

wildlight

East Nassau Community Planning Area

Appendix C

Public Facilities Analysis

October 23, 2023



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Public Facilities Analysis

Appendix C

Public Facilities Analysis

Section 163.3245(3)b.3 and 6 requires that detailed specific area plans provide “detailed identification of water resource development and water supply development projects and related infrastructure” and “public facilities necessary to serve development in the detailed specific area plan,” respectively. This detailed analysis has been completed using the proposed development program for DSAP 2, shown in **Table C.1** below.

Table C.1 - DSAP 2 Development Program			
DSAP 2	Acreage (Approximate)	Residential Dwelling Units	Nonresidential Square Footage
	14,879	14,944	1,413,324
*The above mix of uses are subject to the DSAP DO & DSAP 2 Use Type Equivalency Table. In the event of a conflict between this DSAP document and DSAP DO, the DSAP DO shall control.			

Impacts were analyzed for the short (five year) term and the long (buildout) conditions. The short-term analysis includes 2,000 residential dwelling units.

This section summarizes the analysis of public facilities as defined by Section 163.3164, Florida Statutes, including potable water, sanitary sewer, solid waste, drainage (stormwater), schools and parks. In some cases, capacity reservation has been secured. Through this permit process, the analysis was completed with the utility. In addition, a full transportation impact analysis is provided separately as **Appendix B**.

Utilities

Jacksonville Electric Authority (JEA), a municipally owned utility, provides potable water service to the ENCPA Sector Plan, specifically the Central Planning Area of the Employment Center Detailed Specific Area Plan (DSAP 1). The JEA issued two Availability Letters for water and sewer and reclaimed when available. The first analyzes and reserves availability for 4,621 single family units and 171,940 square feet of nonresidential uses to accommodate the initial phase of development. The second letter dated March 29, 2022 analyzes and reserves availability for 14,944 residential units and 6,937,200 square feet of nonresidential development. Refer to **Attachment C.1**.

Potable Water & Wastewater

DSAP 2 is located within JEA’s District 7 – Nassau County Water Service Area. Currently, the District 7 water service area is served by four potable water treatment plants; Lofton Oaks, Otter Run, Nassau (Yulee) Regional, and West Nassau Regional. **(Response to Comments Referred Attachment Map Series)**

Water and wastewater service is available for the short term development program. **Table C.2** provides the estimated water and wastewater demand at build out.

Table C.2 - Estimated Water & Wastewater Demand – Build out				
			Water	Wastewater
			LOS (gpd per capita)	LOS (gpd per capita)
Units	Persons / HH	Projected Population	100	85
14,944	2.55	38,107	3.8 MGD	3.2 MGD
Nonresidential				
Square Feet			Gallons per Square Feet	Total Flow Combined
1,413,324			0.15	211,999

Source: Nassau County Comprehensive Plan, Capital Improvements Element, Policy CI.02.01.D, E. Persons/HH rate sourced from Nassau Co. Parks & Recreation, Jacksonville Electric Authority (JEA) Service Availability Form.

Solid Waste

Solid Waste service is provided to the region by Nassau County. Nassau County has an adopted solid waste Level of Service of 4.91 pounds per capita per day (Policy CI.02.01.F, Comprehensive Plan). **Table C.3** provides an estimate of solid waste creation at build-out based upon the number of residential units and projected persons per household within the DSAP.

Table C.3 - Estimated Solid Waste Demand at Build Out					
Units	Persons / HH	Projected Population	LOS (lbs per capita/day)	Total Demand (lbs per day)	Total Demand (tons per year)
14,944	2.55	38,107	4.91 lbs	187,105	34,147
Nonresidential					
Square Feet			LOS (lbs per 100 SF/day)	Total Demand (lbs per day)	Total Demand (tons per year)
1,413,324			5.5 lbs (retail)	77,732	14,186

Pursuant to the interlocal agreement with Camden County, Georgia (September 15, 2009), Nassau County uses the Camden County Landfill Solid Waste Disposal Facility as the primary disposal location. The agreement is effective for a period of 10 years with the ability to renew for another five years upon consent of both local governments. A second agreement with Waste Management, Inc (October 14, 2009) provides that the County may dispose of its solid waste at its Chesser Island Road landfill, in Charlton County Georgia. This agreement also provides for five year renewals.

