

POLK COUNTY DEVELOPMENT REVIEW COMMITTEE STAFF REPORT

DRC Date: February 20, 2025	Level of Review: Level 4 Review
PC Date: April 2, 2025	Type: Small-scale Comprehensive Plan Amendment
BoCC Date: April 15, 2025	Case Numbers: LDCPAS-2025-4
Applicant: Polk County Facilities Management	Case Name: Bradley Junction Fire Station
	Case Planner: Erik Peterson, AICP

Request:	Future Land Use Map change from Rural Cluster Center (RCC) to Institutional (INST) on ±8.13 acres to recognize an existing Water Treatment Facility and County Fire Rescue Station.
Location:	6800 Old Highway 37 in Bradley Junction, north of Main Avenue, south of Bay Avenue East and West, east of State Road 37, south of the town of Mulberry, west of Fort Meade in Section 11, Township 31, Range 23.
Property Owners:	Polk County
Parcel Size (Number):	±8.13 acres (233111-000000-021010)
Future Land Use:	Rural Cluster Center-Residential (RCC-R)
Development Area:	Rural Development Area (RDA)
Nearest Municipality:	City of Mulberry (6.5 miles)
DRC Recommendation:	Approval
Planning Commission Vote:	Pending Public Hearing

Location Map



2024 Satellite Photo



Summary:

The Facilities Division is proposing a proposed new fire rescue station for the southwestern corner of the County in Bradley Junction to replace the current station at 6949 Old Highway 37. The existing facility and property are too small to meet the needs of the County's target level of service standard. Staff have found a better location on the site of the County's Bradley Water Treatment Plant on parcel 233111-000000-021010. The property has not been recognized by the Comprehensive Plan. It is currently Rural Cluster Center Residential (RCC-R). Fire Rescue Station are classified as Government Facilities in the LDC. The property will default to INST-1 because there is no application for subdistrict change to INST-2. Government Facilities are permitted on the INST-1 district. The uses allowed in the INST-1 district are listed in Exhibit 5.

The over eight-acre property has been the site of two production wells and a water treatment facility since 1990. The surrounding property is owned by the Mosaic Fertilizer Company. Bradley Junction was created as a town in 1910 but later disenfranchised.

There are approximately 5-6 acres of the site that is unused. The amendment will enable the construction of a much larger fire rescue station with ambulance services that are lacking at the current facility. It will not only serve the immediate population in Bradley junction but also provide regional services to the area that has other pockets of residential development, a power generation facility, and a growing number of industrial developments.

Compatibility Summary

Comprehensive Plan Policy 2.116-A3 states that "Institutional development may occur within the lands designated Institutional on the Future Land Use Map Series, and in any other land use designation throughout the County." Therefore, designating government property INST should be considered compatible with any other land use district. Additionally, the future homeowners within the area will benefit from the additional government services. By designating this site with an additional six acres as INST, it will increase awareness of future government facilities to the real estate and development community which can potentially increase the market value of properties in the area.

Infrastructure Summary

There is potable water service onsite. The roadway network is unincumbered by traffic. There is a community park facility nearby and limited mass transit available. There is very little commerce available in the area. If this new facility promotes new job growth to the area, new residents along with new commerce may evolve.

Environmental Summary

The site has few environmental limitations for the remaining six acres other than the poorly drained soil. Further manipulation of the surface waters throughout the site will be needed. This may limit development to less than the six available acres. Fortunately, this site is located in an open basin and no floodplain or wetland formations exist on or near the site. With connections to public water, more land is available for development. There are no endangered species likely on the remaining acreage or archaeological remains.

Comprehensive Plan

The relevant sections of the Comprehensive Plan that are applicable to the project request:

- Policy 2.102(A1-A15): Growth Management Policies
- Section 2.108-A3 and A5 Rural Development Area (RDA) Land Use Categories and Development Criteria
- Policy 2.116-A3 INST Location Criteria

Findings of Fact

Request and Legal Status

- *On February 20, 2025, the representatives from Polk County Facilities Division presented a proposed new fire rescue station for the southwestern corner of the County in Bradley Junction to replace the current station at 6949 Old Highway 37 to the Development Review Committee (DRC) in a pre-application meeting under case# LDDRC-2025-21.*
- *This is a county-initiated request for a Small-Scale Future Land Use designation change from Rural Cluster Center (RCC) to Institutional (INST) on approximately 8.13 acres in the Rural Development Area (RDA).*
- *The Land Development Code Sub-district Map designation is Rural Cluster Center – Residential (RCC-R).*
- *The construction of a water treatment plant was completed on this site in 1990.*
- *The map of the Town of Bradley Junction was established by plat filed on September 7, 1910, on Plat Book 2, Page 39 of Polk County.*
- *If this request is approved, Government Buildings are permitted through the Level 2 Review (administrative approval) in the INST district.*
- *POLICY 2.125-E1 of the Comprehensive Plan identifies Police, Fire and EMS stations as Type “A” Community Facilities.*

Compatibility

- *Comprehensive Plan Policy 2.116-A3 states that “Institutional development may occur within the lands designated Institutional on the Future Land Use Map Series, and in any other land use designation throughout the County.”*
- *The property is surrounded by a mixture of residential dwellings, railroads, and phosphate mining.*
- *The surrounding Future Land Use Map designations and LDC Subdistrict Map districts are Rural Cluster Center (RCC-R), Rural Cluster Center Commercial (RCC), and Phosphate Mining (PM).*

- *Land Development Code (LDC) Section 220 Compatibility Standards will apply to development of the remaining undeveloped portions of the property because the abutting development is designated RCC and under the ownership of the Mosaic Fertilizer Company.*

Infrastructure

- *The property is zoned for schools in Mulberry, 7-8 miles away driving distance: Purcell Elementary, Mulberry Middle and Mulberry High School.*
- *The current fire response to this project is from Polk County Fire Rescue Station 4 located at 6949 Old Highway 37 in Bradley Junction. This change will enable that station to be replaced.*
- *The current ambulance response is from Polk County Fire Rescue Station 721 located in Mulberry at 700 NE 9th Ave eight (8) miles away. The proposed station for this site will provide ambulance services.*
- *There is a water treatment plant onsite and a fire hydrant within 60 feet.*
- *The site is served by the Polk County Sheriff's Office Southwest District Command at 4120 US Highway 98, south of Lakeland, 23 miles driving distance from the site.*
- *Polk County serves potable water to this area through its Southwest Regional Utility Service Area (SWRUSA) Bradley Junction Public Water System (Bradley PWS) which is located onsite.*
- *The subject property has ±400 feet of frontage on Old Highway 37 with enough frontage for a second access point according to LDC Section 705.*
- *Old Highway 37 is a Rural Major Collector Road with between 50 and 100 feet of right-of-way width and ±22 feet of pavement width along the frontage of the property.*
- *According to the Transportation Planning Organization, there is adequate capacity on State Road 37 as well as other roads such as County Roads 630 and 640, within the area transportation network to support the development currently.*
- *There is no sidewalk system present in all of Bradley Junction.*
- *Mass transit service is provided south to Bradley Junction through Route 21X of the Citrus Connection. The nearest stop is less than 800 feet from the site at the intersection of Whidden Street and Main Avenue.*
- *The nearest public park, Bradley Junction Park, is slightly more than ½ mile walking distance to the west.*

Environmental

- *The closest surface waters are former phosphate mining pits. Some are in the process of reclamation.*
- *No portion of the site is comprised of areas within the 100-year Flood Hazard Area, according to the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Maps (FIRM).*
- *No portion of the site is comprised of areas wetlands, according to the National Wetlands Inventory (NWI) and the Southwest Florida Management wetland estimations.*
- *The entire site is comprised of soil that is considered to have “severe limitations” for septic tank absorption fields and dwellings without basements, according to the U.S. Department of Agriculture, Soil Conservation Service, Polk County Survey.*
- *According to Polk County Endangered Habitat Maps, the property is not located within a one-mile radius of a past endangered species sighting. (Source: Florida Natural Areas Inventory, 2002 and 2006).*

