ATLAS SAFETY & SECURITY DESIGN, INC.

May 13, 2023

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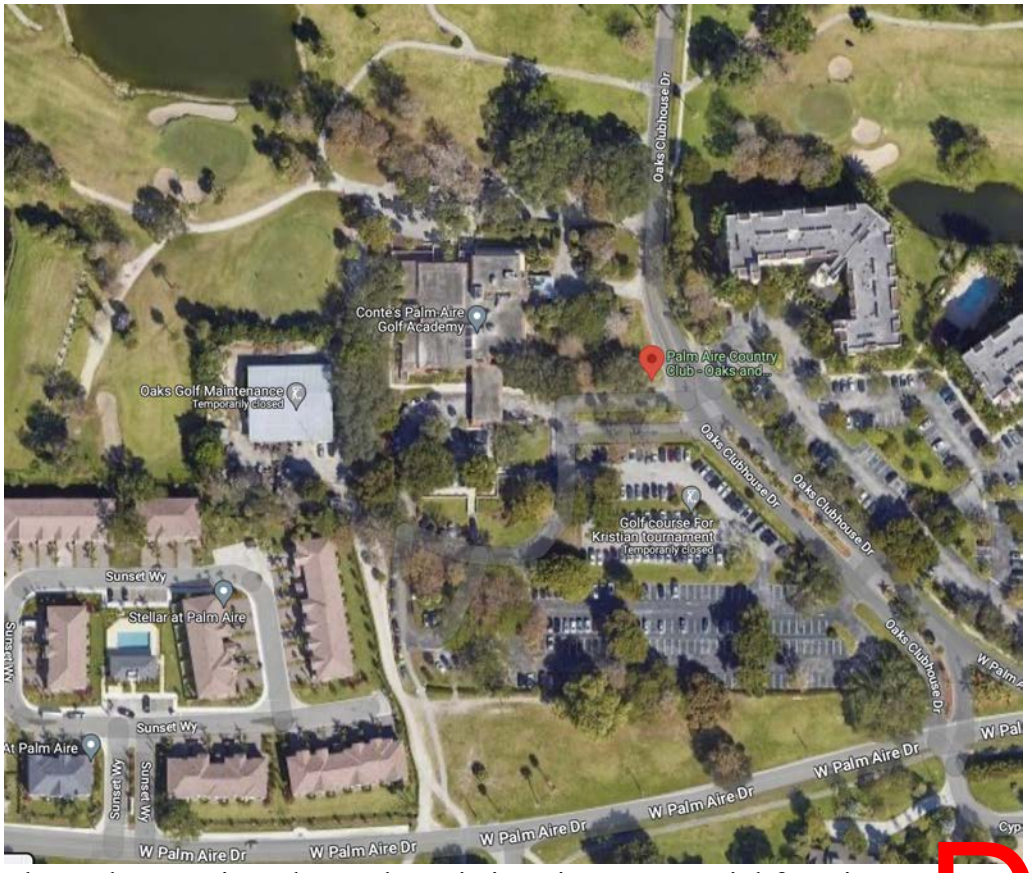
RE: Oaks at Palm Aire - CPTED/Public Safety Plan

SCOPE OF STUDY

Atlas Safety & Security Design Inc. has been retained to undertake a security and CPTED (crime prevention through environmental design) analysis of the Oaks at Palm Aire multi-family housing development that is being considered for permitting by the City of Pompano Beach. This report evaluates the adequacy of proposed security measures, and recommends future security considerations to create a safe multi-family crime-free housing environment.



The Google earth map view shows the existing site commercial function.

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CPTED is part of the City of Pompano Beach Zoning Code Section 155.2415.D, which requires that new infrastructure be designed with security features that lower the risk and probability of crime and loss. The facility design elements should take into consideration and be consistent with the CPTED standards of care for natural surveillance, natural access control, territorial reinforcement, maintenance and management, and legitimate activity support.

The following review is part of the required submission to have CPTED security drawing ***Public Safety*** plan, and a ***security narrative*** explaining the specifications and locations of any specific security features or recommendations.

CPTED principles, performance standards, and strategies have been successfully applied to this housing project. The design development drawings have been reviewed to identify and incorporate CPTED design features, which reduce opportunities for criminal activity to occur. The effectiveness of CPTED is based on the fact that criminals make rational choices about their potential targets. Through use of CPTED principles and strategies, the built environment can be designed and managed to ensure:

(1) The greater the risk and likelihood of illegitimate users being seen, challenged, or caught; therefore, they are less likely they are to commit a crime at this location.
(2) The greater the effort required the less likely opportunistic criminals are to commit a crime at this property.
(3) The lesser the actual or perceived rewards, the less likely persons are to commit a crime at this property.
(4) Opportunities for criminal activity are minimized by good design, and active management, and empowered residents.

This CPTED risk assessment includes a thorough review of the project design drawings, and evaluating each area using basic CPTED approaches and strategies. The consultant shall provide an assessment, and make recommendations (items for consideration) based on the overall building environment. Basic CPTED approaches include, but are not limited to, the following:

1. Natural Surveillance – The placement of physical features that maximize and facilitate visibility by the legitimate building users. This can be achieved by examining the surveillance features of the physical structure of the apartment buildings, common area spaces, parking lots and the surrounding grounds, including shrubbery, lighting, video surveillance systems, window placement, fencing, and other types of physical and architectural design features.

2. Access Control – The use of design features to clearly define where people and vehicles enter and leave the site. Features include well-marked entrances and exits, landscaping plantings and sidewalk paths to guide people, and direct the desired flow of people. Access control uses real and symbolic barriers to reduce availability to unsupervised locations on the facility.

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3. Territorial Reinforcement – Territoriality evaluates the public and private areas for clear delineations of space, expressions of pride or ownership, and the creation of a welcoming environment, through security layering. Territoriality determines the need to create or extend the "sphere of influence," with the use of physical designs, landscaping, and ability to clearly distinguished public areas from private ones. Territoriality creates a sense of community, and promotes ownership with the residents.

4. Order Management – Property management plays a critical role in creating, promoting, and allowing a safe and secure living environment. CPTED considers staff's responsiveness to minor unacceptable acts or incivilities, and the ability to provide operational recommendations that can be implemented that clearly state resident acceptable behaviors, and operational objectives. Management plays a strong role in the screening of residents with background checks, leasing agreements, and directing physical plant improvements in a timely manner.

5. Physical Maintenance – Assessing the repair and general upkeep of a defined space is very important in creating and sustaining a safe living environment. Recommendations for incorporating CPTED into the existing maintenance plan will help preserve property value, and make the property a safer place for the legitimate resident and their visitors. For example, maintenance addresses graffiti, lighting, upkeep of windows and doors, fixing potholes, upkeep of stairways, maintaining the plantings and yard grooming, and make sure equipment is in working order.

6. Legitimate activity support – Having the provided spaces used as lawfully intended, by legitimate building users. Common area spaces are a good example of providing intended spaces for bar-b-q's, recreation, gym, clubhouse, or children play areas. These spaces are designed and desired to be used by residents, and deflect and deter outsiders, trespassers, or persons using these spaces for illegitimate or illegal purposes.

As of March 23, 2023, Governor DeSantis signed into State Law 768.0701. Florida Statutes, is created to read: 768.0701: Premises liability for criminal acts of third parties. Section 8. Section 768.0706 Multifamily residential property safety and security; presumption against liability. —

(1) As used in this section, the term:

(a) "**Crime prevention through environmental design**" has the same meaning as in s. 163.503(6).

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(b) "Multifamily residential property" means a residential building, or group of residential buildings, such as apartments, apartments, or condominiums, consisting of at least **five** dwelling units on a particular parcel.

(c) "Parcel" means real property for which a distinct parcel identification number is assigned to the property by the property appraiser for the county in which the property is located.

(2) The owner or principal operator of a multifamily residential property which substantially implements the following security measures on that property has a presumption against liability in connection with criminal acts that occur on the premises which are committed by third parties who are not employees or agents of the owner or operator:

(a) 1. A security camera system at points of entry and exit which records, and maintains as retrievable for at least 30 days, video footage to assist in offender identification and apprehension.

2. A lighted parking lot illuminated at an intensity of at least an average of 1.8 foot-candles per square foot at 18 inches above the surface from dusk until dawn or controlled by photocell or any similar electronic device that provides light from dusk until dawn.

3. Lighting in walkways, laundry rooms, common areas, and porches. Such lighting must be illuminated from dusk until dawn or controlled by photocell or any similar electronic device that provides light from dusk until dawn.

4. At least a 1-inch deadbolt in each dwelling unit door.

5. A locking device on each window, each exterior sliding door, and any other doors not used for community purposes.

6. Locked gates with key or fob access along pool fence areas.

7. A peephole or door viewer on each dwelling unit door that does not include a window or that does not have a window next to the door.

(b) By January 1, 2025, the owner or principal operator of a multifamily residential property has a **crime prevention through environmental design assessment** that is no more than 3 years old completed for the property. Such assessment must be performed by a Crime Prevention Through Environmental Design Practitioner. The owner or principal operator must remain in substantial compliance with the assessment for purposes of this paragraph.

Thus, this report reflects a systematic examination of the Oaks at Palm Aire Project architectural plans to determine the adequacy of security measures, identify security issues

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not addressed, and provide feedback from which to predict the effectiveness of proposed security measures.

INTRODUCTION

The Oaks at Palm Aire is being placed on a choice piece of real estate at 3701 Clubhouse Drive, formerly the golf course of Palm Aire. The proposed development is in a multi-family residential zoned area in the City of Pompano Beach. There are 286 units planned for, with total of 375 ground level street parking spaces. The housing ranges from 1-bedroom to 3-bedroom units, and 48 units are intended as affordable moderate-income housing, and 244 as Market Price housing.

CPTED is part of the City of Pompano Beach building requirements, which requires that new infrastructure be designed with security features that lower the risk and probability, of crime and loss. The facility design elements should take into consideration, and be consistent with the CPTED standards of care and best practices, for natural surveillance, natural access control, territorial reinforcement, maintenance and management, and legitimate activity support strategies and approaches.

This report is part of the required submission to have a CPTED Public Safety Security Plan, and a security narrative explaining the crime analysis, risk assessment, and specifications of any specific security features, or recommendations

CRIME RISK ANALYSIS

In order to get a better understanding on the overall crime risk factor of the proposed development area, Atlas Safety & Security Design Inc. undertook a CAP (Crime Area Profile) Index analysis. This tool looks at the crime statistics from 2010 to 2023 in a one-mile radius around Oaks at Palm Aire.

CAP Index's CRIMECAST™ products are derived from an advanced comprehensive data analysis evaluation system designed to accurately identify the risk of personal and property crimes at any location in the United States, Canada and the United Kingdom. CRIMECAST™ reports assist CAP's clients with ranking and comparing multiple locations, site selection, security resource allocation, litigation, and underwriting. The CAP Index score represents the overall risk of crime in that geographic area. *Crimes Against Persons* is a weighted average of Homicide, Rape, Robbery, and Aggravated Assault. *Crimes Against Property* is a weighted average of Burglary, Larceny and Motor Vehicle Theft. Census tracts are outlined in blue.

There are approximately 65,322 census tracts in the U.S. Each tract contains approximately 4,562 residents, with similar socio-economic backgrounds. CAP scores each tract alone to determine its risk of crime. Tracts receive a numeric score and coinciding risk shading. State scores compare the site to the average risk of the state in which it resides. County scores compare the site to the average risk of the County in which it resides. Past, Current and Projected crime scores are provided to allow for trending. National scores provide the risk at the site compared to the entire U.S., allowing

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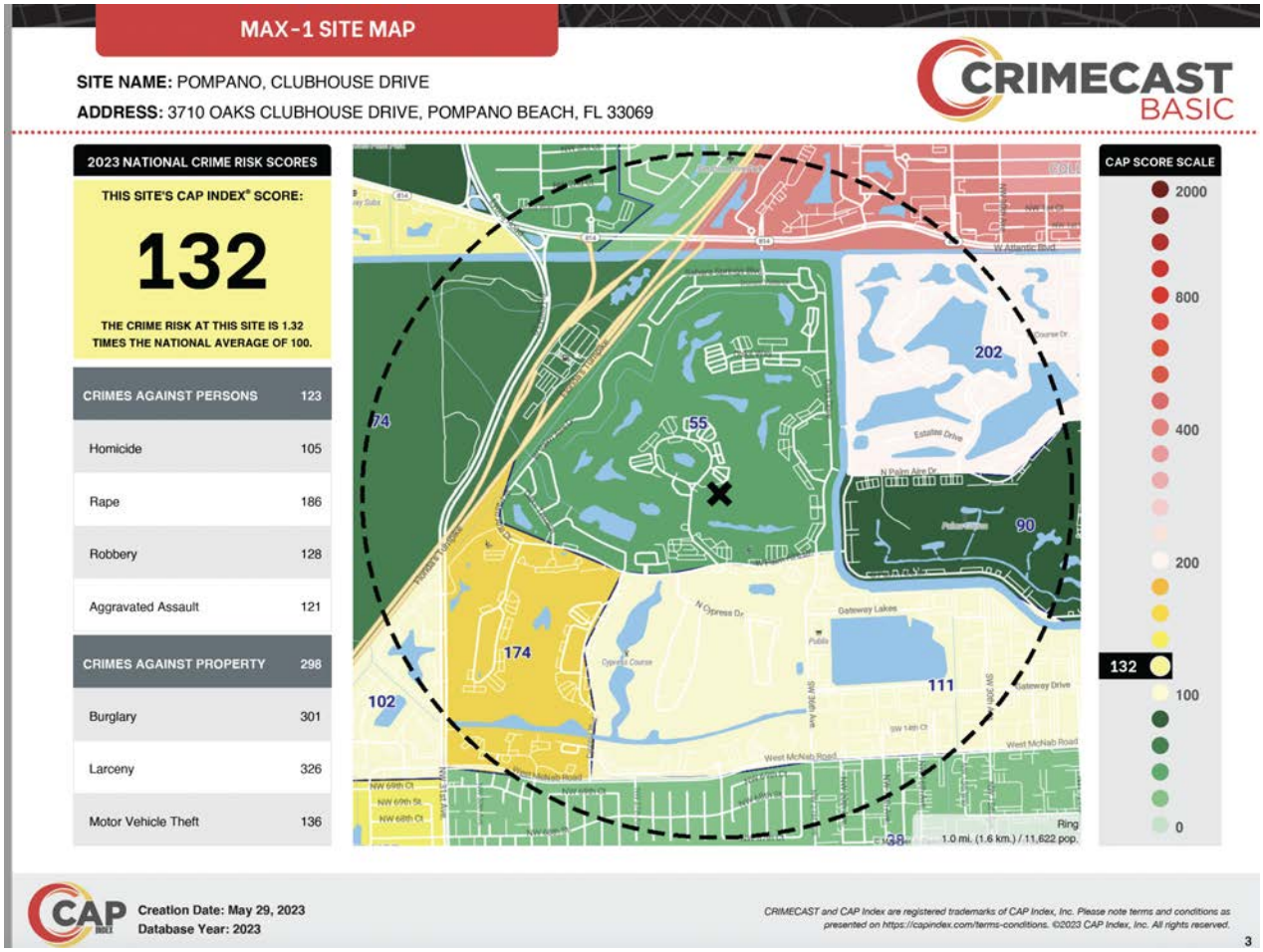
for the ranking and comparison to any other sites. All scores are based on a scale of 0 to 2000, with **0** representing the lowest risk, and **2000** the highest – **100** is *par* or *average*. An example of a score of 500 is 5 times higher than average, and a score of 25, means the risk is 1/4 the average.