The 2020 Remaining Capacity by Landfill database, monitored by the Environmental Protection Division, reports, the Camden Landfill has an estimated fill date of 12/9/2031. Chesser Island Road Landfill is reported to have an estimated fill date of 8/8/2051. The combined capacity covers both the short and long term conditions of the project. With combined facility lifespans of 39 years, it was determined that no improvements to solid waste facilities would be required during the short or long term/build out phases of the project.

Stormwater

Stormwater management system improvements for this region of Nassau County may be developed as regional systems accounting, where possible, for multiple areas of improved development.

Stormwater Managements systems will be permitted in accordance with the St. Johns River Water Management District (SJRWMD) and Nassau County design criteria. The ultimate receiving waters will be the St. Marys River or the St. Johns River.

The interconnected wetland systems within the DSAP 2 proposed to serve as the method for conveying the treated runoff from the proposed development to the receiving waters. In locations where the wetland systems will be severed by proposed roadways, storm drainage networks will be installed beneath the roadway to provide proper surface water conveyence between wetland areas.

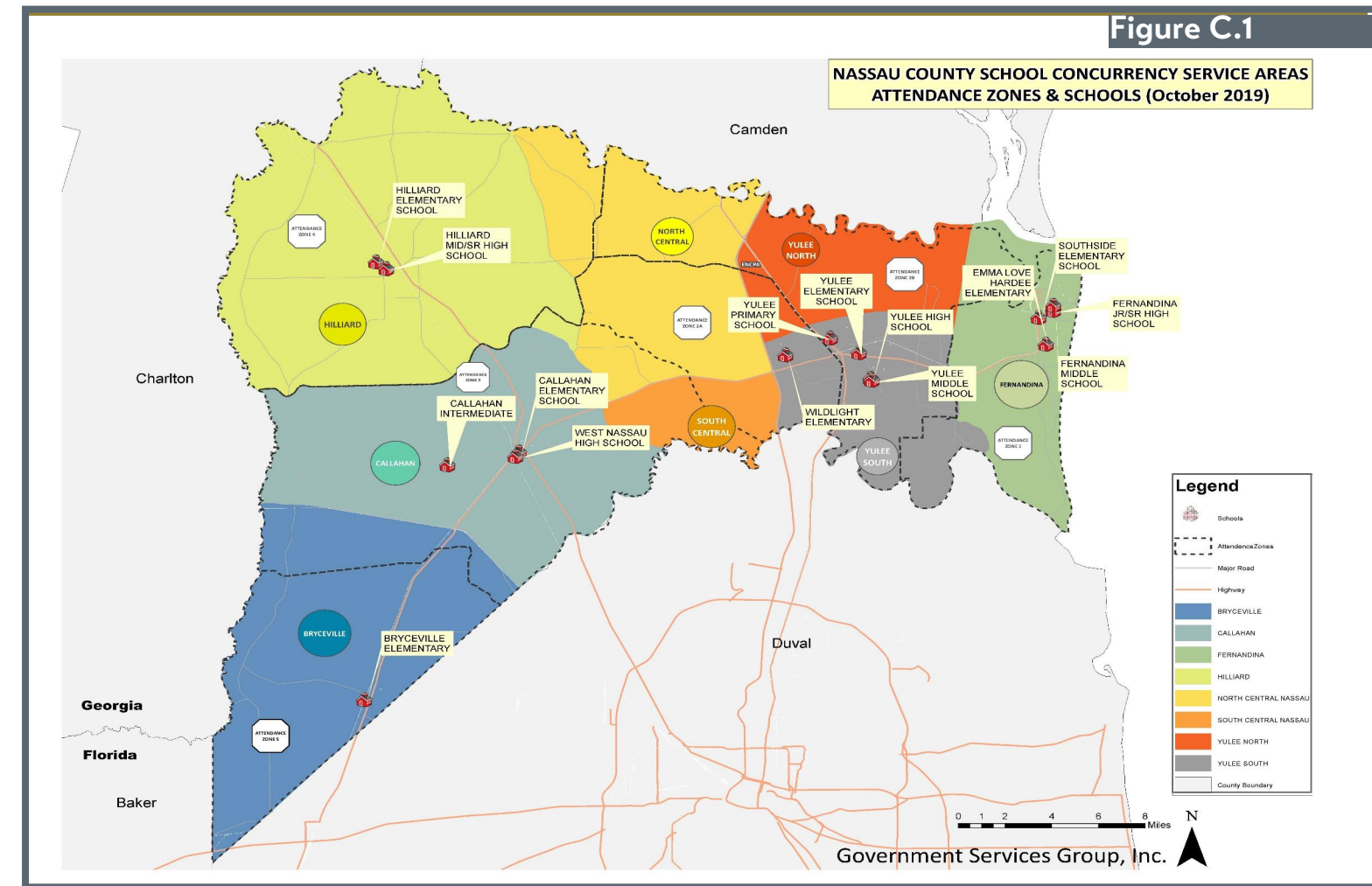
Schools

The Nassau County School District (NCSD) is an A Rated District (2020-21) and is comprised of 16 fully accredited schools serving five geographic areas: Bryceville, Callahan, Hilliard, Yulee, and Fernandina.

