



Monroe County Chiller Plant

521 Thomas Street, Key West, Florida (RE# 00010110-000000)

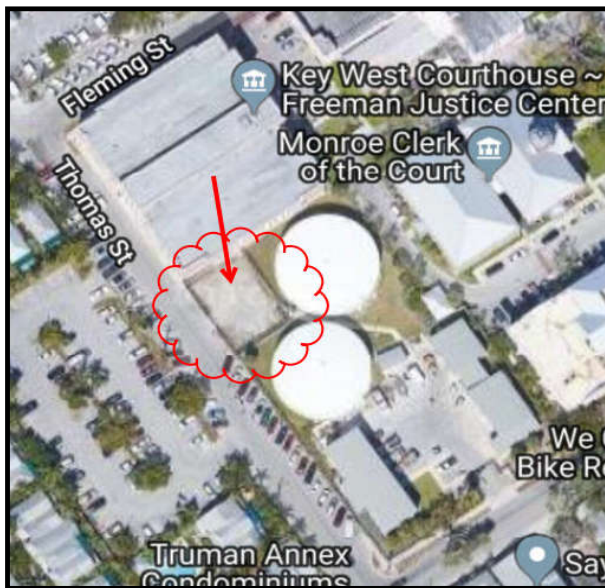
Minor Development Plan

Chapter 108, Article II, Sections 108-276 – 108-289
and 108-346 – 108-352

Conditional Use

Chapter 122, Article III, Sections 122-61 and 122-62

Project Description (Sec. 108-229):

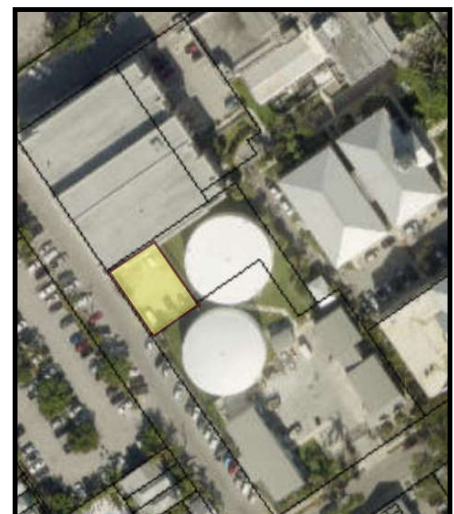


This application is a request for Conditional Use and Minor Development Plan approval for the construction of a 1,171 sq. ft. accessory chiller plant located on the 0.298-acre parcel at 521 Thomas Street. This chiller is an integral part of the Jackson Square Courthouse air conditioning system. The chiller apparatus is currently located on the roof of 312 Fleming Street, which is scheduled to be demolished.

The new proposed location for the chiller is on the adjacent fenced, vacant, scarified and impervious FCAA property. Both parcels are located within the Historic Public and Semipublic Services (HPS) zoning district where *Protective Services* are a Conditional Use.

Key persons and entities (Sec. 108-228) involved in this project are as follows:

Owner:	Florida Keys Aqueduct Commission
Authorized Agent:	Monroe County Public Works
Engineer:	TY Lin International
Architect:	Bender & Associates Architects
Surveyor:	Avirom & Associates, Inc
Planner:	Trepanier & Associates, Inc.



Background:

A Major Development Plan, Conditional Use and Variance application was submitted in 2016 and reviewed at the May 25, 2017 DRC meeting. Following DRC and pre-application meetings with HARC staff, this project was halted for redesign.

