

AGENDA
KEYSTONE HEIGHTS CITY COUNCIL MEETING
555 S. Lawrence Blvd., Keystone Heights, Florida
Monday, April 01, 2024 at 6:00 pm

ANYONE WISHING TO ADDRESS THE CITY COUNCIL REGARDING ANY TOPIC ON THIS EVENING'S AGENDA IS REQUESTED TO COMPLETE A CARD AND RETURN TO THE CITY CLERK. SPEAKERS ARE RESPECTFULLY REQUIRED TO LIMIT THEIR COMMENTS TO THREE (3) MINUTES.
THE CITY COUNCIL PROHIBITS THE USE OF CELL PHONES AND PAGERS WHICH EMIT AN AUDIBLE SOUND DURING ALL MEETINGS WITH THE EXCEPTION OF LAW ENFORCEMENT, FIRE AND RESCUE OR HEALTH CARE PROVIDERS ON CALL. PERSONS IN VIOLATION WILL BE REQUESTED TO LEAVE THE MEETING.

"Please turn off cell phones"

Invocation led by: Local Clergy

Pledge of Allegiance led by: Local Veteran

Roll Call: City Clerk

1. Public Comments

2. Resolutions/Ordinances

- a. Resolution 2024-01 Jordan Cooper Memorial Scholarship Fund 5k Run Road Closure
- b. Resolution 2024-02 Lake Region Kiwanis Club Parade Road Closure

3. Proclamations

- a. Water Conservation Proclamation

4. Consent Agenda

a. Minutes

- i. January 03, 2024 Special City Council Minutes
- ii. January 08, 2024 City Council Minutes
- iii. February 05, 2024 City Council Minutes
- iv. February 20, 2024 Heritage Commission Minutes
- v. February 26, 2024 Planning and Zoning Minutes
- vi. February 28, 2024 City Council Workshop Minutes
- vii. March 04, 2024 City Council Minutes

b. Financials

- c. Life South Blood Drive Event Application for July 4th, 2024

5. Action Items

- a. Paul Wane – 4th of July Introduction
- b. Airport Update – Manager Van Zant
- c. Airport Utility Feasibility Study – Bill Prange, PE
- d. Airport Seats 1 and 3
 - i. Current Board Members
 - ii. Seat 1 – Term Expires 05/2025
 - 1. James Eifert, David Welch and Terri Hall
 - iii. Seat 3 – Term Expires 05/2027
 - 1. Robert Ludwig (current member), James Eifert and David Welch
- e. Keystone Heights Heritage Commission Seat 5 – Term Expires 04/2024
 - i. Renewal Application – Kerry Collins
- f. Donate \$25k from lakes fund for fishing pier to Save our Lakes Organization – Manager Van Zant
- g. Lake Level /Flow Predictions – Councilman Lewandowski

6. Discussion Only

- a. Agenda – Councilman Brown
- b. July 4th – Councilman Brown
- c. Schedule Parks Master Plan Workshop – Mayor Rodenroth and Councilman Lewandowski
- d. City Hall Meeting Room – Councilman Lewandowski and Mayor Rodenroth

AGENDA
KEYSTONE HEIGHTS CITY COUNCIL MEETING
555 S. Lawrence Blvd., Keystone Heights, Florida
Monday, April 01, 2024 6:00 p.m.

- e. Strategic Plan – Councilman Lewandowski
 - i. Potential Workshop on April 10, 2024
 - f. Christmas Workshop – Councilman Lewandowski
 - i. Potential Workshop on August 14, 2024
 - g. Performance Reports – Councilman Lewandowski
 - h. City Discounts for Tax Paying Residents – Councilman Lewandowski
 - i. Child of Moon Tree – Councilman Lewandowski
 - j. Update on 125 Walker Drive Purchase – Manager Van Zant
 - k. Chautauqua – Councilman Lewandowski
 - l. KHHC 4th Grader Field Trip: April 19th, 2024 – Mayor Rodenroth
 - m. Special Magistrate – Councilman Hart
 - n. Summer Concerts – Councilman Lewandowski
- 7. Committee Reports/Recommendations**
- 8. Council Comments**
- 9. City Manager Report – Charlie Van Zant**
- 10. City Attorney Report – Rich Komando**

CITY OF KEYSTONE HEIGHTS, FLORIDA

RESOLUTION 2024- 01

BEFORE THE CITY COUNCIL

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KEYSTONE HEIGHTS, FLORIDA AUTHORIZING THE EXECUTION OF A FLORIDA DEPARTMENT OF TRANSPORTATION TEMPORARY ROAD CLOSING PERMIT APPLICATION; PROVIDING FOR AN IMMEDIATE EFFECTIVE DATE

WHEREAS, the Jordan Cooper Memorial Scholarship Fund is requesting that State Road 21 in the City’s corporate limits be closed for the Jordan Cooper Memorial Scholarship Fund 4th of

July 5K Run; now therefore

BE IT RESOLVED by the City Council of the City of Keystone Heights:

Section 1. The Jordan Cooper Memorial Scholarship Fund is hereby authorized to execute a Request for Temporary Closing of State Road on behalf of the City for the 4th of July 5K Run that are scheduled to take place on State Road 21 within the City’s corporate limits on July 4, 2024.

Section 2. That this resolution shall become effective immediately upon adoption hereof.

DULY ADOPTED AND APPROVED this 1st day of April, 2024, by the City Council of the City of Keystone Heights, Florida.

City Council of the City of Keystone Heights, Florida

By: _____

Nina Rodenroth, Mayor

Attest: _____

Stephanie Silva, City Clerk

CITY OF KEYSTONE HEIGHTS, FLORIDA

RESOLUTION 2024- 02

BEFORE THE CITY COUNCIL

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KEYSTONE HEIGHTS, FLORIDA AUTHORIZING THE EXECUTION OF A FLORIDA DEPARTMENT OF TRANSPORTATION TEMPORARY ROAD CLOSING PERMIT APPLICATION; PROVIDING FOR AN IMMEDIATE EFFECTIVE DATE

WHEREAS, the Lake Region Kiwanis Club is requesting that State Road 21 in the City's corporate limits be closed for the - July 4th Kiwanis Parade; now therefore

BE IT RESOLVED by the City Council of the City of Keystone Heights:

Section 1. The Lake Region Kiwanis is hereby authorized to execute a Request for Temporary Closing of State Road on behalf of the City for the festivities that are scheduled to take place on State Road 21 within the City's corporate limits on July 4, 2024.

Section 2. That this resolution shall become effective immediately upon adoption hereof.

DULY ADOPTED AND APPROVED this 1st day of April, 2024, by the City Council of the City of Keystone Heights, Florida.

City Council of the City of Keystone Heights, Florida

By: _____

Nina Rodenroth, Mayor

Attest: _____

Stephanie Silva, City Clerk



Proclamation

CITY OF KEYSTONE HEIGHTS
KEYSTONE HEIGHTS, FLORIDA

WHEREAS, water is a basic and essential need of every living creature; and

WHEREAS, The State of Florida, Water Management Districts and the City of Keystone Heights are working together to increase awareness about the importance of water conservation; and

WHEREAS, the City of Keystone Heights and the State of Florida has designated April, typically a dry month when water demands are most acute, Florida's Water Conservation Month, to educate citizens about how they can help save Florida's precious water resources; and

WHEREAS, the City of Keystone Heights has always encouraged and supported water conservation, through various educational programs and special events; and

WHEREAS, every business, industry, school and citizen can make a difference when it comes to conserving water; and

WHEREAS, every business, industry, school and citizen can help by saving water and thus promote a healthy economy and community; and

WHEREAS, outdoor irrigation comprises a large portion of water use, the City of Keystone Heights will encourage citizens and businesses to focus on improving outdoor irrigation efficiency;

NOW, THEREFORE, be it resolved that by virtue of the authority vested in me as Mayor of Keystone Heights, FL do hereby proclaim the month of April as

Water Conservation Month

Keystone Heights, Florida is calling upon each citizen and business to help protect our precious resource by practicing water saving measures and becoming more aware of the need to save water. For this, the 26th year of Water Conservation Month, there will be a special focus on improving outdoor irrigation efficiency.

DULY ADOPTED AND PROCLAIMED this 1st day of April, 2024 by the City of Keystone Heights, Florida.

**CITY COUNCIL OF
KEYSTONE HEIGHTS, FLORIDA**

By: _____
Nina Rodenroth, Mayor

Attest: _____
Charlie Van Zant, City Manager

MINUTES
KEYSTONE HEIGHTS CITY COUNCIL MEETING
555 S. Lawrence Blvd., Keystone Heights, Florida
Wednesday, January 3, 2024 at 10:00 am

ANYONE WISHING TO ADDRESS THE CITY COUNCIL REGARDING ANY TOPIC ON THIS EVENING'S AGENDA IS REQUESTED TO COMPLETE A CARD AND RETURN TO THE CITY MANAGER. SPEAKERS ARE RESPECTFULLY REQUIRED TO LIMIT THEIR COMMENTS TO THREE (3) MINUTES.
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Invocation led by: Councilman T. Brown

Pledge of Allegiance led by: Mayor Rodenroth

Roll Call: City Clerk - Present: Mayor Rodenroth, Vice Mayor Thompson, Councilman Brown, Councilman Lewandowski, Councilman Hart.

1. Public Comments – None

Vice Mayor Thompson discussed with the council that she would like to present an offer to the present City Manager, Lynn Rutkowski to continue in her position. Discussion followed.

Councilman Hart made a motion that the matter be tabled until after the interviews today. Councilman Lewandowski seconded. Passed 5:0.

Council members contacted the references that each candidate gave prior to today's interviews. Discussion followed regarding the results.

The interview process will be as follows: City Clerk Ms. Silva will ask each candidate the same questions. The council members will have a score sheet and rate the answer accordingly to their discretion. The score sheet is used as a tool but not to determine the candidate for the position. The council introduced themselves to the candidate. The candidate then had an opportunity tell the council about themselves before being asked the questions from City Clerk Silva.

- 2. City Manager Interview 10:00 am Elmon Lee Garner.** Mr. Garner gave a history of himself. Mr. Garner was originally from North Carolina. He retired from the Army after 20 years. Mr. Garner has a master's degree in public administration. He has been an interim City Manager. Questions were asked of Mr. Garner, then the council followed up with their questions to him.

Break for council

- 3. City Manager Interview 1:00 pm Jeff Shoobridge.** Originally from Cape Coral, Florida. He is presently living in Madison Lake, Minnesota. He was in the Navy. Mr. Shoobridge has a BA in political science and a master's in public administration. Questions were asked of Mr. Shoobridge, then the council followed up with their questions to him.

Break for council

4. **City Manager Interview 3:00 pm Charles Van Zant.** He was originally from Keystone Heights and attended high school there. He went to the Florida National Guard. Mr. Van Zant is a retired helicopter pilot. Graduate of the University of Florida. Superintendent of Clay County School District. Questions were asked of Mr. Van Zant, then the council followed up with questions to him.

Break for council

Once the council returned, Councilman Hart brought back the motion to give consideration to the present Manager, Lynn Rutkowski. Councilman Lewandowski seconded. Passed 5:0

The motion by Vice Mayor Thompson to offer \$80,000 to Manager Rutkowski and a vehicle for city use. Seconded by Councilman Hart. Passed 5:0.

Ms. Rutkowski was brought in before the council to have the offer presented to her. Ms. Rutkowski response was that she loved what she did as Manager for Keystone Heights and she has wavered back and forth on the decision, but she ultimately declined the offer.

The council accepted her decision.

Discussion followed regarding the candidates that were interviewed. Each council member discussed their pick of who they thought would be the best fit for the City Manager of Keystone Heights. Councilman Hart's choice was VanZant, Vice Mayor Thompson's choice was Shoobridge, Mayor Rodenroth's choice was Shoobridge, Councilman Lewandowski's choice was Van Zant.

Councilman Brown did not choose at this time.

Conversation followed by council. Motion was made by Councilman Hart to offer the position of City Manager to Charles Van Zant, Jr. subject to negotiations. If they fail in negotiations the offer will be rescinded and given to Jeff Shoobridge. Seconded by councilman Brown. Vote: 3:2.

Discussion followed regarding the employee package that would be offered to Mr. Van Zant. The council agreed upon \$80,000 for his salary.

Attorney Komando was directed by the council to open negotiations with Mr. Van Zant. Scored sheets were turned into the City Clerk.

Meeting Adjourned

MINUTES
KEYSTONE HEIGHTS CITY COUNCIL MEETING
555 S. Lawrence Blvd., Keystone Heights, Florida
Wednesday, January 8, 2024 at 3:00 pm

ANYONE WISHING TO ADDRESS THE CITY COUNCIL REGARDING ANY TOPIC ON THIS EVENING'S AGENDA IS REQUESTED TO COMPLETE A CARD AND RETURN TO THE CITY MANAGER. SPEAKERS ARE RESPECTFULLY REQUIRED TO LIMIT THEIR COMMENTS TO THREE (3) MINUTES.
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Call to Order: 3:00 pm

Invocation led by: Councilman T. Brown

Pledge of Allegiance led by: Mayor Rodenroth

Roll Call: City Clerk - Present: Mayor Rodenroth, Vice Mayor Thompson, Councilman. Brown, Councilman Lewandowski, Councilman Hart on his way to meeting.

1. Public Comments- No public comment

Staff presentations by Council: City coins were given to staff. Councilman Lewandowski gave the history of the coin presented.

Public works: Mr. Adam Wolf, Mr. Joe Johnson, Mr. Kevin Hall, Mr. Matt Cole, Mr. Garrett Kocks, Mr. Kenny Hall.

Inside Staff: Ms. Krysten Boland, Miss Janie Lloyd, City Clerk Ms. Stephanie Silva and Attorney Mr. Richard Komando.

Photos taken proceeded.

2. Presentations:

- i. Keystone Heights Smart City Master plan. Ms. Rutkowski described what the Smart City Master plan is, and how it would assist Keystone Heights. Plus, Ms. Rutkowski wanted it noted that it has been no cost to the city so far. The North Florida TPO funded the Smart City plan for Keystone Heights.

Ms. Erin Rothman, managing director of Manzana and past CEO of Storm Sensor Inc. Presented a slide presentation. Ms. Rothman wanted council to know that this is just a plan, and it has not been finalized, not prioritized, or been through public approval or approval from council.

Mayor Rodenroth requested from Ms. Rothman a cost comparison. Councilman Lewandowski asked who paid for this plan to be done, what was the cost, and what portion of the contract's monies were used.

- ii. Parks Plan presented by Ms. Erin Rothman, with a slide presentation. This is separate from Smart City Master plan.

- iii. SR 21/Highway 100 study presented by Phill Shad. A slide presentation was presented.
Also, a written report was given to the council for review.

3. Events

Lake Region Kiwanis Club Easter Sunrise Service in the park. Councilman Brown made the motion for the Lake Region Kiwanis to have their sunrise service in the park. Seconded by Vice Mayor Thompson. Passed: 5:0

Pavilion Rental 1/20/2024 Application for a Birthday party. Councilman Brown made a motion to accept the rental application. Seconded by Vice Mayor Thompson. Passed: 5:0

4. Consent Agenda

- a. Minutes:
 - i. November 8, 2023, Special Council Meeting
 - ii. November 20, 2023, Council Meeting
 - iii. November 28, 2023, Special Council Meeting

Note: Councilman Lewandowski stated changes to the minutes due to clerical errors. Please refer to the video for the changes requested to the above stated minutes.

- b. Financials
- c. Payables October 2023
- d. City Clerk Contract
- e. Bank Authorized Letters

Vote to accept the minutes with changes that Councilman Lewandowski stated.
Passed: 5:0

5. **Appointments** – County Manager Ms. Rutkowski stated there are no appointments.

6. City Business

- a. No Parking on ROW Request – Commercial Drive, Mr. Nick Tanetti of Brooklyn Boys has requested “no parking” signs. Mr. Tanetti described the concerns and issues that he has to the council coming out of his parking lot at Brooklyn Boys. Discussion followed by council. Motion made by Councilman Hart to request the “no parking” signs, seconded by Vice Mayor Thompson. Passed: 5:0.
- b. Road Improvements Bid Evaluation; Deshawn Fox, Divisional Manager of DRMP

The project deadline for bids was December 28, 2023. Mr. Fox put together a summary of the bid evaluations and was given to the council. Two companies bid on the project of four roadways that needed repair. The project would include Beam Lane, Beasley Lane, Citrus Avenue, and Naha Street. The companies that presented the bid were John C. Hipp Construction Company and CGC. Mr. Fox gave the description of the company's bid package for both companies. The CGC's bid was \$609,208 for the project. John C. Hipp Construction's bid was \$201,248 for the project. Discussion among the council followed.

Mr. Hall contacted John C. Hipp Construction to ask for the documents that were not in their bid package. The documents that were requested were then sent to Mr. Hall.

Motion made by Councilman Hart to accept the lower bid for the Road Improvement project that was given by John C. Hipp Construction. Seconded by Councilman Lewandowski.

Council discussion followed.

Motion passed 5:0.

- c. February Council Workshop Date(s) Mayor Rodenroth/Lewandowski. Items for discussion that Mayor Rodenroth and Councilman Lewandowski would like to have discussed at workshops are the Vandalism Challenges the city has, cost of fixing the vandalism, the Keystone Heights website, and social media response. Mayor Rodenroth would like to do a four-hour workshop. The workshop is slated for February 28, 2024, from 8:00 am to 12:00 pm.
- d. Clay Day, January 17 and 18, 2024.

7. New Business

- a. Fourth of July – Councilman Brown would like to volunteer to assist with the Fourth of July events and fireworks. The council approved unanimously for Councilman Brown to assist in the July 4th events. Mayor Rodenroth would like to increase the pre-centennial events for this year.

8. Committee Reports/Recommendations

- a. Budget & Finance- Mayor Rodenroth/Councilman Hart - No report
- b. Growth Management – Councilman Hart – No report
- c. Keystone Heights Airport Authority – Chairman Kirkland stated the Fuel master

self-serve terminal that was 100% funded by FDOT is installed and fully functional.

The lighting project is still on-going. The estimated finish date for that project is January 19, 2024. Craig Coon, Airport Manager, and Chairman Kirkland will attend and meet with legislators in Tallahassee for Rural County Days on January 24th and 25th to ask for support for the 3.5-million-dollar appropriations request. Bradford County will lease the Davis building, a government surplus warehouse, to MHD Rockland. This warehouse will store airplane parts. On December 5, 2023, the airport members hosted Councilman Lewandowski and his students for a visit.

d. Planning and Zoning – no reports

e. Keystone Heights Heritage Commission - Deidre Murphy/Kerry Collins. Ms. Murphy stated there was no meeting last month. The Heritage Commission to host the Christmas tour of homes in December 2024 with the Landmark homes in the city. The appreciation luncheon that the Heritage Commission had was a success. The round table that was active in the past but stopped during Covid will start up again.

9. Council Comments

Councilman Lewandowski will not be able to attend the next meeting.

Councilman Brown said he heard great comments about the Appreciation luncheon that the Heritage Commission had last month. Also, with social media being so negative, Councilman Brown has closed his Facebook. Councilman Brown wanted to thank Lynn Rutkowski for her service over the years.

The Council also reflected on how much that Lynn Rutkowski has given to the city and their appreciation over the many years she has served.

Vice Mayor Thompson was happy to see all the people that attended the meeting tonight.

The mayor listed the events she attended in the past month.

10. City Manager and City Attorney Reports

City Manager Rutkowski discussed the road project of the Intersection 21 and 100.

There is an opportunity to purchase a lot of land from the property owner of the Old China Chef. Discussion from council followed and Chairman Brown suggested it to be on the Council's February meeting agenda.

Mike Bell an attendee of the meeting, approached the council with a public comment. His concerns were the access easement and parking arrangement with the Gifts and Guns store.

City Manager Rutkowski announced the following events.

Clay Day event and registrations, the City Clerk will confirm.

The state of the County is Wednesday, February 21, 2024.

City Manager Rutkowski stated that the Public Works is updating the Stop Light list. Also, they will be evaluating the sidewalk replacement. Discussion followed from council.

City Clerk will be working on the Tourism Night.

Two of the council seats will be opening, Councilman Hart and Councilman Lewandowski.

Qualifying for those seats will be from noon January 29, 2024, until noon of February 2, 2024. Ballot election will be April 9, 2024.

The car charger at the Basketball court is now working.

Attorney Komando spoke about Ms. Rutkowski's time at Keystone. Plus, all that she has accomplished for the City of Keystone. She will be missed.

Meeting Adjourned: 6:04 pm

MINUTES
KEYSTONE HEIGHTS CITY COUNCIL
Monday, February 5, 2024, 6:00 p.m.

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“Please turn off cell phones”

Invocation led by: City Manager Charlie Van Zant

Pledge of Allegiance led by: City Manager Charlie Van Zant

Roll Call: City Clerk Stephanie Silva: Mayor Rodenroth, Vice Mayor Thompson, Councilman Hart, Councilman Brown, absent Councilman Lewandowski

Public Comments: Mayor Rodenroth announced the new City Manager, Mr. Charlie Van Zant. City Manager Van Zant then proceeded to take the Oath of Office that was read by Mayor Rodenroth. Pictures followed.

Mayor Rodenroth presented Ms. Brook of the Keystone Women’s Club with a Women’s Club Proclamation. (in audible, parties away from the microphone) Pictures followed.

Evan Stanley, a resident of Keystone Heights, approached the council with discussion on the past topic of the age discretion at the city parks. He feels there needs to be a written ordinance and not a discretionary decision. He was thankful for the Master Plan and the Parks plan that was given at the last meeting. He had some ideas he would like to have considered regarding those plans. Mr. Stanley gave examples of ideas that would also bring the older kids to the parks.

Mayor Rodenroth thanked Mr. Stanley for his comments and suggested he come to the workshop, on February 28, 2024, where these topics may be discussed. Also, suggested he may like to get involved with a Task force.

1. Consent Agenda

- a. Financial November 2023**
- b. Payables November 2023**
- c. City Manager Contract**
- d. Airport Board Resignation**
- e. Lake Region Kiwiais Road Closure Request for July 4th , 2024.**

Motion was made by Councilman Brown to accept the Consent Agenda, seconded by Councilman Hart. Passed 4:0

2. City Business / Action Items

- a. Acquisition plan for the corner property located on 125 E. Walker Drive, Keystone Heights, Florida. Mayor Rodenroth and Councilman Lewandowski.**

Manager Van Zant asked for direction from the council on purchasing the property.

Mr. Hart made a motion to open the discussion on purchasing the property at 125 Walker Drive, Keystone. Seconded by Councilman Hart Passed 4:0

Mr. Patel, the owner of the corner property that the city wants to acquire, approached the council. Mr. Patel stated he is open to receiving bids on his property. The property was purchased by Mr. Patel two years ago for \$240,000. The property has been vacant Parking is owned by the Ace Hardware.

The council stated that if the city can acquire the property, the city would like to use it as a turn lane for the intersection.

Mr. Patel would like to have the same amount he paid for it, \$240,000.

Councilman Hart asked Mr. Patel if there had been any contaminants on the property and if he had a Phase 1 or Phase 2 inspection ever done. Mr. Patel said he had not but would be open to having a Phase 1 inspection done. Councilman Hart request that Phase 1 be done on the property. That cost could be split by the city.

Questions were asked by Councilman Brown to Mr. Patel and the listing agent, Tom Germano. Mr. Tom Germano provided the comps for the property. Councilman Brown said he would like the city to purchase this property for a turn lane. There will also be demolition costs to the city per Attorney Komando. Mr. Brown concluded with, he would like to see the city buy it.

Motion made by Councilman Hart to authorize the city manager to negotiate a purchase and sale agreement subject to the results of the due diligence and a phase 1 inspection. Seconded by Vice Mayor Thompson. Passed 4:0

b. 2024 Scheduled City-Wide Events – Mayor Rodenroth

Councilman Hart made the request, that the Community Band have the pavilion for rehearsals and 4 concerts for this year on Thursday evenings. Manager Van Zant said they will come up with a calendar for the year.

c. City Engineer Discussion – Councilman Brown

Hold off until the next meeting.

d. Florida League of Cities – February 24, 2024

Will be held at the Armory in Starke, Florida, City Clerk Silva has sent in the RSVPs.

e. Women’s Club Proclamation – Mayor Rodenroth (done earlier in the meeting)

3. Old Business

a. July 4th Discussion – Councilman Brown.

The parade's theme will be the Sound of Freedom, supporting Camp Blanding. City Clerk Silva had discussed the performance by Paul Wayne, Duval County Line Band. He has performed at past Jaguar games. Mr. Wayne will be attending the March or April council meeting to introduce himself.

4. Committee Reports / Recommendations

a. Budget & Finance – Mayor Rodenroth/Councilman Brown

Councilman Brown said that they will need to schedule a meeting with staff.

b. Growth Management – Councilman Hart

No business.

c. Keystone Heights Airport Authority – Airport Manager / Mr. Coon

The lighting project for the runway is finished.

Military operations will be done this week during the day and night you may hear C130s. Burned grass at the airport.

Councilman Brown asked if they had gone to Tallahassee, and if they had heard anything regarding the work of the two turn lanes on 100. Mr. Coon said they did speak with Rep. Brandon and Payne about it.

d. Planning & Zoning – City Manager

Meeting, February 12, 2024

e. Heritage Commission – Deidre Murphy / Kerry Collins

They called earlier – no reports.

5. Council Comments

Councilman Hart acknowledged a candidate that was in the audience who is approved by the county for the council seat.

Vice Mayor Thompson asked about who the council should go to for questions, what is the chain of command to follow.

Attorney Komando said if there is an issue with notice, agendas, minutes, records code enforcement, planning and zoning go to the City Clerk. Go to the City Manager with questions regarding growth management, budget finance, airport, etc. Non-discretionary items contact city clerk.

Councilman Brown said his very good friends almost lost their son this past week, he is now doing better, and its due to all the prayers that were said for him.

Mayor Rodenroth attended Clay Day in Tallahassee. She spoke with Sheriff Cook who is helping with some of the data regarding vandalism in the area. Mayor Rodenroth will get a rundown of what the cost has been for the vandalism at the park. She will work on this at the workshop and share it with the community. She went to the Garden Club and presented them with a proclamation, 4-H kids planted a maple tree.

Mayor Rodenroth also participated in the Clay County tourism video. Attended the Sheriffs County meeting.

She would like to have the community be patient with the council, there is a lot of things going on and changes.

6. City Manager – Charlie Van Zant

Discussed a live ballot or a mail in ballot for the upcoming election, April 9, 2024. Motion by councilman Hart would prefer to do the election by mail in ballot versus an in-person election and that to be at the City Manager's discretion. Seconded by Vice-Mayor Thompson Vote: 4:0

The City Manager said he would contact the Supervisor of Elections and discuss this with him.

The City Manager asked that the meetings be published in the first week of the month. Therefore, items need to be submitted by the council before that. If there are changes to the agenda it can be amended prior.

Mayor Rodenroth wanted to remind everyone of the Workshop, February 28, 2024, 8:00am to noon.

7. City Attorney Report – Richard Komando

Welcome the new manager, Charlie Van Zant.

Meeting Adjourned



City of Keystone Heights

555 South Lawrence Blvd Keystone Heights, Florida 32656 352.473.4807

Off 352.473.5101 Fax

Heritage Commission Minutes February

20, 2024

10:00 AM



1. **Call to Order:** 10:01 am by Chair Christine Arnold

- a. **Roll Call** – All present. Chair Christine Arnold, Co-Chair Deidre Murphy, Co-Chair Kerry Collins, Helen Hersey and Karen Nagel
Clerk Stephanie Silva
- b. **Pledge of Allegiance** led by Chair Christine Arnold

2. **Approval of Meeting Minutes**

- a. Approval of minutes from January 16, 2024

The minutes are not ready for review per Clerk Silva but will be emailed to the Commission as soon as they are available.

Clerk Silva spoke to the Commission about the upcoming Workshop on February 28th from 8:00 am – 12:00 pm.

3. **Old Business**

- a. Review of the paddleboard event
 - i. Co-Chair Collins asked who would like to take the lead on this event and Karen Nagel volunteered. The event itself was discussed and advised Karen Nagel to reach out to Melrose who does a very successful paddleboard event.
- b. Historic oak designation
 - i. Co-Chair Collins stated she read through the Clay County Preservation Board website about how to have a tree designated as historic. This requires either an evaluation by a certified Arborist or an Urban Forester as part of the application. After an online search Co-Chair Collins was able to locate an Arborist in the Melrose/Keystone Heights area and made contact with Arborist Robert Ramos. He has agreed to determine the age of the oak tree for a fee of one hundred dollars. Mr. Ramos will do a visual inspection rather than drill into the tree.

Co-Chair Murphy moved to hire Robert Ramos, an arborist, to get the information necessary to complete the application for the Historic Oak designation for a fee of one hundred dollars. If Robert Ramos is unable to provide this service the Commission would hire another arborist. This motion was seconded by Karen Nagel. **The motion carried 5-0.**

PUBLIC COMMENT: Gregory Gay spoke to the Commission about attempting to locate Mr. Bob Burns who is responsible for obtaining the Moon Tree planted near the City Hall.

- c. Plaque presentation for Fort 11 and the City of Keystone Heights
 - i. Co-Chair Murphy state the Clay County Preservation Board has Fort 11 back on their agenda and I would suggest we form a sub-committee to iron out the framework of what the two-sided plaque will look like for Keystone Heights. This can be fast tracked so it could be ready for the Centennial. The process does take around ten months so we would have to move quickly to have the plaque designated by 2025. Chair Arnold agreed to be on the subcommittee. Co-Chair

Murphy stated that Clay County has seven different plaques in que and she would like to get the City of Keystone Height's plaque pushed forward.

Clerk Silva asked that the subcommittee send a list of possible dates for meeting room or Pavilion so availability for meetings can be determined.

- d. Ordering of Centennial flags for 2025
 - i. Chair Arnold spoke about the Centennial flags and how they are ordered through the City of Keystone Heights.
 - ii. Co-Chair Murphy stated there is a brochure for Centennial flags and requested that staff locate the brochure or vendor for this purpose.
 - iii. Co-Chair Collins stated that the logo had for Friends of Keystone Heights who is going to be in partnership with the Heritage Commission as far as organizing the processes and events for the Centennial.
- e. Mother's Day tour of homes planning for Saturday, May 11, 2024
 - i. Co-Chair Murphy stated that she believes the Mother's Day tour event should not take place because the Commission is doing a larger tour of home later in the year. She met with the Garden Club of the Lakes and they agreed they would take on this event for the interior tour of the homes as the Garden Club is able to sell tickets for the event. The Garden Club would like to use any funds for scholarships for the local High School.

The tickets for the walkable house tour would need to be numbered. A date, time and location still need to be decided. This will be a December 21st, 2024 event. Marked on the ticket will be the following: restrooms will be at the Pavilion, no children under 10 years old, walking tour- transportation not provided. On the back: the route, list of homes and numbered as to order to visit.

Tickets could be sold at businesses in town starting in October as well as running ads about this event.

There was a milestone meeting in Clay County to coordinate all the County's historic milestones. The major discussion during this meeting was Centennial celebrations. Clay County suggested that Keystone Height's Heritage Commission share their Tour of Homes information with them and they could develop a QR code for the pamphlets that would connect to helpful information such as the Heritage Commission Facebook and the City of Keystone Heights webpage.

Co-Chair Murphy stated that the Commission need to pick six homes for the walking tour in December and the Commission needs to have tickets on hold. Each of the homes being used will need "do not enter" signs for areas that the Public would not be permitted to enter. The pavilion also need a sign stating: no children over 10, no smoking, no pets, no strollers/wagons, no food/drink, note that restrooms are located at the pavilion and state last entry of homes will be at 3:15 pm.

Samantha Kusters from Clay County has requested that the Heritage Commission to send all the verbage for the tour of homes and she will get that information out to every webpage in Clay County.
 - ii. Co-Chair Collins asked about the time frame for the event and Co-Chair Murphy stated the event should begin at 10 am and end by 3 pm.
 - iii. Clerk Silva stated that the Pavilion will be reserved for use on December 21st, 2024 for the Heritage Commission.
 - iv. Co-Chair Collins discussed accessibility to the homes and that it should be stated in the pavilion that all homes may not be ADA compliant due to the historic nature of the homes.
- f. Workshop for educational field trip planning on April 16, 2024
 - i. Co-Chair Collins stated that the field trip is set for April 19th, 2024 and there is a meeting for the Commission on April 16th, 2024 where they will complete a dry run of the event. How many volunteers will be needed to assist with the stations for this event and can some of the Associate Members who volunteered last year be contacted? Co-Chair Collins stated it would be

nice to invite the entire City Council to participate in this event as well as the City Manager and City Clerk.

- ii. Clerk Silva stated she would reach out to the City Council to secure this date so they can participate in this event.
 - iii. Chair Arnold asked if there are any original Keystone brochures available and if these could be found.
 - iv. Co-Chair Collins stated she would ask for volunteers on TeamReach, send out a detailed email about each station for the event and will discuss rotation. A list of items that will need to be ordered for this event will be sent to staff.
 - v. Co-Chair Collins stated that there is not enough money to pay for Officers for this event but they will be able to get parent volunteers.
- g. Update on historical information tools:
- i. Large trifold brochures
 - 1. Chair Arnold spoke about the brochure and thanked Clerk Silva for updating it. She stated the large tri-fold will need to be updated as well. Chair Arnold stated she would reach out to Mr. Steve to see where he got the large tri-fold.
 - ii. Membership cards and application
 - 1. Chair Arnold discussed membership cards with a QR code.
 - iii. Update on walking tour app and Facebook page
 - 1. Chair Arnold stated she now has control over the Facebook page and she has been updating all the photos from her personal collection in a chronological order. There are 250 followers currently.
- h. Christmas tour of homes planning for Saturday, December 21, 2024
- i. Co-Chair Murphy stated after the Heritage Commission completes the descriptions of the homes for the walking tour, which the information can be sent to Clay County to be digitized for ease of access and future use.