Comprehensive Plan Policies

- *POLICY 2.102-A1 Development Location states that “Polk County shall promote contiguous and compact growth patterns through the development process to minimize energy costs, conserve land, water, and natural resources, minimize the cost of services, and prevent development patterns where tracts of land are by-passed in favor of development more distant from services and existing communities.”*
- *POLICY 2.102-A2 Compatibility states that “land shall be developed so that adjacent uses are compatible with each other, pursuant to the requirements of other Policies in this Future Land Use Element, so that one or more of the following provisions are accomplished: a. there have been provisions made which buffer incompatible uses from dissimilar uses; b. incompatible uses are made to be more compatible to each other through limiting the intensity and scale of the more intense use; c. uses are transitioned through a gradual scaling of different land use activities through the use of innovative development techniques such as a Planned Unit Development.”*
- *POLICY 2.102-A3 Distribution states that “development shall be distributed throughout the County consistently with this Future Land Use Element so that the public utility, other community services, and public transit and transportation systems can be efficiently utilized; and compact, high-density and intensity development is located where urban services can be made available.”*
- *POLICY 2.102-A4 Timing states that “development of land shall be timed and staged in conjunction with the cost-effective and efficient provision of supporting community services which, at a minimum, shall require compliance with the Plan's Level of Service requirements and the County's concurrency management system.”*

- *POLICY 2.102-A10 Location Criteria states “the following factors shall be taken into consideration when determining the appropriateness of establishing or expanding any land use or development area:*
 - a. nearness to incompatible land uses and future land uses, unless adequate buffering is provided;*
 - b. nearness to agriculture-production areas;*
 - c. distance from populated areas;*
 - d. economic issues, such as minimum population support and market-area radius (where applicable);*
 - e. adequacy of support facilities or adequacy of proposed facilities to be provided by the time of development, including, but are not limited to:*
 - 1. transportation facilities, including but not limited to, mass transit, sidewalks, trails and bikeways;*
 - 2. sanitary sewer and potable water service;*
 - 3. storm-water management;*
 - 4. solid waste collection and disposal;*
 - 5. fire protection with adequate response times, properly trained personnel, and proper fire-fighting equipment;*
 - 6. emergency medical service (EMS) provisions; and*
 - 7. other public safety features such as law enforcement;*
 - 8. schools and other educational facilities*
 - 9. parks, open spaces, civic areas and other community facilities*
 - f. environmental factors, including, but not limited to:*
 - 1. environmental sensitivity of the property and adjacent property;*
 - 2. surface water features, including drainage patterns, basin characteristics, and flood hazards;*
 - 3. wetlands and primary aquifer recharge areas;*
 - 4. soil characteristics;*
 - 5. location of potable water supplies, private wells, public well fields; and*
 - 6. climatic conditions, including prevailing winds, when applicable.”*

- *The Comprehensive Plan defines Compatibility in Division 4.400 as “A condition in which land uses or conditions can coexist in relative proximity to each other in a stable fashion over time such that no use or condition is unduly negatively impacted directly or indirectly by another use or condition.”*

- *Policy 2.108-A5 of the Comprehensive Plan states “Development within RDAs shall be... designed to facilitate the provision of public safety services (i.e., fire, EMS and law enforcement).*

- *Policy 2.116-A3 of the Comprehensive Plan states that “The following factors shall be taken into consideration when determining the appropriateness of establishing new Institutional areas on the Future Land Use Map Series, or in approving the location for an institutional use not located within lands classified as Institutional:*
 - a. Accessibility to roadways, with consideration being given to regional transportation issues for large-scale institutional developments having a regional market.*
 - b. Proximity to incompatible land uses, which is dependent upon the intensity of the institutional use (buffering may be provided to mitigate adverse impacts).*

- c. *The locational criteria enumerated in Policy 2.102-A9 and Policy 2.102-A10.*
 - d. *Proximity to similar and compatible uses providing opportunities for shared facilities.*
 - e. *Plans of the School Board and other public service agencies with jurisdiction in the County.”*
- *Policy 2.116-A4 of the Polk County Comprehensive Plan requires development within INST districts to “conform to the following criteria:*
 - a. *Institutional uses include, but are not limited to: private and public-service structures. These commonly include:*
 - 1. *public and private educational facilities;*
 - 2. *government-administration buildings;*
 - 3. ***public-safety structures*** *(e.g. police and fire);*
 - 4. *cultural facilities (e.g. libraries, museums, and performing-arts theaters);*
 - 5. *health-care facilities e.g. hospitals, medical centers, clinics, nursing homes, adult day care centers, group homes, group living facilities, emergency shelters, residential treatment facilities.*
 - b. *Large institutional areas should be designed so that the more intensive uses are at the center of the development, with less intensive uses near the fringes.*
 - c. *Prior to site planning, the School Board, independent special districts, and other governmental entities shall communicate to one another to pursue potential colocation of government services.*
 - d. *Commercial uses within institutional areas mapped on the Future Land Use Map Series shall be primarily for the purpose of serving the institutions within the area and shall be limited to a scale appropriate for that purpose.*
 - e. *Institutional sites shall be designed to provide for:*
 - 1. *Adequate parking to meet the present and future demands of the use.*
 - 2. *Buffering where the effects of lighting, noise, odors, and other such factors would adversely affect adjacent land uses. Parking lots, loading areas, dumpsters, utilities and air conditioning units, signage, etc. are examples of facilities which may require special buffering provisions.*
 - f. *Multi-family residential uses may be permitted at densities up to and including 15 dwelling units per acre as part of a Planned Development. Residential uses may be permitted according to the following:*
 - 1. *Residential uses shall only be established adjacent to or in conjunction with a university, college, vocational school or other similar educational institution.*
 - 2. *Residential development shall be intended to primarily meet the housing needs for students and facility members of the nearby educational institution*
 - g. *Recreational uses accessory to the institutional use or compatible with the location of the institutional district.”*
 - *POLICY 2.125-E2 of the Comprehensive Plan states that “Type A facilities shall be permitted pursuant to the following:*
 - a. *Type A community facilities shall generally be limited to the non-Rural-Development Areas, as designated on the Future Land Use Map. The scale of such facilities should be related to surrounding land uses and designed to preserve the character of residential neighborhoods, when so located.*
 - b. *The provisions of Policy 2.125-E2(a) notwithstanding, it may be in the best interest of public health, safety, and welfare to provide Type A community facilities in locations which are potentially incompatible with adjacent land uses. In such*

cases, these facilities will be buffered from adjacent incompatible land uses through the provision of open space, landscaping berms, site design or other suitable means.

*c. The development of **type A community facilities shall be permitted in the Rural areas**, as designated on the Future Land Use Map, **only when such developments provides regional services**, or is incompatible with urban uses or services the existing needs of the immediate area in which it is located.*

d. Polk County adopted the Land Development Code in accordance with Section 163.3202(1), FS, to further define appropriate development controls to govern the locational and site criteria for Type A Community Facilities.”