Site Data:

SITE DATA TABLE				
Site Data	Permitted/ Required	Existing	Proposed	Variance Request
Zoning	HPS	HPS	No Change	Complies
Flood zone	--	Zone X	No Change	Complies
Height	25 ft	30 ft. (Water Tank)	27' (New Building)	Variance – 2 ft.
Site Size	--	12,972 sq. ft.	No Change	Complies
Density:	N/A	N/A	N/A	N/A
Floor Area Ratio	1.0	(0.35) 4646 sq. ft.	(.54) 7006 sq. ft.	Complies
Building Coverage	40% (5,188 sq. ft.)	35.8% (4,646 sq. ft.)	45.6% (5,920 sq. ft.)	Variance - 5.6% (1,274 sq.ft.)
Impervious Surface	50% (6,486 sq. ft.)	67.4% (8,743 sq. ft.)	66.9% (8,681 sq. ft.)	Complies
Open Space	20% (2594 sq. ft.)	31.7% (4120 sq. ft.)	32.2% (4184 sq. ft.)	Complies
Landscape	20% (2594 sq. ft.)	31.7% (4120 sq. ft.)	32.2% (4184 sq. ft.)	Waiver Request
Setback – Front	20 ft.	20 ft.	5 ft.	Variance - 15 ft.
Side Setback – North	10% of lot width (7.5 ft.)	7.5 ft.	7.5 ft. (new building)	Complies
Side Setback- South	10% of lot width (7.5 ft.)	0 ft. - Water tank	7.5 ft. (new building)	Complies
Setback – Street Side	10 ft.	N/A	N/A	N/A
Setback – Rear	20 ft.	5.9 ft.- Water tank	No Change	Complies
Parking	0	0	No Change	Complies
Accessible Parking	0	0	No change	Complies
Bicycle Parking	0	0	No change	Complies
Consumption Area	N/A	N/A	N/A	N/A

Article III Site Plan (Sections 108-276 – 289)

Site Location and Character of Use (Section 108-277):

Location:

This public service property is located along Thomas Street between Fleming and Southard streets. This portion of Thomas Street runs behind the back of the courthouse complex and is predominantly used by its employees for parking; however, this project will not displace any existing parking.



Legal Description:

KW PT Lot 2, Square 33, collectively known as 930 Eaton Street.

Flood Zone:

According to the 2005 FEMA Flood Insurance Map, the property is located within the X Zone. This means that the area has a 1% annual chance of flooding.

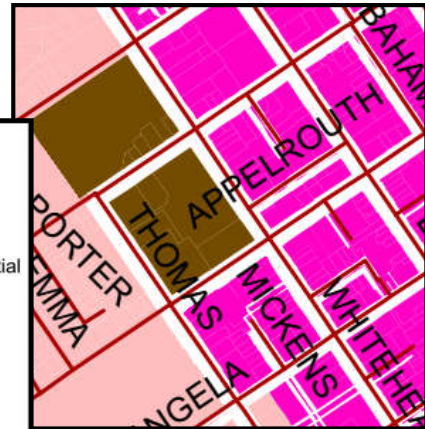
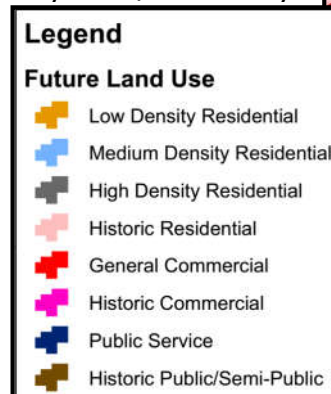


Future Land Use Map Designation ("FLUM"):

According to the City of Key West 2013 Comprehensive Plan, the property's FLUM designation is Historic Public and Semi-Public ("HPS").

Policy 1-1.1.10: Allowed Uses in Historic Public and Semi-Public: The maximum FAR for the HPS area shall be 1.0, excepting large scale regional public facilities. The latter projects may have a higher FAR if approved by City Commission. However, prior to approving an FAR in excess of 1.0, the City Commission must render a finding that the proposed public facility requires a higher FAR in order to accommodate a regional service necessary to the general health, safety, and welfare of the City and/or County.

Furthermore, the finding must indicate that the regional facility as proposed shall comply with all other qualitative and quantitative criteria of the Comprehensive Plan and Land Development Regulations, including, but not limited to the adopted concurrency management policies. In no case may the City approve a FAR of greater than 1.75.