In review of this location for a residential apartment complex, the Crime Area Profile Risk Analysis (CAP Risk) Crime Cast Map has been pulled for the one-mile geographical area where project is being undertaken. The CAP Index score for the Oaks in Palm Aire in Pompano Beach, is **132**, which translates that the risk of crime in the mile radius around the property is ***1 1/3 times the national average***. A 100 score is considered a national average rate of risk for crime. The CAP Risk CrimeCast report is designed to identify the risk of personal and property crimes at any location in the United States, derived from national and local police data, client loss reports, offender and victim surveys, economic data, housing and population data, and population mobility patterns. While, ***any*** location in South Florida is considered a higher risk than most of the United States, the number does suggest that the threat and vulnerability of the risk of theft, car theft, robbery, assault, is high enough to warrant reasonable security features, and plan for normal security industry standards and CPTED features. Multi-family residential housing rental apartment buildings are a high asset, target rich environment, and with a rental community, has a more transient vulnerable population. The area around the site is commercial and residential properties, and is in an relatively safe low crime neighborhood.

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Comparing our South Florida crime rates to the national average is always somewhat skewed. When you compare the numbers, and risk level, to what else is happening in *Broward County*, the numbers of the proposed site are average or par. The overall CAP Index relative of Oaks at Palm Aire to Broward County is **86,** or below par with the other areas of the county. Crimes against persons in context to Broward County crime is a CAP index of **73**, or below par with other parts of the Broward County, and crimes against property is **152,** which is above par by 50%. The reason that crime is so low in this area is that the geographical area for the development is the former golf course, which for obvious reasons, doesn't register any crime at all, skewing the results lower.

MAX-1 SCORE SUMMARY

SITE NAME: POMPANO, CLUBHOUSE DRIVE

ADDRESS: 3710 OAKS CLUBHOUSE DRIVE, POMPANO BEACH, FL 33069

CRIMECAST BASIC

The Score Summary includes a total of 90 risk scores - 10 for each of 3 geographic levels and 3 time periods. The National Scores provide the site's risk in comparison to all 50 states and the District of Columbia broken down by crime category, while the State Scores compare the site to the state averages and the County Scores to the county averages. Past, Current, and Projected risk scores are provided to allow for trending.

GEOGRAPHIC LEVEL	UNITED STATES			FLORIDA			BROWARD COUNTY		
CRIME RISK SCORES	PAST 2010	CURRENT 2023	PROJECTED 2028	PAST 2010	CURRENT 2023	PROJECTED 2028	PAST 2010	CURRENT 2023	PROJECTED 2028
CAP Index® Score	**108**	**132**	**136**	**89**	**112**	**115**	**73**	**86**	**90**
CRIMES AGAINST PERSONS	97	123	137	74	96	106	63	73	83
Homicide	130	105	125	100	84	101	82	65	78
Rape	193	186	218	144	148	166	127	137	155
Robbery	88	128	125	75	111	109	60	81	82
Aggravated Assault	91	121	139	67	90	102	57	69	80
CRIMES AGAINST PROPERTY	491	298	282	307	203	192	251	152	146
Burglary	484	301	302	274	195	196	218	144	147
Larceny	539	326	307	341	222	208	284	170	162
Motor Vehicle Theft	235	136	108	168	103	82	128	70	57

With such close proximity to opportunistic type crime areas, and the attractive magnet of a new residential affordable housing, suggests that this facility is going to require CPTED, and security design considerations, to mitigate that potential risk and vulnerabilities. In conclusion, the risk of crime in the proposed development is low for Broward County, but the proximity to major roadways like McNab, Lyons, and the Florida Turnpike, puts the project at higher risk from attracting criminals to this residential development. As a result, ground floor security, good property management, screening of residents, and responsive architecture will require all reasonable security measures be considered to allow the Oaks at Palm Aire to be a safe and secure living environment.

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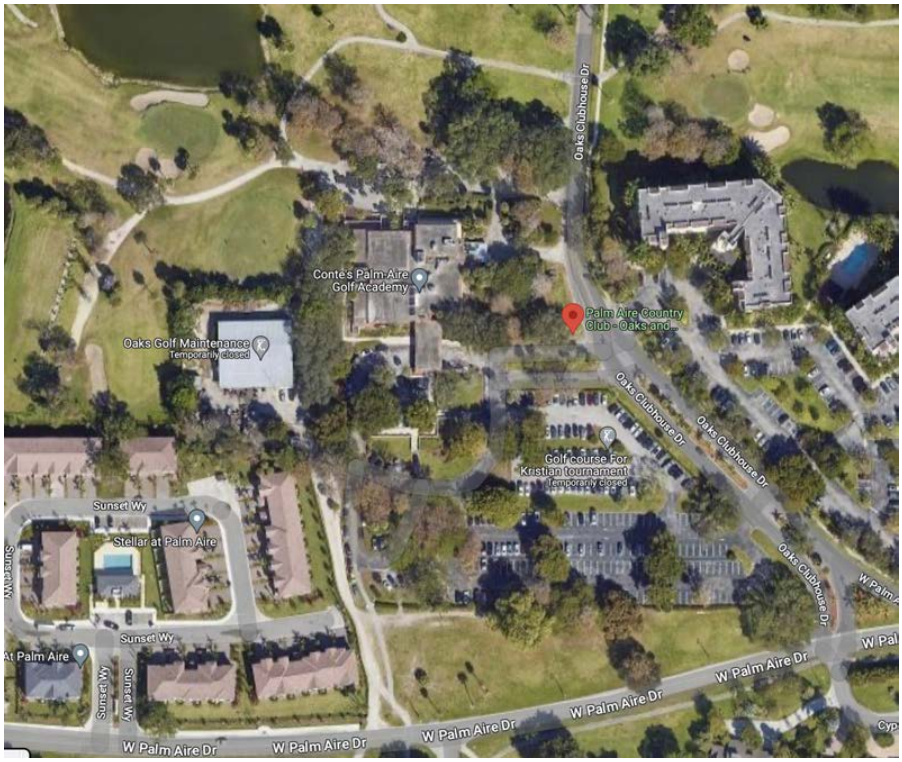
EXISTING SITE CONDITIONS:
The Oaks at Palm Aire development is going on partially developed acreage at 3701 Oaks Clubhouse Drive, Pompano Beach. There are five apartment buildings planned, five stories tall, 4 carriage house buildings, a club house, a golf club house, and 2 garage structures, with street level parking for residents and guests. The typical threats that mixed use apartment multi-family residential housing face are: robbery; vehicle burglary and auto theft; trespass and loitering in and around the site; burglary to the apartments; theft from the common area spaces; drug and gang related activity; assault on residents by outsiders, or their domestic partners; fire, and vandalism.

The Crime analysis for the area near the proposed development in Pompano Beach. reflects a very low crime area, composed of cottage type homes and apartment buildings, but subject to serious threats and influences by the surrounding crime sources. The existing Oaks at Palm Aire area is mostly a golf course. The adjacent residential neighborhood does not have the typical crime challenges of trespass, loitering, drug activity, and illegal dumping. The close proximity to the main highways, provides easy routes for escape from law enforcement. As with <u>all</u> multi-family apartment buildings, the facility perimeter is vulnerable to anyone who desires to come onto the property, unless there is a clear physical boundary that deters and deflects these potential trespassers. Therefore, to limit the exposure and minimize the risk, basic CPTED approaches and strategies of access control, surveillance, territoriality/ boundary definition, maintenance and management, and legitimate activity support, will be employed to deflect and deter those individuals, that come onto the property with criminal intentions.



The proposed development is located proxemic to other rental apartment communities and single-family homes, and a golf course.

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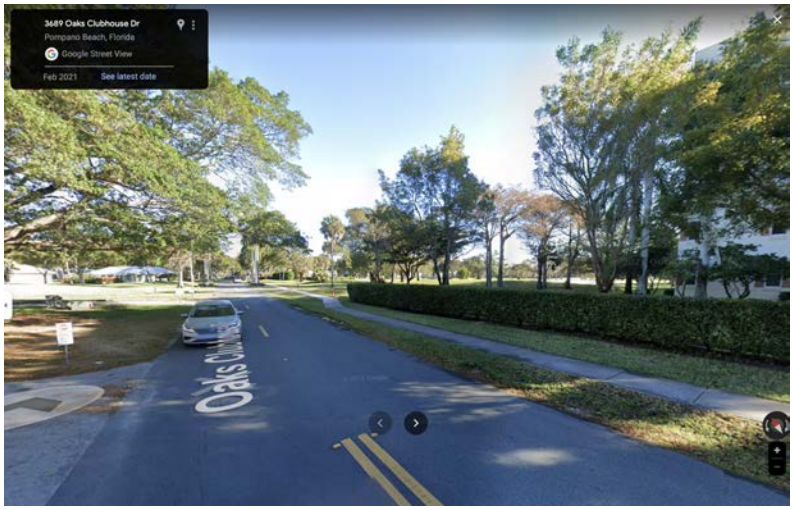
Existing views of the existing neighborhood are shown below.

The Golf Course is to the West, and is being repurposed for this development.



The surrounding access streets are Oaks Clubhouse Drive and West Palm Aire Dr.

The existing roadways will be used for apartment building placement and access.

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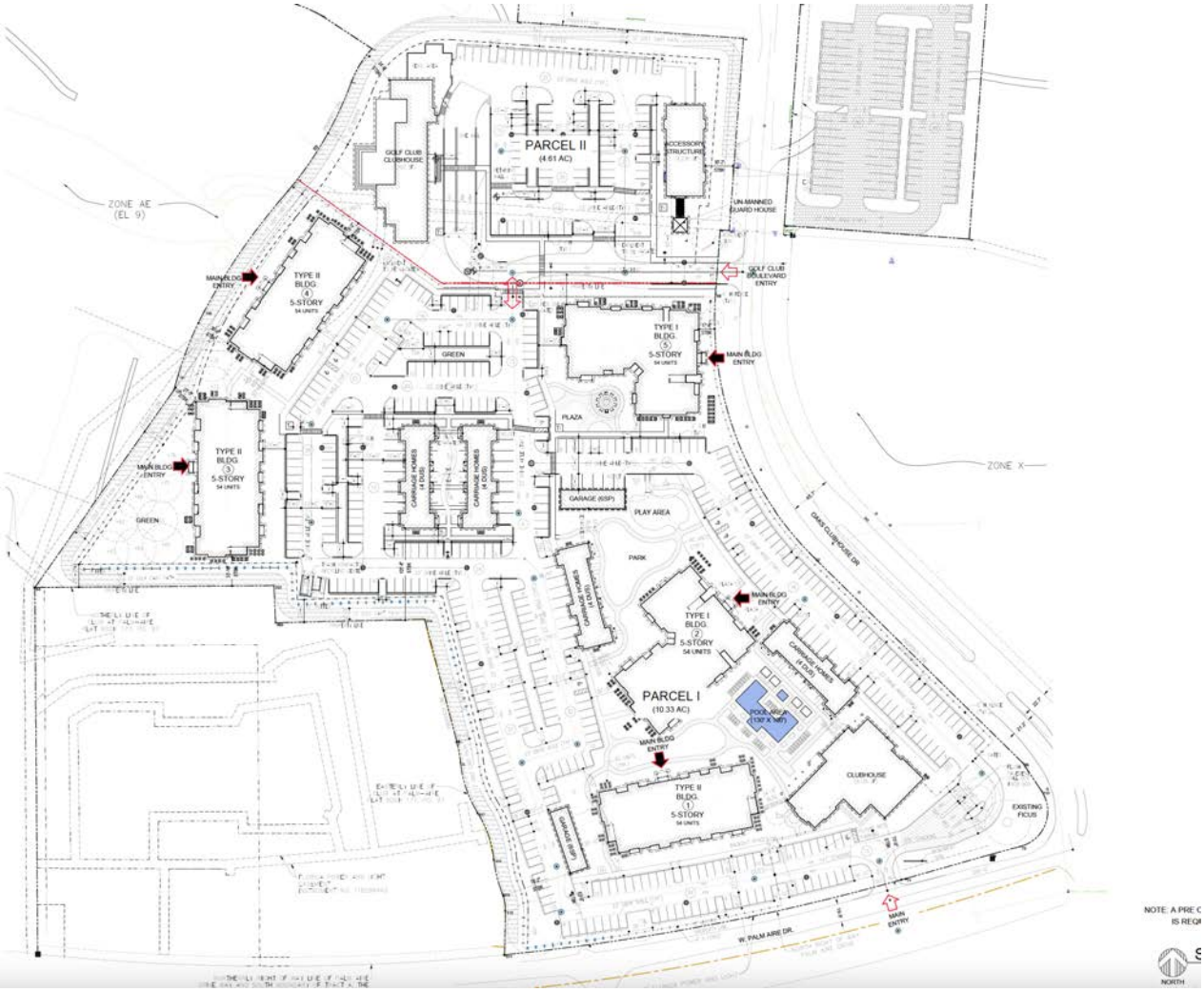
Site CPTED and Building Security considerations:

The site plan shows the primary entrances/exits for the property being off of Oaks Clubhouse Drive, and West Palm Aire Drive. For the purposes of this project, the proposed buildings of the Oaks at Palm Aire are being planned to using CPTED design features. The site plan rendering below shows the siting of the apartment buildings, cottages, clubhouses, and resident/visitor parking.



The Site plan, reflects the planned use of the real estate. Planned access is off of Oaks Clubhouse Drive and West Palm Aire Drive, with two-way traffic. There will be parking lots proxemic to each building, to provide as much parking to residents and guests as possible. The interior roadway will be designed to deter speeding, and speed humps may be added for traffic calming, if necessary, because it is a private roadway within the complex. The siting of the buildings in a courtyard format will provide eyes on the street and parking lots, and exert a level of influence to observe and deter criminal activity.