- *The Polk County Land Development Code Section 220 prohibits non-residential buildings, garbage dumpsters, loading facilities, wastewater lift stations within 50 feet of an offsite residential district. Parking and lighting are strictly regulated. Parking can be no closer than 15 feet from a residential property and require additional landscaping within 50 feet of adjacent residential districts and uses.*
- *The Polk County Land Development Code Section 303 has no standard conditions for Government Facilities.*

Development Review Committee Recommendation: Based on the information provided by the applicant, recent site visits, and the analysis conducted within this staff report, the Development Review Committee finds that with the proposed conditions, the proposed request **IS COMPATIBLE** with the surrounding land uses and general character of the area, **IS CONSISTENT** with the Polk County Comprehensive Plan and Land Development Code, and therefore, the Development Review Committee (DRC) recommends **APPROVAL of LDCPAS 2025-4**.

NOTE: This staff report was prepared without the benefit of testimony and evidence submitted by the public and other interested parties at a public hearing.

NOTE: All written comments made in the application and subsequent submissions of information made during the application review process, which are on file with the Land Development Division, shall be considered to be binding upon the applicant, provided such comments are not at variance with the Comprehensive Plan, LDC or other development regulations in effect at the time of development.

NOTE: Issuance of a development permit by the county does not in any way create any rights on the part of the applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the county for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

Analysis

This section of the staff report includes data on the surrounding uses, infrastructure conditions, environmental conditions, and related Comprehensive Plan policies and Land Development Code regulations.

Surrounding Uses

Table 1 to follow lists the Future Land Use (FLU) designations and the existing uses surrounding the subject site that are immediately adjacent.

Table 1

<p>Northwest: RCC-R, PM Vacant land under phosphate mining ownership, railroad junction, former phosphate mining land</p>	<p>North: RCC-R, PM Ransome WV Addition Subdivision, Railroad, mobile homes, single-family homes</p>	<p>Northeast: RCC-R, PM Vacant land under phosphate mining ownership, railroad, former phosphate mining land</p>
<p>West: RCC-R, RCC, PM Bradley Junction Subdivision, Single-family, mobile homes, railroad, vacant commercial buildings</p>	<p>Subject Property: RCC-R Two production wells and a Water Treatment Facility with ±6 vacant acres of the ±8.13 total acres</p>	<p>East: RCC-R, PM Whidden and Kirkland Addition Subdivision, Church, mobile homes, single-family homes</p>
<p>Southwest: RCC-R, RCC, PM Bradley Junction Subdivision, mobile homes, railroad, gas and convenience store, current fire station</p>	<p>South: RCC-R, PM Gardner Addition Subdivision, mobile homes, former gas and service station, pasture</p>	<p>Southeast: RCC-R, PM McFadden and Jenkins Addition Subdivision, mobile homes, single-family homes</p>

Source: Polk County Geographical Information System and site visit by County staff

This is an excellent location for a fire station in the community. It is central to the residential population. It also provides an exit to the north to service the communities of Rolling Hills and Pinedale without travelling on State Road 37, which can be more congested at certain times of the day. The property immediately abutting the site is owned by the Mosaic Fertilizer Company. The closest single-family dwelling is over 200 feet away.

Compatibility with the Surrounding Land Uses and Infrastructure:

This Comprehensive Plan amendment (CPA) will recognize an existing water treatment facility at this location and enable development of other government facilities in the future. The remainder of the site is intended fire rescue station that will be relatively benign for approximately 95% of any given day. However, when emergencies occur there are approximately two minutes of loud noise and lights. This can be occasionally disruptive to neighboring properties, but they are necessary to all the development in the area. Fire stations are often located in populated areas because that's where the services they provide are most needed. There is more than adequate infrastructure to support the station including water and roadway frontage with room for two points of access (400 feet) to a rural major collector roadway.

A. Land Uses:

Comprehensive Plan Policy 2.116-A3 states that “Institutional development may occur within the lands designated Institutional on the Future Land Use Map Series, and in any other land use designation throughout the County.” Therefore, designating government property INST should be considered compatible with any other land use district. Additionally, the existing water treatment facility sits closest to the roadside which will place the new government facilities to the rear farther away from existing residents. By designating the water plant with an additional six acres as INST, there is a greater chance that future residents will be aware of future government facilities located there. In all likelihood, the new fire rescue station will be under construction within the next year. It is in the preliminary engineering phase. Soil borings and topographic surveys are underway.

The Comprehensive Plan defines compatibility as “A condition in which land uses or conditions can coexist in relative proximity to each other in a stable fashion over time such that no use or condition is unduly negatively impacted directly or indirectly by another use or condition.”

B. Infrastructure:

The site is located within an area that has a minimal level of urban infrastructure and services but there is more than typical for rural areas and capacity is ample. Potable water is available onsite, there is a small recreation area, limited mass transit, and a small commercial facility nearby. This amendment will enable a new, larger fire rescue facility to be located in Bradley Junction which will greatly improve the infrastructure in the small hamlet.

Nearest Schools

The property is zoned for schools in Mulberry, the closest city. These are Purcell Elementary, Mulberry Middle School, and Mulberry High School. All are the closest schools. Fire rescue workers are unaccompanied while working; therefore, no demand for K-12 schools is anticipated. The table to follow provides data on the zoned schools and current capacities.

Table 2

Name of School	Annual Estimated Demand	Distance from subject site	School Capacity
Purcell Elementary	0 students	±7¼ miles driving distance from entrance to entrance	111%
Mulberry Middle School	0 students	±7½ miles driving distance from entrance to entrance	115%
Mulberry Senior High School	0 students	±7½ miles driving distance from entrance to entrance	82%

Source: Polk County School Board, Duncan Associates Educational Facility Impact Fee Study, GIS

Proximity to schools and conflicts with school entrances are the primary concerns with non-residential uses due to the congestion caused by pick-up and drop-off of students. There are no public or private schools nearby that will conflict with this site.

Nearest Sheriff, Fire, and EMS Station

The current fire rescue station in Bradley will be moved to this site and ambulance (EMS) service will be added. This makes this site a very good location with regard to public safety services.

Response could be almost immediate depending on the severity of the call. Fire rescue provides immediate Emergency Medical Technician (EMT) services to a scene. Ambulance provides transport for the injured to the Hospital. Water is available to the site (obviously). There is a hydrant located 60 feet south of the site.

Table 3

	Name of Station	Distance	Response Time*
Sheriff	Southwest District Command (4120 US 98N, Lakeland)	±23 miles	10 minutes
Fire	Polk County Fire Rescue Station 4, 6949 Old Highway 37, Bradley Junction	±0.4 miles	4 minutes
EMS	Polk County Fire Rescue Station 721 700 NE 9th Ave, Mulberry	±8 miles	12 minutes

Source: Polk County Sheriff's Office and Public Safety

**Response times are based on when the station receives the call and not from when the call is made to 911.*

The nearest Sheriff's substation is the Southwest District Command at 4120 U.S. Highway 98, south of Lakeland next to Polk State College, 23 miles driving distance from the site. Sheriff response times are not as much a function of the distance to the nearest sheriff's substation rather more a function of the overall number of patrol officers within the County. However, patrol coverage is less in these more rural areas of the County.

Water and Wastewater

There is ample capacity of potable water available but no wastewater services. The addition of a new fire rescue station will not likely result in significantly greater needs of the existing potable water system.

A. Estimated Demand:

If you look at the absolute worst-case scenario of what can be constructed in the INST district you will see an outrageous discrepancy between the current and proposed district demands for services Table 4a, to follow, provides generalized estimates of the anticipated water and wastewater demands in the maximum scenario. However, it is not likely that the maximum will occur on this site.