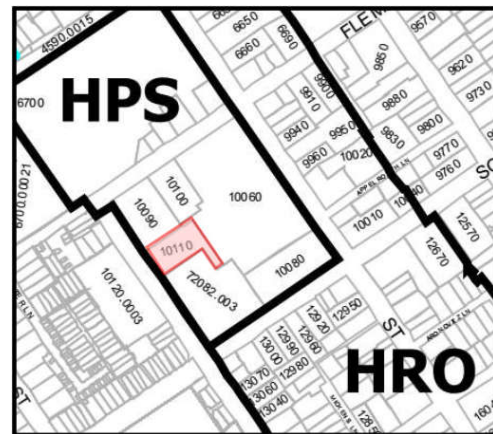


The City shall monitor the need for increased land area for institutional uses and shall ensure that adequate lands are provided in the public and semi-public land use designation. Land uses such as cultural or civic centers, and public or private not-for-profit uses may be included within this land use designation.

Zoning:

According to the City of Key West Zoning Map, the property is zoned is Historic Public and Semi-Public ("HPS").

Per code section 122-956, the intent of the historic public and semipublic services district (*HPS*) is established to implement comprehensive plan policies for areas designated "*HPS*" on the future land use map. The *HPS* district shall accommodate existing public and semipublic services.



Location and screening of mechanical equipment, utility hardware and waste storage areas (Section 108-279):

All mechanical equipment and utility hardware will be appropriately screened. No waste storage areas are proposed for this site.

Front-end loaded refuse container requirements (Sec. 108-280):

A front-end loaded refuse container is not required or proposed.

Roll-off Compactor Container location requirements (Sec. 108-281):

A roll-off container is not required or proposed.

Utility lines (Section 108-282):

Compliance is proposed

Commercial and manufacturing activities conducted in enclosed buildings (Section 108-283):

NA – no manufacturing activities are proposed.

Exterior Lighting (Section 108-284):

All proposed lighting shall be shielded and lighting sources shall be arranged to eliminate glare from roadways and streets and shall direct light away from properties lying outside the district. Shielding of lighting elements shall be accomplished by using directional fixtures or opaque shades.

Signs (Section 108-285):

No new signage is proposed.

Pedestrian sidewalks (Section 108-286):

A pedestrian sidewalk is proposed per the submitted site plan.

Loading docks (Section 108-287):

No loading docks are required or proposed.

Storage Areas (Section 108-288):

No storage areas are required or proposed.

Land Clearing, Excavation, and Fill (Sec 108-289):

There is no land clearing, excavation or fill proposed.

Traffic Impacts (Sections 108-316 – 319):

NA – no traffic generation, parking or vehicular circulation is required or proposed.

Open Space, Screening, Buffers and Landscaping (Article V and VI) of Chapter 108: Sections 108-346 – 108-352

Landscape Waiver:

The current project proposes modest improvements to the site as depicted in the plans, however, full compliance with the landscape and buffer requirements of Sec. 108 is not

possible. The applicant seeks a modification to the open space, screening, buffers and landscaping requirements of Sec. 108 as follows.

This project seeks a waiver/ modification to the standards of this ordinance and hereby files such with the city planning office.

This request is to waive the following landscape requirements of Sec. 108-346 through Sec. 108-352 so as to:

1. Protect and preserve the integrity of this vital community service.
2. The waiver will not have a significant adverse impact on the public interest, or on adjacent property.
3. The waiver or modification is not discriminatory, considering similar situations in the general area.
4. The development will provide an alternative landscape solution which will achieve the purposes of the requirement through clearly superior design.
5. The waiver or modification is necessary to preserve or enhance significant existing cultural and public-like facilities related to the development site.
6. Strict application of the requirement will effectively deprive the owner and the community of reasonable use of the land for the intended purpose due to its unusual size, shape, and location.
7. The effect upon the owner is not outweighed by a valid public purpose in imposing the requirement in this case.
8. The unusual conditions involved, i.e. the need for case-managed health care, housing assistance, and support services for HIV-infected residents of the Florida Keys are not the result of actions of the developer or property owner which occurred after the effective date of the ordinance from which this section derives.
9. Strict application of the requirement would be technically impractical.