Having a well-defined functional entry point is critical to maintaining control of the site. There must be sufficient room for vehicles to cue and not stick out in the street. Having an intercom to screen visitors and guests is important, as is having the turn-around lane before the gate to allow someone to exit, if they have not been cleared to enter. Besides

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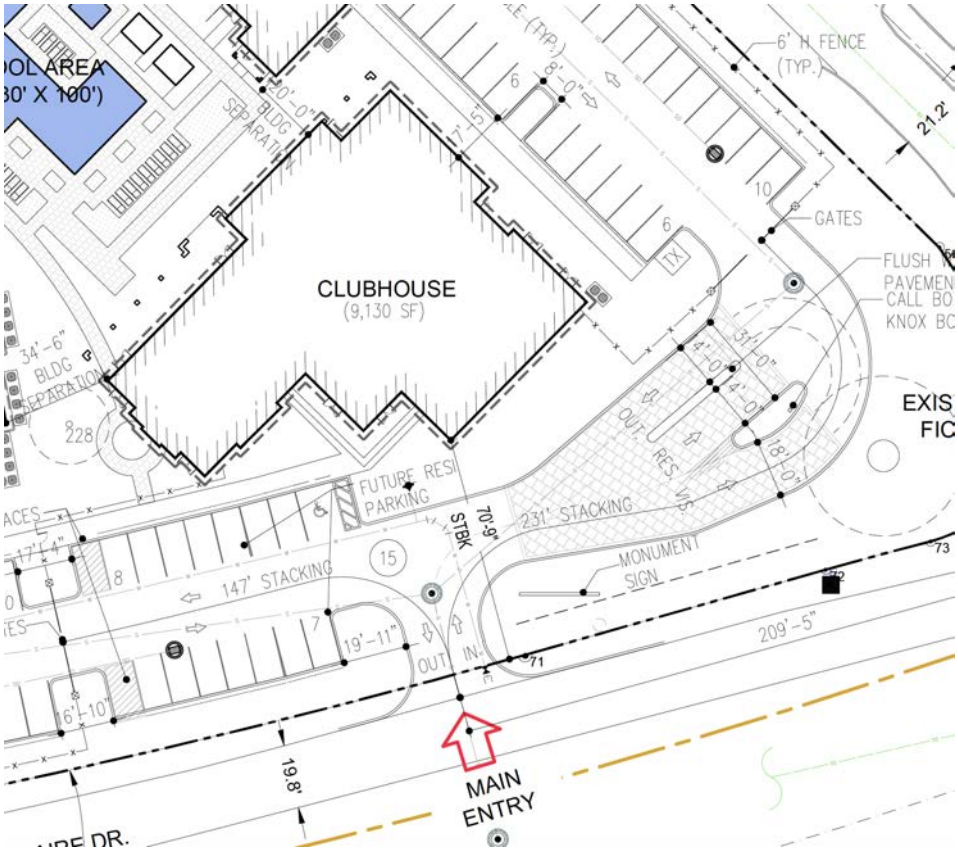
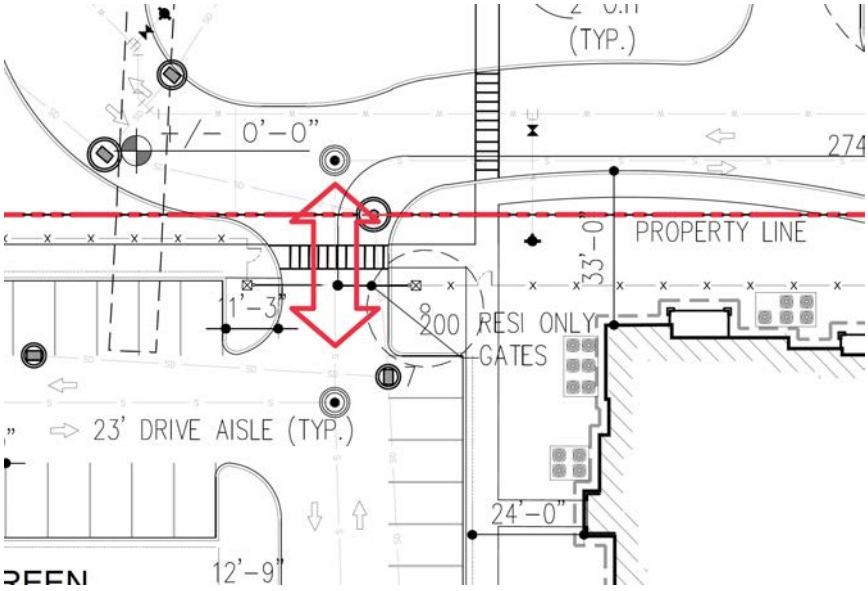
the gate entry system, having a gate arm that activates after a car enters prevents piggybacking and tail gaiting. All the while the entire area is properly illuminated, and under video surveillance. Entrance monumental signage will be placed at the entrances. Existing street improvements in sidewalks, street lighting, street pavers, and appropriate landscaping, makes the new project fit into an upgraded urban environment experience.





A gate entry system will be designed to have controlled access by residents, and visitors to be screened before entry. There will be a turn-around to allow persons to exit that are not

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approved and cleared. A gate arm system will be added to deter piggybacking and tailgating into the complex. License plate recognition (LPR) video surveillance and software may be used to keep a record of entry and exit of vehicles, in case of a criminal incident. The entry gate will be properly illuminated under video surveillance, and well maintained.

There will be a Knox box to allow EMS uninterrupted access to the property through the entry gates. The gates will be fast gates to allow access quickly, and minimize vandalism from impatient drivers. There will be a pedestrian gate that is adjacent and proxemic to the vehicle entry to allow controlled and supervised movement by persons in the development. The pedestrian gate will have a door closer to ensure proper latching, and require a resident code, or phone app for entry. The pedestrian gate will also be under video surveillance and be properly illuminated.

An example of a gate entry system, intercom, and turn around lane.

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The reader on the right picks up the signals from decals or RFID stickers placed on residents' cars. The gate arm goes down after the car enters to stop tailgating.

The choice of swinging or sliding gates is about equal. The speed of the gate is important, and should be as quick as the motor allows to minimize inconvenience and impatience.

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Signage is important to communicate the groundrules of the property.

The site perimeter entry system should safely control how pedestrians enter. The pedestrian gate should have self-latching closer hinges, have low ground cover to allow natural surveillance, good illumination, video surveillance, and resident access control.

CPTED PRINCIPLE #1 NATURAL / MECHANICAL SURVEILLANCE

There are windows in the apartment building on all four sides that facilitate natural surveillance by the residents of the common use areas, parking and grounds. Residents can observe visitors with natural surveillance from their windows, balconies, and patio doors, entering from the street level into the parking lots, and interior courtyard entrances. Wide and well-lit courtyards provide observation from vantage points in the buildings and

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common area spaces. Mechanical video surveillance will supplement natural surveillance for residents and staff.

Elevations of Type I buildings. Windows are on all four sides of the building.

Elevations of Type II buildings. Windows are on all four sides of the building.

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The elevations of the Type III Carriage House apartments with window views.

The elevations of the Type III Carriage House apartments with window views.

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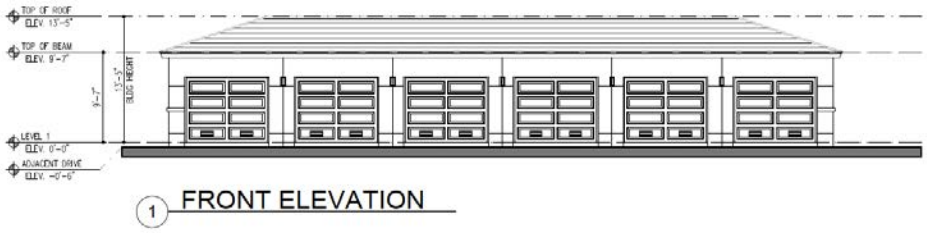
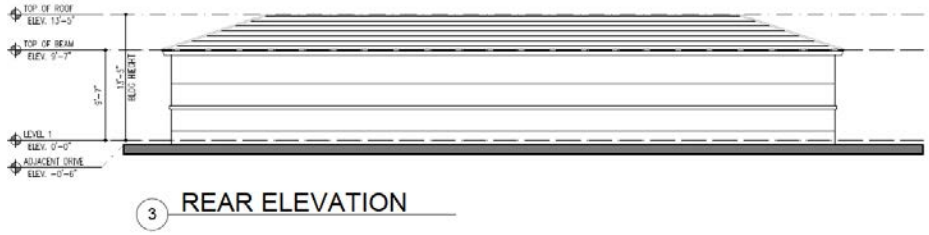
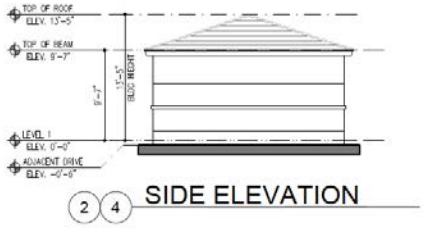
Elevations of the Golf Cart Garage and Guard House







The elevations are of the private car garages with rolling gates.

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The street level elevations above demonstrate plenty of opportunities for natural surveillance by the residents and staff, along with a strong exterior building perimeter, that demonstrates territoriality to direct persons into the buildings at well-defined designated points. The elevations of the development illustrate the availability of natural surveillance from apartment windows, patio doors, and balconies that look outward to the neighborhood sidewalks and residential community, along with the open common area spaces that comprise the proposed development. The building height of five stories is low enough, that residents will be able to see who is coming and going, easily and unobstructed.

The diagrams below demonstrate the typical CPTED goals for residential apartment living.

These sketches demonstrate the desired CPTED goals for new developments

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Mechanical surveillance - Video surveillance is important in monitoring areas where supervision is needed, or being able to detect persons or activity when or where it should not be occurring. There will be video surveillance at the vehicle entrances, the parking lots, the trash compactor and garbage collection areas, lobbies, common use pedestrian paths, gym, leasing office, and building perimeter. Motion activated sensors and infrared cameras may be used on the perimeter boundaries to detect movement; record any activity in what should otherwise be quiet areas; and observe activity that would be unexpected or unusual. It is proposed that all video will be recorded for at least 30 days as per State Law 837, and observable in real time if a monitoring service is used. The system should have local monitoring in the management office, and also be remotely monitored by a professional security company.

The video system that is suggested is something like the Unifi video high definition IP Video surveillance System with advanced hardware and optics for 1080p HD video. The cameras are in secured casings that are weather proof and vandal resistant. The range on the selected cameras exceed 50 feet with total clarity, and the specs show the view can go as far as 89 feet with good resolution. The exterior cameras watching the parking areas and grounds can be mounted on the building walls 25 feet off the ground, so they give good angles of viewing, and are not subject to tampering, or vandalism. The lighting plan illuminates the areas being viewed with excellent resolution. The cameras should be able to use video analytics to make them smart, high resolution, and be observant of unusual events occurring along the perimeter of the building and property.

An example of the Unifi camera mounted high on a wall.

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Mechanical surveillance will use state of the art video surveillance systems, with smart analytics to recognize motion in the driveway, and entrance foyers. Video will be recorded and stored for at least 30 days of records, and be downloadable to law enforcement for forensic evidence, if ever the needs arise, and the video surveillance system should have off-site video recording, and storage of data. There will be warning signage stating that the property is under video surveillance. The owner of the property may be having monitoring remotely at a professional security service.

While it is not the purpose of the Public Safety Plan to specify equipment, the goal is to spell out functional requirements, so the County sees the intention of the technology, and the security integration professionals can specify what is needed or specified. The video surveillance system should be typically a fixed lens, and not pan tilt and zoom. The fixed lens cameras are better quality, and have less maintenance problems. The lens should be in secured casings that are weather proof and vandal resistant. The cameras should night vision capability, because they are being used 24/7. The cameras should be able to use video analytics to make them smart, and observant of unusual events occurring along the perimeter of the building and property.

In addition, the proposed site and building should have:

• Window and glazing in the proposed residential units should occur on all four sides, thus allowing the residents to observe visitors entering from the street into the entrances and parking lots.

• The lighting plan shows the intention to provide excellent illumination to the exterior of the buildings, parking garage and street parking, exterior walkways, public common area spaces, and vehicular entrances for good visibility, identification and accountability.

• Plan for additional lighting at pedestrian entrances and paths of travel, to enhance natural surveillance, and encourage legitimate activity, stranger recognition on major access paths.

• The CPTED goal is to catch any potential landscaping and lighting conflicts, in order to avoid existing or future obstructions, or conflicts to natural or mechanical surveillance, and landscaping and plantings.

• Ensure all surveillance cameras are strategically placed, so they will not be obstructed by the growth of existing, or installation of future landscaping/plantings.

• Design out existing or potential concealment ambush points.

• All exterior building entrances and exits (including service doors), must have unobstructed natural surveillance.

• Any potential vulnerable areas that cannot be covered by electronic monitoring, should be either viewable via natural surveillance, or checked frequently by employees, or designated staff persons.

• All doors should have 180-degree wide-angle ‘peephole’ door viewers, enabling the occupants to view who is outside the apartment door.

• Interior hallways of the residential apartments will have video surveillance placed in the position that permits clear viewing of walkway paths of travel. The design of the apartment buildings has interior corridors do not have chicanes or turns, so this will provide improved visibility, and avoid an ambush, or hiding place. Where appropriate the

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use of corner mirrors will assist persons viewing around corners and hard to see areas, and avoid entrapment or ambush.

Security mirrors allow you to see around corners and avoid ambush from blind spots.

The access control and surveillance plans shown below are for the building types, and provides for a uniform coverage of the means of ingress and egress, elevators, and access points. The Patio sliding doors are marked for security features of laminated hurricane rated glazing, a ventilation lock that allows for openings of up to 4 inches, and a charley bar that prevents the doors from being lifted out of the tracks or slid open. Exit doors are marked to have door position switches, and Detex type push bar alarms, to notify management if an exit door is used other than a fire emergency.

ASSD's strategy for Oaks at Palm Aire development is to place video cameras at all access points to the property including the following areas:

- Vehicle entrances, ingress and egress
- Pedestrian entrances, ingress and egress
- The parking areas
- Entrances to the buildings and ground level hallways
- The Leasing office
- The building amenities like the clubroom, pool, gym, bike storage

The Video Surveillance plan below shows the sight "cones" of camera views. There will be comprehensive parking lot, building, and common area surveillance camera coverage.

