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CITY OF SUNRISE

SITE PLAN APPLICATION | PROJECT SUPPLEMENT & NARRATIVES

# Baptist Health

## Sunrise Hospital





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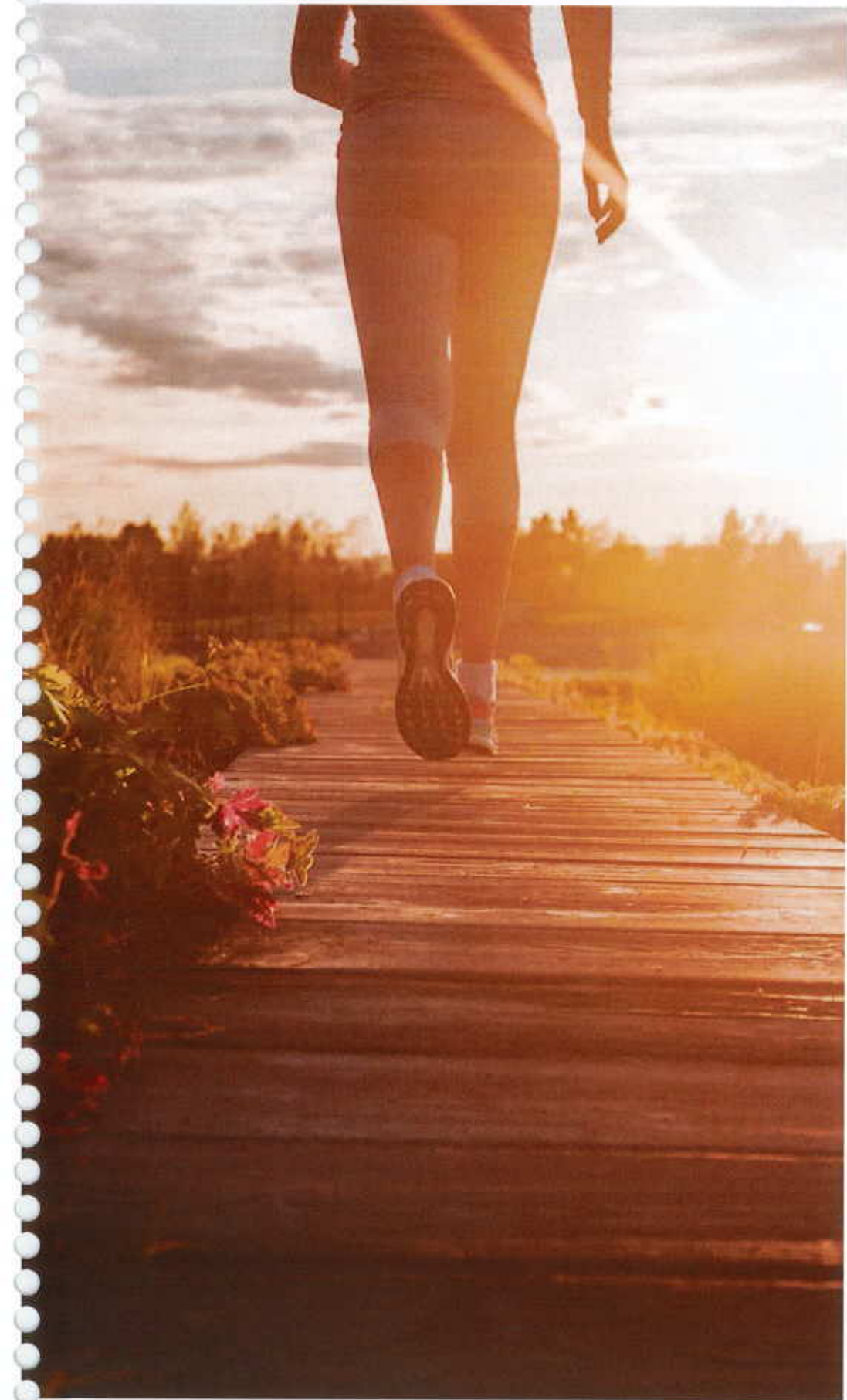
**The Mission of Baptist Health is to improve the health and well-being of individuals, and to promote the sanctity of life, in the communities we serve.**

HKS

ARUP

swa/Balsley





## **1.0 Project Design Narrative**

# Project Purpose

**Baptist Health South Florida is committed to delivering a groundbreaking healthcare facility in Sunrise, FL.**

Recognizing the important role health & wellness plays in strengthening community is a key factor in establishing the project. The opportunity to set a new standard for the preservation of natural surroundings while minimizing the ecological impact of a new building footprint led to the selection of a site that consists of natural wetlands at the edge of the Florida Everglades. The approach to the building design is a desire to lead the way in sustainability, resiliency, and progressive architecture and planning that will elevate the health and wellbeing of the community, while delivering an exemplary working environment for care givers and employees. Flexibility, advanced technology, and adaptability to meet the ever demanding and shifting needs of the healthcare industry will be thoughtfully deployed in all aspects of the project design to ensure the facility plays an active and essential role for all that it serves.

- New Standard for Sustainability, Resilience and Progressive Architecture
- Exemplary Environment for Care Givers and Staff
- Elevate Health & Wellbeing of the Sunrise & South Florida Community



# New Horizons in Sunrise

## Focus Areas

Health & Wellness  
Sustainability & Performance  
Resiliency & Ecology  
Community & Place

The Baptist Sunrise greenfield hospital presents a tremendous opportunity for Baptist Health South Florida to become an industry leader in healthcare and environmental stewardship.

Attention to ecosystem services, human health, community engagement, carbon, energy and water can allow this facility to be more climate-resilient, provide healthier spaces for patients, staff and visitors, and help regenerate the local landscape.

A healthy environment expedites the healing process and caters to happier, more efficient staff who see more patients with better health outcomes.

A building that is conscious of its operational and embodied carbon footprint helps reduce environmental impact in the greater community such as air and water pollution. This helps increase public health and reduces disease incidence in the community. This is also a long-term cost and risk reduction strategy.

The project will strive to incorporate these ideas & strategies so that the building can provide the highest quality healthcare for its patients and the extended community beyond.

The project addresses the needs of all project stakeholders, including the largest one, our earth. The strategic and sensitive location of the future hospital near the Florida Everglades requires us to be conscious of the local ecosystems and help restore and protect the natural balance.

The site in Sunrise will preserve all the wetlands that will help control stormwater and keep biodiversity in place. This preserves the natural beauty of the site while providing opportunities for respite, exercise, and learning.

Guiding principles that encompass our goals for the project, provide the framework and methodology to achieve design excellence and a truly impactful healthcare environment.

## Guiding Principles

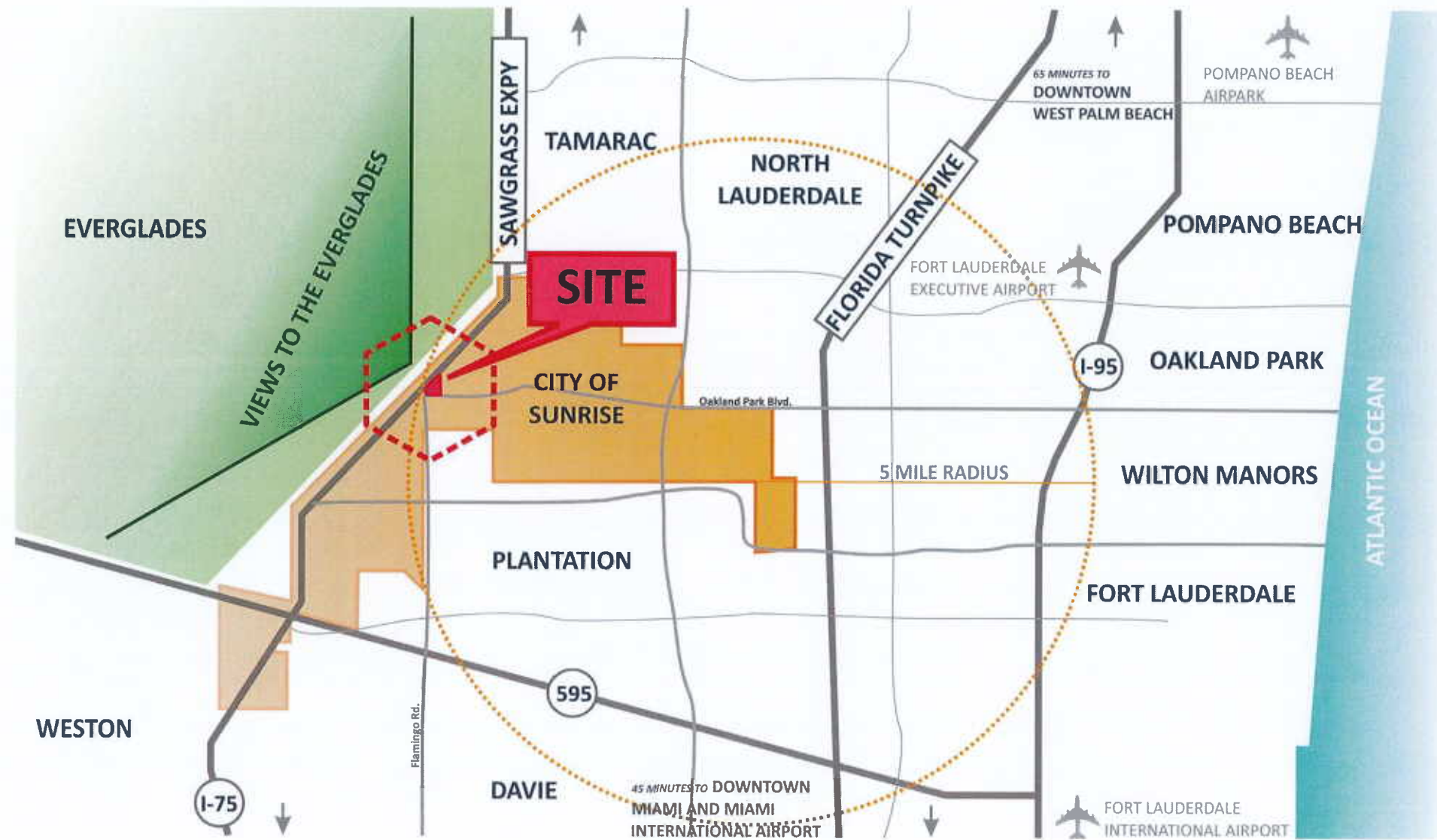
1. Create a project that stands as an exemplary healthcare model for a healthy, environmentally conscious, resilient, and sustainable future for all stakeholders.
2. Deliver a positive healing and working environment that enhances connections to nature, elevates health and wellbeing, support fiscal objectives, and contributes to an exceptional patient and staff experience.
3. Design for future flexibility, rapid growth, market shifts, and evolving technology in all aspects of project planning, design, and implementation.



# Nature of Place

The project location is grounded in its unique characteristics and context. When we understand the context that defines a place, we begin to adopt a more holistic and systemic approach that embodies material, environmental, social, political, economic and cultural understanding local to the site.

The new health + wellness campus draws upon influences that extend beyond the site lines. Our design team analyzed community, energy, economy, resources available, ecology and water resources and integration of the site to define the purpose of the project and create a unique and impactful design solution. Our holistic approach informed our intent behind the initial site studies and design concepts.



# Sunrise, Florida

The HKS Nature of Place analysis uses the AIA Framework for Design Excellence. This framework leverages 10 distinct principles to provide a holistic research study on the project place and various scales of influence.

### AIA Framework for Design Excellence Principles

- Design for Integration
- Design for Equitable Communities
- Design for Ecosystems
- Design for Water
- Design for Economy
- Design for Energy
- Design for Wellbeing
- Design for Resources
- Design for Change
- Design for Discovery

Research was gathered on the history and development of Sunrise, understanding the potential environmental challenges South Floridians and Sunrise residents are experiencing, looking for alignment with the Sunrise Sustainability Action Plan, and referencing the many unique details of this vibrant community.

The collage to the right illustrates a small sample of our Nature of Place study.

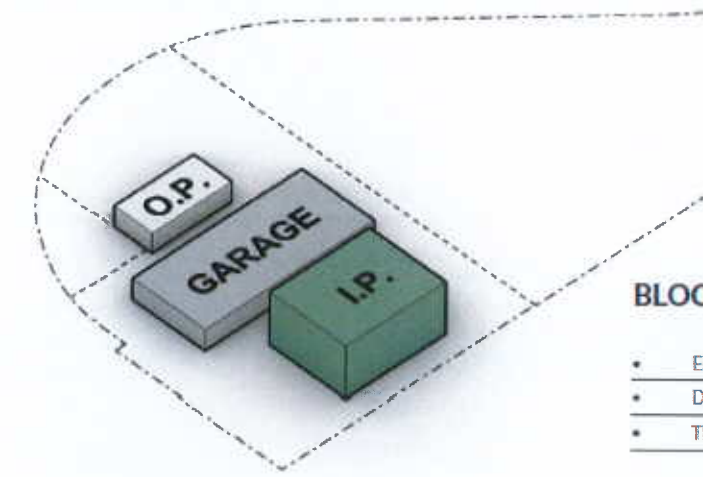




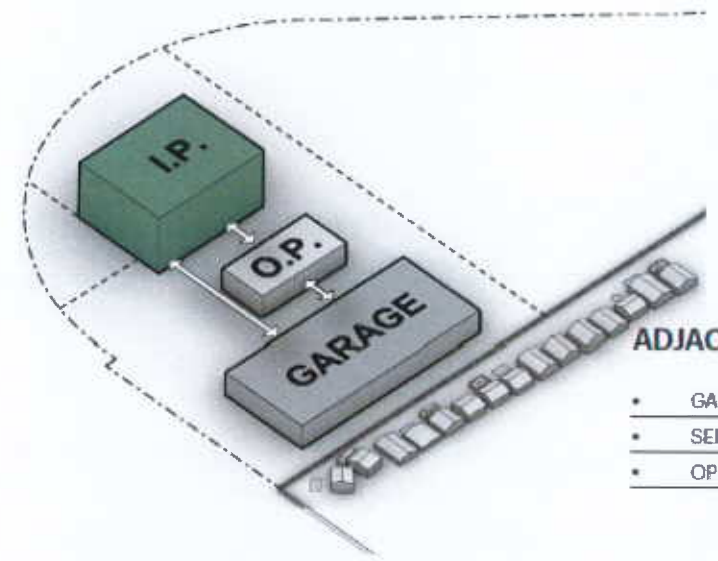
# Site Context & Massing



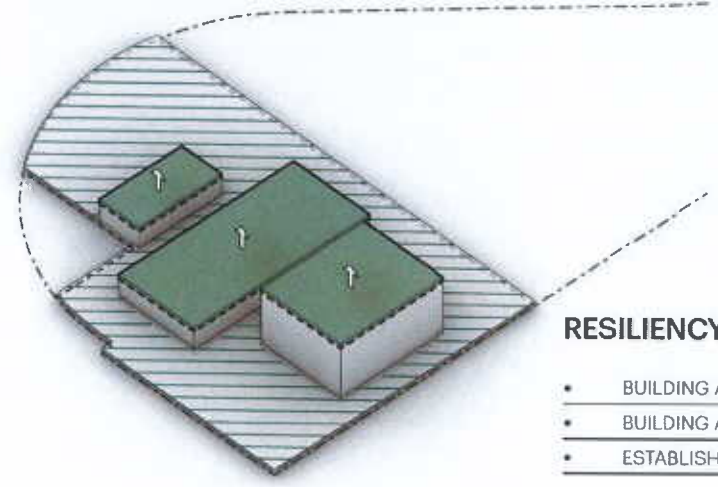
-  Approx 26 Acre Site
-  15 Acre North Section Protected Wetlands
-  11 Acre South Section Project Area
-  Sawgrass Expy.



- BLOCKS**
- ESTABLISH KEY PROGRAMMATIC BLOCKS
  - DETERMINE VOLUMES OF BLOCKS
  - TEST BLOCKS AGAINST AVAILABLE SITE AREA

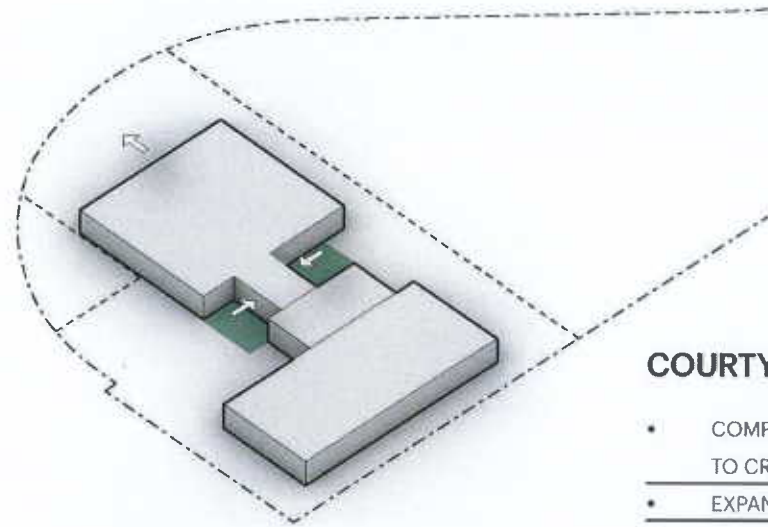


- ADJACENCIES**
- GARAGE NEAR NEIGHBORHOOD IS BUFFER
  - SERVICE, ED, AND CEP WEST OF NEIGHBORHOOD
  - OP DIRECT CONNECTION TO GARAGE AND IP



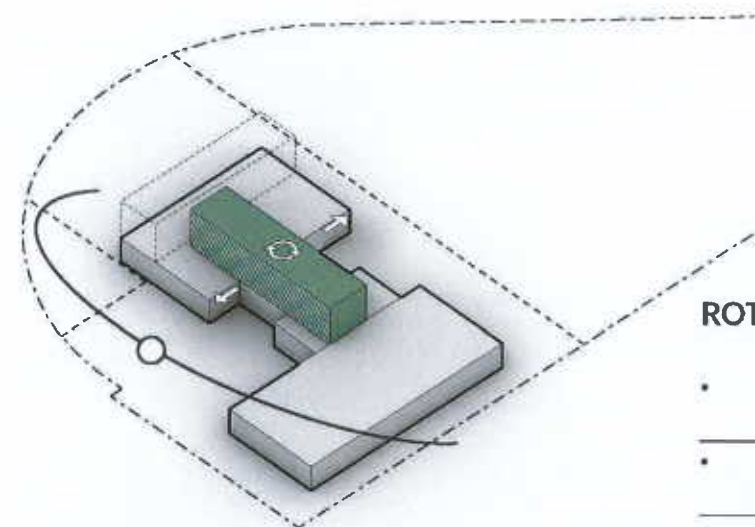
- RESILIENCY**
- BUILDING ABOVE 100YR BASE FLOOD ELEVATION
  - BUILDING ABOVE 500YR BASE FLOOD ELEVATION
  - ESTABLISH FINISH FLOOR ELEVATION AT 11'

# Massing Development



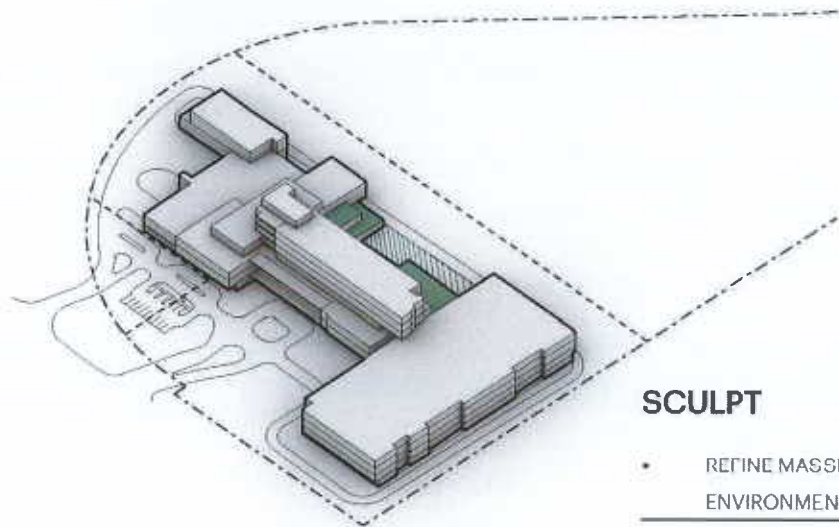
## COURTYARD

- COMPRESS BUILDING VOLUME NORTH/SOUTH TO CREATE ENTRY AND COURTYARD SPACE
- EXPAND FOOTPRINT TO WEST TO OPTIMIZE D&T
- ALIGN ENTRY WITH SITE ACCESS



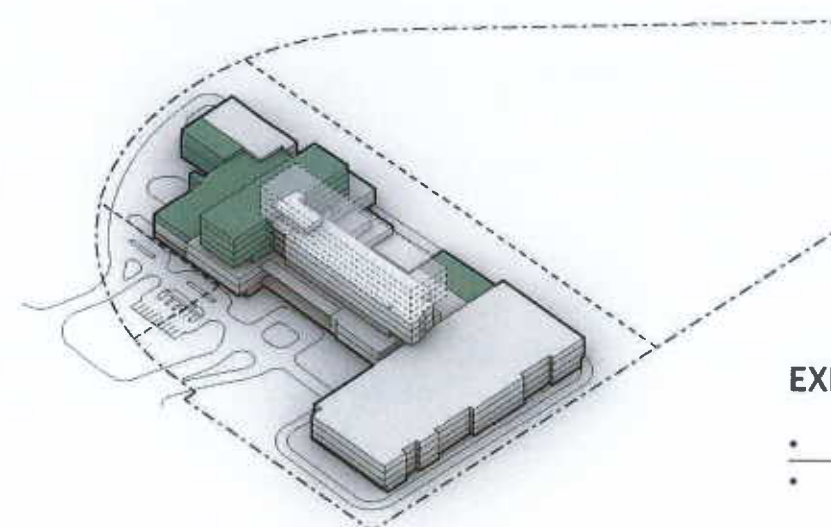
## ROTATE

- ROTATE PATIENT TOWER TO OPTIMIZE SOLAR ORIENTATION
- ~~THREAT~~ SOUTH FACADE TO RESPOND TO SOLAR GAIN/GLARE
- MAXIMIZE PATIENT VIEWS TOWARDS THE SOUTH AND THE WETLANDS TO THE NORTH



## SCULPT

- REFINE MASSING TO RESPOND TO PROGRAMMATIC, ENVIRONMENTAL AND AESTHETIC DRIVERS
- TERRACE DOWN BUILDING MASS TO MAXIMIZE VIEW, GROWTH AND GREEN SPACE
- LOWER AND EXTEND GARAGE FOOTPRINT TO MINIMIZE VISUAL IMPACT TO NEIGHBORHOOD



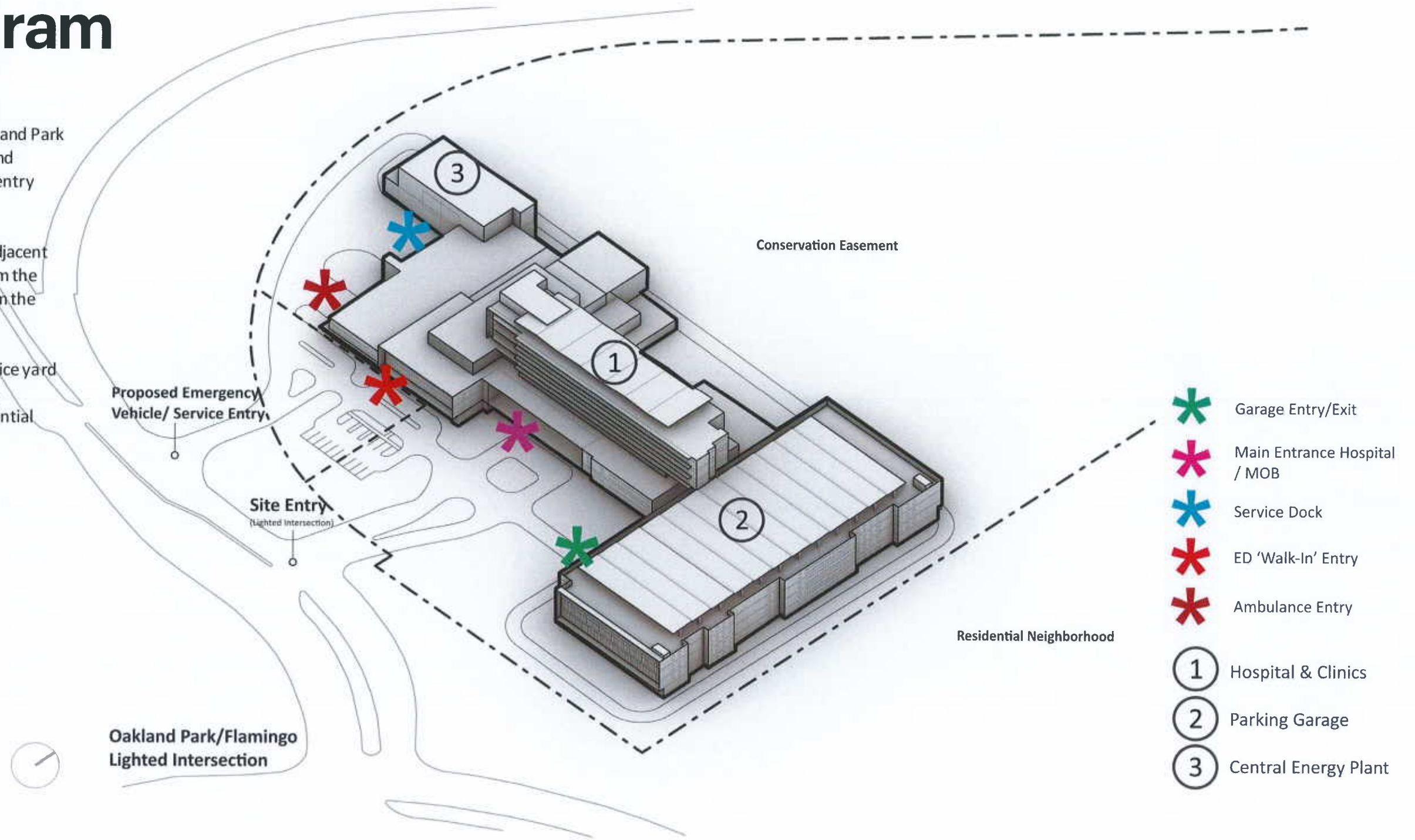
## EXPAND

- BUILT-IN FLEXIBILITY FOR EXPANSION
- UTILIZE STRATEGIC TERRACES AS GROWTH ZONES
- PROVIDE THE ABILITY TO EXPAND VERTICALLY



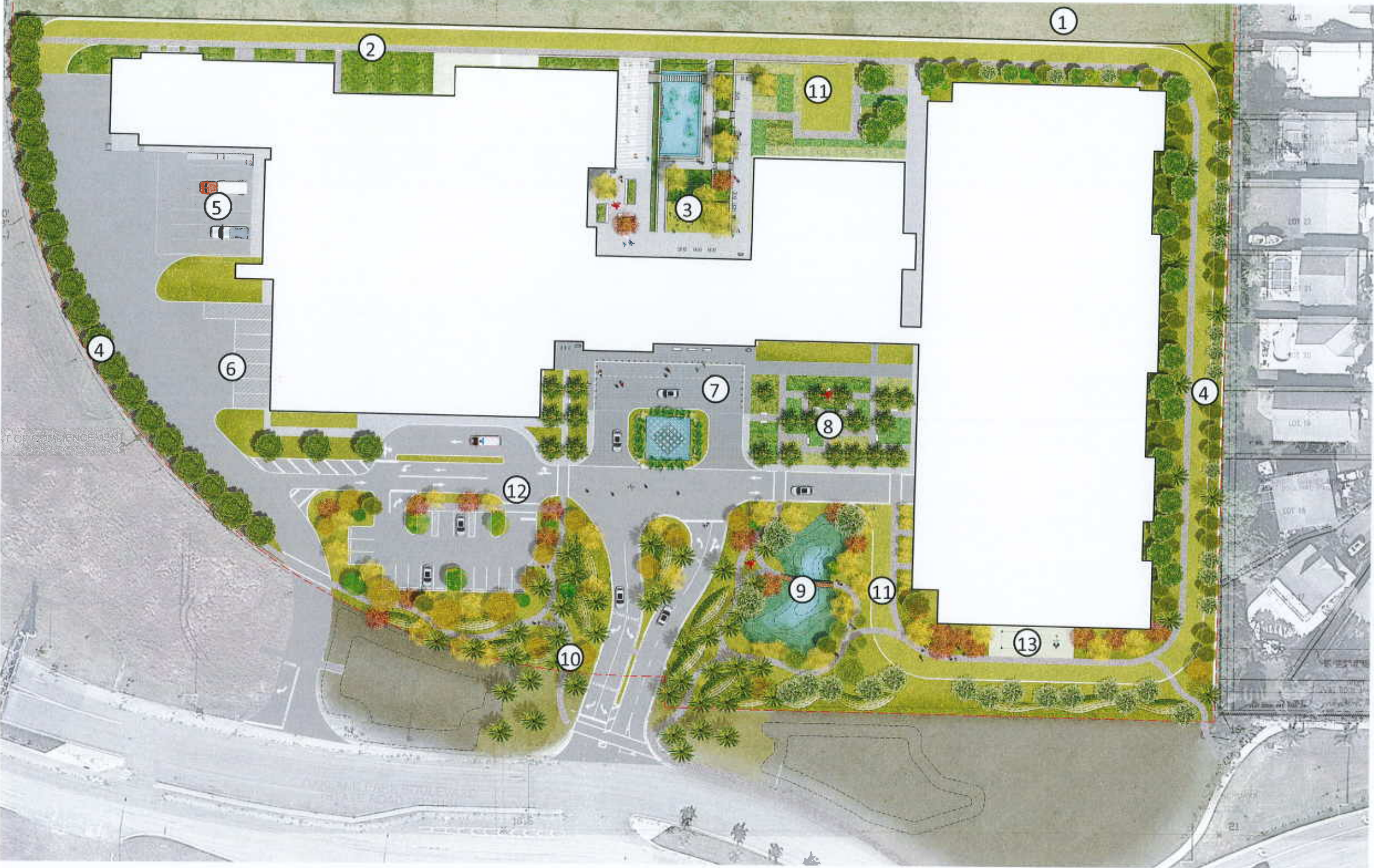
# Site Diagram

- Campus Access from W. Oakland Park Blvd with proposed service and emergency vehicle separate entry point.
- Parking Garage buffers the adjacent residential neighborhood from the Hospital and blocks noise from the expressway.
- Central Energy Plant and service yard positioned near the Sawgrass Expressway away from residential neighborhood



# Site Plan

- 1. Conservation Area
- 2. Wellness Walk
- 3. Courtyard (see enlargement)
- 4. Landscape Buffer
- 5. Service Area
- 6. Ambulance Bays
- 7. Welcome Court (see enlargement)
- 8. Pine Garden
- 9. Rain Garden
- 10. Arrival Garden
- 11. Fire Lane
- 12. Emergency Walk-in Entry
- 13. Fitness area



# Landscape Design

The landscape is an opportunity to celebrate health for people and the environment. Local flora provides a home for native fauna and promotes biodiversity that supports a beautiful place. The informal design will blend into the existing landscape and create welcoming and social outdoor spaces for patients, visitors, and employees to enjoy daily.



PALM LINED ENTRY DRIVE



SCULPTURAL BERMS



FITNESS NODE ALONG WELLNESS WALK



WALKWAY OVER BIO RETENTION

# A Performative Landscape

- Terraced garden and water features complement the surrounding natural wetlands
- Lush vegetation provides buildings shading and places for gathering
- Natural materials provide durability and opportunities for recreation



STEPPING STONES



STEPPED EDGE



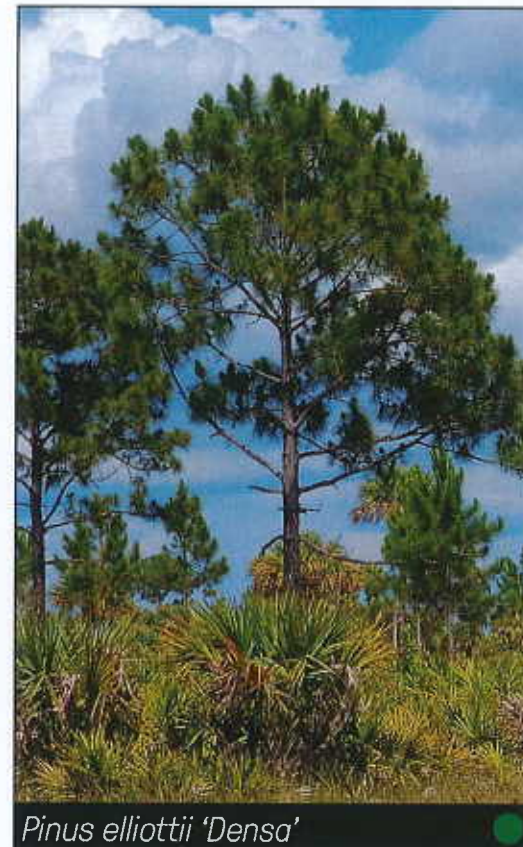
CORAL STONE FEATURE WALL



# Planting Inspiration



# Planting Palette



EVERGREEN ●



# Planting Palette



*Bauhinia x blakeana*



*Conocarpus erectus f. sericeus*



*Ligustrum japonicum*



*Ilex cassine*



*Coccoloba uvifera*



*Delonix poinciana*



*Tabebuia caraiba*



*Cassia surattensis*



*Callistemon viminalis*



*Jacaranda mimosifolia*

EVERGREEN ●

# Community & Place

The design supports the City of Sunrise's Sustainability Action Plan (SAP) 2019 contributing to a safer and more active Sunrise.

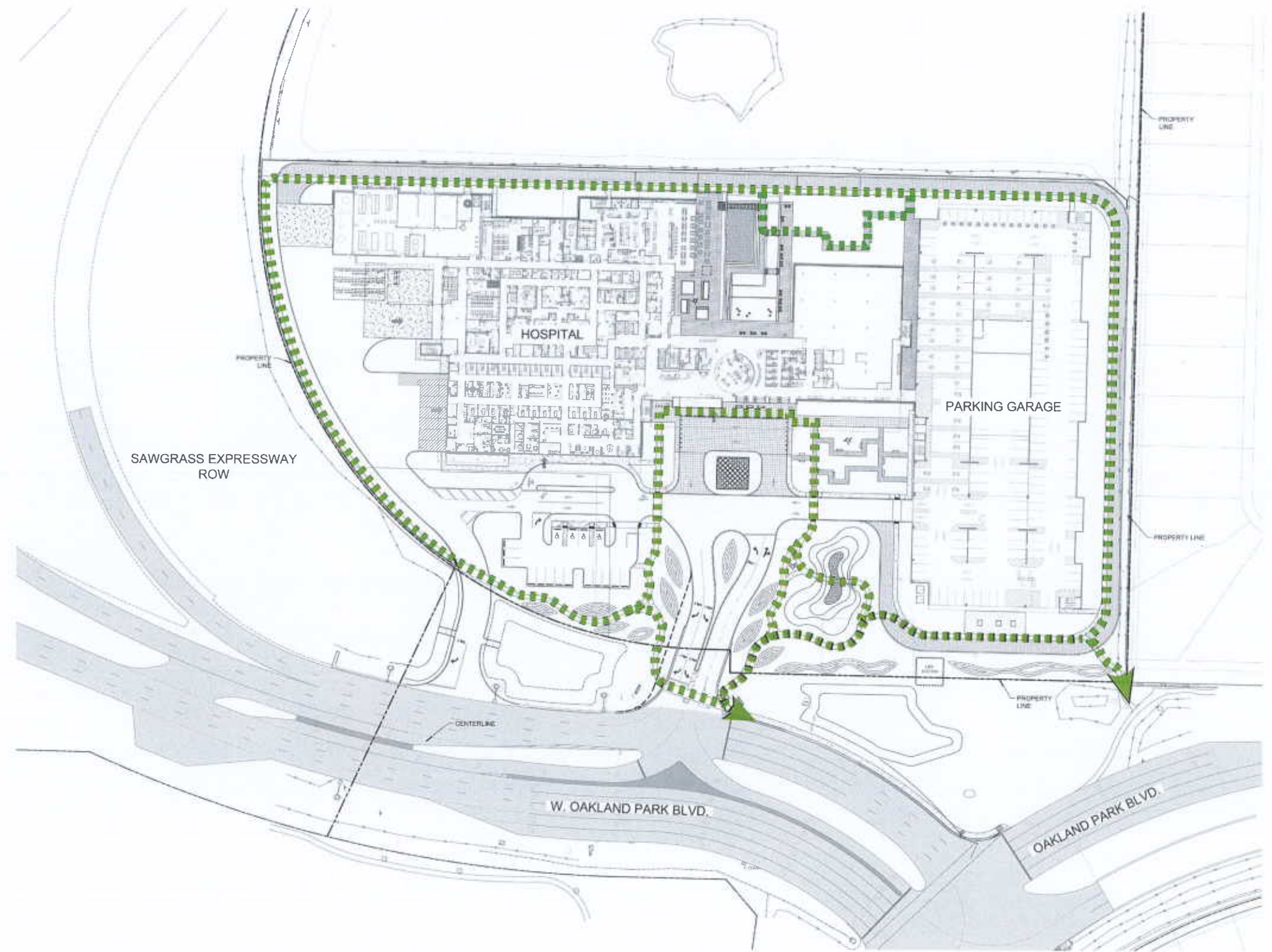
## Campus integrates:

- Community walking trails
- Artwork throughout campus
- Enhanced Pedestrian connectivity
- Support Carbon Reduction Goals emphasized by City of Sunrise
- Onsite renewable energy via Solar PV's
- Onsite EV Charging spaces within the garage footprint



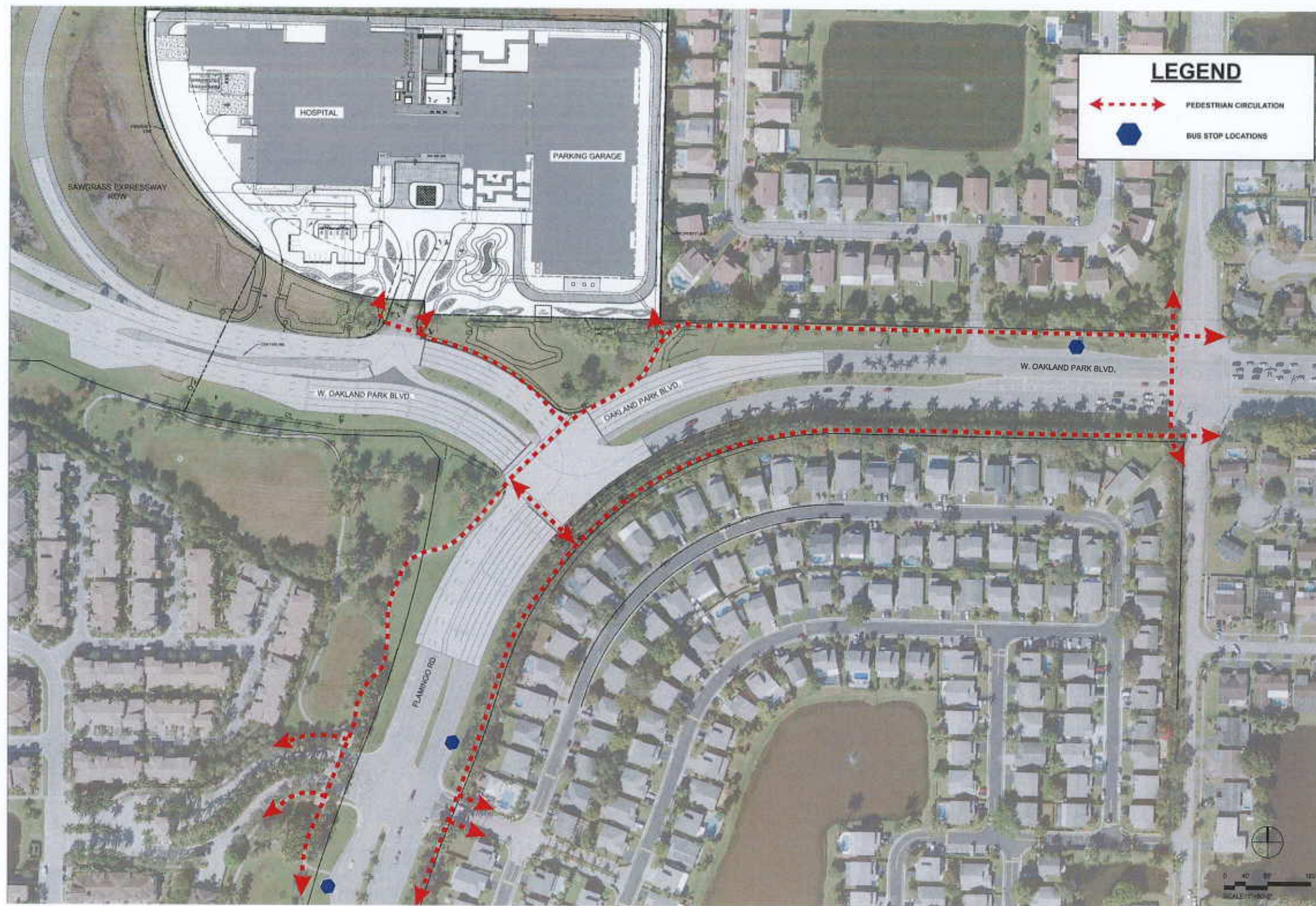
# Connectivity Diagrams

Pedestrian Circulation/ Wellness Walk



# Connectivity Diagrams

Public Transport/ Pedestrian Connectivity



# Resiliency & Ecology

Adaptability to future conditions is critical to serving the community and keeping our doors open.