4. New Business

- a. Discussion on amphitheater
 - i. Chair Arnold discussed that City of Keystone Heights was a Chautauqua City and there was a Chautauqua complex on Chautauqua Way. There is Chautauqua Circle by the Women's Club that was an amphitheater that worked in conjunction with the Chautauqua annex where the Woman Club now resides. Perhaps we could suggest this be a new City park. The property is not worth much so perhaps the CRA could be of help with funding for this.
 - ii. Karen Nagel said this has lots of potential and many potential future uses. It would be nice to rededicate this property.
 - iii. Co-Chair Collins stated she believes this is a great idea and of importance to the City of Keystone Heights.

5. Reports

- a. Museum proposal
 - i. Co-Chair Murphy asked that this be addressed later in the year.
- b. Yesterday's festival report from Karen Nagel
 - i. Karen Nagel discussed the event and how successful it was. She spoke about obtaining a list of individuals who are willing to donate artifacts to the Heritage Commission. She stated the tri-fold possible have the Heritage Commission's Facebook page information on it.

6. Announcements

- a. Clerk Silva stated that the Workshop on the 28th will also be discussing updating the City of Keystone Heights webpage.
- b. Co-Chair Collins asked Clerk Silva if a list of the local residents could be provided.

7. Public Comments

- a. None

8. Future Meetings

- Next meeting scheduled for March 19, 2024, at Keystone Heights City Hall

Meeting Adjourned 11:17 am.



City of Keystone Heights

555 South Lawrence Blvd
Keystone Heights, Florida 32656
352.473.4807 Off 352.473.5101 Fax



PLANNING AND ZONING BOARD MINUTES

CITY OF KEYSTONE HEIGHTS

Monday, February 26, 2024 at 5:00 PM

Please silence any cellular phones and other electric devices

CALL TO ORDER – Chair John Zeiser call the meeting to order at 5:47 pm.

Elston “Speedy” Kussler resigned from the Planning and Zoning Board due to his acceptance of City Council Seat 5.

ROLL CALL – Present: Chair John Zeiser, Ryan Knight, George Ivey and Dylan Bennett

Public Comment – this portion of the agenda is designed to allow citizens an opportunity to bring matters to the attention of the Board. It is not reasonable to expect that the Board will engage in debate or deliberation about matters on which the Board has received no prior information as part of the agenda.

No public comments.

I. Items for Consideration:

1. Use by Exception; Variance – Vince McLeod
 - a. Vince McLeod spoke to the Planning and Zoning Board about his application for a variance and why he is requesting it.

Board Member George Ivey moved to approve the variance application for the McLeod property. The motion was seconded by Ryan Knight. **The motion carried 4-0.**

2. Use by Exception; Zoning – George Restea
 - a. Clerk Silva discussed George Restea’s use by exception of zoning and explained that Staff approves the application.

Board Member Ryan Knight moved to approve the variance application for the McLeod property. The motion was seconded by George Ivey. **The motion carried 4-0.**

II. Board Member Comments

None

Meeting Adjourned at 5:48 pm



City of Keystone Heights

555 South Lawrence Blvd
Keystone Heights, Florida 32656
352.473.4807 Off 352.473.5101 Fax



NOTICE:

APPEAL PROCESS - ANY PERSON DESIRING TO APPEAL ANY DECISION MADE BY THE BOARD WITH RESPECT TO ANY MATTER CONSIDERED AT THIS MEETING WILL NEED A RECORD OF THE PROCEEDINGS FOR SUCH PURPOSE SAID PERSON MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE, WHICH INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED. SEE SECTION 286.0105, FLORIDA STATUTES.

ANYONE WISHING TO ADDRESS THE BOARD REGARDING ANY TOPIC ON THIS AGENDA IS REQUESTED TO COMPLETE A CARD AND RETURN TO THE CITY MANAGER. SPEAKERS ARE RESPECTFULLY REQUESTED TO LIMIT THEIR COMMENTS TO THREE (3) MINUTES.

PLEDGE OF CIVILITY

WE WILL BE RESPECTFUL OF ONE ANOTHER EVEN WHEN WE DISAGREE.
WE WILL DIRECT ALL COMMENTS TO THE ISSUES.
WE WILL AVOID PERSONAL ATTACKS.

**City of Keystone Heights
City Council Workshop
Wednesday, February 28, 2024, at 8:00 am to 12:00pm
City Council Room
555 S. Lawrence Blvd., Keystone Heights, FL**

Please note due to the lack of microphones for the audience, there are times where it is inaudible.

Invocation: City Manager Charlie Van Zant

Pledge: City Manager Charlie Van Zant

Roll Call – City Manager Stephanie Silva; Mayor Rodenroth, Vice Mayor Thompson, Councilman Hart, Councilman Brown, Councilman Lewandowski. Staff; City Manager; Charlie Van Zant, City Clerk Stephanie Silva

Introductions were made by the people in the audience. (no microphone)

Public Comments: - Jorge Figueredo, resident; gave his opinion on the changes to the website. He would like to see the residents to be more informed. Possibly, send out information via U.S. mail. He discussed a possible grant which Congressman Bean has spoken about. Mr. Figueredo wanted to see where those funds from the grant would be dispersed too. He would like to see more decisions put out to the community in a referendum style.

Kerry Collins, resident; Discussed the social media issue. Ms. Collins was happy with the work done so far on the website since it will further transparency in the community. She voiced her opinion with the Park Master Plan. She is a long time resident and wants to see everyone advocate for the unique city Keystone Heights is.

Topics of Discussion:

1. **Social Media:** Mayor Rodenroth presented a slide presentation to the people who attended the Workshop. She presented the ideas that she received from the Florida Municipal Communications Association regarding all aspects of social media. The Mayor paid for the \$100.00 membership fee for the FMCA. She would like to see a point person from City Hall that will handle the issues with social media.

Discussion followed from the attendees of the workshop.

2. **COKH Website Renovations:** Mayor Rodenroth and counsel addressed their concerns with the Website, future changes. The Mayor would also like to see changes to the digital sign in front of town hall and how that may assist members in the community on what is going on.

Discussion followed from attendees of the workshop.

- 3. Pavilion/Park Task Project** – Mayor Rodenroth said that she is gathering information and waiting for her data, that this will be moved to next month. Mayor Rodenroth and council members discussed the past vandalism.

Discussion followed from attendees of the workshop.

- 4. COKH Parks Mater Plan** – Mayor Rodenroth / Councilman Lewandowski.
The council is in the very beginning with this plan. Erin Rothman, Manager Director of Manzana, attended the workshop and presented the slide show of the Parks Plan that she presented to the council at a January council meeting.

Break for workshop for council and attendees.

Erin Rothman, Manager Director of Manzana. Discussed the plan and was asked questions by council and attendees. Erin said that the plan would cost approximately from two million to eight million dollars. Councilman Brown said that due to the cost we will need to get a grant writer to get funds for the project.

Next month's workshop will be dedicated to budgeting on the project.

- 5. Discussion on City owned Property** – Councilman Brown
Properties that the city owns that are not in use. Councilman Brown brought up about discussing selling the two properties owned. One of the properties being 500 West Magnolia and the property of the public works building. Discussion followed.
- 6. Corner of Highway 100 & SR 21** – Mayor Rodenroth
City Manager Van Zant said that the Purchase and Sale Agreement has been finished for that property. The purchase price is \$240,000. Closing costs will be split between parties. It will be ready for the March 4, 2024, counsel meeting to view. Discussion followed. A Phase one inspection which is to determine that there is no petroleum contamination in the property, will cost \$2,300.
- 7. City Hall Meeting Room** – Mayor Rodenroth
Slide presentation. Mayor's goal would be to get more people to come to the meeting room. The Mayor would like to make the room comfortable and visually stimulating for the audience. Her suggestion would be to clear the room and make it more inviting. Paint, update the lighting, etc. The Mayor showed an estimate on the project on her slide presentation, approximately \$1,600 up to \$2,000. Discussion followed.
- 8. Strategic Plan** – Councilman Lewandowski
Slide presentation for a strategic plan and/or a comprehensive plan. He used the example of Clay County's plans. Suggested that Keystone Heights should create a plan. Councilman Lewandowski discussed the Smart Cities Plan and gave ideas on how to proceed. The council discussed the plan and workshop attendees also had discussion regarding the strategic plan.

9. Christmas Market – Councilman Lewandowski

Presented a slide presentation of vendors, entertainment, during the weekends. He suggested buying kiosks and the vendors rent them from the city. This would create a holiday atmosphere and the vendors would be able to sell their wares. Slide presentation showed how the kiosks were put up and torn down, prices of the kiosks. Councilman Lewandowski's idea was to set up a few the weekend of the parade, December 14, 2024. Discussion among the attendees and council followed.

10. General Improvements – Councilman Lewandowski

He was happy to hear about the Strategic long-term calendars, more workshops. Councilman Lewandowski would like to bring back performance reports for city manager and clerk. He also would like to see price breaks for Keystone Heights residents as a benefit.

11. CRA funds Discussion – Councilman Lewandowski

Purchase the China Chef with the CRA funds. Discussion will be discussed further at the council meeting.

Meeting Adjourned

MINUTES
KEYSTONE HEIGHTS CITY COUNCIL
Monday March 4, 2024, at 6:00 p.m.

ANYONE WISHING TO ADDRESS THE CITY COUNCIL REGARDING ANY TOPIC ON THIS EVENING'S AGENDA IS REQUESTED TO COMPLETE A CARD AND RETURN TO THE CITY MANAGER. SPEAKERS ARE RESPECTFULLY REQUIRED TO LIMIT THEIR COMMENTS TO THREE (3) MINUTES.
THE CITY COUNCIL PROHIBITS THE USE OF CELL PHONES AND PAGERS WHICH EMIT AN AUDIBLE SOUND DURING ALL MEETINGS WITH THE EXCEPTION OF LAW ENFORCEMENT

“Please turn off cell phones.”

Invocation led by: “Speedy”

Pledge of Allegiance led by: “Speedy”

Roll Call: City Clerk Stephanie Silva: Mayor Rodenroth, Vice Mayor Thompson, Councilman Brown, Counselman Lewandowski, absent Councilman Hart.

Public Comments:

Sue Plaster, resident, The Women’s Club has a party day one afternoon a week, she would like it to be at the Pavilion. She would like to have the time from 1:00 to 4:00 pm.

Natalia Figueredo, resident, Natalia thanks the mayor and council for the changes that have happened recently. She would like to preserve what Keystone has now. Ms. Figueredo does not want to see some of the changes that were discussed in the Parks Plan.

Dr. John Zisser, resident, discussed the Parks Plan and contributed his ideas.

1. Consent Agenda:

- a. Freedom 5K Run Event – July 4th, 2024.
- b. Charter Amendment for the Keystone Airport Authority
- c. Minutes
12/20/23 Special Council Meeting – City Manager Application Review
01/18/24 Heritage Council Meeting
- d. Close Beach Property on 4/18/24 from 5 to 8 pm

Motion by Councilman Brown to accept the Consent Agenda with the changes, seconded by Vice Mayor Thompson. Passed 4:0

2. City Business/New Business:

Attorney Komando stated that the Charter Amendment for the Airport Authority Ordinance 2023-605 that pertains to removing the National Guard seat and adding a city seat needs to be shortened in title to fifteen words. This will allow it to be on the general election ballot. Open to public comment. It was noted that the National Guard requested this to be done. Councilman Brown made a motion to read the amended Ordinance 2023-605 by title, seconded by Vice Mayor Thompson. Attorney Komando read the amended ordinance 2023-605. Councilman Brown made a motion to accept the Amended Ordinance 2023-605 and seconded by Vice Mayor Thompson. Passed: 4:0

a. Airport Board Appointments – City Manager Van Zant

- i & ii Manager Van Zant asked that the appointments be tabled to the April Council meeting, due to questions on the term limits for Seat 1 and Seat 3.
- iii. Parks Ordinance – Councilman Lewandowski
Councilman Lewandowski asked that this be tabled. Mayor Rodenroth will be accessing the information that she has received and would like to present it at April's meeting.
- iv. Parks Plan – Councilman Lewandowski
Councilman Lewandowski asked that this be tabled.
- v. Strategic Plan- Councilman Lewandowski (slide presentation)
Manager Van Zant spoke with Dr. Saviac, that has done strategic plans in the past, and would like him to speak with the council. Councilman Brown asked this to be tabled until we can get dates that Dr. Saviac can speak to the council.
- vi. Christmas Market – Councilman Lewandowski (slide presentation) Councilman Lewandowski would like to have the council purchase a few of the kiosks for \$10,000 to \$15,000.
Mayor Rodenroth did some research and found there are also portable metal kiosks that may be a consideration. Motion was made by Councilman Lewandowski to buy two metal kiosks and 2 German style wood kiosks to try them for future events. 2nd by Councilman Brown.
Discussion followed.
Previous Motion by Councilman Lewandowski was withdrawn.
The 2nd by Councilman Brown was withdrawn.
The topic will be brought up at the April council meeting.

b. Purchase of 125 E. Walker Drive – City Manager

Councilman Brown asked about the CRA district having to approve this
Motion made by Councilman Brown to purchase the 125 E. Walker Drive. 2nd by Vice Mayor Thompson, Passed: 4:0

Manager Van Zant discussed the additional costs of purchasing the property.

Councilman Brown amended his motion to purchase the property with the purchase price agreed upon including the closing costs. Passed: 4:0

c. Ordinance for Parcel #190823-002260-000-00

Councilman Lewandowski asked a question regarding the parcel number on the survey. After discussion, staff and legal counsel offered to investigate this further.

3. Old Business

- a. July 4th Discussion – Councilman Brown
Councilman met with the Manager and staff. He asked about the Sheriff's department and would there be off duty officers there. Manager Van Zant noted they have been requested.

4. Committee Reports/ Recommendations
 - a. Budget & Finance – Mayor Rodenroth/Councilman Brown, No Report.
 - b. Growth Management – Councilman Hart, Mayor stated No Report.
5. Keystone Heights Airport Authority – Mr. Kirkland

Discussed future Projects. Mr. Kirkland and Mr. Coon met with FAA and FDOT to discuss annual projects. The airport is hosting the Snowbird Aerobatic contest March 19-22. Representative from the Florida State Guard regarding presence at Keystone Airport. The airport will be hosting a dignified transfer mission. Working on the term seats with the City Manager.

 - a. Planning and Zoning – Manager Van Zant
Next meeting is March 25, 2024, at 6pm
 - b. Heritage Commission – Ms. Christine Arnold
The field trip is the next event coming up for the Heritage Commission. Ms. Arnold discussed the Designation of the Oak tree. The recently opened Facebook page for the Heritage Commission has had new information and pictures of interest. An Archaeologist who collaborates with Clay County is willing to help find evidence of whether there was a fort in the area.
 - c. Financial reports – Manager Van Zant
There were some discrepancies, and the Manager will get them ready for April.

6. Council Comments

Councilman Brown stated that the last workshop brought out a lot of great information. Councilman Brown went to a fire station dedication. The trail has been torn up with four-wheelers and would like to have that resolved.

Councilman Lewandowski went to the State of Clay, Councilman Lewandowski congratulated the mayor for her presence.

Vice Mayor Thompson went to local events this past weekend that were free and was happy to see the turnout.

Manager Van Zant spoke about the Hipp contract. The project is moving forward. Councilman Lewandowski discussed administrative changes to the contract.

Attorney Komando said that there should be two parcel numbers before the advertisement of approval for the property.

Mayor Rodenroth attended the Florida League of Cities in Starke. The mayor attended the State of the County meeting held by the Chamber of Commerce. The mayor read the speech that she gave at the State of County meeting to the council and attendees. Date of the next workshop is in April. (no specific date mentioned).

Meeting Adjourned.



City of Keystone Heights
 555 South Lawrence Blvd
 Keystone Heights, Florida 32656
 352.473.4807 Office 352.473.5101 Fax



Special Event Application

EVENT PROPERTY

Property Address: 565 S Lawrence Blvd, Keystone Heights, FL Phone: (352) 473 4807
 Tax Parcel # _____ Zoning _____ Land Use: _____

APPLICANT INFORMATION

Applicant: LifeSouth Address: 1221 NW 13th St. Gainesville, FL 32601
 Phone: (352) 334 1000 Email: Bmarellano@lifesouth.org

PROPERTY OWNER INFORMATION

Property Owner: _____ Phone: (____) _____ - _____
 Address: _____ City _____
 State: _____ Zip Code: _____ Phone: (____) _____ - _____
 Email: _____

TYPE OF REQUEST

Not to Exceed 3 Days: Special Event (city property) Seasonal Sales
 Other Blood Drive
 Event Dates 07/4 to -- Event Times 3:00pm to 9:00pm

Description of event or items to be sold:
Blood drive -Recruiting potential blood donors to meet the needs of North Florida's Hospitals
 It would help immensley if we had the parking spaces roped off at the beach before the celebration begins that day.
Enough parking spaces to fit the Bloodmobile. Thank you!



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 555 South Lawrence Blvd
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REQUIRED INFORMATION

The following items must accompany your application at the time of submittal. No applications will be reviewed without these attachments.

- General description of request including purpose of event, types of proposed activities, and anticipated attendance
- Insurance Coverage: Evidence by a Certificate of Insurance naming the City of Keystone Heights as additional insured and must provide a Hold Harmless Agreement.

OR

- Notarized permission from property owner
- Security/Crowd Control: Plans to include a detailed description of where the attendees will be located security measures, security personnel, etc. A copy of the notification of event to the Clay Sheriff Department must be included and must have verification or receipt by the sheriff department.
- Fire Department Notification Letter: A letter must be attached notifying the local fire department of the event and must verify receipt of the letter by the local fire department.
- Conceptual Site Plan (to scale) including property boundaries, access to the site, location of tents or other temporary structures, location of proposed activities, **parking**, signs (in compliance with Article XIX of the LDR), temporary lighting, utilities, generators and other mechanical
- Sanitation and Public Health: Plans for sanitation and public health protection including temporary bathroom facilities, inspection of food facilities, drainage, and garbage and litter control. A minimum of three (3) dumpsters must be provided unless otherwise stated by City Council. (Proof of compliance with ADA standards must accompany this application)
- Set-up and Take-down: Plans outlining times of set-up and take-down of all event related structures; signage, barricades, tents, vendors, dumpsters/trash receptacles, port-a-potties etc.
- Road Closures: Application for State road closures or map and description of city road closure
- Meeting set up with City Manager to review event. **DATE** _____

Must comply with LFC 101 (life Safety Code); NFPA 1 (National Fire Protection Association); existing ordinances; County Permitting

Signature of Applicant Brandon Arellano Date 03/13/2024

Internal Revenue Service
District Director

Department of the Treasury

P. O. Box 2508
Cincinnati, OH 45201

Date:

APR 09 1998

Lifesouth Community Blood Centers, Inc.
1221 NW 13th Street
Gainesville, FL 32601-4111

Person to Contact:

Dottie Downing

Telephone Number:

513-241-5199

Fax Number:

513-684-5936

Federal Identification Number:

59-1545914

Dear Sir or Madam:

This letter is in response to your Articles of Amendment filed May 6, 1997, Changing your name.

Our records indicate that a determination letter issued in February 1975 granted your organization exemption from federal income tax under section 501(c)(3) of the Internal Revenue Code. That letter is still in effect.

Based on information subsequently submitted, we classified your organization as one that is not a private foundation within the meaning of section 509(a) of the Code because it is an organization described in section 509(a)(2).

This classification was based on the assumption that your organization's operations would continue as stated in the application. If your organization's sources of support, or its character, method of operations, or purposes have changed, please let us know so we can consider the effect of the change on the exempt status and foundation status of your organization.

Your organization is required to file Form 990, Return of Organization Exempt from Income Tax, only if its gross receipts each year are normally more than \$25,000. If a return is required, it must be filed by the 15th day of the fifth month after the end of the organization's annual accounting period. The law imposes a penalty of \$20 a day, up to a maximum of \$10,000, when a return is filed late, unless there is reasonable cause for the delay.

All exempt organizations (unless specifically excluded) are liable for taxes under the Federal Insurance Contributions Act (social security taxes) on remuneration of \$100 or more paid to each employee during a calendar year. Your organization is not liable for the tax imposed under the Federal Unemployment Tax Act (FUTA).

Organizations that are not private foundations are not subject to the excise taxes under Chapter 42 of the Code. However, these organizations are not automatically exempt from other federal excise taxes.

Lifesouth Community Blood Centers, Inc.
59-1545914

Donors may deduct contributions to your organization as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to your organization or for its use are deductible for federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106, and 2522 of the Code.

Your organization is not required to file federal income tax returns unless it is subject to the tax on unrelated business income under section 511 of the Code. If your organization is subject to this tax, it must file an income tax return on the Form 990-T, Exempt Organization Business Income Tax Return. In this letter, we are not determining whether any of your organization's present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

Because this letter could help resolve any questions about your organization's exempt status and foundation status, you should keep it with the organization's permanent records.

Please direct any questions to the person identified in the letterhead above.

This letter affirms your organization's exempt status.

Sincerely,

A handwritten signature in cursive script, appearing to read "C. Ashley Bullard".

C. Ashley Bullard
District Director

Water and Sewer Utility Feasibility Study

DRAFT



Prepared for:

Keystone Heights Airport Authority
7150 Airport Road
Starke, FL 32091

Prepared by:

AECOM

7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462

March 2024

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Dated January 3, 2007 61

Executive Summary

To support planned development at the Keystone Heights Airport (the Airport), AECOM prepared this study to evaluate providing potable water, sanitary sewer, and fire protection systems at the Airport along with offsite improvements required to connect to the local utility, Clay County Utility Authority (CCUA), located in Keystone Heights. Fire protection will remain a separate private onsite system. Refer to **Figure 2-2, Existing Airport Layout Plan**, on **Page 11** of this Study.

The planned development includes new hangars and offices in the existing aviation services area on the Eastside, a new multi-structure facility on the Westside for the current tenant MHD Rockland, and a new commercial and light-industrial development on the Westside (the Westside Development). Potential local development was also evaluated for impact on the CCUA utility treatment and conveyance capacity. Refer to **Figure 3-1, Planned Airport Development**, on **Page 13** of this Study.

Potable Water

The existing CCUA potable water system treatment plants have sufficient capacity for the future Airport needs (117 gpm peak future potable water demand) along with projected local development demands. The existing 12-inch CCUA water main that terminates at the Keystone Heights RV Resort, approximately 1.9 miles south of the Airport, will be extended approximately 12,000 lf along SR 100 to serve the Airport and potential future development along the route. Refer to **Figure 4-4, Proposed Potable Water and Wastewater Piping from Keystone Heights to KHA Layout**, on **Page 24** of this Study.

The existing potable water system of individual wells at most buildings will be replaced by an internal potable water distribution system with two 6-inch potable water mains, one serving the Eastside and one serving the Westside, each connected to the extended offsite CCUA 12-inch water main. An onsite 4-inch water main will connect the Eastside and Westside 6-inch water mains. The system will consist of approximately 14,800 lf of 6-inch and 4-inch water mains. Refer to **Figure 4-5, Conceptual Potable Water Layout** on **Page 25** of this Study.

The results of a preliminary hydraulic analysis indicate that adequate system pressures will be maintained in the 12-inch CCUA water main extension and the Airport water mains for periods of peak Airport demands and during a fire flow condition of 1,000 gpm along the 12-inch CCUA main extension. However, due to highly varying elevations across Parcels E and F in the Westside, in-line booster pumps stations may be required depending on the future development plans.

Sanitary Sewer

While the existing CCUA Keystone Heights Wastewater Treatment Plant (WWTP) has adequate capacity for the future peak Airport wastewater generation of 100 gpd, the additional local development will exceed the WWTP capacity. Anticipating this increase, CCUA engineering staff is proposing funding for the analysis and design of an expansion of the WWTP in the 2023/2024 Fiscal Year. The existing 6-inch CCUA force main that terminates at the Keystone Heights RV Resort will be extended to serve the Airport and potential future development along the route. Significant development beyond what is anticipated could exceed the capacity of the existing 6-inch Force main.

The existing Airport septic systems will be abandoned and decommissioned, replaced by a sanitary collection system that will discharge to the CCUA 6-inch force main at the Airport entrances. On the Eastside, the onsite system will include approximately 4,500 lf of gravity main, for collection from the existing and proposed buildings, that will discharge into a new Airport Master Pump Station (MPS) #1 from which approximately 3,900 lf of 4-inch force main will discharge to the existing 6-inch CCUA force main at the main Airport entrance from SR 100. On the Westside, the FIRM, MHD Rockland Facility, and Parcels E and F will utilize private lift stations that will discharge to a 4-inch force main that runs approximately 3,800 lf from the FIRM to the new Airport MPS #2. Wastewater from Parcels A, B, C and D will be routed via approximately 1,000 lf of gravity sewer main to Airport MPS #2. Approximately 800 lf of 4-inch force main will convey the Westside wastewater flows from the new Airport MPS #2 to the existing 6-inch CCUA force main at the Westside Airport entrance from SR 100. The Airport will own and maintain the new sanitary system with the possible exception of the private lift stations. Refer to **Figure 4-8, Conceptual Wastewater Layout** on **Page 35** of this Study.

Fire Protection

The proposed fire protection system will provide required protection to existing and future development at the Airport. Based on talks with CCUA and the low potable water demands (117 gpm peak future demands) compared to high fire protection requirements (up to 6,000 gpm and 109 psi) typical of an industrial area, the fire protection system will remain separate from the potable water system, supplied by private onsite wells, and operated by the Airport.

Two fire protection systems are proposed, one for the Eastside and one for the Westside. Refer to **Figure 4-9, Conceptual Fire Protection Layout** on **Page 48** of this Study. An optional interconnect between the two systems can be provided, consisting of 2,240 lf of 12-inch fire main, 1,004 lf of which would be a horizontal directional drill (HDD) under the proposed Runway 5/23 extension.

1. Eastside. A lower pressure system is proposed for the Eastside since there are no structures requiring interior fire suppression systems. The system will provide fire flows of 2,250 gpm at 20 psi to the existing and proposed development, and consists of the following components:
 - a. A new upsized 8-inch well with a new 6-inch, minimum 562-gpm submersible pump
 - b. Total storage volume of 270,000 gal by combining the existing 185,000-gal tank with an additional 85,000-gal tank (assuming the existing tank is in reusable condition)
 - c. A new pumping system with 2 new diesel fire pumps (2,250 gpm at 40 psi), an electric jockey pump, and a prefabricated metal building enclosure.
 - d. Replacement of the existing 8-inch fire piping system with approximately 4,400 lf of 12-inch piping with hydrants and stub outs for possible future connections to the Hunt Club and Camp Crystal Lake.
2. Westside. A separate system that provides fire flows and interior fire suppression requirements for the MHD Rockland facility and the adjacent Westside Development consisting of the following components. The MHD Rockland facility will require an independent fire protection system and is anticipated to be constructed before the Westside Development, therefore, it is proposed that this system be shared or transferred to the Airport to also serve the adjacent Westside Development
 - a. A new 8-inch well with a new 6-inch, minimum 625-gpm submersible pump

- b. A new 300,000-gal storage tank.
- c. A new pumping system with 3 new diesel fire pumps (capable of providing up to 6,000 gpm at 109 psi), an electric jockey pump, and an enclosure.
- d. Approximately 5,000 lf of 12-inch fire mains with hydrants

The fire protection analysis was based on assumptions about the proposed building uses for empty parcels on the Eastside and Westside. The proposed Westside system will be capable of serving a variety of tenants with moderate to high-flow and high-pressure needs, while the Eastside will remain an independent lower pressure system. Potential future tenants can be informed of the maximum capacity of the system they will use and options to meet higher requirements (i.e., in-line booster pumps, dedicated storage tanks, etc.)

Utility Alignment

Sanitary sewer and fire protection mains will be located on the same side of each Airport roadway since the fire protection water is untreated well water while the potable water mains will be located on the opposite side. On the Eastside, to maintain fire protection during utility construction, the new 12-inch fire main will be installed on the north side of Airport Road prior to the existing 8-inch fire main being removed from the south side for installation of the new 6-inch water main.

Preliminary Construction Cost Estimate

A preliminary construction cost estimate of \$17,313,500 was developed. Given the conceptual nature of the design, a 25% contingency factor was included. An engineering design and permitting fee of approximately 15% was added. The construction cost estimate should be considered as a Class 3 estimate with an expected accuracy level (-)10% to (+)30%, or \$15,600,000 to \$22,500,000. Refer to **Table 5-1, Preliminary Construction Cost Estimate** on **Page 51** of this Study.

Construction Schedule

A total of 3 years should be allotted for design, permitting, and construction of the potable water, wastewater, and fire protections systems.

1.0 Introduction

The Keystone Heights Airport (the Airport) is planning on expanding by developing portions of their property for new aviation services, as well as new commercial and light-industrial tenants. The Airport currently utilizes onsite wells and septic systems for potable water, sanitary sewer service, and fire protection.

To support this planned growth, the Keystone Heights Airport Authority (KHAA) enlisted the services of AECOM Technical Services, Inc. (AECOM) to provide a conceptual plan, associated costs, and a construction schedule for providing potable water, sanitary sewer, and fire protection to the Airport to serve existing and future development.

The overall goal will be to connect the proposed onsite potable water distribution and sanitary sewer collection systems to the Clay County Utility Authority (CCUA) systems in the City of Keystone Heights (Keystone Heights). Consequently, offsite utility improvements will be needed. In evaluating the offsite utility improvements needed to serve the Airport, consideration was given to potential private development that could occur when the CCUA systems are expanded to serve the Airport. Consequently, this Study will provide recommendations for the construction of a centralized utility system to provide potable water, sanitary sewer, and fire protection at the Airport as well as potable water and sanitary sewer service to potential private developments along SR 100 from Keystone Heights to the Airport.

Since this Study will address offsite utility needs, in addition to Airport needs, CCUA, Keystone Heights, and Bradford County have been involved in reviewing a series of technical memorandums developed through the course of this project, as well as this Feasibility Study. Consequently, this Study can be considered a regional utility study with the goal of providing utility service to the Airport as well as various municipalities surrounding the Airport. It should be noted that fire protection recommendations are also provided but only within the Airport site.

The following resources were used in developing this Feasibility Study:

1. Keystone Airpark Fire Main Extension Phase 2 Record Drawings by URS dated January 2014
2. Airport Master Plan Update by URS Corporation dated January 2016
3. Fire Protection Well - Consumptive Use Permit No. 109130 from St. Johns Water Management District dated January 3, 2007
4. Fire Protection Water Well - Construction Permit from St. Johns Water Management District dated January 10, 2007
5. Clay County Utility Authority Standard Water and Sewer System Specifications and Drawings dated 2017
6. Keystone Heights RV Resort Design Plans by Design Services dated March 19, 2020
7. Technical Memos for Facility Planning for MHD Rockland at the Airport by AECOM dated May 2020
8. Airport Layout Plan (ALP) with interim changes to FAA by AECOM dated December 2021
9. KHA (Westside) Access Road, 100 Percent Plans by CHW dated April 2023

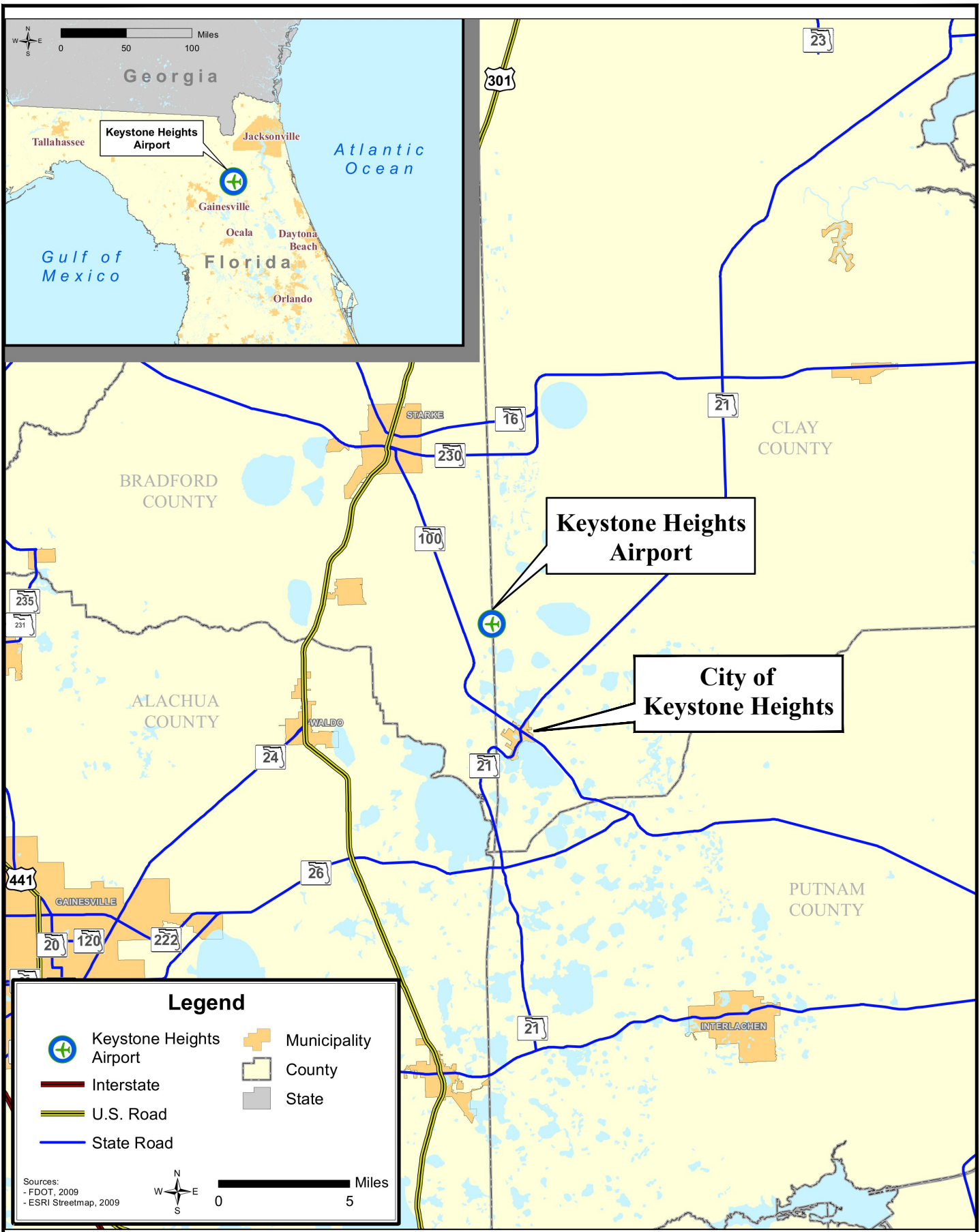
2.0 Airport Background

The Keystone Heights Airport is located in southern Clay and Bradford Counties, on the county line, approximately 4 miles north of Keystone Heights with access from SR 100. The Airport was constructed in 1942 and was a United States Air Forces airfield until 1947 when it was granted to the City of Keystone Heights. Sharing the north and east border of the Airport is the Florida National Guard's Camp Blanding. The land use around the Airport is primarily agricultural, with limited residential and some conservation. An overview of the Airport location and surrounding areas is presented in **Figure 2-1, Location Map**.