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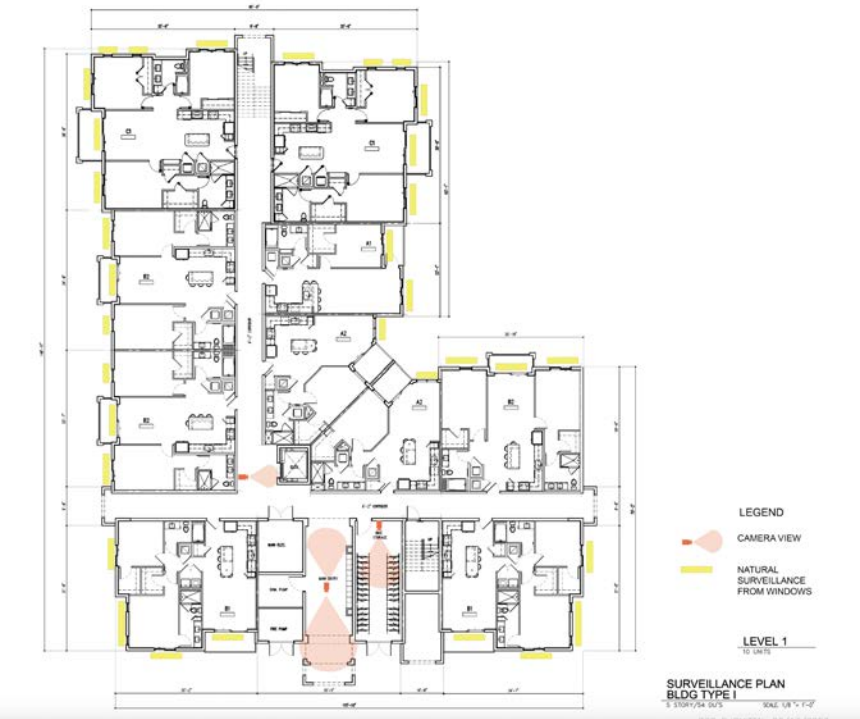
Site Plan showing video surveillance of entries, and public paths of travel.



Surveillance Plan for Type I Apartments.

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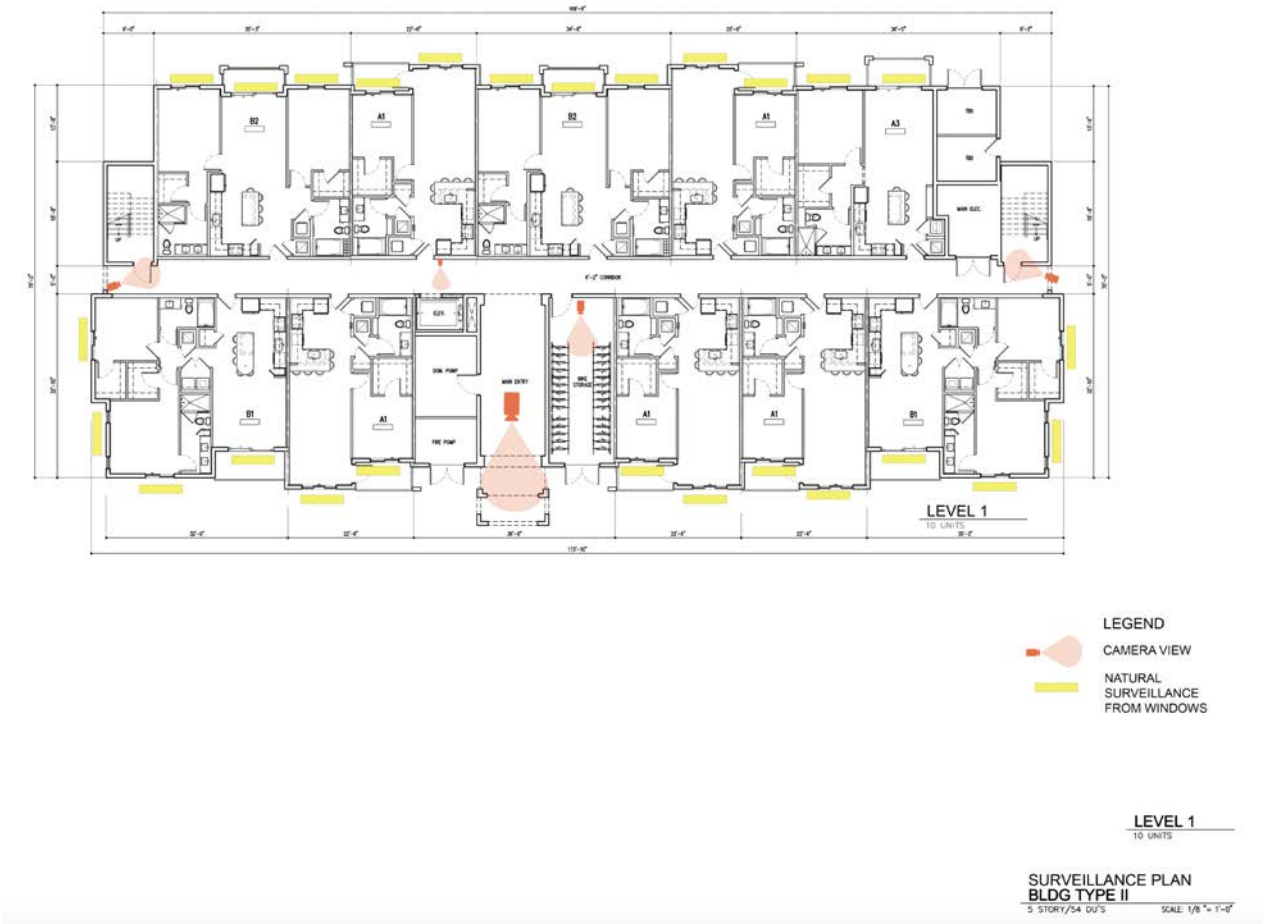
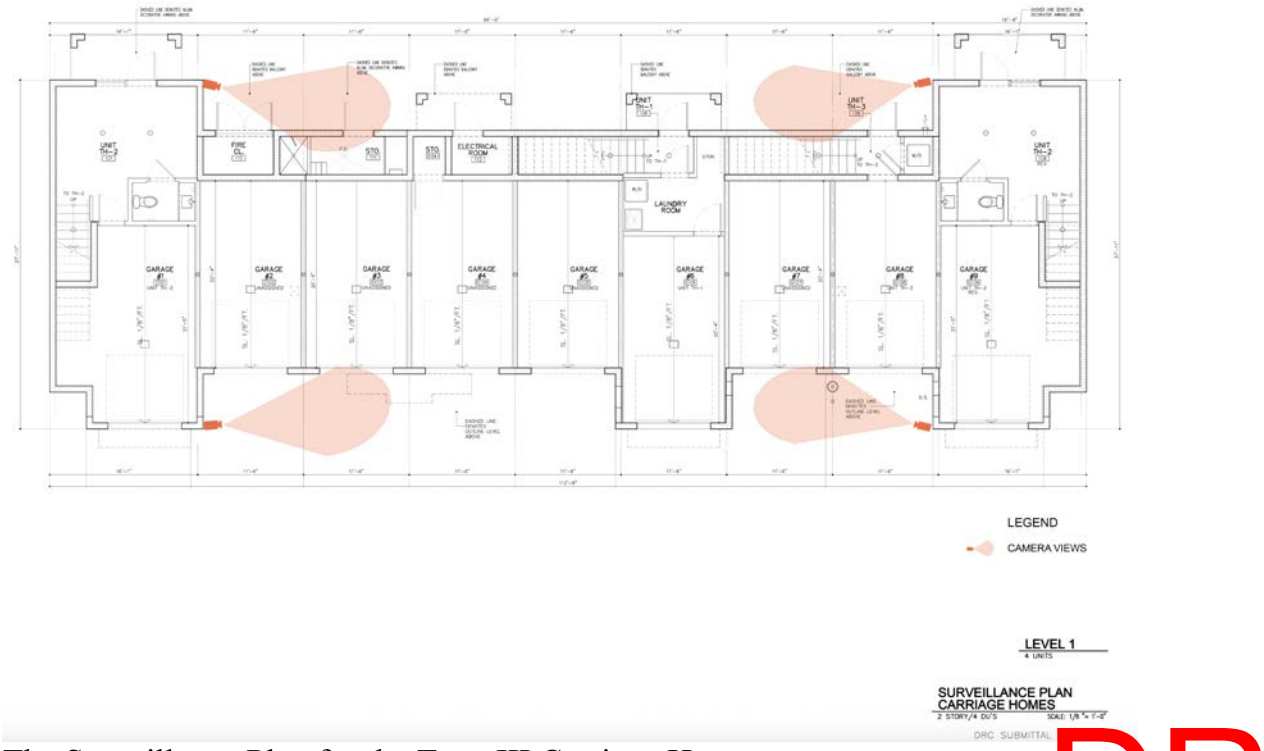


The Surveillance Plan for the Type II apartments.



The Surveillance Plan for the Type III Carriage Homes apartments.

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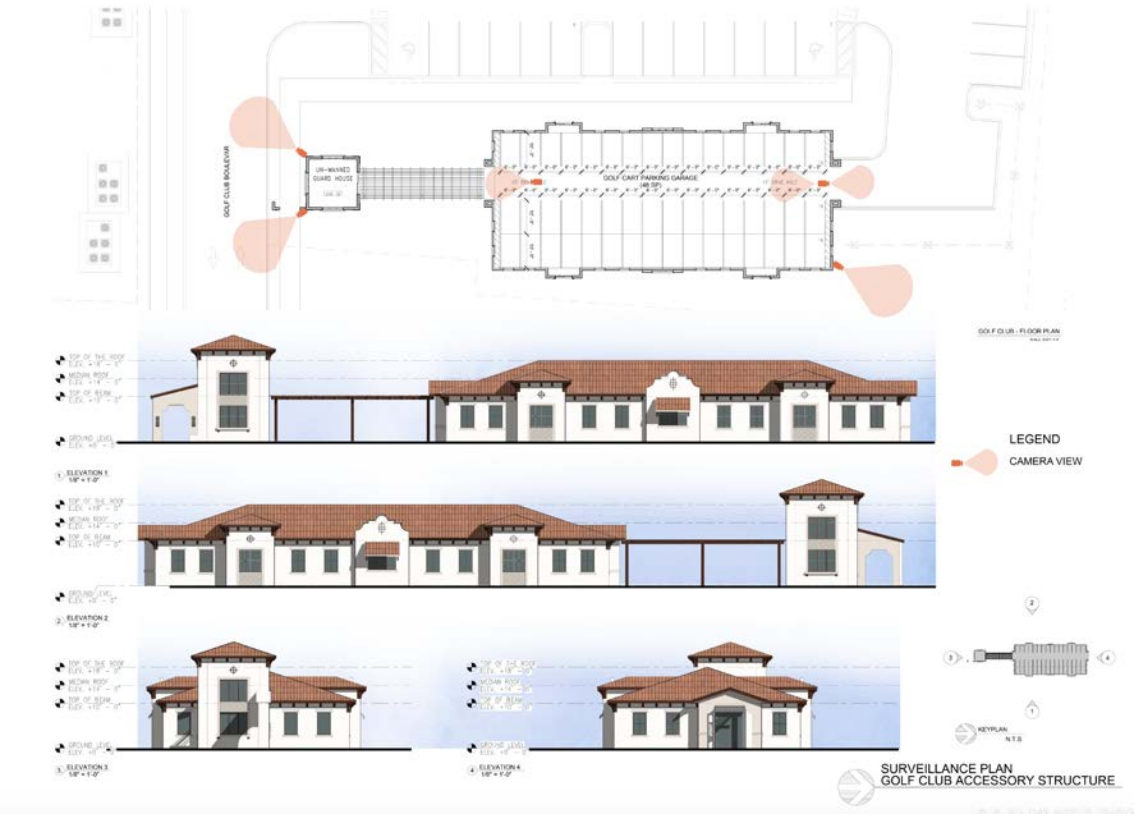
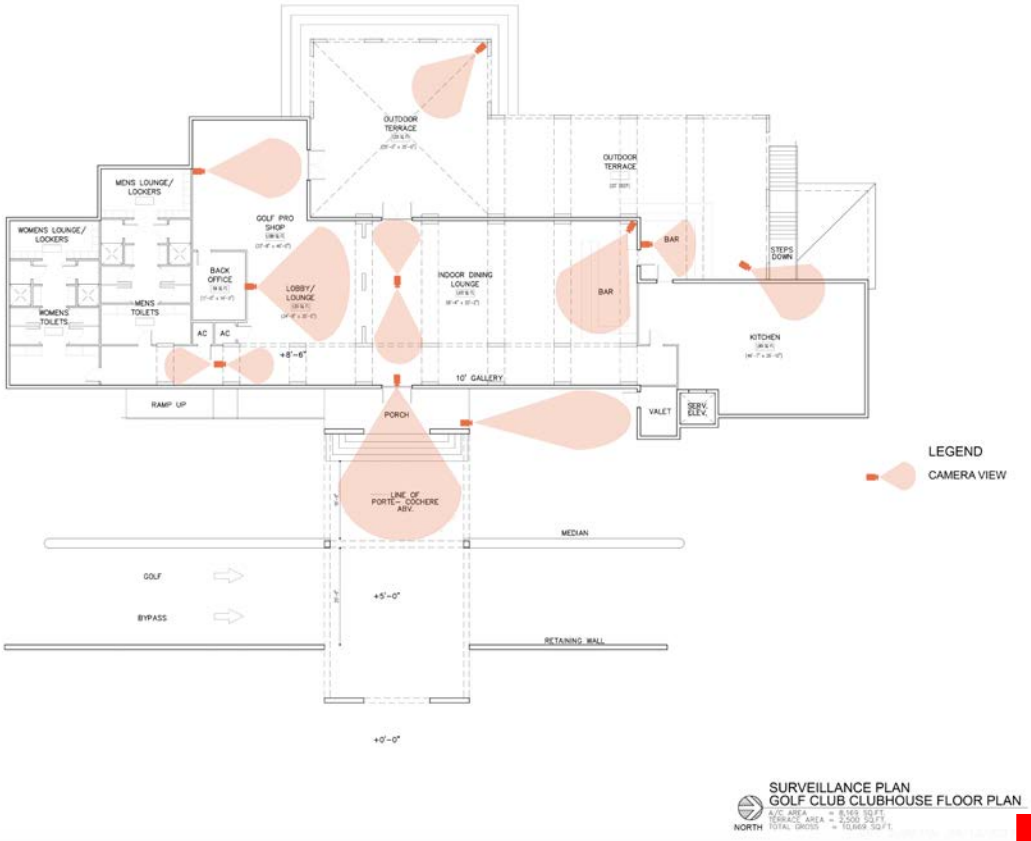


The video surveillance plan for the Golf Cart parking garage.



The video surveillance plans for the Golf clubhouse.