In 2008, Nassau County adopted a school concurrency system consistent with state statute. The details of this system are outlined in both an Interlocal Agreement (ILA) with the School Board of Nassau County and Nassau County's Comprehensive Plan's Public School Facilities Element (PSFE). These documents identify procedures for determining available capacity, identifying deficiencies and implementing improvements.

For the purpose of determining existing and future capacity, the County was subdivided into eight (8) Concurrency Service Areas (CSA). These CSAs identify which schools may serve a proposed development project. The East Nassau Employment Center DSAP 2 is located within both the Yulee North and Yulee South CSAs.

These CSAs are currently served by Wildlight Elementary, Yulee Primary School, Yulee Elementary School, Yulee Middle School and Yulee High School. **See Figure C.1**



Source: Nassau County Public Education Facility Study.

Per the Amended Interlocal Agreement for Public School Facility Planning (ILA), new capacity in place or under construction in the first three years of the School District's Educational Facilities Plan will be added to the capacity shown in the respective CSA and utilization rates will be adjusted accordingly.

The Nassau County School Concurrency Final Report, dated November 2019, summarizes the School District's Capital Improvement Projects through FY2021. There are three projects approved by the Florida Department of Education that increase student capacity (build out improvements at Wildlight, Yulee High and Yulee Middle). Four additional student capacity projects, not yet approved by the FDOE, include adding classrooms to Callahan Elementary and Middle Schools, adding a new K-8 school in Yulee, and additional classrooms to Yulee Primary. Without the FDOE approval, the District must consider other options to develop and manage the capacity improvements.

In addition to the inclusion of programmed improvements, the ILA allows for the use of additional capacity contained in adjacent CSAs. Per the County's PSFE, CSAs contiguous to Yulee North and South include, North Central Nassau, South Central Nassau and Fernandina.

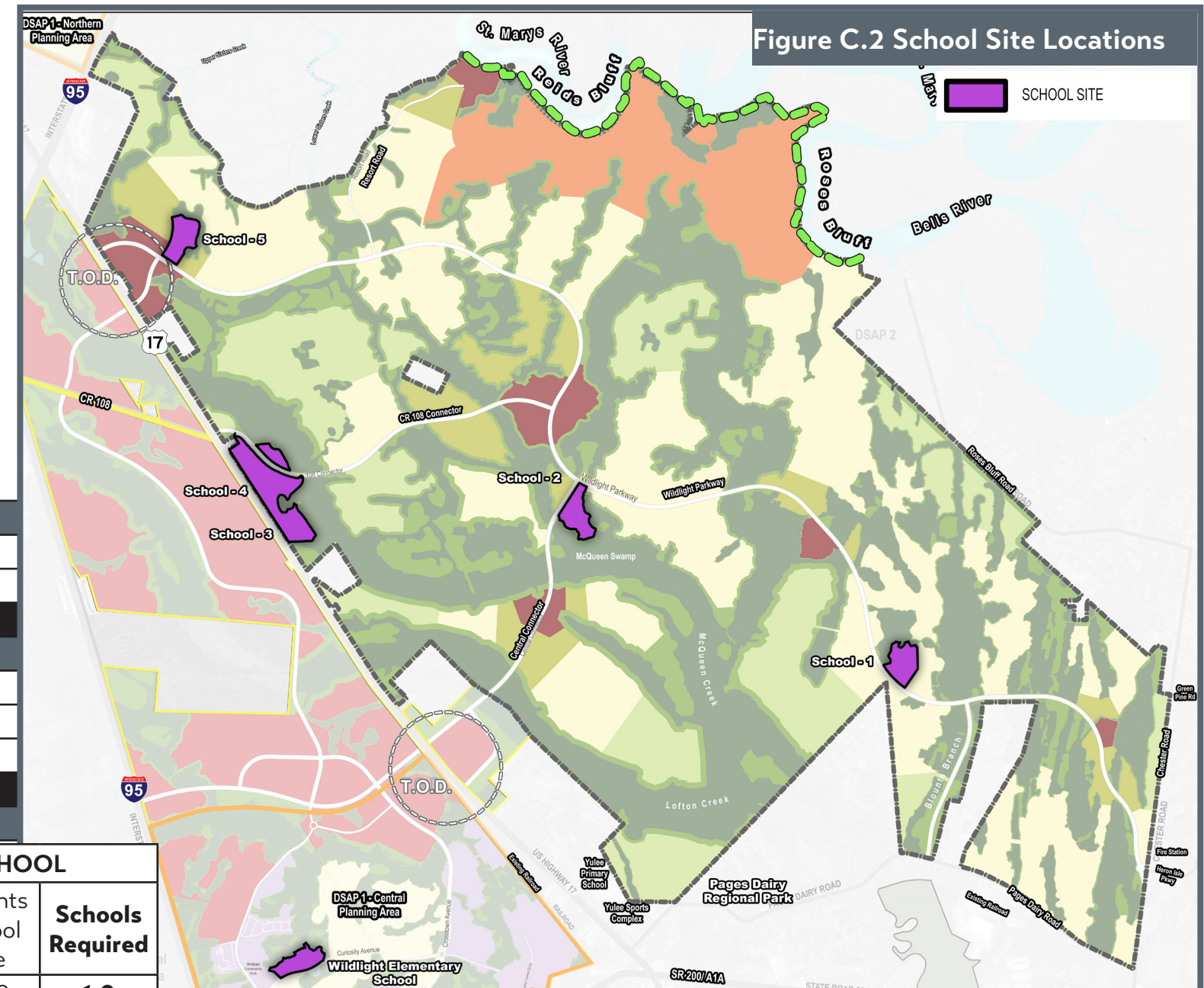
As of March 15, 2022, no capacity is reported for the Yulee North and South CSAs. The capacity report of March 15, 2022 includes capacity at the middle and high school levels in Fernandina and no capacity at any level in the North and South Central Nassau CSAs.