The Design Supports:

- Adoption of Future Technology
- Business Continuity Planning to enable campus operations during emergency events
- Future Climate & Sea Level Rise Predictions set the finished floor level 2' above the 500-year storm level
- Using natural and engineered systems to increase biodiversity, resilience and durability
- 7-days of self-sufficient operation in the case of a disaster event
  - Full generator back up and fuel storage to support 7 days of heating, cooling, ventilation and electrical loads
  - Bottled water storage in the hospital and connection for tanker hook up for potable water needs in the Central Energy Plant
  - Back up power to waste water lift stations to keep drainage systems operational
  - Bulk liquid oxygen tanks and vaporizers on site to supply oxygen to the hospital for more than 7 days
  - Water Reduction and reuse by recovering condensate from AHU's and using it to supplement the cooling tower make up water to provide additional resilience to the cooling system



# Massing & Form

The building design represents a distinctive and contemporary aesthetic closely corresponding to the internal function of this state-of-the-art healthcare facility. The design is intended to present a thoughtful and timeless balance of both the Art and Science of a modern healthcare facility. The entire campus represents the commitment of Baptist Health South Florida to a thoughtful approach to the interaction of site, ecology, resiliency and community healthcare.

A central podium grounds the building on site while the patient tower transitions above providing visibility from the Sawgrass Expressway and local area. Materiality creates a calming, welcoming presence helping orient visitors and patients.



View Towards Main Entrance

# Material & Color Harmony

Subtle and timeless material choices reflect a desire to provide a warm and welcoming appearance. Architectural precast and panelized systems with gentle patterns and articulation continue up across the façade transitioning into extensive glazed elevations that layer frit patterns and passive shading structures as performance responses to solar orientation. The vertical patterning and structural support systems reflect the natural characteristics of the tall elegant Slash Pine conifer trees that once prominently grew in harmony with the surrounding wetlands.

- Insulated, Impact Resistant, High-Performance, Low-E Glazing
  - Vision
  - Shadow Box
  - Frit
- Formed Metal Panel Accents
- Architectural Precast Concrete and terracotta panels with integrated reveals and patterns



View Towards ED Walk-In Entrance



View of Hospital from ED Parking Area



# Architectural Character

The building enclosure layers several elements to provide form and function. A variety of solar-shading techniques and building façade strategies increase performance.

- Control solar heat gain
- Increase occupant visual & thermal comfort
- Reduce glare
- Balance composition and form
- Strategic glazing maximizes natural daylighting
- Modular facades provides efficiency, resiliency and form

Architectural detailing is intended to reinforce the quality and sophistication of the overall design while promoting modern building technology and installation techniques. The intent of the building design is to impart the same sense of design quality no matter what distance it is viewed. Furthering the delicate layering of detail elements is the high-performance passive design approach incorporating secondary shading screen elements to facades exposed to increased solar heat-gain and glare.



View of Hospital Courtyard and Water Garden

# Good Neighbor

A careful and considered approach to the adjacency of the hospital and residential neighborhood is achieved via a combination of new 10' screen wall, landscaped buffer, setbacks, and an enhanced architectural façade treatment to the parking structure envelope.

- The development helps buffer the neighborhood from expressway noise.
- The service dock, CEP, ambulance access and surface parking is located at the far west end of the site buffered by the mass of the hospital and parking garage.
- Extensive landscaping with mature trees at time of planting enhance the site and relationship to the principal buildings proposed, while screening the buildings further from neighboring developments.
- Continued refinement of the structure and overall height of the building has enabled a reduction in height to the hospital by 3.5', the parking garage by 4' and the CEP by 4'.
- Site lighting is designed to reduce light pollution while maintaining required lighting levels for safety and security.
- The garage entrance, main hospital/MAB entrance and ED Walk-In entrance are located away from the neighborhood and buffered by the mass of the parking garage.



View of Parking Garage East Façade from Residential Neighborhood

# Parking Garage

Additional effort has been taken to the design of the parking garage focusing on architectural character, light and sound mitigation and overall mass.

- The Parking garage incorporates an opaque architectural enclosure to eliminate light pollution, noise, and provide an improved view for adjacent residents at the east elevation.
- The architectural surface materials are compatible with the principal building exterior elevations. Additional layering to the east façade is accomplished with synthetic vegetated green walls.
- The parking garage structure does not exceed the height of the principal building that it serves.
- The garage entrance does not front the primary street.
- The east façade at the parking garage is stepped inward to create a varied and visually interesting façade, while providing for additional planting zones.
- Lighting at the roof level of the garage will be mounted as low as possible behind the parapet wall and PV structural mounts to mitigate light pollution.
- The raised parapet wall will block views of vehicles at the roof level and the architectural surfaces at the facades screen vehicles from public view.
- Planting materials within the Landscape Pedestrian Zone and adjacent buffer will be layered to create depth and variety. This will include mature trees at time of planting.
- Continued refinement has enabled a reduction in height to the PV structural system of 3'.
- The garage design has been modified to be classified as open which no longer requires mechanical ventilation and associated equipment. This will further reduce noise generated by the garage.



Parking Garage South Elevation View



View towards Hospital from Oakland Park BLVD



View towards Hospital from Sawgrass EXPWY Heading South

# Exterior Materials

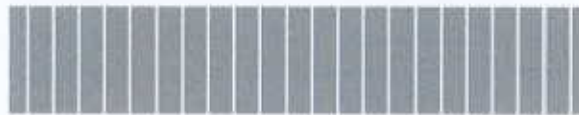
Proposed Selections



**GL10/GL14/GL15/GL16 – Insulated laminated vision glass**  
Guardian Glass SNX 62/27 (GL10) ,  
Guardian Ultra Clear (GL14/G14/G16)



**GL11 – Insulated laminated shadowbox**  
Guardian Gl. SNX 62/27  
+ Shadowbox



**GL12– Insulated laminated vision glass/GL 13 laminated shadow box**  
Guardian Gl. SNR 43 + Frit (GL 12),  
Guardian Gl. SNR 43 + Frit/Shadowbox (GL 13)



**AMF01 – Metal Finish**  
Medium Gray – Mica Kynar



**AMF02 – Metal Finish**  
Bone White



**AMF03 – Metal Finish**  
Brushed Natural Aluminum (Clear)



**AMF04 – Metal Finish**  
Dove Gray



**AMF06 – Metal Finish**  
Ivory



**AMF07 – Metal Finish**  
Graphite



**PWP01 – Plant Wall Panels**  
A. Green Ivy



**TC01 – Terracotta Wall Panel**  
A: Crème



**CIPC01 – Cast-In Place Concrete**  
Natural Buff



**PC01 – Architectural Precast Concrete**  
Buff White

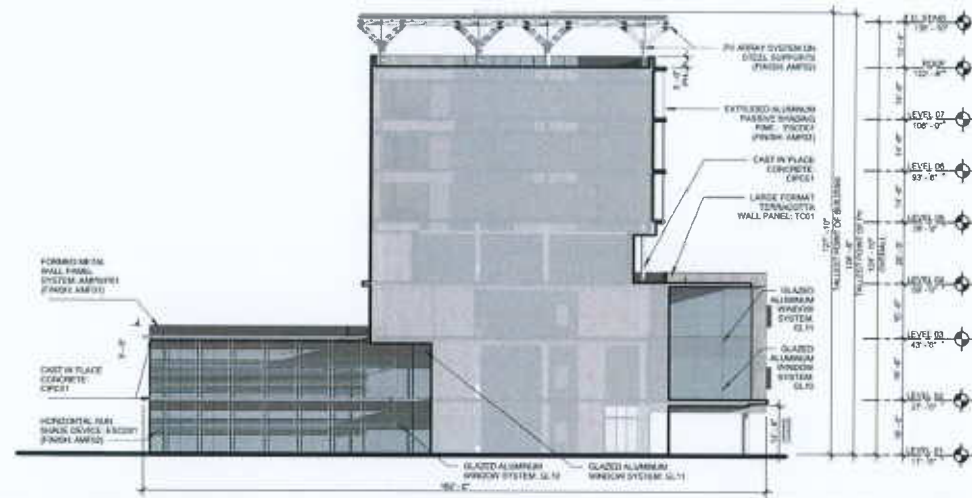


**PC02 – Architectural Precast Concrete**  
Buff Grey

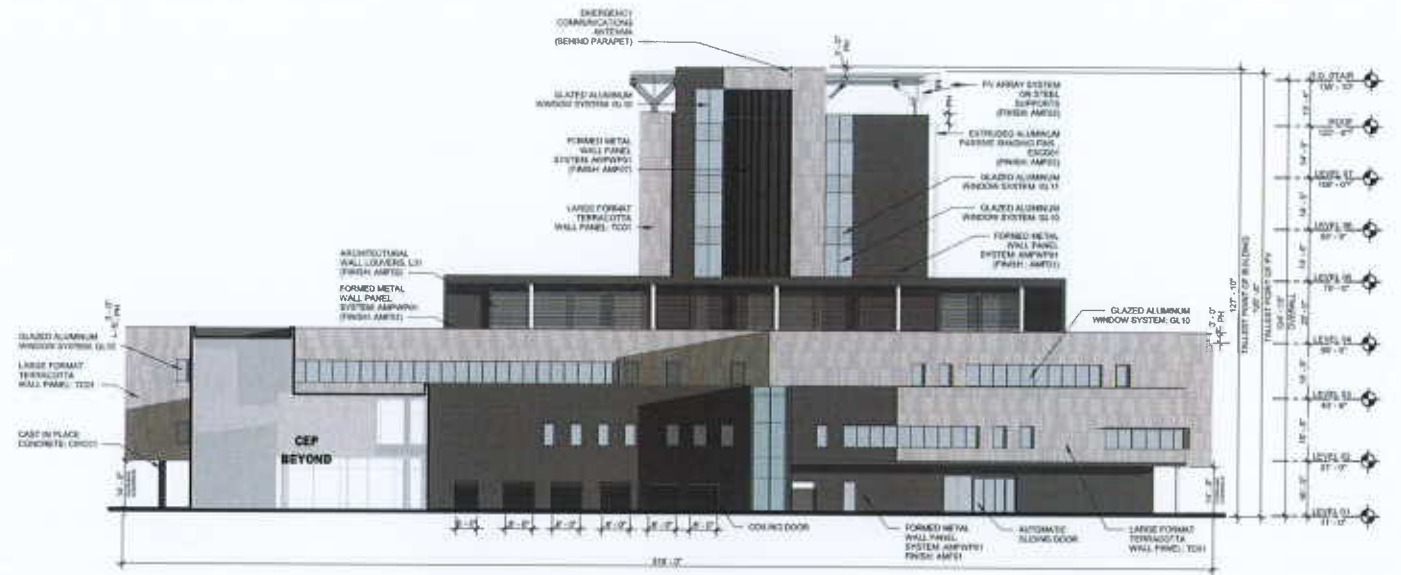


**WM01 – Wire Mesh**  
Stainless Steel

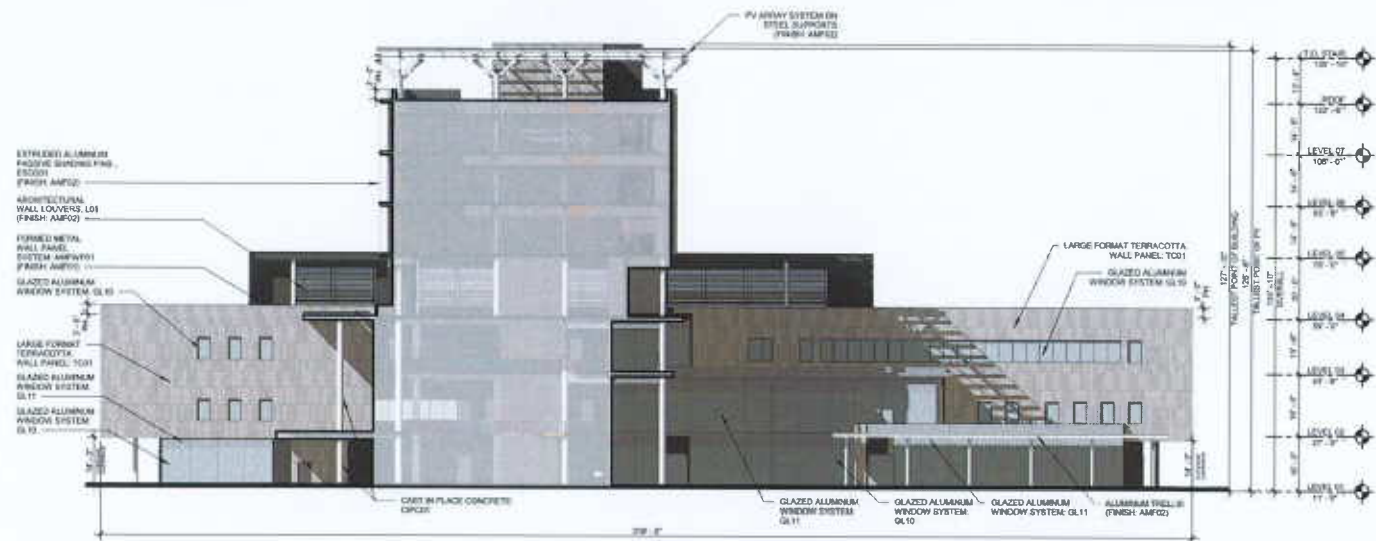
# Exterior Elevations



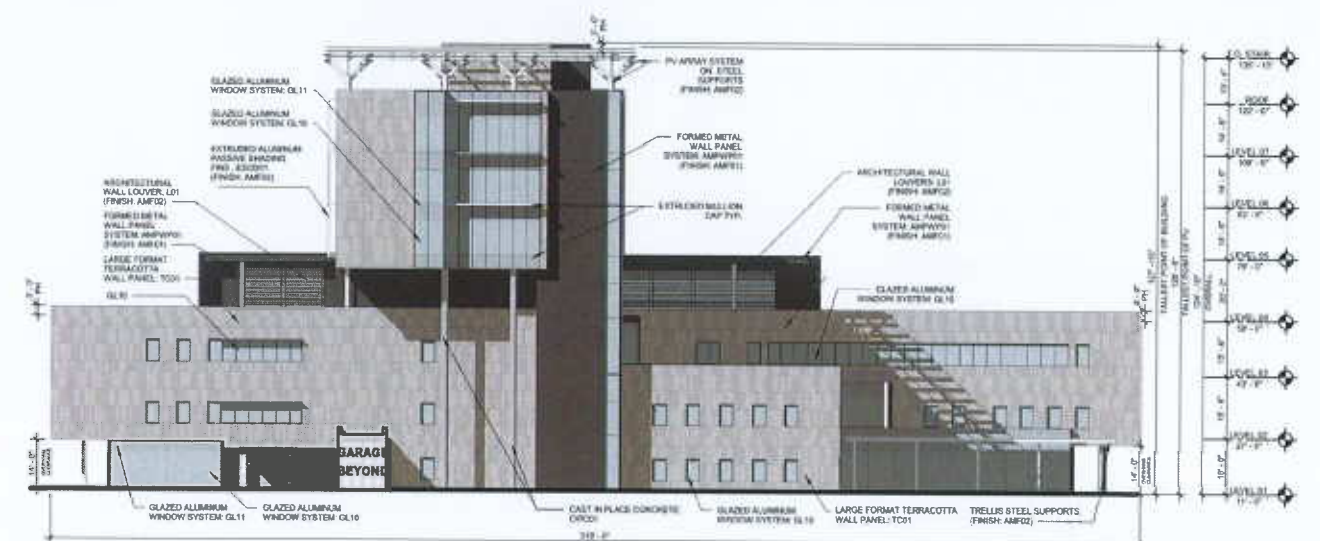
Courtyard East Elevation



Hospital West Elevation

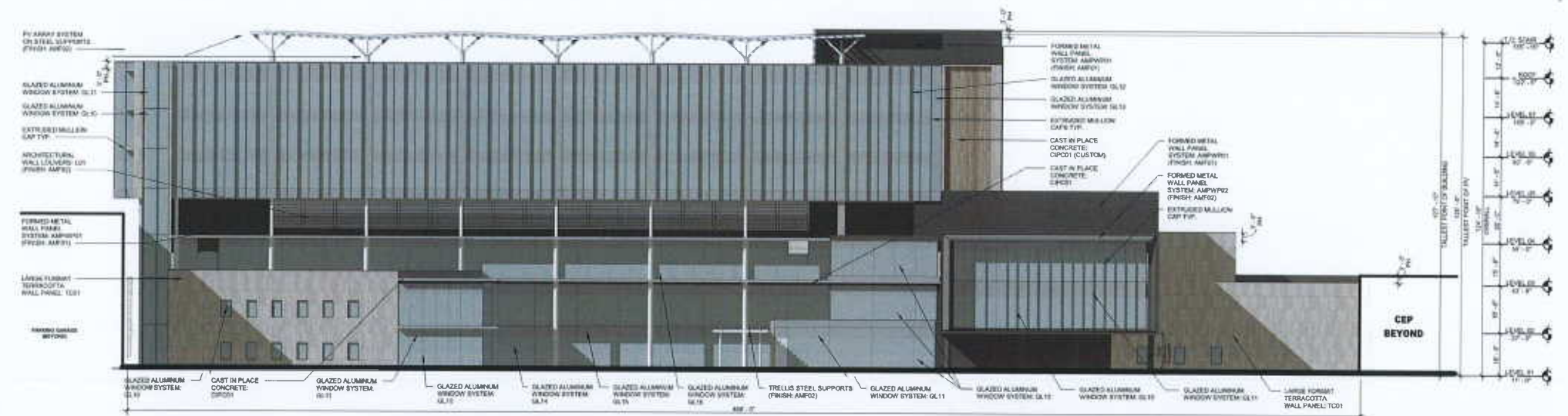


Courtyard West Elevation



Hospital East Elevation

# Exterior Elevations



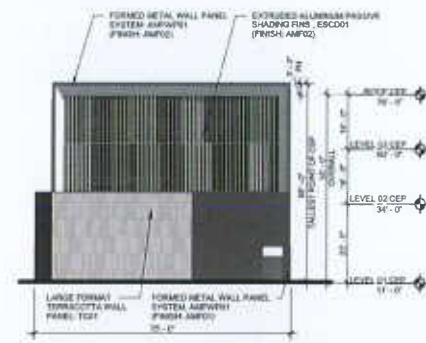
North Elevation



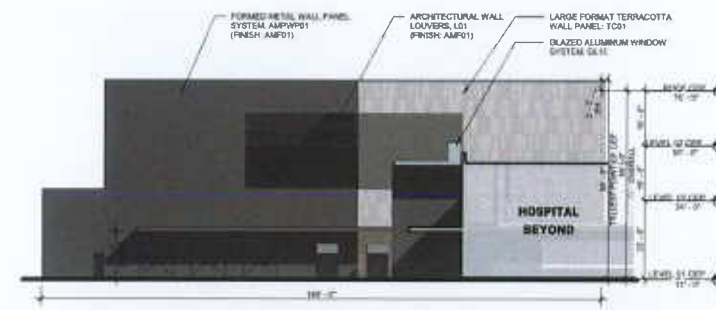
South Elevation



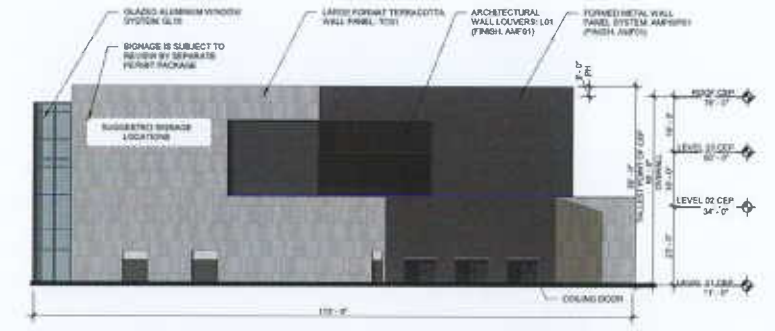
# Exterior Elevations



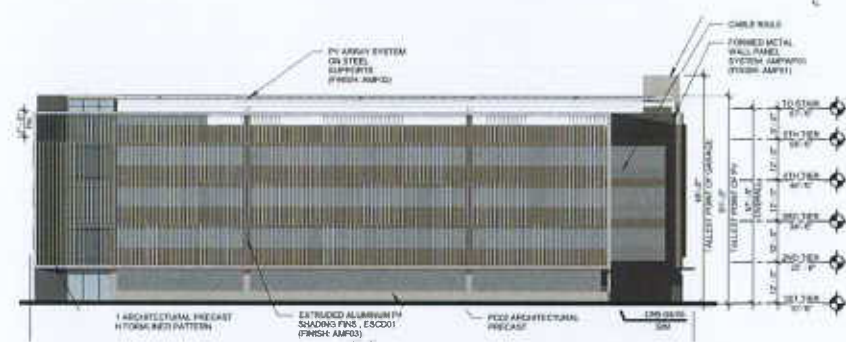
CEP West Elevation



CEP South Elevation



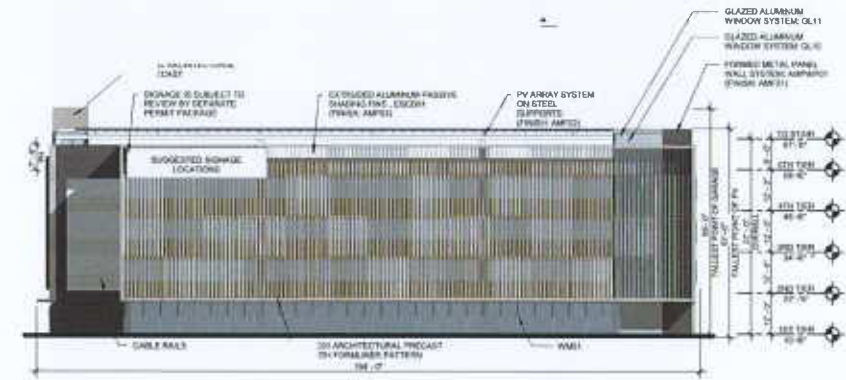
CEP North Elevation



Garage North Elevation



Garage East Elevation



Garage South Elevation



Garage West Elevation

# Interior Design

A blend of spatial form, material selection and biophilia create a calming and inviting interior experience.

- Warm materials and biophilia help provide comfort and reduce stress
- Material selections minimize toxic substances
- Interior form promotes active design, innate wayfinding and delight
- Daylighting is maximized to enable connections to nature and reinforce circadian rhythm



View of Main Atrium and Grand Stair

# Patient and Family

## Acuity Adaptable Patient Room

The patient room, perhaps the most intimate of spaces where a patient will often spend the most time during their journey of healing, will be designed with a hospitality focus. Features including lighting controls, view controls, and options for entertainment will be provided for both patients and their families. And the integration of focused audio will keep the sound where it's desired while keeping the surrounding area quiet. Providing these individual controls and options for comfort and technology can restore a sense of control and help manage the acoustical challenges that can be disruptive to a patient, that is healing. A nested patient room design will maximize access to daylight and views from the patient's bed, supporting a direct connection to nature and 'life' outside the built environment.

Family members are often an extension of the clinical care team; thus, supporting their needs can also help contribute to positive patient outcomes and positive experiences overall. The interior design will seek to improve the family experience and lessen stress by integrating options for how they can interact with the facility, providing choices for healthy nourishment, spiritual reflection, meditation, work, activity, and rest. Family lounges provided within the units will offer a place of respite while not being too far away from a loved one receiving care. Private consultation rooms with comfortable seating will allow for private family and care team conversations. Technology integrated into the consultation rooms and patient rooms will allow for engagement with multidisciplinary specialists and out of town family members. And while most family members prefer not to leave their loved one's side, a nearby courtyard and paved walking paths will provide family members with the opportunity to exercise and reflect while surrounded by nature.



# Health & Wellness

Research Connects Increased staff productivity and faster healing time to:

- Indoor Air Quality
- Acoustical Design
- Thermal Comfort
- Biophilic Building Features
- Views to Nature
- Visual Comfort & Lighting Control
- Water Quality
- Areas for Respite



# Supported Staff

A well-supported clinical team can improve patient outcomes and bolster employee retention and recruitment. The built environment can play a key role in this by ensuring team members, mental health, and well-being are central to the design as well. Daylight and views will be integrated into team member areas where typically those features aren't prioritized and often removed due to other project constraints. Height-adjustable workspaces will support active design strategies, encouraging movement and varied worker postures throughout the day. Quiet spaces for team members to nourish or rest will be provided away from the activity of public areas.



Precedent Images



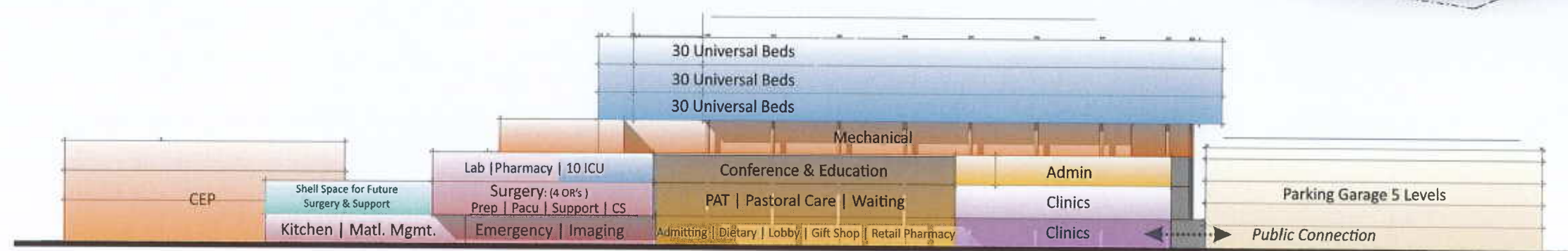
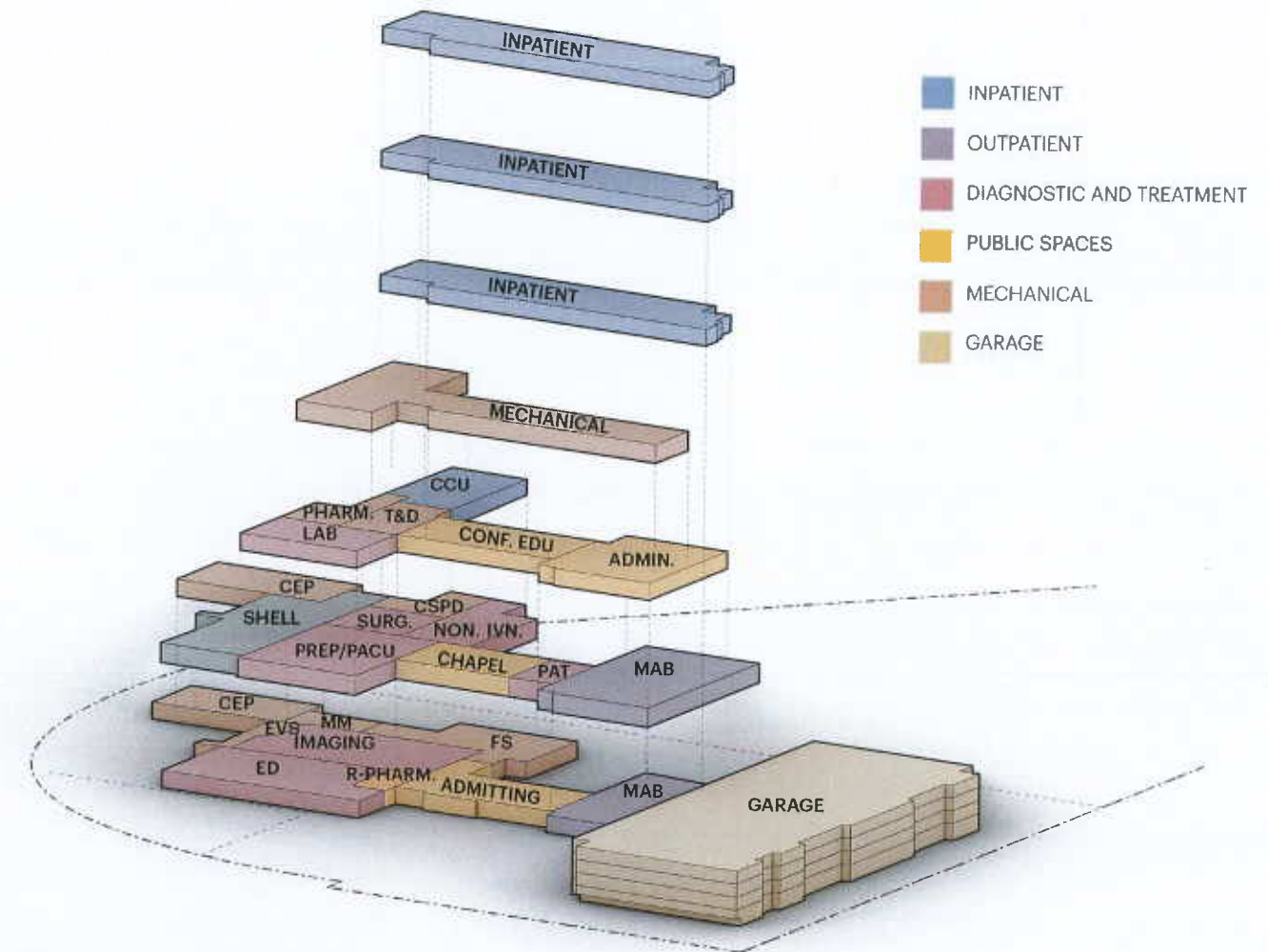
View of Main Lobby and Reception

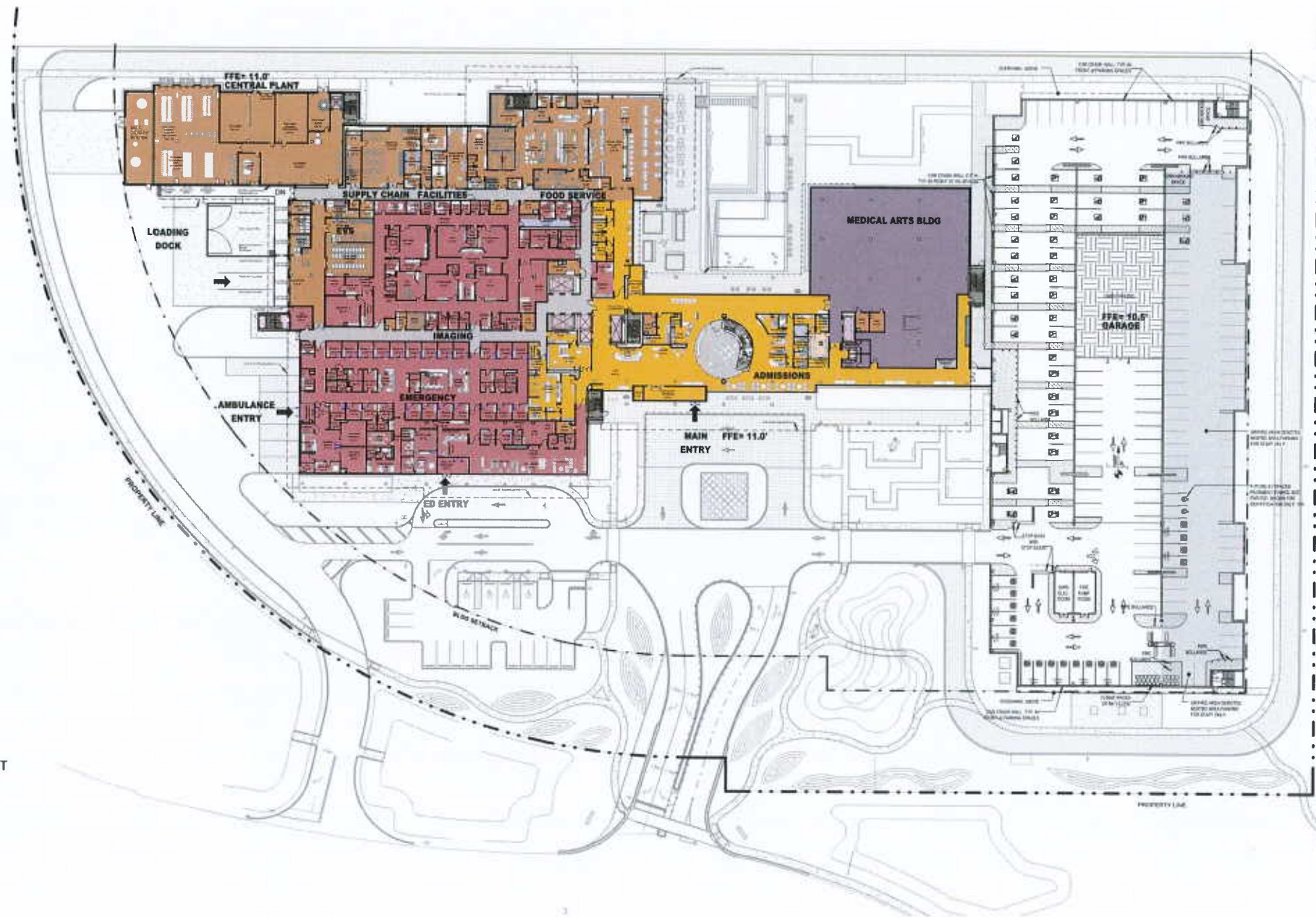
# Program & Stacking

The hospital program is organized into four primary building blocks with clear delineations both inside and outside the building. The height of the inpatient bed tower will create presence in the community and draw patients and guests visually to the main entry at the public lobby below. The lobby opens the patient experience towards the courtyard and wetlands beyond, grounding the entire campus in its native environment. Diagnostic treatment departments and medical arts clinics flank the public lobby on levels 1 and 2, and the garage acts as a buffer to the residential neighborhood to the east.

A comprehensive program on a compact site set on a central podium with bed tower above. The central energy plant sits on the west by the Sawgrass Expressway and the Parking Garage on the east near the residential neighborhood.