Table 4a

Subject Property	Estimated Impact Analysis		
	Demand as Currently Permitted	Proposed Change to 8.13 acres INST maximum effect	Percentage increase
±8.13 acres <i>Rural Cluster Center (RCC)</i>			
Permitted Use	16 dwelling units	Office building (265,607 sq.ft @ 75% FAR)	
Potable Water Consumption (GPD)	5,760	63,746 GPD	1,180%
Wastewater Generation (GPD)	4,320	50,997 GPD	1,180%

Source: Polk County Concurrency Manual & Polk County Utilities estimates

*** Offices are 0.24 GPD per sf for water and 80% for wastewater.*

In reality, a 7,500 square foot fire rescue station exists that most likely consumes an average of 790 gallons of potable water per day and 1,800 according to standard estimates. Table 4b, to

follow, provides generalized estimates of the anticipated water and wastewater demands of the potential expansion of government facilities on the undeveloped remainder of the site.

Table 4b

Subject Property	Estimated Impact Analysis		
	Demand as Currently Permitted <i>RCC</i>	Maximum Permitted on the property <i>RCC</i>	Future Plan Government Facility
±8.13 acres <i>Rural Cluster Center (RCC)</i>			
Permitted Intensity	Unmanned Potable Water Treatment Facility	16 dwelling units	7,500 sq.ft. <i>Fire Rescue Station</i>
Potable Water Consumption (GPD)*	0	5,760	1,800 GPD
Wastewater Generation (GPD)*	0	4,320	1,440 GPD

Source: Polk County Concurrency Manual & Polk County Utilities estimates

**Offices = 0.24 gallons per square foot, 20% less for wastewater*

Polk County serves potable water to this area through its Southwest Regional Utility Service Area (SWRUSA) Bradley Junction Public Water System (Bradley PWS). There are no wastewater services available in Bradley Junction. The facility has a commercial grade onsite sewage disposal system.

B. Available Capacity:

The Bradley PWS potable water system has a permitted capacity of 1,919,000 gallons per day (GPD). Current usage is approximately 128,000 GPD with 83,000 GPD of committed capacity. This leaves 45,000 GPD of uncommitted capacity which is enough to serve nearly 125 single-family residential units. There are approximately 534 customers being served. The system growth rate is 3 GPD and less than two (2) new connections per year. At the current rate of growth, expansion of the system will not be needed for over 20 years.

C. Planned Improvements:

There are no capacity improvements planned for Bradley PWS. There are operational improvements underway with the system in the form of equipment upgrades and system control and data acquisition (SCADA).

Roadways/Transportation Network

There are more than adequate transportation facilities to accommodate an INST district with the addition of a fire rescue station at this location. The traffic generated from such a facility is rather low relative to other potential uses for the property. The surrounding roadway network has ample capacity remaining despite the increases in demand over the past five years. There is no sidewalk network but there are mass transit services in the area. If the population grows through the new and infill development in the area, pedestrian and mass transit facilities will be in higher demand.

A. Estimated Demand

It is often difficult to estimate the impact of a Future Land Use Map change to an Institutional district because there are so many possible uses. Looking at the maximum buildout of the highest intensity use possible provides the analysis below:

Table 5

Subject Property	Estimated Impact Analysis		
	Demand as Currently Permitted	Proposed Change to 8.13 acres INST maximum effect	Percentage increase
±8.13 acres <i>Rural Cluster Center (RCC)</i>			
Permitted Use	16 dwelling units	Office building (265,607 sq.ft @ 75% FAR)	
Average Annual Daily Trips (AADT)	125	5,340	4272%
PM Peak Hour Trips	16	404	2525%

Source: Polk County Concurrency Manual rate of Government Office Complex = 89% new trips 22.59 AADT/1,000 sq.ft., 1.71 PM Peak Hour

In reality, the existing 7,500 square foot Fire Station will not likely have as much impact on transportation facilities as it does a similar size government office. Current estimated multipliers are 22.59 AADT per 1,000 square feet and 1.71 PM peak hour trips per 1,000 square feet with an estimate of 89% new trips.

Table 5a

Subject Property	Estimated Impact Analysis		
	Demand as Currently Permitted <i>RCC</i>	Maximum Permitted on the property <i>RCC</i>	Future Plan Government Facility
±8.13 acres <i>Rural Cluster Center RCC</i>			
Permitted Intensity	Unmanned Potable Water Treatment Facility	16 dwelling units	Unmanned Potable Water Treatment Facility and 7,500 sq.ft. Fire Rescue Station
Average Annual Daily Trips (AADT)	2	125	170
PM Peak Hour Trips	1	16	13

Source: Polk County Concurrency Manual rate of Government Office Complex = 89% new trips 22.59 AADT/1,000 sq.ft., 1.71 PM Peak Hour

B. Available Capacity

The site has direct access to Old Highway 37, a two-lane rural major collector roadway. According to the Polk County Transportation Planning Organization (TPO) approximately 700 vehicles per day travel that portion of the roadway each day on average. There are approximately 24 northbound vehicles and 25 southbound vehicles passing through during the PM peak hour. This road is currently operating at 3½% of its capacity. Table 6, to follow, shows the generalized capacity on the immediately affected roads within proximity of the facility. Based on periodic traffic counts there appears to be adequate capacity on roads listed in Table 6.

Table 6

Link #	Road Name	Current Level of Service (LOS)	Available PM Peak Hour Capacity	Minimum LOS Standard
4128N	Old Highway 37 From: CR 640 To: CR 630	B	706	D
4128S	County Road 630 From: CR 630 To: CR 640	B	705	D
4063E	County Road 630 From: State Road 37 To: U.S. Highway 17/98	B	808	C
4063W	County Road 630	B	812	C

Table 6

Link #	Road Name	Current Level of Service (LOS)	Available PM Peak Hour Capacity	Minimum LOS Standard
	From: U.S. Highway 17/98 To: State Road 37			
5801N	State Road 37 From: State Road 674 To: County Road 640	B	574	C
5801S	State Road 37 From: County Road 640 To: State Road 674	B	560	C
4070E	County Road 640 From: State Road 37 To: U.S. Highway 17/98	B	1,036	C
4070W	County Road 640 From: U.S. Highway 17/98 To: State Road 37	B	1,044	C

Source: Polk County Transportation Planning Organization, Concurrency Roadway Network Database October 2023

County Roads 630 and 640 are monitored for transportation capacity. They are both considered minor arterial roadways. According to the Polk County Transportation Planning Organization (TPO), approximately 2,000 vehicles per day travel on CR 630 each day on average and 4,000 on CR 640. There are less than 200 vehicles in either direction during the PM peak hour. These roads are currently operating at less than 15% of their capacity. Based on the projected impact shown in Table 5, and the estimated capacity shown in Table 6, there appears to be ample capacity available to support the addition of the proposed fire rescue station.

C. Roadway Conditions

Polk County uses the Pavement Surface Evaluation and Rating (PASER) method established by the Transportation Information Center at the University of Wisconsin-Madison. The roadway conditions are displayed in the table to follow under the Pavement Condition Index (PCI) rating.

Table 7

Road Name	Roadway Classification	Pavement Width	Pavement Condition Index (PCI)
State Road 37	Minor Arterial	32'	n/a
Main Avenue	Rural Minor Collector	20'	“very good” (8)

The property has frontage on State Road 37. Main Avenue in Bradley Junction is a two-lane, 20-foot wide, rural minor collector roadways with a PCI rating of “very good” (8) along the project frontage. State Road 37 is not rated under the County’s Road Inventory but appears to be in excellent condition since it was re-surfaced and widened in 2018. The Florida Department of Transportation (FDOT) maintains it.

D. Planned Improvements:

There are no transportation improvements planned for the Bradley Junction area. There will be no requirements for offsite improvements.

E. Mass Transit

Mass transit service is provided south to Bradley Junction through Route 21X of the Citrus Connection. The closest fixed route transit stop is at the intersection of Whidden Street and Main Avenue in Bradley Junction. This is just over ½ mile from the site which is a comfortable walking distance. One limitation is there are no sidewalks on any streets in Bradley Junction or on State Road 37. The other is there are only five trips on weekdays and three on Saturday.