CONCURRENCY ANALYSIS:

Concurrency Facilities and Other Utilities or Services (Sec. 108-233):

The City's Comprehensive Plan directs the City to ensure that facilities and services needed to support development are available concurrent with the impacts of new development.

The following specific issues are outlined:

1. Roads/Trip Generation
2. Potable Water
3. Sanitary Sewer
4. Solid Waste
5. Recyclables
6. Drainage

The following concurrency analysis reflects the proposed chiller facility on a current public utilities plant.

Policy 2-1.1.1- Transportation

This property currently functions as a water storage facility for the Florida Keys Aqueduct Authority with a vehicle use area with no parking. The proposed addition of the Courthouse chiller will not create any new trip generation and will not require additional parking.

Notwithstanding, Policy 2-1.1.3: Dense Urban Land Area effectively eliminates the transportation concurrency requirement in favor of a prioritization of safety and function of existing roads and multi-modal transportation improvements (i.e. transit, air, boat, bicycles, pedestrianism, mixed-use development)

Policy 2-1.1.3: Dense Urban Land Area. The City of Key West is a substantially developed dense urban land area and is thereby exempted from transportation concurrency requirements for roadways. The City recognizes that its development characteristics make substantive expansion of capacity of the roadway system prohibitive. The City will therefore prioritize improving the safety and function of existing roads and multi-modal transportation improvements (i.e. transit, air, boat, bicycles, pedestrianism, mixed-use development) as its primary strategies for addressing current and projected transportation needs.

Policy 4-1.1.2.C – Potable Water

Based on the City of Key West adopted level of service the potable water demand is anticipated to increase at the end of this single-phase development plan (pursuant to Policy 4-1.1.2.C, the potable water LOS for residential uses is 100 gallons/capita/day and nonresidential development is 100 gal/capita/day).

The potable water level of service is anticipated to be **0.0 gal/day**

Summary Response: According to the assumptions in the comprehensive plan, the potable water flow is anticipated to **remain unchanged.**

Designation		LOS	Daily Capacity	Gal/day
Existing	Nonresidential	100gal/capita ¹ /day	100 gal /ppl /day = 100 x 0 ppl	0.0
Proposed	Nonresidential	100gal/capita ² /day	100 gal /ppl /day = 100 x 0 ppl	0.0
Change in Potable Water Capacity				0

¹ Proposed development requires no assigned staff employed on-site

² Proposed development requires no assigned staff employed on-site

The Aqueduct Authority has the capacity to supply adequate service to this property, as demonstrated below.

Potable water to the City of Key West is provided by the Florida Keys Aqueduct Authority (FKAA). The FKAA has the capacity to provide 23 million gallons per day to Monroe County as a result of: The South Florida Water Management District’s issuance of Water Use Permit #13-0005, which allocates 17 million gallons per day in the dry season; 17.79 million gallons per day which can be withdrawn from the Biscayne Aquifer; and six million gallons per day provided by a reverse osmosis treatment plant in Florida City. As documented above, the City is meeting its Level of Service Standard for Potable Water. The City projects a slight permanent population decrease, and only a slight increase in its functional population and non-residential development during short and long-range planning periods, so the current capacity should remain adequate. Ongoing capital improvements will be necessary to maintain and improve standards and service delivery.

Policy 4-1.1.2.A- Sanitary Sewage

Based on the City of Key West adopted level of service the sanitary sewer demand is anticipated to increase at the end of this single-phase development plan (pursuant to Policy 4-1.1.2.A, the sanitary sewer LOS for nonresidential development is 660 gal/acre/day and the sanitary sewer LOS for residential development is 100 gal/capita/day and 90 gal/capita/day for seasonal residents.