- Hospital including Mechanical and Central Energy Plant
- 100 Patient Beds
- Medical Arts Building (Outpatient Clinics) Including Mechanical
- 5 Level Parking Garage



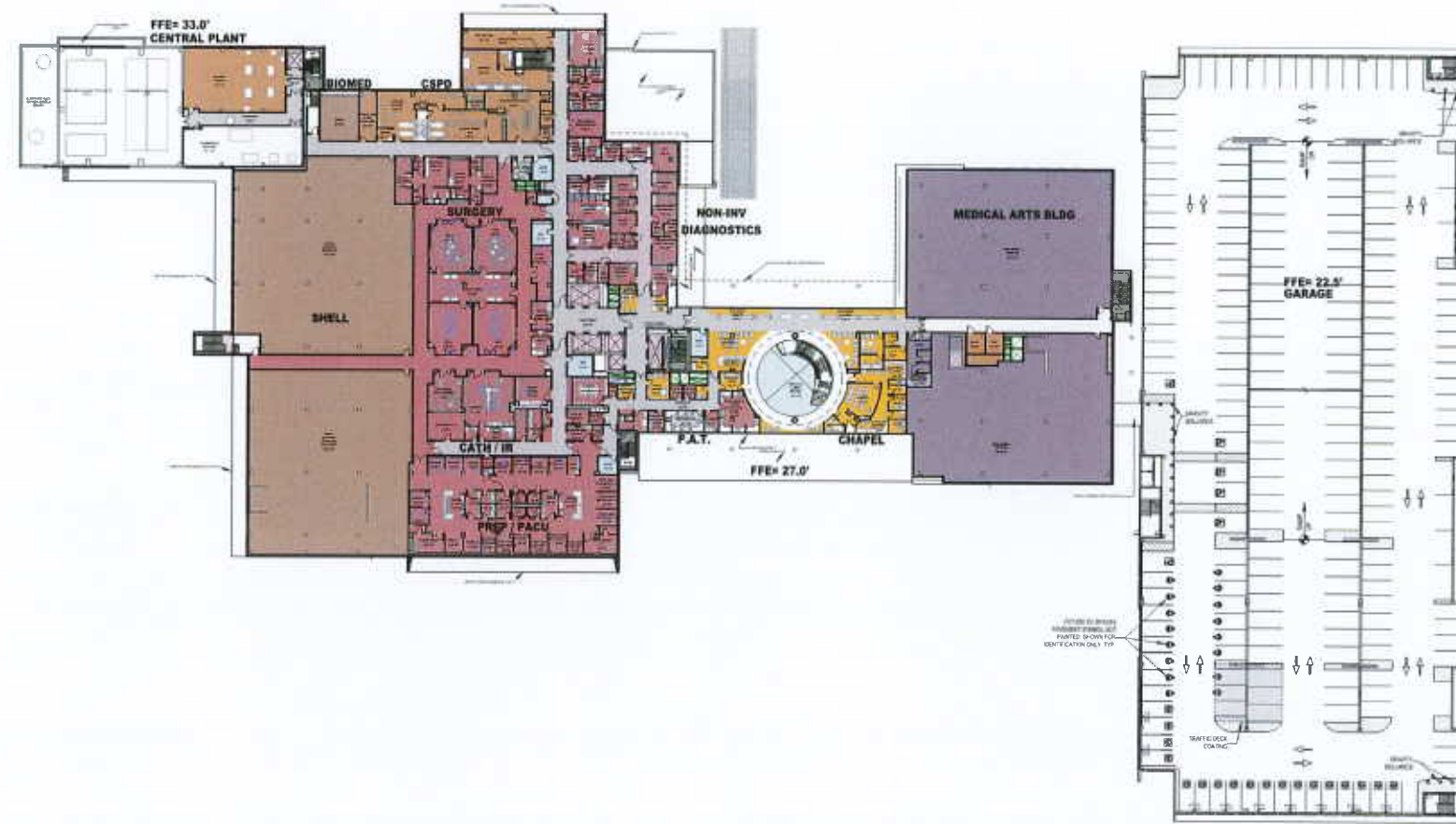


- BUILDING SERVICES
- CIRCULATION
- DIAGNOSTIC / TREATMENT
- COURTYARD
- OUTPATIENT CLINICS
- PATIENT CARE UNITS
- PUBLIC
- PUBLIC / ADMIN
- SHELL
- VERTICAL CIRCULATION / CORE
- VERTICAL CIRCULATION / SHAFT

Level 01 Floor Plan



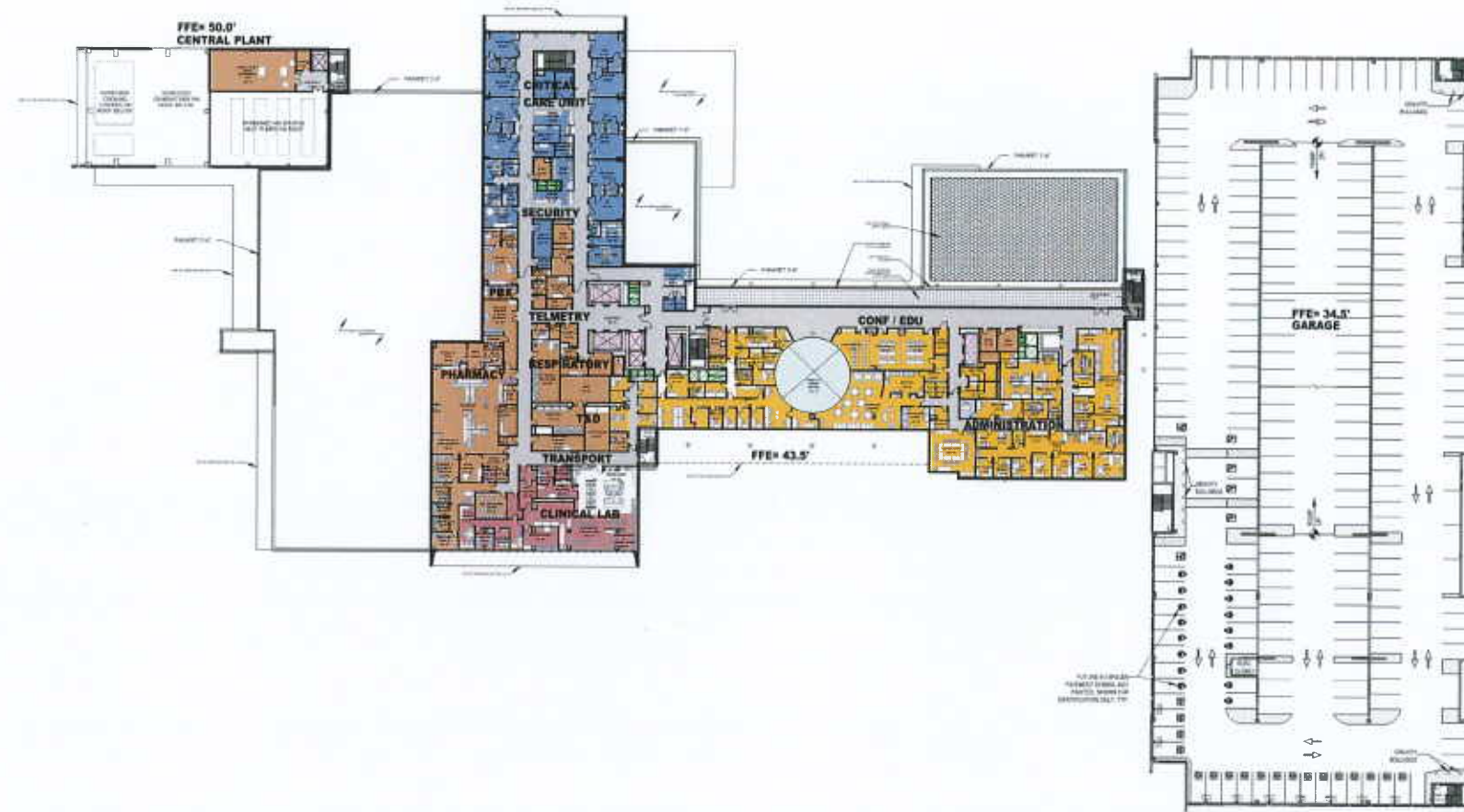




- BUILDING SERVICES
- CIRCULATION
- DIAGNOSTIC / TREATMENT
- COURTYARD
- OUTPATIENT CLINICS
- PATIENT CARE UNITS
- PUBLIC
- PUBLIC / ADMIN
- SHELL
- VERTICAL CIRCULATION / CORE
- VERTICAL CIRCULATION / SHAFT

Level 02 Floor Plan





- BUILDING SERVICES
- CIRCULATION
- DIAGNOSTIC / TREATMENT
- COURTYARD
- OUTPATIENT CLINICS
- PATIENT CARE UNITS
- PUBLIC
- PUBLIC / ADMIN
- SHELL
- VERTICAL CIRCULATION / CORE
- VERTICAL CIRCULATION / SHAFT

Level 03 Floor Plan

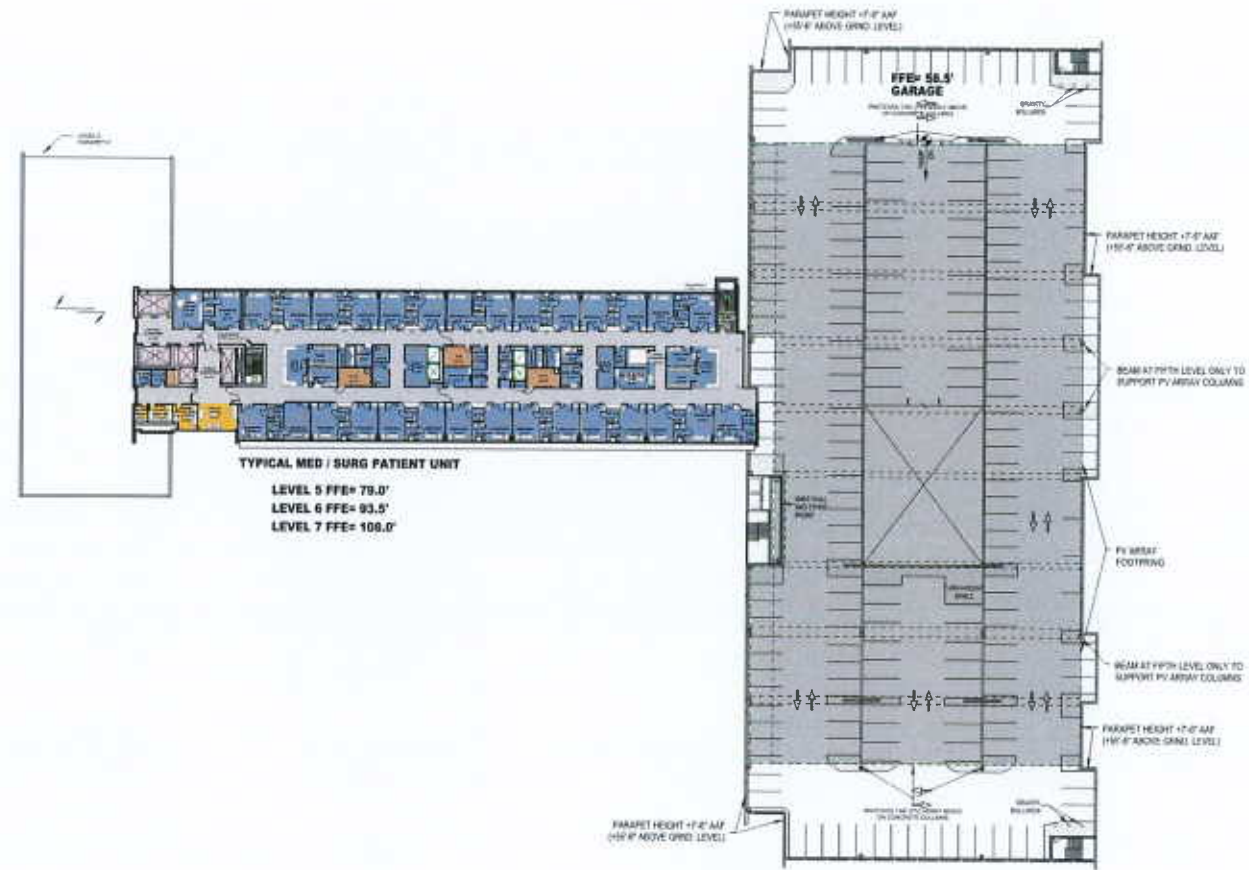




- BUILDING SERVICES
- CIRCULATION
- DIAGNOSTIC / TREATMENT
- COURTYARD
- OUTPATIENT CLINICS
- PATIENT CARE UNITS
- PUBLIC
- PUBLIC / ADMIN
- SHELL
- VERTICAL CIRCULATION / CORE
- VERTICAL CIRCULATION / SHAFT

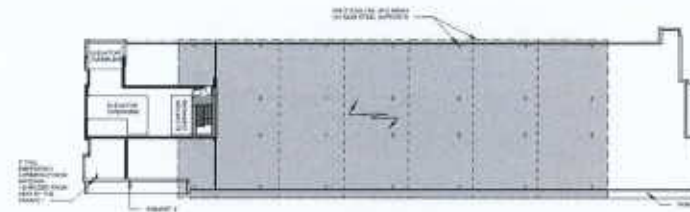
Level 04 Floor Plan





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- DIAGNOSTIC / TREATMENT
- COURTYARD
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- PUBLIC / ADMIN
- SHELL
- VERTICAL CIRCULATION / CORE
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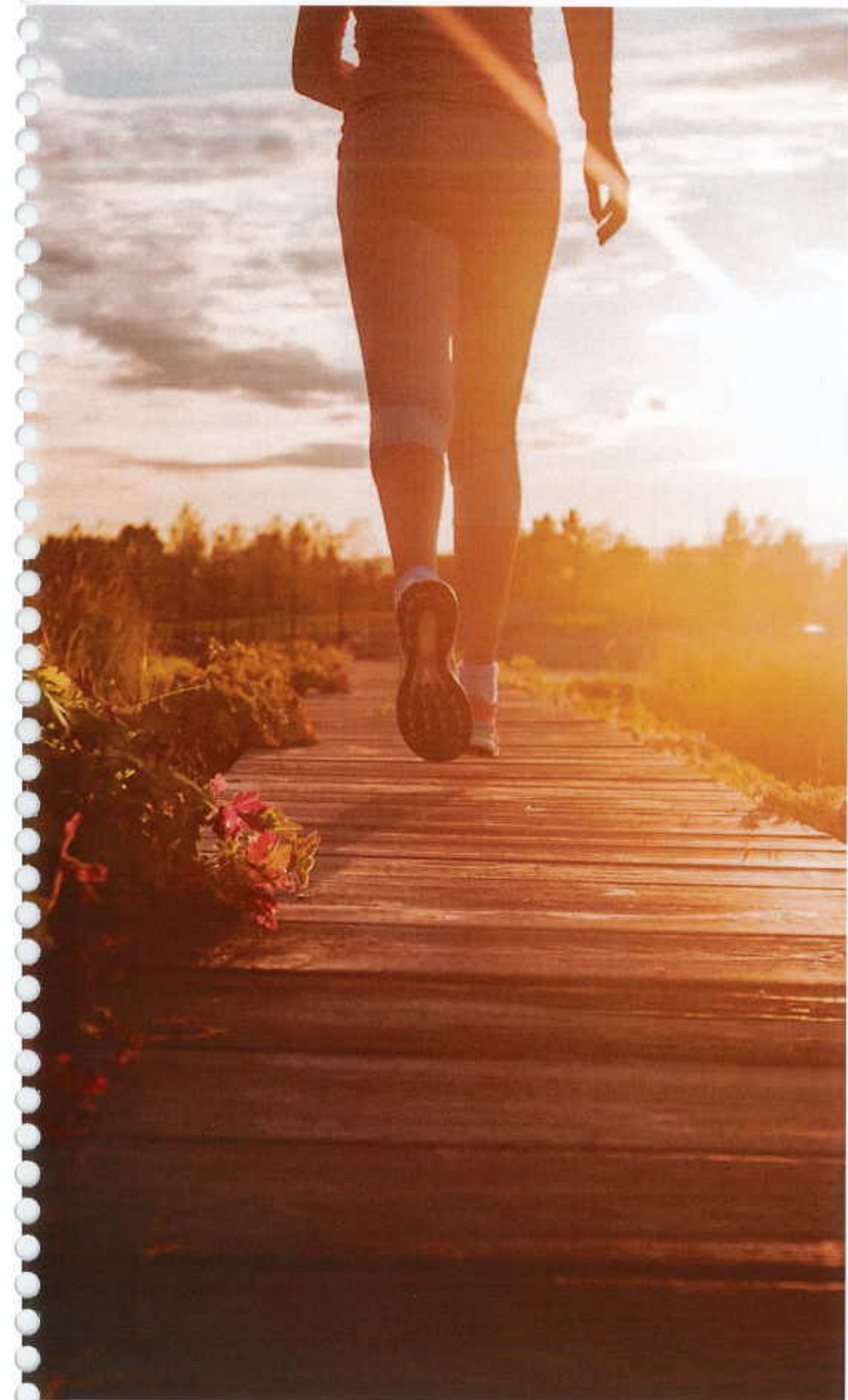
LEVEL 05-7 Floor Plan



- BUILDING SERVICES
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- COURTYARD
- OUTPATIENT CLINICS
- PATIENT CARE UNITS
- PUBLIC
- PUBLIC / ADMIN
- SHELL
- VERTICAL CIRCULATION / CORE
- VERTICAL CIRCULATION / SHAFT

Roof Plan





## **2.0 Sustainability Narrative**

# Sustainability Approach

All Electric Building Systems



Resilient Landscape



Stormwater Detention



Integrate Public Art



Wetland Conservation



High-Performance Building



Access to Nature



Solar Power

Sustainability design strategies increase building performance and support community wellness.

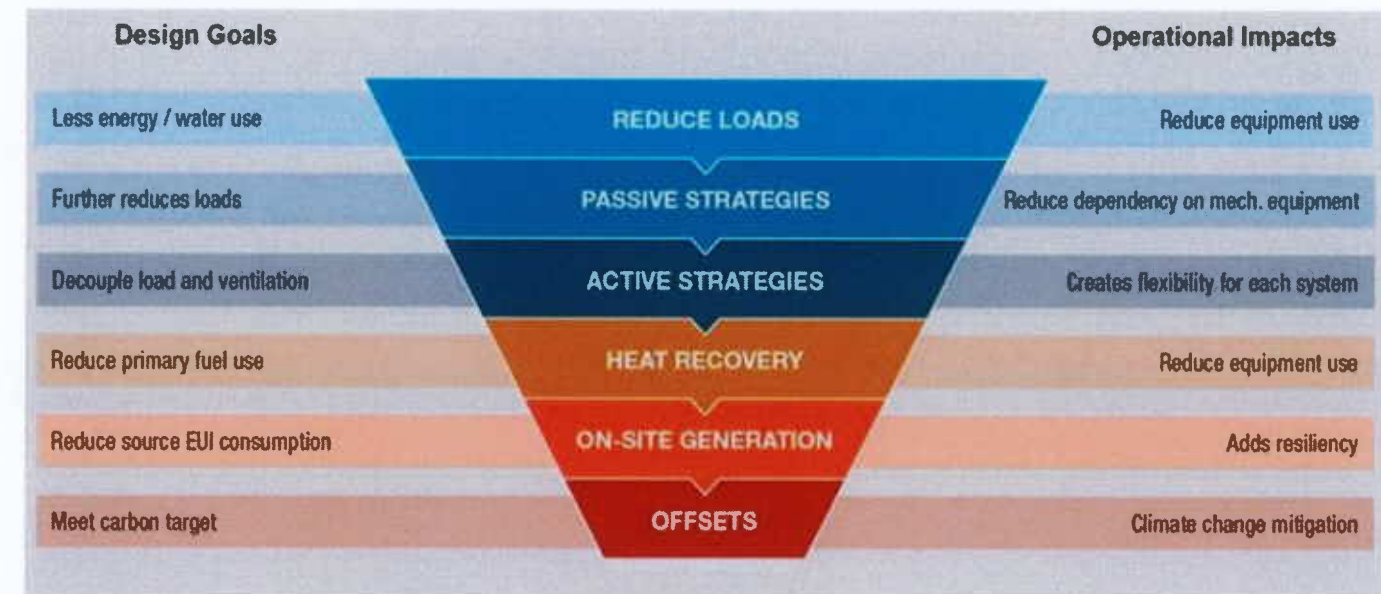
# Sustainability & Performance

Carbon Neutrality and Operational Efficiency drive building performance.

The design reduces passive loads like solar heat gain and cooling tonnage before adding active strategies like solar energy production. This helps shrink the campus' carbon footprint.

## Design Strategies:

- High Performance Envelope with Shading to minimize heat gain and heat loss
- Heat-Recovery Chillers to take advantage of simultaneous heating and cooling within the building and reduce the load on the dedicated heating or cooling plant
- Air Source Heat Pumps to generate heating hot water without fossil fuels
- Solar Photovoltaic (PV) System on the garage and inpatient tower



## Designing towards an all-electric Hospital

An all-electric facility enables the hospital to operate on 100% renewable energy in the future and eliminates on site combustion, that helps reduce carbon emissions and protects community health and air quality.

## Water Savings are a Priority

Potable water is becoming an ever more precious resource in South Florida. It is very important to preserve the finite aquifers that currently supply nearly 90% of South Florida's potable water demand. One way to achieve this is to implement water saving fixtures within the hospital and recover condensate from the AHU's to supplement the cooling tower make up water. The condensate recovery alone is estimated to save over 1 million gallons per year.



# Key Energy Reduction Strategies

**1. Reducing demand on mechanical systems** by utilizing a high performing façade. Shading, tint, insulated glazing units or dynamic glass can all be utilized to help reduce the loads.

**2. Improving mechanical system efficiency** by reducing re-heat. Utilizing a variable air volume system (VAV) in conjunction with efficient zoning strategies will allow the mechanical system to accurately match the demand within the space and prevent energy wastage.

**3. Improving mechanical system efficiency** by investing in high efficiency equipment. Investing in high efficiency chillers will increase the capital costs but reduce the operational costs and the amount of offsets that need to be purchased.

**4. Identifying key strategies to deal with humidity.** Controlling humidity levels is a major component of energy usage, especially in the local environment. Systems such as desiccant wheels can greatly reduce energy usage, however Arup understands that there have been issues with these technologies in other hospitals in the region.

**5. Reducing energy usage by recovering waste heat.** Heat recovery chillers can recover waste heat from cooling the building. This heat can then be used to provide reheat where required or to preheat water for other systems such as domestic hot water and steam generation.

**6. The design team will work with BHSF to determine an appropriate amount of spare capacity to account for a changing climate.** With installed cooling capacity sufficient to continue providing safe, comfortable conditions for building occupants as the local climate grows warmer in the decades to come.

**7. Illuminating space needs using the most effective concepts and equipment.** Efficient light sources and luminaires will be specified to reduce electrical loads. Automatic lighting control via sensors, schedules and daylight harvesting will promote further energy saving.

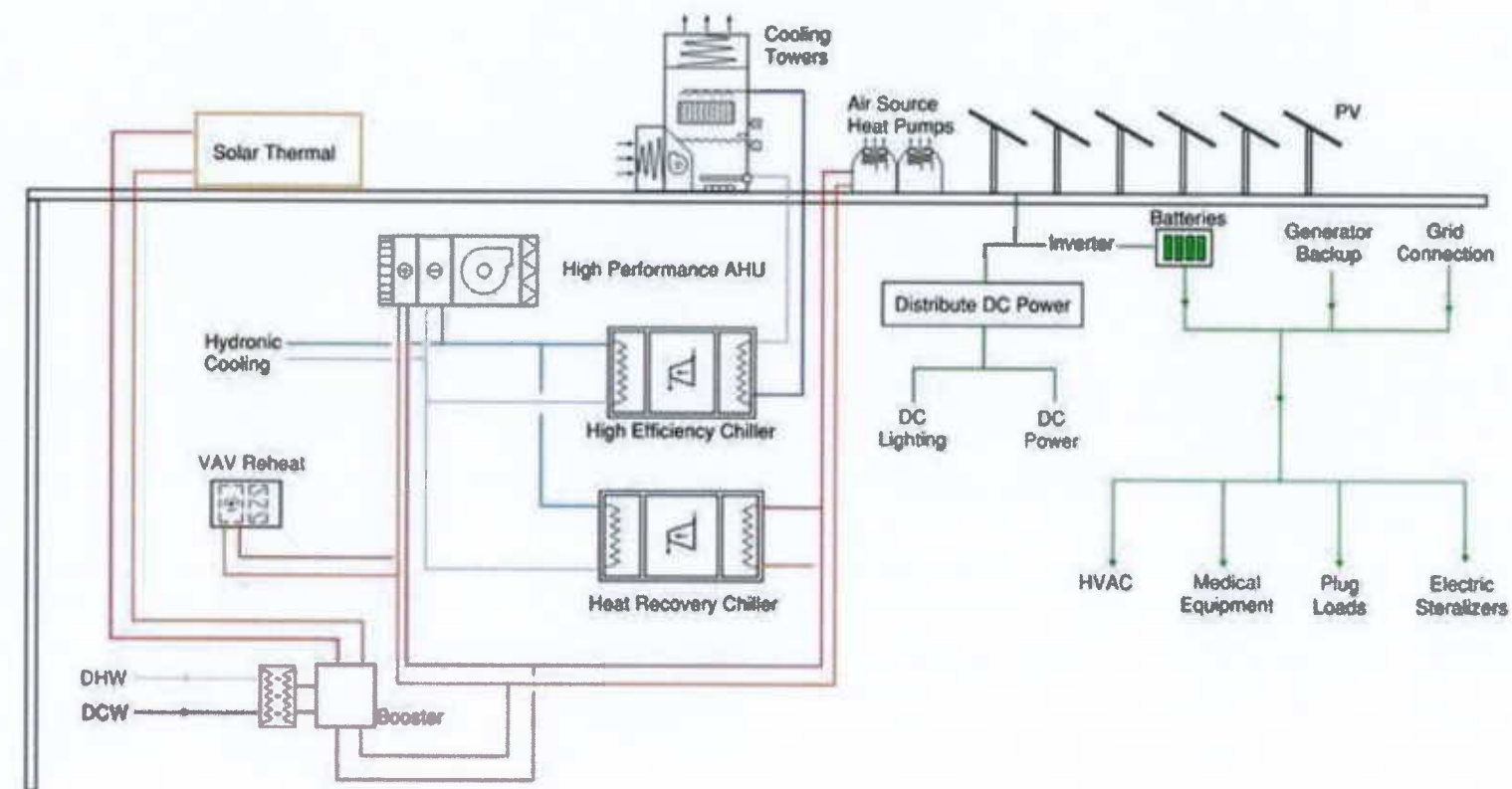


Figure 2: All-electric hospital principles

# Enhanced Air Quality

mindfulMATERIALS is a design industry initiative that provides a common platform for manufacturers to clearly communicate transparency and optimization information for their building products.

HKS created mindfulMATERIALS in 2014, when we recognized a need to share chemical content and environmental impact materials information to project teams simply. What began as a resource library labeling initiative to incorporate transparency information into designers' everyday work process has grown into an industry-wide, open-source digital platform with more than 600 user and manufacturer members.

With growing public concerns that range from increasing cancer and autism diagnoses to global warming, it is imperative to take a deeper look at the health and environmental impact of building products. Responsible product selection criteria includes durability, performance, high recycled content, low or zero-VOC content and local sourcing. That definition has expanded to include the chemical content and environmental life cycle impacts.



# Daylighting

Access to natural light can help improve our moods, concentration, and productivity. Studies suggest that exposure to light can help lower stress, reduce perceived levels of pain, and reduce a patient's length of stay. Designing with a strategy to maximize daylighting can also provide the added benefit of energy savings by reducing the need for artificial lighting.

With so many known benefits of daylighting, it's a critical design element that will be prioritized in both the planning and design. Considerations such as nurse station proximity to daylighting, and staff only areas with access to daylighting and views will be given special attention. The nested patient room module will allow for maximized daylighting in the patient room. And the integration of glazing at interior doors and architectural walls, where appropriate, will allow the passage of filtered light into adjoining spaces. Waiting spaces and other public areas will be purposefully positioned at exterior facing zones to maximize the opportunities for views and daylighting, taking advantage of the nature that surrounds the building both on site and beyond.



Precedent Images

# Green Building Certifications

Alignment with several Building Performance, sustainability and resiliency initiatives reinforces the projects vision and goals. The project will seek LEED, and WELL certification, with the potential to certify the parking garage via Parksmart. This effort will illustrate the rigor of the design and implementation of the project, exemplifying its efforts and solidifying its positive impact on place, community and region.



The goal of LEED is to create better buildings that:

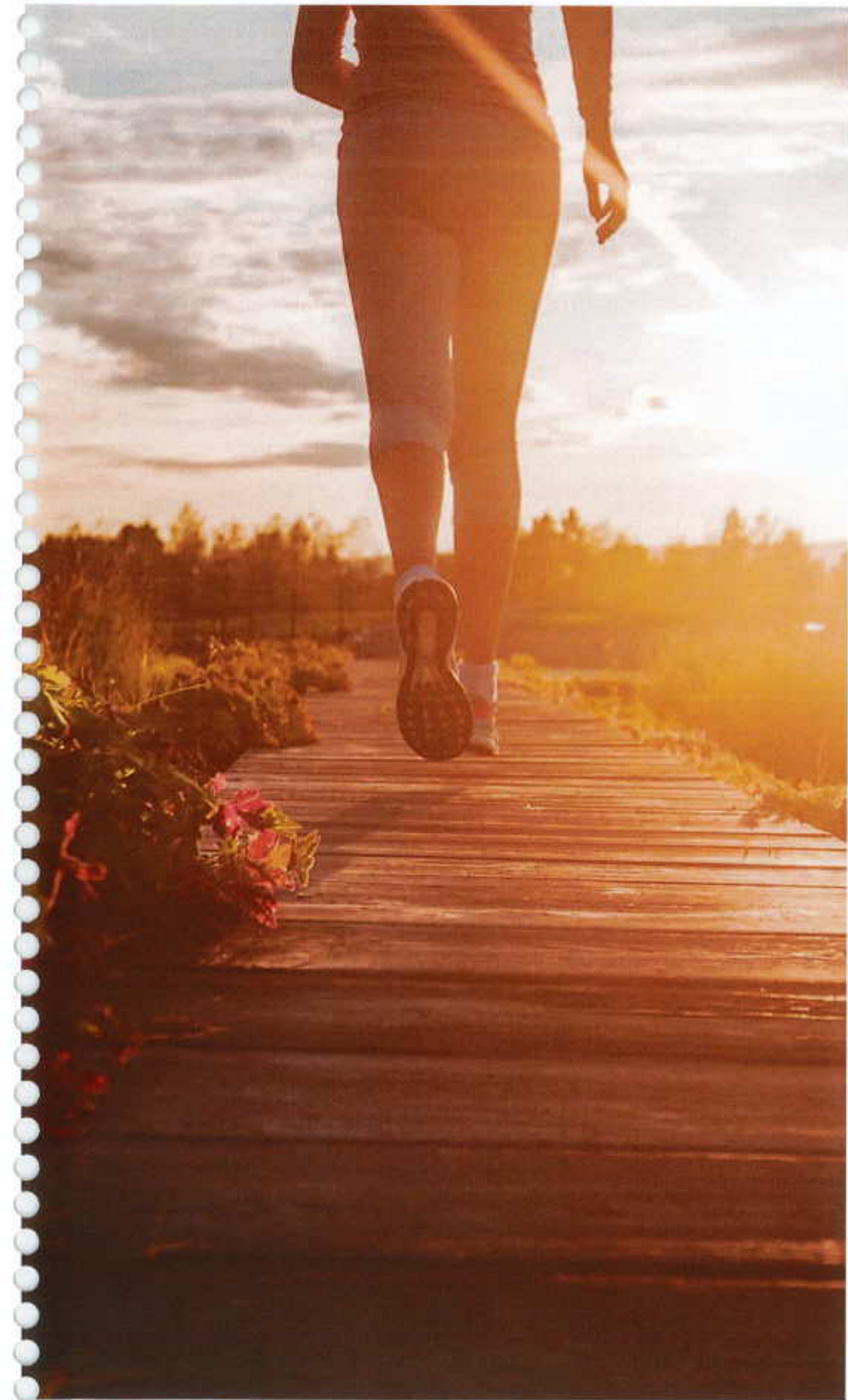
- Reduce contribution to global climate change
- Enhance individual human health
- Protect and restore water resources
- Efficient use of energy and product resources
- Protect and enhance biodiversity and ecosystem services
- Promote sustainable and regenerative material cycles
- Enhance community quality of life



WELL, applies the science of physical and social environments to benefit the health, well-being and performance of people.



Parksmart is a certification program offered by the green business certification institute, complimentary to LEED, geared towards parking structures. Many of the categories in the Parksmart certification program are like those from the LEED rating system. Credits are earned by providing sustainable cleaning procedures and recycling program, wayfinding, parking for low-emitting or electric vehicles, bicycle parking, providing EV charging stations, energy efficient lighting, and renewable energy generation.



## **3.0 Public Art Narrative**

# Artwork

Art has the remarkable power to weave the threads of our community into a vibrant tapestry, creating connections that transcend words and unite us in a shared celebration of creativity and expression.

With a significant role in shaping the character, identity, and vibrancy of a community, public artwork can hold a unique and influential role within any area, touching upon various aspects that enrich the lives of its residents. These installations become more than just artistic expressions; they foster civic pride and a sense of identity, acting as prominent landmarks and gathering points. The aesthetic enhancement of public spaces through art not only beautifies the community but also invites engagement and dialogue among its members. Public art can serve as a reflection of local culture, celebrating heritage, history, and the local landscape, while also promoting tourism and boosting the local economy. It can inspire creativity and contribute to placemaking efforts by transforming neglected spaces into vibrant, welcoming areas.

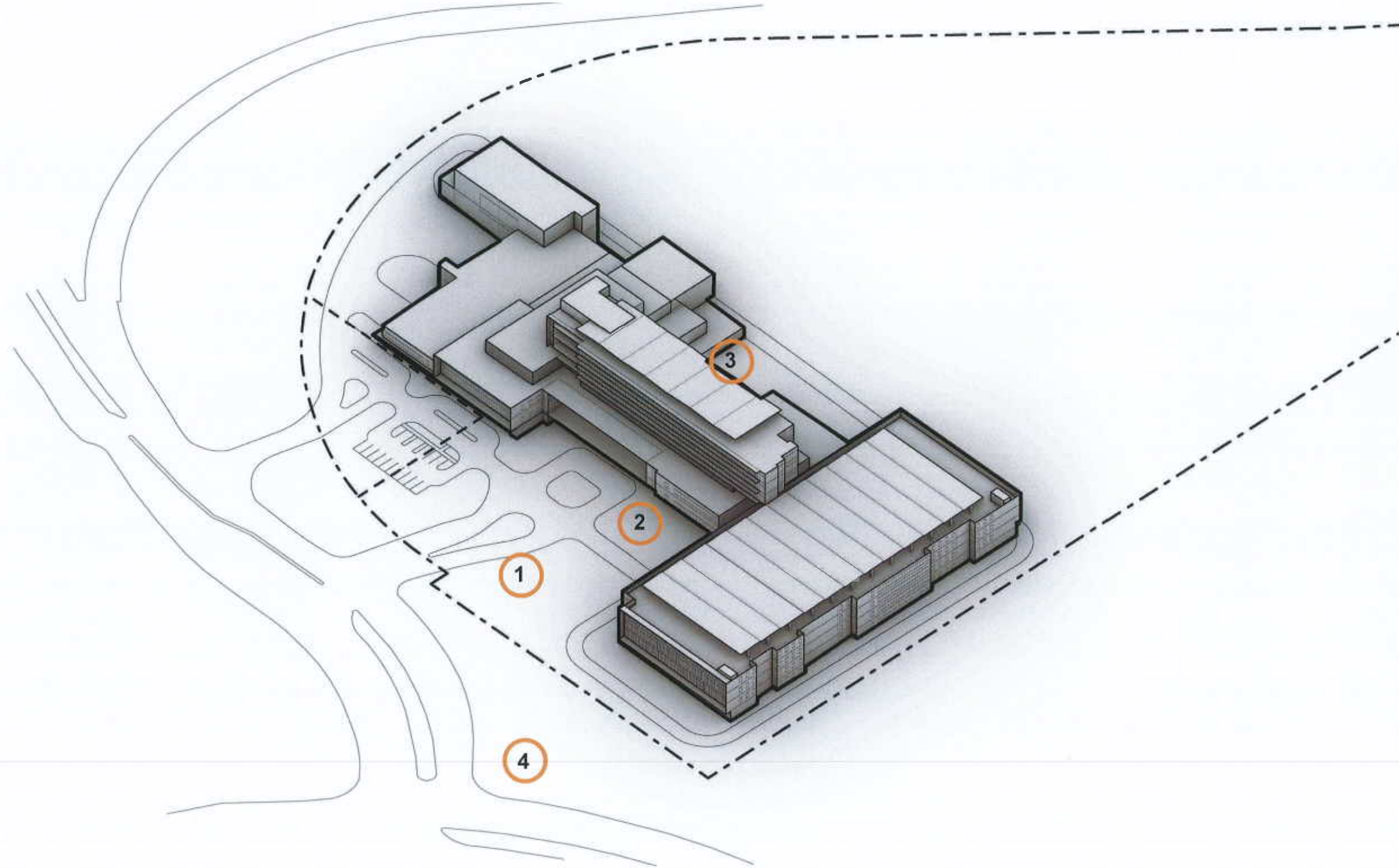
Artwork can be a welcome, positive distraction for patients, families, and team members. It can help reduce stress, can be used to create a beautiful focal point incentivizing a patient to walk down the corridor, serve as a wayfinding element, and create an opportunity for peace and reflection. Artwork can also help reinforce community connection by integrating artwork created by local and regional artists. The artwork and interior design will be seamlessly integrated ensuring each piece is thoughtfully considered for its intended audience and celebrated.

Environmental graphic design is a form of artwork that can be used to reinforce Brand identity, create a consistent user experience, support Wayfinding strategies, tell a story, and add visual interest through color, pattern, or texture in a way that is unique to this facility. Through a process of discovery of place, a unique graphic language will be developed and implemented throughout the facility, working in concert with the already established Brand identity, interior design concepts, and interior signage, telling a cohesive story that speaks to your Brand and the community in which the facility resides.



# Site Artwork Location Plan

- Location 1-** Main Entry Approach- East of Entry Drive
- Location 2-** Pine Shade Garden at Main Entrance
- Location 3-** Courtyard/ Garden
- Location 4-** ROW at Oakland Park BLVD



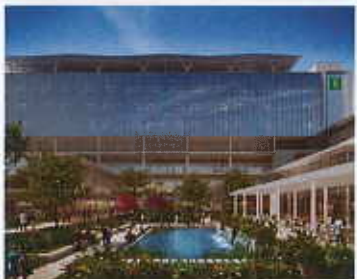
# Artwork Criteria



Location 1- Main Entry Approach- East of Entry Drive



Location 2- Pine Shade Garden at Main Entrance



Location 3- Courtyard/ Garden



Location 4 - Oakland Park BLVD

## ARCHITECTURAL PURPOSE/CONTEXT

- Signifies the entry sequence highlighting the approach to the main entry

- Sculptural piece set within pine garden
- Will be visible from within main lobby and connector from garage to lobby
- Continues art connection from main entrance towards building
- Activate garden drawing pedestrians from within building and connection from parking structure.

- Continues visual connection to art through building to courtyard garden and beyond to conservation wetlands
- Activates courtyard
- Concludes connected art elements through campus

- A visual connection from the City of Sunrise Linear Park, Art in Public Spaces installations to the hospital site

## DESIGN PARAMETERS MATERIALS/SCALE

- Large Scale
- Natural metal, SS, cast bronze, aluminum

- Scale appropriate to closer pedestrian interaction
- White concrete marble or natural stone.

- Medium scale
- Natural metal, SS, cast bronze, aluminum, stone

- Large scale
- TBD

## CONVEYED FEELING/ EXPRESSION

- Uplifting and energetic
- Consider both vehicular and pedestrian views in transition from both within and outside campus

- Calming contemplative piece
- Connection to nature

- Framed views outward to wetlands
- Pedestrian interaction at ground plane but also visible from upper levels and terraces.