The current practice in Nassau County is to build new public-school facilities with core capacities by type:

- Elementary School: 800 students, 25 acres
- Middle School: 1,200 students, 40 acres
- K-8 Combination: 1,200 students, 50 acres
- High School: 1,600 students, 60 acres
- 6-12 Combination: 1,500 students, 60 acres

In order to mitigate for the DSAP 2 non-exempt residential impacts, the developer intends to dedicate land for five (5) school sites to the School District within the DSAP Property. The DSAP 2 school land locations are generally depicted in Figure C.2. See **Figure C.2** for Proposed School Sites and DSAP DO for the school mitigation development condition.

SCHOOL REQUIREMENTS - Based on Population & Dwelling Units								
TOTAL UNITS		14,944						
AGE RESTRICTED UNITS		0						
TOTAL SCHOOL BASED UNITS		14,944						
Elementary (0.1505 per unit)		2,249						
Middle (0.0790 per unit)		1,181						
High (0.1025 per unit)		1,532						
Student Population by School Type		4,962						
ELEMENTARY SCHOOL			MIDDLE SCHOOL			HIGH SCHOOL		
Students	Students /School Type	Schools Required	Students	Students /School Type	Schools Required	Students	Students /School Type	Schools Required
2,249	800	2.8	1,181	1,200	1.0	1,532	1,600	1.0



Note: All proposed uses and acreages are conceptual and subject to change during planning and may be modified based on review and comments.

Recreation and Open Space

Nassau County recently amended the Recreation and Open Space Element to adjust the Level of Service. This analysis applies the new Recreation and Open Space Level of Service using the DSAP 2 development program and has been completed with the aid of Nassau County and their parks consultant, Barth & Associates, Inc. Barth & Associates, Inc. completed a spatial analysis based on data provided by Nassau County and the Applicant, to propose potential Regional and Community Park sites within the ENCPA. The evaluation also examined each site for suitability based on prototypical park designs to confirm development feasibility. See **Figure C.3** for the Regional and Community Park Locations as proposed by Nassau County and Barth & Associates, Inc.

To mitigate for the DSAP 2 residential impacts, approximately 533.50 acres of land for Community/Regional Parks will be dedicated to Nassau County. As part of the dedicated park land, approximately 10 acres of land will be dedicated for 10 boat ramp lanes near Crandall in satisfaction of the overall ENCPA boat ramp LOS. The proposed park locations are generally depicted in **Figure C.3**.