In 1991, the KHAA was created to manage and oversee the Airport. Administration of funding grants is also managed by the KHAA which is comprised of seven members who serve for three-year terms. The Keystone Heights City Council chooses the members of the Authority, upon nomination, by a majority vote. The KHAA staff operates the Airport as the Fixed Base Operator (FBO) that provides commercial services such as fuel sales, fuel distribution, aircraft parking and storage at the Airport, and the day-to-day interaction with its tenants and users.

The current Airport operations include FBO, commercial aviation maintenance, repair and support services, fueling services, aircraft storage, Airport maintenance, and Airport administration. The Airport has two runways (11/29 and 5/23) and three taxiways (A, B, and C). Landside facilities are on the southeast side of Runway 5/23 and include the FBO Office, T-hangars, corporate hangars with offices, maintenance hangars, warehouse, fuel farm, and vehicular parking areas. Support structures include two electrical vaults, a shed, maintenance building, water tank for fire protection, and fire pump building. All of these aviation facilities are located on the southeast side of the Airport which is called the Eastside. The Airport layout and structures are presented in **Figure 2-2, Existing Airport Layout Plan**.

There are several non-aviation facilities at the Airport. East of the aviation activities, the Keystone Heights Sportsmen's Club has a land lease where they offer an outdoor shooting range that is open to the public. South of the aviation area is Camp Crystal Lake whose access road is on Airport property, but the Camp's land is owned by the Alachua County School Board. The Camp provides day camps during the school year and sleep away camps during the summer. Located in the northwest quadrant of the Airport property, the Florida International Rally & Motorsports Park (FIRM) is a European-style rally school and sports facility offering rally and road racing, driver training, and security and military tactical driver training.



PLOTTED March 4, 2024 4:15 PM PLOTTED BY: SONNENBERG, TERENCE
 C:\PWORKING\USFL\DMST19056\FIG 2-1.DWG

KEYSTONE

HEIGHTS

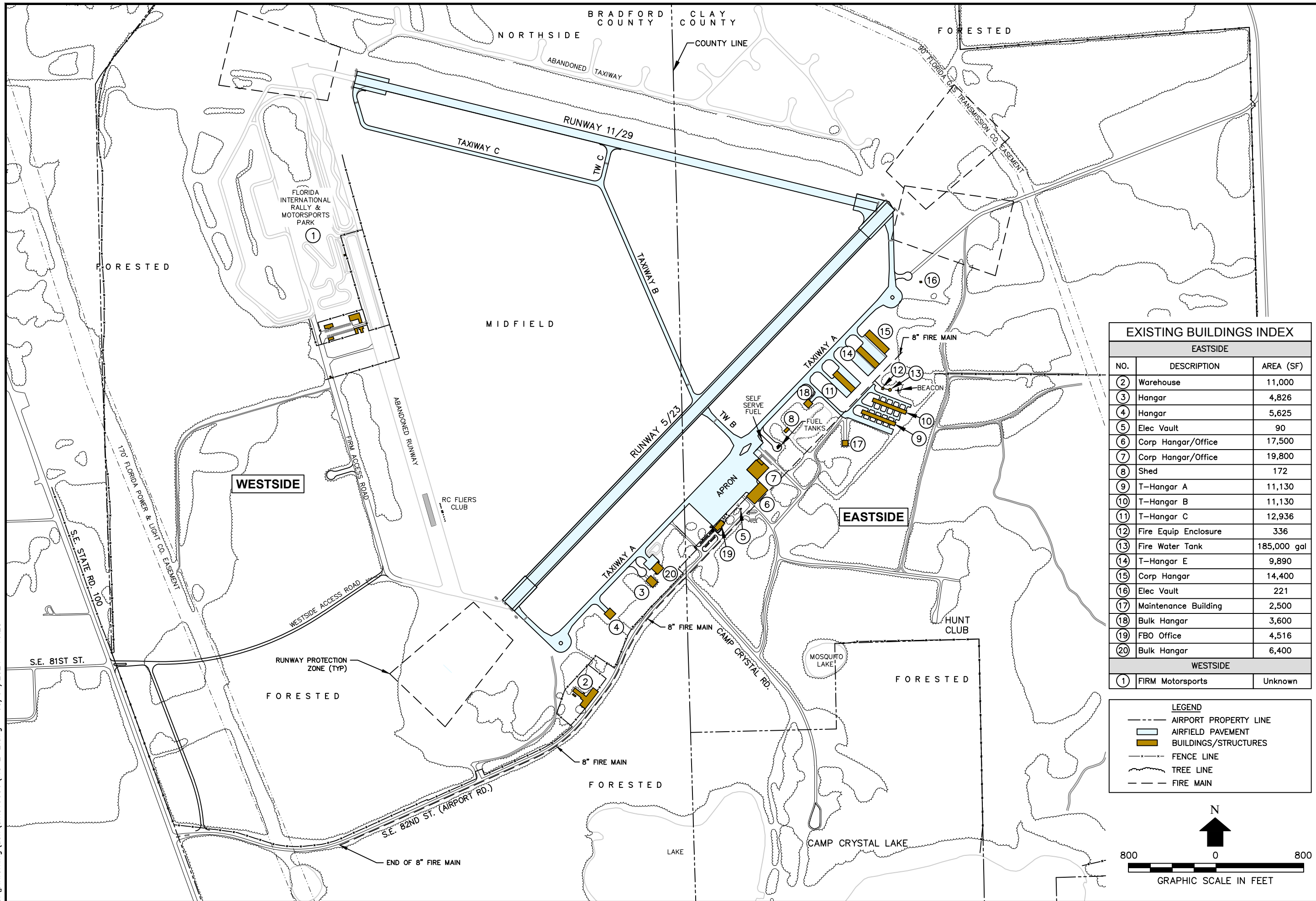
AECOM

Water and Sewer Utility Feasibility Study

LOCATION MAP

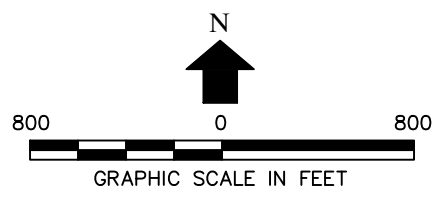
FIGURE
2-1

C:\pwworking\usfl\dms19056\FIG 2-2.dwg 03/04/2024 16:28



EXISTING BUILDINGS INDEX		
EASTSIDE		
NO.	DESCRIPTION	AREA (SF)
2	Warehouse	11,000
3	Hangar	4,826
4	Hangar	5,625
5	Elec Vault	90
6	Corp Hangar/Office	17,500
7	Corp Hangar/Office	19,800
8	Shed	172
9	T-Hangar A	11,130
10	T-Hangar B	11,130
11	T-Hangar C	12,936
12	Fire Equip Enclosure	336
13	Fire Water Tank	185,000 gal
14	T-Hangar E	9,890
15	Corp Hangar	14,400
16	Elec Vault	221
17	Maintenance Building	2,500
18	Bulk Hangar	3,600
19	FBO Office	4,516
20	Bulk Hangar	6,400
WESTSIDE		
1	FIRM Motorsports	Unknown

LEGEND	
	AIRPORT PROPERTY LINE
	AIRFIELD PAVEMENT
	BUILDINGS/STRUCTURES
	FENCE LINE
	TREE LINE
	FIRE MAIN



EXISTING AIRPORT LAYOUT PLAN

FIGURE 2-2

3.0 Planned Airport Development

The Airport has plans to increase aviation services, aviation-related industrial and commercial activities, and non-aviation commercial and industrial activities in the existing developed Eastside and the to-be-developed Westside. The runways will be extended and modified, and new taxiways are also proposed. A map of the Airport showing the planned development is presented in **Figure 3-1, Planned Airport Development**.

3.1 Eastside

Development plans for the Eastside include two new 10-unit T-hangars and five new corporate hangars, all of which will front Taxiway A. The existing fuel farm with one 10,000-gallon Avgas tank and one 12,000-gallon Jet-A tank is to be expanded by adding another 12,000-gallon Jet-A tank. It is anticipated that development of Parcels G and H will include a total of four office buildings at 12,000 sf each.

There are plans to construct a new realigned Airport entrance and internal access road from the existing Airport entrance at SR 100 to the Eastside building area. On the south end, this new route will remove the roadway from the future expanded runway protection zone (RPZ). On the north end, the existing road will continue to be operable for accessing existing and new Airport buildings on the airside while the new road will provide access to Parcels G and H.

The Camp Blanding Joint Training Center (CBJTC) has an Airfield Strategic Initiative that includes future activities at the property they lease at the Airport (northeast of the t-hangars). Previously, there were plans to expand training on the site leased from the Airport and to add additional facilities, however, this expansion is no longer planned and is not included in this analysis.

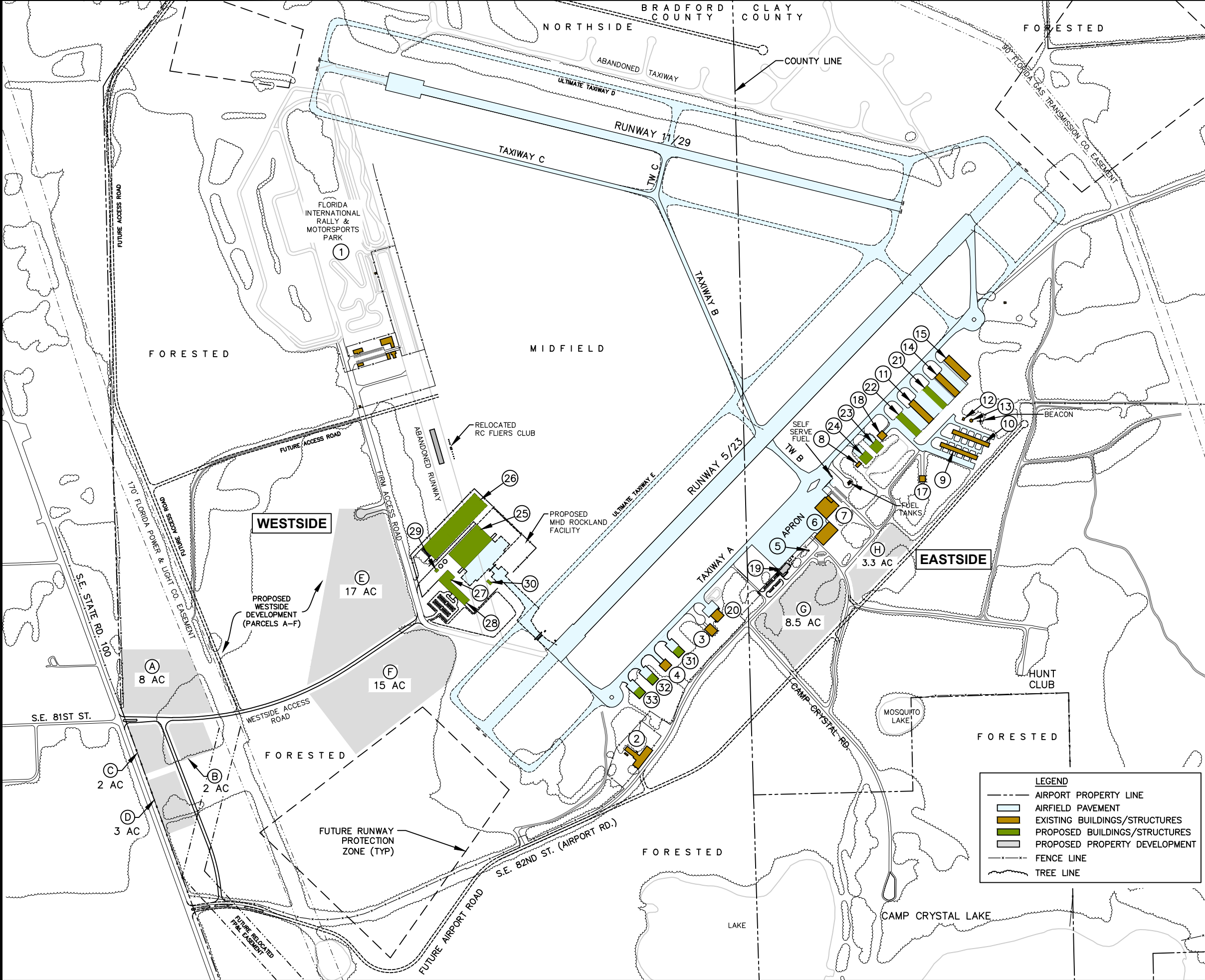
3.2 Westside

Planned development on the west side of the Airport includes a new aviation facility for the current tenant, MHD Rockland, and a commercial development referred to as the Westside Development. Bradford County recently completed construction of a new entrance and Westside Access Road directly from SR 100, through the proposed Westside Development area, that will allow access to the MHD Rockland and the new development without entering the Airport operations area (AOA).

3.2.1 MHD Rockland

MHD Rockland is a current tenant utilizing a warehouse and hangar with an office on the Eastside. They provide flight and maintenance training along with parts sales for P-3 aircraft for allied foreign countries with P-3 fleets. They have plans to expand their operations at the Airport, constructing a new complex of structures on the Westside. While the planned development for MHD Rockland is on the Westside of the Airport, it is not considered part of the Westside Development.

C:\pwworking\usfl\dms19056\FIG 3-1.dwg 03/04/2024 16:29



BUILDING INDEX		
EASTSIDE		
NO.	DESCRIPTION	AREA (SF)
EXISTING		
2	Warehouse	11,000
3	Hangar	4,826
4	Hangar	5,625
5	Elec Vault	90
6	Corp Hangar/Office	17,500
7	Corp Hangar/Office	19,800
8	Shed	172
9	T-Hangar A	11,130
10	T-Hangar B	11,130
11	T-Hangar C	12,936
12	Fire Equip Enclosure	336
13	Fire Water Tank	185,000 gal
14	T-Hangar E	9,890
15	Corp Hangar	14,400
16	Elec Vault	221
17	Maintenance Building	2,500
18	Bulk Hangar	3,600
19	FBO Office	4,516
20	Bulk Hangar	6,400
FUTURE		
21	Future T-Hangar	12,000
22	Future T-Hangar	12,000
23	Future Corp Hangar	6,400
24	Future Corp Hangar	6,400
31	Future Corp Hangar	6,400
32	Future Corp Hangar	6,400
33	Future Corp Hangar	6,400
G	Future 3 Office Bldgs	3@12,000
H	Future Office Bldgs	12,000
WESTSIDE		
EXISTING		
1	FIRM Motorsports	Unknown
FUTURE		
MHD ROCKLAND		
25	Future Hangar	54,000
26	Future Warehouse	90,000
27	Future Flight Simulator	9,500
28	Future Office Bldg	12,800
29	Future Fire Suppr Bldg	500
30	Future Wash Control Bldg	720
WESTSIDE DEVELOPMENT		
A	Future Hotel	50,000
B	Future Gas Station	2,500
C	Future Gas Station	5,900
D	Future Strip Mall	39,000
E	Future Warehouses	222,000
F	Future Warehouses	196,000

LEGEND

- AIRPORT PROPERTY LINE
- AIRFIELD PAVEMENT
- EXISTING BUILDINGS/STRUCTURES
- PROPOSED BUILDINGS/STRUCTURES
- PROPOSED PROPERTY DEVELOPMENT
- FENCE LINE
- TREE LINE

N

800 0 800

GRAPHIC SCALE IN FEET

Preliminary planning for the new MHD Rockland facilities was performed by AECOM in 2020 and included:

1. Office building with multiple offices, conference rooms, lounge, breakroom, and restrooms, suitable for 50 employees.
2. Simulator building, attached to office building, with one full-motion and one static simulator as well as classrooms, instructor offices, briefing rooms, and restrooms.
3. Aircraft hangar with space for five P-3 aircraft.
4. Warehouse (expandable from 30,000 sf to 90,000 sf in the future) for storing aircraft parts inventory for the retail side of their operations.
5. Aircraft wash facility to house 'BirdBath' equipment for drive through clear water rinse system for aircraft.
6. Fire suppression system including well with submersible pump, water storage tank, and structure containing fire pumps. This system was previously intended for only the MHD Rockland development. Decisions made based on this feasibility study could result in changes.

3.2.2 Westside Development

The Airport plans to develop parcels on the Westside for commercial and light-industrial use, however, not necessarily aviation related. Below is a listing of the parcels for development included in the current Airport Layout Plan (ALP) submitted to FAA by AECOM in December 2021, as well as a description of their anticipated uses:

1. Parcel A: 8-acre parcel, hotel (3-star, 3-story, 50,000 sf, similar to a Holiday Inn Express or Hilton Hampton Inn)
2. Parcel B: 2-acre parcel, gas station / convenience store
3. Parcel C: 2-acre parcel, gas station / convenience store
4. Parcel D: 3-acre parcel, strip mall / retail
5. Parcel E: 17-acre parcel, warehouse / light industrial
6. Parcel F: 15-acre parcel, warehouse / light industrial

4.0 Potable Water, Wastewater & Fire Protection Systems Design

The Airport is located in a rural area that does not have currently access to public potable water and sanitary sewer utilities. Consequently, the site is served by onsite potable water wells, septic systems, and a fire protection system. The buildings at the Airport that have restrooms that utilize their own individual potable well and septic systems resulting in a large number of these small onsite systems. A few clusters of buildings share systems. The Airport previously provided an inventory of these systems as shown in **Figure 4-1, Historic Well and Septic System Locations**. The existing fire protection system serves the buildings on the Eastside and consists of a well with submersible pump, storage tank, fire pumps, and fire main with hydrants as previously shown above in **Figure 2-2, Existing Airport Layout Plan on Page 11**.

The nearest municipal potable water supply and wastewater treatment facilities are located approximately 4 miles south of the Airport in Keystone Heights. This system is owned and operated by CCUA, an independent special district with no financial ties to Clay County. The closest access to the CCUA potable water distribution and sanitary sewer collection systems is approximately 1.9 miles south, along SR 100, where CCUA has extended a 12-inch potable water main and a 6-inch force main to serve the Keystone Heights RV Resort. To provide service to the Airport, it will be necessary to extend these mains along SR 100 to the Airport entrance road in addition to constructing internal piping systems within the Airport property to service existing and projected development. Based on talks with CCUA and the low potable water demands versus high fire protection requirements typical of an industrial area, the fire protection system will remain separate from the potable water system and will be supplied by private onsite wells and operated by the Airport. A map of the existing CCUA system in relation to the Airport is presented in **Figure 4-2, Available CCUA Utility Connection Points**

In this section, projected future flow rates for potable water, wastewater, and fire protection will be presented along with conceptual designs. Subsequent sections will evaluate construction costs and scheduling.

4.1 Potable Water and Wastewater Design Flow Rates

To determine the capacity required from CCUA and conceptual designs for the potable water and wastewater systems, projected potable water demands and wastewater flows for the Airport were determined based on existing and future conditions. In addition, potential development was identified along SR 100 that could be connected to the potable water and wastewater pipelines that currently exist and will be extended to serve the Airport, as well as potential large customers in the service area.

4.1.1 Airport Potable Water and Wastewater Flow Projections

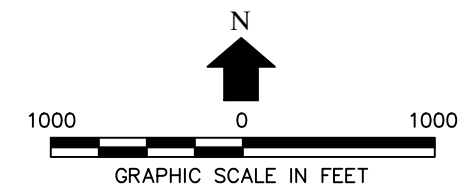
For the Airport potable water and wastewater flow projections, wastewater flow rates were established using Florida Administrative Code (FAC) 64E-6.0008, System Size Determinations. Potable water flow rates were then calculated as wastewater flow rates plus 10 percent. The proposed hangars on the Eastside, the proposed MHD Rockland Facility, and the proposed Westside Development (Parcels A through F) were classified as near-term development occurring in 1-3 years while developing Parcels G and H on the Eastside were considered future activities occurring in greater than 4 years. A summary of the flow rates is presented in **Table 4-1** below. The detailed analysis is available in **Appendix A, Airport Potable Water Demand and Wastewater Generation Flow Calculations**.



ID	General Location	Well	Septic Tank	Size / Casing Mat'l.	Lat/Lon Degrees	Status	Easting	Northing
1	Hangar A	X		4" PVC	29 deg. 50' 26.26" N / 82 deg. 02' 27.14" W	Active	2748102.969	314120.233
2	Hangar A		X		29 deg. 50' 27.16" N / 82 deg. 02' 26.63" W	Active	2748145.913	314212.097
3	Hangar C	X		4" PVC	29 deg. 50' 29.20" N / 82 deg. 02' 31.65" W	Active	2747699.468	314408.595
4	Main Fire Protection Tank for Airport Hydrants	X		8" PVC	29 deg. 50' 30.11" N / 82 deg. 02' 26.83" W	Active	2748121.876	314509.653
5	Hangar E & Corporate		X		29 deg. 50' 36.78" N / 82 deg. 02' 29.30" W	Active	2747889.871	315178.599
6	Hangar H6	X		4" PVC	29 deg. 50' 29.38" N / 82 deg. 02' 52.25" W	Active	2745818.463	312784.762
7	Hangar H6		X		29 deg. 50' 13.76" N / 82 deg. 02' 52.25" W	Active	2745919.177	312810.379
8	Express Air Lease		X		29 deg. 50' 07.79" N / 82 deg. 03' 00.58" W	Active	2745198.708	312191.457
9	The Firm	X		4" PVC	29 deg. 50' 37.31" N / 82 deg. 03' 26.11" W	Active	2742886.799	315125.610
10	The Firm		X		29 deg. 50' 37.31" N / 82 deg. 03' 24.84" W	Active	2742998.640	315126.996
11	Bulk Hangar 1 County Line Aviation	X		2" Steel	29 deg. 50' 23.61" N / 82 deg. 02' 40.10" W	Inactive	2746967.624	313827.999
12	Bulk Hangar 1 County Line Aviation		X		29 deg. 50' 24.29" N / 82 deg. 02' 40.68" W	Active	2746915.076	313895.575
13	Bulk Hangar 2 MHD Rockland	X		4" Steel	29 deg. 50' 20.71" N / 82 deg. 02' 40.10" W	Active	2746973.933	313535.113
14	Bulk Hangar 2 MHD Rockland		X		29 deg. 50' 20.75" N / 82 deg. 02' 42.55" W	Active	2746758.123	313534.506
15	Recreational Vehicle Pad	X		2" Steel	29 deg. 50' 20.98" N / 82 deg. 02' 37.44" W	Active	2747207.558	313567.427
16	Recreational Vehicle Pad		X		29 deg. 50' 21.07" N / 82 deg. 02' 38.33" W	Active	2747128.998	313574.828
17	Crystal Lake Mobile Home Pad / Down Powerline Easement	X		2" Steel	29 deg. 49' 55.90" N / 82 deg. 02' 54.90" W	Inactive	2745724.674	311001.377
18	Camp Crystal Rd. & Airport Rd. Mobile Home Pad	X		4" PVC	29 deg. 50' 12.94" N / 82 deg. 02' 47.29" W	Inactive	2746357.742	312736.750
19	Old Boy Scout Campsite area on Crystal Lake	?				Inactive		
20	Airport Road. Warehouse	X		2" Iron	29 deg. 50' 04.52" N / 82 deg. 02' 59.03" W	Active	2745342.289	311864.136
21	Airport Road. Warehouse		X		29 deg. 50' 03.64" N / 82 deg. 02' 59.46" W	Active	2745306.336	311774.447
22	Keystone Sportsmen's Club Lease	X		2" Steel	29 deg. 50' 12.73" N / 82 deg. 02' 20.92" W	Active	2748680.129	312765.589
23	Keystone Sportsmen's Club Lease		X		29 deg. 50' 12.02" N / 82 deg. 02' 20.18" W	Active	2748746.836	312695.289
24	Keystone Army Airfield Well on Sportsmen's Club Loop Rd.	X		8" Steel	29 deg. 50' 11.31" N / 82 deg. 02' 39.63" W	Inactive	2747035.766	312586.650
25	Keystone FBO		X	10" PVC	29 deg. 50' 18.79" N / 82 deg. 02' 39.63" W	Inactive	2746566.324	313332.628
26	Keystone FBO	X			29 deg. 50' 18.23" N / 82 deg. 02' 46.38" W	Inactive	2746426.422	313272.332

NOTES:

1. THESE HISTORIC WELL AND SEPTIC TANK LOCATIONS WERE PROVIDED BY THE AIRPORT.
2. CURRENT CONDITIONS AND OPERATION STATUS ARE UNKNOWN.
3. PER A PERMIT FROM THE CLAY COUNTY DEPARTMENT OF HEALTH DATED OCTOBER 2021, WELL #13 WAS ABANDONED BECAUSE IT WAS IN THE WAY OF CONSTRUCTION.





Westside Access Road

Keystone Heights Airport

Bradford Clay

Airport Road

Crystal Lake

Magnolia Lake

100

Alligator Creek

Northern Limits of CUA Water & Sewer Systems

Lake Bedford

Existing Keystone Heights RV Resort

Existing CUA 12" Water Main

Existing CUA 6" Force Main

Silver Lake

Bradford Clay

Lake Brooklyn

21

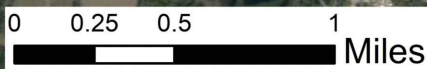
Brooklyn Bay

Keystone Golf & Country Club

Keystone Heights WWTP

Keystone Heights

100



Note: Remainder of water and sewer systems in Keystone Heights not shown

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Water and Sewer Utility Feasibility Study



AVAILABLE CUA UTILITY CONNECTION POINTS

FIGURE 4-2

Table 4-1 Keystone Heights Airport Potable Water Demand and Wastewater Generation Projected Flow Rates		
Building Type	Potable Water Demand (gpd)	Wastewater Generation (gpd)
Existing Buildings & Property Uses	14,185	12,895
Proposed Buildings (near term, 1-3 years)	26,086	21,260
Subtotal Average Flow for Near Term	40,271	34,155
Future Buildings (greater than 4 years)	1,980	1,800
Total Future Average Flow	42,251	35,955
<i>Total Future Average Flow</i>	<i>29 gpm</i>	<i>25 gpm</i>
Peaking Factor	4	4
Total Future Peak Flow	169,002	143,820
Total Future Peak Flow	117 gpm	100 gpm

Note: Refer to **Appendix A** for Airport Potable Water Demand and Wastewater Generation Flow Calculations

4.1.2 Local Potential Development Activity Potable Water and Wastewater Flow Projections

In identifying potential new customers along the pipeline route and potential large customers in the service area, discussions were held with the following:

1. Clay County Utility Authority (CCUA):
 - a. Darrell Damrow, Sr. Service Availability Engineer
2. Keystone Heights RV Resort:
 - a. Vince Esson, Owner's Representative
 - b. Ken Lloyd, Resort Manager
 - c. Ralph Henson, Engineer
3. Bradford County:
 - a. Patricia Evans, Development Authority Chair
 - b. Scott Kornegay, Lake Region Development Corporation, Executive Director
 - c. Joe Wiggins, Commercial Circle Development
4. Clay County:
 - a. Cheresse Stewart, Clay County Economic & Development Services
 - b. Laura Pavlus, Clay County Economic Development Commission

The existing Keystone Heights RV Resort currently has 400 spaces but is planning to expand to a total of 700 spaces in the near term (1 to 3 years), including adding an adjacent gas station/convenience store. An additional 300 spaces, for a total of 1,000 spaces, are planned in the future (greater than 4 years). The RV Resort connected to the existing 12-inch potable water main that terminates nearby and funded the extension of the 6-inch force main from Keystone Heights to the RV Resort.

Two residential developments are planned in Keystone Heights: Country Meadows subdivision and Commercial Circle condominiums, which are classified as near term and future, respectively. While no development is

currently planned along SR 100 between the RV Resort and the Airport, a subdivision and gas station/convenience store were added as potential future developments since there is a large residential parcel along the route that could be a prime development location. A map of these developments is presented in **Figure 4-3, Potential Development Activity**.

Potable water and wastewater flow rates were calculated for the anticipated development using a combination of historical data and standard system sizing guidelines. For single and multi-family homes, CCUA provided historical potable water demand rates from August 2021 to July 2022 of 208 gpd and 112 gpd, respectively. Wastewater flow rates were then calculated as 91% of the historical potable water rates resulting in 190 gpd for single family homes and 100 gpd for multi-family homes. For the RV Resort and gas stations, wastewater flow rates were obtained from the Florida Administrative Code (FAC) 64E-6.0008, System Size Determinations, and potable water flow rates were then calculated as wastewater flow rates plus 10 percent. The project flow rates are presented below in **Table 4-2**.

Development	Unit	Rate Water or WW (gpd/unit)	Near Term (1-3 years)			Future (>4 years) ⁽⁵⁾		
			Total # Units	Water (gpd)	WW (gpd)	Total # Units	Water (gpd)	WW (gpd)
Keystone Heights RV Resort ^(1,3)	RV Space	WW 75	700	57,750	52,500	1,000	82,500	75,000
Gas Station/ Convenience Store ⁽¹⁾	Restroom	WW 250	2	550	500	2	550	500
Country Meadows Subdivision ⁽²⁾	Single Family	Water 208	52	10,868	9,880	52	10,868	9,880
Commercial Circle Condominiums ⁽²⁾	Condo	Water 112	-	-	-	469	51,590	46,900
Anticipated Subdivision ^(2,4)	Single Family	Water 208	-	-	-	80	16,720	15,200
Anticipated Gas Station/ Convenience Store ^(1,4)	Restroom	WW 75	-			2	550	500
Total Average Flow:				69,168	62,880		162,778	147,980

- (1) Wastewater flow rate is for average day and is from Florida Administrative Code (FAC) 64E-6.0008, System Size Determinations. Potable water demand is average day based on wastewater generation plus 10%
- (2) Potable water demand is based on historical data from CCUA. Wastewater flow rate is calculated as 91% of potable water demand
- (3) The Keystone Heights RV Resort currently has 400 spaces. Plans are in place to expand to a total of 700 and 1,000 spaces in the near-term and future, respectively
- (4) There are no current plans for these projects, however, they are being included to account for potential future development
- (5) Future values are cumulative and include Near Term rates



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KEYSTONE  HEIGHTS
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POTENTIAL DEVELOPMENT ACTIVITY

FIGURE 4-3

4.2 Potable Water System Design

4.2.1 Existing Potable Water System

Due to the rural nature of the area, many homes and business utilize private wells for their potable water. In Keystone Heights, there is a potable water system serving the downtown business district and along SR 100 as well as residential customers. The potable water system grid includes multiple small water treatment plants (WTPs) utilizing wells located around the City. The current Consumptive Use Permit for the service area, issued by the Florida Department of Environmental Protection (FDEP), allows 0.667 MGD to be withdrawn from the Lower Floridian Aquifer and 0.17 MGD from the Upper Floridian Aquifer, for a total allowable withdrawal of 0.837 mgd.

Below is a summary of the CUA WTPs serving Keystone Heights. Two of the WTPs are not in use or are slated to be taken out of use as CUA consolidates their resources.

1. Postmaster Village WTP (Wells #1 and #2) – Meets approximately 90 percent of the community demand. Two of the four wells are in use. Located southeast of the City.
2. Peach Street WTP (Well #3) - Helps meet peak system demands.
3. Geneva Lake Estates WTP - Helps meet peak system demands. Located southeast of the City.
4. Keystone Club Estates WTP – Will be shut down in approximately 4 years. Located downtown.
5. Keystone Heights WTP – Currently not pumping. Located downtown.

Table 4-3 lists some examples of the WTP delivery rates for the Keystone Heights potable water system.