- Visible from intersection and adjacent Linear Park
- Uplifting modern signature piece reflecting commitment to public arts

## ART CHARACTERISTICS

- Organic flowing form, to complement landscape design
- Possible reflectivity to activate impact of surroundings

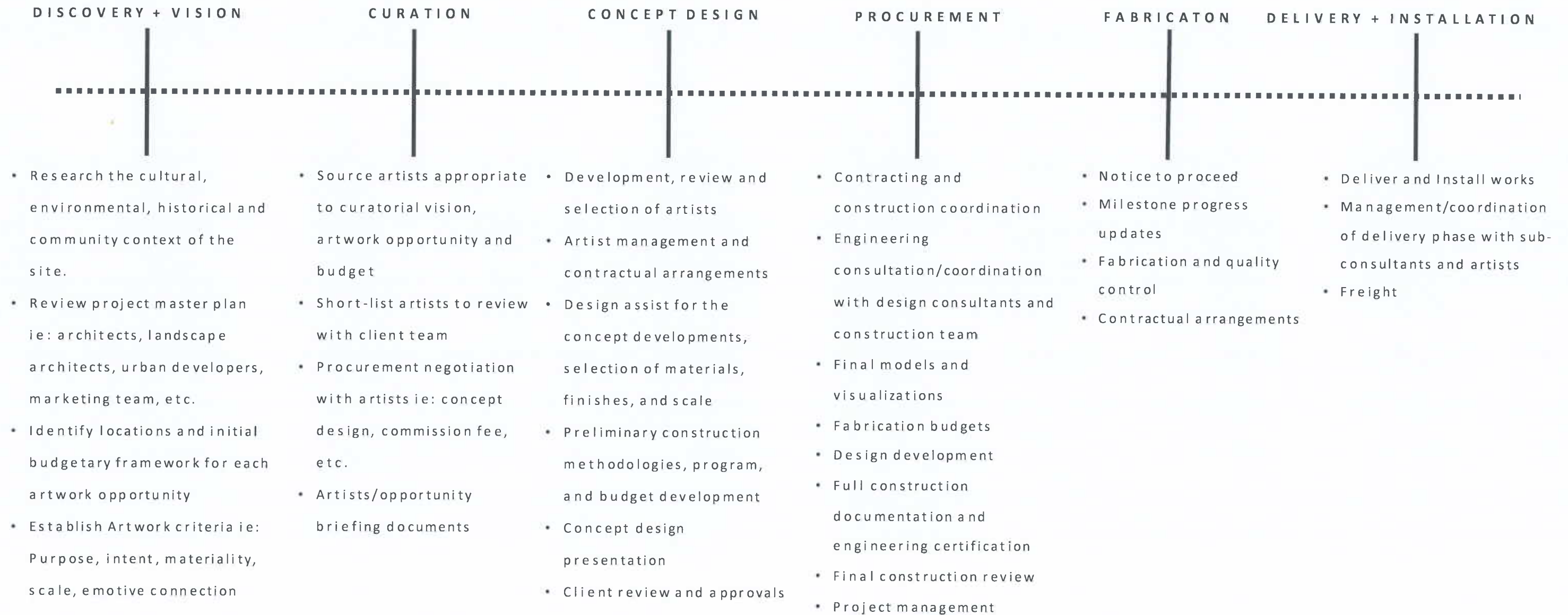
- Soft flowing form
- Ability to receive shadows and mottled light
- Void and solid elements
- 360-degree visibility

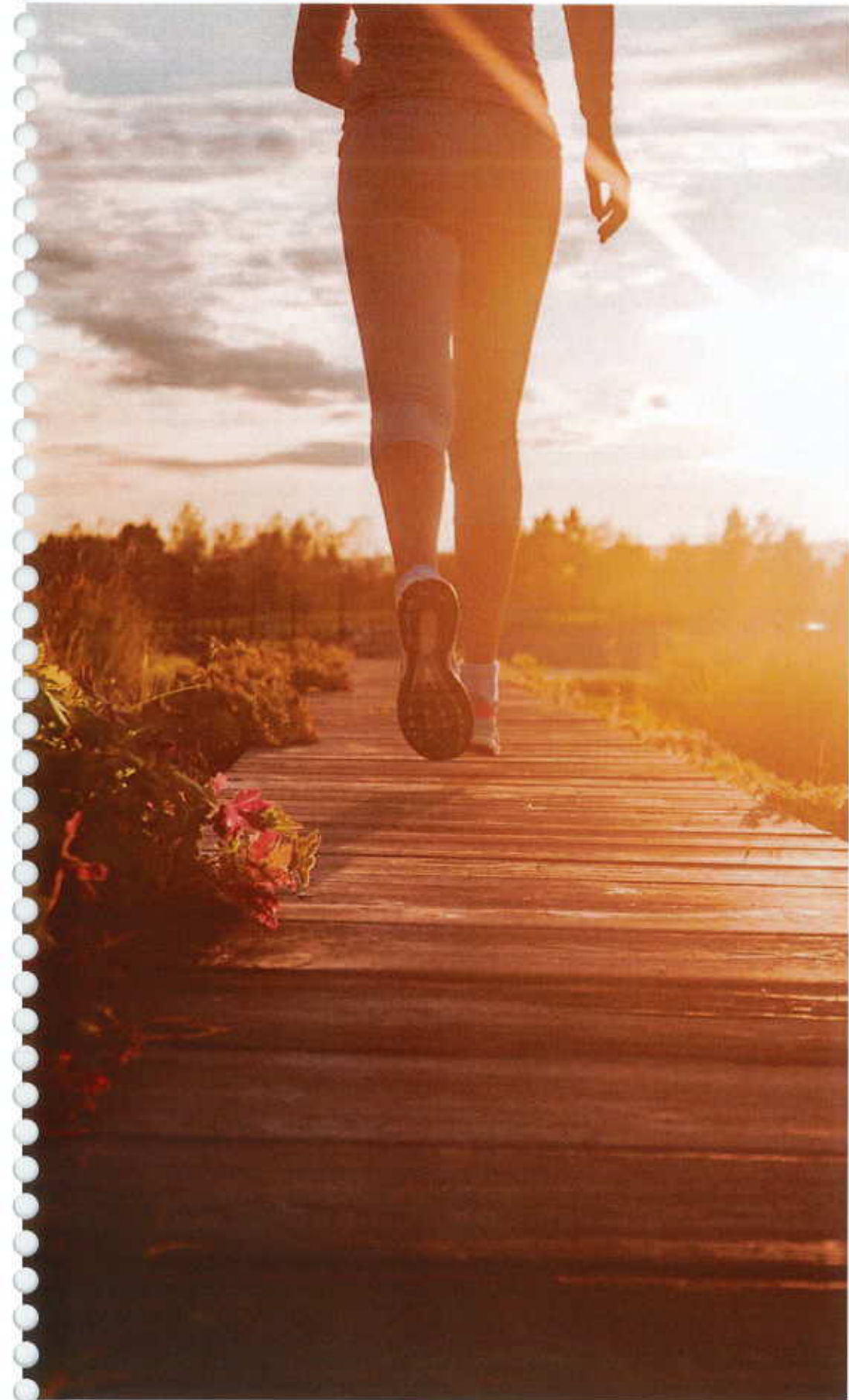
- Frame like void forms to promote views through piece
- Consider reflectivity from adjacent building facades
- Sculptural lens

- Organic, calming, unifying, anchoring
- Sculptural, elegant
- Subtle sheen, light reflecting, color



# Artwork Selection Process





## 4.0 Operations Narrative

# OPERATIONS NARRATIVE

## 1.0 OPERATIONS OVERVIEW

**1.1** The new building will be a 7-story full-service hospital with Diagnostic and Treatment, 100 patient beds, an MAB (out-patient clinics), CEP and Parking Garage. Operational functions are divided by main public ED walk-in & service entries within the building on level 1. West of the main entrance the emergency department is a primary entry for patients seeking emergency care, while the dock & support departments facilitate the supply chain of the hospital. At the main lobby, a public zone anchors all public flow either to the west or east. Patients, family & friends will be directed either to core hospital functions to the west or to the medial arts clinics to the east.

### 1.2 Operations on Level 1

The emergency department has its own public entry which connects to the east back to the main entry. Patients may begin and end their stay in the department, or they may be admitted and to an inpatient floor in the tower. ED patients often need diagnostic images taken so the Imaging Department is directly behind the ED for efficient movement of patients and staff. Outpatients will also visit the department, so it has a public facing entry at the main lobby, and it is proximal to the core elevators for inpatient transfers. Hospital dining faces the courtyard on level 1 and is available for public & staff. Food service to patient rooms will be via the service elevator core.

### 1.3 Operations on Level 2

The interventional wing on the west includes operating rooms, procedure rooms, and a cath suite. Public facing entry is in front of the courtyard with a stair connection for easy access to /from level 1 amenities. Patients will transfer from the ED or inpatient rooms to and from surgeries or procedures. Before returning home or back to their inpatient room they will be observed in the recovery area south of the surgical suite. Non-invasive diagnostics will have a similar flow of both inpatients and outpatients. In the north the sterile processing department supports surgery with sterile instrument and supplies throughout the course of the day. Toward the east the chapel is available to all public via the grand central stair, and the MAB clinics have their own dedicated elevator for easy in/out access from the garage. Convenient for staff entering & exiting the building is the employee health suite within the MAB, where staff can have a clinic exam visit themselves.

### 1.4 Operations on Level 3

The clinical lab and pharmacy serve the entire hospital primarily through the pneumatic tube system, but some results and medications will be hand delivered. Point to point p-tube exist between lab and ED for faster turn-around times. The respiratory department is adjacent to the ICU because of those patients will often be on ventilators. From the RT base, the therapists will deploy to support ED, surgery and the other inpatient units. ICU toward the rear will care for patients: receive them from surgery, send them to imaging for diagnostics, and patients may either be discharged home from the ICU or move to a med / surg unit. In the middle of the floor the conf/ edu supports all staff and rooms will be open for public education as well. Further to the east the administrative office suite houses the c-suite / nursing administration / HR and other admin groups.

### 1.4 Operations on Level 4

An interstitial mechanical / electrical floor is on level 4 serving the entire building.

### 1.5 Operations on Level 5 -7

The medical / surgical floors will treat patients via minor procedures in room and as a base of operation for diagnosis & treatment sending patients to/from surgery and imaging or cardio-diagnostics until they are ready for discharge home. Food service from the kitchen will go to each room via an on-demand model. Labs will be run, and medications delivered from the pharmacy to these inpatients as well.

#### Operational Hours

Hospital:	24/7 Operations
Medical Office/Clinics:	8am-6pm M-F, 7am-3pm Saturdays
Parking Garage:	24 Hour Access
Grease Trap maintenance (at service dock):	Monthly Between 7am-7pm
Generator Fuel Service (at service dock):	Every 4 months Between 7am-7pm
Facility Supply Deliveries (at service dock):	Daily Between 7am-7pm
Generator Testing (at CEP): <i>Testing requirements are per NFPA 110</i>	Once a month for 0.5hrs Annual load test 1.5hrs only if monthly test fail Once every 3 years compliance load-test 4hrs Testing Between 7am-7pm
Landscape Service:	Bi-Weekly Between 7am-7pm
Non-Hazardous Waste (at service dock):	Recycle - Two times a week Between 7am-7pm Trash Compactor - Three times a week Between 7am-7pm
Hazardous Waste (at service dock):	Daily Between 7am-7pm
O2 Tanks maintenance and supply:	Bi-Monthly Between 7am-7pm
Ambulance Visits per Day	4 visits (estimated average) 24 Hour Access

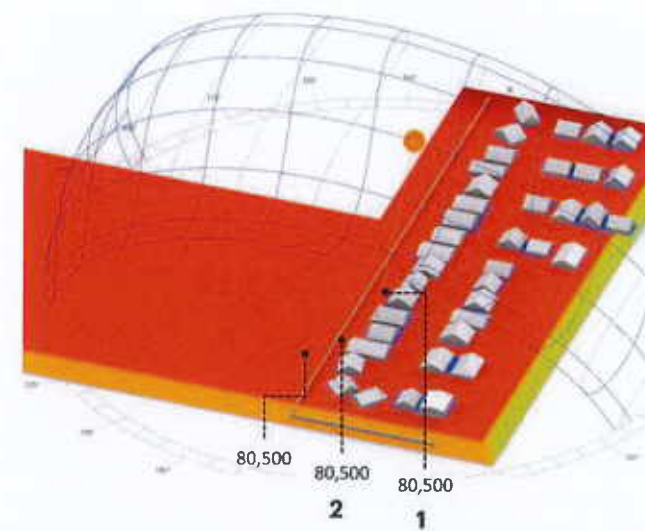
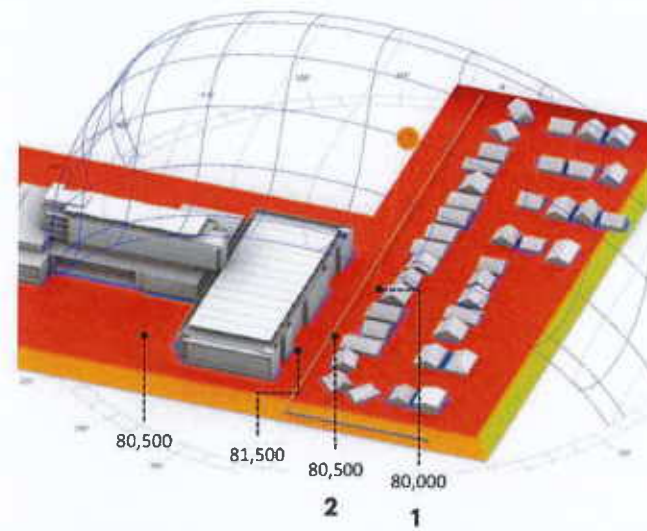


## **5.0 Shadow & Sight Line Study**

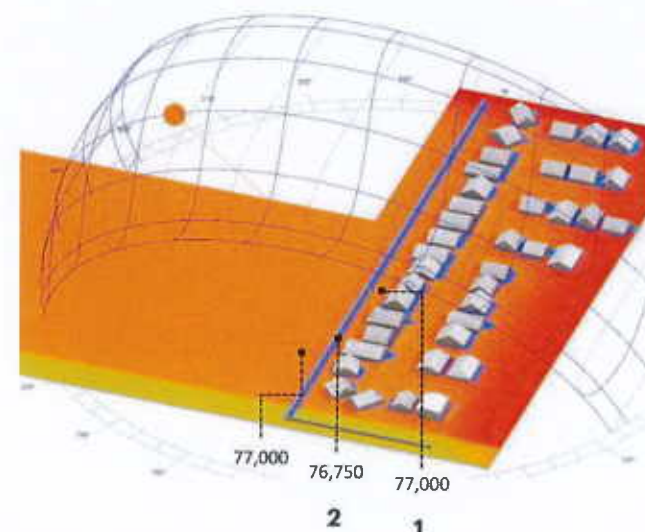
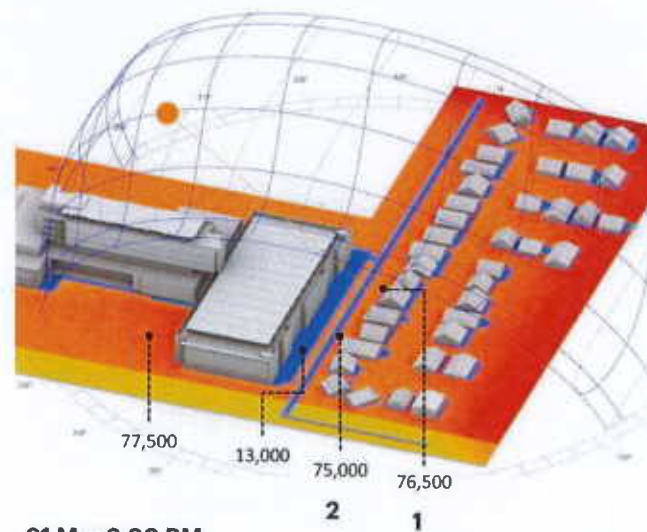
# Shading Study

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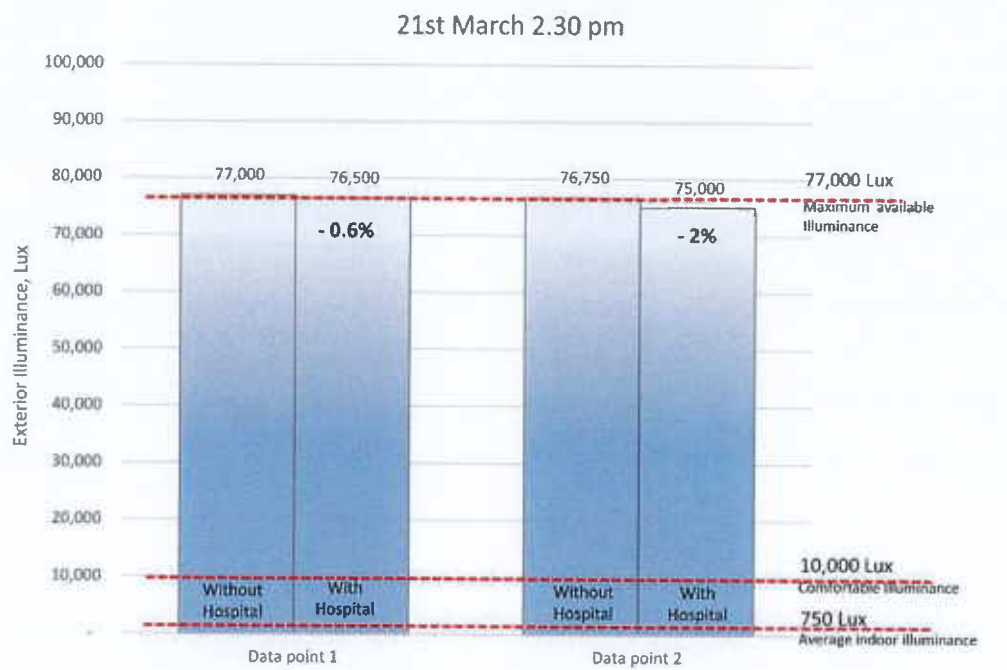
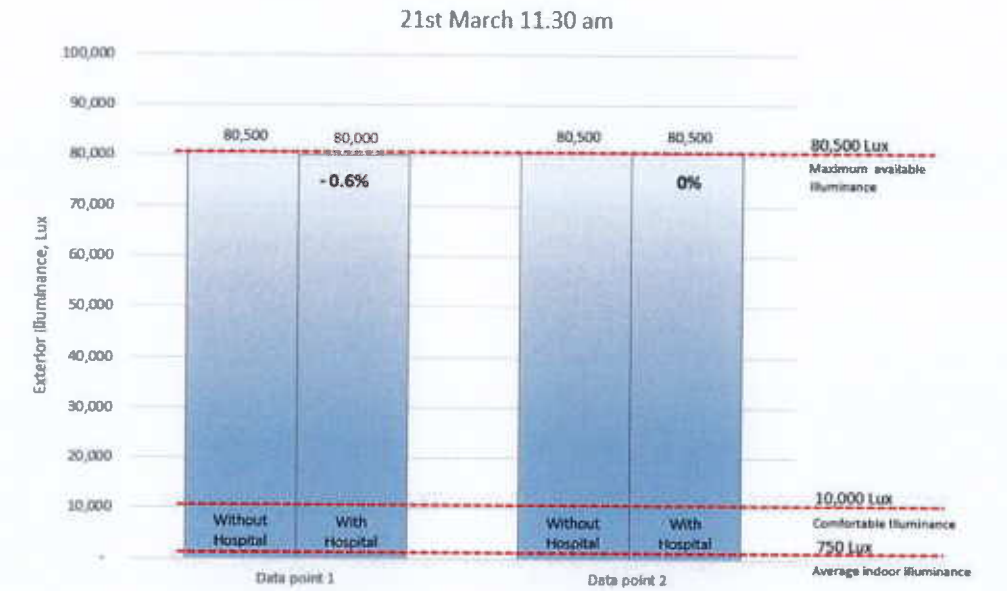
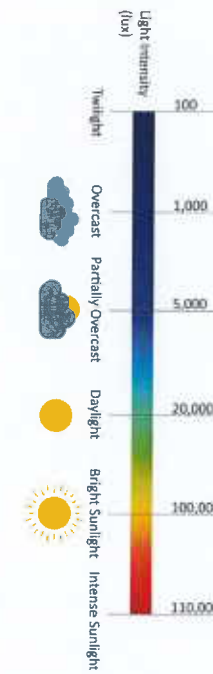
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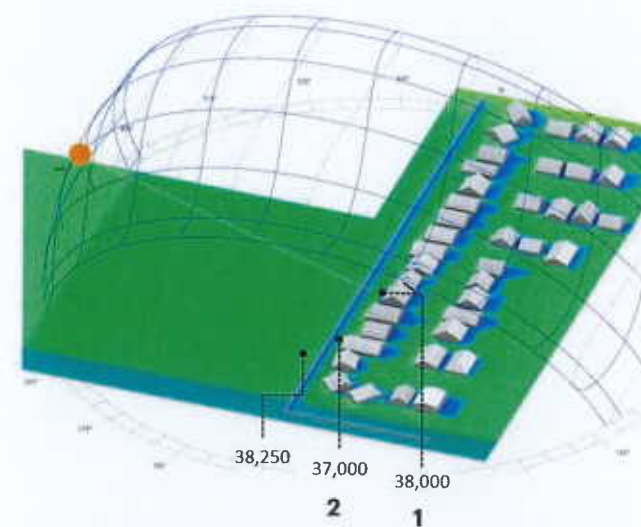
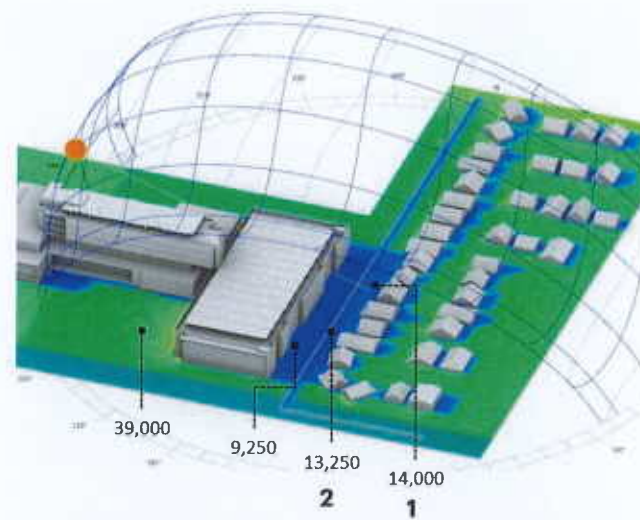


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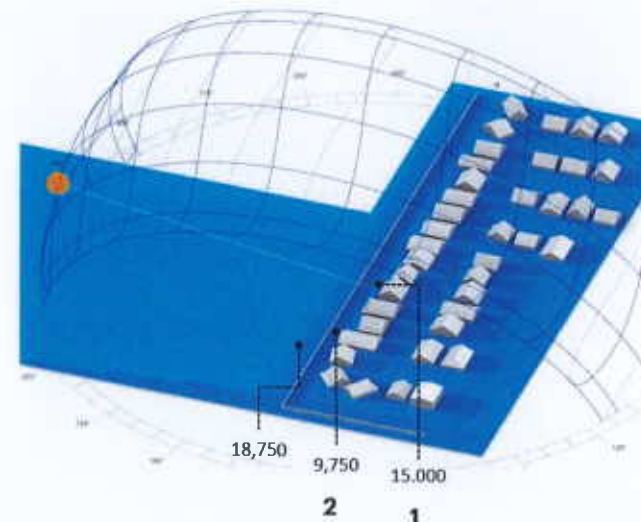
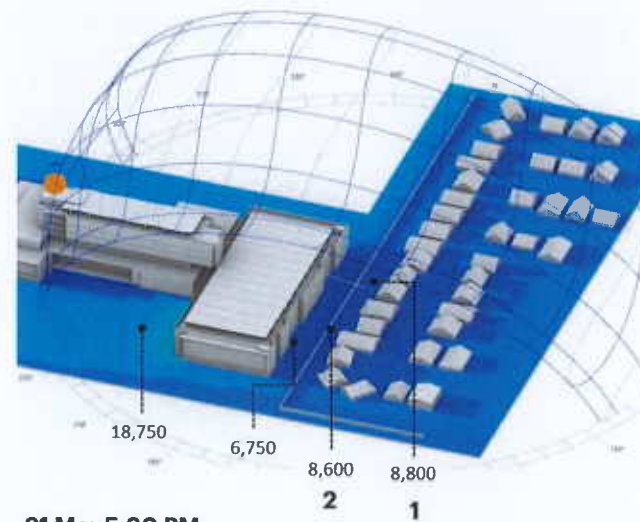
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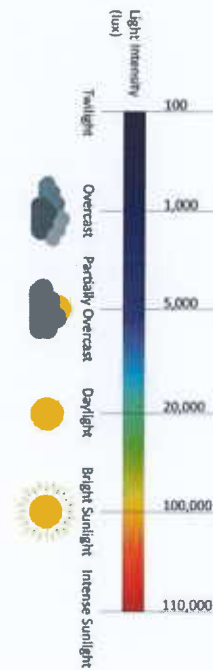
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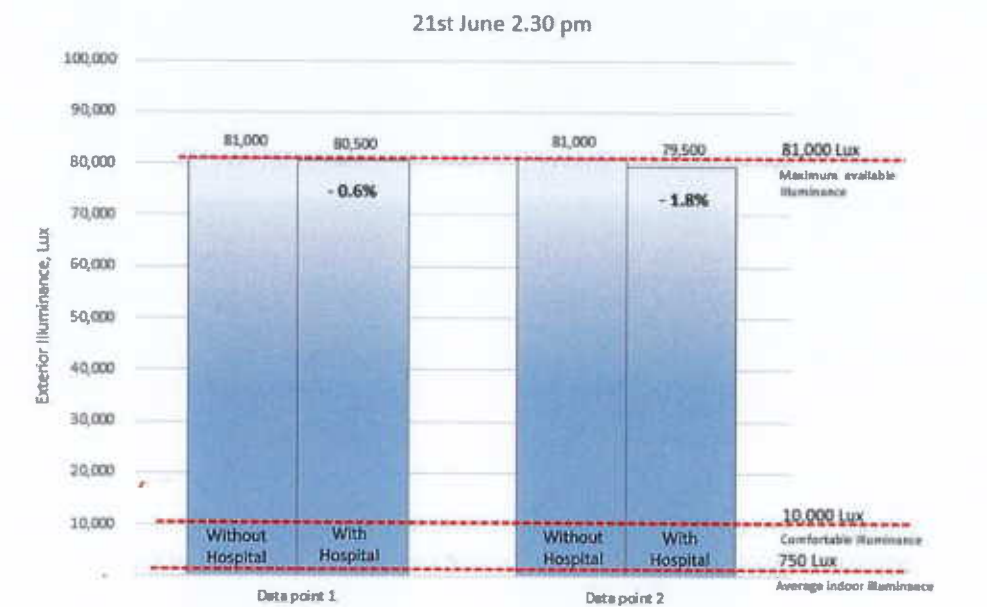
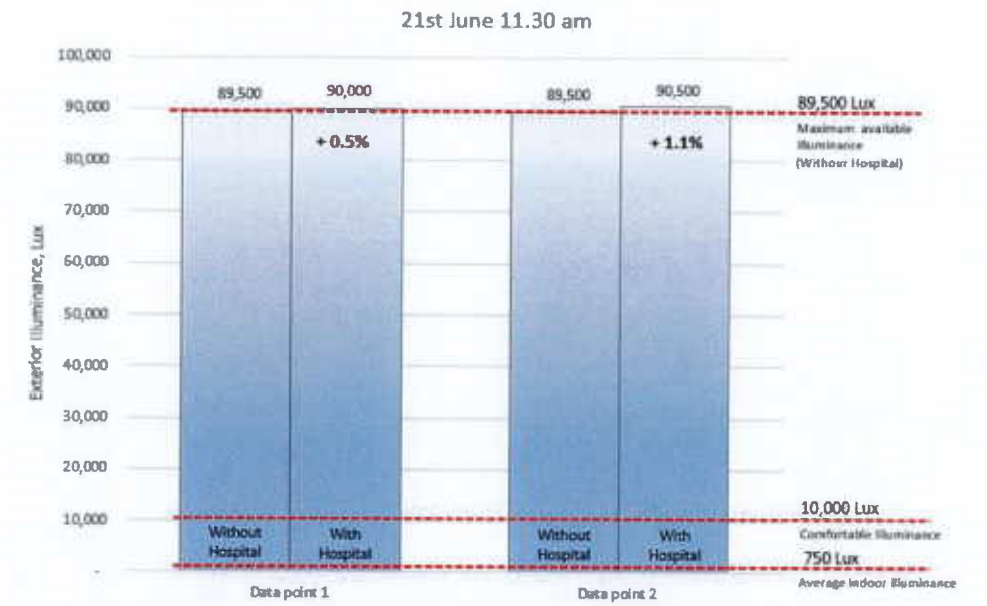
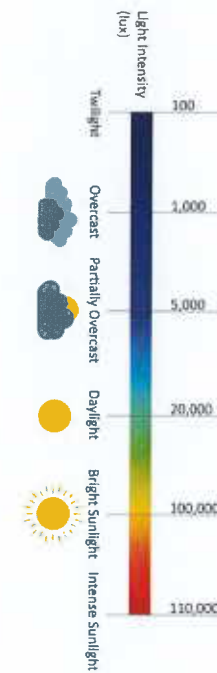
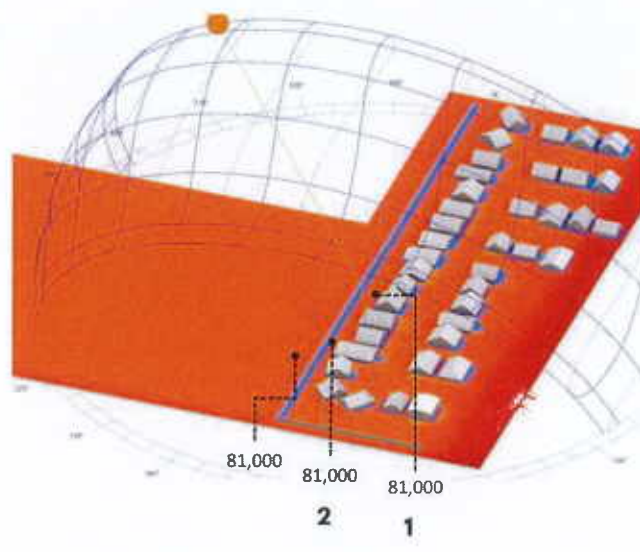
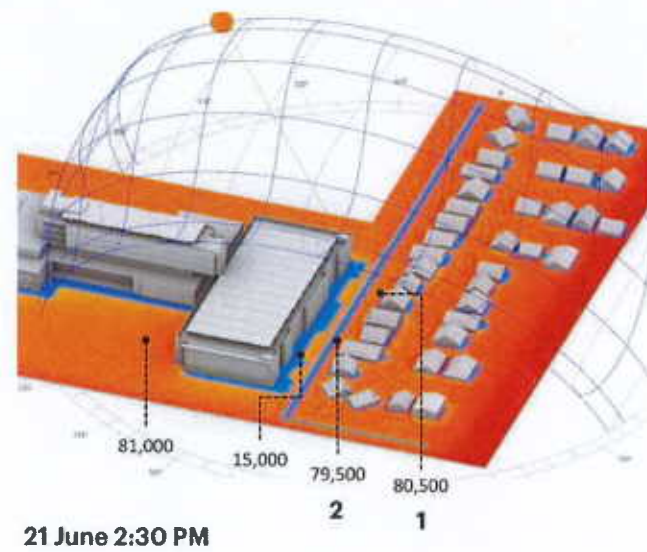
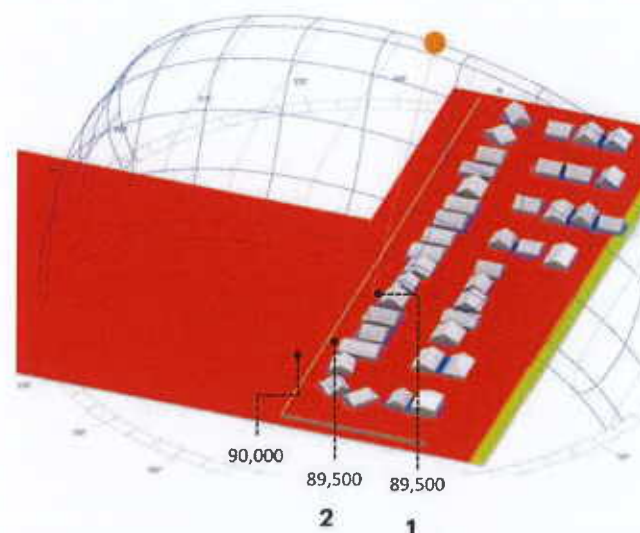
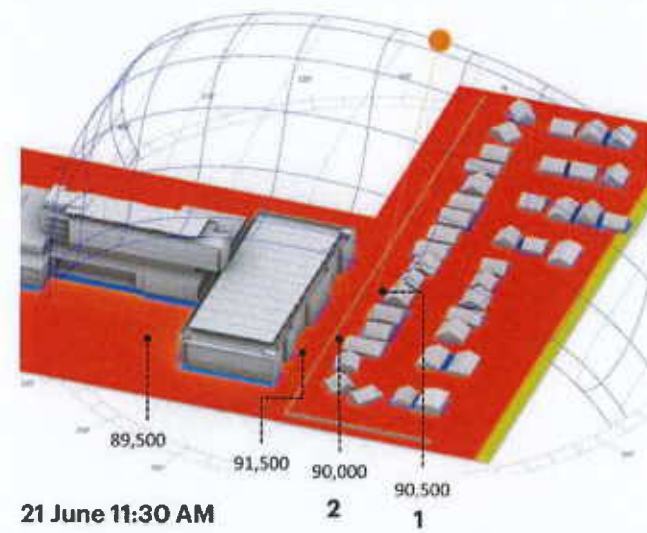


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# Shading Study

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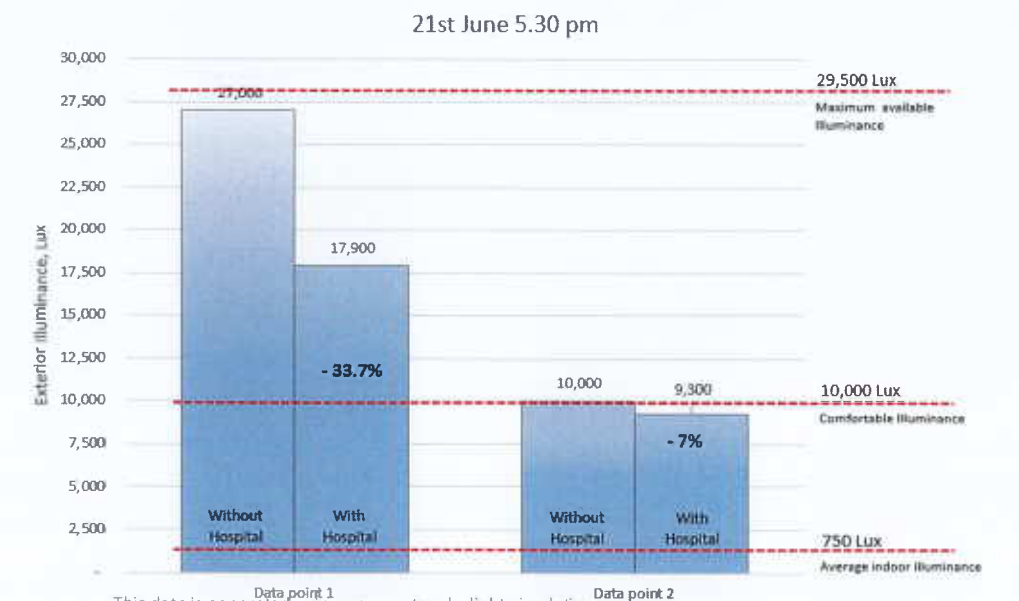
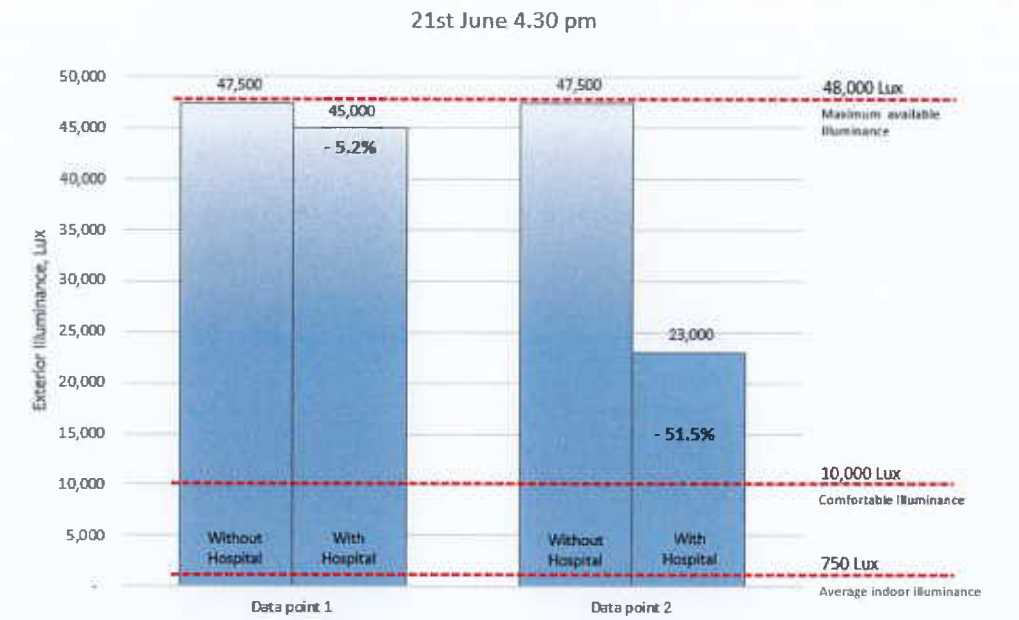
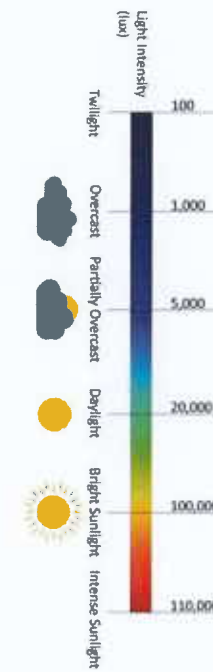
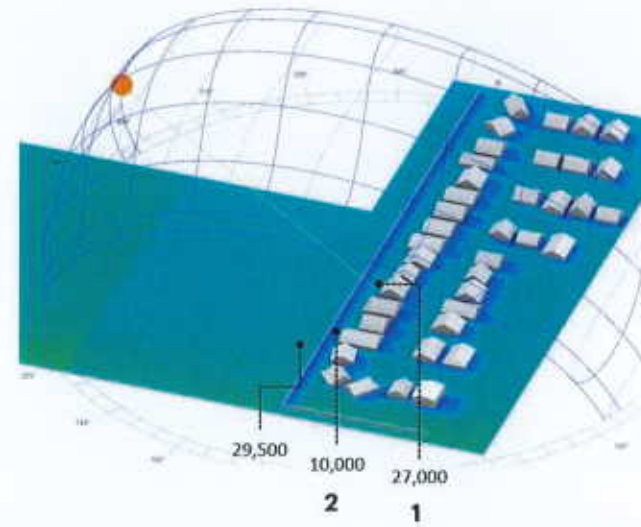
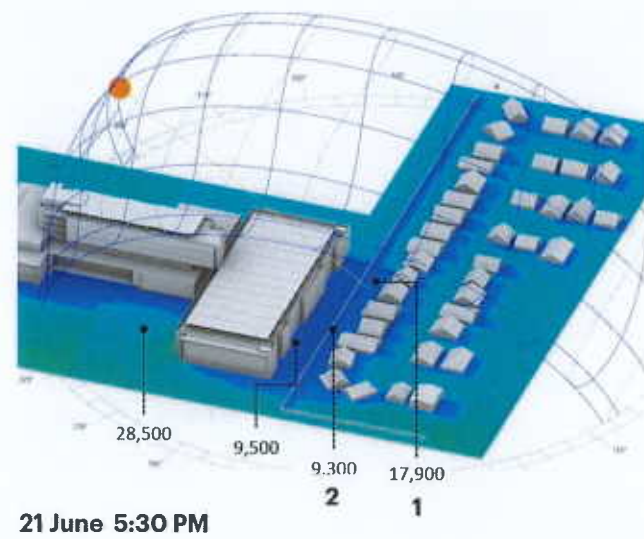
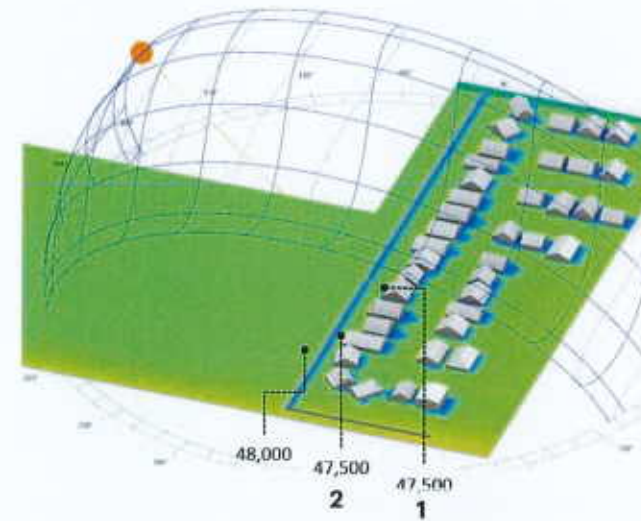
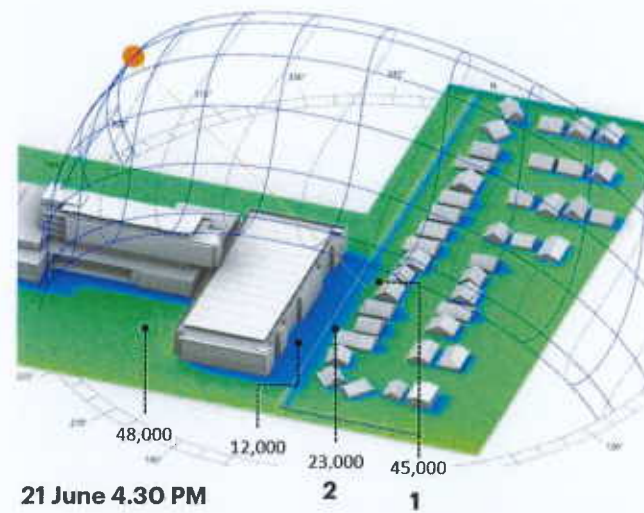