In addition, the Developer will cause the construction of neighborhood parks consistent with the County's new park regulations and payment by residential builders of recreational facility impact fees consistent with the county's adopted Comprehensive Impact Fee Ordinance.

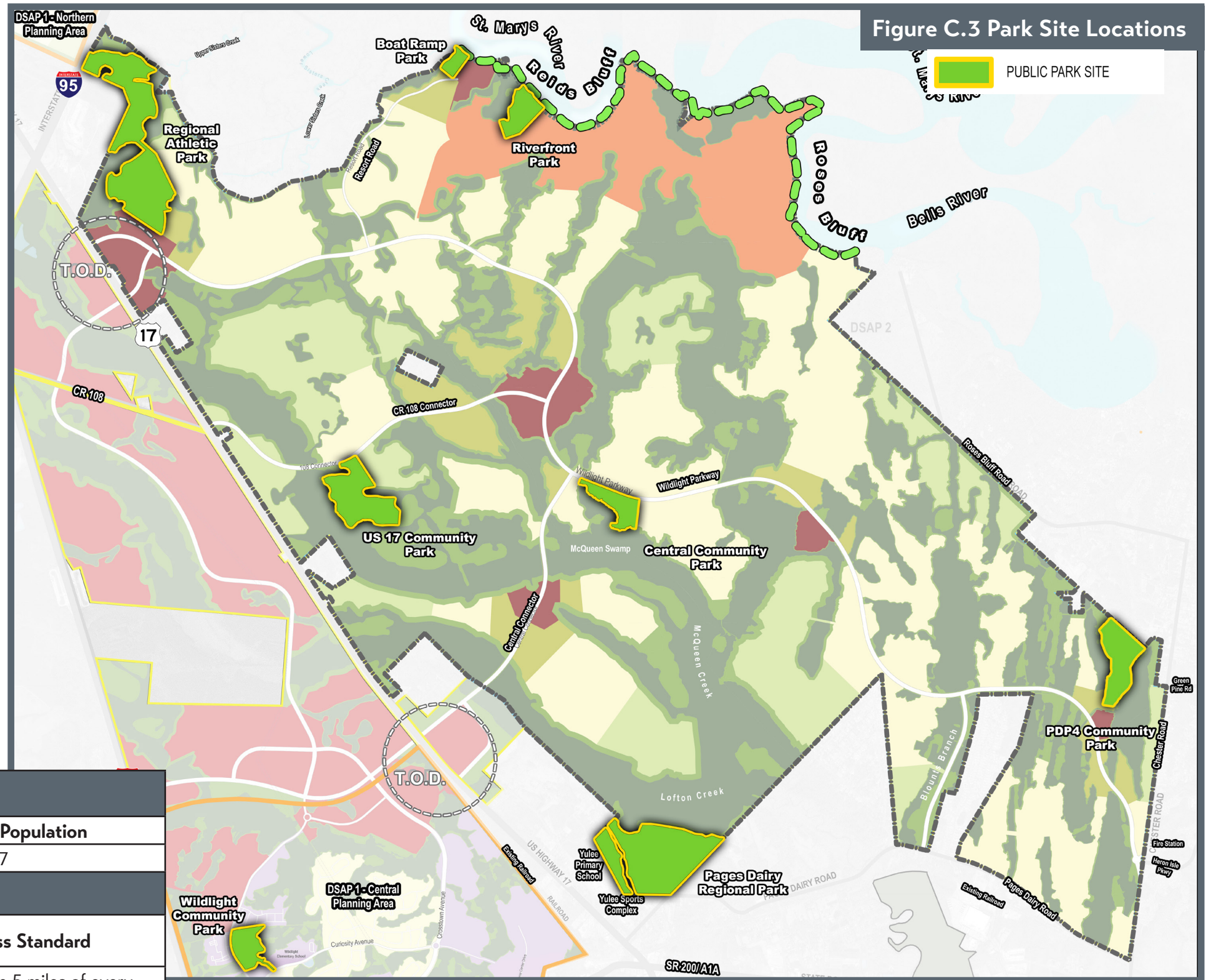


Figure C.3 Park Site Locations

Note: All proposed uses and acreages are conceptual and subject to change during planning and may be modified based on review and comments.