Table 4-3		
Keystone Heights Potable Water Grid WTP Production		
Treatment Facility	Average Flow Rate (mgd)	
	August 2021	April 2022
Postmaster Village WTP	0.458	0.444
Peach Street WTP	0.004	0.006
Geneva Lake Estates WTP	0.037	0.040
Keystone Club Estates WTP	0	0
Keystone Heights WTP	0	0
Total	0.499	0.490

In **Table 4-4**, the capacity of the Keystone Heights potable water system is evaluated for near term and future conditions considering the projected demands from the Airport and potential development. In evaluating the available potable water system capacity, the demands for the Keystone Heights RV Resort were broken out of the existing potable water demand so that their expansion plans could be considered as part of the potential development rates. In August 2021, the Keystone Heights RV Resort had 192 spaces. Assuming that only half the spaces were occupied, since August is off-season, results in a potable water demand of 7,920 gpd at the RV Resort with the remaining 491,080 gpd of potable water being used by other commercial and residential

customers. In considering future potable water demand, this rate for other existing commercial and residential customers is increased by 10% to 540,188 gpd to account for possible growth. (The demand for the total RV spaces for near term and future were accounted for above in **Table 4-2.**)

Table 4-4 Keystone Heights Potable Water System Capacity		
Potable Water Customer	Near Term (1-3 yrs) Water Demand (gpd)	Future (>4 yrs)⁽⁴⁾ Water Demand (gpd)
Existing Commercial & Residential Customers ⁽¹⁾	491,080	540,188
Keystone Heights Airport ⁽²⁾	40,271	42,251
Potential Development ⁽³⁾	69,168	162,778
Total Average Potable Water Demand	600,519	745,217
Remaining Potable Water System Capacity	236,481	91,783
Remaining Potable Water System Capacity	28%	11%

- (1) Existing commercial and residential customers excludes the Keystone Heights RV Resort which is included in Potential Development due to various expansion plans. Demand is increased by 10% for future conditions
- (2) Refer to **Table 4-1** for Airport projected demands
- (3) Refer to **Table 4-2** for potential development projected demands
- (4) Future values are cumulative and include Near Term rates

The existing potable water wells for Keystone Heights are permitted for withdrawals up to 837,000 gpd. For near term and future conditions, the remaining well capacity after serving existing customers is 345,920 gpd and 296,812 gpd, respectively, which is more than adequate to meet the projected Airport demands of 40,271 gpd and 42,251 gpd, respectively. Based on the information provided by the stakeholders discussed previously and the assumed future subdivision development on SR 100, the additional potential developments in the area would reduce the reserve capacity to approximately 91,783 gpd, or 11% of the permitted rate. It appears that there is adequate capacity in the system for these future projects, however, if additional development were to occur, CCUA may want to consider expanding their system.

The closest connection for the Airport to the Keystone Heights potable water system is a 12-inch water main that runs northwest on SR 100, terminating at SE CR 21b (also called SE 8th Avenue), approximately 1.9 miles south of the Airport. The water main serves the Keystone Heights RV Resort located at the termination point. The existing 12-inch water main location was previously presented in **Figure 4-2, Available CCUA Utility Connection Points** on **Page 17.**

4.2.2 Proposed Potable Water System

4.2.2.1 Proposed Offsite Potable Water Main

With a projected peak hourly flow rate at the Airport of 117 gpm, a 6-inch potable water line extension from Keystone Heights RV Resort would be adequate to meet the projected peak future potable water demands. However, it would leave little capacity for future growth along the pipeline. Therefore, AECOM assumes that CCUA would prefer to extend the 12-inch water main approximately 1.9 miles to the Airport. Two 6-inch connection points to the Airport are proposed; one at each access road to the site. A stub out is provided for possible future extension of the water main along SR 100, north of the Airport. The proposed offsite water main

location along with major potential developments located along the route is presented in **Figure 4-4, Proposed Potable Water and Wastewater Piping from Keystone Heights to KHA.**

4.2.2.2 Proposed Onsite Potable Water System

The proposed onsite potable water system is presented in **Figure 4-5, Conceptual Potable Water Layout**, and includes two 6-inch water distribution mains supplying the Eastside and Westside at the Airport, each connecting to the proposed 12-inch main extension on SR 100 from the CCUA system. A 4-inch connection line between the mains on Airport Road and the recently constructed Westside Access Road is provided to interconnect the Eastside and Westside potable water systems and serve Parcel D. The onsite potable water system will consist of approximately 14,800 lf of 6-inch and 4-inch water mains. A blow off is located at the end of the Eastside and Westside piping systems for system maintenance.

When this study began, CCUA indicated that they prefer individual parcel meters. However, based on their comments in December 2023, master meters are now provided at both 6-inch water mains fed from the CCUA 12-inch main on SR 100. The Airport can choose to meter all, some, or none of their tenants on a case-by-case basis. Also, when this study began, it was anticipated that the piping systems located in the major roadways within the Airport would become CCUA assets while proposed piping located in developed parcels would be maintained by the Airport. However, December 2023 comments from CCUA indicate a preference for the Airport to own and maintain the new onsite systems. As this decision does not impact the preliminary design or construction costs, it can be further discussed and finalized when design occurs.

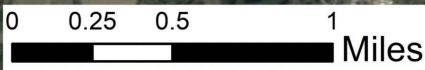
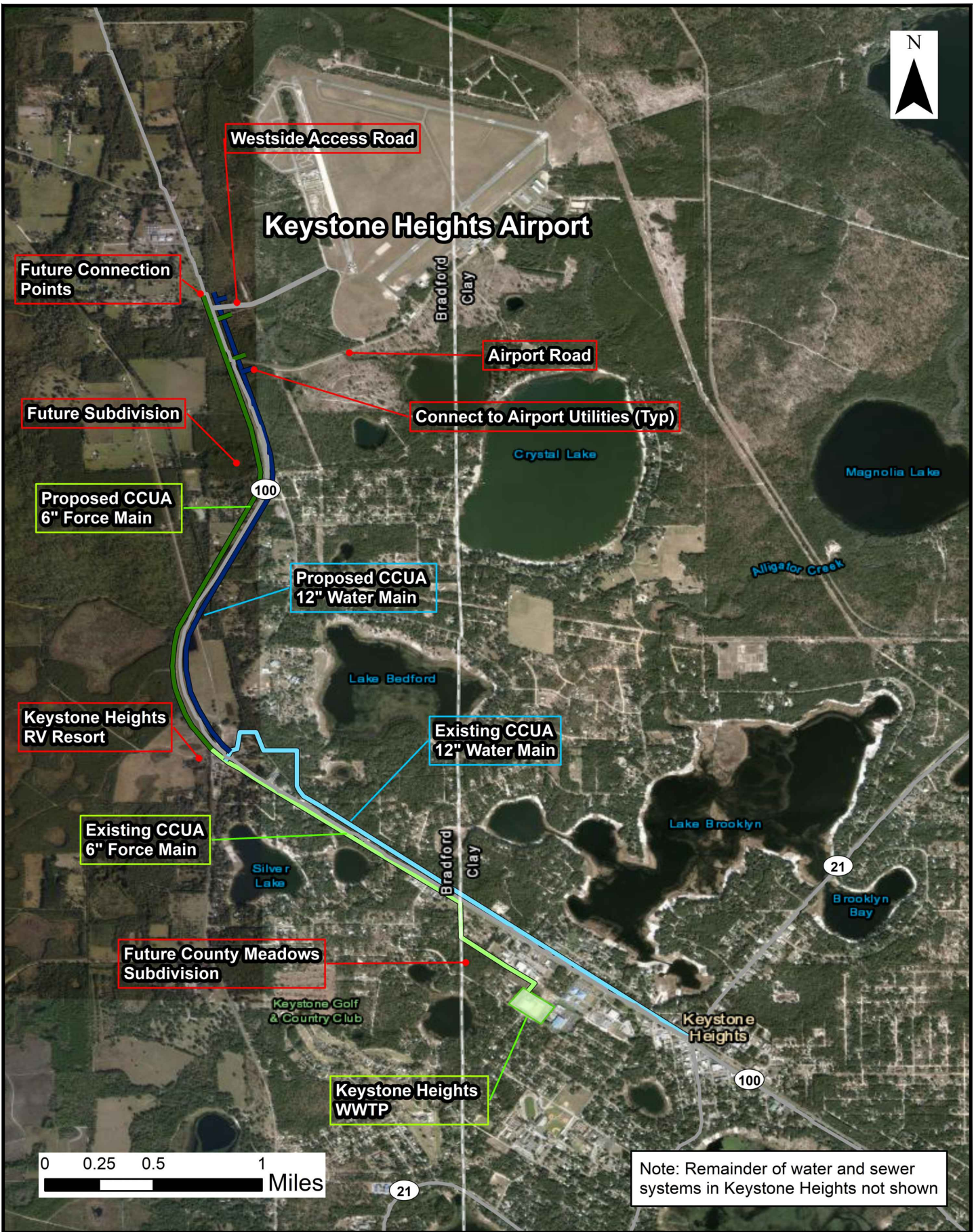
On the Eastside, in addition to serving existing buildings with water fixtures and future buildings, connections will be provided for future development of Parcels G and H and stub outs for future possible connections for the Hunt Club and Camp Crystal Lake.

On the Westside, connections will be provided for future development of Parcels A through F and potable water will be supplied to the proposed MHD Rockland Facility and the existing FIRM. The proposed water main size is reduced from 6-inch to 4-inch to serve the FIRM.

The existing potable water wells that will no longer be in use can remain, possibly for a future non-potable use such as irrigation. Any of the wells in the way of construction can be abandoned per Clay County Department of Health guidelines and pursuant to obtaining a permit.

4.2.2.3 Proposed Potable Water System Conceptual Hydraulics

Potable water supplied to the project site will be provided by CCUA via a 12-inch water main that will be extended 1.9 miles along SR 100 from the Keystone Heights RV Resort to the main Airport entrance and Westside entrance. The proposed development within the Airport will be served by two 6-inch water lines; one along Airport Road for the Eastside and the other along the Westside Access Road (which reduces to 4-inches on the FIRM Access Road). Since onsite fire protection will be provided by a separate system, system pressures within the Airport will only be impacted by line losses associated with projected demands and elevation changes plus a 1,000 gpm fire demand in the 12-inch CCUA main on SR 100. To assist in this evaluation, CCUA performed a hydrant pressure test at the nearest existing hydrant to the Airport which is located adjacent to the Keystone Heights RV Resort (FH #3550). Static pressure was found to be 76 psi, while system pressure under a simulated 1,000 gpm fire demand was found to be 58 psi (refer to **Appendix B, CCUA Fire Hydrant Flow Test Summary dated 6/9/2022**).



Note: Remainder of water and sewer systems in Keystone Heights not shown

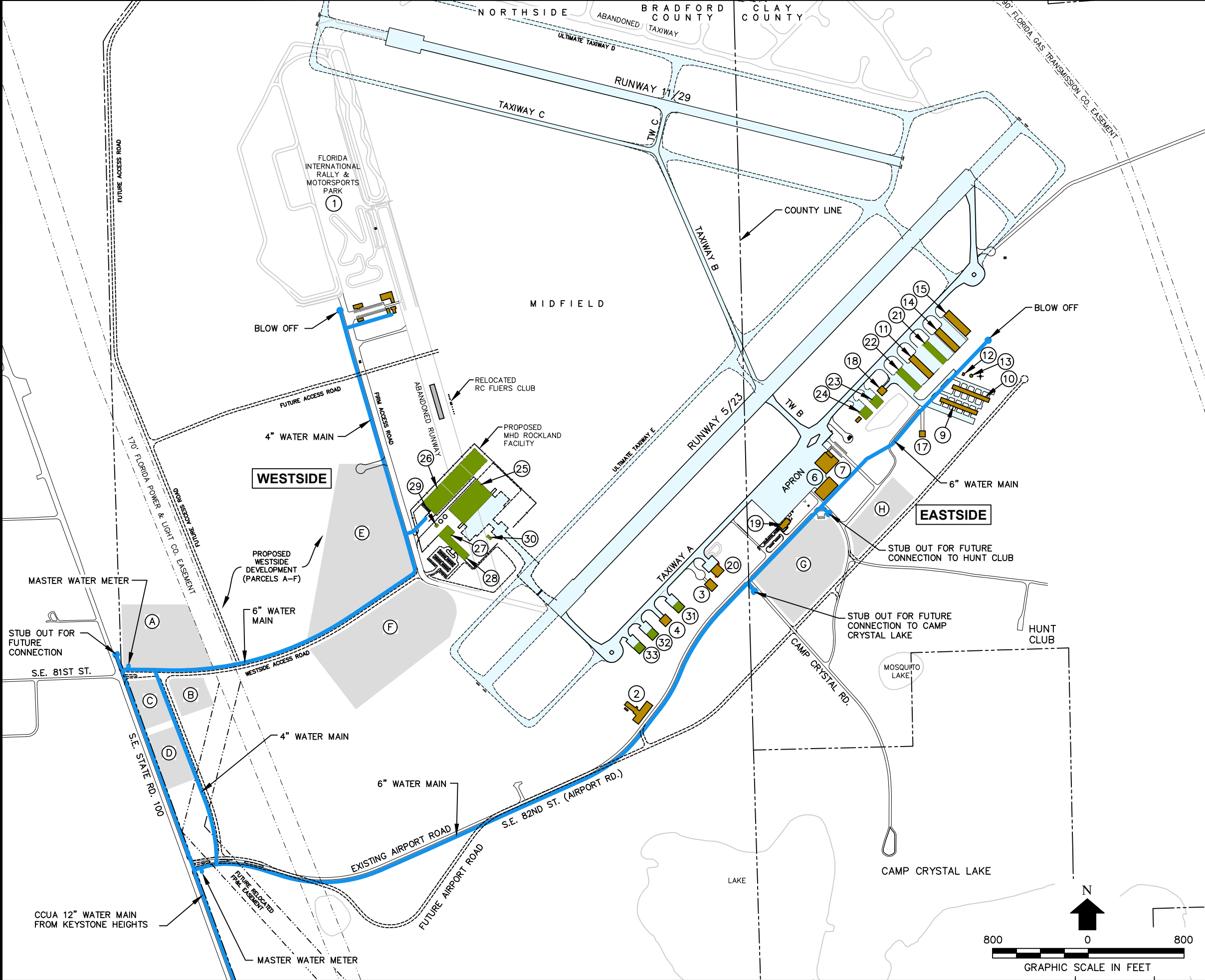
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PROPOSED POTABLE WATER AND WASTEWATER PIPING FROM KEYSTONE HEIGHTS TO KHA

FIGURE 4-4

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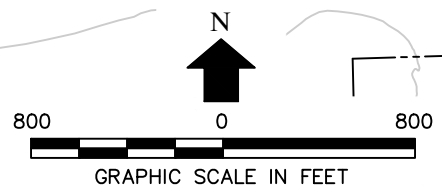
POTABLE WATER DEMANDS		
EASTSIDE		
NO.	DESCRIPTION	WATER PHF ⁽¹⁾ (gpd)
2	Warehouse ⁽²⁾	0
3	Hangar	66
4	Hangar	396
6	Corp Hangar/Office	1,100
7	Corp Hangar/Office	1,320
9	T-Hangar A	1,320
10	T-Hangar B ⁽²⁾	0
11	T-Hangar C	660
12	Fire Equip Enclosure ⁽²⁾	0
13	Fire Water Tank ⁽²⁾	0
14	T-Hangar E	660
15	Corp Hangar	660
17	Maintenance Building ⁽²⁾	0
18	Bulk Hangar ⁽²⁾	0
19	FBO Office	440
20	Bulk Hangar	66
21	Future T-Hangar	660
22	Future T-Hangar	660
23	Future Corp Hangar	132
24	Future Corp Hangar	132
31	Future Corp Hangar	132
32	Future Corp Hangar	132
33	Future Corp Hangar	132
G	Future 3 Office Bldgs	5,940
H	Future Office Bldg	1,980
	Camp Crystal Lake	30,800
	Hunt Club	16,500
EASTSIDE TOTAL WATER PHF (gpd)		63,888
EASTSIDE TOTAL WATER ADF (gpd)		15,972
WESTSIDE		
1	FIRM Motorsports	2,750
MHD ROCKLAND		
25	Future Hangar	132
26	Future Warehouse	132
27	Future Flight Simulator	990
28	Future Office Bldg	5,500
29	Future Fire Suppr Bldg ⁽²⁾	0
30	Future Wash Control Bldg	24,000
WESTSIDE DEVELOPMENT		
A	Future Hotel	44,000
B	Future Gas Station	2,200
C	Future Gas Station	2,200
D	Future Strip Mall	17,600
E	Future Warehouses	2,970
F	Future Warehouses	2,640
WESTSIDE TOTAL WATER PHF (gpd)		105,114
WESTSIDE TOTAL WATER ADF (gpd)		26,279

TABLE NOTES:
 (1) Peak hour flow factor of 4
 (2) Structure has no fixtures

LEGEND	
	NEW POTABLE WATER MAIN
	AIRPORT PROPERTY LINE
	FUTURE AIRFIELD PAVEMENT
	EXISTING BUILDINGS/STRUCTURES
	PROPOSED BUILDINGS/STRUCTURES
	PROPOSED PROPERTY DEVELOPMENT

CONCEPTUAL POTABLE WATER LAYOUT

FIGURE 4-5



System Demand Losses

Pressure losses due to system demand (i.e., pipeline friction losses) along the proposed 12-inch water main will be based on the projected peak flow rates from the Airport (117 gpm) and from anticipated development along the new pipeline (48 gpm). This results in a total projected peak flow rate through the new 12-inch main of 165 gpm and a total headloss of 0.3 psi. Peak flow rates along the Eastside and Westside access roads are estimated to be 44 gpm and 73 respectively. As presented below in **Table 4-5**, the pressure loss associated with these demands in the respective 6-inch water lines are 1.0 psi and 0.4 psi respectively. Consequently, the anticipated line losses due to system demand are negligible.

Table 4-5 Potable Water System Pressure Losses for Projected Peak Airport Demands in Selected Water Main Segments						
New Water Main Section (South to North)	Diameter (in)	Length (miles)	Peak Flow (gpm)	Velocity (fps)	Headloss (ft)	Headloss (psi)
FH #3550 near Keystone Heights RV Resort to "Future Subdivision"	12	1.4	165	0.05	0.6	0.26
"Future Subdivision" to Airport Eastside Entrance	12	0.5	117	0.3	0.1	0.05
Subtotal Headloss to Airport					0.7	0.31
Airport Eastside Entrance to Eastside Terminus at Hangar #15	6	1.6	44	0.5	1.7	0.7
Total Headloss at Eastside Terminus					2.4	1.0
Airport Eastside Entrance to Westside Entrance	12	0.3	73	0.8	0.03	0.01
Airport Westside Entrance to Parcels E&F	6	0.4	27	0.3	0.18	0.08
Parcels E&F to MHD Rockland	6	0.2	23	.26	0.05	0.02
MHD Rockland to FIRM (Westside Terminus)	4	0.4	2	0.05	0.01	0.004
Westside Subtotal Headloss					0.27	0.12
Total Headloss at Westside Terminus					0.97	0.42

Note: Calculations are based on a peaking factor of 4 and C900 PVC DR18 pipe.

Pressure Loss within Airport Facility

Since fire protection within the Airport facility is provided by a separate system and the potable demands are very low, resulting in negligible friction losses, system pressures within the Airport will be most impacted by changes in elevation. The ground elevation at FH #3550 near the Keystone Heights RV Resort is approximately 156 ft. The ground elevation in the developed areas along Airport Road (for Eastside access) varies from 172 ft at the entrance to 196 ft at the new water line terminus at Hangar #15. Consequently, system pressure losses due to elevation changes along the Airport Road will vary from 6.9 to 17.3 psi. For the Westside Access Road, the elevations vary from 170 ft at the entrance development to 180 ft at MHD Rockland to 187 ft at the FIRM. Undeveloped Parcels E and F have highly varying ground elevations of 177 ft to 244 ft and 175 ft to 210 ft, respectively. **Table 4-6** below summarizes the estimated pressure losses due to elevation changes.

Table 4-6 Potable Water System Pressure Losses Due to Elevation Changes			
Location (South to North)	Elevation⁽¹⁾ (ft)	Elevation Difference (ft)	Pressure Change (psi)
FH #3550 near Keystone Heights RV Resort	156	---	---
Airport Eastside Entrance	172	16	-6.9
Eastside			
Eastside Terminus at Hangar #15	196	40	-17.3
Westside			
Airport Westside Entrance	170	14	-6.1
Parcel E	177 to 244	21 to 88	-9.1 to -38.0
Parcel F	175 to 210	19 to 54	-8.2 to -23.4
Proposed MHD Rockland	180	24	-10.4
Westside Terminus at the FIRM	187	31	-13.4

(1) Elevations are from Google Earth

Impact of Off-Site Fire Flows on System Pressures

Utilizing the pressures provided by CCUA for FH #3550, the proposed system demands, and the estimated elevations at various locations within the Airport, the following tables were developed to illustrate anticipated system pressures with peak Airport demands and a 1,000-gpm fire demand located either at FH #3550 or at a new hydrant on the 12-inch main near the Airport entrance.

Table 4-7 Potable Water System System Pressures for Projected Airport Demands (with No Fire Flow) at Select Locations		
Location (South to North)	Flow at Peak Conditions (gpm)	Available Pressure (psi)
FH #3550 near Keystone Heights RV Resort	165 ⁽¹⁾	76 ⁽²⁾
Airport Eastside Entrance	117	68
Eastside		
Eastside Terminus at Hangar #15	44	58
Westside		
Airport Westside Entrance	73	69
Parcel E (Interior)	27	66 to 37
Parcel F (Interior)	27	67 to 52
Proposed MHD Rockland Connection	23	65
Westside Terminus at the FIRM	2	62

(1) Flow consists of Airport peak demand of 117 gpm plus peak demand of 48 gpm for future development along SR 100 (north of RV Resort)

(2) Available pressure at FH #3550 is from CCUA Fire Hydrant Flow Test Summary dated 6/9/2022 in **Appendix B**

Table 4-8 Potable Water System System Pressures for Fire Flow at MH #3550 at Select Locations		
Location (South to North)	Flow at Peak Conditions (gpm)	Available Pressure (psi)
FH #3550 near Keystone Heights RV Resort	1,165 ⁽¹⁾	58 ⁽²⁾
Airport Eastside Entrance	117	51
Eastside		
Eastside Terminus at Hangar #15	44	40
Westside		
Airport Westside Entrance	73	52
Parcel E (Interior)	27	49 to 20
Parcel F (Interior)	27	49 to 34
Proposed MHD Rockland Connection	23	47
Westside Terminus at the FIRM	2	44

(1) Flow consists of 1,000 gpm fire flow at FH #3550, Airport peak demand of 117 gpm, and peak demand of 48 gpm for future development along SR 100 (north of RV Resort)

(2) Available pressure at FH #3550 is from CCUA Fire Hydrant Flow Test Summary dated 6/9/2022 in **Appendix B**

Table 4-9 Potable Water System System Pressures for Fire Flow Near Airport Entrance at Select Locations		
Location (South to North)	Flow at Peak Conditions (gpm)	Available Pressure (psi)
FH #3550 near Keystone Heights RV Resort	1,165 ⁽¹⁾	58 ⁽³⁾
Airport Eastside Entrance	1,117 ⁽²⁾	38
Eastside		
Eastside Terminus at Hangar #15	44	27
Westside		
Airport Westside Entrance	73	39
Parcel E (Interior)	27	36 to 7
Parcel F (Interior)	27	37 to 22
Proposed MHD Rockland Connection	23	35
Westside Terminus at the FIRM	2	32

(1) Flow consists of 1,000 gpm fire flow near Airport, Airport peak demand of 117 gpm, and peak demand of 48 gpm for future development along SR 100 (north of RV Resort)

(2) Flow consists of 1,000 gpm fire flow near Airport entrance and Airport peak demand of 117 gpm

(3) Available pressure at FH #3550 is from CCUA Fire Hydrant Flow Test Summary dated 6/9/2022 in **Appendix B**

Potable Water Hydraulics Discussion

A reasonable goal for this analysis would be to maintain a minimum system pressure of 40 psi under peak flow conditions. Under fire flow conditions a minimum system pressure at any given location along the system should not be less than 20 psi. Pressures under normal peak flow conditions at the Airport without fire flow, as shown in **Table 4-7**, are acceptable with a minimum predicted pressure of 58 psi. Pressures along the Airport's primary access roads for peak flow conditions plus 1,000 gpm fire flows in the 12-inch main are acceptable but somewhat

low (i.e., less than 40 psi), as presented in **Tables 4-8 and 4-9**. However, due to current elevation differences in Parcel E, projected pressures in the higher elevation portions of the site are unacceptable and will require a booster pump to maintain minimum pressure requirements under fire flow conditions. As this is a conceptual analysis, the borderline pressure of 22 psi in the higher elevations of Parcel F for a fire flow near the Airport entrance as presented in **Table 4-9** could be an issue and may also require an inline booster pump.

Potable Water Hydraulics Recommendations

The potable water system can be constructed to serve known development by extending the 12-inch main to the Airport and installing the 4-inch and 6-inch onsite water mains as outlined in this Study. Based on the preliminary hydraulic analysis performed on the system, normal condition system pressures are predicted to be between 40 psi and 58 psi. However, due to the elevations across Parcels E and F, the recommended system pressure under fire flow conditions cannot be achieved. In-line booster pump stations may be needed for Parcels E and F. The need for these booster pump stations can be determined once the site plans have been developed for each parcel since the finished grade will likely be modified as part of the site development.

4.3 Wastewater System Design

4.3.1 Existing Wastewater System

The Keystone Heights wastewater collection and treatment system is less extensive than the potable water supply system, serving primarily commercial customers with limited residential users. Most of the residences in the Keystone Heights area use private, onsite septic systems for treatment. The Keystone Heights Wastewater Treatment Plant (WWTP) is located in the downtown area on Nightingale Street and is rated by FDEP to treat up to 74,000 gpd. CCUA has stated that engineering staff is proposing funding for the analysis and design of an expansion of the WWTP in the 2023/2024 Fiscal Year.

Some examples of the WWTP treatment rates for Keystone Heights are presented in **Table 4-10** below.

Table 4-10 Keystone Heights Wastewater Treatment Rates		
Treatment Facility	Average Flow Rate (gpd)	
	August 2021	April 2022
Keystone Heights WWTP	19,000	23,000

In **Table 4-11** the capacity of the existing wastewater treatment system is evaluated for near term and future conditions considering the projected wastewater generation rates for the Airport and local potential development. As was the case in the potable water system evaluation, the rates for the Keystone Heights RV Resort were broken out of the existing wastewater generation so that their expansion plans could be considered as part of the potential development rates. In August 2021, the Keystone Heights RV Resort had 192 spaces. Assuming that only half the spaces were occupied, since August is off-season, this results in a wastewater generation rate of 7,200 gpd at the RV Resort with the remaining 11,800 gpd of wastewater being generated by other commercial and residential customers. In considering future wastewater generation, this rate for other existing commercial and residential customers is increased by 10% to 12,980 gpd to account for possible growth. (The generation rate for the total RV spaces for near term and future were accounted for previously in **Table 4-2**.)

Table 4-11 Keystone Heights Wastewater System Capacity		
Wastewater Customer	Near Term (1-3 yrs) WW Generation (gpd)	Future (>4 yrs)⁽⁴⁾ WW Generation (gpd)
Existing Commercial & Residential Customers ⁽¹⁾	11,800	12,980
Keystone Heights Airport ⁽²⁾	34,155	35,955
Potential Development ⁽³⁾	62,880	147,980
Total Average Wastewater Generation	108,835	196,915
Remaining Wastewater System Capacity	-34,835	-122,915
Remaining Wastewater System Capacity	-47%	-166%

- (1) Existing commercial and residential customers excludes the Keystone Heights RV Resort which is included in Potential Development due to various expansion plans. Wastewater generation is increased by 10% for future conditions
- (2) Refer to **Table 4-1** for Airport projected wastewater generation rates
- (3) Refer to **Table 4-2** for potential development projected wastewater generation rates
- (4) Future values are cumulative and include Near Term rates

The existing Keystone Heights WWTP is rated for 74,000 gpd. Based on the April 2022 WWTP flows of 23,000 gpd, the current remaining available capacity of 51,000 gpd is adequate to meet near term and future Airport flows of 34,155 gpd and 35,955 gpd, respectively. However, the additional development that is planned for the area results in a total flowrate that exceeds the current facility capacity by approximately 123,000 gpd. In particular, expansion of the Keystone Heights RV Resort and planned condominiums at Commercial Circle will generate significant wastewater flows (refer to **Table 4-2** above). CCUA is aware of the need to expand the Keystone Heights WWTP in order to meet the service area needs and will begin analysis and design in the 2023/2024 Fiscal Year.

In 2020, The Keystone Heights RV Resort was constructed and installed a new 6-inch force main along SR 100 from the Resort to the WWTP. This is the closest sanitary sewer collection system to the Airport as presented previously in **Figure 4-2, Available CCUA Utility Connection Points on Page 17**.

4.3.2 Proposed Wastewater System

4.3.2.1 Proposed Offsite Sanitary Sewer Force Main

The proposed offsite sanitary sewer force main location, as well as significant potential development along the route, was previously presented in **Figure 4-4, Proposed Potable Water and Wastewater Piping from Keystone Heights to KHA, on Page 24**. Using the future wastewater generation rates from **Table 4-2, Table 4-12** below was developed showing each section of the proposed and existing force main, future peak flows, and resulting velocities and headloss.

Table 4-12 Wastewater System Pressure Losses for Projected Peak Flows In Proposed & Existing CCUA 6-Inch Force Main					
Force Main Section (North to South)	Status	Length (miles)	Peak Flow (gpm)	Velocity (fps)	Headloss (ft)
Airport to "Future Subdivision"	New	0.5	100	1.1	2.0
"Future Subdivision" to Keystone Heights RV Resort	New	1.4	142	1.6	10.9
Keystone Heights RV Resort to Proposed Country Meadows Subdivision	Existing	1.6	350	3.9	67.5
Proposed Country Meadows Subdivision to Existing Keystone Heights WWTP	Existing	0.2	378	4.1	8.8
Total:					89.2

Note: Calculations are based on a peaking factor of 4 and 6-inch C900 PVC DR18 pipe.

A 6-inch force main extension to the Airport, in conjunction with the existing 6-inch force main from the existing Keystone Heights RV Resort to the WWTP, should be sufficiently sized to handle both the existing and projected flow rates without resulting in excessive velocities or system pressures. Projected velocities range from 1.1 to 1.6 fps for the proposed 6-inch force main to 4.1 fps in the existing 6-inch force main. While these are a relatively average velocities, the long distance results in an accumulation of 89 feet of headloss in the piping system. Since a cumulative headloss of 100 feet or less for the total 6-inch force main is acceptable, the existing force main is adequate for these conditions. However, if development beyond what is contemplated for this study occurs, upsizing the force main or providing a re-pumping facility should be considered. There is minimal elevation difference between the Airport entrance and the WWTP headworks, thus, elevation changes do not significantly impact the hydraulics as in the potable water analysis and consequently were not included in the preliminary hydraulic analysis of the force main system.

Two connections points for the Airport, one at each access road, is recommended. Again, a stub out is provided to the north for possible future extension of the force main along SR 100.

4.3.2.2 Proposed Onsite Wastewater Collection and Transmission System

The proposed onsite wastewater system design consists of two separate systems; the Eastside system located along Airport Road and the Westside system located along the recently constructed Westside Access Road and the existing FIRM Access Road. Each system will consist of a combination of gravity mains, force mains, and pump stations. Collected wastewater will be conveyed to the proposed CCUA 6-inch force main extension along SR 100 via two proposed Airport master pump stations (MPS's), one each for the Eastside and Westside. The locations proposed for these two master pump stations is based on the elevation, grade, and site conditions.