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# Shading Study

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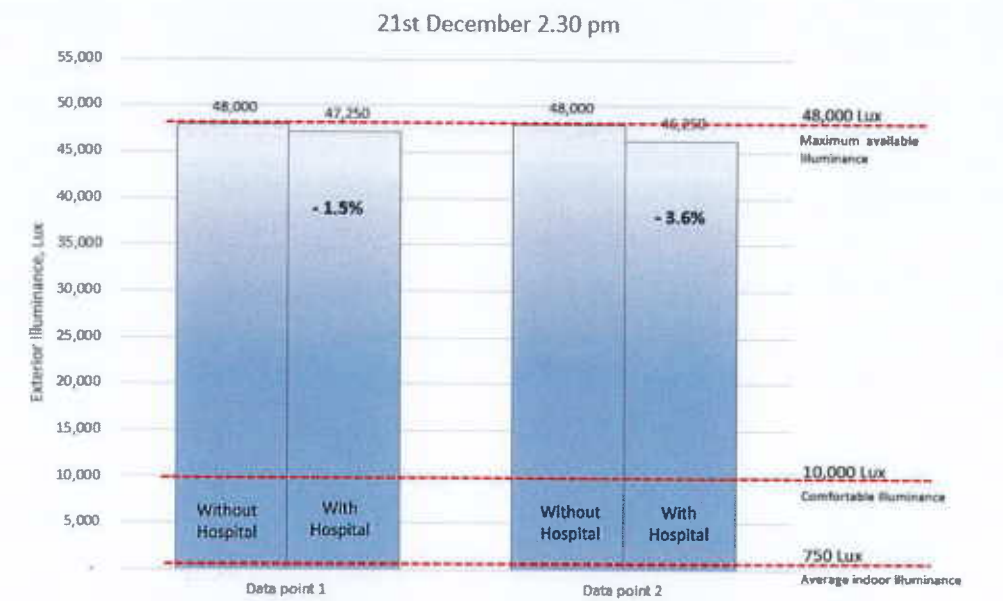
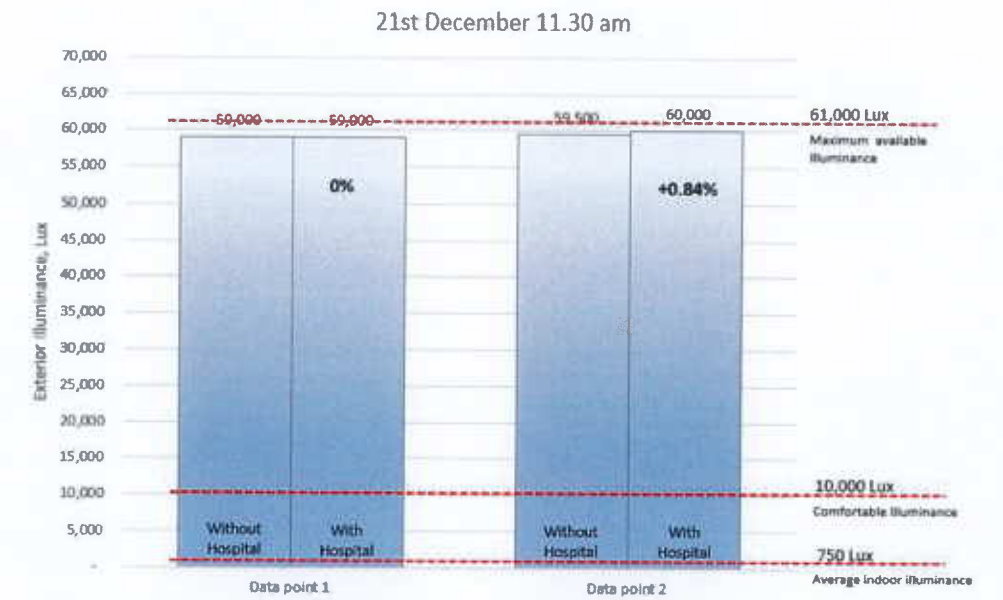
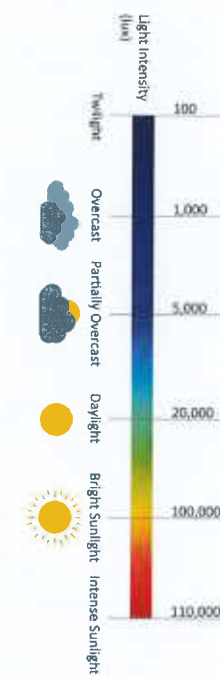
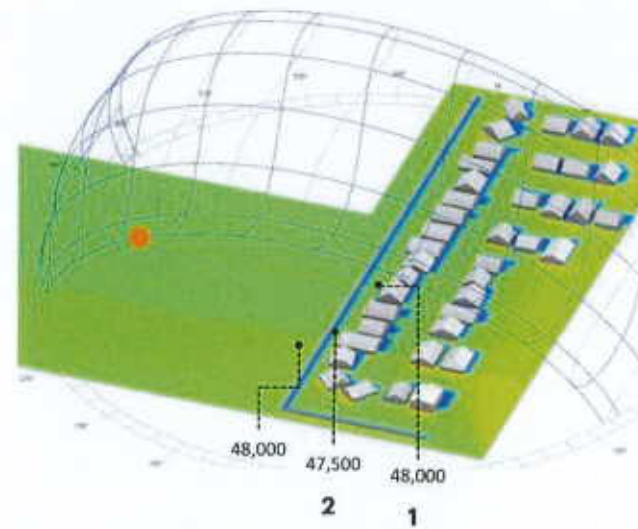
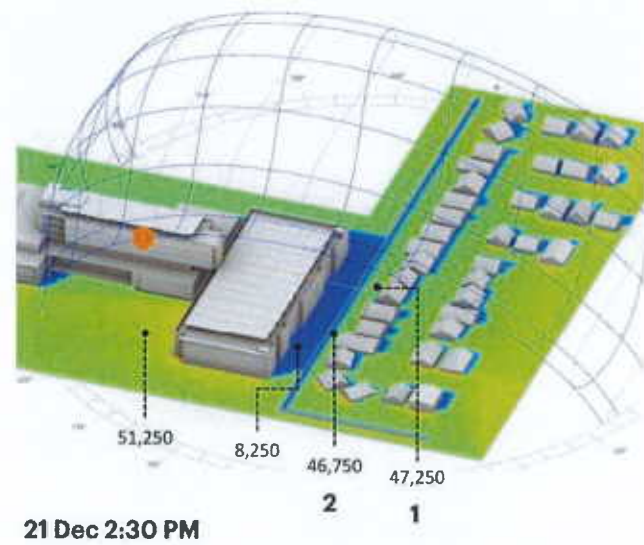
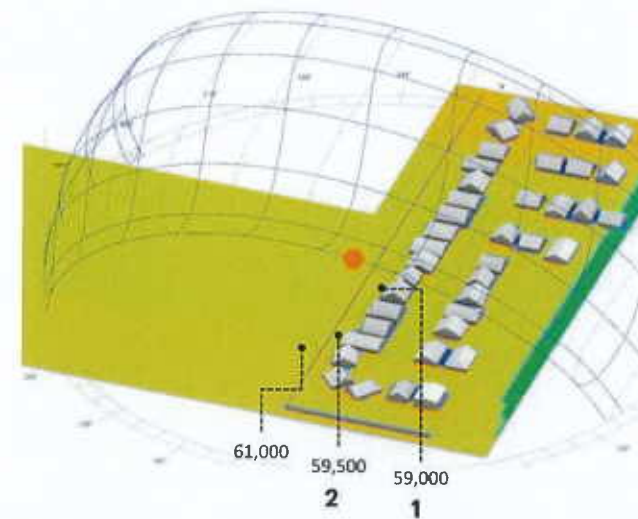
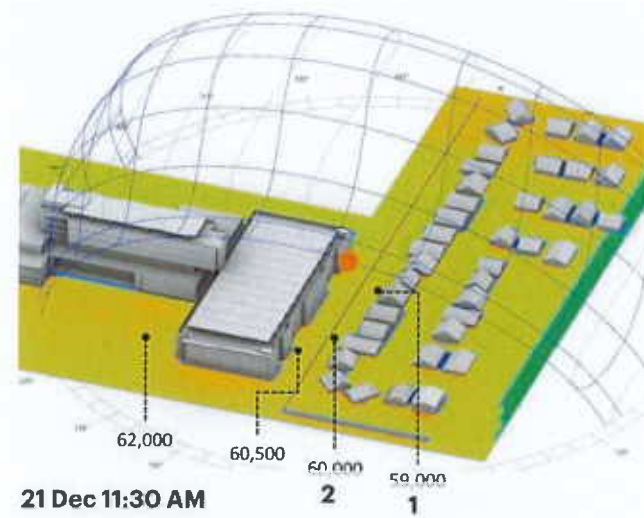
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# Shading Study

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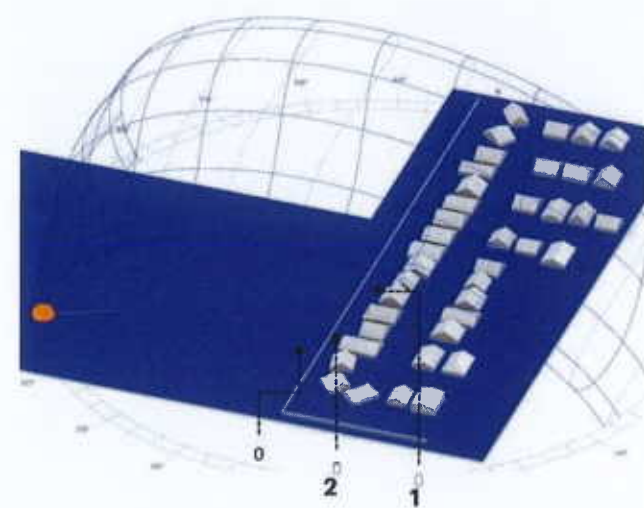
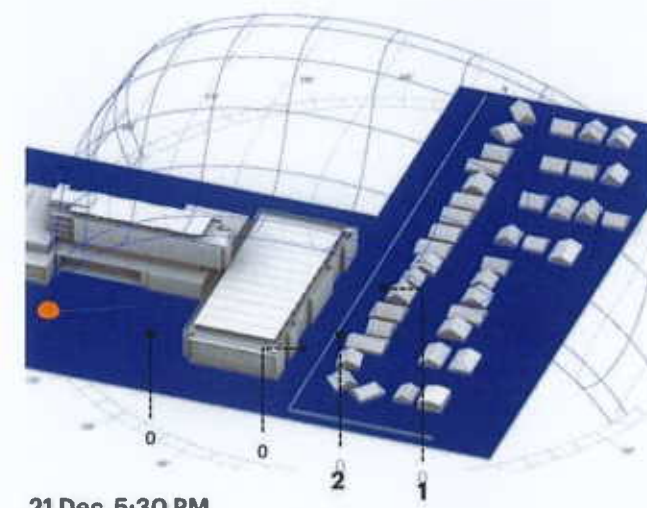
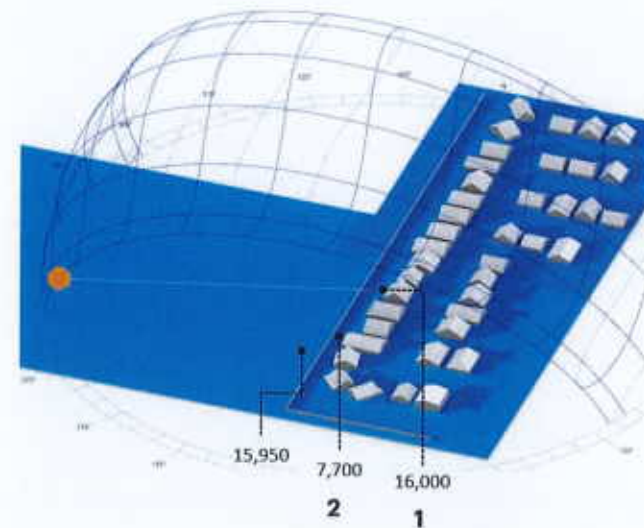
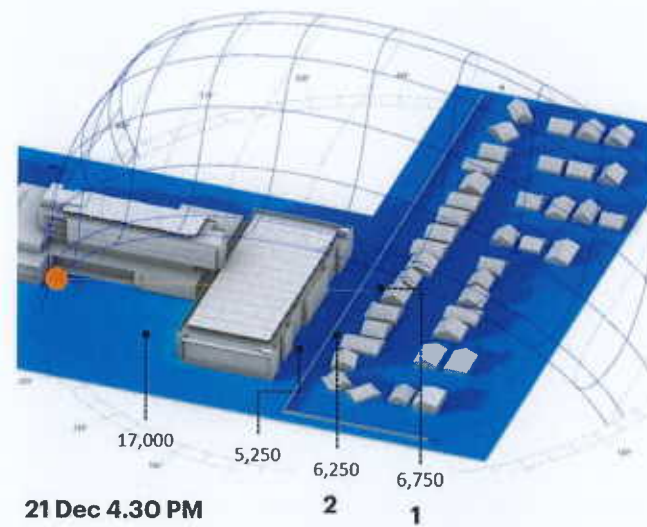


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# Shading Study

WITH HOSPITAL

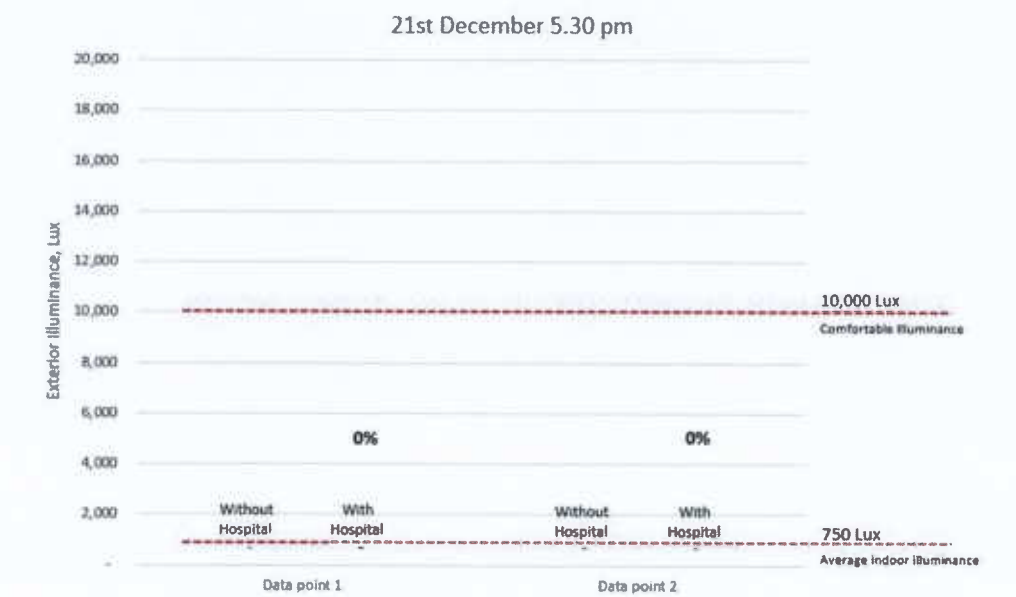
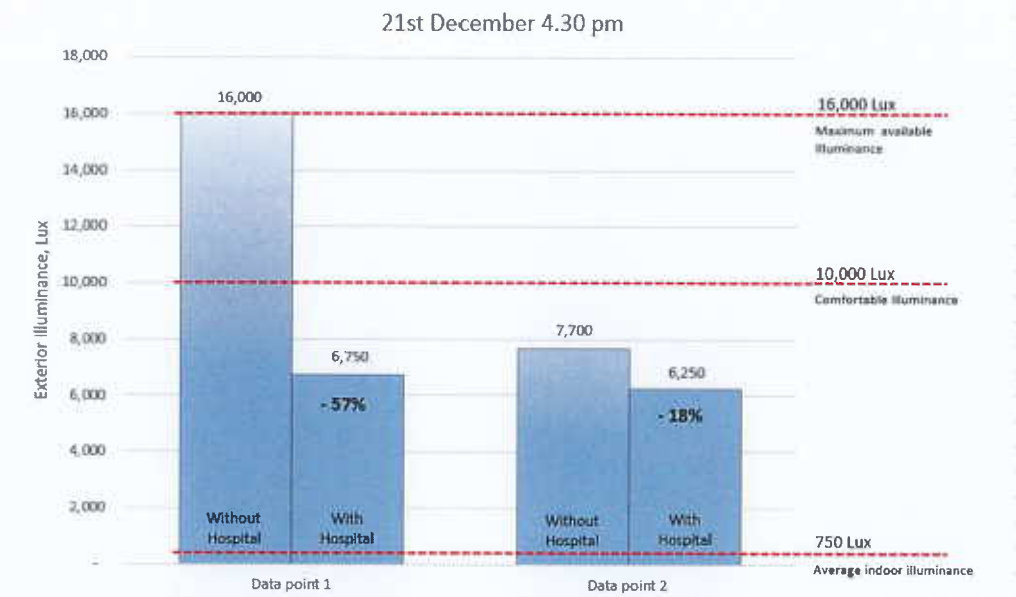
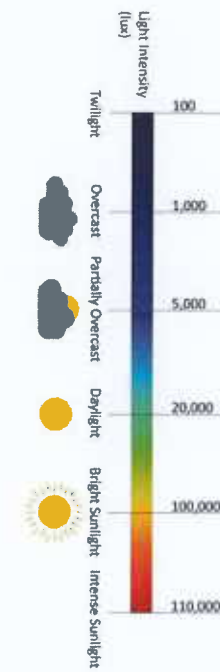
WITHOUT HOSPITAL



21 Dec 5:30 PM

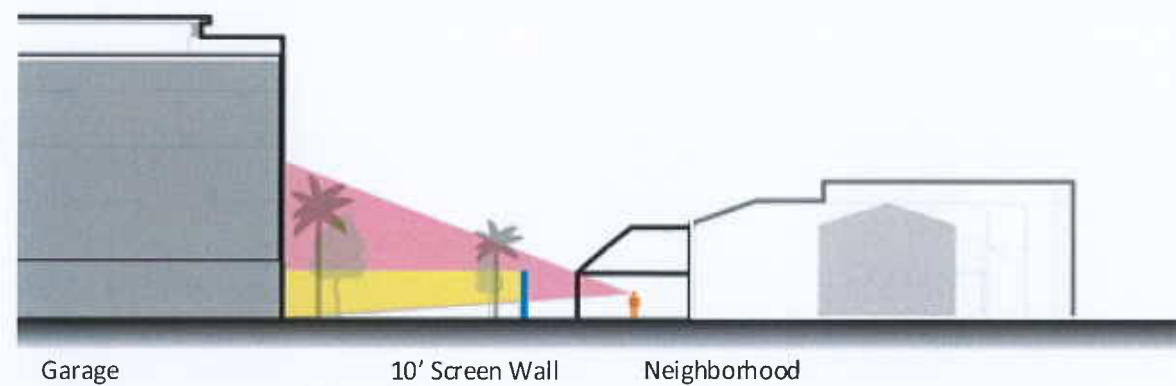
Notes

The sun has already set at 5:30 PM on December 21st, and there is no sunlight.



This data is generated using a computer daylight simulation model assuming clear sky conditions. The actual impact of seasonal weather conditions, shade and illuminance levels will vary.

# Sight Line Key

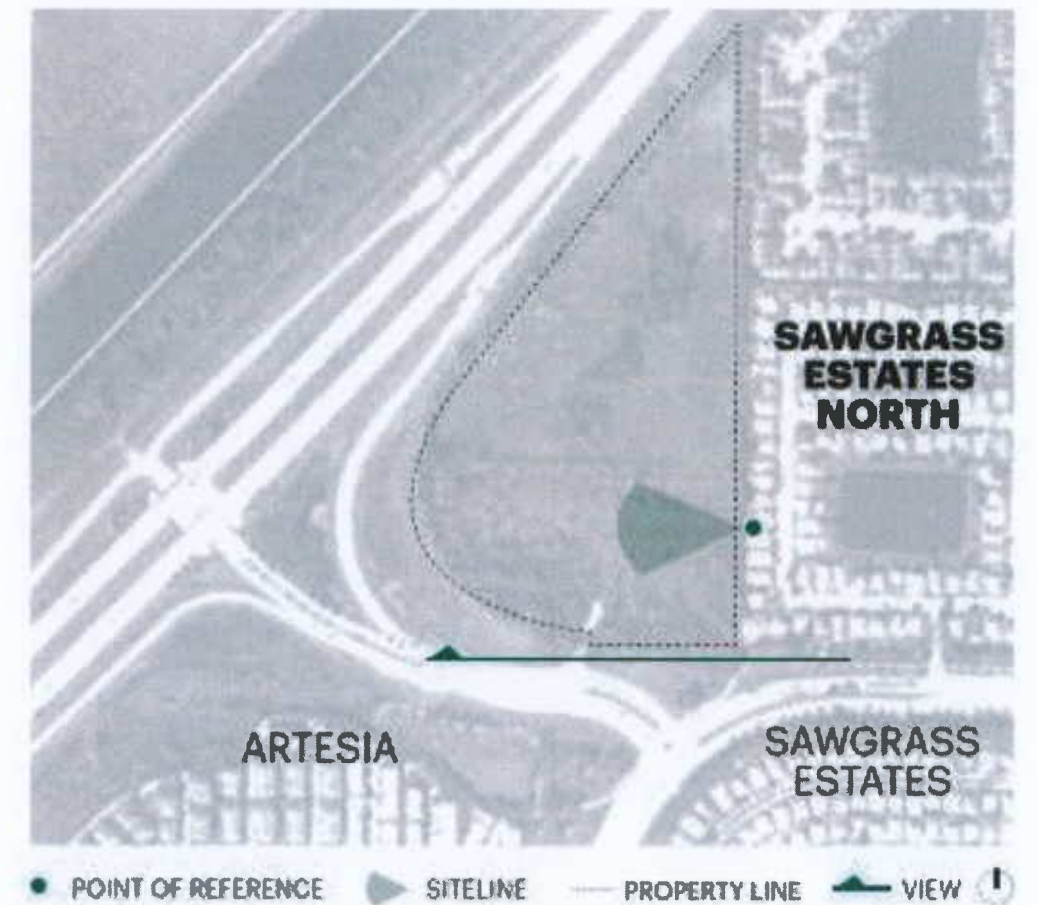


- Screen Wall ■
- Trees ■
- Person W/View ■
- Visible Sight Line ■
- Obstructed Sight Line ■

## Site Line Diagrams

The diagram shows a person's perceived view from the surrounding neighborhoods. It illustrates the visible/obstructed views from a person's yard, first floor and second floor space.

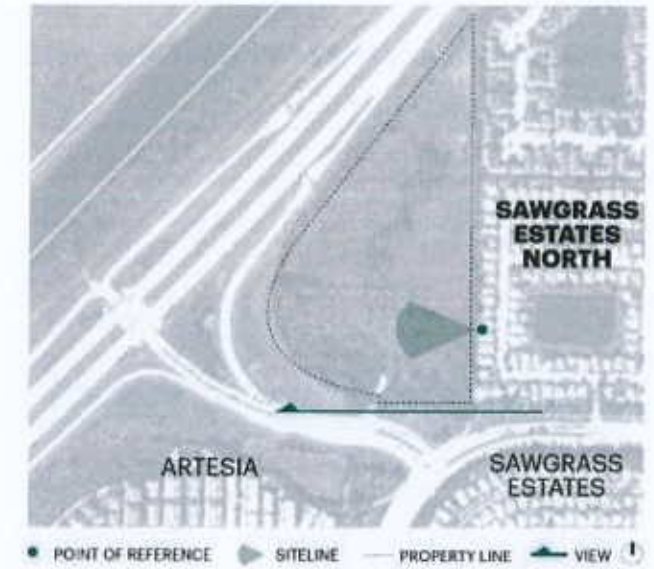
These diagrams are intended to portray the perceived view angles. Actual views and view angles may vary by location.



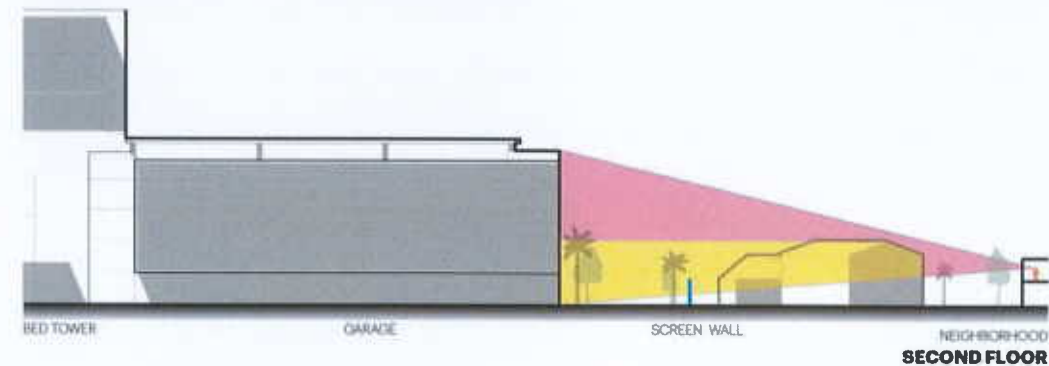
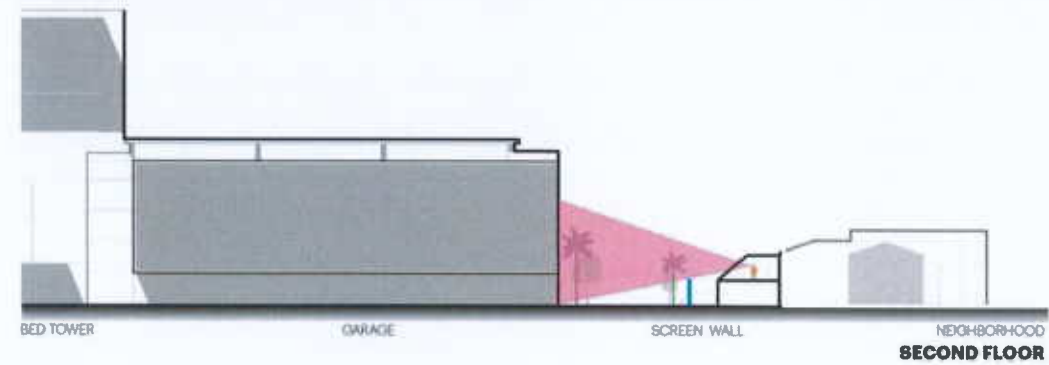
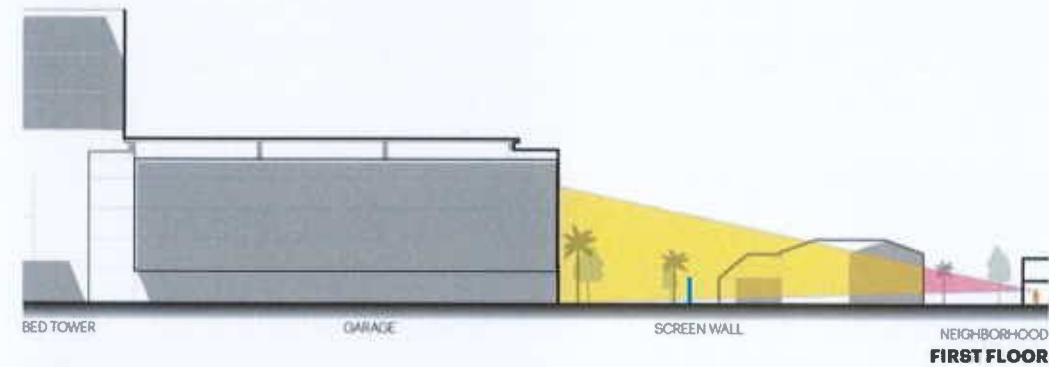
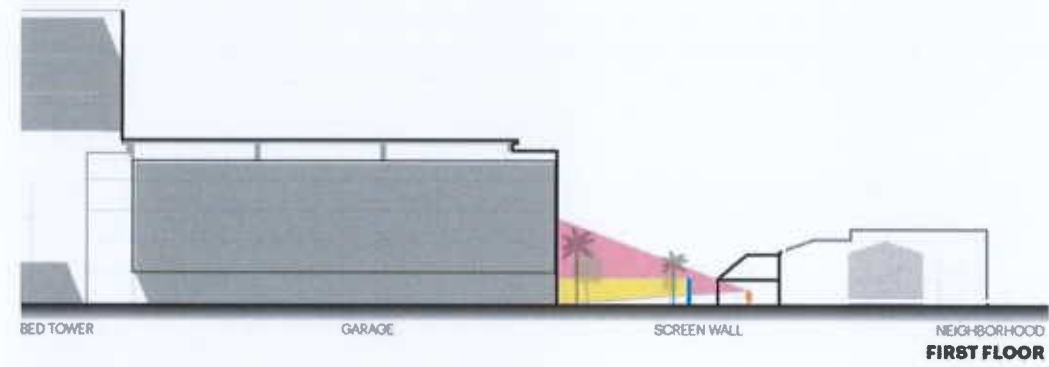
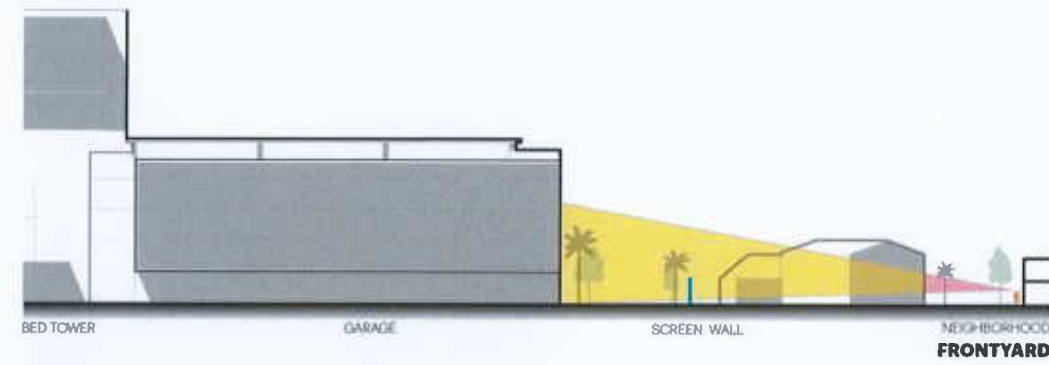
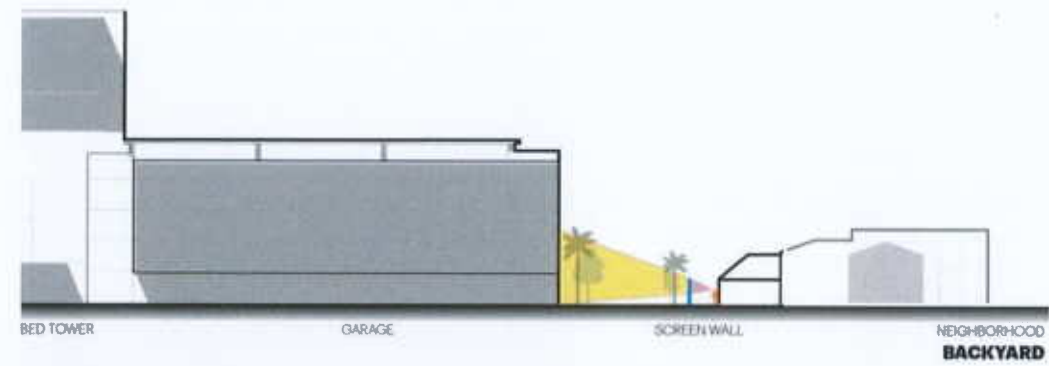
## Key Plans

This plan illustrates where views are referenced, when persons may be standing and the perceived sight lines of these persons.