PARK REQUIREMENTS- by Population			
Community Population	Population per Unit	Total Population	
	2.55	38,107	
PARK LEVEL OF SERVICE - PER PROPOSED ORDINANCE			
	Area/1000 Residents	Minimum Park Requirement	Access Standard
Level of Service for Regional/Community Parks	14 Acres	533.50	Within 5 miles of every resident
Level of Service for Neighborhood Parks	4 Acres	152.43	Within .5 miles of every resident
Level of Service for Boat Facility	1 ramp lane/5,000 population	7.6 ramp lanes	None
TOTAL:		685.93	

Summary

Within the public facilities of utilities (water, sewer, solid waste, drainage), adequate supply exists to accommodate the proposed short term (5yr) development program. Future utility (water, waste water) improvements may be required to accommodate the long term (build out) development program.

School capacity is not available within the short or long term phases, except for limited middle and high school capacity. The analysis indicates five (5) new schools will be needed to accommodate the projected total student population of 4,962. Land for five (5) school sites will be dedicated to the School District to mitigate for the non-exempt residential impacts within DSAP 2. Please see DSAP DO for the complete school mitigation development condition Those sites are generally identified on **Figure C.2**.

It is acknowledged that Raydient Places + Properties LLC has analyzed for the new Level of Service for Neighborhood Parks and Community/Regional Parks, including boat ramps.





ATTACHMENT C.1

Availability Letter

Nicole Bolatete
ENGLAND-THIMS & MILLER, INC.
14775 Old St. Augustine Rd.
Jacksonville, Florida 32258

6/26/2021

Project Name: Wildlight DSAP 2 - Chester Road
Availability #: 2021-2707

Attn: Nicole Bolatete

Thank you for your inquiry regarding the availability of Reclaim,Sewer,Water. The above referenced number in this letter will be the number JEA uses to track your project. Please reference this number when making inquiries and submitting related documents. This availability letter will expire two years from the date above.

Point of Connection:

A summary of connection points for requested services are identified on the following page. JEA recognizes Connection Point #1 as the primary point of connection (POC); however, a secondary, conditional POC will be listed if available. JEA assumes no responsibility for the inaccuracy of any service connection portrayed on a JEA utility system record drawing. JEA requires field verification in the form of a Level A SUE of all POCs prior to any plan approval to ensure connection availability. Please note the Special Conditions stated in each section contain pertinent information and additional requirements as well as further instructions. In the event the point of connection is located within a JEA easement located on private property not owned by applicant, applicant shall be responsible to obtain a temporary construction easement (TCE) from the third party owner providing applicant with the right to construct the utilities. The TCE will need to be provided by JEA prior to setting up a pre-construction meeting.

Main Extensions and/or Offsite Improvements:

For all utilities located in the public Right of Way or JEA easement, the new WS&R utilities shall be dedicated to JEA upon completion and final inspection, unless otherwise noted. It shall be the applicant's responsibility to engage the services of a professional engineer, licensed in the State of Florida. All WS&R construction shall conform to current JEA Water, Sewer & Reuse Design Guidelines which may be found at:

https://www.jea.com/engineering_and_construction/water_and_wastewater_development/reference_materials/

Reservation of Capacity:

This availability response does not represent JEA's commitment for or reservation of WS&R capacity. In accordance with JEA's policies and procedures, commitment to serve is made only upon JEA's approval of your application for service and receipt of your payment of all applicable fees.

A detailed overview of the process can be found at JEA.com. This document along with other important forms and submittal processes can be found at

https://www.jea.com/water_and_wastewater_development

Sincerely,

JEA Water, Sewer Reclaim
Availability Request Team

Availability Number: 2021-2707
Request Received On: 6/15/2021
Availability Response: 6/26/2021
Prepared by: Susan West
Expiration Date: 06/26/2023

Project Information

Name: Wildlight DSAP 2 - Chester Road
Address:
County: Nassau County
Type: Reclaim,Sewer,Water
Requested Flow: 1643141
Parcel Number: 44-3N-28-0000-0001-0520; 51-3N-27-4780-0003-0000; 51-3N-27-0000-0001-0290;51-3N-27-0000-0001-0300;
Location: North of Paiges Dairy Road, W. of Chester Road
Description: Project consists of 4,621 Single family residential units and 171,940 SF of non residential use; previous LOA 2016-1755

Potable Water Connection

Water Treatment Grid: Nassau/Lofton Oaks
Connection Point #1: Existing 16 inch water main along Chester Rd; Existing 12 inch water main along Roses Bluff Rd
Connection Point #2: Proposed 16 inch water main along Pages Dairy Rd
Water Special Conditions: Connection point not reviewed for site fire protection requirements. Private fire protection analysis is required. Master water plan and calculations required for plan approval. Maximum number of connections allowed at a given time will be based on the capacity of the upstream system as well as the timing and schedule of upstream treatment and distribution system improvements. The project buildout schedule and timing of improvements should be an integral part of the water master plan.