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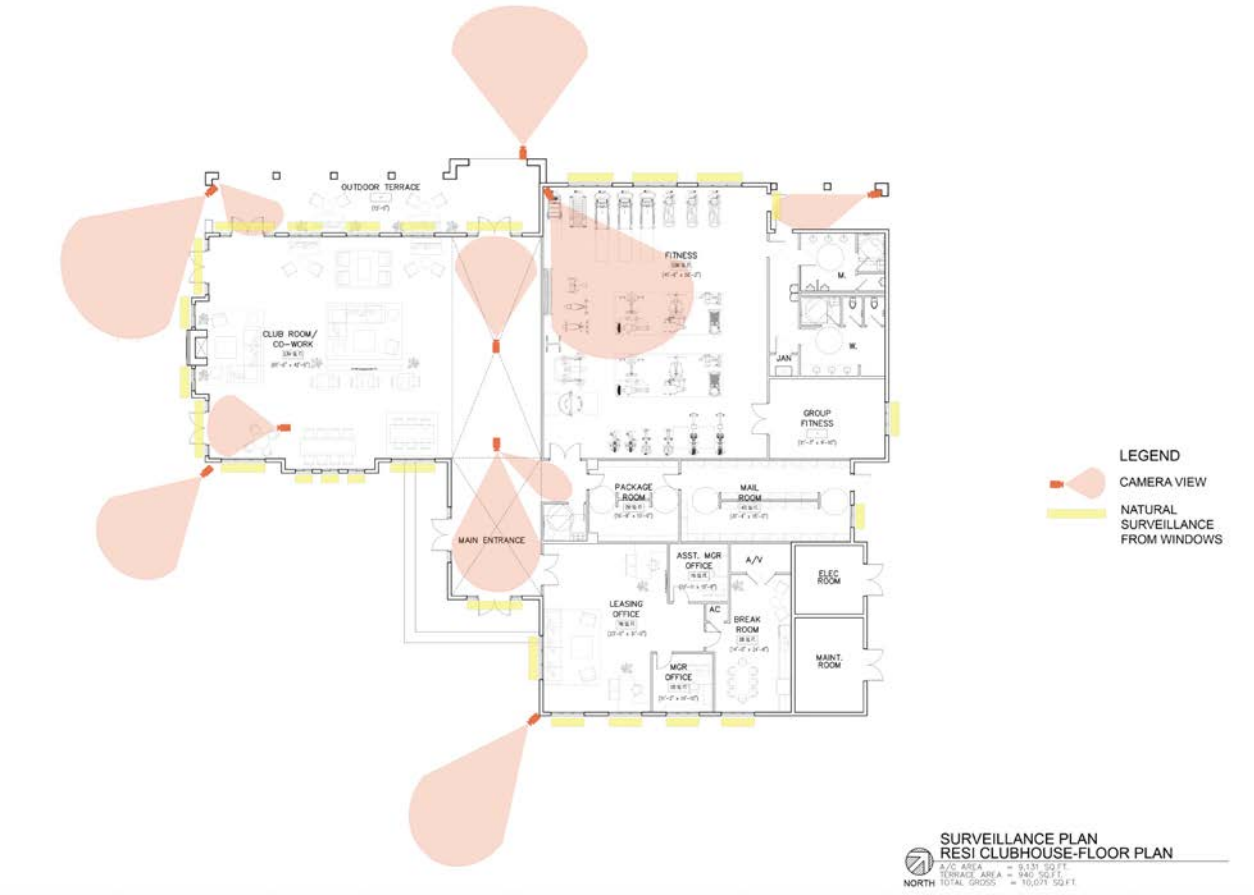
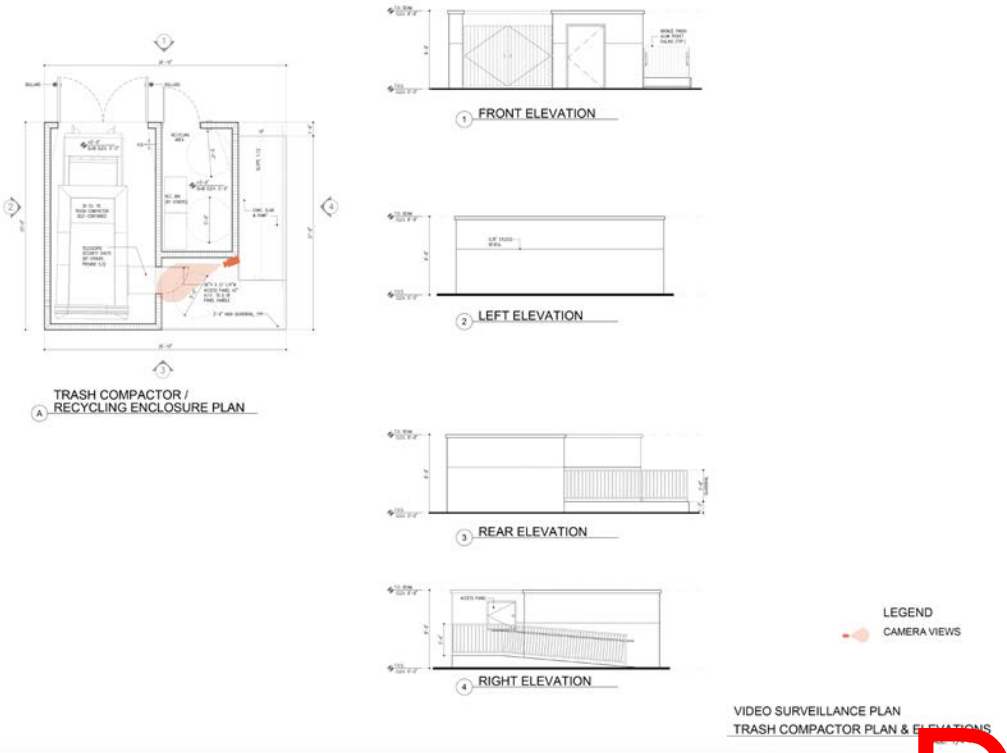


The video surveillance plans for the Main clubhouse and pool area.



The video surveillance plan for the trash dumpster compactor area.

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Surveillance Cameras can be mounted on the light poles, or ceilings for wide viewing angles.

These photos are an example of light poles for the parking lot that uses mounting post for

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the video surveillance cameras. The ease to prewired electricity makes this a desirable installation.

If there is going to be video surveillance on the property, then property management needs explicit signage to create notice to trespassers, or persons looking for an opportunity to steal something, or hurt someone.

The pictures above are examples of posting notice of video coverage of a property.

The use of LED lighting will provide sufficient background lighting for clear resolution of the proposed video surveillance systems. CPTED plays an important role in providing visibility for clear coverage, by mindfully avoiding conflicts of the video cameras lines of sight with overgrown plantings and trees, and careful placement of lighting luminaires to prevent glare into the cameras. The industry standard for resolution is 1080, and the proposed camera system, Axis or Unifi G3 or equal, are excellent video management systems.

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Surveillance cameras, and warning signage will be used on the perimeter boundaries, and the parking areas, and activity areas, to detect movement and record any activity, in what should otherwise quiet, except for building residents, and their guests.

CPTED Lighting Standards: **Natural Surveillance**

Perimeter Lighting – The photometric lighting plans are intended to show that there is adequate security for the site and parking areas, without the effects of light trespass or light pollution. The Broward County minimum lighting level requirements are 1 FC according to Section 8C-3.d.1. Exterior lighting for the development shall also comply with City of Pompano Beach Land Development Code, and zoning regulations. ***However***, new state law (HB 837) cited at the beginning of this report, now requires a minimum of 1.8 FC. Therefore, lighting levels around the building should be a minimum of 1.8 FC maintained lighting is required, and the best type of lighting presently is the source of LED luminaires. Exterior lights around the building may be integrated into motion detection technologies, in order to remain at a minimum lighting level in evening hours, but if motion is detected, then the lights are activated, and or higher levels of light activated. The increased lighting serves as a crime deterrent, and notification to neighbors and cars driving by, that there is unauthorized access to the backyards, since there is a secure perimeter and controlled entrance onto the property. The parking areas meet the lighting level requirements.

Lighting levels must be consistent throughout the complex, in the parking lot, around the common use facilities, and building exterior. The nighttime experience should be a consistent level of lighting, without hot and cold spots, however, the property should not

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be lit up like a nuclear flash, proverbially attracting the local “moths” to the light. Building exterior lighting should be shielded, and dark skies compliant (no sky glow or light trespass) luminaires.

The lighting plan should include a comprehensive detailed description of how CPTED lighting goals will be addressed at this site. Lighting that is specified will be vandal resistant, and use motion sensor capabilities, with alert lights over all exterior doors (both front doors and rear patio doors), and overhangs, main entrances, and exterior pathways. Security motion sensors are very effective in capturing an intrusion, and creating the perception by the intruder of being discovered, therefore these devices should be utilized strategically in high-risk areas of circulation, such as a building design feature area that has an overhang that would attract loiterers and trespassers, who use these areas for concealment, ambush, sleeping, urinating, etc.

The pictures above are examples of attractive LED porch lights, that should be wired in series. The luminaire for the front and back porches should be a shielded LED fixture. The building street number will be adjacent to the front porch light, so that it is illuminated and visible from the street.

Lighting should be primarily concentrated at gateways, doorways, and windows with an even dispersion of lighting to avoid deep shadows or areas of darkness. To enhance security, the lighting engineer will select bright soft lighting and shielded fixtures, or luminaires, to eliminate glare and undesirable light pollution trespass. Wide dispersion of soft lighting is preferred to spotlights, so as to not blind legitimate property users, and make them vulnerable to a surprise hazard, such as an ambush.

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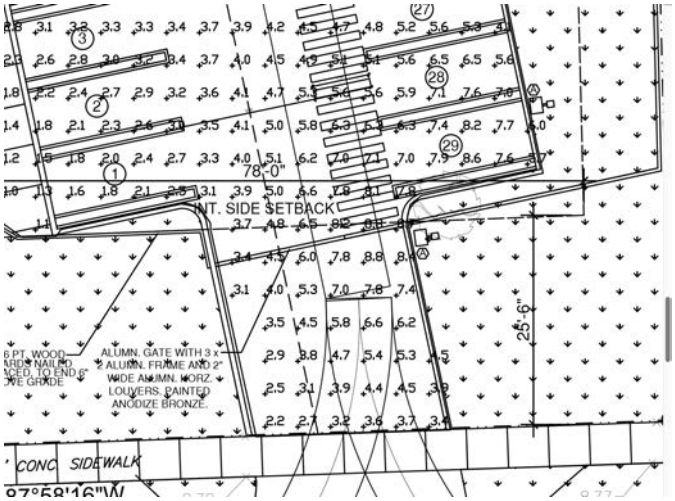
The lighting engineer will choose something comparable to the Lithonia RSX1-LED-P3-40K-R3 luminaire on 15-foot-high poles for the parking lot.

The lighting plan will be providing excellent illumination to the exterior of the buildings, the parking lots, the exterior walkways and public spaces, and vehicular entrance for good visibility and accountability. The lighting will support video surveillance, and smart video analytics will be placed around the entranceways into the buildings, stairwells, and foyers.

>>>> **add in drawing of photometric lighting plan**

The photometric plan of the parking lots will have a projected average of 5.1 footcandles, a maximum of 9.2 FC, and a minimum of 1.8 FC. The proposed photometric plan for the development will show a uniform level of lighting and dispersion. Lighting will be shielded, and are energy efficient lighting sources. There is adequate lighting in the parking areas, common use areas, around the building exteriors, and the vehicle entrance and exit. The hallways will have an average lighting level of 16.2 FC, with a maximum of 22.6 FC.



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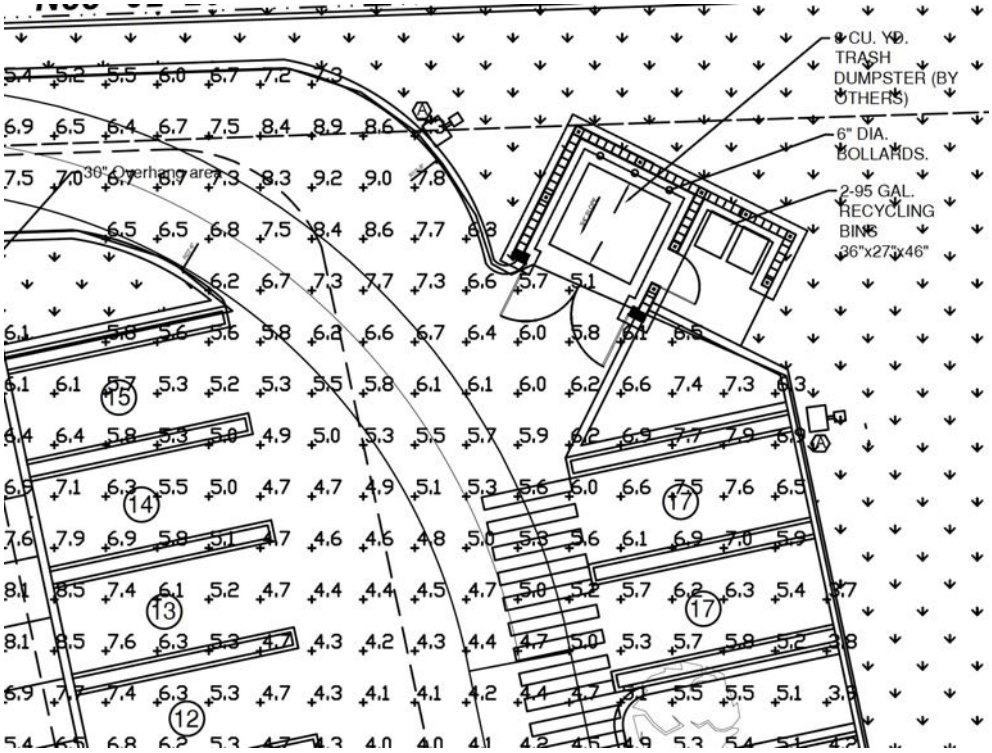
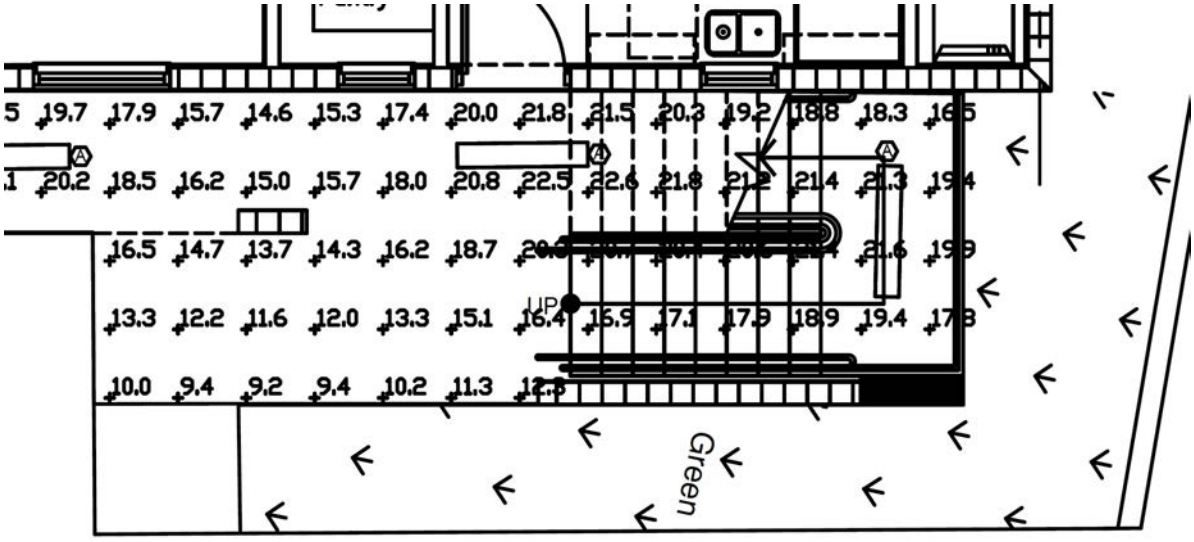
This example of a photometric plan will be highlighting the vehicular entrance to a multi-family residential complex lighting levels is shown above, with no light trespass.