# Sight Line Study



- Screen Wall ■
- Trees ■
- Person W/View ■
- Visible Sight Line ■
- Obstructed Sight Line ■



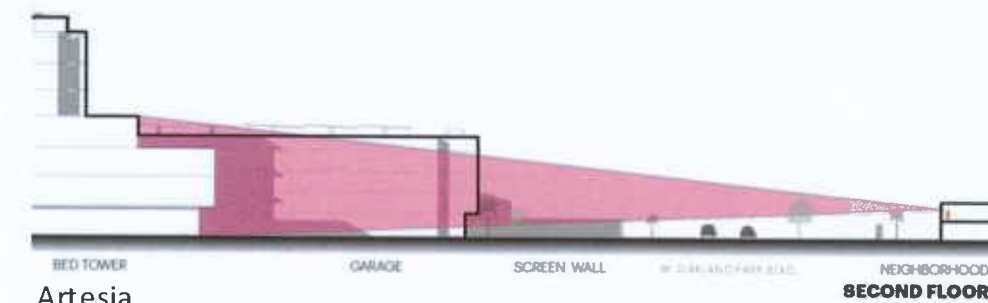
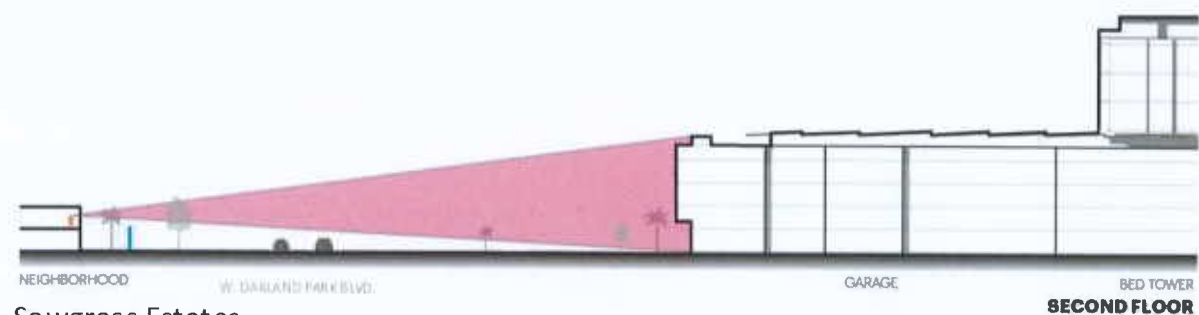
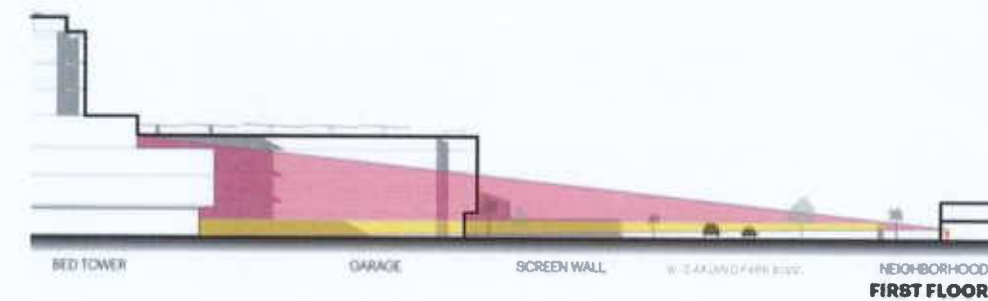
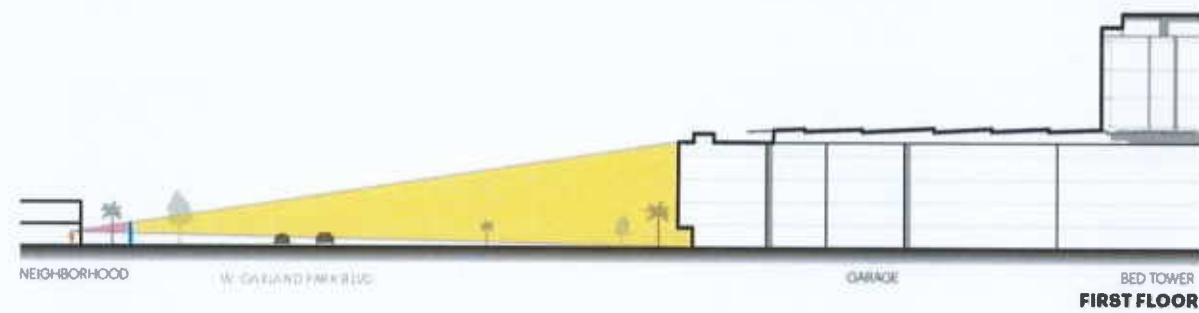
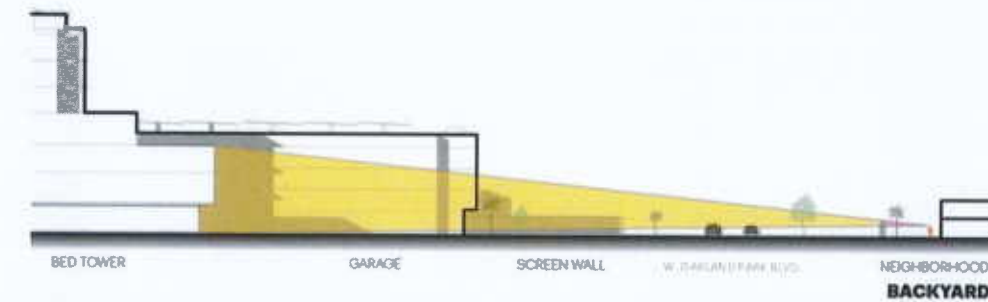
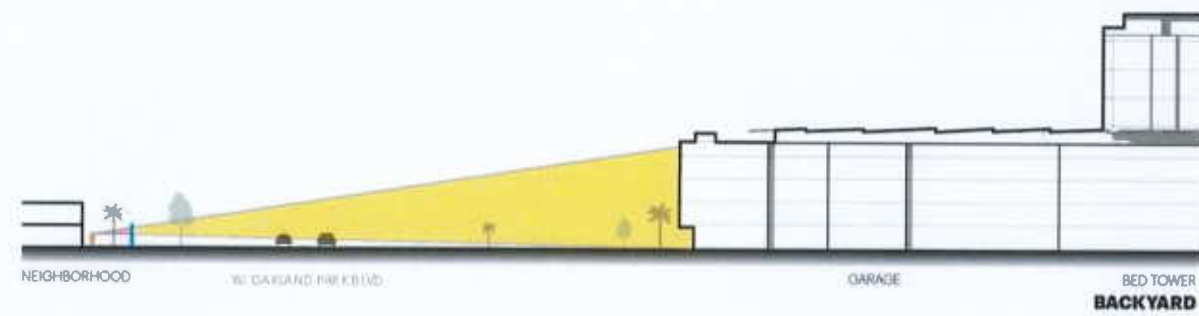
Sawgrass Estates North (West Row)

Sawgrass Estates North (East Row)

# Sight Line Study



- Screen Wall ■
- Trees ■
- Person W/View ■
- Visible Sight Line ■
- Obstructed Sight Line ■



Sawgrass Estates

Artesia



## **6.0 Wetlands & Natural Vegetation Narrative**

Sunrise LDC Section 16-219

**A. SECTION 16-219 – WETLANDS AND NATURAL VEGETATION**

- 1. AT THE TIME OF SITE PLAN REVIEW, THE DEPARTMENT MAY DETERMINE THE NEED FOR AN ENVIRONMENTAL PLAN IF SIGNIFICANT WETLANDS OR NATURAL VEGETATION IS LOCATED ON THE SITE. AN APPROVED PRESERVATION PLAN MAY RESULT IN A CITY ENGINEER DECISION TO WAIVE UP TO HALF OF THE REQUIRED ON-SITE PLANT MATERIALS. SEE ALSO SUBSECTION 16-165(E)(5)**

**1.1** The site contains an extensive wetland that was recently created by the City of Sunrise. The entire wetlands are covered under a Conservation Easement. This project intends to keep all of the existing wetlands and adjacent upland buffers as well as adding trees to the eastern buffer. A Natural Resource Assessment report prepared by Kimley-Horn & Associates, dated July 2024 submitted under separate cover provides additional information regarding the existing wetlands within the Conservation Easement on site. The project was designed to take advantage of the views into the wetlands. All of the natural vegetation, including the existing Pond Apple trees located on the southern boundary of the conservation easement, are intended to remain to thrive. Since the wetland was finished, the wildlife has returned, and the vegetation is thriving.

Even though the project could request a waiver, the applicant does not intend to request the waiver to waive up to half of the required on-site plan materials. The site will meet and exceed the current landscape code without a waiver.



# Ecological Context

The site is located on the eastern border of the Florida Everglades, where the pre-disturbance vegetation community would likely be categorized as Glades Marsh, a freshwater, mostly non-forested wetland marsh in the Miami Ridge / Atlantic Coastal Strip. This eco-region consists of pine rockland forest made up of Dade County Slash Pine (*Pinus elliottii*), saw palmetto (*Serenoa repens*), sable palm, and a variety of grasses and shrubs that thrive on the shallow soil and hard limestone terrain. This ecosystem is highly adapted to severe conditions such as hurricanes and brushfires. The plant and animal species in this forest are quite unique and only naturally occur in South Florida. Due to urban development, only a small fraction of pine rockland forests still exist today.

Prior to disturbance, the site was on the eastern edge of the Everglades freshwater marsh. The evidence for this is derived from 45 year-old soils mapping from the Soil Survey of Broward County (NRCS, 1976). Based on the 1976 Broward County Area Soil Survey, the predominant soil present at the site before development was Lauderhill muck (*La symbol*). It is a relatively shallow organic or peat soil overlying limestone bedrock, a typical Everglades freshwater marsh soil in site's immediate vicinity.

## Pre-development Vegetation Community

Based on the Guide to the Natural Communities of Florida compiled by the Florida Natural Areas Inventory group, the pre-development vegetation community would likely be categorized as Glades Marsh, a freshwater, mostly non-forested wetland marsh. While commonly a dense, tall monoculture of sawgrass (*Cladium jamaicense*), deeper glades marsh may support an array of emergent plants that includes sparse sawgrass:

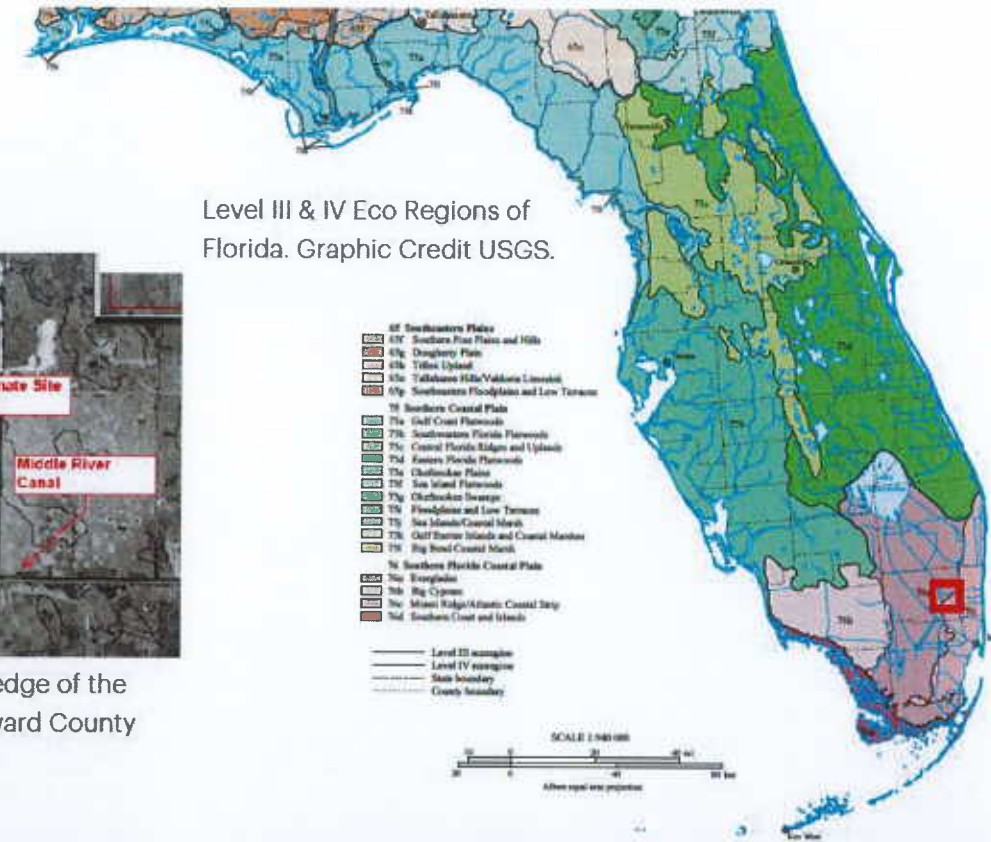
- maidencane (*Panicum hemitomon*)
- Tracy's beaksedge (*Rhynchospora tracyi*)
- Gulf Coast spikerush (*Eleocharis cellulosa*)



Prior to disturbance, the site was on the eastern edge of the Everglades freshwater marsh. Soil Survey of Broward County (NRCS, 1976).



Current image of the site from Google Earth for orientation.



Level III & IV Eco Regions of Florida. Graphic Credit USGS.



Pine Rockland Forest in the Miami Ridge Eco-Region of South Florida. Pine tree canopy covers palmetto understory below that promotes biodiversity and resilience. Photo Credit Sarah Burrow.



Various other herbs are common:

- Shortbristle horned beaksedge (*R. corniculata*)
- Slim spikerush (*E. elongata*)
- String lily (*Crinum americanum*)
- alligatorlily (*Hymenocallis palmeri*)
- Creeping primrosewillow (*Ludwigia repens*)
- Bulltongue arrowhead (*Sagittaria lancifolia*)
- Pickerelweed (*Pontederia cordata*)
- American cupscale (*Sacciolepis striata*)

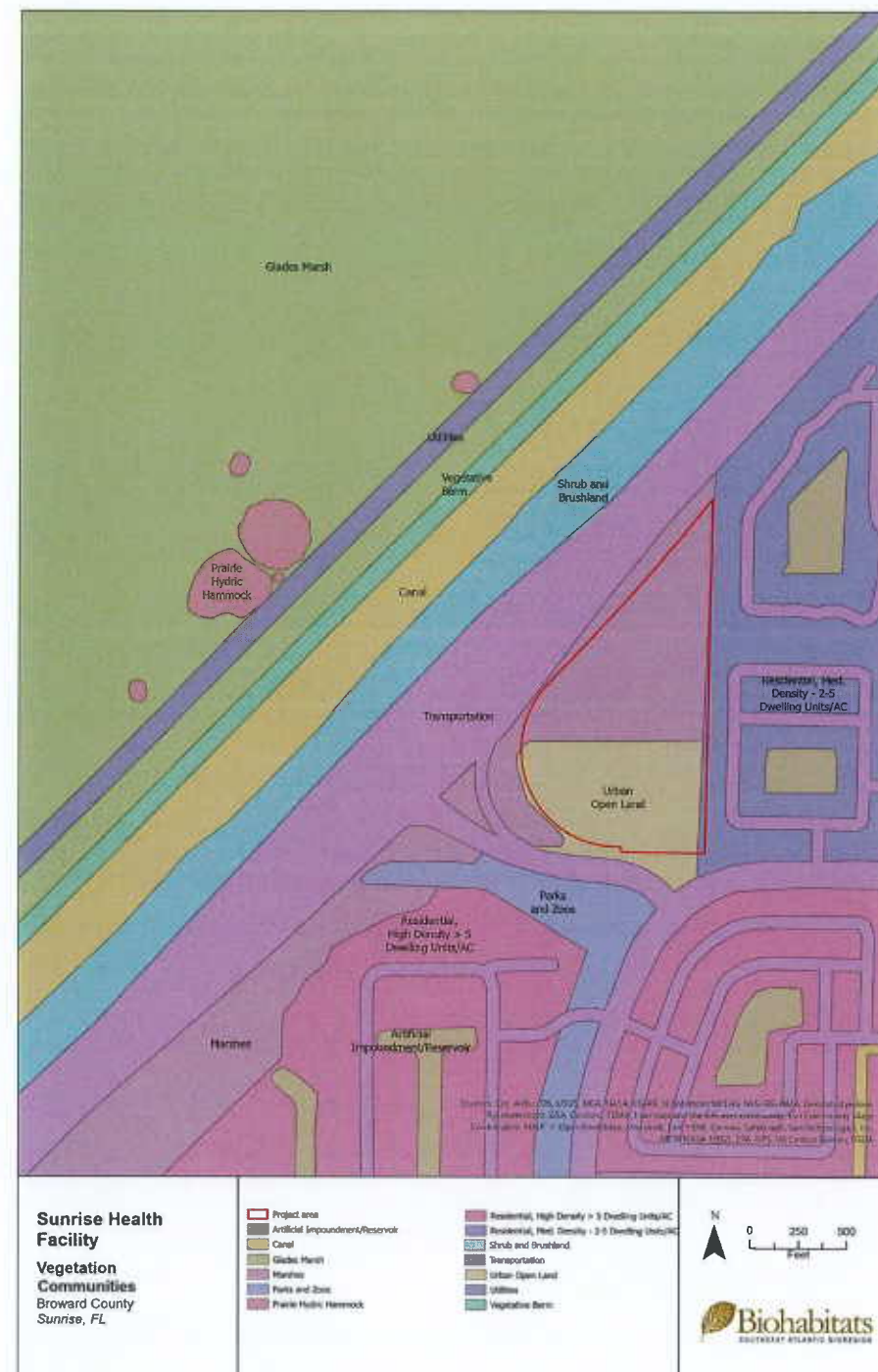
Scattered tree islands support species such as:

- Coastal plain willow (*Salix caroliniana*)
- Coco plum (*Chrysobalanus icaco*)
- Buttonbush (*Cephalanthus occidentalis*)
- Cabbage palm (*Sabal palmetto*)
- Live oak (*Quercus virginiana*)
- Pond apple (*Annona glabra*)
- Bald cypress (*Taxodium distichum*)
- Slash pine (*Pinus elliotii*)

The vegetation communities mapped below are derived from the Florida Department of Environmental Protection and the U.S. Geological Survey. On the project site they include Urban Open Land and Marshes. Across the Sawgrass Expressway (SR 869) the vegetation is mapped as Glades Marsh and Prairie Hydric Hammock, which corroborates the historic soils mapping.

### Landscape Ecology Analysis

Landscape ecology is a relatively new discipline, and in part entails the study of the presence of habitat, the size, shape and configuration of the habitat areas or patches, and how easily wildlife can move between habitat patches. Corridors between habitat patches enhance the ability of wildlife to move from one patch to another with more ease and security. Generally, the better the connectivity between the net-

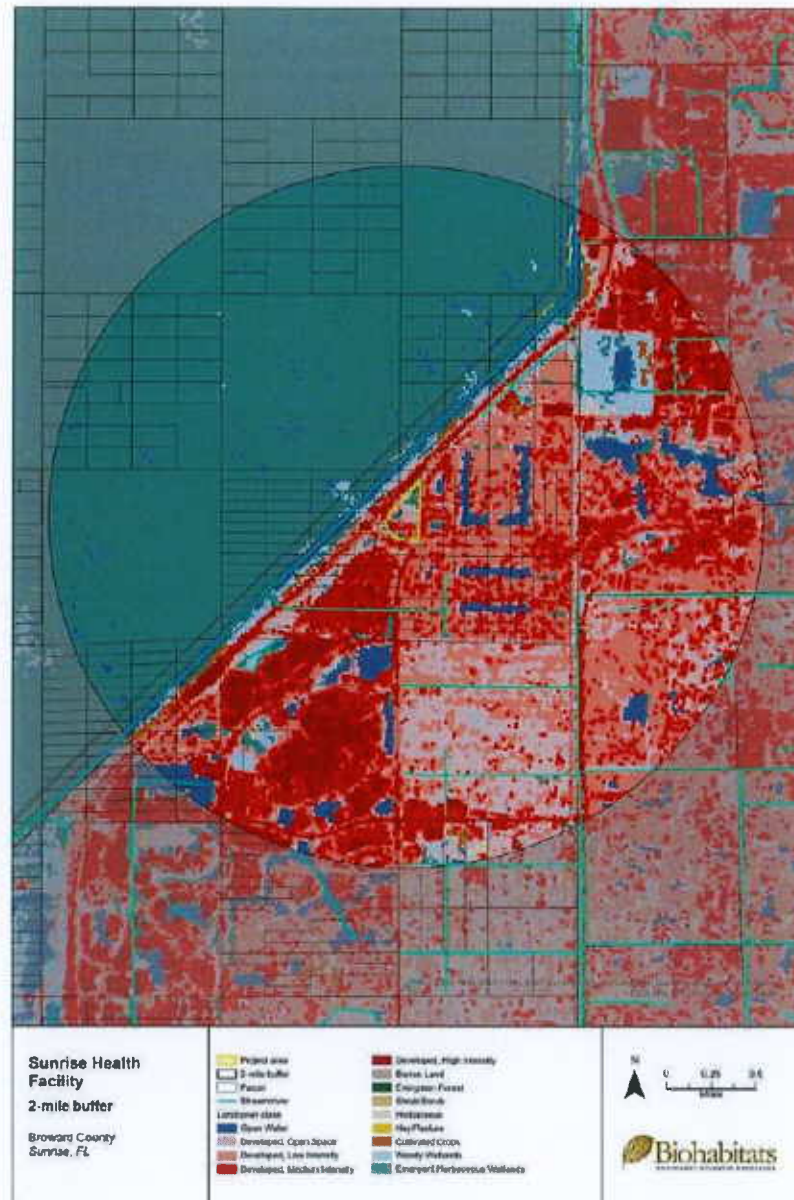


work of habitat patches, the better the habitat. In landscape ecology, forest cover is often used as a surrogate for habitat patches, corridors and wildlife habitat.

In the landscape ecology analysis performed shown below, the southern portion of the site is mapped as being in three separate levels of development- open space, low and medium intensity development (available land use/land cover data has relatively large pixels, diminishing the resolution of the mapping, but it is sufficient to illustrate local habitat relationships in and around the site). Emergent herbaceous wetland or marsh is mapped in the northern portion of the site, and represents the least disturbed, more natural habitat area on the site.

A very large patch of the same habitat type is located across the Sawgrass Expressway from the site. Other habitat patches within one-half mile of the site to the north, east and south are limited and quite small. This array of habitat patches, being fragmented and isolated by roads and extensive development east of the Expressway, with no real terrestrial corridors, limits the habitat value of these patches for terrestrial species. However, birds and other wildlife that can fly over the fragmenting roads and developed areas can still utilize the habitat patches on the site and in the site's vicinity.

The 15 acre wetland in the conservation easement is a habitat patch that will be protected in perpetuity, which enhances its overall ecological value if the quality of habitat is good enough to support the local fauna that can access it. It is fragmented by highways to the south, west and north, and development to the east. Although of limited value to terrestrial species due to the surrounding development, it represents valuable habitat for wildlife capable of flight, including birds, bats and pollinators if invasive trees, shrubs and herbaceous species can be controlled in the long-term. It is also advantageous to habitat to control cattails, which are a



site that are rare and can also fly, allowing safe access to the conservation easement site:

- Florida bonneted bat (*Eumops floridanus*)- Endangered
- Everglade snail kite (*Rostrhamus sociabilis plumbeus*) - Endangered
- Wood stork (*Mycteria americana*) - Threatened.

In addition, the Florida sandhill crane (*Antigone canadensis pratensis*) is not a federally-listed species, but is listed as Threatened at the state level. The site represents potential long-term beneficial habitat for these species, and other more common species of bats, birds, pollinator insects (and terrestrial wildlife, if they can access it) if invasive species are controlled.

**References**

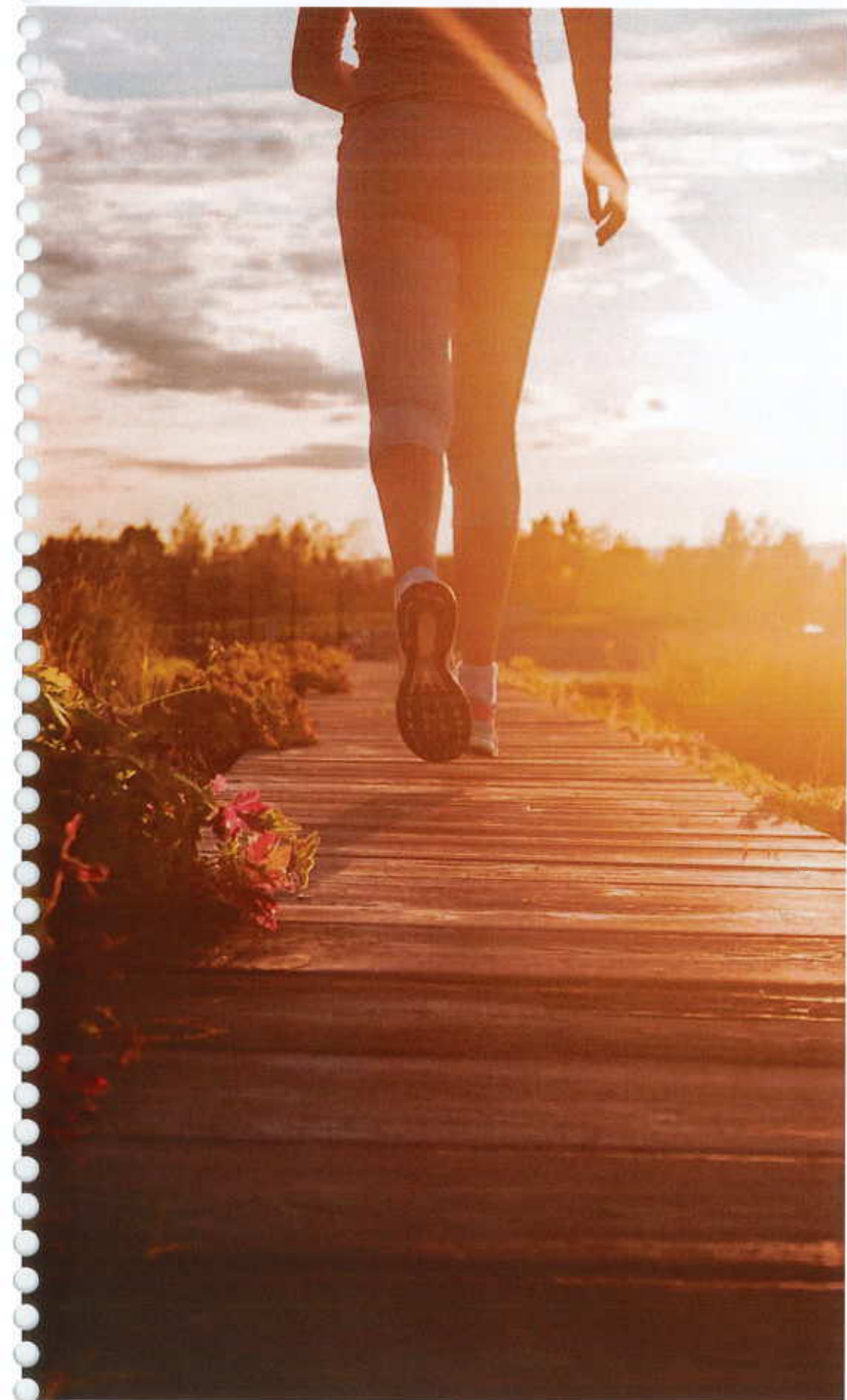
Florida Natural Areas Inventory. 2010. Guide to the Natural Communities of Florida: [www.fnai.org](http://www.fnai.org).

U.S. Department of Agriculture. 1976. Soil Survey of Broward County Area, Florida. Soil Conservation Service in association with the University of Florida.

Kimley-Horn & Associates. Natural Resource Assessment July 2024. Oakland Park Blvd. & Flamingo Rd., Broward County.

native species but can grow aggressively into a monotypic stand, severely decreasing plant biodiversity and habitat value.

There are three species identified by the U.S. Fish and Wildlife Service in the Information for Planning and Consultation report for the



## 7.0 Buffer Narrative

Sunrise LDC Section 16-192

# Buffer Narrative

## A. SECTION 16-192 – VISUAL AND SOUND BUFFERS

1. NON-RESIDENTIAL USES REQUIRING SIDE AND REAR BUFFERS – ANY COMMERCIAL, OFFICE OR INDUSTRIAL USE ABUTTING A RESIDENTIAL DISTRICT SHALL HAVE A TEN-FOOT WALL OR FENCE TO SERVE AS A VISUAL AND SOUND BUFFER. IT SHALL BE LOCATED IN A LANDSCAPED AREA AS SPECIFIED IN SUBSECTION 16-169(B)(3). THE BUFFER SHALL BE REQUIRED ALONG THE ENTIRE LENGTH OF SIDE OR REAR LOT LINES, EXCEPT WHERE SUCH LOT LINES ABUT A STREET OR WATERFRONT.

WHERE A WALL INTENDED TO SERVE AS A VISUAL AND SOUND BUFFER IS LOCATED UPON A RESIDENTIALLY ZONED PARCEL AND AN APPLICATION IS SUBSEQUENTLY MADE FOR A SITE PLAN FOR COMMERCIAL OR INDUSTRIAL USE OF THE ADJACENT PROPERTY, SUBPARAGRAPH (A) (1) SHALL BE CONSIDERED SATISFIED BY THAT SITE PLAN APPLICATION IF THE EXISTING WALL MEETS ALL OF THE FOLLOWING REQUIREMENTS:

A. THE WALL MUST BE CONTINUOUS, ADJACENT TO THE COMMERCIAL PARCEL, AND AT LEAST SIX (6) FEET IN HEIGHT.

B. THE WALL MUST COMPLY WITH THE DESIGN FEATURES SET FORTH IN SUBSECTION (D) OF THIS SECTION.

C. IF THE WALL IS LESS THAN TEN (10) FEET IN HEIGHT, A LANDSCAPE BUFFER OF AT LEAST TWENTY (20) FEET IN WIDTH SHALL BE PROVIDED TO FURTHER SCREEN THE COMMERCIAL OR INDUSTRIAL USES FROM SURROUNDING RESIDENTIAL USES. THE LANDSCAPE BUFFER SHALL BE COMPRISED OF SPECIMEN TREES THAT ARE PLANTED AT INTERVALS OF TWENTY-FIVE (25) FEET ON CENTER. SPECIMEN TREES PROVIDED AS PART OF THIS REQUIREMENT SHALL BE IN ADDITION TO, AND SHALL NOT COUNT TOWARDS THE MINIMUM NUMBER OF SPECIMEN TREES REQUIRED PURSUANT TO SUBSECTION 16-165(D)(6).

- 1.1 The proposed non-residential use of the hospital, abuts a single-family neighborhood to the east. Currently, an eight (8) foot concrete wall exists and is located on a two (2) foot berm. It is the applicant's intent to remove the existing eight (8) foot wall in the areas not located within the conservation easement and to replace it with a ten (10) foot wall meeting all of the architectural requirements of this section.

Per section 16-169(B)(3), the perimeter landscape buffer required is five (5) feet in width. It is the applicant's intent to double that required width and provide a ten (10) foot wide landscape area. This will permit the applicant to add intermediate trees and palms within the landscape buffer. The code requires the planting of one (1) tree for every twenty-five (25) feet which would equate to 22 trees. The applicant is proposing to plant 29 trees and/or palms within this buffer.

In addition to the required perimeter landscape buffer between the non-residential and the residential uses, the applicant is providing a thirty (30) foot (average width) Landscape Pedestrian Zone (LPZ) between the proposed garage and the existing residences. This LPZ provides an additional layer of large canopy trees and palms to further buffer the residences. Within the LPZ, the applicant is proposing another 38 trees and/or palms as at heights ranging from 20 feet to 30 feet, which includes mature Live Oaks, Florida Slash Pines, and Florida Royal Palms.

No buffer is required along the northside of the hospital as it faces the wetlands (conservation easement) which is part of this site, but to provide some additional buffering, the applicant is proposing 17 trees and/or palms on the north side of the garage.

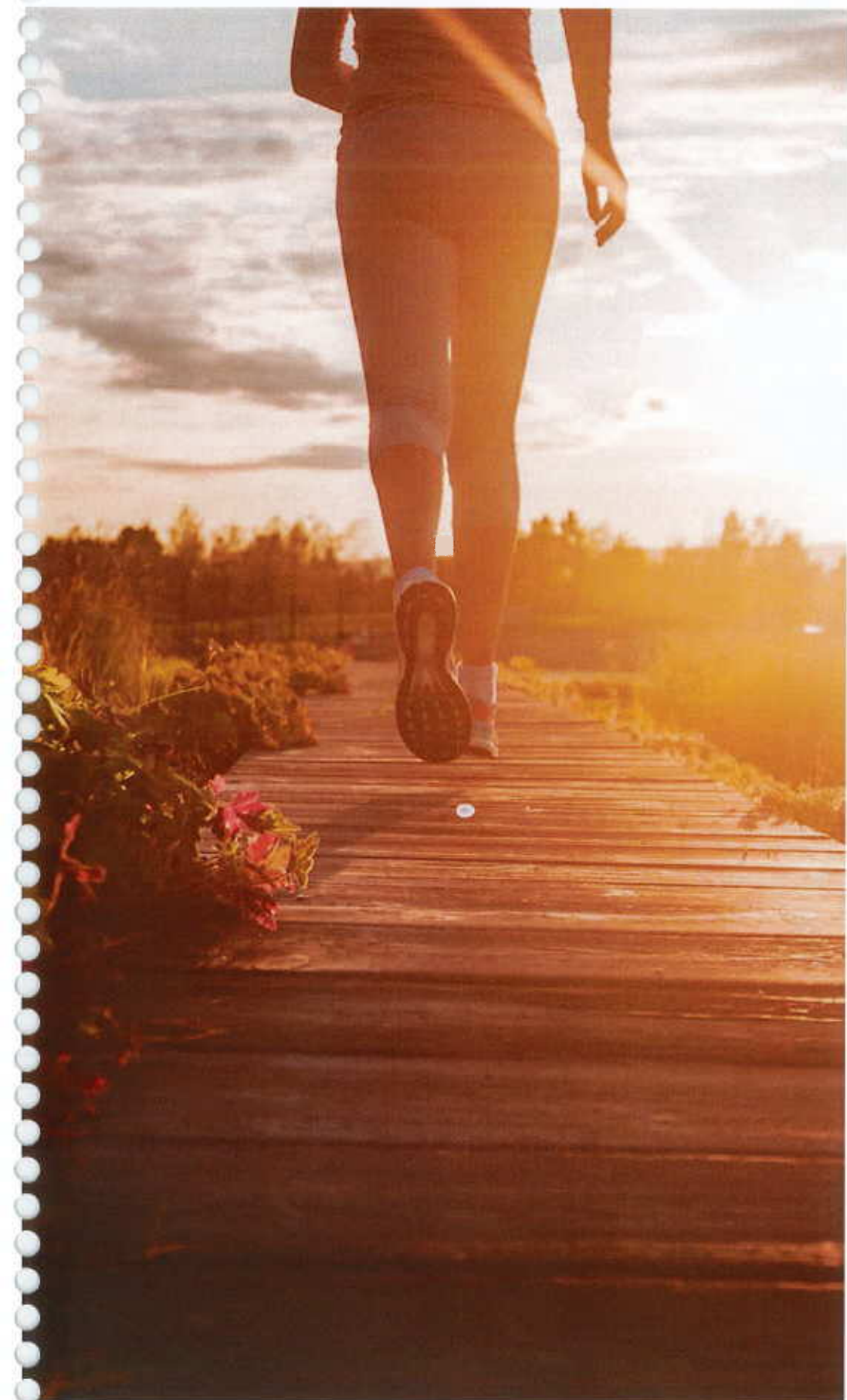
Along the eastern boundary, within the uplands of the conservation easement, in addition to the existing trees the applicant proposes to relocate 48 trees and plant 20 new trees to provide additional vegetation and screening for the adjacent residential properties.

- 2.0 WALL DESIGN - A REQUIRED WALL SHALL BE A MASONRY OR SOLID CONCRETE BLOCK AND STUCCO (CBS) STEEL-REINFORCED WALL, WITH A CONTINUOUS FOOTING. THE WALL SHALL BE UNIFORM TYPE AND DESIGN AND BE COMPATIBLE WITH SIMILAR STRUCTURES IN THE SURROUNDING AREA. ALL WALLS SHALL, IN ADDITION TO THE ABOVE, INCORPORATE THE FOLLOWING DESIGN FEATURES:
- 1) AT INTERVALS NO GREATER THAN THIRTY (30) FEET, VERTICAL COLUMNS OR STRUCTURAL ELEMENTS SUCH AS PILASTERS WHICH BREAK THE VERTICAL AND/OR HORIZONTAL PLAN OF THE ADJOINING WALL SURFACE
  - 2) CHANGES IN WALL MATERIALS AND/OR TEXTURES SUCH AS BANDING AND REVEALS PROVIDING A MINIMUM OF TWO (2) MATERIALS OR TEXTURES FOR THE EXTERIOR SURFACE OF THE WALL
  - 3) STONE OR STUCCO CAP MOLDINGS AND COLUMN CAPS
- ALTERNATIVES SUCH AS PRECAST CONCRETE WALLS MAY BE APPROVED BY THE DEPARTMENT WHEN SUCH WALLS INCORPORATE THE ABOVE DESIGN FEATURES AND ARE EQUAL TO OR BETTER IN APPEARANCE THAN CONCRETE BLOCK AND STUCCO WALLS.

- 2.1 The proposed design of the east boundary screen wall is intended to align with the same high-quality, low maintenance and long-lasting materials found at the building. Architectural precast panels utilize a neutral tan color range with a light sandblast finish. Additional formliner patterns create visual transitions breaking up the finish. Vertical and horizontal reveals further create visual breaks across the wall surface while a defined horizontal reveal at the top edge of the wall creates the cap condition, completing the design.

- 3.0 SECTION 16-169 – MINIMUM LANDSCAPE REQUIREMENTS IN B-3 WHEN ABUTTING A STREET RIGHTS-OF-WAY THAT IS ON A TRAFFICWAY, A BERMED LANDSCAPE STRIP OF AT LEAST TWENTY (20) FEET IN WIDTH IS REQUIRED. THE LANDSCAPE STRIP SHALL INCLUDE ONE (1) TREE FOR EVERY TWENTY-FIVE (25) FEET.

- 3.1 The southern and western property boundaries abut a trafficway's right-of-way. The required buffer would be 56,100 SF (20 feet times 2,805 linear feet). The buffer would also require 113 trees (1 tree for every 25 LF). The proposed landscape plan provides the entire buffer with 133 existing trees and/or palms with an additional 27 relocated trees and 48 trees and/or palms being proposed.



## 8.0 Civil Narrative

### 11.1 Site Access

The site's access will be off Oakland Park Boulevard between the Sawgrass Expressway and Flamingo Road. There are two proposed ingress/egress locations along the southern property line—the main entrance is approximately three hundred seventy-five (375') feet west of Flamingo Road and the emergency/service entrance is approximately two hundred thirty (230') feet west of the main entrance. Access to the site is currently being coordinated between Baptist Health, Kimley Horn, City of Sunrise, Broward County, and Florida's Turnpike Enterprise. In order to facilitate the design and construction of the improvements required for the proposed access plan, the City of Sunrise has entered into an agreement with Florida's Turnpike Enterprise to facilitate the incorporation of these access points within their SR 869/Sawgrass Expressway widening project which includes enhancements to the adjacent interchange and the subject section of Oakland Park Boulevard.

### 11.2 Site Grading

Design criteria for the parking lots is proposed at a minimum longitudinal grade of 0.50% with a cross slopes from 1% to 4%. Sidewalks shall not exceed a 2% cross slope. All ADA parking spaces will not exceed 2% slope in any direction to comply with the Florida Building Code and City of Sunrise.

The entire site will require structural fill to match the proposed grades; the fill shall be proofrolled and compacted as directed by the geotechnical requirements. Further geotechnical information is needed to finalize the site grading requirements.

### 11.3 Finished Floor Elevation

Finish Floor elevations have been set at 11.0 NAVD 88 based on the most conservative criteria across FEMA, ASCE 24, and Broward County future 100-year flood map requirements. We have also utilized the future water table elevation rise of approximately 3.0 feet to establish a minimum emergency drive aisle on the site of 8.5 NAVD.

### 11.4 Proposed Demolition

This project does not require any on-site demolition since the site has been cleared and is undeveloped.

### 11.5 Proposed Drainage System

The proposed drainage system will include a network of pipes, structures, retention areas and exfiltration trenches as well as the wetland area that will provide water quality and storage for the entire parcel. [Refer to section 9.0 for additional information]

### 11.6 Domestic Water Service

The City of Sunrise is the water provider for this site. The domestic water service connection will be on Oakland Park Boulevard and NW 120th Way. The water main will be a minimum of eight (8") diameter and be looped back to NW 120th Way to provide the necessary flows for the hospital. This looped system should be suitable to provide the proper domestic and fire flows and pressures to the hospital.

An entirely new water and sanitary sewer system will be constructed as part of this Project. All services will be provided by the City of Sunrise and installed facilities will be owned and maintained by the City of Sunrise. It is proposed that the on-site water mains will be owned and operated by the City within a 15' easement.

It is anticipated that a four (4") water meter with a six (6") water service will be provided for domestic flow and an eight (8") fire line for both the building and parking garage fire service. These two (2) services will be located at the northwest corner of the site, adjacent to the pump room. The available fire flow based on two (2) flow tests performed is approximately 4,700 gpm. The necessary fire flow for the development is approximately 2,000 gpm.

Fire hydrants shall be spaced at a maximum of (300') feet around the site to provide fire protection.