F. Sidewalks

There is no sidewalk network in the Bradley Junction community. They may not be necessary on most streets. However, along Old Highway 37 and Main Avenue they may be needed in the future due to higher vehicle volumes and greater speed of travel. As habitation in the area increases, this will be monitored by Roads and Drainage staff and the County Sidewalk Committee.

Park Facilities and Environmental Lands

Recreation facilities in rural areas are most often resource-based facilities. Active recreation facilities such as ballfields are better suited for urban areas where they can serve higher population concentrations. There are active recreation facilities in Bradley Junction within a ¼ mile of the site called Bradley Junction Park. The largest resource-based facility within proximity of the site is the Bone Valley ATV Park. It's not likely to be of much use to the fire rescue staff of this facility. The County will provide some recreation facilities onsite for use between calls such as a basketball court and indoor recreation equipment.

A. Location:

Bradley Junction Mini Park is located at the intersection of Whidden Street and Pine Street, ¼ mile from the site. The Bone Valley ATV Park is approximately 4½ miles driving distance from the site on County Road 630 just east of the intersection of Fort Green Road and west of the CSX rail line.

B. Services:

The Bradley Junction Mini Park has an unlighted softball field, basketball court, picnic facilities and tot-lot, but no restrooms. The ATV Park requires an entrance fee to use.

C. Planned Improvements

There are no recreation improvements scheduled for the park in Bradley Junction in the 5-year Community Investment Program (CIP). Construction to expand the ATV Park with additional buildings, restrooms, amenities, and more trails is nearing completion.

Environmental Conditions

The site has few environmental limitations for the property other than the poorly drained soil. Further manipulation of the surface waters throughout the site will be needed. This may limit the development of the less than approximately six available acres outside of the portion dedicated to water treatment facility. Fortunately, this site is located in an open basin and no floodplain or wetland formations exist on or near the site. With connections to public water and wastewater, more land is available for development. There are no endangered species likely on the remaining acreage or archaeological remains.

A. Surface Water

The site is located within the Hookers Prairie Slough drainage basin. It is connected to the Alafia River watershed. Much of the surrounding areas have been mined for phosphate and is in a state of reclamation, so there are a lot of manmade lakes in the area. There are no new impervious surfaces planned on the facility site. There is a positive outfall available in the right-of-way of Old Highway 37 that connects to an area drainage network.

B. Wetlands/Floodplains

The phosphate mining in the surrounding area has greatly altered the natural hydrology of the area. There are no wetlands or flood hazard areas onsite. However, there are some drainage systems nearby that render some flooding to areas during peak storm periods.

C. Soils:

The entire site is comprised of Smyrna and Myakka fine sands, severely rated soil. More than likely, filling material will be needed to stabilize the building foundations.

Table 8

Soil Name	Septic Tank Absorption Field Limitations	Limitations to small commercial buildings	% of Site (approximate)
Smyrna and Myakka (17)	Severe: wetness, poor filter	Severe: wetness.	100%

Source: Soil Survey of Polk County, Florida, USDA, Soil Conservation Service

Smyrna and Myakka Soils often have a surficial aquifer (water table) within less than 18 inches of the surface. They are not always a sign of wetlands but possess many wetland qualities. A significant portion of the site will need to be dedicated to stormwater management.

D. Protected Species

The site is within a mile radius of an endangered animal species sighting, according to the Florida Natural Areas Inventory of 2002 but not in 2006. (Source: Florida Natural Areas Inventory, 2002,

2006 & 2011). However, as the Bradley area has been developed for nearly two centuries, no endangered species are likely to inhabit this site.

E. Archeological Resources

There are no known historical or archeological resources onsite according to the Secretary of State's Department of Historical Resources Florida Master Site File.

F. Wells (Public/Private)

This site has two major production wells, potable water treatment plant, and a ground storage tank. There are no private well facilities nearby. Adding the fire station will pose no adverse impacts to the wells.

G. Airports

The site is not within any Airport Buffer Zones. The South Lakeland Airport is the closest public use airport. It is over seven miles from the site. This location is far from an airport flight path or protection zone.

Economic Factors:

Bradley Junction has not seen the level of growth experienced in other parts of the County recently. The hamlet is surrounded by vast amounts of former phosphate mines that have yet to be repurposed which makes it isolated from other population centers. There are very few community services offered to the area. There are no schools, only one small park, and a convenience store is the only general mercantile in the community. It was once the center of economic activity in the area during the late 1800s and early 1900s when rail was the primary form of domestic travel. Bradley was at its peak during the heavy mining periods when it was surrounded by many processing facilities and other mining towns. As the labor demand declined in the phosphate industry, the town lost its economic base industry and fell into decline.

Groundwater contamination discovered in the 1980s contributed to a decline in demand for housing in the area and detriment to property values in the existing housing stock. Although the affected homes and properties were taken off of well water and connected to a new potable water system, it did not provide potential residents with the confidence to settle in the area. The declining populations led to a decline in commerce. With no employment and very few public or private services, the area fell behind.

In the late 1990s a return of employment opportunities in the area helped end the decline. A new electric power generation facility was constructed to the south, but there has been little since. Lately, former phosphate mined lands are being changed to industrial classifications and new businesses are moving into them. This will encourage more residents to move to the area in search of employment.

Changing the land use designation on the existing water treatment property and adding a larger fire rescue facility will also encourage residential growth because it will provide the community with greater sustainability and lower homeowners insurance rates. Added population can attract

more public and private services such as schools and retail facilities. This land use change and community investment may encourage more community investment in the future.

Consistency with the Comprehensive Plan

Many policies within the Comprehensive Plan are reviewed for consistency with an application. The most relevant policies for the proposed request are included in this section. The policy is first stated and then an analysis of how the request is provided to state that it may or may not be consistent with the Comprehensive Plan. How the request is **consistent or inconsistent** with the Comprehensive Plan is listed below:

- Section 2.102 – General Growth Management policies
- Section 2.108 – Rural Development Area (RDA) policies
- Section 2.116 – Institutional

The table to follow provides a brief breakdown of Section 2.102 policies that are most pertinent to this request.

Table 8

Comprehensive Plan Policy	Consistency Analysis
POLICY 2.102-A1: DEVELOPMENT LOCATION – Polk County shall promote contiguous and compact growth patterns through the development process to minimize energy costs, conserve land, water, and natural resources, minimize the cost of services, and prevent development patterns where tracts of land are by-passed in favor of development more distant from services and existing communities.	The proposed INST district is to recognize an existing water treatment plant and allow a fire rescue station. These properties are surrounded by a historic town that was disenfranchised around the turn of the 20 th century. It is mapped as a Rural Cluster Center (RCC) on the Future Land Use Map. This area is more densely developed than the rural areas of the County that surround it.
POLICY 2.102-A2: COMPATIBILITY - Land shall be developed so that adjacent uses are compatible with each other, pursuant to the requirements of other Policies in this Future Land Use Element, so that one or more of the following provisions are accomplished: a. there have been provisions made which buffer incompatible uses from dissimilar uses; b. incompatible uses are made to be more compatible to each other through limiting the intensity and scale of the more intense use; c. uses are transitioned through a gradual scaling of different land use activities through the use of innovative development techniques such as a Planned Unit Development.	The INST district will recognize an existing water treatment facility and enable a new fire rescue station that serves the population in the area based on the current development density and future industrialization to the north.
POLICY 2.102-A3: DISTRIBUTION - Development shall be distributed throughout the County consistently with this Future Land Use Element so that the public utility, other community services, and public transit and transportation systems can be efficiently utilized; and compact, high-density and intensity development is located where urban services can be made available.	The site was developed with a water treatment plant in the late 1980s and deeded to Polk County to own and manage.