This is an example of what the photometric plan will show for the garbage dumpster/ compactor area. The lighting levels will be good, and will support natural and mechanical surveillance.



This is an example of what the photometric plan for the apartment hallway lighting might look like. It needs to be bright enough for is for natural and mechanical surveillance.
The photometric lighting plan will provide adequate lighting for the site and parking areas, without the effects of light trespass or light pollution. The vehicle entrances light levels shall be a minimum of 1.8 footcandle (FC) or greater, as per Florida state law. It will be

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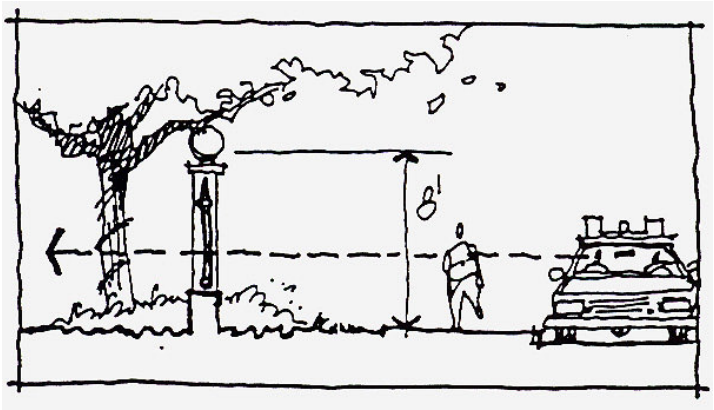
important to view any illegitimate activity on the site and around the buildings. Therefore, lighting should be uniform and consistent, with enough lighting to be able to observe movement by any potential trespassers.

When the lighting plan and the landscape plans are not coordinated, you have very expensive tree lighting! The goal is to stagger the trees and the site lighting, to complement each other, and not compete for the same space.



Pedestrian lighting enhances public safety and increases natural surveillance. Pedestrian lighting enhances public safety and increases natural surveillance. The diagram demonstrates the field of unobstructed vision from pedestrian paths, with fencing defining the paths of travel and tree canopies, and having ground cover pruned to avoid creating hiding spaces, or places for ambush.

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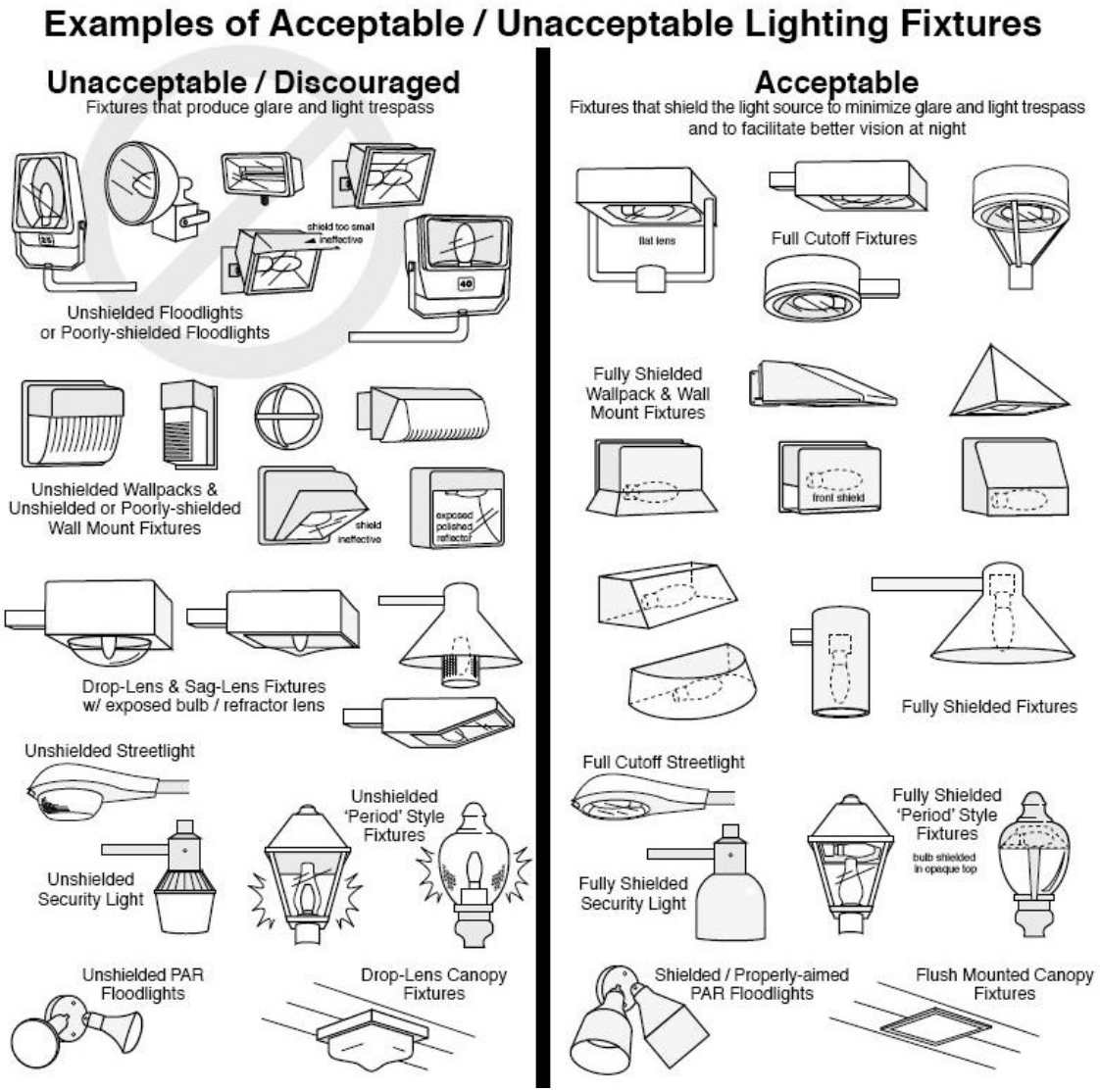

This chart demonstrates acceptable lighting luminaires that avoid light trespass.
In addition, the lighting should:

• Includes a comprehensive detailed description in the security narrative plan on how CPTED lighting standards will be addressed at this specific site to meet local code requirements and security best practices.

• Security motion sensors are very effective in capturing an intrusion and creating the perception by the intruder of being discovered, therefore these should be utilized in strategically targeted areas after careful consideration, especially any building design feature area that has an overhang that would attract loiterers and trespassers who use these areas for concealment, ambush, sleeping, urinating, etc.

• Lighting should not over-illuminate or create shadows, sky glow or light pollution.

• To enhance security, use carefully focused bright soft lights with shielded fixtures to eliminate glare, and undesirable light pollution trespass.

• Adequate soft lighting is preferable to spotlights, so as not to 'blind' legitimate users, and make them prone to surprise hazards, such as an ambush. With soft bright lighting the field of vision is greatly extended.

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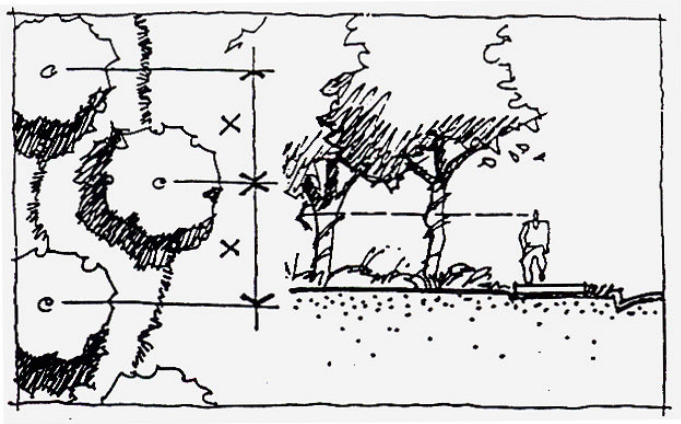
• Lighting luminaires used on the back and front porches, will be wired in series, and automatically turned on when the sun goes down with a photometric sensor, until sunrise to provide illumination evenly to the back yards, and front door entrances.
• Pedestrian level lighting will be added to the walkways around the property.
• Lighting will be added along sidewalks and community multi-purpose spaces, and any children areas or tot lot.
• Porch lighting is wired *in-series,* so that the entire development has uniform lighting after dark, for the *front* and *back* porches.
• Unit numbering shall be placed under the front porch light, and should be at least 5-inches in height, to allow easy reading and visibility from the street.

Fencing and Plantings
Natural surveillance is supported on the building perimeter with ground floor plantings and hedges no higher than 32 inches in height, and with *mature* tree canopies, a canopy no lower than 8 feet. These parameters will allow a clear zone of natural surveillance for police and residents, to be able to see clearly around the perimeter, and into the property.

Plantings should be maintained to be no higher than the perimeter wall or fencing on the boundaries. Mature tree canopies should be maintained clear under 8 feet, with a tree trunk six inches in diameter or greater. If new saplings are planted, do not mutilate them to comply with the canopy requirement, until they are mature trees with a six-inch diameter trunk or greater, and if the tree canopies are blocking the field of vision.



The diagram illustrates the zone of visibility over the groundcover and under the canopy. The border definition will be improved with an attractive code compliant metal picket fencing with plantings, at the property entry points, and the main pedestrian travel paths.

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The pictures above are examples of CPTED compliant plantings that create setback from ground floor windows, yet promote visibility and natural surveillance, and deny hiding spaces.

The elevations illustrate where the trees will be located by the apartment buildings.

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The elevations illustrate compliant plantings and lines of sight for natural surveillance.

Building Identification - Ensure buildings are clearly identified by street number and building numbers to prevent confusion, disorientation, and unintended access to persons trying to find the building. Street numbers should be plainly visible and legible from the street or road fronting the property. Each building entry should clearly state the unit numbers accessed from than entry. Street numbers should be made of durable materials, preferably reflective or luminous, and unobstructed by foliage.

Building number signage should be visible, lighted for evening viewing, and have good color contrast. Building and unit numbers should be illuminated so that they are visible from the street, and by EMS and law enforcement responding to an emergency.

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The numbering signage will be at least 5-inches, and visible from the street. Lighting the back porch is equally as important, and can use motion sensor technology to detect movement when not in use, and shall be wired in series to provide a uniform level of lighting. With the advent of LED lighting, the cost in negligible for operations, and removes the excuse of the tenants to turn off the lighting, because they think it is going to add to their utility bill. All porch lighting will be considered common use space functions, and maintained by the owner/property management.

CPTED PRINCIPLE #2 NATURAL / MECHANCIAL ACCESS CONTROL

The site is accessed through two points, one on Oaks Clubhouse Drive, and the other on West Palm Aire Drive. Pedestrian access can be from sidewalks that are adjacent to the vehicle entrances.

Perimeter Access Control will be accomplished with attractive fencing on the boundaries. A vehicular gate at each entrance into the parking lot is recommended for access control for residents and their visitors. The vehicle entrance from West Palm Aire Drive will have sliding or swinging gates. The Oaks Clubhouse Drive vehicle entrance will be bracketed with the perimeter fencing, but does not show any vehicle gate access control system. There will be video surveillance and warning signage (No trespass, and Video Surveillance Coverage), that serves as symbolic deterrence to trespassers and unauthorized access. Pedestrians walk from the exterior street sidewalk to the primary site entrance, where they can be observed with video surveillance. There will be video surveillance of the parking lots, as well.

Attractive picket fencing, shall be used to separate the real estate between the apartments building exteriors, and the adjacent properties and allow natural surveillance. This type of fencing will reinforce territoriality and boundary definition. The sidewalk promenade that enters from roadway will be using Defensible Space principles of security layering (transitioning Public to Private Spaces), and encourage use by the legitimate users (residents and their assigned approved guests) of the property.