### 11.7 Sanitary Sewer Service

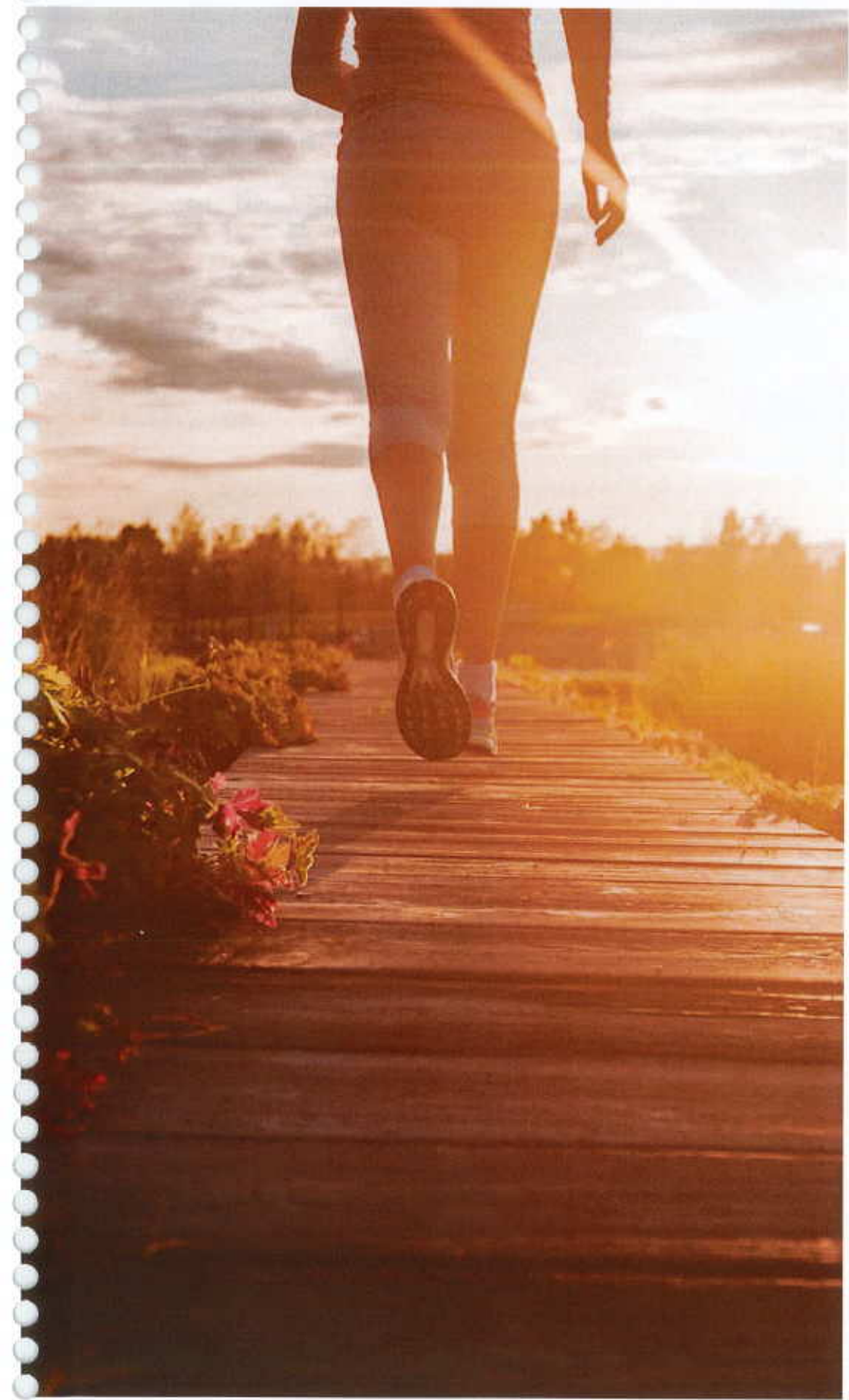
The City of Sunrise provides sanitary sewer service for the site.

A new lift station is proposed at the southeast corner of the site to collect and convey the wastewater flows east to an existing six (6") force main located at NW 120th Way and NW 35th Street. The wastewater flows will be collected via an eight (8") inch pvc gravity sewer system throughout the site discharging to the proposed lift station. A grease trap service will be located in the northwest corner of the site with domestic services located along the south side of the building.

All sanitary sewer materials and installation shall conform to the City of Sunrise standards as well as Broward County Environmental and Growth Management Division standards.

The gravity sewer, lift station, and force main will be located in proposed easements within the property. The wastewater system will be owned and operated by the City of Sunrise.

All franchise utilities will be designed by other consultants and will be coordinated with all civil site improvements.



# 9.0 Stormwater Narrative

Sunrise LDC Section 16-216

# Ecology & Water

The campus creates a balance between built and natural forms to preserve local ecosystems and provide biophilic qualities.

- Stormwater is collected and used as a campus asset
- Vegetation reduces heat island
- Rain gardens elevate water quality and provide 100- & 500-year flood resistance
- The site design can accommodate local Sea Level Rise impacts to 2100 predictions

View of Courtyard Garden





# Stormwater & Drainage

## 12.1 Drainage System

The site is part of an existing master drainage system that serves the 26.3-acre site, North Sawgrass Estates, Twin Fountains, Sunrise Golf Village and the Athletic Complex. The overall basin is approximately 477 acres in size and has an allowable discharge of 56.5 cubic feet per second (cfs). The Site discharge has been restricted to 2.92 cfs based on SFWMD formula of 75.9 cubic feet per square mile (CSM).

There is an existing control structure located at the northeast corner of the 10-acre site that regulates the discharge into the overall master drainage system. This structure will remain in service as part of the development.

The site has been recently permitted/licensed through South Florida Water Management District (SFWMD) under permit number 06-80111-P and Broward County Environmental and Growth Management Division license number SWM2021-062-0 dated November 17, 2021. The permit has been modified several times since it was first issued.

The master drainage system ultimately discharges into the SFWMD L-35A Canal north of the site.

Proposed improvements include permeable emergency access road along the north and east sides of the building, a bioretention area as a focal point on the south side of the Site at the main entrance, and sustainable drainage systems (SuDS) for the treatment and attenuation of runoff.

The following section outlines the project's compliance with regards to water quality treatment of on-site stormwater runoff.

### SECTION 16-216 – ON-SITE STORMWATER RUNOFF

- A. THE FIRST ONE-HALF (½) INCH OF RAINFALL SHALL BE RETAINED ON-SITE THROUGH THE USE OF SWALES, TRENCH DRAINS, RETENTION PONDS AND OTHER SIMILAR TECHNIQUES REASONABLY ACCEPTABLE TO THE DEPARTMENT.**

One-half (½") inch dry pretreatment, will be provided for the development parcel through bio-swales, on-site retention, and exfiltration trenches. The proposed drainage system may include all or some of the following, a network of pipes, structures, retention areas, bio-swales, rain gardens, and exfiltration trenches as well as the 15 acres of on-site wetland area that will provide water quality and storage for the entire parcel. Once the water elevations reached the outfall structure's weir elevation the Site will discharge into the City's master drainage system ultimately to the SFWMD L-35A Canal north of the site.

The development site must provide a half inch (1/2") of dry pre-treatment on the site prior to discharge into the wetlands. However, the roof drains are permissible to discharge directly into the wetland site without the dry pre-treatment requirements. The site will provide dry retention within the green areas on site as well as utilize exfiltration trench on the storm drain system wherever possible to provide the necessary dry pre-treatment requirements.

The existing site condition allow runoff from the site to drain into the existing wetlands. This pattern will continue after development of the 10-acre parcel and continue to allow the flow to the wetland to maintain the wetland hydro period. This period is conducive to a healthy wetland system.

The 10-acre development site will then discharge into the 15-Ac wetland area which will provide storage and remaining water quality as necessary. The on-site wetlands site can provide approximately 18 Ac-Ft of storage to the bleeder elevation of 4.15 NAVD 88 and approximately 38 Ac-Ft of storage to the overflow grate elevation of 6.50 NAVD 88.

The proposed Finish Floor elevations have been set at 11.0 NAVD 88 based on FEMA, ASCE 24 and Broward County future 100-year flood map. We have also utilized the future water table elevation rise of approximately 3.0 feet to establish a minimum emergency drive aisle on the site of 8.5 NAVD.



## **10.0 Air Pollution Control Narrative**

Sunrise LDC Section 16-217

**SECTION 16-217 – AIR POLLUTION CONTROL**

- 1.0 CONSTRUCTION SITES. DURING CONSTRUCTION, CLEARED LAND NOT SUBJECT TO ACTIVE DEPLOYMENT SHALL BE EITHER MULCHED OR REGULARLY SPRAYED TO MINIMIZE THE BLOWING OF DUST. THIS INCLUDES VEHICULAR USE AREAS.**
- 1.1** The general contractor for the project will be required to either mulch or provide regular soaking with water to minimize the blowing of dust. This will be for all areas, including the vehicular use areas.
- 2.0 PROCESSING USES. AT THE TIME OF BOTH SITE PLAN REVIEW AND OCCUPATIONAL LICENSING, INDUSTRIAL PROCESSING USES SHALL REQUIRE APPROVAL BY THE BROWARD COUNTY ENVIRONMENTAL QUALITY CONTROL BOARD TO ASSURE COMPLIANCE WITH AIR POLLUTION STANDARDS.**
- 2.1** The proposed project does not include any industrial processing uses.

View of Pine Garden at Main Entrance





## 11.0 Waste Narrative

Arup

Sunrise LDC Section 15-92

The following section outlines the project's compliance with regards to prohibited discharges into the public sanitary sewer system.

**SEC. 15-92. PROHIBITED DISCHARGES**

**A. NO PERSON SHALL DISCHARGE OR CAUSE TO BE DISCHARGED ANY STORMWATER, SURFACE WATER, GROUNDWATER, ROOF RUNOFF, SUBSURFACE DRAINAGE, COOLING WATER, SEPTIC TANK EFFLUENT OR UNPOLLUTED INDUSTRIAL OR COMMERCIAL PROCESS WATER INTO ANY SANITARY SEWER.**

No stormwater, surface water, groundwater, roof runoff, subsurface drainage, cooling water, septic tank effluent, or unpolluted industrial or commercial processes will be discharged into the sanitary sewer system.

**B. THE DISCHARGE OF COOLING WATER FROM AIR CONDITIONING UNITS IS PROHIBITED. COOLING WATER FREE FROM BACTERIA AND HARMFUL CHEMICALS SHOULD BE DISCHARGED INTO STORMWATER SEWERS. EXCEPT AS HEREINAFTER PROVIDED, NO PERSON SHALL DISCHARGE OR CAUSE TO BE DISCHARGED ANY OF THE FOLLOWING DESCRIBED WASTES OR WATERS TO ANY PUBLIC SEWER:**

Any cooling water from air conditioning units shall be discharged into the proposed drainage system.

**ANY LIQUID HAVING A TEMPERATURE HIGHER THAN ONE HUNDRED FIFTY (150) DEGREES FAHRENHEIT**

Any liquids inside the building with temperatures higher than 150°F or greater shall be tempered prior to being discharged into the sanitary sewer system.

**ANY WATER OR WASTE CONTAINING MORE THAN ONE HUNDRED (100) P.P.M. OR EXCEED A DAILY AVERAGE OF TWENTY-FIVE (25) P.P.M. OR ANY GREASE OR OIL OR ANY OILY SUBSTANCE**

Any grease or oil waste shall pass through a proposed on-site grease interceptor prior to being discharged into the sanitary sewer system.

CHEMICAL	PPM
CYANIDES	0.01
COPPER, TOTAL	0.5
CHROMIUM, HEXAVALENT	0.5
CHROMIUM, TOTAL	1.0
CADMIUM	0.5
ZINC, TOTAL	1.0

**ANY GASOLINE, BENZENE, NAPHTHA, FUEL OIL OR OTHER FLAMMABLE OR EXPLOSIVE LIQUID, SOLID OR GAS**

Fuel oils are stored in underground tanks. No gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquids, solids, or gasses shall be discharged into the sanitary sewer system.

**ANY WATERS OR WASTES CONTAINING A TOXIC OR POISONOUS SUBSTANCE IN SUFFICIENT QUANTITY TO INJURE OR INTERFERE WITH ANY SEWAGE TREATMENT PROCESS, CONSTITUTE A HAZARD TO HUMANS OR ANIMALS, OR CREATE ANY HAZARD IN THE RECEIVING WATERS OF THE SEWAGE TREATMENT PLANT**

There are no waters or wastes containing toxic or poisonous substances in sufficient quantity to injure or interfere with sewage treatment processes intended for the site. [TO BE CONFIRMED BY BHSF]

**ANY GARBAGE THAT HAS NOT BEEN PROPERLY SHREDDED, WHICH SHALL MEAN THE WASTES FROM THE PREPARATION, COOKING AND DISPENSING OF FOOD THAT HAVE BEEN SHREDDED TO SUCH DEGREE THAT ALL PARTICLES WILL BE CARRIED FREELY UNDER THE FLOW CONDITIONS NORMALLY PREVAILING IN PUBLIC SEWERS, WITH NO PARTICLE SIZE GREATER THAN ONE-HALF INCH IN ANY DIMENSION**

No garbage or particles from the preparation, cooking, or dispensing of food are proposed as discharge into public sanitary sewer systems.

**ANY WATERS OR WASTES HAVING A PH LOWER THAN 5.5 OR HIGHER THAN 9.5 OR HAVING ANY CORROSIVE PROPERTY CAPABLE OF CAUSING DAMAGE OR HAZARD TO STRUCTURES, EQUIPMENT OR PERSONNEL OF THE SEWAGE WORKS**

Any acid wastewater inside the building will pass through a pH neutralizer prior to discharging into the sanitary sewer system.

**ANY WATER OR WASTE CONTAINING TOXIC SUBSTANCES IN QUANTITIES IN EXCESS OF THE FOLLOWING LIMITS AND MEASURED AT THE POINT OF DISCHARGE INTO THE SEWER SYSTEM OR ANY SUBSTANCE THAT WILL PASS THROUGH THE SEWAGE TREATMENT PLANT AND EXCEED THE STATE REQUIREMENTS FOR THE RECEIVING STREAM.**

No toxic substances exceeding the limits above will be discharged into the public sanitary sewer system.

**ANY WATER OR WASTE CONTAINING PHENOLS IN EXCESS OF FIVE THOUSANDTHS (0.005) P.P.M.**

No phenols exceeding the limits above will be discharged into the public sanitary sewer system.

**ANY WATER OR WASTE CONTAINING SUSPENDED SOLIDS OR COLOR OF SUCH CHARACTER AND QUANTITY THAT UNUSUAL ATTENTION OR EXPENSE IS REQUIRED TO HANDLE SUCH MATERIALS AT THE SEWAGE TREATMENT PLANT, WITHOUT A SPECIAL PERMIT**

No waste effluent containing suspended solids or color of such character and quantity that unusual attention or expense is required to handle such materials will be discharged into the public sanitary sewer system.

**ANY TOXIC RADIOACTIVE ISOTOPES, WITHOUT A SPECIAL PERMIT**

No toxic radioactive isotopes will be discharged into the public sanitary sewer system without a special permit.

**ANY WATER OR WASTE WHICH, AFTER TREATMENT, WOULD CAUSE THE CITY TO VIOLATE ANY LAWS OR REGULATIONS OF THE STATE OR THE UNITED STATES OF AMERICA.**

No water or waste are planned to be discharged into the public sanitary sewer system such that, after treatment, it would cause the City to violate any state or federal laws or regulations.

**All building waste is collected and removed at the facility Service dock located at grade on the west side of the campus.**

Grease Trap maintenance (at service dock): Monthly Between 7am-7pm

Non-Hazardous Waste (at service dock):  
Recycle - Two times a week Between 7am-7pm  
Trash Compactor - Three times a week Between 7am-7pm

Hazardous Waste (at service dock): Daily Between 7am-7pm



## 12.0 Noise Study

**A. SECTION 9 - NOISE REGULATIONS**

**1.0 CITY OF SUNRISE NOISE ORDINANCE**

The following excerpts from the City of Sunrise Code of Ordinances comprise the relevant sections related to noise and set forth the applicable sound levels limits. For this project, the most sensitive receiver type is the residential receivers to the east and south, which have the most stringent sound level limits per the noise ordinance.

**Section 9-22 – Maximum permissible sound levels.**

Notwithstanding any other provision of this article, it shall be unlawful, except as expressly permitted herein, to cause, allow, or permit the making of any sound which exceeds the limits set forth in this section. However, a sound shall not be considered in violation of the sound level limits set forth in Table 1 if the measured sound level exceeds the background sound level by less than five (5) decibels.

Receiving Property Use	Times	Sound Level
Residential, including multifamily	7:00 a.m. to 10:00 p.m.	60 dBA
	10:00 p.m. to 7:00 a.m.	55 dBA
Commercial	Any time	65 dBA
Industrial	Any time	70 dBA
Western Sunrise Entertainment District*	6:00 p.m. to 4:00 a.m.	85 dBA or 87 dBC
	4:00 a.m. to 6:00 p.m.	65 dBA or 75 dBC

**Section 9-19 – Exemptions**

The following uses and activities shall be exempt from the provisions of this article. (2) Radios, sirens, horns, and bells and other sounds created by authorized emergency vehicles.

\* It is intended that emergency vehicles shut off sirens on transition from the right of way to the Hospital.

**2.0 PROCESS**

**2.1 ESTABLISHING THE BASELINE NOISE ENVIRONMENT**

Arup have conducted an environmental noise survey of the proposed site and surrounding residential property boundaries to document the existing site ambient levels. This survey includes attended spot measurements around the site and unattended continuous noise monitors running for several days using sound level meters.

The results of this survey showed that the noise levels at the neighboring residences currently exceed the City of Sunrise ordinance levels. This report will inform the next stages of design and is included as an appendix to this Supplement document.

**2.2 DESIGN AND CONSTRUCTION**

Following discussions with the City of Sunrise's noise consultant, we have created an early stage acoustic model using SoundPLAN v8.2 to predict the future noise levels from the hospital development at neighboring properties.

The model incorporates the noise emissions from the proposed mechanical and electrical equipment in the hospital in normal and emergency scenarios. It also incorporates loading dock noise based off measurements taken at a similar Baptist Health facility loading dock.

This acoustic model will continue to be developed throughout the design of the project to inform, select and specify the exact acoustic abatement measures required to comply with the City of Sunrise code requirements.

During construction we will assist in the review of building systems equipment and noise control submittals and shop drawings.

The full report is included as an appendix to this Supplement document with a summary on the next page.

**2.3 VERIFICATION**

At project close-out Arup will visit the site and conduct acoustics measurements to verify that noise emissions have been properly controlled.



# Acoustic Design Strategies

Specific measures to reduce noise to the community are:

- The site has been laid out to minimize noise to the community. The loudest equipment is in the Central Energy Plant, CEP, which has been situated close to the freeway and as faraway as possible from residences. Trash compactors have also been located away from residences and compactor noise is not anticipated to be a problem, but this will be reviewed further as design progresses.
- Emergency generators are located in packaged, attenuated enclosures on the roof of the CEP. Generator noise will be attenuated using high performance silencers on both intake and discharge air paths to the enclosures. High performance combustion exhaust mufflers will also be used. The selection of the attenuated enclosures will be done to ensure compliance with the City of Sunrise noise ordinance at the residential and neighboring properties.
- Noise control for equipment on the CEP roof will be primarily through the selection of low noise equipment. This will be screened using a combination of louvers, solid barriers and acoustic lowers as needed to meet the City noise limits. Additional noise control for the Air Source Heat Pumps, if needed, will comprise 3 ft tall discharge silencers on the tops of the units, and sound attenuation lagging/wraps around their compressors. Cooling Towers will have low noise fans and intake and discharge silencers may be considered if needed.
- Air handling units are enclosed within the building and duct silencers will be provided at the outside air intakes and exhaust as needed to meet the City noise limits.
- Miscellaneous mechanical equipment will be analyzed as the design progresses, including exhaust fans, which will be attenuated using acoustic lowers, roof screens to form noise barrier walls and attenuators, as needed to meet the City noise code.

Refer to Separate Reports (both prepared by Arup as the acoustic consultant on this project) for more details

- SM-01 BHSF Site Noise Survey Report – 16 February 2024  
Existing Noise Survey
- SM-02 BHSF Noise Modeling Report – 19 July 2024  
Acoustic model to estimate noise from HVAC equipment, loading dock and impact of the building on the freeway noise

# Acoustics

The acoustic model looks at predicted noise levels from:

- Normal HVAC operations
- Emergency HVAC operations (when generators are running)
- Loading Dock operations
- Shielding impact of the hospital from the adjacent traffic noise

The findings of the acoustic survey and model show that:

## Existing Noise

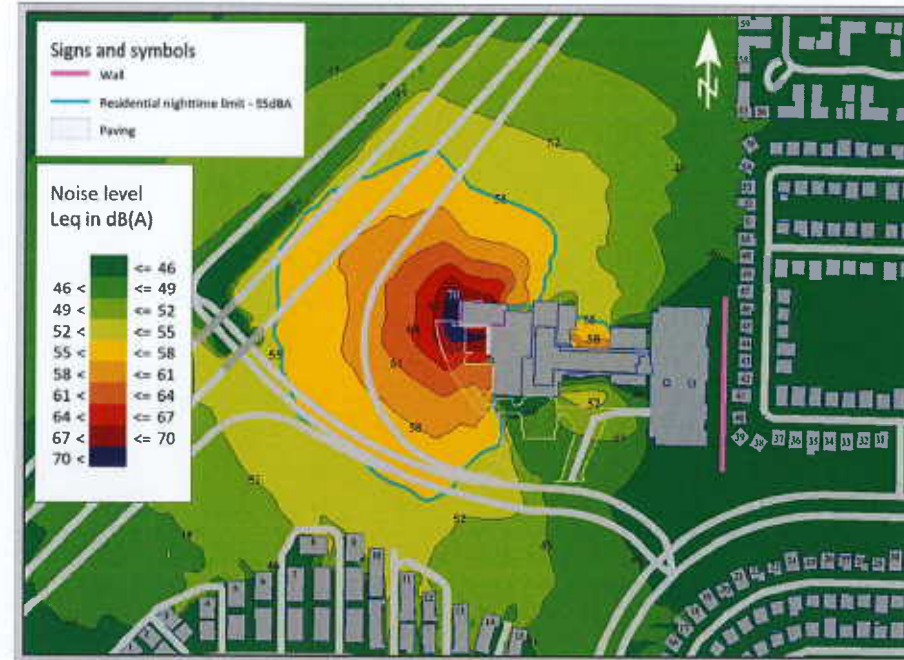
- Existing noise levels – generally exceed residential day and night city ordinance levels for Sunrise

## Predicted Noise (see images to the right)

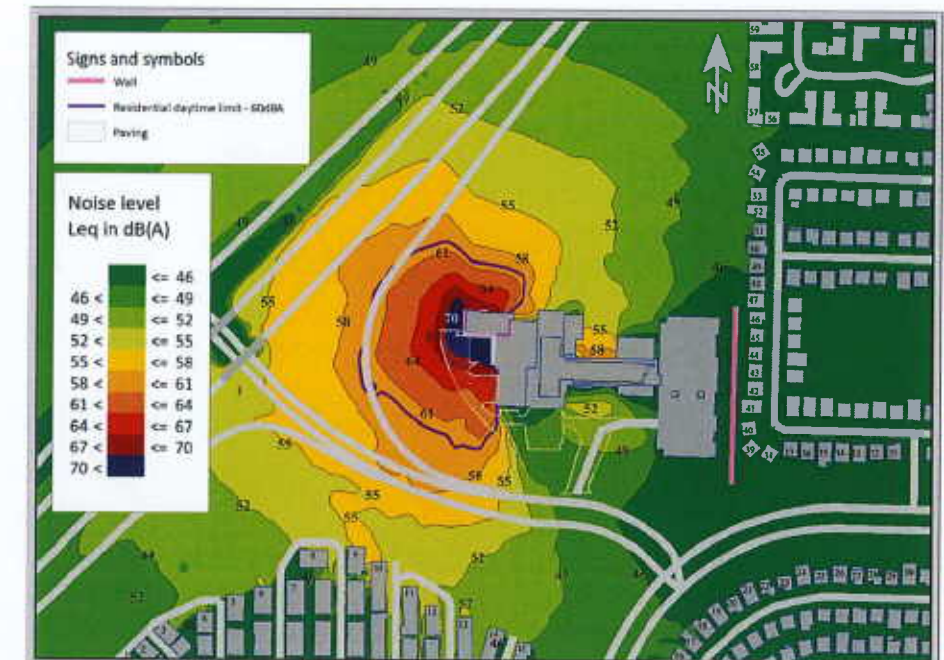
When looking at the hospital in isolation of current background noise:

- Normal HVAC operations – complies with residential day (<60dBA) and night (<55dB) city ordinance levels at both eastern and southern residences
- Emergency HVAC Operations – complies with residential day city ordinance levels at both eastern and southern residences for generator operation during testing or in power outage scenario. Predicted nighttime noise levels for a few residences to the south (in the Western Sunrise Entertainment District - marked in black - which has higher noise limits) are currently 5dB above the measured noise levels at night (which is the limit of exceedance) so the generator acoustic enclosures will be selected to ensure compliance with City of Sunrise ordinance for residential properties
- Loading Dock – complies with residential day and night city ordinance levels at both eastern and southern residences with or without mechanical equipment operating
- Traffic Noise – the new development is predicted to have 1-10dBA reduction in noise levels to the eastern residences from the adjacent freeway and roads

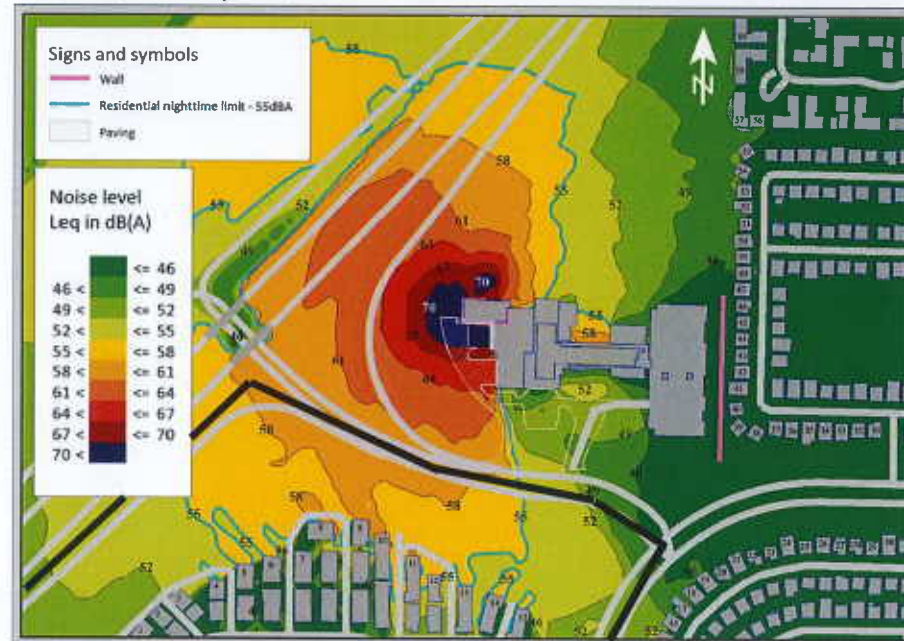
Acoustic model of proposed Hospital – SoundPLAN v8.2



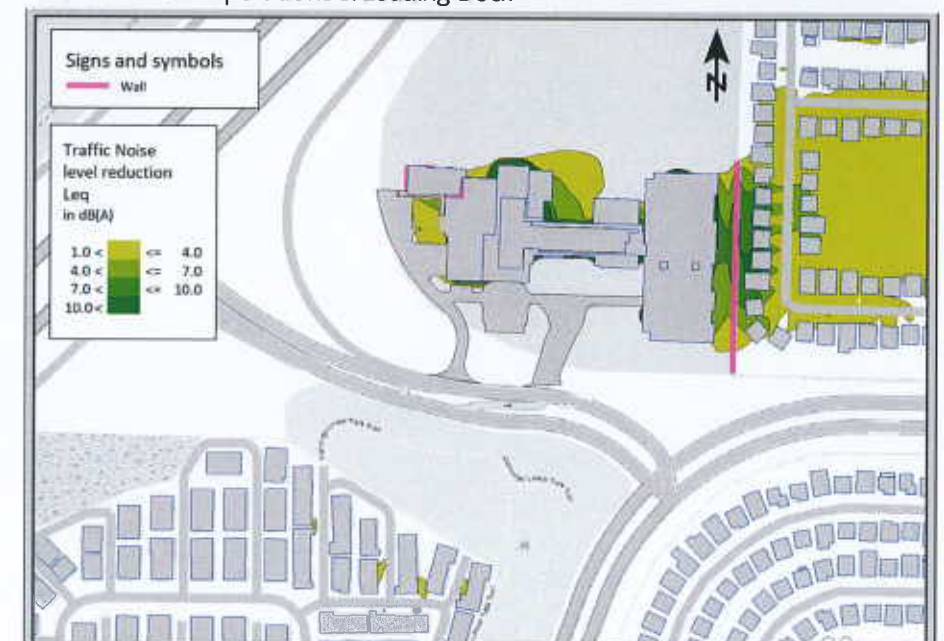
Normal HVAC Operations



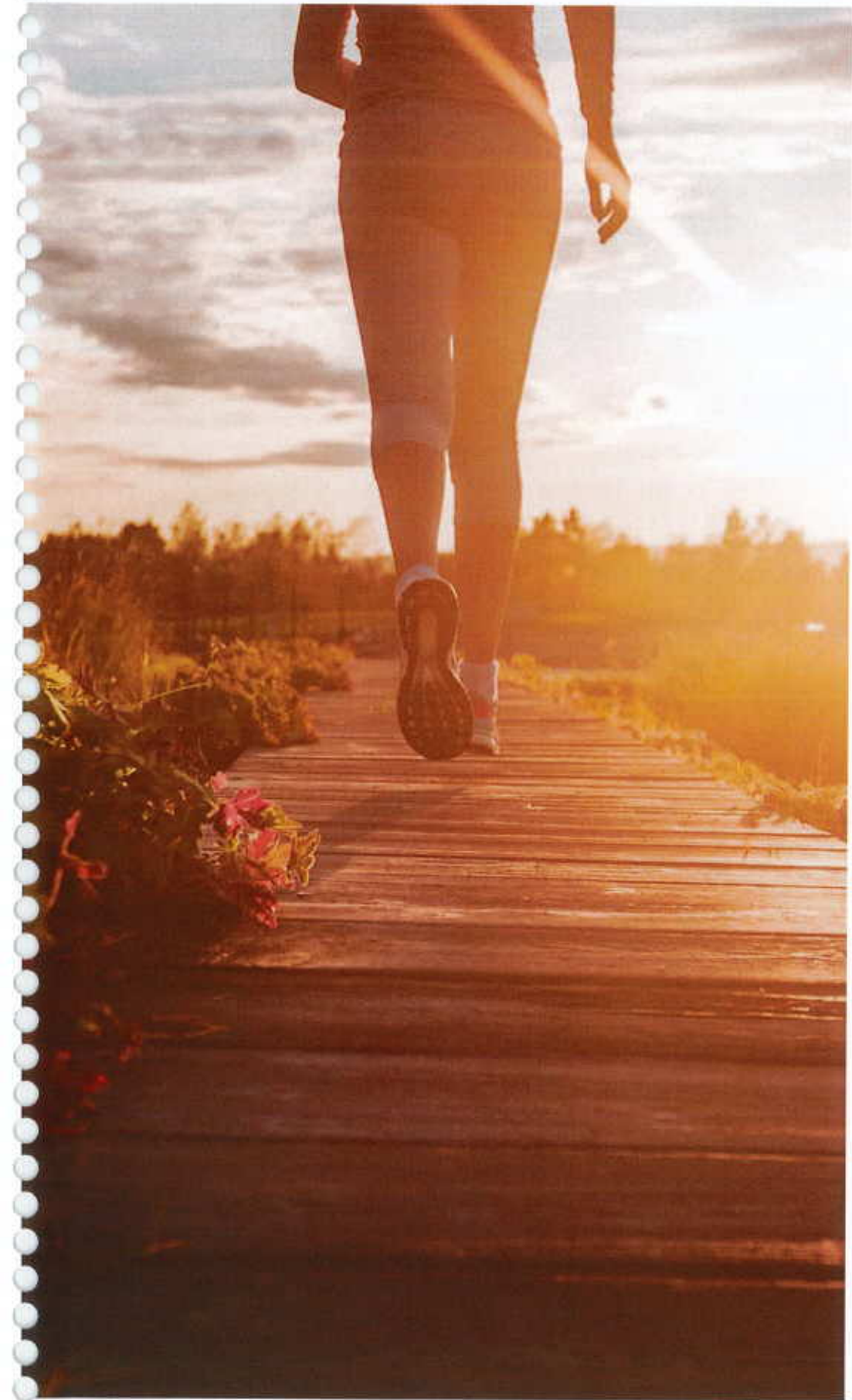
Normal HVAC Operations & Loading Dock



Emergency HVAC Operations



Noise Reduction from Freeway & Roads



## 13.0 Traffic Study

## EXECUTIVE SUMMARY

Baptist Health South Florida, Inc. is proposing to develop the property located at 1240 West Oakland Park Boulevard in Sunrise, Florida. The proposed development consists of a 100-bed, 367,000 (+/-) square foot, 675-employee hospital campus. The development is expected to be operational in year 2029.

Access to the Project will be provided via one (1) full access signalized driveway just west of the intersection of West Oakland Park Boulevard and North Flamingo Road. Note exiting vehicles destined for West Oakland Park Boulevard (eastbound) will perform a left-turn at this driveway, while exiting vehicles destined for North Flamingo Road (southbound) will perform a right-turn and a subsequent westbound U-turn along West Oakland Park Boulevard to leave the site. Additionally, a secondary access point primarily for emergency/delivery vehicles will be provided (right-in/right-out driveway) west of the main Project entrance and east of the SR 869/Sawgrass Expressway northbound on-ramp. This access plan and the related improvements to West Oakland Park Boulevard have been coordinated with the City, Broward County, and Florida's Turnpike Enterprise (FTE). These improvements will be included in and constructed through a larger programmed FTE project (FM No. 437155-1) for completion in year 2029. The FTE project includes the widening SR 869/Sawgrass Expressway from NW 8th Street to south of Atlantic Boulevard and associated interchange improvements. Improvements in the vicinity of the Property includes:

- Reconstruction of the SR 869/Sawgrass Expressway interchange with West Oakland Park Boulevard to a partial diverging diamond design.
- Intersection capacity/signalization improvements at West Oakland Park Boulevard/North Flamingo Road including triple eastbound left-turn and right-turn lanes, triple northbound left-turn lanes, and dual southbound right-turn lanes.
- Construction of access points to the Property including signalization and signage improvements.

The City has entered into a Local Funding Agreement with FTE for this additional design while Baptist Health has entered into a separate agreement with the City to reimburse the City for the costs associated with this design. A separate Local Funding Agreement will be entered into between the City and the FTE to fund the construction of the improvements associated with the access to the Property, with Baptist Health entering into a separate agreement with the City to fund all improvements associated with access to the Hospital, including required signalization. These improvements are expected to be completed on/before the certificate of occupancy for the facility and which will provide safe ingress and egress for the Project. See Traffic Impact Analysis report included with this submittal.

A traffic impact analysis was prepared by Kimley-Horn and Associates, Inc. under separate cover dated February 2024. As indicated in that study, trip generation for the proposed development was calculated using rates and/or equations contained in the Institute of Transportation Engineers' (ITE's) Trip Generation Manual, 11th Edition. The project is expected to generate 290 weekday A.M. peak hour trips and 227 weekday P.M. peak hour trips.

The results of the intersection capacity analysis indicate that the study intersections are expected to operate at adopted level of service (LOS D) or better during the A.M. and P.M. peak hours under all analysis.

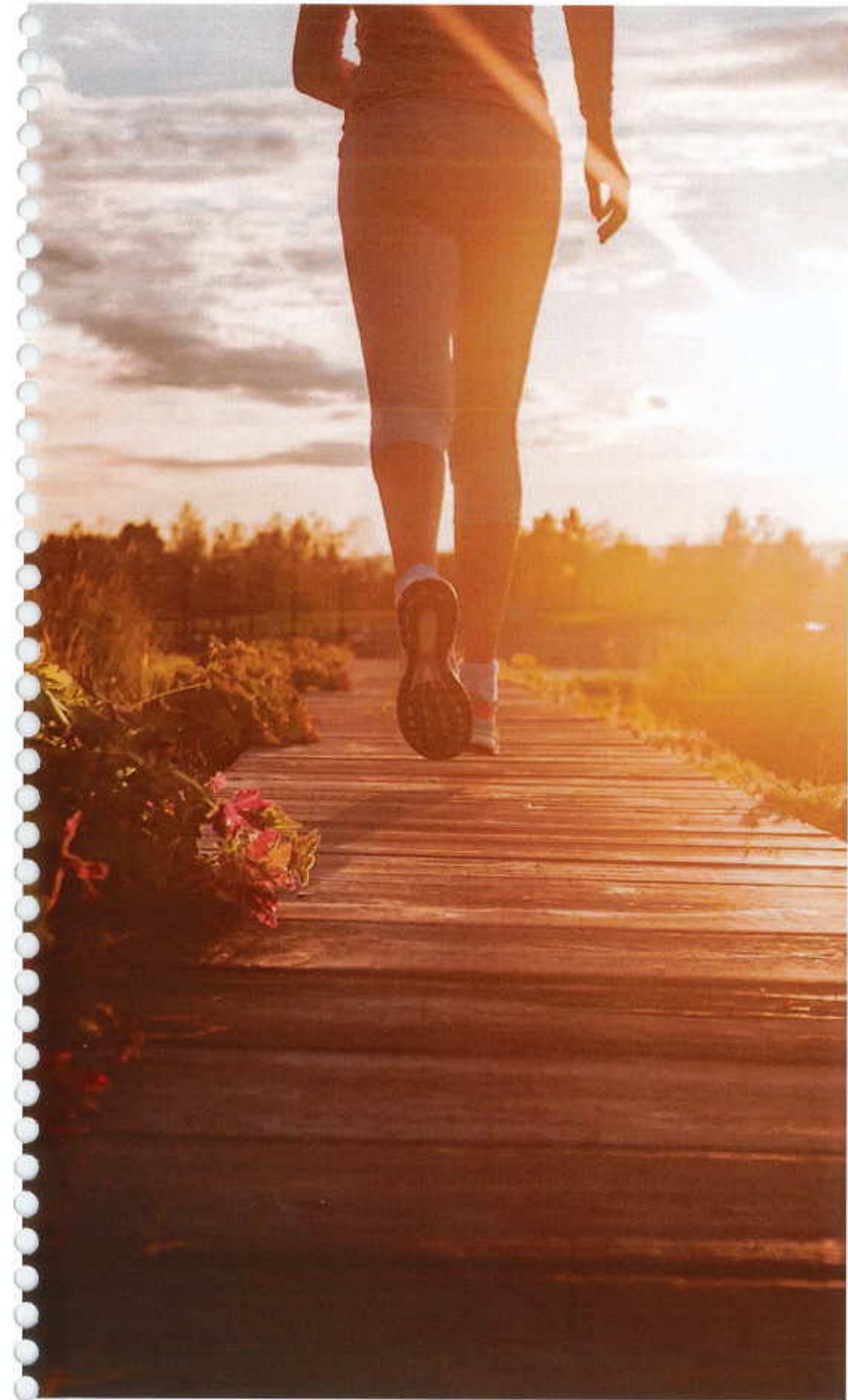
An entry gate analysis was performed for the proposed gate within the parking garage restricting a portion of the ground floor parking for physicians. Less than one (1) vehicle at the entry gate during the A.M. and P.M. peak hours. Therefore, vehicle queues are expected to be accommodated on-site without extending onto West Oakland Park Boulevard.