Table 8

Comprehensive Plan Policy	Consistency Analysis
<p>POLICY 2.102-A4: TIMING - The development of land shall be timed and staged in conjunction with the cost-effective and efficient provision of supporting community services which, at a minimum, shall require compliance with the Plan's Level of Service requirements and the County's concurrency management system.</p>	<p>This site has been under Polk County's ownership since 1990. The INST designation will acknowledge the water treatment plant on the Future Land Use Map and allow for other government facilities such as the proposed fire rescue station.</p>
<p>POLICY 2.102-A15: ADEQUATE PUBLIC FACILITIES - The County will direct new growth to areas where adequate public facilities exist or are planned; and ensure that essential services are in place to provide for efficient, cost-effective response times from the Fire Department, Sheriff's Department, and Emergency Management Service (EMS).</p>	<p>The requested INST district is to recognize the existing water treatment plant and allow for the placement of fire rescue services on this site to ensure that adequate response times of emergency services are maintained in the area.</p>

The table to follow provides a brief breakdown of Section 2.106 policies that are most pertinent to this request.

Table 9 Rural Development Area (RDA)

Comprehensive Plan Policy	Consistency Analysis
<p>POLICY 2.108-A1: DESCRIPTION - Rural-Development Areas (RDA) shall be all unincorporated areas within the County that are not located within a Transit Supportive Development Area, Urban-Growth Area, Suburban-Development Area, or Utility-Enclave Area. Development in these areas is characterized by large open areas, agricultural use, with scattered development and rural centers. Services are limited and mostly found in the rural centers and clustered developments.</p>	<p>Bradley Junction is a rural center of clustered development. It was once the second largest city in Polk County before the first growth spurt after the end of the 19th Century.</p>
<p>POLICY 2.108-A5: DEVELOPMENT CRITERIA - Development within RDAs shall be guided by the following criteria:</p>	
<p>a. The detailed criteria listed for each land use category permitted within the Rural-Development Area;</p>	<p>The new fire station will be connected to the water treatment plant onsite and use an onsite septic system for wastewater services. The fire station will be permitted use in INST-1.</p>
<p>b. Elementary, middle and high schools and other community facilities and essential services will be allowed as conditional use, in accordance with the guidelines of the County's Land Development Code; and</p>	<p>The site was developed to support existing and future development in the area. A fire station is being moved from a smaller site in Bradley Junction to a bigger one.</p>
<p>c. Be designed to facilitate the provision of public safety services (i.e., fire, EMS and law enforcement).</p>	<p>This site is "designed to facilitate the provision of public safety services." It will be developed with them.</p>

Table 11 – Institutional Policies

Comprehensive Plan Policy	Consistency Analysis
<p>POLICY 2.116-A1: CHARACTERISTICS - Institutional areas are primarily characterized by private and public-service structures.</p>	<p>This CPA recognizes an existing water treatment facility and will enable the development of a County fire station.</p>
<p>POLICY 2.116-A3: LOCATION CRITERIA - Institutional development may occur within the lands designated Institutional on the Future Land Use Map Series, and in any other land use designation throughout the County, unless further prohibited by the Land Development Code the County in accordance with Section 163.3201(1), FS. The following factors shall be taken into consideration when determining the appropriateness of establishing new Institutional areas on the Future Land Use Map Series, or in approving the location for an institutional use not located within lands classified as Institutional:</p> <ul style="list-style-type: none"> a. Accessibility to roadways, with consideration being given to regional transportation issues for large-scale institutional developments having a regional market. b. Proximity to incompatible land uses, which is dependent upon the intensity of the institutional use (buffering may be provided to mitigate adverse impacts). c. The locational criteria enumerated in Policy 2.102-A9 and Policy 2.102-A10. d. Proximity to similar and compatible uses providing opportunities for shared facilities. e. Plans of the School Board and other public service agencies with jurisdiction in the County 	<ul style="list-style-type: none"> a. This site has frontage on an Rural Major Collector road. b. The closest residential structure is approximately 230 feet away. c. It meets the criteria enumerated in in Policy 2.102-A9 and Policy 2.102-A10. See pages 10 thru 18 of the staff report. d. This will be a shared facility once the Fire Station is added. e. The closest school is in Mulberry over 6½ miles away.
<p>POLICY 2.116-A4: DEVELOPMENT CRITERIA - Institutional development shall conform to the following criteria:</p> <ul style="list-style-type: none"> a. Institutional uses include, but are not limited to: private and public-service structures. These commonly include: <ul style="list-style-type: none"> 1. public and private educational facilities; 2. government-administration buildings; 3. public-safety structures (e.g. police and fire); 4. cultural facilities (e.g. libraries, museums, and performing-arts theaters); 5. health-care facilities e.g. hospitals, medical centers, clinics, nursing homes, adult day care centers, group homes, group living facilities, emergency shelters, residential treatment facilities. 	<p>The County received ownership of the property in 1990 from a former mining company as part of a contaminated water settlement to provide safe , potable water to residents of the Bradley and Pierce areas. The property has been used for a water treatment facility and production well. The property will also be used for a Fire/EMS station.</p>
<ul style="list-style-type: none"> b. Large institutional areas should be designed so that the more intensive uses are at the center of the development, with less intensive uses near the fringes. 	<p>8.13 acres is not large. The fire station will fill the remaining area on the site.</p>

Table 11 – Institutional Policies

Comprehensive Plan Policy	Consistency Analysis
c. Prior to site planning, the School Board, independent special districts and other governmental entities shall communicate to one another to pursue potential colocation of government services.	The property was dedicated to Polk County to manage a water treatment facility. It can also be used for a fire rescue station. There is not room for a school on the site.
d. Commercial uses within institutional areas mapped on the Future Land Use Map Series shall be primarily for the purpose of serving the institutions within the area and shall be limited to a scale appropriate for that purpose.	It's a fire station and a water treatment plant. Not a place for commercial uses.
e. Institutional sites shall be designed to provide for: 1. Adequate parking to meet the present and future demands of the use. 2. Buffering where the effects of lighting, noise, odors, and other such factors would adversely affect adjacent land uses. Parking lots, loading areas, dumpsters, utilities and air conditioning units, signage, etc. are examples of facilities which may require special buffering provisions.	The site has the required parking for a fire rescue station and the water plant is unmanned.
f. Multi-family residential uses may be permitted at densities up to and including 15 dwelling units per acre as part of a Planned Development. Residential uses may be permitted according to the following: 1. Residential uses shall only be established adjacent to or in conjunction with a university, college, vocational school or other similar educational institution. 2. Residential development shall be intended to primarily meet the housing needs for students and facility members of the nearby educational institution.	No multifamily uses are proposed or characteristic of a fire station or this unmanned water production facility.
g. Recreational uses accessory to the institutional use or compatible with the location of the institutional district.	The fire station has a basketball goal for the firefighters to use. The water plant is unmanned.

Urban Sprawl Analysis

After analyzing the primary indicators of Urban Sprawl per *Policy 2.109-A10* of the Polk County Comprehensive Plan, it is apparent that the proposed request is not considered urban sprawl based on these criteria as this is a mapping error of a land use and it is permitted in the designated area. Table 10 (below) depicts the Urban Sprawl Criteria used by staff as indicators of Urban Sprawl.

Urban Sprawl Criteria: The following table lists the criteria are the primary indicators of urban sprawl per Florida Statutes Policy 2.102-A11.

Table 10 Urban Sprawl Criteria

Urban Sprawl Criteria	Sections referenced in this report
a. <i>Promotes substantial amounts of low-density, low-intensity, or single use development in excess of demonstrated need.</i>	Summary of analysis
b. <i>Allows a significant amount of urban development to occur in rural areas.</i>	Summary of analysis

Urban Sprawl Criteria: The following table lists the criteria are the primary indicators of urban sprawl per Florida Statutes Policy 2.102-A11.