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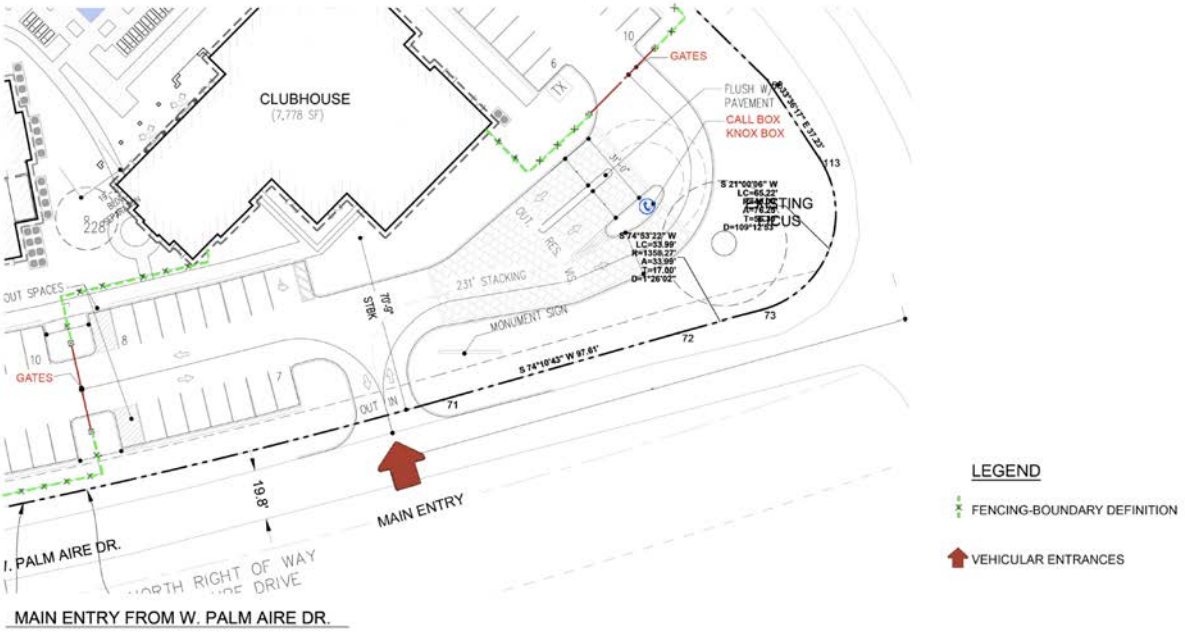
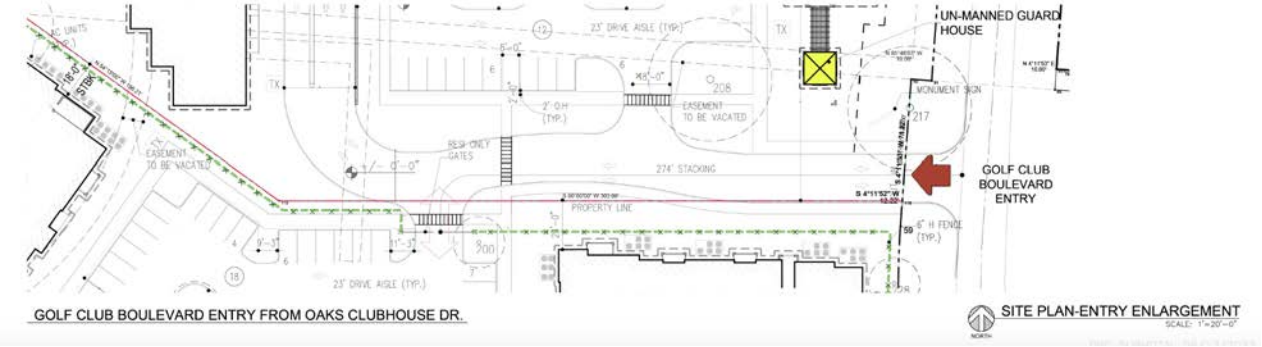


MAIN ENTRY FROM W. PALM AIRE DR.

The entrance from West Palm Aire Drive has vehicle gates restricting access to the apartment building parking lots.



GOLF CLUB BOULEVARD ENTRY FROM OAKS CLUBHOUSE DR.

However, the entrance off of Oak Clubhouse Drive is **not** restricted with sliding gates because there is public access to the golf clubhouse. If a person tries to turn left into the apartment parking lot, there is an access-controlled sliding gate.

License plate recognition (LPR) video surveillance and software *may* be used to keep a record of entry and exit of vehicles, in case of a criminal incident. The entry will be properly illuminated, and under video surveillance, and having warning signage.

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An example of a gate entry system, intercom, and turn around lane, when you have the real estate to support it. The vehicle entry will be under surveillance to record the vehicle and pedestrian traffic. The Oaks at Palm Aire Apartments will be using gate control for vehicles or pedestrians wherever feasible. Access Control will be with video mechanical surveillance, lighting, natural surveillance by residents, and warning signage about trespass and video.

Access control onto the parking lot and site will be accomplished with attractive mechanical sliding or swinging gates, and attractive picket fencing on the boundaries. The CPTED goal is to have pedestrians walk around the building exterior and walk into the courtyards and common area spaces, where they can be observed and monitored. The following are examples of vehicular access control gates the designers may consider for boundary definition and access control delineation:

Examples of sliding gates for the development.

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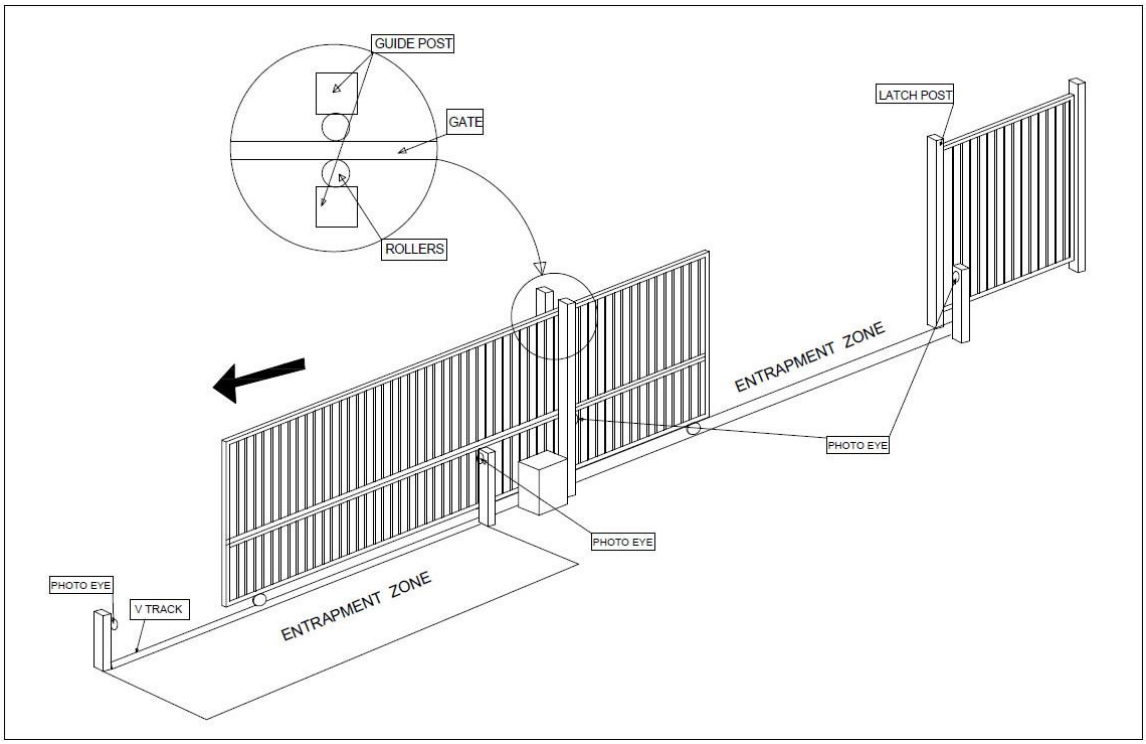

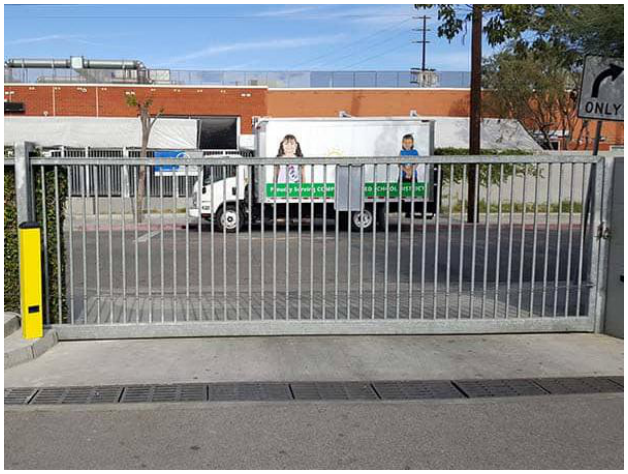

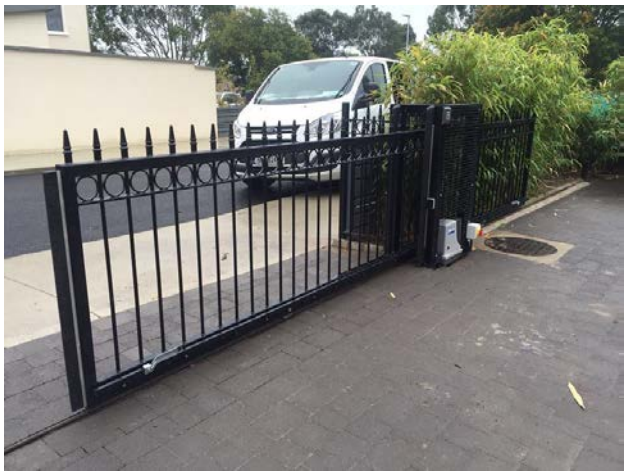

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Examples of sliding vehicle gates.

Parking lots, by design are at greater risk of loss and theft, car burglary, personal assaults, especially when confronting someone trying to break into your car. This is why natural surveillance is so important to this vulnerable activity on the proposed property. Theft of personal identification in vehicles can lead to identify theft fraud. Violent robbery incidents have resulted in serious personal injuries and death to residents, guests, customers, and employees. Therefore, there will be no gaps in video surveillance coverage of the parking areas.

Parking areas should be *clearly designated* for authorized resident parking, and a designated areas for guests, employees, loading zones, and handicapped parking. At ***no time***, should the *name or unit number* ***ever*** be marked on the parking space that could identify if a person is home, or out of their apartment. Signage will be posted in parking areas forbidding vehicles other than authorized guest and employees to park, in the private resident parking areas.

Speed *humps* may be placed strategically throughout the planned parking lot to curb speeding. Speed *bumps* are no longer preferred or desired because of the potential for accidents and liability for persons tripping over them, or bicycles, or motorcycles spilling on them.

Examples of well-placed and marked speed humps for speed control. The parking lot is under natural surveillance from the windows of the adjacent apartment building units.

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Signage is critical for safe application of speed control devices, and giving adequate warning to drivers so they can respond appropriately.

Doors and access control to the apartments: The front entry doors for the apartments shall be hollow metal, and there should be a break resistant vision panel, or a 180-degree wide angle door viewer, on all exterior doors. The goal is to provide an opportunity to visually screen visitors or vendors in the event of an attempted criminal ruse entry. The door vision panel should be on the *opposite* side of the door handle, to limit reaching through a broken panel, and accessing the door handle. Vision panels will be on the opposite side of the door handle.

Examples of door vision panels on the opposite side of the door handle.

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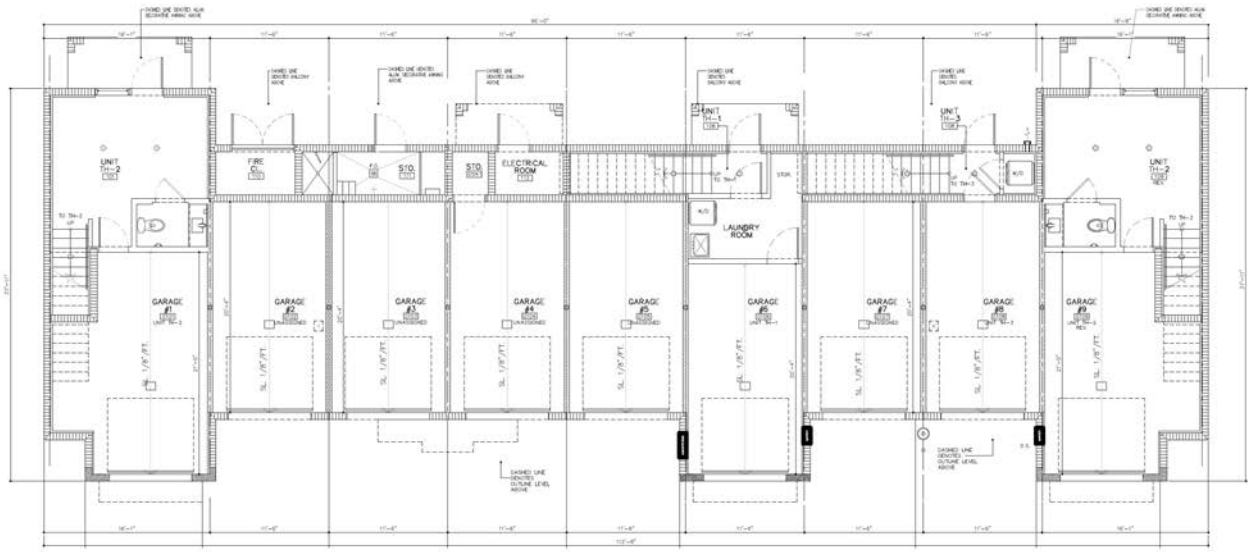
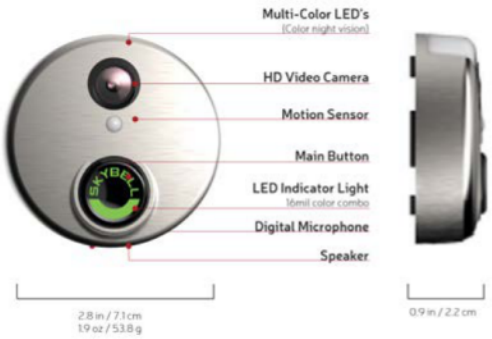


Each apartment of the Carriage Homes Type III apartments, will have its own secured entry foyer. The drawings do not show a view panel, which should be on the far side of the door handle. That feature is being requested to minimize the opportunity for forced entry, by placing the view panel to the opposite side of the lock and handle.

Unit doors will have a minimum one-inch throw dead bolt lock as required by state law, with the doorjamb properly reinforced to prevent jimmying or kicking in. The door hardware latch and strike plate needs be secured with a minimum of 3-inch screws, to sufficiently anchor the lock latch in the door jamb and frame. Door hinges should be non-removable. Doors should be hollow metal, and not wood. Door locks should be rated for intrusion protection, and resistance from tampering. The security doorbells will act as peepholes for residents to view who is at the door. ADA and Fair Housing Act may require some doors to have the peephole lower to accommodate a person with disabilities. Residents may be able to use Smart Phone Blue Tooth apps. The goal is to provide an opportunity to visually screen visitors or vendors, in the event of an attempted criminal ruse entry.



The doorbell system may be Ring Video doorbell or equal, like Skybell. https://store.skybell.com The unit doors may use a Ring, U-Bolt, or Skybell system, or

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equal, that includes a peephole, and video system app. Residents can see, hear and speak to visitors from anywhere with the new and improved Video Doorbell systems available. Residents can also get instant notifications on their phone and tablet, customize their motion settings, arrange for visitors or guest to gain access, and conveniently stay connected to their home, no matter where they are.

An example of another Bluetooth enabled door deadbolt system.

Windows: The exterior windows and unit doors will be South Florida Hurricane impact rated, which besides offering protection from wind borne debris, also offers forced entry protection on the ground floor and upper floors, from potential burglaries or break-ins. There will be ventilation locks on the sliding glass patio doors, and exterior windows. The ventilation locks will prevent unauthorized entry or trespass into the apartments, as the locks only open to a maximum of 4 inches. This allows for natural air ventilation on nice weather days, but prevent someone from the outside jimmying the sliding glass door or windows to gain unauthorized entry.

All residents and their guests will have to enter their apartment at the designated entry point on the ground floor and hallways on the 2nd and 3rd floors. The ground floor back yard patios are accessible from the outside by swinging gates. All sliding doors, and windows, shall have anti-burglary prying devices added, as well as a 4-inch ventilation locking device.