# Site Plan Overlay

## Attachment A

Note: This site plan is for informational purposes only. Please refer to the site plan submittal for the current site plan.





## 14.0 Security Report

**A. PUBLIC SAFETY AND SECURITY REPORT**

**1.0 LOCATION AND TYPE OF LOW-LEVEL LIGHTING FOR WALKWAYS AND COMMON AREAS**

A combination of 12ft pedestrian light poles and 3ft light bollards will light all pedestrian walkways and common areas. Parking and pedestrian areas will be lit by means of 16ft and 20ft poles. 3 foot light bollards will provide walkway lighting where street or pedestrian lights are not suitable for satisfying light pollution reduction targets.

**2.0 LOCATION AND TYPE OF EXTERIOR WALL MOUNTED LIGHTS TO PROVIDE ILLUMINATION FOR PARKING/PEDESTRIAN AREAS**

Exterior wall mounted lights will be mounted above emergency exit doors. At the loading area, adjustable wall mounted flood lights will provide lighting where pole mounted lights are not suitable. Fixtures angles will be locked in place upon aiming and will be carefully aimed onto the loading zone.

**3. LOCATION OF ALL PAVEMENT MARKINGS AND TRAFFIC/DIRECTIONAL SIGNAGE SUCH AS STOP SIGNS, ONE-WAY, DO NOT ENTER, ETC.**

**3.1** Please refer to the submitted Pavement, marking and signage (PMS) plans submitted as part of the site plan submittal. The PMS plans identify all pavement markings and signage for traffic movement. Specific directional signs, both on-site and off-site will be provided once the Oakland Park Boulevard access is finalized.

**4.0 A NARRATIVE ON THE LOCATION OF REQUIRED LANDSCAPING AND ITS COMPATIBILITY WITH EXTERIOR LIGHTING**

**4.1** All required and proposed landscaping has been coordinated with the lighting. All canopy trees are located a minimum of 15.0' and all palm trees are located a minimum of 7.5' from all light poles. All landscape shrub material on the perimeter of the site will be maintained low enough to allow natural surveillance from Oakland Park Boulevard. This allows the 'eyes on the street' to see what activity is occurring on site. In addition, through the use of walkways and landscaping, natural access control is provided and also identifies the difference between the public and private spaces.

**5.0 DETAILS OR DESCRIPTION OF ROOF ACCESS LADDERS AND A NOTE THAT THEY ARE SECURED BY A LOCKED MECHANISM.**

**5.1** Roof access hatches will be locked from inside the building.

**6.0 INCLUDE TWO (2) PERSONS (NAME, TITLE AND PHONE NUMBERS) TO CONTACT IN CASE OF EMERGENCY. THIS MAY BE THE OWNER, PROPERTY MANAGER, SECURITY GUARD, ETC.**

**6.1** The Security Communications Center, commonly referred to as "SECOM", serves as Baptist Health's 24-hour global security operations center. It actively monitors over 8,000 CCTV cameras, thousands of access control points, security alarms and sensitive equipment status while serving as the central dispatching and incident management hub system-wide. SECOM also compiles security and safety data to meet compliance requirements.  
The number to reach SECOM is 786-594-6911. (This number and codes are printed on the back of each badge buddy for immediate reference.)

**6.1 Site Security Office - TBD**

**7.0 PROVIDE A LIST OF AND LOCATION FOR INTERNAL SAFETY MEASURES SUCH AS SECURITY CAMERAS (CCTV), ALARMS, PERSONAL SECURITY SERVICES, HEIGHT MARKERS, ETC.**

There will be a security operations space located within the building, which controls and monitors all systems all alarms and notifications of the systems identified herein. All dispatching functions of security personnel for events will occur from the security operations area. The security operations area will also be responsible for maintaining contact with first responders and have the capability to become a command-and-control center in the event of an incident.

There will also be strategically located security systems user workstations for investigative, administrative, and maintenance use. All Electronic Safety and Security Systems will be networked and may reside on the enterprise network.

**7.1 VIDEO SURVEILLANCE – SECURITY CAMERAS**

There will be video surveillance cameras at strategic locations of the interior and exterior of buildings to provide for activity awareness across the campus. Locations include but are not limited to the following:

- Vehicular campus entry and exit points
- Interior entry points of the building
- Publicly accessible areas of the facility, except for the restrooms.
- Back-of-house areas through-out the facility
- Within each elevator cab
- Within each elevator lobby
- Exterior entry and exit points of the building(s), including but not limited to main entrance, ambulance bay, loading dock, and parking garage entry and exit points.
- Building perimeter
- Emergency Call device locations
- Driveways
- Pedestrian walkways

**7.2 ACCESS CONTROL AND INTRUSION DETECTION**

- There will be hardwired electronic physical access control at strategic entry points of building, the central utility plant, the parking structure, and to strategic areas throughout the facility.
- There will be hardwired door position monitoring at all entries to and exits from the building and at miscellaneous doors.
- There will be hardwired intrusion detection system to monitor and protect secure areas and zones of the facility, including pharmacy and places that facilitate medical drugs.

**7.3 INTERCOM TWO-WAY COMMUNICATION SYSTEM**

There will be an intercom system at strategic building access points, such as back of house entrances, the loading dock man entrance, and parking garage vehicular entry and exit.

**7.4 EMERGENCY CALL TWO-WAY COMMUNICATION SYSTEM**

There will be emergency call devices, with blue light notification, located strategically on site. The following criteria is being followed.

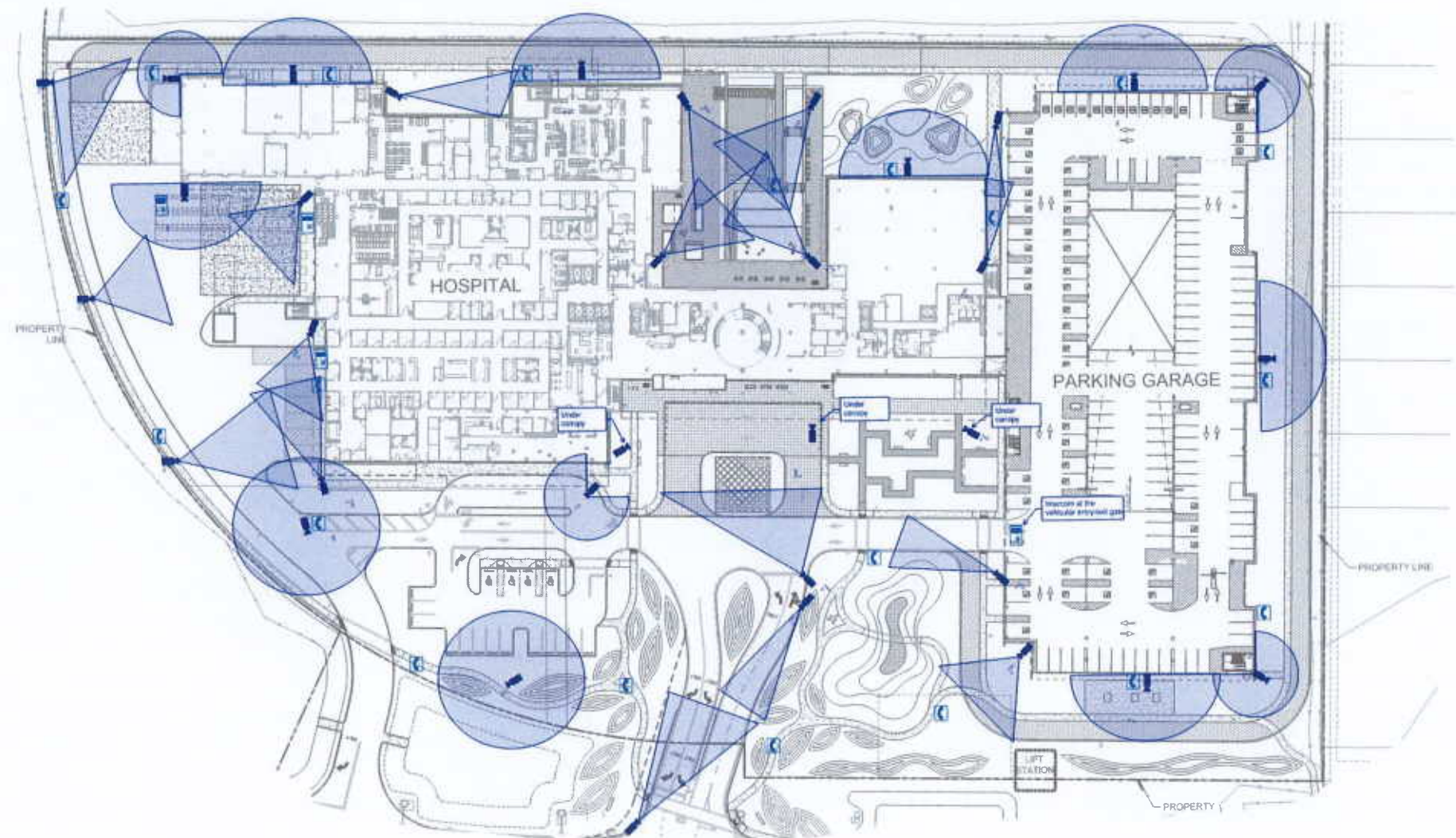
- Emergency Call devices, with blue light notification, along pedestrian paths, located no more than 200ft apart for unoccupied areas.
- Emergency Call devices, with blue light notification, located approximately every 250, but no more than 300ft, for occupied areas.

**Arup - Site Security Layout**

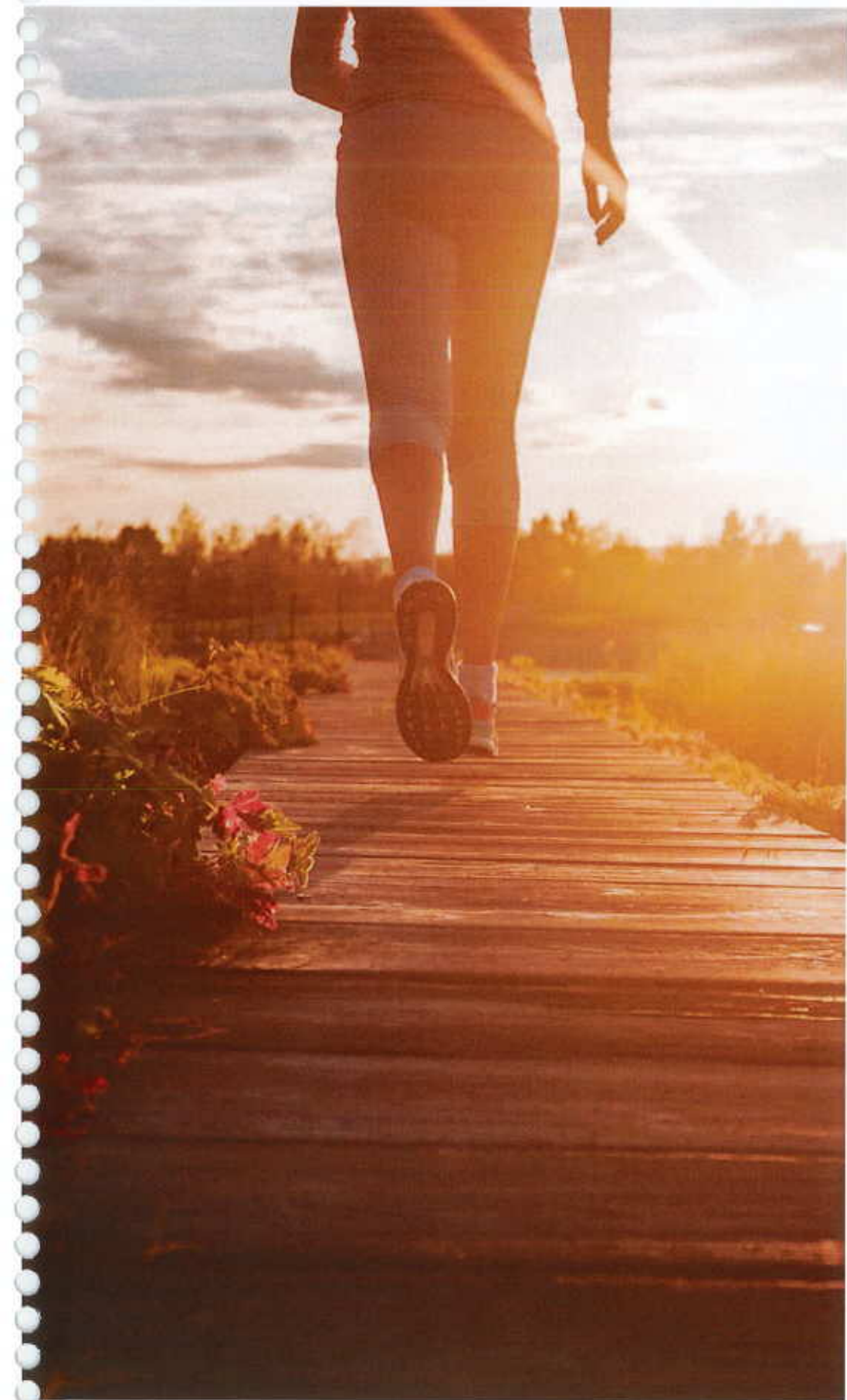
**General notes**  
 - Cameras will be mounted on poles, or building facade or underside of canopy. location to be further developed during design.  
 - Pole locations will be coordinated with lighting team.  
 - Field of views shown are indicative only, to show camera coverage intent. Coverage to be further developed during design.

**SYMBOL LIST**

- 📹 SURVEILLANCE CAMERA
- ☎️ EMERGENCY CALL STATION WITH BLUE LIGHT
- 📞 TWO-WAY VOICE INTERCOM
- ▶️ APPROXIMATE, INTENDED FIELD OF VIEW







## **15.0 Comprehensive Plan Narrative**

## Comprehensive Plan Narrative

**Goal 1-** Provide an adequate amount of residential area to accommodate the existing and future residents of Sunrise and which allows for the flexibility to provide a varied mix of residential densities and housing types.

**Objective 1.3** – Protection of Residential Areas: Develop and implement land use controls which promote residential areas that are attractive, well maintained and protect the health, safety, and welfare of residential areas.

**Policy 1.3.1** – Provide, through the City of Sunrise Land Development Code (LDC) buffering requirements between residential and non-residential land uses.

**Policy 1.3.2** - Non-residential uses are restricted to those uses set forth in the Land Use Implementation Section.

Both the Community Hospital and the medical office uses are permitted uses within the Commercial land use designation for the Property. Further, the Site Plan submittal, together with the Project Supplement and Narratives, outlined in great detail the buffering that has been provided between the Project and the adjacent residential communities, particularly the adjacent community to the east. The Project not only meets, but in many respects, exceeds the buffering requirements provided in the LDC.

### **FUTURE LAND USE ELEMENT:**

**Goal 2** – Provide for a varied and diverse mix of commercial opportunities to serve the residents of the City of Sunrise and the South Florida Region.

**Objective 2.1** – Commercial Acreage: Ensure that the amount of land designated for commercial use on the City of Sunrise Future Land Use Map is sufficient to meet the needs of existing and future residents of the City and region.

**Policy 2.1.1** – Permitted uses in the Commercial land use category will be consistent with the Broward County Land Use Plan (BCLUP)

**Policy 2.1.2** – Permitted uses for the Commercial land use category are as set forth in the Implementation Section of this Element.

**Policy 2.1.4** – Encourage new commercial developments to utilize innovative environmental techniques for filtering stormwater run-off above the Biscayne Aquifer.

**Objective 2.2** – Commercial Intensity: Regulate the location, use, type and intensity of commercial acreage.

**Policy 2.2.1** - The City of Sunrise Land Development Code (LDC) further regulates the intensity of commercial use by the establishment of several commercial zoning districts and providing that some commercial uses be allowed by special exception only.

The development of the Property for a community hospital with supporting medical office is strategically off the Sawgrass Expressway and the major corridor of Oakland Park Boulevard and Flamingo Road to allow ready and easy access to serve the residents of the City and the surrounding communities. Property is designated Commercial on the City's Future Land Use Map. The use of the Property as a Hospital with included medical office is a permitted use in the Commerce category of the Broward County Land Use Plan (BrowardNext). The Applicant sought and obtained a letter confirming consistency with the Commerce classification which is included in this Application. As outlined in the Implementation Section of the City's Comprehensive Plan, community facilities – which includes the proposed hospital use – and medical offices are allowed uses for properties designated Commercial.

The stormwater management system proposed will provide water quality and quantity retention within the exfiltration trenches, swales, bio-swales and wetlands prior to overflow into the Master Drainage System, providing aquifer recharge for the Property. The Project is designed in accordance with the Flood Resistant Development regulations. Dry pretreatment is being provided by the use of grassy swales, exfiltration trenches and bio-retention consistent with the best management practices of the SFWMD and Broward County.

As demonstrated by the included Site Plan submittal and Project Supplements and Narratives, the Project meets or exceeds the requirements outlined in the LDC for the development of property zoned B-3. A concurrent application seeking approval of the community hospital as a special exception has also been submitted.

**Goal 10** – Consistency with the provisions of a adequate regional and community services and facilities.

**Objective 10.3** - Efficient Use of Urban Services: Promote the efficient use of urban services by encouraging new development into areas where necessary regional and community facilities and services exist.

**Policy 10.3.1** - When extending new services to undeveloped portions of the City, priority should be given to those areas where other facilities and services are available, or are anticipated to be provided, concurrent with the extension of such new services.

**Policy 10.3.2** - Regional or community libraries, clinics, civic centers, schools, cultural facilities and other public facilities such as passive and active parks, government buildings, and sports complexes, should be located in areas of concentrated activity, such as community or regional shopping centers or major transportation interchanges, in order to allow multipurpose trips, provide easy access by mass transit and minimize parking areas.

**Policy 10.3.3** - Except for schools, regional and community facilities should be located close to major traffic corridors and mass transit routes adequate to carry the volume of traffic generated by such facilities.

<sup>1</sup> Please refer to the Project Letter of Intent for all defined terms.

**Objective 10.4** - Concurrency Management System: Public facilities and services will be available at a level of service (LOS) established within the City of Sunrise Comprehensive Plan concurrent with impacts of development (Concurrency Management System).

**Policy 10.4.3** - To ensure that the necessary facilities and services are available concurrent with the impacts of development, the City shall continue to implement, and amend as necessary, the City of Sunrise Code of Ordinances.

**Policy 10.4.7** - The City's established level of service (LOS) standards for potable water, wastewater, solid waste, traffic circulation, parks and drainage shall be available concurrent with the impacts of development, or that development orders and permits shall be specifically conditioned on the availability of facilities and services necessary to serve the proposed development.

**Objective 14.2 - Wetlands:** Protect the wetlands, hydric soils and the vegetative communities historic to the areas within Broward County for their natural functions, such as storing fresh water, filtering stormwater runoff and preventing erosion.

As noted previously, the Project is sited on property that is strategically located adjacent to major arterials serving the City and the surrounding area, i.e. Sawgrass Expressway, Oakland Park Boulevard and Famingo Road. The Project is intended to bring a much-needed use, i.e. community hospital, to the City, and as such is proposed near a major transportation interchange and major traffic corridors within the City. As part of the site plan application, a concurrency review application will be provided in order to ensure the City that the Project meets the level of services required. Lastly, the Property includes existing wetlands that are and will continue to be protected by a recorded Conservation Easement.

**Goal 15** – To minimize off-site runoff, flooding and erosion.

**Objective 15.1** - Drainage: Eliminate flooding problems while preserving groundwater quality through planned growth. Provide drainage and stormwater management systems through the adoption of appropriate development regulations.

**Policy 15.1.1** - Development shall provide water storage capacity consistent with the regulations and plans of the South Florida Water Management District (SFWMD), Broward County Environmental Protection and Growth Management Department (BCEPGMD), independent drainage districts and the City.

**Policy 15.1.2** - Commercial, industrial, mixed-use and development, as defined by Broward County, shall provide dry pre-treatment for stormwater runoff through grassy swales, ex-filtration trenches, or other means consistent with the best management practices of the South Florida Water Management District (SFWMD), Broward County, independent drainage districts and the City.

**Objective 15.3** - Flooding: Regulate all new development and redevelopment which minimizes flood damage by meeting regulations and plans of federal, state, South Florida Water Management District (SFWMD), Broward County, independent drainage districts and the City.

**Policy 15.3.3** - City of Sunrise Land Development Code shall require public roads and all parking lots to be designed consistent with the criteria of the South Florida Water Management District (SFWMD), Broward County and independent drainage districts.

**Policy 15.3.4** - Minimum floor elevation standards for all developments shall meet the criteria set forth by the Federal Emergency Management Agency (FEMA), Florida Building Code (FBC), the South Florida Water Management District (SFWMD), Broward County, independent drainage districts and the City.

As to all the above policies, please be advised that the Project is being designed in conformance with all applicable development and regulatory requirements. Dry pretreatment is being provided by the use of grassy swales, exfiltration trenches and bio-retention consistent with the best management practices of SFWMD and Broward County. As to flooding, the Project is designed in accordance with all applicable agency's regulations, i.e. federal, state, SFWMD and Broward County. The proposed parking lot and vehicular circulation is designed consistent with the criteria of the City, SFWMD and Broward County. The minimum floor elevation was set at 11 NAVD which meets the criteria set forth by FEMA, FBC, SFWMD and Broward County. There is no independent drainage district having jurisdiction for this site.

**Objective 16.2** - Crime Prevention Through Environmental Design: Employ Crime Prevention Through Environmental Design (CPTED) principles in the site plan review process to reduce the incidence of crime and protect the safety and welfare of all the residents and merchants in the City of Sunrise.

The Project is designed to meet applicable CPTED principles. A Security Report Narrative is included within the Project Supplement and Narratives package provided to the City.

**TRANSPORTATION ELEMENT:**

**Goal 1** - The City will actively promote the provision of a safe, convenient, and efficient transportation system for all modes of travel.

**Objective 1.3** - The City will continue to work with State, County and other local agencies to improve traffic safety involving vehicles, pedestrians and/or cyclists, and take appropriate steps to maintain level of service (LOS).

**Policy 1.3.1** - Traffic signalization, roadway signage and operational capacities (including curb cuts and turn lanes) shall be designed to optimize traffic flows and levels of service (LOS).

**Policy 1.3.6** - The City of Sunrise shall coordinate with the Florida Department of Transportation (FDOT), Broward County Traffic Engineering Division, City of Sunrise Comprehensive Plan April 2018 B-3 Transportation Element Broward Metropolitan Planning Organization (MPO) and private developers to provide the appropriate traffic control devices.

The City, as the owner of the Property, has worked with the FDOT (Florida Turnpike Enterprise) and Broward County Traffic Engineering to coordinate any right-of-way improvements and traffic control to ensure the safe ingress and egress to the Project, while maintaining or improving the operation of the Sawgrass Expressway interchange and operation of the Oakland Park and Flamingo Road intersection.

**GOAL 2** - The City of Sunrise will coordinate transportation and land use planning activities to ensure adequate facilities and services are available to meet existing and future needs of Sunrise's population and economy and address existing and projected intermodal deficiencies and needs.

**Objective 2.1** - The City of Sunrise will coordinate transportation planning activities with land use decisions, ensuring that transportation planning and land use planning activities are properly coordinated in the City, as shown on the Future Land Use Map.

**Policy 2.1.2** - To minimize the impact on locally maintained transportation facilities land uses which generate high traffic volumes will be located adjacent to, or have safe and adequate access to, principal arterials, expressways, or other regionally significant roadway facilities.

**Policy 2.1.3** - The City of Sunrise will coordinate with the Florida Department of Transportation (FDOT), Florida Turnpike Enterprise, Broward County, and the Broward Metropolitan Planning Organization (MPO) for regional transportation facilities and access to the regional roadway network including the Sawgrass Expressway at Pat Salerno, Sawgrass Expressway at NW 8 Street, and SR 84/I-595 at NW 136 Avenue.

**Policy 2.1.4** - Transportation facilities will be planned and located in a manner which minimizes the potential for adverse impacts on adjacent land uses.

The City, as the owner of the Property, has worked with the FDOT (Florida Turnpike Enterprise) and Broward County Traffic Engineering to coordinate any right-of-way improvements and traffic control to ensure the safe ingress and egress to the Project, while maintaining or improving the operation of the Sawgrass Expressway interchange and operation of the Oakland Park and Flamingo Road intersection.

**Objective 7.3** - The City of Sunrise shall continue to participate in cooperative intergovernmental plans and programs that will improve safety.

**Policy 7.3.1** - Continue to coordinate with Broward County to provide a safe transportation roadway network through implementation of, but not limited to, the following programs, activities, or actions:

1. The City shall continue to maintain land development regulations that control the connections and access points of driveways and roads to roadways as prescribed by either the Florida Department of Transportation (FDOT) access management guidance documents and standards, as well as the City of Sunrise and Broward County Land Development Codes.
2. The City shall continue to maintain land development regulations governing on-site traffic flow, parking, and signage.

The City, as the owner of the Property, has worked with the FDOT (Florida Turnpike Enterprise) and Broward County Traffic Engineering to coordinate any right-of-way improvements and traffic control to ensure the safe ingress and egress to the Project, while maintaining or improving the operation of the Sawgrass Expressway interchange and operation of the Oakland Park and Flamingo Road intersection.

**INFRASTRUCTURE ELEMENT**

**Goal 1** – Needed public facilities shall be provided in a manner, which protects investments in existing facilities and promotes orderly, urban growth.

**OBJECTIVE 1.1** - Levels of Service (LOS) and Concurrency Management: The City of Sunrise shall implement procedures to ensure that at the time a development order or permit is issued, adequate facility capacity is available or will be available when needed to serve the development prior to issuance of a building permit.

**Policy 1.1.1** - The following level of service (LOS) standards are hereby adopted and shall be used as the basis for determining the availability of facility capacity and the demand generated by a development:

<b>Buildings</b>	Lowest floor elevation no lower than the elevation for the respective area depicted on the "100-year Flood Elevation Map," or the Federal Emergency Management Agency (FEMA) Base Flood Elevation, whichever is higher.
<b>Off-Site Discharge</b>	Note to exceed the inflow limit of the South Florida Water Management District (SFWMD) primary receiving canal or the local conveyance system, whichever is less.
<b>Storm Sewers</b>	Design frequency minimum to be 3-year rainfall intensity of the Florida Department of Transportation (FDOT) Zone 10 rainfall curves.
<b>Floodplain Routing</b>	Calculated flood elevations based on the 10- year and 100- year return frequency rainfall of three (3) day duration shall not exceed the corresponding elevations of the 10-year "Flood Criteria Map" and the "100-year Flood Elevation Map."

Antecedent Water	The higher elevation of either the control level elevation or the elevation depicted on the map "Average Wet Season Water Levels."
On-Site Storage	Minimum capacity above antecedent water level and below floodplain routing elevations to be design rainfall volume minus off-site discharge occurring during design rainfall.

**Policy 1.1.3** - The Concurrency Management System shall develop procedures to update facility demand and capacity information as permits are issued.

**As part of the Site Plan application, a concurrency review application will be provided in order to ensure the City that the Project meets the level of services required.**

**OBJECTIVE 2.3** -Water Conservation: Conserve potable water by pursuing implementation of the water conservation practices described in the 10-Year Water Supply Facilities Work Plan.

**Policy 2.3.1** Irrigation with potable water will be discouraged.

**Policy 2.3.5** Require low volume water saving fixtures.

**Irrigation water supply shall be via a well. Low volume water saving fixtures will be provided.**

**GOAL 3** - The functions of natural groundwater aquifer recharge areas within the City will be protected and maintained.

**OBJECTIVE 3.1** - Groundwater Recharge: The City of Sunrise shall continue to protect the function of designated aquifer recharge areas through implementation of the following policies and land development regulations.

**Policy 3.1.1** Natural groundwater aquifer recharge areas will be maintained to provide for quality groundwater recharge.

**Policy 3.1.2** The stormwater drainage regulations shall require retention of stormwater runoff to maximize groundwater recharge.

**Over sixty (60%) percent of the Property will be either protected wetlands or pervious area, which provides the function of recharging the aquifer.**

**GOAL 4** - Provide a stormwater management system for the City which will minimize damage from runoff and retain as much of the runoff as possible for a quifer recharge.

**OBJECTIVE 4.4** - Flood Protection: Ensure that all existing and future development in the City of Sunrise is afforded reasonable flood protection through protection of identified floodplains and areas subject to seasonal or periodic flooding.

**Policy 4.4.1** - The City of Sunrise will enforce its Flood Resistant Development regulations throughout the City.

**OBJECTIVE 4.5** - On-Site Runoff Detention: Implement the use of Best Management Practices (BMP) for all stormwater runoff systems.

**Policy 4.5.1** - Encourage the use of grassy swales, dry retention and detention areas, exfiltration trenches, or other means consistent with the best management practices of the South Florida Water Management District (SFWMD), Broward County, independent drainage districts and the City, wherever possible.

**Policy 4.5.3** - Coordinate the permitting of stormwater management facilities with wellfield protection to ensure protection of the drinking water supply.

**The stormwater management system proposed will provide water quality and quantity retention within the exfiltration trenches, swales, bio-swales and wetlands prior to overflow into the Master Drainage System, providing aquifer recharge for the Property. The Project is designed in accordance with the Flood Resistant Development regulations. Dry pretreatment is being provided by the use of grassy swales, exfiltration trenches and bio-retention consistent with the best management practices of the SFWMD and Broward County.**

**GOAL 5** - Provide an environmentally sensitive system of solid waste disposal which reduces the need for sanitary landfilling.

**Policy 5.1.2** - Continue to implement a recycling or source separation program to encourage recycling as a means to reduce demand on capacities at sanitary landfills and resource recovery facilities.

**A Hazardous and Regular Waste Narrative is included within the application package that outlines how all waste is being handled for the Project. Baptist Health has a recycling program utilized throughout all of their facilities, including the proposed Baptist Health Sunrise Hospital.**

**CONSERVATION ELEMENT**

**GOAL 1** - To conserve, protect, and appropriately use the natural resources of the City of Sunrise.

**OBJECTIVE 1.1** - Detention/Retention Basins: The City of Sunrise shall develop and implement land use controls and programs to preserve and enhance surface waters.

**Policy 1.1.1** - The City of Sunrise will require on-site stormwater management systems for all new development and redevelopment to ensure that stormwater runoff meet the requirements of South Florida Water Management District (SFWMD), Broward County and independent drainage districts (where applicable).

**Policy 1.1.2** - The City of Sunrise shall require, as applicable per the City of Sunrise Land Development Code (LDC), pretreatment of stormwater runoff to ensure no direct discharge into surface waters.

**Policy 1.1.5** - The City of Sunrise shall continue to participate in the Broward County Joint Municipal National Pollutant Discharge Elimination Systems (NPDES) Permit and require that all management activity be performed in conformance with all permit conditions.

**The newly restored wetland on the Property is under the protection of a Conservation Easement and will be protected. The stormwater management system will be in compliance with the requirements of the SFWMD and Broward County. It is not under the control of an independent drainage district. The stormwater runoff shall be pretreated as required. As part of the Construction Documents for the Project, an NPDES permit will be required.**

**OBJECTIVE 1.2 - Wetlands:** The City of Sunrise's wetlands shall continue to be conserved and protected from adverse impacts.

**The newly restored wetland on the Property is under the protection of a Conservation Easement and will be protected.**

**Policy 1.2.1** The City of Sunrise shall require that wetlands be preserved within any new development or mitigated in accordance with the regulations of the Broward County Environmental Protection and Growth Management Department.

**The newly restored wetland on the Property is under the protection of a Conservation Easement and will be protected.**

**Policy 1.2.2** The City of Sunrise shall protect, restore, enhance or create aquatic vegetation, wetlands and ecosystems along public shorelines adjacent to passive conservation preserves and low lands including but not limited to: aquatic weed control, restoration or the creation of aquatic grass beds, and aquacultures.

**The newly restored wetland on the Property includes aquatic vegetation, littoral plantings, as well as upland tree islands that are a host to a wide variety of flora and fauna. The tree islands even include bat houses to provide a safe haven to replenish the Florida Bonneted Bat.**

**Policy 1.2.4** The City of Sunrise shall continue to protect and conserve the natural functions of existing soils, wildlife habitats, canals, lakes, rivers and marine habitats during the review of applications for new development and/or redevelopment through the implementation of adopted land development regulations consistent with Broward County's Comprehensive Plan which require at a minimum that:

- a. Site plans for new development identify the location and extent of wetlands located on the property;
- b. Site plans provide measures to assure that normal flows and quality of water will be provided to maintain wetlands after development;
- c. Where alteration of wetlands is necessary in order to allow reasonable use of property, either the restoration of disturbed wetlands will be provided or additional wetlands will be created to mitigate any wetlands destruction;
- d. Proposed developments comply with Broward County's wellfield protection program;
- e. All endangered and threatened plant and animal populations are protected;
- f. All habitats of significant value to existing populations of endangered and threatened species are preserved;
- g. All nuisance vegetation (i.e. Brazilian Pepper, Australian Pine, and Melaleuca) is removed by the developer at the time of development or redevelopment of a site; and
- h. All native woody vegetation of a significant size is preserved or replaced.

**The Property is developed to not only protect the existing wetland and its ecosystem, but to replenish the water supply through the use of pretreated stormwater. All nuisance vegetations will be removed at the time of development. Any trees that need to be removed for site development will be mitigated for and in compliance with the Tree Preservation ordinance of the City.**

**Policy 1.2.5** Encourage the provision and maintenance of a buffer zone of native upland (i.e. transitional) vegetation and littoral zones in and around wetland and retention areas which are constructed or preserved on new development sites.

**The newly restored wetland on the Property includes a buffer zone of native upland vegetation, as well as littoral plantings and upland tree islands. These areas will be monitored and maintained as required by the associated permits, as well as the recorded Conservation Easement covering this area.**

**Policy 1.2.6** - Development permits for development and redevelopment activities shall be issued only if the conservation of wildlife and natural systems is consistent with goals, objectives, and policies of this Comprehensive Plan.

**The newly restored wetland on the Property includes aquatic vegetation, littoral plantings as well as upland tree islands that are a host to a wide variety of flora and fauna. The tree islands even include bat houses to provide a safe haven to replenish the Florida Bonneted Bat.**

**Policy 1.3.4** - The City of Sunrise shall protect the minimum seasonal flows and levels of surface waters, in accordance with the South Florida Water Management District (SFWMD).

**The stormwater system is designed in accordance with the SFWMD.**

**OBJECTIVE 1.4 - Habitat Protection:** All endangered or potentially endangered natural communities including, but not limited to, native vegetation, special vertebrates, wildlife, and wetlands included in the list developed by the Florida Natural Areas Inventory of Florida Game and Freshwater Fish Commission located in passive conservation preserves shall be identified as the basis for management and, in particular, protection of rare or endangered species.

**The newly restored wetland on the Property includes aquatic vegetation, littoral plantings as well as upland tree islands that are a host to a wide variety of flora and fauna. The tree islands even include bat houses to provide a safe haven to replenish the Florida Bonneted Bat.**

**Policy 1.4.5** - The City of Sunrise will not issue any appropriate development permits until such time as the owner or developer shall demonstrate compliance with Broward County Ordinance 89-6 which regulates and protects native vegetative communities and wildlife therein.

**The Property has been designed in accordance with Broward County Ordinance 89-6.**

**Policy 1.4.7** - The City of Sunrise shall promote the use of native plants to provide and improve urban habitat and connectivity for native species.

**The landscape design for the Project emphasizes the use of native plants which improve the urban habitat and connectivity for native species.**

**Policy 1.5.5** - During construction, exposed land areas will be appropriately treated to minimize air pollution, by means such as mulching, spraying, or grassing.

**The exposed land areas will be treated during construction, to minimize air pollution.**

**Policy 1.6.3** - The City of Sunrise shall continue to require through the Land Development Code (LDC) requiring Florida Friendly plantings in all new developments and redevelopment, which will reduce the overall amount of all types of water to be used for irrigation purposes.

**The landscape design is designed in accordance with the Florida Friendly landscape principles.**

**Policy 1.6.8** - In an effort to reduce water usage, the City of Sunrise shall immediately utilize measures outlined in the Water Conservation Ordinance for Landscape Irrigation and Florida Department of Environmental Protection's (FDEP) Florida Statewide Comprehensive Water Conservation Program for Public Water Supply.

**The irrigation design incorporates measures outlined in the Water Conservation Ordinance for Landscape Irrigation and FDEP Florida Statewide Comprehensive Water Conservation Program for Public Water Supply.**

**Policy 1.6.9** - The City of Sunrise shall require new development to implement automatic self-actuating water conservation measures, to be utilized year-round during periods of declared drought. These conservation measures include restricted water use for irrigation purposes to the hours indicated in the South Florida Water Management District's (SFWMD) Comprehensive Water Conservation Plan.

**The irrigation system will utilize a smart controller which eliminate the irrigation cycle when not required due to a rain event. The controller will also be programmed to include restricted use for irrigation to the hours indicated in the SFWMD Comprehensive Water Conservation Plan.**

**OBJECTIVE 1.7** - Hazardous Wastes: The City of Sunrise shall implement activities for the management of hazardous wastes to protect natural resources.

**Policy 1.7.1** - The City of Sunrise shall continue to utilize the programs for hazardous waste contamination by the federal, state and county regulations.

**Policy 1.7.2** - The City of Sunrise shall enforce and strengthen regulation of the generation, storage, treatment, disposal, and transportation of hazardous waste.

**Policy 1.7.3** - The City of Sunrise shall require all hazardous waste generators to properly manage their own wastes as per applicable Federal, State, Broward County and City regulations.

**Please refer to the Hazardous Waste section of the provided supplemental narratives as to how these policies are met.**



# Baptist Health Sunrise Hospital

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