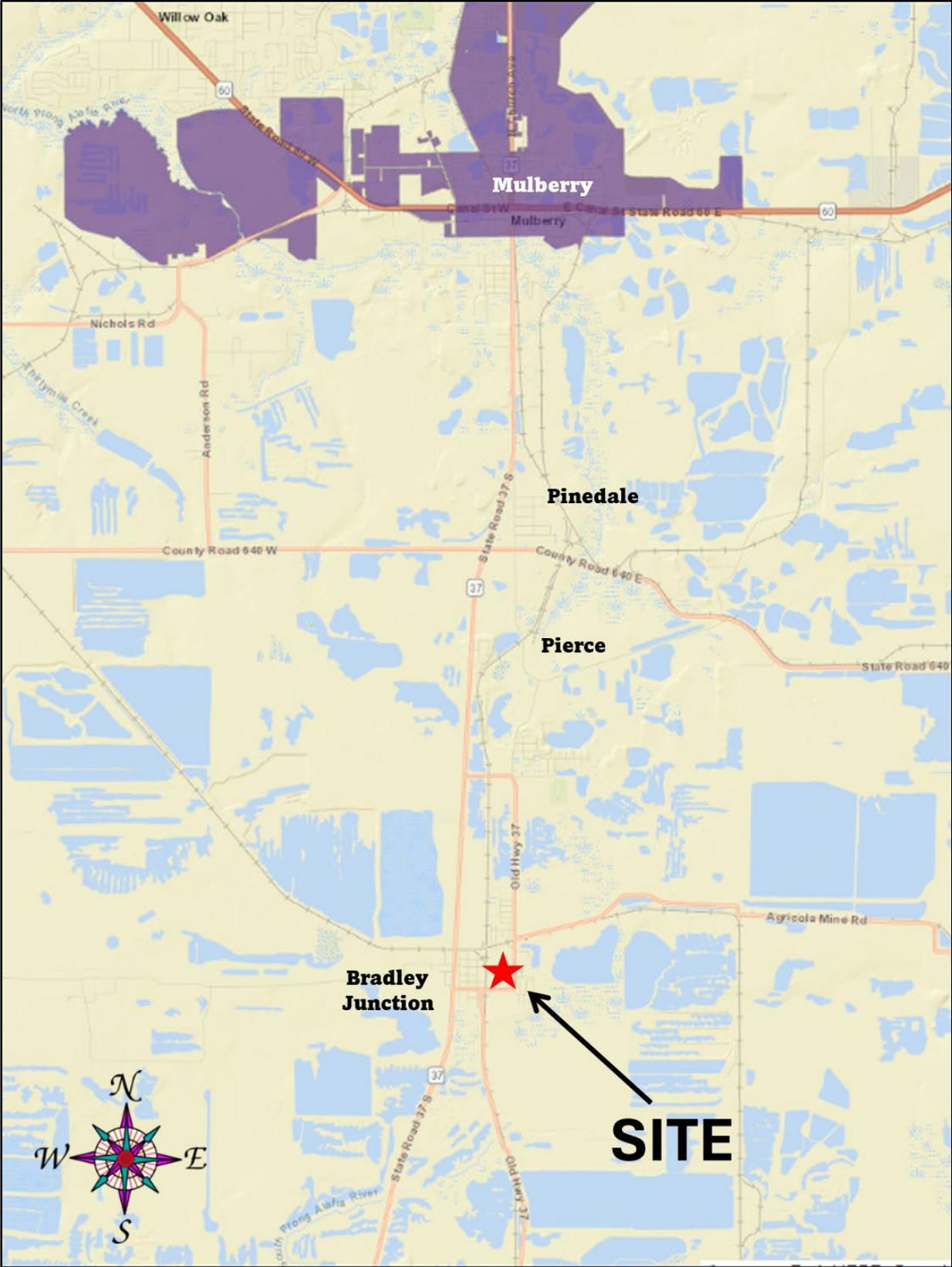
Table 10 Urban Sprawl Criteria

Urban Sprawl Criteria	Sections referenced in this report
c. <i>Designates an urban development in radial, strip isolated, or ribbon patterns emanating from existing urban developments.</i>	Summary of analysis, surrounding Development, compatibility
d. <i>Fails to adequately protect and conserve natural resources and other significant natural systems.</i>	Summary of analysis, surrounding Development, compatibility
e. <i>Fails to adequately protect adjacent agricultural areas.</i>	Compatibility with Surrounding Land Uses
f. <i>Fails to maximize existing public facilities and services.</i>	Summary of Analysis, Infrastructure
g. <i>Fails to minimize the need for future facilities and services.</i>	Summary of Analysis, Infrastructure
h. <i>Allows development patterns that will disproportionately increase the cost of providing public facilities and services.</i>	Summary of Analysis, Infrastructure
i. <i>Fails to provide a clear separation between urban and rural uses.</i>	Summary of Analysis, Compatibility with Surrounding Land Uses
j. <i>Discourages infill development or redevelopment of existing neighborhoods.</i>	Summary of Analysis, Compatibility with Surrounding Land Uses
k. <i>Fails to encourage an attractive and functional mixture of land uses.</i>	Summary of Analysis, Compatibility with Surrounding Land Uses
l. <i>Will result in poor accessibility among linked or related land uses.</i>	Summary of Analysis, Compatibility with Surrounding Land Uses
m. <i>Results in the loss of a significant amount of open space.</i>	Summary of Analysis, Compatibility with Surrounding Land Uses

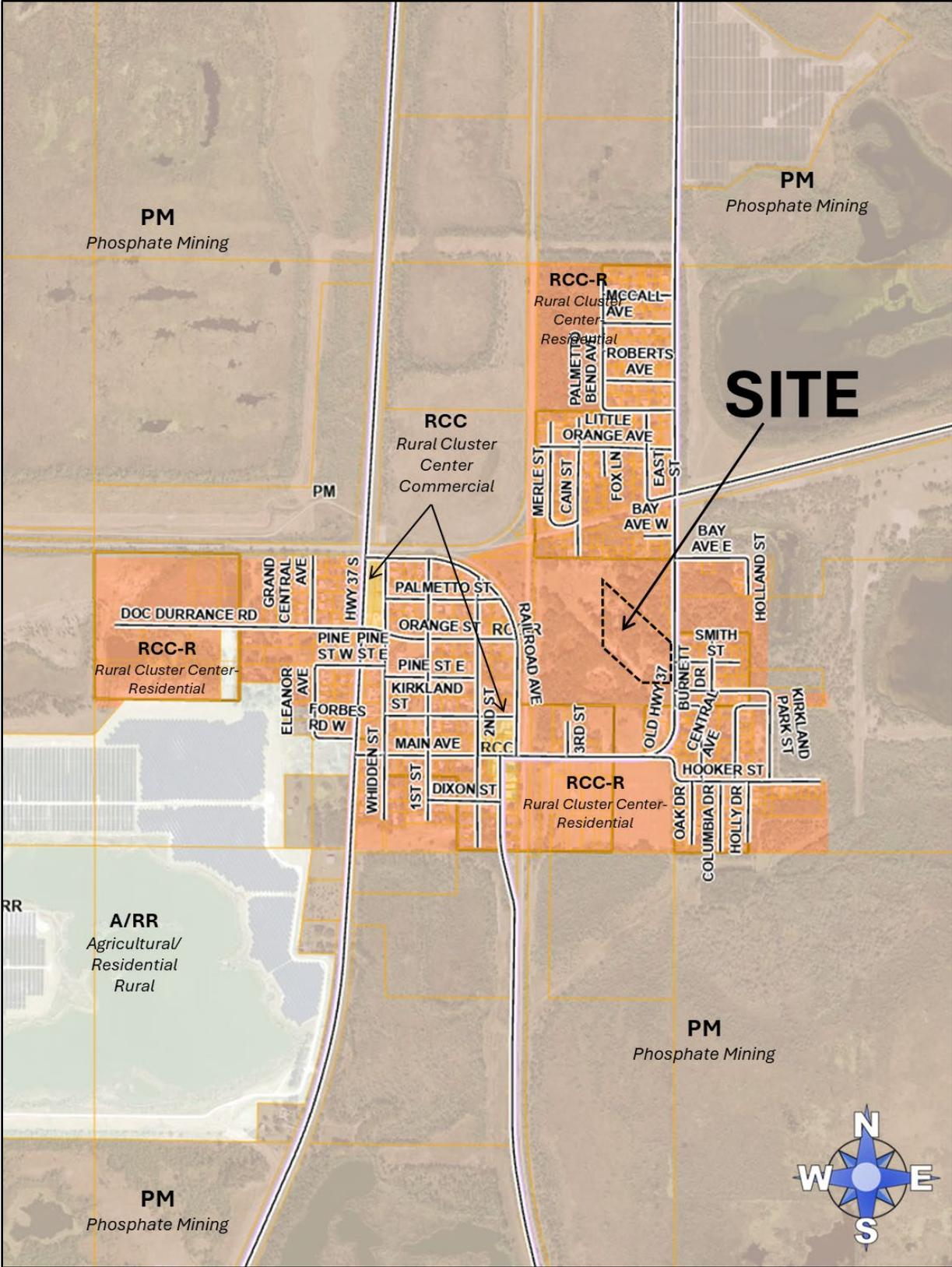
Comments from other Agencies: None.