When this study began, it was anticipated that the two proposed Airport MPSs and piping systems in the major Airport roadways would become CCUA assets while the parcel/tenant pump stations and internal piping systems in the major parcels would be maintained by the Airport. However, CCUA indicated in their December 2023 comments that they prefer that the entire onsite wastewater collection and transmission system be owned and maintained by the Airport. For the tenant/parcel pump stations on the Westside, the Airport can decide on a case-by-case basis if the tenant or the Airport will own the pump stations. For the large Parcels E and F, if a single

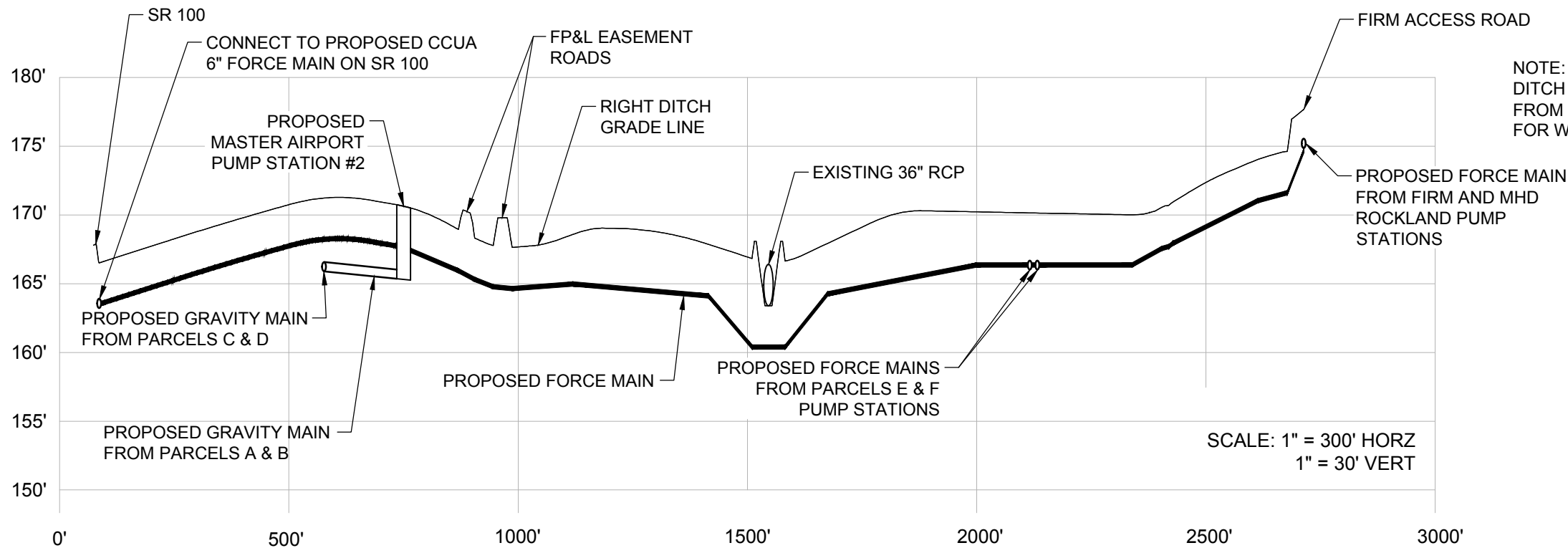
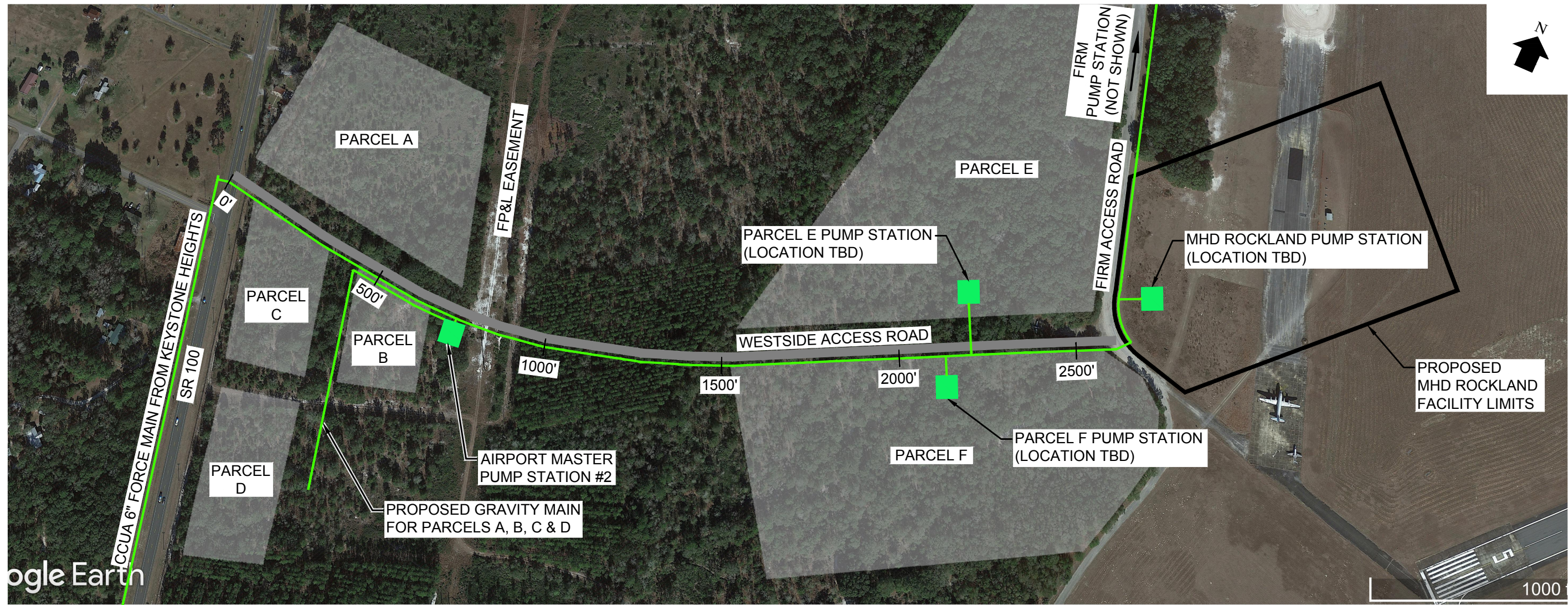
tenant develops the parcel then they could be responsible for the pump station. However, if multiple tenants lease the parcel, then the Airport would need to have ownership of the pump stations.

For the Westside system, approximately 3,800 lf of 4-inch force main system is proposed starting at the FIRM traveling south along the FIRM Access Road to the intersection with the Westside Access Road where it heads west discharging into proposed Airport MPS #2 located approximately 750 feet east of SR 100. A force main is proposed since the distance to the proposed Airport MPS #2 would result in a deep gravity main that would increase construction costs and would likely disturb the newly constructed Westside Access Road. Also, gravity mains are most appropriate for locations with many service connections. Development along this run of force main will need to have individual pump stations to convey wastewater to the force main. It is anticipated that the FIRM, MHD Rockland, and Parcels E and F will need to be served by individual pump stations. Development west of proposed Airport MPS #2 will be served by approximately 1,000 lf of 8-inch gravity piping system that will deliver wastewater to Airport MPS #2. From Airport MPS #2, a second 4-inch force main of approximately 800 lf will deliver wastewater to the proposed 6-inch force main along SR 100. The use of a force main collection piping system was selected based on elevations obtained from Google Earth for the proposed development parcels and from construction plans for the Westside Access Road. The Airport MPS #2 site was located so that the development along the western edge of the property site could be served by gravity collection piping. A conceptual profile view of the Westside wastewater piping system is presented in **Figure 4-6, Wastewater Design for Westside**.

For the Eastside system, the design was developed utilizing gravity piping to the fullest extent possible due to the numerous existing and proposed buildings as opposed to the Westside system which mainly serves large parcels. The existing grade is conducive to a gravity system, with the grade decreasing from the east side to about half a mile west of the Warehouse. The wastewater design includes installing approximately 4,500 lf of 8-inch gravity piping from the hangers, located to the northeast, to the warehouse located to the southwest. Since no further development is anticipated beyond the warehouse, Airport MPS #1 is proposed immediately southwest of the warehouse. A proposed 4-inch force main would convey wastewater approximately 3,900 lf from Airport MPS #1 to the proposed 6-inch force main located along SR 100. The existing grade from Google Earth and conceptual profile are presented in **Figure 4-7, Wastewater Design for Eastside**.

Figure 4-8, Conceptual Wastewater Layout, provides a conceptual illustration for the horizontal alignment of the proposed piping systems, incorporating the Westside and Eastside designs discussed above. Connection points for the Hunt Club and Camp Crystal Lake will be provided. Due to elevation differences, both will require pump stations to convey their respective wastewater to the Airport system.

The ten existing Airport septic systems will require abandonment per FDEP rules (refer to previously presented **Figure 4-1, Historic Well and Septic System Locations on Page 16**). Since providing utility service to the Hunt Club is not in the scope for this project, their septic system will remain. A local licensed plumber or septic tank contractor can permit and decommission the systems. To abandon the septic system, FDEP requires that the septic tank be pumped out, collapsed, and backfilled. The drain field can be abandoned in place. If the drain field is removed, the spoils require disposal at a landfill that accepts sewage contaminated soil.



NOTE:
DITCH GRADE INFORMATION
FROM 100% CONTRACT PLANS
FOR WESTSIDE ACCESS ROAD.

SCALE: 1" = 300' HORZ
1" = 30' VERT

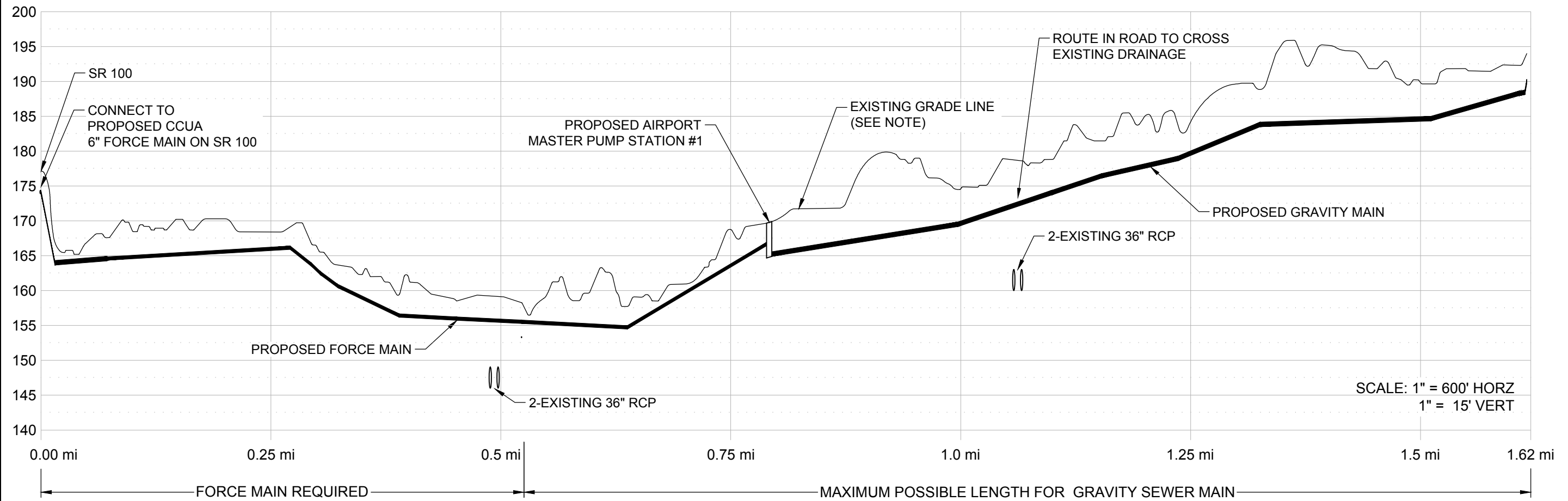
WASTEWATER DESIGN FOR WESTSIDE

FIGURE 4-6

C:\pwworking\usf\dms19056\FIG 4-6.dwg 03/04/2024 16:31



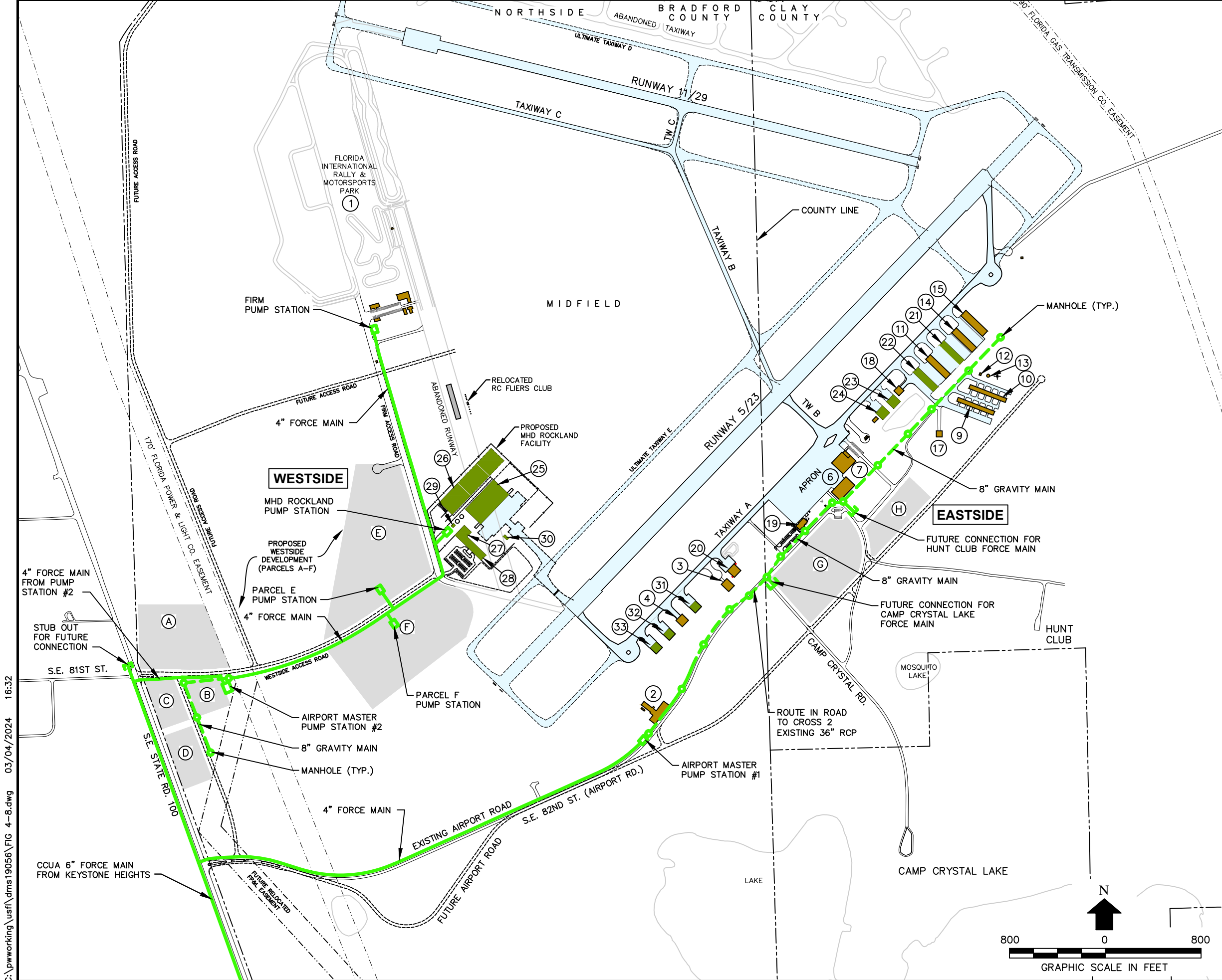
NOTE:
EXISTING GRADE FROM GOOGLE EARTH.



C:\pwworking\usfl\dms19056\FIG 4-7.dwg 03/04/2024 16:32

WASTEWATER DESIGN FOR EASTSIDE

FIGURE 4-7



WASTEWATER GENERATION		
EASTSIDE		
NO.	DESCRIPTION	WW PHF ⁽¹⁾ (gpd)
2	Warehouse ⁽²⁾	0
3	Hangar	60
4	Hangar	360
6	Corp Hangar/Office	1,000
7	Corp Hangar/Office	1,200
9	T-Hangar A	1,200
10	T-Hangar B ⁽²⁾	0
11	T-Hangar C	600
12	Fire Equip Enclosure ⁽²⁾	0
13	Fire Water Tank ⁽²⁾	0
14	T-Hangar E	600
15	Corp Hangar	600
17	Maintenance Building ⁽²⁾	0
18	Bulk Hangar ⁽²⁾	0
19	FBO Office	400
20	Bulk Hangar	60
21	Future T-Hangar	600
22	Future T-Hangar	600
23	Future Corp Hangar	120
24	Future Corp Hangar	120
31	Future Corp Hangar	120
32	Future Corp Hangar	120
33	Future Corp Hangar	120
G	Future 3 Office Bldgs	5,400
H	Future Office Bldg	1,800
	Camp Crystal Lake	28,000
	Hunt Club	15,000
EASTSIDE TOTAL WW PHF (gpd)		58,080
EASTSIDE TOTAL WW ADF (gpd)		14,520
WESTSIDE		
1	FIRM Motorsports	2,500
MHD ROCKLAND		
25	Future Hangar	120
26	Future Warehouse	120
27	Future Flight Simulator	900
28	Future Office Bldg	5,000
29	Future Fire Suppr Bldg ⁽²⁾	0
30	Future Wash Control Bldg	12,000
WESTSIDE DEVELOPMENT		
A	Future Hotel	40,000
B	Future Gas Station	2,000
C	Future Gas Station	2,000
D	Future Strip Mall	16,000
E	Future Warehouses	2,700
F	Future Warehouses	2,400
WESTSIDE TOTAL WW PHF (gpd)		85,740
WESTSIDE TOTAL WW ADF (gpd)		21,435

NOTES: (1) Peak hour flow factor of 4
(2) Structure has no fixtures

LEGEND	
	NEW WASTEWATER MAIN FORCE MAIN
	NEW WASTEWATER GRAVITY MAIN
	NEW WASTEWATER MANHOLE
	NEW WASTEWATER PUMP STATION
	AIRPORT PROPERTY LINE
	FUTURE AIRFIELD PAVEMENT
	EXISTING BUILDINGS/STRUCTURES
	PROPOSED BUILDINGS/STRUCTURES
	PROPOSED PROPERTY DEVELOPMENT

C:\pwworking\usfl\dms19056\FIG 4-8.dwg 03/04/2024 16:32

CONCEPTUAL WASTEWATER LAYOUT
 FIGURE 4-8

4.4 Onsite Fire Protection System Design

The proposed fire protection system will provide required protection to existing and future development at the Airport. In industrial areas, such as the Airport, it is typical for there to be low potable water demands and high fire protection demands, which can result in oversized lines and stagnant water when the systems are combined. Thus, it is typical for the potable water and fire protection distribution systems to be separate. In addition, due to the high flowrates and pressure required for fire protection (discussed later in this section), it is recommended that the system be independent from the CCUA potable water system. The Airport and CCUA are in agreement with this approach.

In this section, the anticipated fire protection requirements for each proposed building at the Airport were determined and used to evaluate how to meet the existing and proposed needs in the three main areas at the Airport (Eastside, proposed MHD Rockland facility, and the Westside Development) in terms of required water storage, fire pumps, piping systems, and source water. As part of this evaluation, use of the existing fire protection system was considered.

4.4.1 Existing Onsite Fire Protection System

Fire Protection is currently provided at the Airport by a dedicated onsite system consisting of:

1. A 500 ft deep 6-inch well with a 6-inch, 40 hp submersible pump that discharges into the adjacent tank. The well was installed in 2007 and appears to be undersized for the pump; typically, an 8-inch well would have been used for this size pump. The well driller, Bronco Drilling, confirmed that it may not be possible to remove the existing pump if repair or replacement were ever required. The well permit is presented in **Appendix C, Fire Protection Well - Consumptive Use Permit from St. Johns Water Management District dated January 3, 2007** and allows for the withdraw of up to 864,000 gallons per year for fire protection use, expiring in 2027.
2. A 185,000-gallon bolted-steel water storage tank that supplies the fire pumps. The age and condition of the storage tank are unknown.
3. A 21 ft by 16 ft concrete block building (#12, fire suppression equipment enclosure, on **Figure 2-2**) that houses one diesel fire pump (1,750 gpm at 60 psi) and an electric jockey pump (to maintain pressure in the fire main under non-fire conditions). The fire pump appears to have been installed in 2006.
4. An 8-inch fire main with hydrants that runs along the southside of the existing buildings fronting Airport Road to within approximately 1,500 feet of SR 100. The 8-inch fire main was installed in two phases, the first in 2006 and the second in 2014.

The existing fire system protects the existing buildings on the Eastside of the Airport including the Fixed Base Operator Building, hangars, warehouse, and maintenance shed. The FIRM, located on the northwest portion of the property, and the Hunt Club on the far the east side currently have no fire protection. Camp Crystal Lake is on private property to the southeast that is owned by Alachua County School Board but is accessed via Airport Road. We reached out to Camp Crystal Lake but have been unable to determine if they have their own onsite fire protection system. The existing buildings and fire protection system were previously presented in **Figure 2-2, Existing Airport Layout Plan on Page 11**.

Currently, no buildings at the Airport have internal fire suppression systems (i.e., sprinklers or sprinklers and foam system). Based on discussions with the current Bradford County Fire Marshal, Chris Cooksey, the required fire flow for the existing buildings is 1,500 gpm at 20 psi over 2 hours and was determined under the previous Fire Marshall (and possibly previous regulations). The existing 185,000-gal tank meets the storage requirement of

180,000 gallons (1,500 gpm x 2 hrs x 60 min/hr). The existing fire pump can deliver 1,500 gpm. While this rate results in substantial pressure losses in the 8-inch fire main, the minimum pressure requirement of 20 psi can be maintained. Required fire protection for the existing buildings is established and does not require evaluation in this Study. The proposed system will provide the required flows to continue to protect the existing structures.

4.4.2 Fire Protection Codes and Requirements

The Florida Building Code and Florida Fire Prevention Code contain fire protection requirements while the National Fire Protection Association (NFPA) provides design standards. Some of the many variables considered when determining fire protection for a building are use, construction type/materials, building size, contiguous fire areas within the building, if fire suppression systems will be provided, types of commodities being stored, hazard classification type, etc. With so many variables, assumptions were made in evaluating the fire protection required for each building and the required storage, flows, and pressures. These assumptions are discussed briefly below and in more detail in the analysis for each building.

A blanket assumption was made that all new buildings will be Type II B construction (as defined by the Florida Building Code) which is noncombustible and includes metal buildings, structural metal frame buildings, concrete block construction, etc. but excludes wood frame. The new FBO building at the Airport is an example of Type II B construction. In some instances, the square footage was kept under a specific threshold to avoid increasing required fire flows or triggering the requirement for a fire suppression system. It was assumed that no hazardous operations (e.g., doping, hot work, fuel transfer, spray finishing, or all aircraft within the sprinklered single fire area having more than 1,600 gallons fuel capacity) will be performed in the proposed hangars and light-industrial buildings, except for the proposed MHD Rockland hangar.

When designing a fire protection system, the flowrate and pressure for sizing the pump(s), storage for sizing the tanks, and flowrate for sizing piping are determined. It should be noted that there are two types of fire protection:

1. **Fire Flow.** The required hydrant flow rate that must be met with a minimum of 20 psi at the main. The required flow rate and duration determine the required water storage. When a building has a fire suppression system, the fire flow rate can be reduced by 75 percent.
2. **Sprinkler and Hose Stream Demand.** A building with an interior fire suppression system may require just sprinklers or sprinklers and a foam system. The required water flow rate will be some combination of sprinkler water demand, foam water demand, and exterior hydrant demand (this is separate from fire flow). A combination of variables are then used to determine required duration and water storage. A required end head pressure along with pressure losses from the main to the sprinkler head are used to calculate the required pressure at the main. For this analysis, the losses from the main to the head were estimated based on losses due to elevation and piping/fittings. These pressures are higher than the 20 psi required for fire flow.

For this analysis, fire suppression systems were only included on proposed buildings where required by code. The fire protection system for a sprinklered building must meet sprinkler and fire flow requirements. The system must be able to meet both the fire flow and sprinkler/hose demand flow and pressure rates, but not at the same time. The pumping/piping system must be adequate for both maximum flowrate and maximum pressure.

If the fire protection flows can be met by the supplying well or potable water system, a storage tank is not needed. However, for larger fire protection flows, a storage tank is typically used to eliminate the need for oversized wells or potable water supply lines. Water storage requirements calculated for both fire flow and sprinklered conditions must both be met; thus, the storage requirement is the larger of the two. When a tank is used, the water supply must be able to refill the storage tank within an 8-hour period, reducing the demand on the well or potable water supply system. While a storage requirement will be calculated for each proposed

building, only the largest storage requirement for a system is used to size the storage tank (i.e., the storage volumes are not cumulative).

The fire protection system must be able to meet the requirements for each building, however, only one at a time. Thus, the largest flow, pressure, and storage requirements will drive the system sizing and design. Typically, these maximum values are for the same building, but they could be for different buildings.

4.4.3 Fire Protection Requirements for Proposed Buildings

In preparing this document, we engaged AECOM’s senior Fire Protection Engineer, Charles Davis PE, to assist in determining the required fire protection for the proposed buildings. The proposed development at the Airport will include additional hangars and offices on the Eastside, the new facility for MHD Rockland, and an industrial/commercial park on the Westside with retail and light-industrial uses. The proposed buildings were previously presented in **Figure 3-1, Planned Airport Development** on **Page 13**. The fire protection requirements were determined separately for each of the three main areas of the Airport in the analyses below. In a subsequent section, options for combining the systems are discussed.

4.4.3.1 Eastside

Apart from the FIRM, Hunt Club, and Camp Crystal Lake, the rest of the existing development is located on the Eastside fronting Taxiway A and is served by the existing fire protection system. **Table 4-13** below presents the fire protection requirements for the proposed buildings on the Eastside. For each building, the required flowrate, minimum pressure at the main, and storage volume were determined. A fire protection system for this area would only need to meet the largest flow, pressure, and storage requirement (which are shown in bold).

Bldg or Parcel No.	Building⁽¹⁾	Size (sf)	Hydrant Only	Hydrant & Sprinklers	Hydrant, Sprinklers & Foam	Total Required Flowrate (gpm)	Required Pressure at the Main (psi)	Required Storage⁽⁵⁾ (gal)
21	Future T-Hangar ⁽²⁾	12,000	X			2,250	20	270,000
22	Future T-Hangar ⁽²⁾	12,000	x			2,250	20	270,000
23	Future Corp Hangar ⁽³⁾	6,400	X			1,750	20	210,000
24	Future Corp Hangar ⁽³⁾	6,400	X			1,750	20	210,000
31	Future Corp Hangar ⁽³⁾	6,400	X			1,750	20	210,000
32	Future Corp Hangar ⁽³⁾	6,400	X			1,750	20	210,000
33	Future Corp Hangar ⁽³⁾	6,400	X			1,750	20	210,000
G	Future Office Bldgs ⁽⁴⁾ 3@12,000 sf each	12,000	X			2,250	20	270,000
H	Future Office Bldg ⁽⁴⁾	12,000	X			2,250	20	270,000

- (1) All buildings are assumed to be Construction Type II B.
- (2) Greater than 12,000 sf single fire area or hazardous operations requires hydrant, sprinklers, and foam. Hazardous operations include doping, hot work, fuel transfer, spray finishing, or all aircraft within the sprinklered single fire area having more than 1,600 gallons fuel capacity.
- (3) Hazardous operations requires hydrant, sprinklers and foam. Hazardous operations include doping, hot work, fuel transfer, spray finishing, or all aircraft within the sprinklered single fire area having more than 1,600 gallons fuel capacity.
- (4) Maximum 12,000 sf per office building for fire flow of 2,250 gpm.
- (5) The required storage is not cumulative; only the largest value must be provided.

Based on the building uses, Type II B construction, and sizes, none of the buildings require sprinklers or foam. The table notes discuss thresholds that impact required fire protection levels. Exceeding 12,000 sf for the hangars or housing hazardous operations would trigger a requirement for a sprinkler and foam system, impacting the pumping requirements. Exceeding 12,000 sf for an office building would increase the fire flow to 2,500 gpm and the required storage to 300,000 gpm. The largest storage requirement is 270,000 gallons and the largest flowrate required is 2,250 gpm while maintaining a minimum of 20 psi at the main. These maximum values (bolded in **Table 4-13**) are the drivers for designing the fire protection system for the Eastside.

Based on this analysis, a fire protection system dedicated to the Eastside would need to be able to provide a flowrate of 2,250 gpm for a 2-hour time period while maintaining a minimum system pressure of 20 psi at the main. In order to utilize the existing system to the fullest extent possible, it is recommended that the total storage volume be increased to 270,000 gallons (2,250 gpm for 120 minutes) with the addition of a second storage tank with a volume of 85,000 gallons. This assumes that the existing 185,000-gallon storage tank is in good condition. We recommend that the tank be drained and inspected. If it is in reasonable condition, it can be reused but may require cleaning and recoating. If the existing tank is deteriorated, we recommend providing a new tank with the full required storage volume of 270,000 gal. In accordance with NFPA, the onsite fire well would need to be able to fill the storage tank(s) within an 8-hour period, which equates to a flowrate of 562 gpm. While the current well and pump are capable of providing this required flowrate, as discussed previously, there are concerns about being able to remove the existing submersible pump from the well if repair or replacement are ever required. Thus, to ensure reliability of the fire protection system, we recommend installation of a new 8-inch well with a 6-inch submersible pump. As the existing Consumptive Use Permit (refer to **Appendix C**) for the fire protection well expires in 2027, it will require renewal. The existing diesel fire pump may be able to meet the flow and pressure requirements, however, we recommend that it be replaced due to its advanced age with two new diesel pumps, one primary and one backup, as well as a replacing the existing electric jockey pump. The existing pump enclosure building is too small for two new diesel pumps and requires replacement. The existing 8-inch fire line could be reused in combination with an additional 8-inch line to carry the increased flows or it could be replaced by a new 12-inch line. However, based on the limited available space for utilities, we recommend replacing the 8-Inch line with a 12-inch main. Stub outs can be provided for the Hunt Club and Camp Crystal Lake if they require fire protection.

4.4.3.2 MHD Rockland

MHD Rockland has plans to lease land from the Airport and construct a new complex of buildings to expand their operations. This expansion will likely occur before the Airport connects to the CUA utility services and before the Westside Development is constructed. Thus, it is anticipated that MHD Rockland will construct their own fire protection system which could be integrated into the Airport's future system. The fire protection requirements for the proposed MHD Rockland expansion are presented below in **Table 4-14**.

**Table 4-14
Fire Protection Requirements
MHD Rockland Proposed Buildings**

Bldg or Parcel No.	Building ⁽¹⁾	Size (sf)	Hydrant Only	Hydrant & Sprinklers	Hydrant, Sprinklers & Foam	Total Required Flowrate ⁽²⁾ (gpm)	Required Pressure at the Main ⁽²⁾ (psi)	Required Storage ⁽⁵⁾ (gal)
25	Hangar ⁽³⁾	54,000			X	6,000	109	300,000
						1,250	20	
26	Warehouse ⁽⁴⁾	90,000		X		2,640	88	246,000
						1,563	20	
27	Flight Simulator Building	9,500	X			2,000	20	240,000
28	Office Building	12,800	X			2,500	20	300,000
29	Fire Suppression Building (with Electric Pump)	500	X			1,500	20	180,000
30	Wash Control Building	720	X			1,500	20	180,000

(1) All buildings are assumed to be Construction Type II B.

(2) For sprinklered buildings, both sets of flow and pressure conditions must be met. The first set is for the sprinklered condition (higher pressure at the main). The second set is for the fire flow condition (20 psi minimum at the main).

(3) Requirements are based on using high expansion foam which requires less water and has reduced environmental concerns.

(4) The fire protection required for a warehouse depends on many factors, see discussion for assumptions made.

(5) The required storage is not cumulative; only the largest value must be provided.

The size and use of the proposed hangar necessitate a fire suppression system utilizing sprinklers, a foam system, interior hose connection, and exterior hydrants. While multiple types of foam systems can be used, a high expansion foam system was selected because it uses less water and has less environmental concerns than the other foam systems. The hangar has the largest flow, pressure, and storage required; thus, it is the driver for the system design.

The warehouse will initially be 30,000 sf and expanded to 90,000 sf. Fire protection requirements are not impacted by the building area unless the square footage is very small. Thus, both warehouse sizes require the same fire protection system, both in size and type (sprinklers and exterior hydrants). The factors that determine the required fire protection for a warehouse include building type, commodity class, storage height, aisle width, whether the commodity is encapsulated, ceiling height, and if sprinklers are located in the racks. The commodity class is primarily impacted by the percentage of plastic in the item being stored, as well as its packaging. While aircraft parts will unlikely have a large percentage of plastic, their packaging may contain plastics. Commodity Class IV was selected for this analysis because it includes items with the highest percentage of plastics as an ancillary component. Storage heights of 20 to 35 feet were considered along with an additional 5 or 10 feet to the ceiling. Aisle widths of 4 and 8 feet were considered. Since the warehouse parameters are unknown, a wide variety of combinations were evaluated, and the largest values, presented below, were included in **Table 4-14**.

1. Warehouse conditions for maximum water storage: Class IV Commodity, 20 feet storage height, 4 feet wide aisles, not encapsulated, ceiling height not relevant, no in-rack sprinklers.

2,050 gpm, minimum of 56 psi required at the main, and 246,000 gallons of storage.

2. Warehouse conditions for maximum water flow and pressure: Class IV Commodity, 35 feet storage height, aisle width not relevant, encapsulation not relevant, 45 feet ceiling height, no in-rack sprinklers.

2,640 gpm, minimum of 88 psi required at the main, and 158,400 gallons of storage.

The remainder of the buildings will not require sprinklers and will be protected by fire flow from hydrants.

To meet the fire protection requirements for the proposed MHD Rockland buildings, the system must be able to meet the largest flow, pressure, and storage requirements, presented in bold in **Table 4-14**. Thus, the hangar is the driver and the MHD Rockland facility will require a well with a submersible pump, 300,000-gallon water storage tank, fire pumps, piping system with hydrants, and fire suppression systems in the hangar and warehouse. The well and pump must be capable of filling the tank within an 8-hour period (625 gpm). Due to the almost 6,000 gpm flowrate required for the hangar, the short length of the piping system carrying that flow will need to be at least 20-inches in diameter. The fire piping system will include hydrants located as required. Since the fire pumps will need to meet both the fire flows for hydrants (2,500 gpm) and the suppression system requirements (6,000 gpm and 2,640 gpm), multiple pumps will likely be needed. One possible pump combination is three 3,000 gpm pumps where the first pump would meet fire flows or warehouse suppression system needs, operating two pumps would meet the hangar requirements, and the third pump would be for redundancy. A jockey pump would also be required to keep the fire mains pressurized during non-fire conditions.

4.4.3.3 Westside Development

The Airport plans to develop land on the west side of the property, between SR 100 and the proposed MHD Rockland facility. As part of the latest Master Plan, six parcels were identified for development, ranging from 2 to 17 acres as previously presented in **Figure 3-1, Planned Airport Development** on **Page 13**. Based on input from the Airport, potential tenants were assumed. The fire protection requirements for these proposed uses are presented below in **Table 4-10**.