The sanitary sewer flow is anticipated to be **196.54 gal/day**

Summary Response: According to the assumptions in the comprehensive plan, the sanitary sewer demand is anticipated to **remain unchanged**.

Designation		LOS	Daily Capacity	Gal/day
Existing	Nonresidential	660gal/capita ³ /day	660 gal /ppl /day = 660 x 0 ppl	0.0
Proposed	Nonresidential	660gal/capita ⁴ /day	660 gal /ppl /day = 660 x 0 ppl	0.0
Change in Sanitary Sewer Flow				0

The City contracts out the operation of the Richard A. Heyman Environmental Pollution Control Facility, its wastewater treatment plant (Plant), and the associated collection system to Operations Management International, Inc. (OMI). The Plant currently has the capacity to treat 10 million gallons per day, exceeding the capacity required to achieve the existing Level of Service Standard by approximately seven million gallons per day. Actual daily flow is 4.5 million gallons per day. This is a reduction from eight (8) million gallons per day due to a 67 million dollars capital improvement to the City’s wastewater

³ Proposed development requires no assigned staff employed on-site

⁴ Proposed development requires no assigned staff employed on-site

treatment during the past short-term planning period, including \$56 million for collection system rehabilitation.

As documented above, the City is exceeding its Level of Service Standard for Wastewater. The City projects a slight permanent population decrease, and only a slight increase in its functional population and non-residential development, during the short and long-range planning periods, so the current capacity should remain adequate. Ongoing capital improvements and continuing conservation efforts will continue to maintain and improve service delivery.⁵

Policy 4-1.1.2.D- Solid Waste

Based on the City of Key West adopted level of service the solid waste demand is anticipated to increase at the end of this single-phase development plan (pursuant to Policy 4-1.1.2.D, the solid waste LOS for nonresidential development is 6.37 lbs/capita/day) and the solid waste LOS for residential development is 2.66 lbs/capita/day).

The solid waste generation is anticipated to be **0.0 lbs/day**

Summary Response: According to the assumptions in the comprehensive plan, the solid waste generation is anticipated to **remain unchanged**.

Designation		LOS	Daily Capacity	Gal/day
Existing	Nonresidential	6.37 lbs/capita ⁶ /day	6.37 lbs /ppl /day = 6.37 x 0 ppl	0.0
Proposed	Nonresidential	6.37 lbs/capita ⁷ /day	6.37 lbs /ppl /day = 6.37 x 0 ppl	0.0
Change in Solid Waste Generation				0

The City currently contracts with Waste Management of Florida, Inc. to collect, transfer and dispose of solid waste and residential recyclables. Commercial recyclables and other non-franchised collection services such as construction and demolition debris and yard waste are available on the open market to all licensed haulers. The City owns and operates a solid waste transfer station on Rockland Key that received 45,402.10 tons of solid waste for disposal and 3,607 tons of recyclables in 2009/10. Waste Management disposes of the solid waste collected in Monroe County, including the City of Key West, at its Central Sanitary Landfill in Broward County. In 2009 Waste Management Inc. reported a reserve capacity of 17 years at this facility. There is therefore an estimated reserve capacity of 15 years as of the date of this report.

⁵ City of Key West Comprehensive Plan Data and Analysis, Pg. A-16

⁶ Proposed development requires no assigned staff employed on-site

⁷ Proposed development requires no assigned staff employed on-site

As documented above, the City is meeting its Level of Service Standard for solid waste. The City projects a slight permanent population decrease, and only a slight increase in its functional population and non-residential development, during the short and long-range planning periods, and the current capacity should remain adequate. Ongoing capital improvements will be necessary to improve standards and service delivery.⁸

Policy 4-1.1.2. D- Recyclable Waste Generation Level of Service

Based on the City of Key West adopted level of service the recyclable waste demand is anticipated to increase at the end of this single-phase development plan (pursuant to Policy 4-1.1.2. D, the recyclable waste LOS for nonresidential development is 0.25 lbs/capita/day) and the recyclable waste LOS for residential development is 0.50 lbs/capita/day).