Sewer Connection

Sewer Grid: Nassau
Connection Point #1: Existing 12 inch force main along Chester Road; Existing 16 inch force main along SR 200
Connection Point #2:

Master wastewater plan and calculations required for plan approval. Design should utilize master pump stations to minimize the number of connections to the existing JEA force main network. Maximum number of connections allowed at a given time will be based on the capacity of the downstream system as well as the timing and schedule of downstream treatment and collection system improvements. The project buildout schedule and timing of improvements should be an integral part of the wastewater master plan. Connection to the JEA-owned sewer system for your project will require the design and construction of an onsite, JEA owned and maintained pump station, and a JEA dedicated force main (min. 4" dia.). Request a force main connection pressure letter through Step 2 of the SagesGov portal.

**Reclaimed Water
Connection**

Reclaim Grid: Nassau

Connection Point #1: Existing 16 inch reclaimed water main along Amelia Concourse

Connection Point #2:

Reclaim for irrigation purposes only. Reclaimed water will be available in the near future for your development. In the interim, a temporary connection to the potable water system will be required. Coordinate the temporary connection with the JEA Development group so the

Reclaim Special Conditions: configuration is designed to simplify the transition to reclaimed water when it becomes available. Master reclaimed water plan and calculations required for plan approval. The project buildout schedule and timing of improvements should be an integral part of the reclaimed water master plan.

Electric Availability:

Electric Special Conditions: The subject property does not lie within the geographic area legally served by JEA. The subject property does not lie within JEA's electric service territory.

Point of connection location(s) to be field verified by developer during project design. If needed, a development meeting may be scheduled prior to submitting a plan set through the SagesGov portal. Copies of reference drawings may also be requested using the SagesGov portal.

General Conditions: Connections to proposed POCs are contingent upon inspection and acceptance of the proposed mains by JEA. JEA must approve construction and accept the proposed mains prior to acceptance of this project.



Availability Letter

Kristen Phillips
ENGLAND-THIMS & MILLER, INC.
14775 OLD ST AUGUSTINE ROAD
Jacksonville, Florida 32258

3/29/2022

Project Name: Wildlight DSAP 2
Availability #: 2021-3959

Attn: Kristen Phillips

Thank you for your inquiry regarding the availability of Reclaim,Sewer,Water. The above referenced number in this letter will be the number JEA uses to track your project. Please reference this number when making inquiries and submitting related documents.

Point of Connection:

A summary of connection points for requested services are identified on the following page. JEA recognizes Connection Point #1 as the primary point of connection (POC); however, a secondary, conditional POC will be listed if available. JEA assumes no responsibility for the inaccuracy of any service connection portrayed on a JEA utility system record drawing. JEA requires field verification in the form of a Level A SUE of all POCs prior to any plan approval to ensure connection availability. Please note the Special Conditions stated in each section contain pertinent information and additional requirements as well as further instructions. In the event the point of connection is located within a JEA easement located on private property not owned by applicant, applicant shall be responsible to obtain a temporary construction easement (TCE) from the third party owner providing applicant with the right to construct the utilities. **The TCE will need to be provided by JEA prior to setting up a pre-construction meeting.**

Main Extensions and/or Offsite Improvements:

For all utilities located in the public Right of Way or JEA easement, the new WS&R utilities shall be dedicated to JEA upon completion and final inspection, unless otherwise noted. **It shall be the applicant's responsibility to engage the services of a professional engineer, licensed in the State of Florida.** All WS&R construction shall conform to current JEA Water, Sewer & Reuse Design Guidelines which may be found at:

https://www.jea.com/engineering_and_construction/water_and_wastewater_development/reference_materials/

Reservation of Capacity:

This availability response does not represent JEA's commitment for or reservation of WS&R capacity. In accordance with JEA's policies and procedures, commitment to serve is made only upon JEA's approval of your application for service and receipt of your payment of all applicable fees.