Bldg Or Parcel No.	Building ⁽¹⁾	Size (sf)	Hydrant Only	Hydrant & Sprinklers	Hydrant, Sprinklers & Foam	Total Required Flowrate ⁽²⁾ (gpm)	Required Pressure at the Main ⁽²⁾ (psi)	Required Storage ⁽⁵⁾ (gal)
A	3 Star Hotel ⁽³⁾ (3 floors)	50,000		X		600	60	72,000
						1,200	20	
B	Gas Station/ Convenience Store	2,500	X			1,500	20	180,000
C	Gas Station/ Convenience Store	5,900	X			1,500	20	180,000
D	Strip Mall / Retail	39,000		X		625	52	127,500
						1,063	20	
E	Warehouse / Light Industrial ⁽⁴⁾	222,000		X		2,640	88	246,000
						2,000	20	
F	Warehouse / Light Industrial ⁽⁴⁾	196,000		X		2,640	88	246,000
						2,000	20	

(1) All buildings are assumed to be Construction Type II B.

(2) For sprinklered buildings, both sets of flow and pressure conditions must be met. The first set is for the sprinklered condition (higher pressure at the main). The second set is for the fire flow condition (20 psi minimum at the main).

(3) Greater than 50,000 sf increases the fire flow requirement.

(4) Square footage is not a driver for fire protection requirements. This is maximum building size based on full development of the site acreage. A smaller warehouse would require the same flows/protection. The fire protection required for a warehouse depends on many factors, see discussion for assumptions made.

(5) The required storage is not cumulative; only the largest value must be provided.

Based on the assumed uses, all the new buildings will require fire suppression sprinkler systems except the gas station/convenience stores. Two sizes of gas station/convenience stores were considered to assess possible differences in required fire protection, however, there were none.

Several options for Parcel A (8 acres) were considered to determine if one would be a driver for fire protection in the Westside development area. All three options considered would require sprinkler protection. If a 37,900-sf storage unit facility were built on the site, it would require 1,000 gpm at 20 psi fire flow, 625 gpm at 52 psi sprinkler and hose demand, and 120,000 gal of storage. A more intensive industrial use such as manufacturing mobile homes or office furniture would require 2,000 gpm at 20 psi fire flow, 2,000 gpm at 88 psi sprinkler and hose demand, and 240,000 gal of storage. A 3-star hotel such as a Holiday Inn Express or Hampton Inn with 3 floors and a total area of 50,000 sf would require 1,200 gpm at 20 psi fire flow, 600 gpm at 60 psi sprinkler and hose demand, and 72,000 gal of storage. Since none of these options exceed the requirements for the warehouses, the warehouses on Parcels E and F would continue to be the basis for the fire protection system design for the Westside Development. The hotel option was selected because it was a driver for potable water and wastewater utilities.

The warehouse/light-industrial uses for the two largest parcels (Parcel E at 17 acres and Parcel F at 15 acres) were calculated similarly to the warehouse for MHD Rockland and resulted in the same values. The warehouse calculations are not dependent on the building area and it is assumed that any industrial work would not include hazardous operations. While the size of the parcels can support development of warehouse structures as large as 222,000 and 196,000 sf, there is not likely a demand for such large spaces in the near future. However, the fire protection requirements are not driven by the building area and reducing the size will not change them.

Based on the assumed uses and analysis, the largest flow, pressure, and storage are for the warehouses, resulting in a fire protection system for the Westside Development with a 246,000-gallon water tank, fire pumps, and a piping system. Two fire pumps will be required, each capable of providing 2,640 gpm with the second one for redundancy, plus a jockey pump. The fire distribution piping will be 12-inch diameter to handle the largest flow of 2,640 gpm with 8-inch and 10-inch branches for the buildings with lower flow requirements. Hydrants will be required as necessary. It is assumed that the fire protection water supply would be provided by the MHD Rockland system, refer to configuration options and water supply source discussion below.

4.4.4 Onsite Fire Protection System Configuration Options

The three main areas of future development at the Airport have different required flow rates, pressures, and storage requirements for fire protection. While each area was considered independently above, there are several options available for configuring the fire protection system:

1. MHD Rockland and Westside Development combined. Eastside separate. (Preferred)
2. Eastside and Westside Development combined. MHD Rockland separate.
3. All three areas combined.
4. Three separate systems (with emergency interconnections).

The following provides discussion of these options. The fire protection water supply source is discussed in a subsequent section.

4.4.4.1 Option 1 - MHD Rockland and Westside Development Combined. Eastside Separate (Preferred)

In this option, the adjacent MHD Rockland and Westside fire protection systems would be combined while the Eastside remains independent. This would only be possible if the Airport owns and operates the MHD Rockland

system or develops a binding shared use agreement for the system with Rockland. **Table 4-16** below lists the required pumping and storage requirements that will drive the systems' sizing.

Table 4-16 Fire Protection Design Criteria for Option 1 – MHD Rockland & Westside Development Combined, Eastside Separate		
Area	Pumping ⁽¹⁾	Water Storage (gal)
Eastside	2,250 gpm @ 20 psi	270,000 ⁽²⁾
MHD Rockland & Westside Development	6,000 gpm @ 109 psi	300,000

(1) Pumping pressures are minimum required pressure at the main for the building in question.

(2) If existing tank is reusable, 185,000-gallon existing tank plus new 85,000-gallon tank.

The primary advantage of this system is combining the adjacent high-pressure systems while the lower pressure Eastside remains independent. Also, since MHD Rockland will be built before the Westside Development, water storage and pumping would be in place, only requiring extension of the piping system to serve the Westside Development. The number of tanks and pumps would be reduced by combining two of the areas.

AECOM, in consultation with the Airport, recommends this option since it works with the geographic areas, utilizes a portion of the existing Eastside fire protection system and the soon to be constructed MHD Rockland system, and keeps the low pressure and high-pressure systems separate.

4.4.4.2 Option 2 - Eastside and Westside Development Combined. MHD Rockland Separate

Option 2 includes the Eastside and Westside Development systems combined into one system operated and maintained by the Airport and an independent MHD Rockland system. The systems are summarized in **Table 4-17** below.

Table 4-17 Fire Protection Design Criteria for Option 2 – Eastside & Westside Development Combined, MHD Rockland Separate		
Area	Pumping ⁽¹⁾	Water Storage (gal)
Eastside & Westside Development	2,640 gpm @ 88 psi	270,000 ⁽²⁾
MHD Rockland	6,000 gpm @ 109 psi	300,000

(1) Pumping pressures are minimum required pressure at the main for the building in question.

(2) If existing tank is reusable, 185,000-gallon existing tank plus new 85,000-gallon tank.

MHD Rockland would maintain their independent system while the Airport would be responsible for the combined Eastside and Westside Development system. The major advantage to this arrangement would be reducing the number of tanks and pumping systems. However, the entire Eastside and Westside Development system would need to maintain the higher pressure of 88 psi required for the Westside Development. Alternately, a moderate system pressure of 60 psi could be maintained and the warehouses that require higher pressure could have booster pumps for their interior fire suppression systems.

4.4.4.3 Option 3 - All Three Areas Combined

Combining all three areas would create one comprehensive fire protection system for the Airport property. Either the existing fire protection system can be rehabilitated and expanded or the new MHD Rockland system could be used. This option would require the Airport to own and operate the MHD Rockland system or develop a

binding shared use agreement for the system with Rockland. The required design parameters are presented in **Table 4-18**.

Table 4-18 Fire Protection Design Criteria for Option 3 – All Three Areas Combined		
Area	Pumping ⁽¹⁾	Water Storage (gal)
Eastside, MHD Rockland & Westside Development	6,000 gpm @ 109 psi	300,000 ⁽²⁾

(1) Pumping pressures are minimum required pressure at the main for the building in question.

(2) If existing tank is reusable, 185,000-gallon existing tank plus new 115,000-gallon tank.

The primary advantage of a combined system is reducing the number of pumps and tanks required. However, the entire system would need to meet the driving pressure of 109 psi for the MHD Rockland hangar. Alternately, a moderate system pressure of 60 psi could be maintained and the hangar and warehouses that require higher pressures could have booster pumps for their sprinkler systems.

4.4.4.4 Option 4 - Three Separate Systems

Under this option, each system would be provided fire protection from a dedicated individual system (storage tanks, fire pumps, and piping systems) designed to meet their specific requirements as described previously. While the systems would operate independently, emergency interconnects could be provided. **Table 4-19** below summarizes the systems.

Table 4-19 Fire Protection Design Criteria for Option 4 – Three Separate Systems		
Area	Pumping ⁽¹⁾	Water Storage (gal)
Eastside	2,250 gpm @ 20 psi	270,000 ⁽²⁾
MHD Rockland	6,000 gpm @ 109 psi	300,000
Westside Development	2,640 gpm @ 88 psi	246,000

(1) Pumping pressures are minimum required pressure at the main for the building in question.

(2) If existing tank is reusable, 185,000-gallon existing tank plus new 85,000-gallon tank.

The Airport authority would be responsible for the Eastside and Westside Development systems while MHD Rockland would maintain their own system. The major advantage to this arrangement would be that the varying flow rates and pressures could be provided to each system. For example, the Eastside system could be designed as a low-pressure system since the minimum required pressure at the main is 20 psi as opposed to the MHD Rockland and Westside Development systems that have much higher pressure requirements of 109 psi and 88 psi, respectively. The disadvantage would be the redundancy in storage tanks and pumping systems between the three systems.

4.4.5 Potable Water and Fire Protection Water Distribution Systems

Currently, the fire and potable water systems at the Airport are separate. However, they could be combined into one new piping system. The required fire protection flows of 625 to 6,000 gpm are 10 to 60 times greater than the peak potable water demands (117 gpm) at the Airport. Combining the systems would result in oversized water lines to meet the fire protection flows that rarely or never occur, along with stagnation in the water lines and possible water quality and maintenance issues. Thus, we recommend separate potable water and fire

protection water piping systems. This is common at industrial sites where potable demands are small compared to the large, required fire protection flows. The Airport and CCUA are in agreement with this approach.

4.4.6 Proposed Fire Protection Water Supply

Water for fire protection could be provided by the future connection to the CCUA potable water supply or onsite dedicated fire wells. Given the high instantaneous fire protection demand rates, direct supply from a well is not feasible and fire supply storage tanks would be used. For any well and tank combination, in accordance with NFPA, the well must be capable of filling the required storage volume in an 8-hour period. To continue using onsite wells, the existing undersized 6-inch well and submersible pump on the Eastside would require replacement with a new 8-inch well and 6-inch submersible pump, as discussed previously. Depending on the fire system configuration selected, new well(s) and submersible pump(s) would need to be constructed to fill any new storage tanks. For preferred Option 1, MHD Rockland and Westside Development Combined with Eastside Separate, a new well and submersible pump would be required at the MHD Rockland site with a minimum discharge capacity of 625 gpm to fill the 300,000-gal storage tank in the required 8-hour period. New wells will require construction and consumptive use permits from the St Johns River Water Management District.

There are two options for utilizing the future municipal potable water supply. The potable water source will be the CCUA 12-inch potable water main approximately 1.9 miles south of the Airport at the Keystone Heights RV Resort. CCUA stated that they could provide 1,000 gpm of water for fire protection. While they indicated that larger fire flows could be provided if they did not adversely impact their system pressures, the large fire flows required for some of the proposed industrial buildings coupled with the long distance would result in high pressure losses and could not be met directly by CCUA.

As an alternative to using the CCUA potable water supply to meet the fire protection water supply requirements directly, potable water could be used to fill the fire supply storage tanks from which the fire pumps would supply the required fire flows and pressures. Per code, the required 300,000-gallon tank(s) would have to be filled within an 8-hour period resulting in a flow of 625 gpm from CCUA. While this is 6 times greater than the peak Airport water demands (117 gpm), CCUA could provide it and the potable water lines would only be slightly oversized.

AECOM, in consultation with the Airport and CCUA, recommends using onsite dedicated wells to supply the fire protection systems since this would utilize the soon to be constructed MHD Rockland system.

4.4.7 Changes in Building Uses

This analysis is based on assumptions about the proposed building uses for empty parcels on the Eastside and in the Westside Development. A conservative approach was taken allowing the proposed fire protection systems to meet the needs of varying future tenants. The Westside system (whether independent or combined with MHD Rockland) is capable of serving a variety of tenants with moderate to high flow and high pressure needs. The system configuration selected will impact the flexibility in serving tenants on the Eastside. If the Eastside remains an independent lower pressure system and a future tenant requires higher fire flows or a fire suppression system (with higher pressures), it could be supplemented with their own system, or the Airport system could possibly be modified. Potential future tenants can be informed of the maximum capacity of the system they will use and options to meet higher requirements (i.e., in-line booster pumps, dedicated storage tanks, etc.)

4.4.8 Proposed Onsite Fire Protection System Design

4.4.2.1 Summary of Recommendations for Onsite Fire Protection System Design

To provide fire protection for the proposed expansion at the Airport Eastside, the proposed MHD Rockland facility, and the proposed Westside Development, AECOM recommends the following:

1. Separate systems for fire protection and potable water.
2. Utilizing onsite wells to provide the water supply to the fire protection system(s); an upsized well on the Eastside and the proposed fire system well for the MHD Rockland facility.
3. Two fire protection systems:
 - a. Eastside. A lower pressure system to provide fire flows (2,250 gpm at 20 psi) to the existing and proposed development consisting of the following components. The lower pressure requirements are due to no Eastside structures requiring interior fire suppression systems.
 - i. A new upsized 8-inch well with a new 6-inch, minimum 562-gpm submersible pump.
 - ii. Total storage volume of 270,000 gal by combining the existing 185,000-gal tank with an additional 85,000-gal steel tank (assuming the existing tank is in reusable condition) or a new 270,000-gal steel tank. As a conservative approach to the preliminary construction cost estimate in **Section 5.0**, the cost for a new 270,000-gal tank was included.)
 - iii. A new pumping system with 2 new diesel fire pumps (2,250 gpm at 40 psi), an electric jockey pump, and a prefabricated metal building enclosure.
 - iv. Replacement of the existing 8-inch fire piping system with approximately 4,400 lf of 12-inch piping with hydrants and stub outs for possible future connections to the Hunt Club and Camp Crystal Lake.
 - b. Westside. A separate system that provides fire flows and interior fire suppression requirements for the MHD Rockland facility and the adjacent Westside Development consisting of the following components:
 - i. A new 8-inch well with a new 6-inch, minimum 625-gpm submersible pump.
 - ii. A new 300,000-gal storage tank.
 - iii. A new pumping system with 3 new diesel fire pumps (capable of providing up to 6,000 gpm at 109 psi), an electric jockey pump, and an enclosure.
 - iv. Approximately 5,000 lf of 12-inch fire mains with hydrants.

As the MHD Rockland facility is anticipated to be constructed before the Westside Development and will require a fire protection system, it is proposed that this system be shared or transferred to the Airport to also serve the adjacent Westside Development.

4.4.2.2 Onsite Fire Protection System Conceptual Layout

The proposed fire protection system is presented in **Figure 4-9, Conceptual Fire Protection Layout**.

On the Eastside, the existing well, tank, and fire pumps will be replaced or modified for the increased flow requirements. The existing 8-inch fire main, which is undersized for the new fire protection flows, should be replaced by a 12-inch fire main with fire hydrants to protect the structures and provide for stub outs for possible future connections to the Hunt Club and Camp Crystal Lake. No fire suppression systems are anticipated for new buildings on the Eastside; thus, this system has lower pressure requirements than the Westside.

On the Westside, it is anticipated that construction of the proposed MHD Rockland facility will include a new fire supply system with a well, tank, and fire pumps. A 12-inch fire main from the fire supply system will serve Parcels A through F and the existing FIRM facility. Since multiple buildings on the Westside require fire suppression systems, higher pressures are required (up to 109 psi at the main).

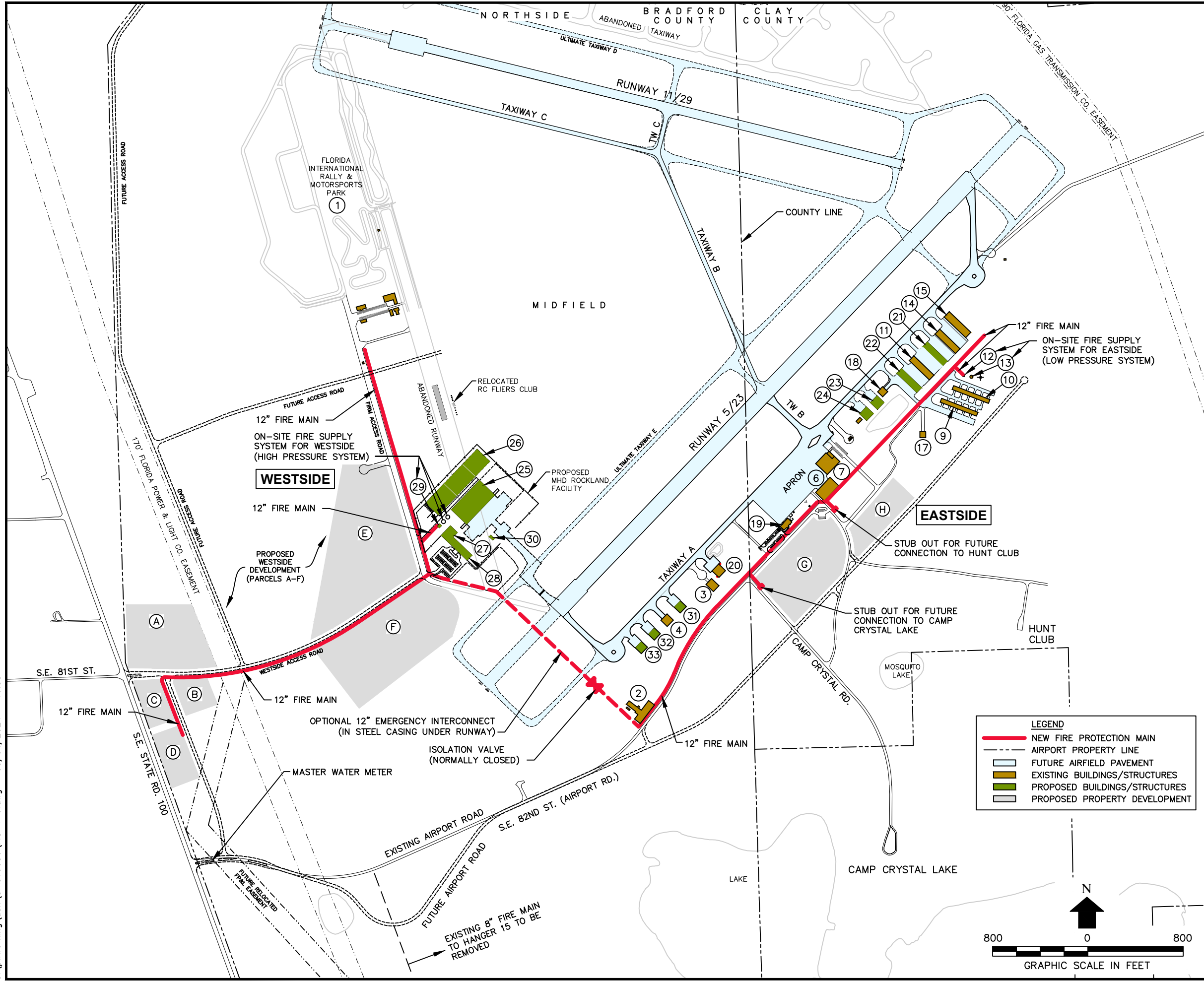
An optional 2,240 lf 12-inch emergency interconnect, with a normally closed valve, between the Eastside and Westside is proposed in the event that one of the supply/pumping systems is inoperable. Approximately 1,040 lf of the 12-inch line would be installed as a horizontal directional drill (HDD) under the proposed Runway 5/23 extension so that installation does not impact Airport operations.

4.5 Utility Alignments

To maintain separation of potable water from wastewater and fire protection water (untreated well water), it is proposed to install wastewater and fire lines on one side of the roads and potable water on the opposite side.

Currently, the Eastside has an 8-inch fire main on the south side of Airport Road from the hangars to within 1,200 feet of SR 100. To maintain fire service while this main is replaced, it is proposed to install the new 12-inch fire main on the north side of Airport Road along with the wastewater mains. Once the new fire main is in service, the existing 8-inch fire main can be removed to install the new 6-inch potable water main on the south side of the road. The typical existing and proposed utility alignments are presented in **Figure 4-10, Typical Sections for Airport Road**.

The Westside Access Road on the Westside includes a 5-foot Public Utility Easement (PUE) dedicated for two 4-inch fiber optic cable conduits on the north side of the roadway as shown in **Figure 4-11, Typical Section for Westside Access Road**. The proposed 6-inch potable water line will also be located on the north side of the road. The 12-inch fire main and wastewater mains will be located on the south side of the roadway. The 4-inch force mains will be located along the entire route while the 8-inch gravity main will also be present for approximately 500 feet.



REQUIRED FIRE PROTECTION FLOWS

EASTSIDE		
NO.	DESCRIPTION	REQ'D FLOW (gpm)
2	Warehouse	----(1)
3	Hangar	----(1)
4	Hangar	----(1)
6	Corp Hangar/Office	----(1)
7	Corp Hangar/Office	----(1)
9	T-Hangar A	----(1)
10	T-Hangar B	----(1)
11	T-Hangar C	----(1)
12	Fire Equip Enclosure	----(1)
13	Fire Water Tank	----(1)
14	T-Hangar E	----(1)
15	Corp Hangar	----(1)
17	Maintenance Building	----(1)
18	Bulk Hangar	----(1)
19	FBO Office	----(1)
20	Bulk Hangar	----(1)
21	Future T-Hangar	2,250
22	Future T-Hangar	2,250
23	Future Corp Hangar	1,750
24	Future Corp Hangar	1,750
31	Future Corp Hangar	1,750
32	Future Corp Hangar	1,750
33	Future Corp Hangar	1,750
G	Future 3 Office Bldgs	2,250
H	Future Office Bldg	2,250
	Camp Crystal Lake	----(2)
	Hunt Club	----(2)
EASTSIDE MAX FIRE FLOW (gpm)		2,250
WESTSIDE ⁽³⁾		
1	FIRM Motorsports	----(1)
MHD ROCKLAND		
25	Future Hangar	6,000
26	Future Warehouse	2,640
27	Future Flight Simulator	2,000
28	Future Office Bldg	2,500
29	Future Fire Suppr Bldg	1,500
30	Future Wash Control Bldg	1,500
WESTSIDE DEVELOPMENT		
A	Future Hotel	1,200
B	Future Gas Station	1,500
C	Future Gas Station	1,500
D	Future Strip Mall	1,063
E	Future Warehouses	2,640
F	Future Warehouses	2,640
MHD ROCKLAND MAX FLOW (gpm)		6,000
REMAINING WESTSIDE MAX FLOW (gpm)		2,640

TABLE NOTES:
 (1) Previously, the Fire Marshall determined that the maximum fire flow for any one existing structure is 1,500 gpm.
 (2) Fire protection requirements unknown.
 (3) Fire protection flows for the proposed structures on the Westside are a mix of fire flow and sprinkler & hose demands.

NOTE:
 1. FIRE PROTECTION WATER TO BE SUPPLIED BY PRIVATE ON-SITE SYSTEM.

LEGEND

- NEW FIRE PROTECTION MAIN
- - - AIRPORT PROPERTY LINE
- ▭ FUTURE AIRFIELD PAVEMENT
- ▭ EXISTING BUILDINGS/STRUCTURES
- ▭ PROPOSED BUILDINGS/STRUCTURES
- ▭ PROPOSED PROPERTY DEVELOPMENT

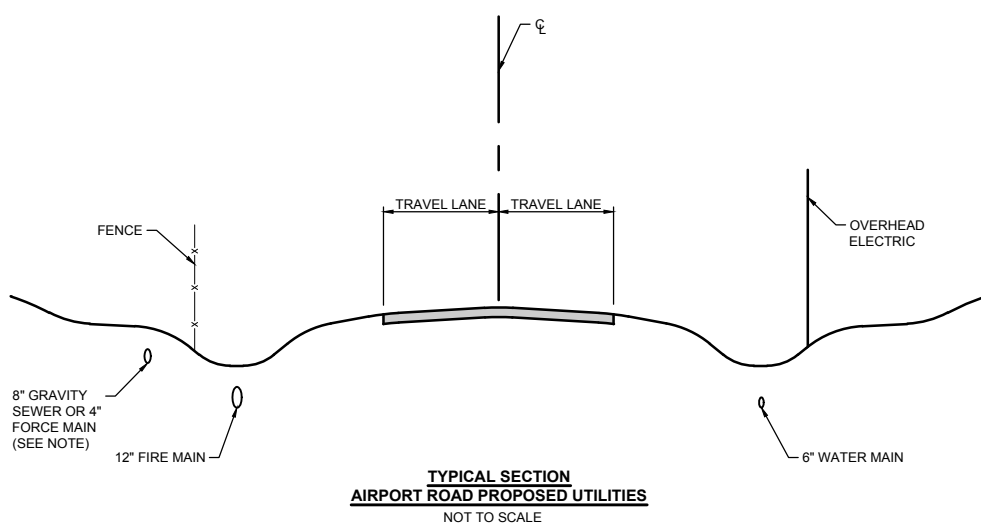
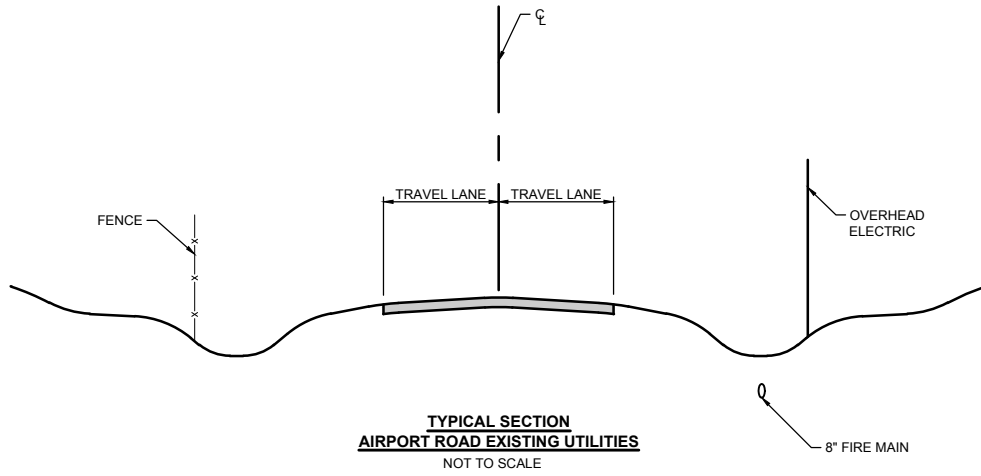
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GRAPHIC SCALE IN FEET

CONCEPTUAL FIRE PROTECTION LAYOUT

FIGURE 4-9



NOTE:
THE GRAVITY SEWER WILL BE LOCATED UNDER PAVEMENT TO CROSS THE (2)-36" RCPs AT APPROXIMATELY MILE 1.1.

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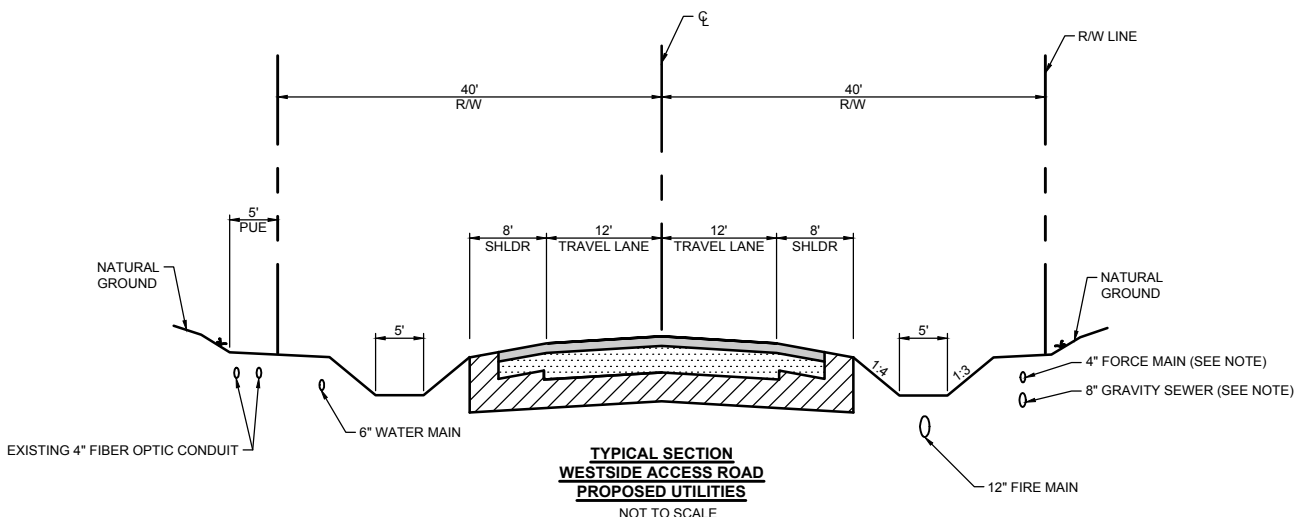
 KEYSTONE **42J** AIRPORT HEIGHTS
EST. 1942

Water and Sewer Utility Feasibility Study 

**TYPICAL SECTIONS FOR
AIRPORT ROAD**

**FIGURE
4-10**

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 C:\PWORKING\USFL\DMST19056\FIG 4-11.DWG



NOTE:
 THE 4" FORCE MAINS WILL RUN THE ENTIRE LENGTH OF THE ROAD. THE 8" GRAVITY SEWER WILL ALSO BE PRESENT FOR 500 LF.

KEYSTONE **AIRPORT 42J** HEIGHTS
 EST. 1942

Water and Sewer Utility Feasibility Study **AECOM**

TYPICAL SECTION FOR WESTSIDE ACCESS ROAD

FIGURE 4-11

5.0 Preliminary Construction Cost Estimates

Preliminary construction costs estimates were developed for the potable water, wastewater, and fire flow systems and are presented in **Table 5-1**. The construction costs include materials, installation, and contractor overhead and profit. The linear foot pricing for piping also includes fittings, service connections, fire hydrants (where applicable), and restoration. These costs are based on January 2024 Construction Cost index from Engineering News Record. The cost for the MHD Rockland fire water supply and pumping system was not included since it is assumed that Rockland would be responsible for its construction. Given the conceptual nature of the design, a 25% contingency factor was included. An engineering design and permitting fee of approximately 15% was added. The preliminary construction costs estimate including design, permitting and construction is \$17,313,500. The construction cost estimates should be considered as a Class 3 estimate with an expected accuracy level of (-) 10% to (+) 30%, or \$15,600,000 to \$22,500,000.

Table 5-1 Preliminary Construction Cost Estimate				
Item	Unit	Quantity	Unit Price	Total Price
Potable Water System				
12-inch PVC Water Main - SR 100	LF	12,000	\$150	\$1,800,000
6-inch PVC Water Main - Airport	LF	11,200	\$80	\$896,000
4-inch PVC Water Main - Airport	LF	3,600	\$60	\$216,000
Master Water Meter	EA	2	\$30,000	\$60,000
12" Jack & Bore - Along SR 100 (6 crossings)	LF	570	\$850	\$484,500
4" Jack & Bore at Airport (2 crossings)	LF	120	\$325	\$39,000
Potable Water System Subtotal				\$3,495,500
Wastewater System				
6-inch PVC Force Main - SR 100	LF	12,000	\$70	\$841,200
4-inch PVC Force Main - Airport	LF	8,500	\$55	\$470,050
8-inch Gravity Sewer - Airport	LF	5,500	\$200	\$1,100,000
Gravity Sewer Laterals (17 total)	LF	4,320	\$50	\$216,000
Manholes	EA	19	\$6,000	\$114,000
Small Private Pump Stations	EA	3	\$75,000	\$225,000
Large Private Pump Station	EA	1	\$250,000	\$250,000
Airport Master Pump Stations	EA	2	\$350,000	\$700,000
6-inch Jack & Bore - Along SR 100 (3 crossings)	LF	250	\$375	\$93,750
4-inch Jack & Bore - Across SR 100 (2 crossings)	LF	160	\$325	\$52,000
Abandon Existing Septic Systems	EA	10	\$2,500	\$25,000
Wastewater System Subtotal				\$4,087,000
Fire Protection System				
12-inch PVC Fire Main - Airport	LF	9,400	\$150	\$1,410,000
Eastside - Fire Supply Well & Submersible Pump	LS	1	\$125,000	\$125,000
Eastside - Fire Tank (270,000-gal)	LS	1	\$250,000	\$250,000
Eastside - Fire Pump System w/ Enclosure	LS	1	\$650,000	\$650,000
Optional 12" PVC Fire Main Interconnect	LF	2,240	\$125	\$280,000
Optional 12" HDD for Optional 12" Fire Main	LF	1,040	\$400	\$416,000
Fire Protection System Subtotal				\$3,131,000
SUBTOTAL				\$10,713,500
Mobilization (5%)	LS	1	\$500,000	\$500,000
General Conditions (10%)	LS	1	\$1,100,000	\$1,100,000
Contingency (25%)	LS	1	\$2,700,000	\$2,700,000
SUBTOTAL				\$15,013,500
Engineering & Permitting (15%)	LS	1	\$2,300,000	\$2,300,000
TOTAL				\$17,313,500
Range of Costs (-10% to +30%)			\$15,600,000 to \$22,500,000	

6.0 Construction Schedule & Permitting

A total of 3 years should be allotted for design, permitting, and construction of the potable water, wastewater and fire protections systems. Engineering design and regulatory permitting should take approximately 1 year. Due to current global supply chain issues for construction materials and equipment, 2 years is anticipated for construction of these improvements.