The recyclable waste impact is anticipated to be **0.0 lbs/day**

Summary Response: According to the assumptions in the comprehensive plan, the recyclable waste generation is anticipated to **remain unchanged**.

Designation		LOS	Daily Capacity	Gal/day
Existing	Nonresidential	0.25 lbs/capita ⁹ /day	0.25 lbs /ppl /day = 0.25 x 0 ppl	0.0
Proposed	Nonresidential	0.25 lbs/capita ¹⁰ /day	0.25 lbs /ppl /day = 0.25 x 0 ppl	0.0
Change in Recyclable Waste Generation				0

Policy 4-1.1.2. E- Drainage Facilities Level of Service

The project is exempt from storm water management permitting requirements in accordance with Section 108-716(3), "Any maintenance, alteration, renewal, repair, use or improvement of an existing structure or the construction of any structure or modification thereto which does not create impervious surface exceeding 500 square feet. This shall not exempt the applicant from retaining the first one inch of rainfall on site as required by F.A.C. 17-25".

Existing Level of Service Standard

1. Post development runoff shall not exceed the pre-development runoff rate for a 25-year storm event, up to and including an event with a 24-hour duration.
2. Storm water treatment and disposal facilities shall be designed to meet the design and performance standards established in Chapter 62-25 Section 25.025, Florida Administrative Code, with treatment of the runoff from the first one inch

⁸ City of Key West Comprehensive Plan Data and Analysis, Pg. A-17

⁹ Proposed development requires no assigned staff employed on-site

¹⁰ Proposed development requires no assigned staff employed on-site

of rainfall on-site to meet the water quality standards required by Chapter 62-302, Florida Administrative Code. Storm water facilities which directly discharge into "Outstanding Florida Waters" (OFW) shall provide an additional treatment pursuant to Section 62-25.025 (9), Florida Administrative Code.

3. Storm water facilities must be designed so as to not degrade the receiving water body below the minimum conditions necessary to assure the suitability of water for the designated use of its classification as established in Chapter 62-302 Florida Administrative Code.

Sec. 122-62. – Specific criteria for approval:

(a) Findings.

A conditional use shall be permitted upon a finding by the planning board that the proposed use, application and, if applicable, development plan complies with the criteria specified in this section, including specific conditions established by the planning board and or the city commission during review of the respective application in order to ensure compliance with the comprehensive plan and the land development regulations.

(b) Characteristics of use:

(1) Scale and intensity

a. Floor area ratio

FAR for the HPS zoning district is 1.0. Existing FAR is 0.35 with 4,646 square feet consumed by the existing water tank. With the addition of the chiller equipment and enclosure, the FAR will increase to 0.54 or 7,006 sq. ft.

b. Traffic generation

The proposed chiller will not generate daily traffic. Only occasional maintenance personnel are expected.

c. Proposed enclosed building square footage

The interior area of the building enclosure is proposed at ~1,132 sq. ft.

d. Proposed employment

There will be no on-site full-time personnel; only the occasional existing maintenance staff.

e. Proposed number and type of service vehicles

Monroe County maintenance vehicles as needed for maintenance.

f. Off-street parking needs

The proposed addition of the chiller building does not trigger a parking requirement per the LDRs. No parking is proposed.