A detailed overview of the process can be found at JEA.com. This document along with other important forms and submittal processes can be found at

https://www.jea.com/water_and_wastewater_development

Sincerely,

Mollie Price
pricml@jea.com
(904) 667-9488

Availability Number: 2021-3959

Request Received On: 8/27/2021

Availability Response: 3/29/2022

Prepared by: Mollie Price

Expiration Date: 9/10/2023

Project Information

Name: Wildlight DSAP 2

Address:

County: Nassau County

Type: Reclaim,Sewer,Water

Requested Flow: 4029380

Parcel Number:

50-3N-27-0000-0002-0010;26 N 341000000010010; 26 N 341000000010040;26 N 337000000010000;26 N 338000000010000;26 N 436000000010000;26 N 438000000010000;26 N 301000000010060;27 N 351000000580010;27 N 341000000010000;27 N 343000000010030;27 N 348000000020050;27 N 344000000010000;27 N 344000000010010;27 N 348000000010000;27 N 348000000020040;27 N 350000000010230;27 N 348000000010010;27 N 348000000020000;27 N 345000000010000;27 N 348000000020020;27 N 348000000020010;27 N 350000000010260;27 N 350000000010330;27 N 348000000030000;27 N 350000000010310;27 N 350000000010390;27 N 350000000020010;27 N 350000000010310;27 N 350000000020010;27 N 350000000010380;27 N 342000000010010;27 N 345000000010010;27 N 346000000010000;27 N 351000000010290;27 N 351000000080010;27 N 432000000010000;27 N 355000000010000;27 N 432000000010040;27 N 433000000010000;27 N 356000000010000;27 N 432000000010010;27 N 432000000010030;27 N 351478000030000;27 N 347000000010000;27 N 350000000010240;27 N 350000000010320;27 N 350000000010280;27 N 3510000

Location: See attachment for a complete list of Parcels included

Overall development of Wildlight DSAP 2, consisting of 14,944 residential units and 6,937,200

Potable Water Connection

Water Treatment Grid: Nassau/Lofton Oaks

Connection Point #1: Existing 16 inch water main along Chester Rd; Existing 12 inch water main along Roses Bluff Rd

Connection Point #2: Proposed 16 inch water main along Pages Dairy Rd

Water Special Conditions:

Connection point not reviewed for site fire protection requirements. Private fire protection analysis is required. Master water plan and calculations required for plan approval. Maximum number of connections allowed at a given time will be based on the capacity of the upstream system as well as the timing and schedule of upstream treatment and distribution system improvements. The project buildout schedule and timing of improvements should be an integral part of the water master plan.

General Conditions:

Connections to proposed POCs are contingent upon inspection and acceptance of the proposed mains by JEA. JEA must approve construction and accept the proposed mains prior to acceptance of this project. Point of connection location(s) to be field verified by developer during project design. If needed, a development meeting may be scheduled prior to submitting a plan set through the SagesGov portal. Copies of reference drawings may also be requested using the SagesGov portal. Connections to proposed POCs are contingent upon inspection and acceptance of the proposed mains by JEA. JEA must approve construction and accept the proposed mains prior to acceptance of this project.

Sewer Connection

Sewer Grid: Nassau

Connection Point #1: Existing 12 inch force main along Chester Road; Existing 16 inch force main along SR 200

Connection Point #2: Proposed 16 inch force main along Chester Road

Sewer Special Conditions:

Master wastewater plan and calculations required for plan approval. Design should utilize master pump stations to minimize the number of connections to the existing JEA force main network. Maximum number of connections allowed at a given time will be based on the capacity of the downstream system as well as the timing and schedule of downstream treatment and collection system improvements. The project buildout schedule and timing of improvements should be an integral part of the wastewater master plan. Connection to the JEA-owned sewer system for your project will require the design and construction of onsite, JEA owned and maintained pump stations, and JEA dedicated force mains (min. 4" dia.). Request a force main connection pressure letter through Step 2 of the SagesGov portal.

Subsequent steps you need to take to get service:

Reclaimed Water Connection

Reclaim Grid: Nassau

Connection Point #1: Existing 16 inch reclaimed water main along Amelia Concourse

Connection Point #2: Proposed 16 inch reclaimed water main along Chester Road

Reclaim Special Conditions:

Reclaim for irrigation purposes only. Reclaimed water will be available in the near future for your development. In the interim, a temporary connection to the potable water system will be required. Coordinate the temporary connection with the JEA Development group so the configuration is designed to simplify the transition to reclaimed water when it becomes available. Master reclaimed water plan and calculations required for plan approval. The project buildout schedule and timing of improvements should be an integral part of the reclaimed water master plan.

Electric Availability:

Electric Special Conditions:

The subject property does not lie within the geographic area legally served by JEA. The subject property does not lie within JEA's electric service territory.