This project will require permitting through a variety of state and local agencies. During the design phase, the following permits will be required:

1. FDOT right of way permit for utility construction along SR 100
2. FDEP construction permit for water mains
3. FDEP construction permit for wastewater collection/transmission system
4. CCUA Review and Approval of water and sewer
5. St Johns Water Management District construction and consumptive use permit for new fire protection well
6. FDEP permits to abandon existing septic systems

Appendix A

Airport Potable Water Demand and Wastewater Generation Flow Calculations

Keystone Heights Airport - Water and Sewer Utility Feasibility Study
Potable Water Demand and Wastewater Generation Flow Calculations

Wastewater Generation flow calculations are attached (and color coded for each category)
Potable Water Use is wastewater generation plus 10%

LEGEND

These values are assumed

ALP No.	Name	Use	Bathrooms	Showers	Offices	Normal Occupants	Surge Occupants	Wastewater Generation Rate (gpd/pp)	Wastewater Generation (gpd)	Potable Water Demand (gpd)	Notes
EXISTING BUILDINGS											
1	Florida International Rally & Motorsports Park	Training and events	4	2	4	10	25	25	625	688	For 3-4 events a year with 4,000-5,000 attendees, port-a-johns are used
2	Warehouse (11,000 sf)	Currently MHD Rockland parts storage	2	-	1	0	0	15	0	0	
3	Hangar (4,828 sf)	Currently MHD Rockland parts storage	0	0	1	1	1	15	15	17	
4	Hangar (5,625 sf)	College of Missionary Aviation	1	-	1	3	6	15	90	99	
5	Electrical Vault (90 sf)		-	-	-	0	0	15	0	0	
6	Corporate Hangar/Office (17,500 sf)	Currently MHD Rockland hangar and office	2	1	1	10	10	25	250	275	
7	Corporate Hangar/Office (19,600 sf)	Currently MHD Rockland storage and office	3	2	1	12	12	25	300	330	
8	Shed (172 sf)	Airport site maintenance equipment	-	-	-	0	0	15	0	0	
9	T-Hangar A (11,130 sf)	Holds 10 aircraft. Space rented to individuals.	1	-	-	0	10	15	300	330	Includes occupants from No. 10, T-Hangar B
10	T-Hangar B (11,130 sf)	Holds 10 aircraft. Space rented to individuals.	-	-	-	0	10	15	0	0	Occupants use restroom in No. 9, T-Hangar A
11	T-Hangar C (12,936 sf)	Holds 10 aircraft. Space rented to individuals.	1	-	-	0	10	15	150	165	
12	Fire Suppression Equipment Enclosure (336 sf)	Fire pumps to distribute fire flow from No. 13, Water Tank	-	-	-	-	-	-	0	0	
13	Water Tank (185,000 gal)	For fire suppression	-	-	-	-	-	-	0	0	
14	T-Hangar E (9,890 sf)	Holds 10 aircraft. Space rented to individuals.	1	-	-	0	10	15	150	165	
15	Corporate Hangar (14,400 sf)	Currently no office or restroom, but plumbed for future	4	1	4	4	6	25	150	165	Using future projections
16	Electrical Vault (221 sf)		-	-	-	-	-	-	0	0	
17	Maintenance Building (2,500 sf)	Airport site maintenance equipment	-	-	-	0	0	15	0	0	
18	Bulk Hangar (3,600 sf)		-	-	-	0	0	15	0	0	
19	FBO Office (4,516 sf)		3	1	1	3	4	25	100	110	
20	Bulk Hangar (6,400 sf)	Currently no office or restroom, but plumbed for future	1	-	1	1	1	15	15	17	Using future projections
OTHER EXISTING PROPERTY USES											
	Camp Crystal Summer Camp	Alachua County Schools	-	-	-	-	200	35	7,000	7,700	Max Occupancy - Summer Camp 200 total campers & counselors
	Hunt Club	Private Keystone Sportsmen Club	2	2	0	25	150	25	3,750	4,125	Assume surge for events is accommodated by port-a-johns
Subtotal Existing Building & Property Uses, Average Flow (gpd):									12,895	14,185	
PROPOSED BUILDINGS (Near Term, 1-3 years)											
21	Future Hangar (Approx. 13,000 sf)	T-hangar will hold 10 aircraft	1	-	-	0	10	15	150	165	
22	Future Hangar (Approx. 13,000 sf)	T-hangar will hold 10 aircraft	1	-	-	0	10	15	150	165	
23	Future Hangar (80' x 80') (6,400 sf)	Corporate hangar	1	-	1	1	2	15	30	33	
24	Future Hangar (80' x 80') (6,400 sf)	Corporate hangar	1	-	1	1	2	15	30	33	
25	Hangar (54,000 sf)	Future MHD Rockland	1	-	-	1	2	15	30	33	
26	Warehouse (30,000 sf)	Future MHD Rockland	1	-	-	1	2	15	30	33	Possible alternate 60,000 sf warehouse across street from No. 2, Warehouse
27	Flight Simulator Building (9,500 sf)	Future MHD Rockland; classroom	4	1	-	15	15	15	225	248	
28	Office Building (12,800 sf)	Future MHD Rockland	6	4	-	50	50	25	1,250	1,375	
29	Fire Suppression Building (500 sf)	Future MHD Rockland; adjacent to 2 tanks holding fire flow	-	-	-	-	-	-	0	0	
30	Wash Control Building (720 sf)	Future MHD Rockland; Riveer RainBird aircraft rinse system	-	-	-	-	-	-	3,000	6,000	See attached calculations
31	Future Hangar (80' x 80') (6,400 sf)	Corporate hangar; Taxiway A frontage, north of No. 4	1	-	1	1	2	15	30	33	
32	Future Hangar (80' x 80') (6,400 sf)	Corporate hangar; Taxiway A frontage, south of No. 4	1	-	1	1	2	15	30	33	
33	Future Hangar (80' x 80') (6,400 sf)	Corporate hangar; Taxiway A frontage, south of No. 4	1	-	1	1	2	15	30	33	
PROPOSED BUILDINGS - WEST SIDE DEVELOPMENT (Near Term, 1-3 years)											
A	Future Industrial/Comm. Development (8 ac)	West Side Development; Hotel (3-star, 3-story, 50,000 sf)	-	-	-	-	-	-	10,000	11,000	See attached calculations
B	Future Industrial/Comm. Development (2 ac)	West Side Development; Gas Station/ Convenience Store	-	-	-	-	-	-	500	550	See attached calculations
C	Future Industrial/Comm. Development (2 ac)	West Side Development; Gas Station/ Convenience Store	-	-	-	-	-	-	500	550	See attached calculations
D	Future Industrial/Comm. Development (3 ac)	West Side Development; Strip Mall/Retail	-	-	-	-	-	-	4,000	4,400	See attached calculations
E	Future Industrial/Comm. Development (17 ac)	West Side Development; Warehouse/ Light Industrial	-	-	-	45	45	15	675	743	See attached calculations
F	Future Industrial/Comm. Development (15 ac)	West Side Development; Warehouse/ Light Industrial	-	-	-	40	40	15	600	660	See attached calculations
Subtotal Proposed (Near Term), Average Flow (gpd):									21,260	26,086	
Subtotal Existing & Near Term, Average Flow (gpd):									34,155	40,271	
FUTURE BUILDINGS (Greater than 4 years)											
G	Future Development Site (8.5 ac)	3 Office Buildings				90	90	15	1,350	1,485	By Taxiway A. Assume Fire Station. See attached calculations. Actually 12 ac
H	Future Development Site (3.3 ac)	Office Building				30	30	15	450	495	By Taxiway A. See attached calculations.
Subtotal Future Average Flow (gpd):									1,800	1,980	
DISTANT FUTURE PROPERTY USES (No current time frame)											
	Future Development Site (12.8 ac)	South Side of Taxiway A	-	-	-	-	-	-	-	-	Not Included in Study. Assume cannot be developed due to deep ditch through site.
	Future Development Site (48 ac)	Northeast of Taxiway A. CBJTC Airfield Strategic Initiative	-	-	-	-	-	-	-	-	Not Included in Study
	Future Midfield Aviation Development (190 ac)	Midfield	-	-	-	-	-	-	-	-	Not Included in Study
	Future Aviation Development (53 ac)	North Side of Taxiway D	-	-	-	-	-	-	-	-	Not Included in Study
	Future Industrial Development (116 ac)	North Side of Taxiway D	-	-	-	-	-	-	-	-	Not Included in Study
Total Average Flow (gpd):									35,955	42,251	
Total Average Flow (gpm):									25.0	29.3	
Peaking Factor:									4	4	
Peak Flow (gpd):									143,820	169,002	
Peak Flow (gpm):									99.88	117.36	

Keystone Heights Airport Utility Master Plan

EXISTING BUILDINGS

Wastewater Flow Calculations

Primary Source of **wastewater flowrates** is Florida Administrative Code (FAC) 64E-6.0008, System Size Determinations
Other assumptions are noted.

Commercial & Industrial Establishments

15 gpd per employee per 8-hour shift

25 gpd when showers are provided

OTHER EXISTING PROPERTY USES

Camp Crystal Summer Camp - Alachua County Schools

During the school year, day camps and limited overnight camps (Wednesday through Friday)

During June and July, there's a total of 200 campers, counselors and employees

Per FAC 64E-6.008: There is no listing for overnight camps. The following were considered:

RV Park without water and sewer hookup (shared clean-up sinks, restrooms & showers) - 50 gpd per space

Public Park with bathhouse, showers, and toilets - 10 gpd per person

School - day type with showers and cafeteria - 18 gpd per student and 15 gpd per worker

School, Boarding type - 75 gpd per student

Work/Construction Camp, semi-permanent - 50 per worker

Assume:

35 gpd per camper, counselor and employee

Hunt Club - Private Keystone Sportsmen Club

Assume special event with surge participants are accommodated by porta johns

Normal operations - for members, use same as employee on 8-hour shift.

25 gpd when showers are provided

Keystone Heights Airport Utility Master Plan

PROPOSED BUILDINGS

Wastewater Flow (& Water Use) Calculations

Primary Source of **wastewater flowrates** is Florida Administrative Code (FAC) 64E-6.0008, System Size Determinations
Other assumptions are noted.

Commercial & Industrial Establishments

15 gpd per employee per 8-hour shift

25 gpd if showers are provided.

MHD Rockland - Riveer BirdBath - Clear Water Rinse System for Aircraft

Normal MHD Rockland operation is 3 planes, but new hangar will be able to hold 5.

Assume wash all 5 planes once a day.

System will use 3,000 gallons per plane.

Rinse water is collected, filtered and recycled.

Once the filtered water does not meet reequipments, it's sent to wastewater drain.

Assume one full wash is sent to wastewater drain per day = **3000 gpd**

Water use - 20 gpm to pretreatment system, intermittently, to top off rinse water storage tank.

The pretreated water replaces filtered rinse water sent to drain and rinse water lost to environment during wash.

Replace one full wash sent to waste (3000 gal)

and the 25% lost to the environment for the other 4 washes (3000 gal = $4 \times (0.25 \times 3000)$)

Total water use = **6000 gpd**

Keystone Heights Airport Utility Master Plan

PROPOSED BUILDINGS - WEST SIDE DEVELOPMENT

Wastewater Flow Calculations

Rule of thumb for commercial/industrial development is to use a Floor Area Ratio (FAR) of 30%

Meaning that the maximum building square footage would be 30% of the site area.

(The remaining 70% of the site area would be for access, parking, stormwater, green space, etc.)

A - Future Industrial/Comm. Development (8 ac)	West Side Development; Hotel
--	------------------------------

$$30\% \text{ FAR} * 8 \text{ ac} = 2.4 \text{ ac}$$

$$2.4 \text{ ac} * 43,560 \text{ sf/ac} = 104,544 \text{ sf max building area}$$

Per FAC 64E-6.008: Hotels & Motel, 100 gpd per room

$$100 \text{ rooms at } 100 \text{ gpd} = \mathbf{10,000 \text{ gpd}}$$

Per Fire Flow Calcs and for conservative W/WW analysis,
assume hotel similar to Hilton Hampton Inn or Holiday Inn
Express: 3 star, 3 story, 50,000sf total, 16,700sf ground floor

B - Future Industrial/Comm. Development (2 ac)	West Side Development; Gas Station/ Convenience Store
--	---

Per FAC 64E-6.008: Service Station

Open 16 hr/day or less, 250 gpd per water closet

$$250 \text{ gpd} * 2 \text{ restrooms} = \mathbf{500 \text{ gpd}}$$

C - Future Industrial/Comm. Development (2 ac)	West Side Development; Gas Station/ Convenience Store
--	---

Per FAC 64E-6.008: Service Station

Open 16 hr/day or less, 250 gpd per water closet

$$250 \text{ gpd} * 2 \text{ restrooms} = \mathbf{500 \text{ gpd}}$$

D - Future Industrial/Comm. Development (3 ac)	West Side Development; Strip Mall/Retail
--	--

450' frontage on SR 100

$$30\% \text{ FAR} * 3 \text{ ac} = 0.9 \text{ ac}$$

$$0.9 \text{ ac} * 43,560 \text{ sf/ac} = 39,204 \text{ sf max building area}$$

Per FAC 64E-6.008:

0.1 gpd per sf of shopping center floor space

Or 200 gpd/store restroom

$$39,204 \text{ sf} * 0.1 = \mathbf{4,000 \text{ gpd}}$$

E - Future Industrial/Comm. Development (17 ac)	West Side Development; Warehouse/ Light Industrial
---	--

$$30\% \text{ FAR} * 17 \text{ ac} = 5.1 \text{ ac}$$

$$5.1 \text{ ac} * 43,560 \text{ sf/ac} = 222,156 \text{ sf max building area}$$

Assuming 1 employee per 5,000 sf of warehouse.

$$222,146 \text{ sf} / 5,000 = 44.4 \text{ employees}$$

Per FAC 64E-6.008: 15 gpd per employee / 8 hr shift

$$45 \text{ employees at } 15 \text{ gpd} = \mathbf{675 \text{ gpd}}$$

F - Future Industrial/Comm. Development (15 ac)	West Side Development; Warehouse/ Light Industrial
---	--

$$30\% \text{ FAR} * 15 \text{ ac} = 4.5 \text{ ac}$$

$$4.5 \text{ ac} * 43,560 \text{ sf/ac} = 196,020 \text{ sf max building area}$$

$$196,020 \text{ sf} / 5,000 = 39.2 \text{ employees}$$

Per FAC 64E-6.008: 15 gpd per employee / 8 hr shift

$$40 \text{ employees at } 15 \text{ gpd} = \mathbf{600 \text{ gpd}}$$

Keystone Heights Airport Utility Master Plan

FUTURE PROPERTY USES

Wastewater Flow Calculations

G -Future Development Site (8.5 ac)	Offices
-------------------------------------	---------

Site is labeled on ALP as 8.5 ac, but is actually 12 ac

Per FAC 64E-6.008: 15 gpd per employee per 8 hr shift
90 employees * 15 gpd = **1,350 gpd**

30% FAR * 12 ac = 3.6 ac

3.6 ac * 43,560 sf/ac = 156,816 sf max building area

Per Fire Flow Calcs, set building area at 3 separate/phased office buildings at 12,000 sf each for 36,000 sf total

Assuming 1 employee per 400 sf of office

36,000 sf / 400 sf = 90

H - Future Development Site (3.3 ac)	Offices
--------------------------------------	---------

Rule of thumb for commercial/industrial development is to use a Floor Area Ratio (FAR) of 30%

Meaning that the actual building square footage would be 30% of the site area.

(The remaining 70% of the site area would be for access, parking, stormwater, green space, etc.)

30% FAR * 3.3 ac = 1 ac

Per FAC 64E-6.008: 15 gpd per employee per 8 hr shift

1 ac * 43,560 sf/ac = 43,560 sf max building area

30 employees * 15 gpd = **450 gpd**

Set building area at 12,000 sf per Fire Flow Calcs

Assuming 1 employee per 400 sf of office

12,000 sf / 400 sf = 30

Future Development Site (12.8 ac) shown on ALP	Development Not Considered for This Analysis
--	--

Assume site cannot be developed due to deep ditch.

No wastewater generation or water use included.

Appendix B

**CCUA Fire Hydrant Flow Test Summary
Dated 6/9/2022**

Clay County Utility Authority

Fire Hydrant Flow Test Summary

Task ID	Activity	Prepared By	Date Prepared	Date Completed
570616	Flow Test	AMACDONALD	6/23/2022	6/29/2022

Flowing Hydrant Info

Residual Hydrant Info

Date Installed: 1/1/2013

Hydrant Number: 3550

As-built Number: MO-2

Hydrant Location: 1316 SE State Road 100

Brand Name: Waterous

Model or Other ID: WB-67-250

Water Main Size: 12"

Hydrant Outlet Size: 2-1/2"

Valve Opening Size: 5-1/4"

Hydrant Number: 3549

As-built Number: MO-2

Hydrant Location:

Flow Test Results

Hydrant Static Pressure: 76 Pressure Per Square Inch

Hydrant Pitot Pressure: 35 Pressure Per Square Inch

Residual Hydrant Pressure: 58 Pressure Per Square Inch

Flow Duration: 3 Minutes

***Water Flowed:** 1,000 Gallons Per Minute

Estimated Gallons Flushed: 3,000 Gallons

Was there a backflow preventer between the hydrant flowed and the residual reading location?

No

If yes, list type of backflow device and show calculations of adjusted residual pressure.

*Note: CCUA only provides 1,000 GPM at 20 PSI regardless of test data.

Flow Test Completed By:

Marvin Short

Jerry Sleezer

Appendix C

**Existing Fire Protection Well -
Consumptive Use Permit from St. Johns Water Management District
Dated January 3, 2007**



St. Johns River Water Management District

Kirby B. Green III, Executive Director • David W. Fisk, Assistant Executive Director

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500
On the Internet at www.sjrwmd.com.

January 3, 2007

Keystone Airpark Authority
7100 Airport Rd
Starke, FL 32091

SUBJECT: Consumptive Use Permit Number 109130
Keystone Airpark Authority

Dear Sir/Madam:

Enclosed is your permit as authorized by the St. Johns River Water Management District on January 03, 2007.

Please be advised that the period of time within which a third party may request an administrative hearing on this permit may not have expired by the date of issuance. A potential petitioner has twenty-six (26) days from the date on which the actual notice is deposited in the mail, or twenty-one (21) days from publication of this notice when actual notice is not provided, within which to file a petition for an administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes. Receipt of such a petition by the District may result in this permit becoming null and void.

Permit issuance does not relieve you from the responsibility of obtaining permits from any federal, state and/or local agencies asserting concurrent jurisdiction over this work.

The enclosed permit is a legal document and should be kept with your other important records. Please read the permit and conditions carefully since the referenced conditions may require submittal of additional information. All information submitted as compliance with permit conditions must be submitted to the nearest District Service Center and should include the above referenced permit number.

Sincerely,

Gloria Lewis, Director
Permit Data Services Division

Enclosures: Permit, Conditions for Issuance, Compliance Forms, Map, Well Tags

cc: District Permit File

GOVERNING BOARD

David G. Graham, CHAIRMAN JACKSONVILLE	John G. Sowinski, VICE CHAIRMAN ORLANDO	Ann T. Moore, SECRETARY BUNNELL	Duane L. Ottenstroer, TREASURER JACKSONVILLE	
R. Clay Albright OCALA	Susan N. Hughes PONTE VEDRA	William W. Kerr MELBOURNE BEACH	Ometrias D. Long APOPKA	W. Leonard Wood FERNANDINA BEACH

PERMIT NO. 109130

DATE ISSUED: January 3, 2007

PROJECT NAME: Keystone Airpark Authority

A PERMIT AUTHORIZING:

The District authorizes, as limited by the attached conditions, the use of .864 million gallons per year (mgd) maximum of groundwater from the Floridan aquifer exclusively for fire protection use (essential use) for 20-years.

LOCATION:

Site: Keystone Airpark Authority
Clay County

Section(s): 31 Township(s): 7S Range(s): 23E

ISSUED TO:

Keystone Airpark Authority
7100 Airport Rd
Starke, FL 32091

Permittee agrees to hold and save the St. Johns River Water Management District and its successors harmless from any and all damages, claims, or liabilities which may arise from permit issuance. Said application, including all maps and specifications attached thereto, is by reference made a part hereof.

This permit does not convey to permittee any property rights nor any rights of privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation or requirement affecting the rights of other bodies or agencies. All structures and works installed by permittee hereunder shall remain the property of the permittee.

This permit may be revoked, modified or transferred at any time pursuant to the appropriate provisions of Chapter 373, Florida Statutes and 40C-1, Florida Administrative Code.

PERMIT IS CONDITIONED UPON:

See conditions on attached "Exhibit A", dated January 3, 2007

AUTHORIZED BY: St. Johns River Water Management District
Department of Resource Management

By: 
Dwight Jenkins
Division Director

"EXHIBIT A"
CONDITIONS FOR ISSUANCE OF PERMIT NUMBER 109130
KEYSTONE AIRPARK AUTHORITY
DATED JANUARY 3, 2007

1. District Authorized staff, upon proper identification, will have permission to enter, inspect and observe permitted and related facilities in order to determine compliance with the approved plans, specifications and conditions of this permit.
2. Nothing in this permit should be construed to limit the authority of the St. Johns River Water Management District to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event a water shortage, is declared by the District Governing Board, the permittee must adhere to the water shortage restriction as specified by the District, even though the specified water shortage restrictions may be inconsistent with the terms and conditions of this permit.
3. Prior to the construction, modification, or abandonment of a well, the permittee must obtain a Water Well Construction Permit from the St. Johns River Water Management District, or the appropriate local government pursuant to Chapter 40C-3, Florida Administrative Code. Construction, modification, or abandonment of a well will require modification of the consumptive use permit when such construction, modification or abandonment is other than that specified and described on the consumptive use permit application form.
4. Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to eliminate the leak or make the system fully operational.
5. Off-site land uses existing at the time of permit application may not be significantly adversely impacted as a result of the consumptive use. If unanticipated significant adverse impacts occur, the District shall revoke the permit in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by the permittee.
6. The District must be notified, in writing, within 30 days of any sale, conveyance, or other transfer of a well or facility from which the permitted consumptive use is made or within 30 days of any transfer of ownership or control of the real property at which the permitted consumptive use is located. All transfers of ownership or transfers of permits are subject to the provisions of section 40C-1.612, Florida Administrative Code.
7. A District-issued identification tag shall be prominently displayed at each withdrawal site by permanently affixing such tag to the pump, headgate, valve or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. Permittee shall notify the District in the event that a replacement tag is needed.
8. For the purposes of the following permit conditions, the St. Johns River Water Management District shall be referred to as "the District" and the holder of this permit shall be referred to as "the permittee".
9. All submittals made to demonstrate compliance with this permit must include the CUP number 22-019-109130-1 plainly labeled.
10. This permit will expire December 31, 2026.

11. Legal uses of water existing at the time of the permit application may not be significantly impacted as a result of the consumptive use. If significant impacts occur (including interference with other existing legal users), the District may revoke the permit in whole or in part to abate the adverse impact unless otherwise mitigated by the permittee. In those cases, where other permit holders are identified by the District as also contributing to the adverse impact, the permittee may choose to mitigate in a cooperative effort with these other permittees. The permittee must submit a mitigation plan to the District for approval prior to implementing such mitigation.
12. Maximum daily groundwater withdrawals from the Floridan aquifer, solely for fire protection (essential use), must not exceed 0.864 million gallons.
13. Groundwater well "Fire Well" (GRS ID 104803), as listed on the application, is authorized solely for fire protection use only. This permit must be modified prior to any change in type use.
14. A District-issued identification tag shall be prominently displayed on well "Fire Well" (GRS ID 104803), as listed on the application, by permanently affixing such tag to the pump, headgate, valve, or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. Permittee shall notify the District in the event that a replacement tag is needed.

Notice Of Rights

1. A person whose substantial interests are or may be affected has the right to request an administrative hearing by filing a written petition with the St. Johns River Water Management District (District). Pursuant to Chapter 28-106 and Rule 40C-1.1007, Florida Administrative Code, the petition must be filed (received) either by delivery at the office of the District Clerk at District Headquarters, P. O. Box 1429, Palatka Florida 32178-1429 (4049 Reid St., Palatka, FL 32177) or by e-mail with the District Clerk at Clerk@sjrwm.com, within twenty-six (26) days of the District depositing notice of District decision in the mail (for those persons to whom the District mails actual notice), within twenty-one (21) days of the District emailing notice of District decision (for those persons to whom the District emails actual notice), or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail or email actual notice). A petition must comply with Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes, and Chapter 28-106, Florida Administrative Code. The District will not accept a petition sent by facsimile (fax), as explained in paragraph no. 5 below. Mediation pursuant to Section 120.573, Florida Statutes, is not available.
2. If the Governing Board takes action that substantially differs from the notice of District decision, a person whose substantial interests are or may be affected has the right to request an administrative hearing by filing a written petition with the District, but this request for administrative hearing shall only address the substantial deviation. Pursuant to Chapter 28-106 and Rule 40C-1.1007, Florida Administrative Code, the petition must be filed (received) at the office of the District Clerk at the mail/street address or email address described in paragraph no. 1 above, within twenty-six (26) days of the District depositing notice of final District decision in the mail (for those persons to whom the District mails actual notice), within twenty-one (21) days of the District emailing the notice of final District decision (for those persons to whom the District emails actual notice), or within twenty-one (21) days of newspaper publication of the notice of final District decision (for those persons to whom the District does not mail or email actual notice). A petition must comply with Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes, and Chapter 28-106, Florida Administrative Code. Mediation pursuant to Section 120.573, Florida Statutes, is not available.
3. A person whose substantial interests are or may be affected has the right to a formal administrative hearing pursuant to Sections 120.569 and 120.57(1), Florida Statutes, where there is a dispute between the District and the party regarding an issue of material fact. A petition for formal hearing must also comply with the requirements set forth in Rule 28-106.201, Florida Administrative Code.
4. A person whose substantial interests are or may be affected has the right to an informal administrative hearing pursuant to Sections 120.569 and 120.57(2), Florida Statutes, where no material facts are in dispute. A petition for an informal hearing must also comply with the requirements set forth in Rule 28-106.301, Florida Administrative Code.

Notice Of Rights

5. A petition for an administrative hearing is deemed filed upon receipt of the complete petition by the District Clerk at the District Headquarters in Palatka, Florida. Petitions received by the District Clerk after 5:00 p.m., or on a Saturday, Sunday, or legal holiday, shall be deemed filed as of 8:00 a.m. on the next regular District business day. The District's acceptance of petitions filed by e-mail is subject to certain conditions set forth in the District's Statement of Agency Organization and Operation (issued pursuant to Rule 28-101.001, Florida Administrative Code), which is available for viewing at www.sjrwmd.com. These conditions include, but are not limited to, the petition being in the form of a PDF file and being capable of being stored and printed by the District. Further, pursuant to the District's Statement of Agency Organization and Operation, attempting to file a petition by facsimile is prohibited and shall not constitute filing.
6. Failure to file a petition for an administrative hearing within the requisite time frame shall constitute a waiver of the right to an administrative hearing. (Rule 28-106.111, Florida Administrative Code).
7. The right to an administrative hearing and the relevant procedures to be followed are governed by Chapter 120, Florida Statutes, Chapter 28-106, Florida Administrative Code, and Rule 40C-1.1007, Florida Administrative Code. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means the District's final action may be different from the position taken by it in this notice. A person whose substantial interests are or may be affected by the District's final action has the right to become a party to the proceeding, in accordance with the requirements set forth above.
8. A person with a legal or equitable interest in real property who believes that a District permitting action is unreasonable or will unfairly burden the use of their property, has the right to, within 30 days of receipt of the notice of District decision regarding a permit application, apply for a special magistrate proceeding under Section 70.51, Florida Statutes, by filing a written request for relief at the Office of the District Clerk located at District Headquarters, P. O. Box 1429, Palatka, FL 32178-1429 (4049 Reid St., Palatka, FL 32177). A request for relief must contain the information listed in Subsection 70.51(6), Florida Statutes. Requests for relief received by the District Clerk after 5:00 p.m., or on a Saturday, Sunday, or legal holiday, shall be deemed filed as of 8:00 a.m. on the next regular District business day.
9. A timely filed request for relief under Section 70.51, Florida Statutes, tolls the time to request an administrative hearing under paragraph nos. 1 or 2 above. (Paragraph 70.51(10)(b), Florida Statutes). However, the filing of a request for an administrative hearing under paragraph nos. 1 or 2 above waives the right to a special magistrate proceeding. (Subsection 70.51(10)(b), Florida Statutes).
10. Failure to file a request for relief within the requisite time frame shall constitute a waiver of the right to a special magistrate proceeding. (Subsection 70.51(3), Florida Statutes).

Notice Of Rights

11. Any person whose substantial interests are or may be affected who claims that final action of the District constitutes an unconstitutional taking of property without just compensation may seek review of the action in circuit court pursuant to Section 373.617, Florida Statutes, and the Florida Rules of Civil Procedures, by filing an action in circuit court within 90 days of rendering of the final District action, (Section 373.617, Florida Statutes).
12. Pursuant to Section 120.68, Florida Statutes, a party to the proceeding before the District who is adversely affected by final District action may seek review of the action in the District Court of Appeal by filing a notice of appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, within 30 days of the rendering of the final District action.
13. A party to the proceeding before the District who claims that a District order is inconsistent with the provisions and purposes of Chapter 373, Florida Statutes, may seek review of the order pursuant to Section 373.114, Florida Statutes, by the Florida Land and Water Adjudicatory Commission, by filing a request for review with the Commission and serving a copy on the Florida Department of Environmental Protection and any person named in the order within 20 days of the rendering of the District order.
14. A District action is considered rendered, as referred to in paragraph nos. 11, 12, and 13 above, after it is signed on behalf of the District, and is filed by the District Clerk.
15. Failure to observe the relevant time frames for filing a petition for judicial review as described in paragraph nos. 11 and 12 above, or for Commission review as described in paragraph no. 13 above, will result in waiver of that right to review.

Notice Of Rights

Certificate of Service

I HEREBY CERTIFY that a copy of the foregoing Notice of Rights has been sent by U.S. Mail to:

Keystone Airpark Authority
7100 Airport Rd
Starke, FL 32091

At 4:00 p.m. this ⁸⁴~~80~~ day of January, 2007.

Gloria Lewis

Division of Permit Data Services
Gloria Lewis, Director

St. Johns River Water Management District
Post Office Box 1429
Palatka, FL 32178-1429
(386) 329-4152
Permit Number: 109130

CONSUMPTIVE USE TECHNICAL STAFF REPORT
ESSENTIAL USE (FIRE PROTECTION)

December 29, 2006
22-019-109130-1

APPLICANT: Keystone Airport Authority
7100 Airport Road
Starke, FL 32091
(352) 473-0031

PROJECT NAME: Keystone Airport Fire Department

LOCATION: Clay County

WATER USE:
Recommended Use: .864 million gallons per day (mgd) maximum of groundwater from the Floridan aquifer for fire protection use (essential use) for 20-years.

Recommended Permit Duration and Compliance Reporting: 20 year permit without compliance reporting pursuant to section 373.236(3), Florida Statutes. Permittee is required to comply with, and submit all information and data required by, the limiting conditions set forth in this technical staff report.

OBJECTORS: None

USE STATUS:
This is an application for a new use.

AUTHORIZATION:
The District authorizes, as limited by the attached conditions, the use of .864 million gallons per year (mgd) maximum of groundwater from the Floridan aquifer exclusively for fire protection use (essential use) for 20-years.

TIMEFRAMES:
Date application received: December 26, 2006
Date application deemed complete: December 26, 2006
90th day: March 26, 2007

PROJECT DESCRIPTION:
Project Location
The Keystone Airport Authority is located in the southwestern portion of Clay County.

Background
The Keystone Airport Authority is requesting to construct a 6-inch diameter Floridan aquifer well to be used exclusively for fire protection on airport property. This application is for a new use.

Water Supply System and Use Description

The applicant has requested the use of .864 million gallons per day (mgd) to supply a dedicated fire protection system at the Keystone Heights Airpark. There are no other wells listed on the application.

PERMIT APPLICATION REVIEW:

Section 373.223, Florida Statutes, and Section 40C-22.001, Florida Administrative Code, state that the District has determined that certain minor consumptive uses, either singly or cumulatively, have a minimal adverse impact on the water resources of the District. Further, pursuant to Section 40C-22.020, F.A.C., the Governing Board grants a general permit to allow the withdrawal of ground or surface water anywhere within the District when the use is solely for fire protection purposes.

PERMIT DURATION:

The applicant has requested a 20-year duration permit. Chapter 40C-22.020, F.A.C., states that all general permits exclusively for fire protection purposes shall have a duration of 20-years from the date of notice to the District. Staff, therefore, is recommending issuance of a 20-year permit.

RECOMMENDATION:

Staff have concluded that the proposed use, as limited by the attached permit conditions, is reasonable-beneficial, will not cause or contribute to interference with existing legal uses, and is consistent with the public interest. Staff, therefore, recommends approval of this application.