(2) On- or off-site improvement needs

a. Utilities

Concurrency Facilities and Other Utilities or Services for the non-residential development are summarized as follows:

Levels of Service – The impacts of the proposed project are generally summarized as follows:

- The LOS analysis concludes that overall trip generation from the site is not expected to change.
- Supply of parking follows public demand.
- Potable water demand for the non-residential development is estimated to remain unchanged at **0 gal/day**.
- The wastewater flow for the non-residential development is anticipated to remain unchanged at **0 gal/day**.
- The recyclable waste LOS for the non-residential development is anticipated to remain unchanged at **0 lbs/day**.
- The solid waste LOS for the new non-residential development is anticipated to remain unchanged at **0 lbs/day**.
- The proposed change is not expected to impact Storm water LOS.
- The proposed change is not expected to impact Recreation LOS.
- The team will coordinate with FCAA to ensure the water pressure and flow will be adequate for fire protection for the type of construction and use proposed.
- No adverse impacts to the quality of receiving waters are anticipated before, during or after construction.
- A storm water management system is proposed.

b. Public facilities

See concurrency analysis below.

c. Roadway or signalization improvements

NA - No roadway or signalization improvements are required or proposed.

d. Accessory structures or facilities

NA - No accessory structures or facilities are required or proposed.

e. Other unique facilities/structures proposed as part of site improvements

NA - No other unique facilities/structures proposed as part of site improvements are required or proposed.

- (3) On-site amenities proposed to enhance site and planned improvements
 - a. Open space
Open space will increase slightly.
 - b. Setbacks
A variance request from code Sec. 122-960(6)a. front yard setback of 15 ft. from the required 20 ft. to the proposed 5 ft.
 - c. Screening and buffers
A waiver from strict compliance to the landscape, screening and buffers is being requested.

(c) Criteria for conditional use review and approval:

- (1) Land use compatibility.
The Historic Public and Semi-Public zoning district is intended to accommodate existing public and semipublic services.
The proposed chiller facility will be compatible to adjacent properties which include municipal buildings and a water facility plant located on the same block. There is a mix of other uses such as commercial, office, transient and single-family homes of various sizes, age and architectural style in the surrounding area.
- (2) Sufficient site size, adequate site specifications, and infrastructure to accommodate the proposed use.
As mentioned above, the site has sufficient size, adequate specifications, and infrastructure to accommodate the proposed use.
- (3) Proper use of mitigative techniques.
No adverse impacts to adjacent land uses are anticipated, the community character is a mix of municipal, commercial, office, transient and single-family homes of various sizes, age and architectural style. Community infrastructure will not be burdened by this project.
- (4) Hazardous Waste.
The proposed use will not produce any hazardous waste or use hazardous materials in its operation.
- (5) Compliance with applicable laws and ordinances.
All applicable permits required from agencies other than the City of Key West will be obtained.
- (6) Additional criteria applicable to specific land uses.

e. Public facilities or institutional development. Public facilities or other institutional development proposed as a *conditional use* shall be reviewed based on land *use* compatibility and design criteria established for commercial and mixed *use* development. In addition, the city shall analyze the proposed site location and design attributes relative to other available sites and the comparative merits of the proposed site, considering professionally accepted principles and standards for the design and location of similar community facilities and public infrastructure. The city shall also consider compliance with relevant comprehensive plan assessments of community facility and infrastructure needs and location impacts relative to service area deficiencies or improvement needs.

This development plan satisfies criteria established in Article IV divisions 2 -14; and V divisions 2 - 3; Chapter 102, articles I, II, IV and V of Chapter 108; Section 108-956; and Article II of Chapter 110 of the Key West City Code in the following manner:

- Chapter 102 – This property is located within the Historic District and will be subject to HARC approvals and process.
- Articles I, II, IV and V of Chapter 108 – As demonstrated by the site plan, trip generation analysis, and the site data calculations, the project complies with the requirements of the Articles.
- Section 108-956 – The project team will coordinate with FCAA to ensure access to potable water. Potable water and fire protection is currently proposed to be pulled off the 12" water main along Thomas Street.
- Chapter 110 – As demonstrated in this application, the proposed development complies with the resource protection requirements of Chapter 110.