square foot will be used as determined by the adopted Bunnell Wastewater Master Plan, prepared by Kimley-Horn and Associates, Inc. in February 2020.

Estimated Raw Water Supply Capacity Calculations

Existing Demand = 368du * 2.36 people/unit * 120 gpd per capita = 0.104 MGD

Estimated Demand = 40,118,760sqft (allowable intensity) * 0.0058 gpd per square foot (determined LOS) = 232,688.808 gpd / 1,000,000 = 0.233 MGD

Demand Difference = Increase of 0.129 MGD

Permitted Water Use Allocation (CUP) = 0.675 MGD

Current Daily Average Withdrawal = 0.406 MGD

Reserved Allocations = 0.138 MGD

Yearly Projected Demand = 0.011 MGD (2025 – 2035 = 0.110 MGD)

Total Supply Capacity = (Current Daily Average Withdrawal + Reserved Allocations + Projected Demand) = 0.654 MGD

Available Raw Water Supply Capacity = (Permitted Supply – Total Capacity) = 0.021 MGD

Available Capacity with Amendment Demand = -0.212 MGD

Estimated Water Treatment Facility Capacity Calculations

Existing Demand = 368du * 2.36 people/unit * 120 gpd per capita = 0.104 MGD

Estimated Demand of FLUM amendment = 40,118,760sqft (allowable intensity) * 0.0058 gpd per square foot (determined LOS) = 232,688.808 gpd / 1,000,000 = 0.233 MGD

Demand Difference = Increase of 0.129 MGD

Permitted Facility Capacity = 0.999 MGD

Current AADF Capacity = 0.406 MGD

Reserved Allocations = 0.138 MGD

Yearly Projected Demand = 0.011 MGD (2025 – 2035 = 0.110 MGD)

Current Total Facility Capacity = (Current AADF Capacity + Reserved Allocations + Projected Demand) = 0.654 MGD

Available Capacity = (Permitted Capacity – Current Total Capacity) = 0.345 MGD

Available Capacity with Amendment Demand = 0.112 MGD

The analysis shows there is adequate capacity at the Water Treatment Plant for this amendment but an over-expenditure for Raw Water supply under the current CUP; however, the City is currently in the process of updating and modifying the City's CUP to increase the amount of Raw Water Supply the City is allowed to extract from available water resources.

Drainage

The subject area currently has approximately 87.3± acres located within FEMA Flood Zone A, 20.29± acres within FEMA Flood Zone AE, and 6.54 within FEMA Flood Zone X that has a 2% annual chance of flood hazard. The site also contains the following soil types as indicated on the National Cooperative Soil Survey:

- 09 EauGallie fine sand
- 08 Hicoria, Riviera, and Gator Soils, depressional
- 16 Malabar fine sand
- 07 Favoretta, Chobee, and Winder soils, frequently flooded
- 04 Wabasso fine sand
- 14 Pineda fine sand
- 11 Myakka fine sand
- 12 Placid, Basinger, and St. Johns soils, depressional
- 21 Smyrna fine sand

Development of the subject area will be subject to the stormwater regulations of the St. Johns River Water Management District and the City of Bunnell. All appropriate stormwater permits and environmental assessments will need to be obtained before the development can proceed. Additionally, the City will enforce comprehensive plan policies to reduce development within flood hazard areas and to direct development to areas with more compatible soils and preserve areas that are not suitable for development. Chapter 10 in the City's Land Development Code regulates any and all development with FEMA Flood Hazard areas.

Solid Waste

The subject property will not have a significant impact on the City's solid waste services. Any deficits in the City's level of service at time of development will be timely addressed with an agreement between the City and the developer.

Traffic Circulation
The subject area will have ingress/egress off of US Highway 1. The area with its current land use capabilities has the possibility to generate a weekday AM Peak Hour trip generation of 191 trips (between 7 and 9 a.m.) and a PM Peak Hour trip generation of 291 trips (between 4 and 6 p.m.) based on the ITE Land Use Code 215. Under the requested Future Land Uses, there is a possible weekday AM and PM Peak Hour trip generation of 1,605 trips each (between 7 and 9 a.m.; between 4 and 6 p.m.) based on the ITE Land Use Code 130. This results in an increase of 1,314 trips for the subject area based on discussions with the applicant on possible future outcomes for the site.

The City will coordinate with Flagler County and FDOT regarding the impacts on the LOS when development is under review. A concurrency-level traffic impact analysis will be required at time of development that will follow the Volusia-Flagler TPO TIA guidelines to ensure all traffic impacts are accounted for.

Schools and Recreation
The subject area is will not have any impacts on public school concurrency as there is no residential density related to the proposed amendment.

Facility Conclusion
The proposed large-scale amendment will not create a significant impact to the City's facilities or public services. The City will have adequate capacity of its facilities to accommodate the land use change. The City will coordinate with Flagler County and FDOT for any facilities that fall under their jurisdiction such as traffic concurrency.

Comprehensive Plan Analysis

This large-scale Future Land Use Map amendment is consistent with the Goals, Objectives, and Policies in the 2035 Bunnell Comprehensive Plan. The applicant has supplied a justification/comprehensive analysis of the proposed amendment.