GENERAL CONDITIONS: 1-4, 6-8

OTHER CONDITIONS:

1. For the purposes of the following permit conditions, the St. Johns River Water Management District shall be referred to as "the District" and the holder of this permit shall be referred to as "the permittee".
2. All submittals made to demonstrate compliance with this permit must include the CUP number 22-019-109130-1 plainly labeled.
3. This permit will expire December 31, 2026.
4. Legal uses of water existing at the time of the permit application may not be significantly impacted as a result of the consumptive use. If significant impacts occur (including interference with other existing legal users), the District may revoke the permit in whole or in part to abate the adverse impact unless otherwise mitigated by the permittee. In those cases, where other permit holders are identified by the District as also contributing to the adverse impact, the permittee may choose to mitigate in a cooperative effort with these other permittees. The permittee must submit a mitigation plan to the District for approval prior to implementing such mitigation.
5. Maximum daily groundwater withdrawals from the Floridan aquifer, solely for fire protection (essential use), must not exceed 0.864 million gallons.

6. Groundwater well "Fire Well" (GRS ID 104803), as listed on the application, is authorized solely for fire protection use only. This permit must be modified prior to any change in type use.
7. A District-issued identification tag shall be prominently displayed on well "Fire Well" (GRS ID 104803), as listed on the application, by permanently affixing such tag to the pump, headgate, valve, or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. Permittee shall notify the District in the event that a replacement tag is needed.

REVIEWERS: J. Lawrence

ATTACHMENT "A"

WELL INFORMATION: (PS=Public Supply, IRR=Irrigation, ESS=Essential)

PUMP NAME	GRS I.D.	Casing Diameter (Inches)	SOURCE	PUMP RATE (gpm)	Type Use
FP #1	104803	6	Floridan aquifer	600	ESS

**ST JOHNS RIVER WATER MANAGEMENT DISTRICT
NOTICE OF INTENT TO USE NOTICED GENERAL PERMIT FOR A
FIRE FLOW WELL**



The Permittee hereby gives notice to the District of its intent to commence use of a well for the sole use of fire protection, pursuant to 40C-22, F.A.C..

Please type or print in ink. Complete all necessary data sheets attached. Submit 2 copies of all forms and attachments.	
Project Name: <u>Fire Protection Wells</u> Project Acreage: <u>1/4 acre</u>	
Amount Requested: <u>Per Day</u> County parcel No. <u>31-07-23-000142-000-0</u> County: <u>Clay</u> <u>856,800</u> Sec/Twn/Rng: _____	
PERMITTEE	NAME <u>Keystone Airpark Authority</u> LAST FIRST
	ADDRESS <u>7100 Airport Rd.</u>
	CITY <u>Starke</u>
	STATE <u>FL</u> ZIP CODE <u>32091</u>
	BUS. TELEPHONE NO. <u>352 473 0031</u> HOME TELEPHONE NO. <u>same</u>

Please mail to the nearest District Service Center: St. Johns River Water Management District			
<u>District Headquarters:</u> 4049 Reid Street Palatka, Florida 32177 FAX: 386-329-4490	<u>Jacksonville Service Center:</u> 7775 Baymeadows Way Suite 102 Jacksonville, Florida 32256 FAX: 904-730-6267	<u>Altamaonte Springs Service Center:</u> 975 Keller Road Altamonte Springs, Florida 32714 FAX: 407-659-4805	<u>Palm Bay Service Center:</u> 525 Community College Parkway Palm Bay, Florida 32909 FAX: 321-722-5357

PART II: SUPPLEMENTAL INFORMATION

Provide the following information:

I. PROPERTY CONTROL

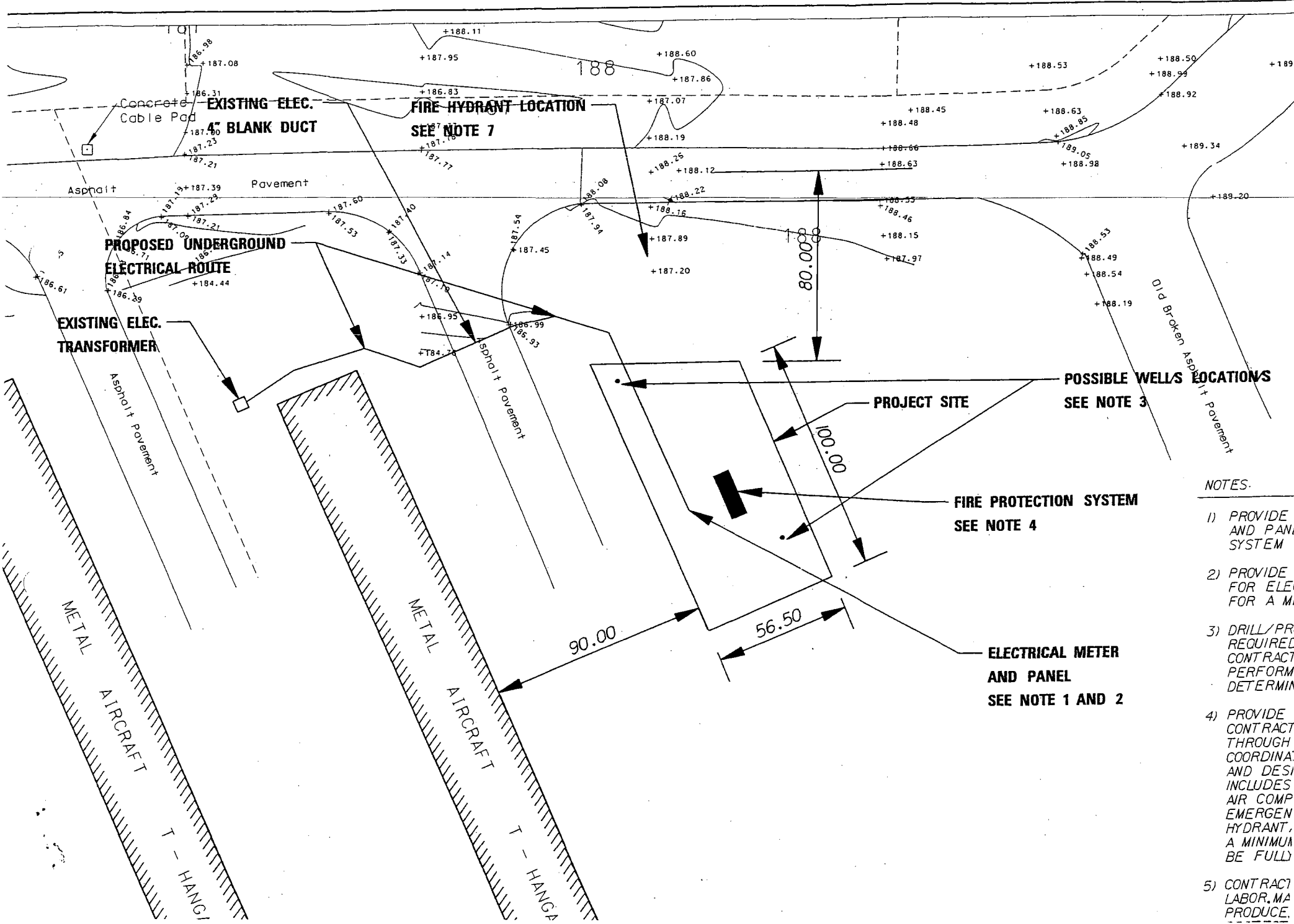
1. Property Ownership - Provide a copy of the excuted deed indicating the current owner of the property which is the subject of this application.
2. Leased Property - Provide a copy of the current lease, or a letter signed by the property owner describing the lease arrangement and the duration of the lease.

II. LOCATION MAPS

1. Provide a recent map (preferably a USGS topographic quadrangle, a map from a county plat directory, or survey map) indicating the following:
 - (a) property boundaries (include approximate lengths of boundaries in feet);
 - (b) All existing and proposed withdrawal point locations. Indicate well number and casing size for ground water withdrawals, and pump number and maximum pump capacity for surface water withdrawals;
 - (c) a north arrow;
 - (d) a scale designation - all maps should have a minimum scale of 1" = 2,000'; and
 - (e) labeled landmarks such as roads and political boundaries.
2. Complete Table 1 for all wells/pumps to be used for fire flow use only.

**Table 1
Well/Pump Description**

Well or Pump Number	Casing Dia. (in)	Casing Depth (ft)	Total Depth (ft)	Pump Capacity (in gpm)	Date Drilled	Existing or proposed (date)
FP#1	6"	300	500	600		Jan 07



POSSIBLE WELLS LOCATIONS
SEE NOTE 3

FIRE PROTECTION SYSTEM
SEE NOTE 4

ELECTRICAL METER AND PANEL
SEE NOTE 1 AND 2

- NOTES:**
- 1) PROVIDE AND PANEL SYSTEM 1
 - 2) PROVIDE FOR ELEC FOR A MI
 - 3) DRILL/PRO REQUIRED CONTRACT PERFORM. DETERMIN
 - 4) PROVIDE CONTRACT THROUGH COORDINA: AND DESI INCLUDES AIR COMP EMERGEN HYDRANT, A MINIMUM BE FULL
 - 5) CONTRACT LABOR, MA PRODUCE

		37501
DATE		P 024324
12 / 24 / 20 06		
RECEIVED OF	Keystone Air Park Authority	
ADDRESS	#4559	
		DOLLARS \$ 170.00
ACCT. NO.	ST. JOHNS RIVER WATER MANAGEMENT DISTRICT	
<input type="checkbox"/> CASH	<input checked="" type="checkbox"/> CHECK	P.O. Box 1429
<input type="checkbox"/> MONEY ORDER	<input type="checkbox"/> DRAFT	Palatka, Florida 32178-1429
FOR	permit	
803	by	<i>D. Hartley</i>
		<i>Thank You</i>

Application Submittal

Fee Receipt

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

P. O. Box 1429

Palatka, FL 32178-1429

Date: Dec. 26, 2006

By: Janet Stein

RECEIPT #: 37501

RECEIVED FROM: Keystone Air Park Authority

THE SUM OF: \$170.00

FOR: Application Fee

FEE DETAIL INFORMATION

F/A Receipt

P024324

\$170.00

\$ 50.00 fire flow
120.00 water well construction

Keystone Heights Airport Authority – Board Seats 2023/24

Position	Term	Member Information
FLNG	08/20-08/23	ALLEN, Shep LTC – Deputy Commander Camp Blanding Phone: (904) 682-3361 Email: Michael.s.allen20@milemail.mil
City #1	04/24-05/25	VACANT
City #2	01/23-05/25	SEIMER, Rex – Natural Resource Conservation Chairman 5681 Campo Dr. Keystone Heights, FL. 32656 Phone: (352) 473-8175 Cell: (352) 553-0169 Email: rseimer@keystoneairport.com
City #3	05/24-05/27	LUDWIG, Bobby – Security Chairman 6451 Loch Lommond Dr Keystone Heights, FL. 32656 Cell: (352) 478-9269 Email: rludwigjr@bellsouth.net
City #4	05/23-05/26	KIRKLAND, David - Chairman 4574 SE 3 rd Place Keystone Heights, FL 32656 Home: (352) 473-2372 Cell: (352) 745-0963 Email: dkirkland@keystoneairport.com
Bradford County	05/23-05/25	DAGENAIS, David- Aviation Education Chairman 5015 SE 7 th Ave Keystone Heights, FL. 32656 Cell: (352) 571-8248 Email: ddagenais@keystoneairport.com
Clay County	05/23-05/26	FRYAR, Scott D. – Vice Chairman & Aviation Chairman 7309 SE 2 nd Place Starke, FL. 32091 (Cell) (352) 514-4862 (Work) (800) 321-6280 x2290 Email: sfryar@keystoneairport.com

Keystone Heights Airport Authority – Board Seats 2023/24

Position	Term	Member Information	
Airport Manager	12/2012	COON, Craig – <i>Airport Manager</i> 7150 Airport Road Starke, FL 32091 Phone: (352) 473-0031	Hired 12.15.2012
Airport Engineer	02/17-02/22	PRANGE, Bill AECOM 9421 71 st . Dr. Live Oak, FL. 32060 Cell: (386) 898-2298 Bill.prange@aecom.com	Hired Jan. 2012
City Manager	06/2020	Van Zant, Charlie City of Keystone Heights 555 S Lawrence Blvd Keystone Heights, FL 32656 Phone: (352) 473-4807 Cell: (352) 756-2300 vanzant@keystoneheights.us	

City Seat #1- previously filled by Mr. Van Zant. Term to be advertised as Current - April 2025

City Seat #2- filled by Mr. Seimer. Term to be advertised as Current -April 2025

Bradford County Seat – filled by Mr. Dagenais (finishing out Mr. Wynn’s term). Term to be advertised as Current – April 2025

Seats #1 and #3 –currently accepting applications – due by March 21, 2024.

Seat #1 upon Council appointment through 05/2025.

Seat #3 upon Council appointment 05/2024 through 05/2027.

*FLNG - If Keystone Heights voters approve the change to the city charter; then the seat becomes available 01/2025 – 01/2028



AIRPORT AUTHORITY BOARD SEAT APPLICATION

Name: James O. Eifert

Primary residential address: 2208 SE 30th St

City: Melrose State: FL Zip: 32666

Phone: Home: _____ Cell: 904 563-1873 Work: _____

Email address jeifert@hotmail.com

Which Keystone Heights Airport Authority seat are you applying for? any vacant one

In what City/County is your primary residence located. Melrose/Bradford

How many years have you been in this area? 4 years temporarily, < 1 year permanently

Do you currently own or operate an aircraft? No

Have you owned or operated an aircraft in the past? (Give pertinent aviation background)
Never owned private aircraft. Flew fighter aircraft (AT-38, F-4, F-15) for 30 years in the USAF. Spent 18 years at the .
125th Fighter Wing, FL Air National Guard, JAX IAP, culminating in command of that unit from 2009-2013.

Do you lease property at the Airport? If so, attach copy of lease? No

What would you like to see originated or completed in the following areas at Keystone Heights Airport? Please be as specific as possible.

Aviation Complex: Not familiar
Not familiar

Commerce Complex: Not familiar
Not familiar

Recreation Complex: Not familiar

Timber Management: Not familiar

Why would you like to serve on the Airport Authority? What do you feel your major contribution would be? I want to serve my new community. Since retiring from a 41 year military career and settling on Lake Santa Fe, my knowledge and skills could be of use in the aviation community, locally. As the former Adjutant General of the Florida National Guard i have a strong connection to neighboring Camp Blanding, and good relationships with both state and federal elected officials which could be of use to the KHAA . i'm excited to bring a new perspective to this board and provide wisdom, experience, and leadership to a vibrant growing local community.

What is your employment and position held?Retired

What has been your main employment background or interest? Military aviation and leadership. I have led Soldiers and Airman at every level, culminating in my 4-year command of the 13,000 strong FLNG.

Do you presently serve on any Governmental Committee? If so, provide name of committee.

No

By signing this application, the applicant affirms that he/she is a qualified elector of their respective County, and is qualified under the Constitution and the Laws of Florida and the KHAA Charter to hold the public office of KHAA Board Member.

By signing this application, the applicant affirms that they have no personal, business or professional relationships with the KHAA, any of its Board Members, Employees or Tenants; except as briefly disclosed below (attach a separate sheet if necessary for full disclosure).

Additional information can be attached to this application.

Please complete and return to the City of Keystone Heights, P O Box 420 or 555 S. Lawrence Blvd, Keystone Heights, Fl 32656, telephone 352-473-4807.

James O. Eifert
Signature and date

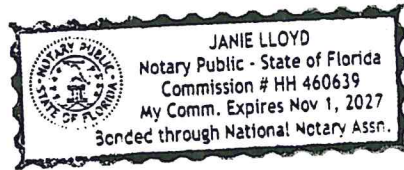
James O. Eifert
Printed name

State of FL
County of Clay

The foregoing instrument was acknowledged before me this 25th day of Jan, 2028,²⁰²⁴
by James O. Eifert, who is personally known to
me or have produced their driver license as identification.

Janie Lloyd
Notary Public signature

Janie Lloyd
Notary printed name
Commission expires 11/1/27



Seal

APPLICATION TO SERVE ON KEYSTONE HEIGHTS AIRPORT AUTHORITY

Name: John David Welch (Dave)

Primary residential address: 79 SE Nelsons Point

City: Keystone Heights State: FL Zip: 32656

Phone: Home: 256-651-3471 Cell: 256-651-3471 Work: _____

Email address: dwelch151@icloud.com

Which Keystone Heights Airport Authority seat are you applying for? Charlie VanZant

In what City/County is your primary residence located. Keystone Heights, Clay County

How many years have you been in this area? 2-1/2

Do you currently own or operate an aircraft? Yes

Have you owned or operated an aircraft in the past? (Give pertinent aviation background) Private Pilot: Rented Piper J-5, Cherokees, Archers, Cessna 150s and 172s. Built and fly Van's RV-12 (Sport Pilot). Studying for Aviation Ground Instructor certification. Active in Civil Air Patrol.

Do you lease property at the Airport? If so, attach copy of lease? Yes, Hangar E-5

What would you like to see originated or completed in the following areas at Keystone Heights Airport? Please be as specific as possible.

Aviation Complex: I would like to see commercial and general/recreational operations expanded to support the airport growth and general aviation in general. Increased activities will also expand opportunities to stimulate interest particularly among younger people to explore opportunities in aviation.

Commerce Complex: The open spaces around airports seem ideal for light industrial, distribution and similar business use which could support the airport financially as well and fund infrastructure improvements serving the airport and surrounding community.

Timber Management: As much as I support wildlife and their habitat I feel that timbered areas adjoining the airport could be harvested or better managed in a way to reduce wildlife activity and associated risks to airport operations.

Why would you like to serve on the Airport Authority? What do you feel your major contribution would be? I believe my experience as a Defense Contractor supporting Army Aviation and Missile Defense could be helpful as the airport works to expand its operations and services.

What is your employment and position held? Retired

What has been your main employment background or interest? As a DoD Contractor I employed my farm background, engineering and business education/experience to develop all aspects of product support planning (eg. Maintenance, spares, facilities), trade studies, and business case analyses for decision makers in Army Leadership.

Do you presently serve on any Governmental Committee? If so, provide name of committee. No

By signing this application, the applicant affirms that he/she is a qualified elector of their respective County and is qualified under the Constitution and the Laws of Florida and the KHAA Charter to hold the public office of KHAA Board Member.

By signing this application, the applicant affirms that they have no personal, business or professional relationships with the KHAA, any of its Board Members, Employees or Tenants; except as briefly disclosed below (attach a separate sheet if necessary for full disclosure).

Additional information can be attached to this application.

Please complete and return to the City of Keystone Heights, P O Box 420 or 555 S. Lawrence Blvd, Keystone Heights, Fl 32656, telephone 352-473-4807.

[Handwritten Signature]
Signature and date
John D. Welch
Printed name

State of Florida
County of Bradford

The foregoing instrument was acknowledged before me this 17th day of January, 2024, by John David Welch, who is personally known to me or have produced their driver license as identification.

[Handwritten Signature: Andrea Stacy Wall]
Notary Public signature

Andrea Stacy Wall
Notary printed name
Commission expires June 1, 2025





AIRPORT AUTHORITY BOARD SEAT APPLICATION

Name: Terri Hall

Primary residential address: 8594 SE 23rd Avenue

City: Starke **State:** FL **Zip:** 32091

Phone: Home: _____ **Cell:** (352) 745-0060 **Work:** (352) 745-0060

Email address terri.hall0503@yahoo.com

Which Keystone Heights Airport Authority seat are you applying for? 1

In what City/County is your primary residence located. Bradford

How many years have you been in this area? 29 years

Do you currently own or operate an aircraft? No

Have you owned or operated an aircraft in the past? (Give pertinent aviation background)
No

Do you lease property at the Airport? If so, attach copy of lease? No

What would you like to see originated or completed in the following areas at Keystone Heights Airport? Please be as specific as possible.

Aviation Complex: I am not familiar enough with the facilities to offer any suggestions.

Commerce Complex: I would like to see the facilities promoted and maintained in a manner that would draw other businesses and events.

Recreation Complex: I am not familiar with this complex but I would like to see more and varied recreational uses and more events that would interest citizens locally.

Timber Management: As a professional forester and land manager, I would like to see the airport's natural resources properly managed and enhanced.

Why would you like to serve on the Airport Authority? What do you feel your major contribution would be? I live within 1 mile of the airport property so I am interested in the current and future plans for the airport and how they might affect the surrounding community. I feel my major contribution would be utilizing my experience in forest management to explore possibilities for enhancing and protecting the natural resources.

What is your employment and position held? Rayonier Inc. - Senior Resource Land Mgr

What has been your main employment background or interest? Forestry and land mgt.

Do you presently serve on any Governmental Committee? If so, provide name of committee.

No

By signing this application, the applicant affirms that he/she is a qualified elector of their respective County, and is qualified under the Constitution and the Laws of Florida and the KHAA Charter to hold the public office of KHAA Board Member.

By signing this application, the applicant affirms that they have no personal, business or professional relationships with the KHAA, any of its Board Members, Employees or Tenants; except as briefly disclosed below (attach a separate sheet if necessary for full disclosure).

N/A

Additional information can be attached to this application.

Please complete and return to the City of Keystone Heights, P O Box 420 or 555 S. Lawrence Blvd, Keystone Heights, Fl 32656, telephone 352-473-4807.

Terri Hall 2/22/24
Signature and date

Terri Hall
Printed name

State of Florida
County of Clay

The foregoing instrument was acknowledged before me this 22nd day of FEB, 2024,
by Terri Dawn Hall, who is personally known to
me or have produced their driver license as identification. KW



Notary Public signature

Kristina R. Wright
Notary printed name
Commission expires 03/13/2025



TERRI DAWN HALL

(352) 745-0060

terri.hall@rayonier.com

<https://www.linkedin.com/in/terridawnhall/>

Starke, FL 32091

EXPERIENCE

Senior Resource Land Manager

RAYONIER FOREST RESOURCES, L.P.

Jul 2022 – Present

- Responsible for budgeting and forecasting capital and expenses for Florida offices and 350,000-acre land base.
- Supervised 4 land managers and 1 ranger for 350,000-acre land base.
- Supervised the land management team in all Resource Unit silvicultural operations including site preparation, planting, herbaceous weed control, fertilization, thinning and forest protection from fire and pests.
- Supervised harvest activities and ensured contract compliance and adherence to SFI standards and best management practices.

Resource Land Manager

RAYONIER FOREST RESOURCES, L.P.

Apr 2008 – Jun 2022

- Planned, implemented, and supervised all silvicultural operations for 60,000 acres in Bradford County, FL, including site preparation, planting, herbaceous weed control, fertilization, thinning, and forest protection from fire and pests.
- Supervised harvest activities and ensured contract compliance and adherence to SFI standards and best management practices. Responsible for safety, risk management and environmental compliance programs within area of responsibility.

Forest Supervisor

RAYONIER FOREST RESOURCES, L.P.

Oct 1999 – Apr 2008

- Responsible for land management and administrative activities on approximately 88,000 acres
- Supervised three employees.
- Responsible for overseeing site preparation and planting contractors, logging operations, fire prevention and suppression.

District Management Forester/Forest Supervisor

RAYONIER FOREST RESOURCES, L.P.

Feb 1994 – Sep 1999

- Responsible for land management and administrative activities on approximately 33,000 acres.
- Supervised two employees.

EDUCATION

Auburn University 1989

Master of Science - MS, Forest Economics

Auburn University 1985

Bachelor of Science - BS, Forestry Management

LICENSES & CERTIFICATIONS

Certified Prescribed Burn Manager

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER

Issued Jan 2022 · Expires Dec 2024

Credential ID 20043471

APPLICATION TO SERVE ON KEYSTONE HEIGHTS AIRPORT AUTHORITY

Name: Robert Ludwig
Primary residential address: 6451 Loch Lommond Dr.
City: Keystone Heights **State:** FL **Zip:** 32656
Phone: Home: (352) 473-5641 **Cell:** (352) 235-2439 **Work:** N/A
Email address rsludwigjr@bellsouth.net

Which Keystone Heights Airport Authority seat are you applying for? Seat 3

In what City/County is your primary residence located. unincorporated Clay County

How many years have you been in this area? Approximately 31 years

Do you currently own or operate an aircraft? No

Have you owned or operated an aircraft in the past? (Give pertinent aviation background)
No, but I have continuously worked at Jacksonville Fire Rescue stations at Cecil Airport, Jacksonville International Airport, and Jacksonville Executive Airport (formerly known as Craig Airport) for my entire 26 year fire/rescue career.

Do you lease property at the Airport? If so, attach copy of lease? No

What would you like to see originated or completed in the following areas at Keystone Heights Airport? Please be as specific as possible.

Aviation Complex: I would like to ensure the airport is properly managed and staffed.
In addition, I would like to see events at the airport better marketed to the surrounding community.

Commerce Complex: I would like to see expanded aeronautical business opportunities at the airport.

Recreation Complex: I would like to be involved in assessing the activities currently taking place on the grounds, and determine other opportunities that we as a Board may be able to bring to the airport in the future.

Timber Management: I would like to assist in protecting the current resources, the timber management process, and land conservation.

Why would you like to serve on the Airport Authority? What do you feel your major contribution would be? As someone who has worked at multiple airports during my 26 year career in Aircraft Rescue Firefighting (ARFF), I have always had a genuine interest in aviation and airport operations.

My contribution would be the airfield and operations knowledge and experience I have obtained. Also, in my first year on the KHAA Board, I have assisted with the preparation of the Airport Security Plan, and am also currently collaborating with the Airport Manager to create an Airport Emergency Response Plan for airport staff and local first responding agencies.

What is your employment and position held? Aircraft Rescue Firefighter (ARFF) at Jacksonville Fire-Rescue

What has been your main employment background or interest? Aviation fire fighting and airport operations

Do you presently serve on any Governmental Committee? If so, provide name of committee.

Currently serving a one-year appointment as KHAA Board Member Seat 3, and seeking a three-year reappointment of this seat.

By signing this application, the applicant affirms that he/she is a qualified elector of their respective County, and is qualified under the Constitution and the Laws of Florida and the KHAA Charter to hold the public office of KHAA Board Member.

By signing this application, the applicant affirms that they have no personal, business or professional relationships with the KHAA, any of its Board Members, Employees or Tenants; except as briefly disclosed below (attach a separate sheet if necessary for full disclosure).

N/A

Additional information can be attached to this application.

Please complete and return to the City of Keystone Heights, P O Box 420 or 555 S. Lawrence Blvd, Keystone Heights, Fl 32656, telephone 352-473-4807.

Robert G. Ludwig Jr.

Signature and date

ROBERT G. LUDWIG JR.

Printed name

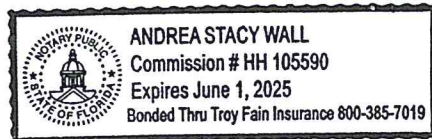
State of Florida
County of Bradford

The foregoing instrument was acknowledged before me this 23 day of February, 2024, by Robert Ludwig, who is personally known to me or _____ have produced their driver license as identification.

Andrea Stacy Wall
Notary Public signature

Andrea Stacy Wall
Notary printed name
Commission expires June 1, 2025

Seal





CITY of KEYSTONE HEIGHTS, Office of the Mayor

HERITAGE COMMISSION APPLICATION

Name: Kerry Collins
Address: 6446 Brooklyn Bay Rd., KH, FL 32656
Home Phone: (904) 509-7699 Years in Keystone: 49

I. COMMUNITY INVOLVEMENT: List organizational affiliations and community activities:

KHHC - current, Friends of KH, Growth Mgt Committee, Freedom 5K Race Director

II. WORK EXPERIENCE:

Brief statement of employment and work experience:

I am a FL licensed attorney and have worked at several law firms.

Please describe any special qualifications, experience or interests in historic preservation or old house restoration and building construction that should be considered in reviewing your application.

I have restored one of the original homes of Keystone Heights and turned it into a B&B.

ADDITIONAL INFORMATION:

Do you own property in the Keystone Heights city limits area that was constructed more than 49 years ago? If so, briefly describe your property.

Yes, as mentioned above: 555 SE Palmetto Ave.

Do you presently or have you formerly served on any governmental committee, commission or board?

If so, what committee, commission or board?

Keystone Heights Heritage Commission
October 2020 - present.

Please complete and return to the City of Keystone Heights, City Hall, 555 S. Lawrence Boulevard, Keystone Heights, Florida, 32656.

[Signature]
Signature and Date 3/16/24



THE WATER TIMELINE AND TASKS

(COUNCILMAN LEWANDOWSKI'S
ESTIMATE)

APRIL 2024 COUNCIL MEETING

BACKGROUND

D

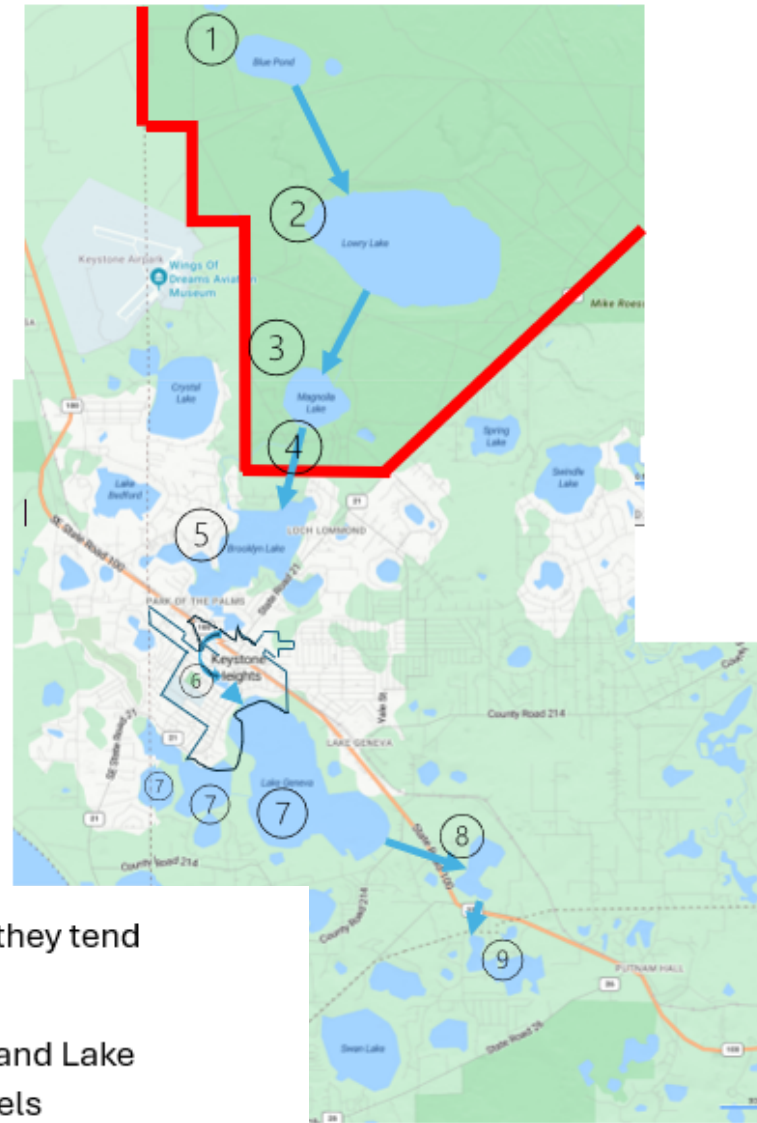
THE ETONIA

CHAIN

Note 1: Although surrounding lakes are not part of the Etonia Chain, they tend to rise up or be drained down in sync with the Etonia Chain of lakes.

Note 2: The lakes with the most variation in depth are Lake Brooklyn and Lake Geneva. The three lakes on Camp Blanding are maintained at full levels nearly all the time. Camp Blanding stops water flow out of Magnolia Lake when its level would drop below a level that the military needs.

Note 3: All identified boundaries, limits, locations, etc. are approximate.



The Etonia Chain of Lakes

1. Blue Pond – On Camp Blanding
2. Lowry Lake – On Camp Blanding
3. Magnolia Lake – On Camp Blanding
4. Filtration Fields – On the far southern edge of Camp Blanding
5. Lake Brooklyn
6. Little Lake Keystone – So small you can barely see it (It is inside the City)
7. Lake Geneva – When full, all the locations are connected to each other
8. Oldfield Pond
9. Halfmoon Lake

Boundary of Camp Blanding 

Boundary of Keystone Heights 

Direction of Water Flow 

THE BLACK CREEK WATER RESOURCE PROJECT

(BEST ESTIMATE OF WHAT TO EXPECT AND
WHEN)

Construction is on Target

- Water will start flowing through the pipes **Between Sep & Dec '24**
- Filtration fields in Camp Blanding are tested **2-3 months**
Finishing Jan/Feb/Mar '25
- Water starts to flow down Alligator Creek into
Lake Brooklyn. Average 7.5M gallons per day **Jan/Feb/Mar '25**
- Little Lake Keystone starts to receive water **Between Sep & Dec '25**
This starts when Lake Brooklyn hits 115 ft (currently at 109 ft)
- Lake Geneva starts to receive water from Little
Lake Keystone **Earliest – Nov '25**
Latest – Mar '26

TASKS NEEDED TO MEET ALL WATER MILESTONES

TASKS	Responsible Org	Status	City action needed?
Complete Black Creek Project	SJRWMD	Green	No
Alligator Creek Cleanup	Multiple	Red	Some
Amend Black Creek Project Permit	SJRWMD	Yellow	No
The Geneva Project	FL DEP + Others	Red	Maybe
Boat Ramp Access/Readiness	Clay County	Yellow	Maybe

Green = Plan in plan and on schedule

Yellow = Plan is being worked
schedule is unknown

Red = No plan yet
or no schedule

MY CONCERN AND RECOMMENDATION

Concern:

No single government organization is looking at the total picture. Each government agency is focusing on its piece.

The Save Our Lakes Organization (SOLO) (not a govt organization) is looking at the big picture

Recommendation:

The City of Keystone Heights help SOLO.

We are the people who care the most.

We are the businesses most impacted by the changes coming.