Exhibits:

- Exhibit – 1 Location Map
- Exhibit – 2 Future Land Use Map
- Exhibit – 3 2024 Satellite Photo (Context)
- Exhibit – 4 2024 Satellite Photo (Close-up)
- Exhibit – 5 District Use Comparison Table



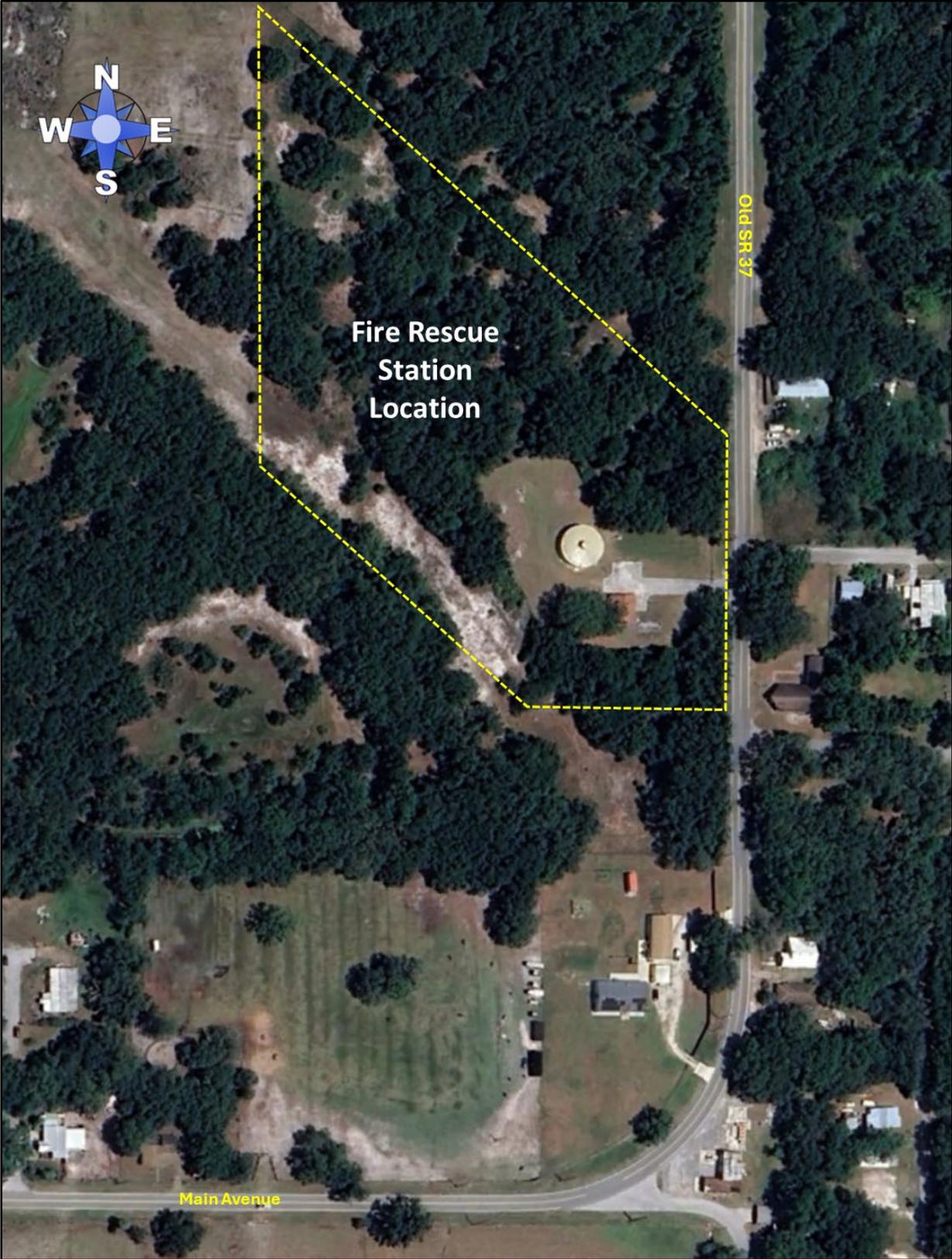
Location Map



Future Land Use Map



2024 Satellite Photo (Context)



2024 Satellite (Close Up)

Comparison of Permitted and Conditional Uses*

District	Permitted Uses	Administrative Review	Public Hearing(s) Required
RCC-R <i>Rural Cluster Center</i>	Single-family Residential Class I Utilities	Small Group Homes (≤6 patients) Mobile Homes Golf Course Emergency Shelter (≤6 patients) Passive Recreation Low Intensity Recreation Elementary Schools Class II Utilities	Planned Development Adult Day Care (≤6 patients) Offsite Agricultural Support Bed and Breakfast Cemetery Childcare Center Communication Towers Community Center Emergency Shelter (6> patients) Government Facility Helistop High Intensity Recreation Vehicle Oriented Recreation Religious Institution Middle School High School Leisure/Special Interest School College or University Solar Farm Class III Utilities
INST-1 <i>Institutional-1</i>	Childcare Center Government Facility Lodges and Retreats Elementary School Middle School Leisure/Special Interest School Production Studio Transit Facility	Group Living Facility (7+ clients) Adult Day Care Center (7+ clients) Cemetery Clinics & Medical Offices Community Center Communication Tower Cultural Facility Emergency Shelter (7+) Heliports & Helistops Nursing Home Offices & Office Park High & Low Intensity Recreation Vehicle Oriented Recreation Religious Institution Research & Development Solar Power Generation Facility	Multifamily Housing (dormitories) Gas Station (fleet) Hospital Lime Stabilization Facility Residential Treatment Facility High School Residential Treatment Facility Vo-Tech, College or University

*Uses with the same level of review in both categories not listed nor are agricultural and utility uses preempted by State Law. Also excluded are uses impractical due to property size or location.