Examples of ventilation window locks.

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Examples of sliding door ventilation locks.

This example has sliding glass doors with anti-burglary latches, locks, and ventilation locks. Sliding door security latches and bars prevent the doors being lifted off the track or

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slid open by a burglar. New Hurricane rated sliding glass doors will come standard with a 4-inch lip in the track to prevent water intrusion, but also serves as a means to prevent lifting the glass door off the track. The laminated glazing serves as effective forced entry protection.

Access control features should include the following:

- Having attractive fencing if and where needed, use low height CPTED compliant plantings and landscaping on the boundaries, to facilitate Natural Access Control.
- Resident parking spaces should be clearly and individually marked and assigned for residents/ authorized guests/ employee use only.
- Post signage in parking areas forbidding vehicles, other than owner's/ authorized guests/ employees, to park and loiter in these properties parking lots.
- Post towing sign, and enforce tow away policy consistently, concerning non-resident/ non-authorized guests, and abandoned vehicles.

If there are key control systems in the property management office, the keys should be stored in a secured key storage container. If the mechanical keys are in the secured container, they should only have a general description only, and avoid specific location of unit or room numbers in case there is a compromise of the key cabinet. Video surveillance may be placed to monitor the key cabinet, for the offices, apartments, commercial spaces, and for the parking garage.

The head-end access control intrusion detection system will keep a data log of what common area doors are opened, by which resident's key, for a system of accountability. Integration of the camera system with the access control system can determine which resident entered into the building, and if there was a duress situation, or someone piggybacked behind the guest. Both the data log and the video surveillance should be retrievable in case of an incident for law enforcement investigation.

It is recommended that if there are mechanical and electrical rooms for the property, that they have the exterior doors with non-removable hinge pins, monitored for accountability, and have door position switches (DPS) on the doors. Door closers will be on every

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exterior common area space door to ensure proper closer and latching of the locks. If there is a roof access door, it should also have a door contact switch, to create an alarm condition if it is being used, other than through authorized and approved maintenance personnel and vendors.

CPTED PRINCIPLE #3 TERRITORIAL REINFORCEMENT/BOUNDARY DEFINITION

The site design is proposing a combination of landscaped buffers, walls, gates and fences, and other CPTED devices to funnel people and cars to the intended openings and desired building entrances. The goal of the perimeter buffer is to deflect persons on the sidewalk to walk around until they access a concrete sidewalk pathway into the property. Pavers, varying in color and texture, will be utilized and identify the private pathways of the building, versus the public sidewalk, further reinforcing the sense of proprietorship and ownership.

The goal of the landscape buffer is to deflect persons on the sidewalk to walk around until they access a concrete sidewalk pathway into the property. Pavers, varying in color and texture, will be utilized and identify the private pathways of the building, versus the public sidewalk, further reinforcing the sense of proprietorship and ownership. The easement areas on the property boundaries will be fencing and a landscaping buffer. There will be boundary definition to reinforce territoriality of the new buildings, in the form of fencing

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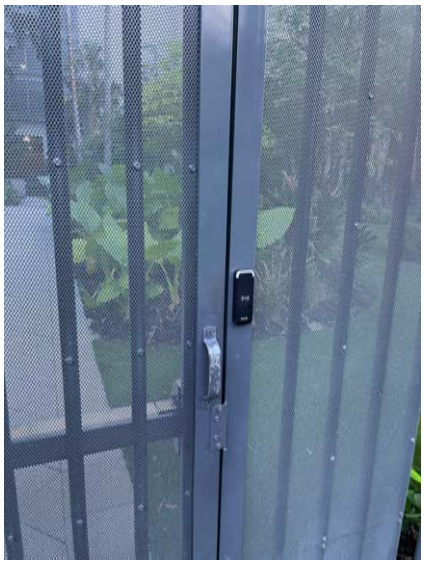

Any exterior doors or gates should be screened to prevent unauthorized access, or from easy climbing.

An example of a well-protected exterior gate that is screened, and access controlled.

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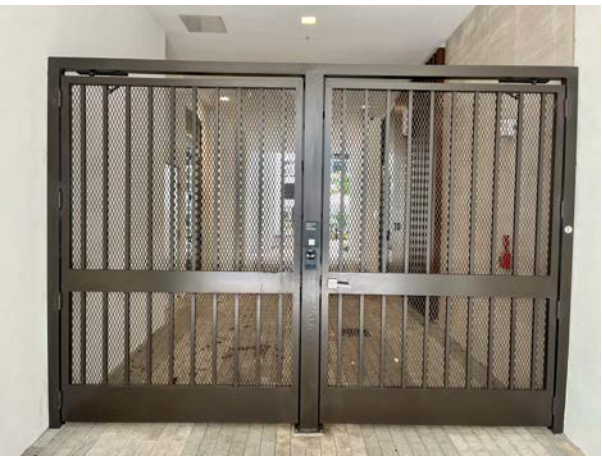
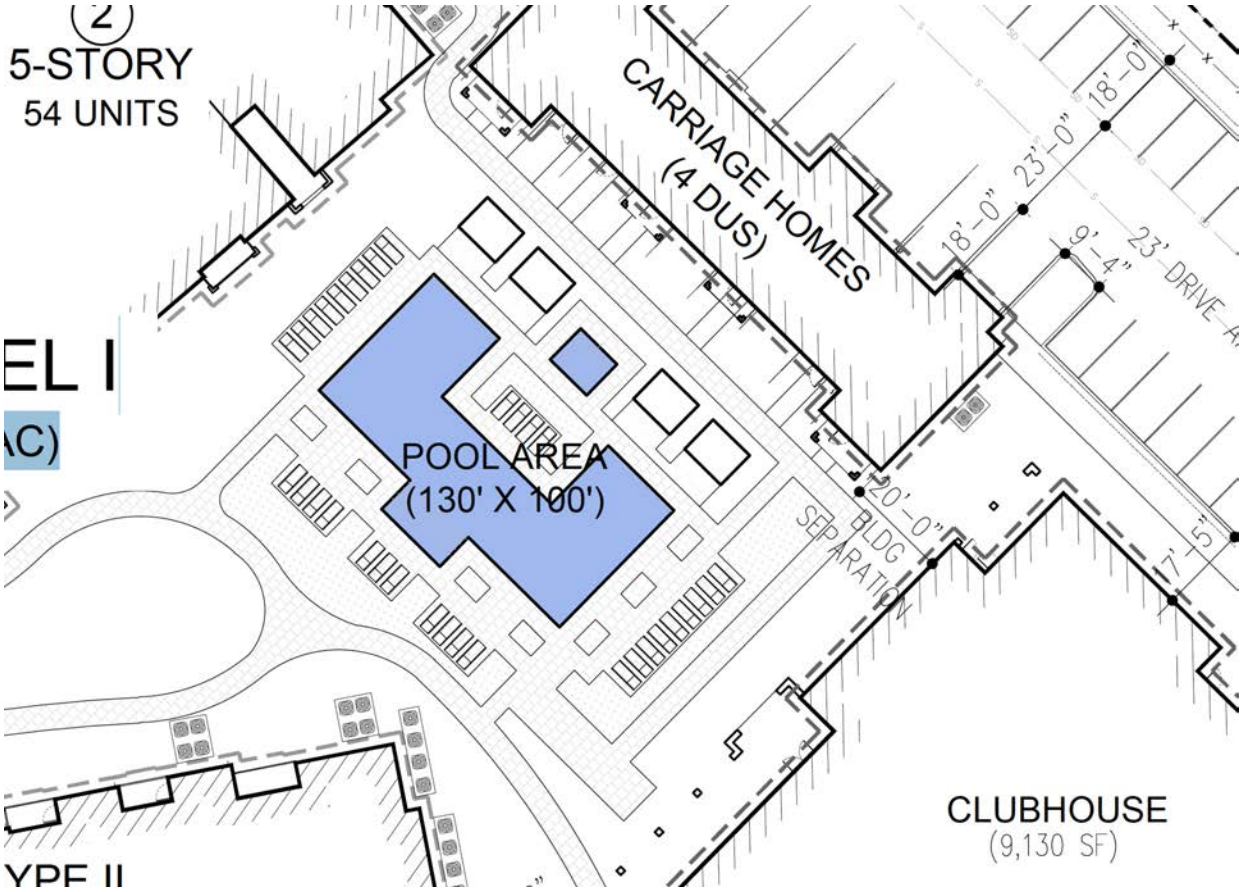


Examples of well-designed exterior gates with security screening or mesh to deter unauthorized access and reaching the exit push bar.



There is a community pool and amenities by the main clubhouse. The boundary of the pool will be secured by fencing, and contain access controlled gate entry to the area for child protection.

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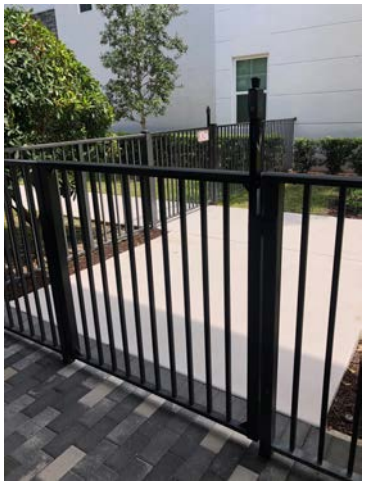
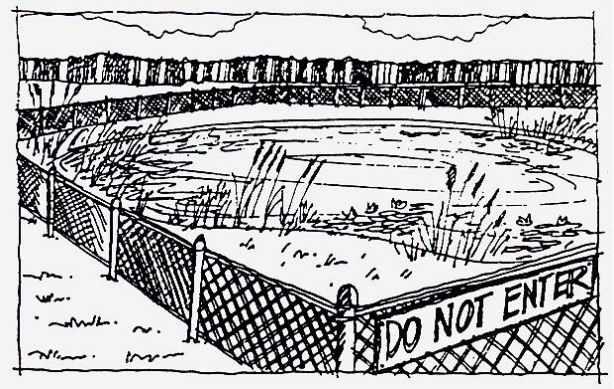
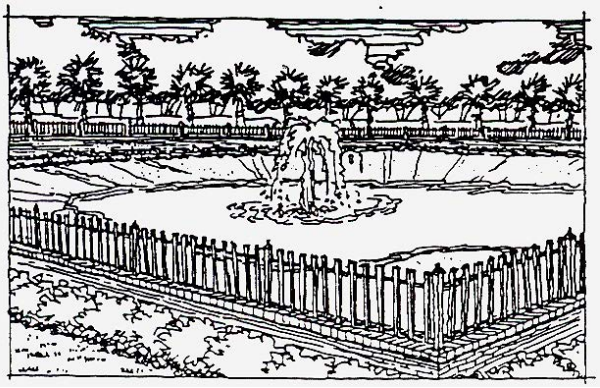
Interior paths of travel can be fenced, landscaped, and access controlled.



Pools must be secured from trespass by small unattended children, with site 48inch high fencing, and 54-inch-high child proof gate locks. Pools must be secured from unauthorized use, and have self-latching doors with child resistant locks or access controlled. The pool courtyard will be secured with attractive picket fencing to prevent unauthorized access into the common area space by trespassers. The State of Florida requires fencing and child proof locks around the pool to prevent children drowning.





Any retaining pond must also be designed to either have a very gentle slope, or be fenced to prevent drowning by a child or person who can't swim.

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Fencing around retaining ponds are critical to prevent accidental drowning and the liability that results from it. The site drawings show fencing around the retaining ponds and the central lake area. Posted signage should be posted to deter fishing or swimming.

There may be areas that can be used as dog runs, and should be accessorized, which will give them legitimate use by residents, prevent trespass and unauthorized access into these side aisles. Where you have dog runs, it is important to protect the trees and bushes from dog urine. An innovative CPTED tool is too have designated “dog rocks”!

Signage with groundrules for dogs, and designated dog rocks to protect the plantings

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In order to protect the plantings, and maintain the civility of not having dog droppings, having pet pick-up stations are very useful, and reasonable, and helps in the maintenance of the property. It is recommended that there be a station around the green spaces, walking trails, and multi-purpose areas.

The proposed development is planning on having a six-foot precast concrete wall and or 6-foot high, steel picket fencing on the boundaries of the property, which will separate the property boundary from adjacent properties, and prevent unauthorized access and trespass.

As required by the City and Urban Forestry Department, a new planting buffer will be required along the fence lines. New landscaping will be indigenous and native, not to exceed 32 inches off the ground. Tree canopies should be maintained clear under 8 feet, with a tree trunk six inches in diameter or greater. If new saplings are planted, do not mutilate them to comply with the canopy requirement until they are mature trees and the canopies are blocking the field of vision. The landscaping and planting goal is to allow a clear zone of natural surveillance for police to be able to have unobscured sight around the perimeter and into the property.

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This fencing material in this example is unobtrusive, yet very difficult to climb over.

Plantings should be maintained to be no higher than the fence line on the boundaries where there is fencing. Sloping sites must accommodate the fencing as it moves along the

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ground, so there are no gaps or crawl spaces underneath. This can be accomplished with extension or a footer.

The fencing has a pointed topping to deter and dissuade climb overs.

Where there is exterior picket fencing, plantings should be used to create a setback and visual buffer. The fencing shown above, has a pointed topping to deter and dissuade climb overs. The border definition will be improved with an attractive code compliant metal picket fencing with plantings, at the property entry points, and the main pedestrian travel paths to dissuade and deter trespass.

An example of very poor security fencing, because the post serves as an easy climbing ladder to get over the fence quickly,

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The fencing and signage are clear and provides excellent security.

Attractive picket fencing and plantings may be used reinforce territoriality and boundary definition.

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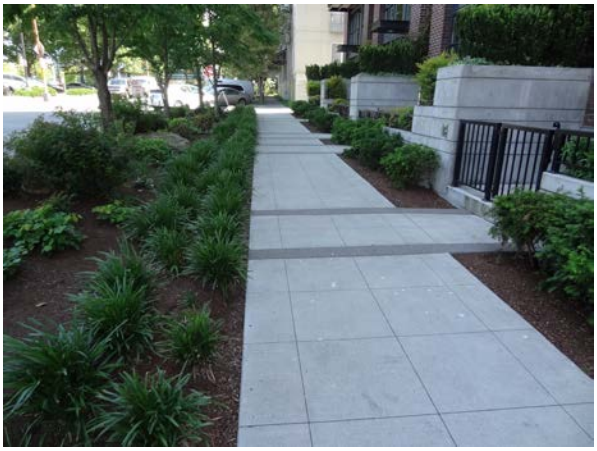
The sides of the complex may have buffer walls to the adjacent properties, and have fencing and locked gates to prevent through fare by non-residents (trespassers).



The pictures above demonstrate boundary definition at comparable developments. The sidewalk paths of travel along the buildings will be using Defensible Space principles of security layering, and encouraging legitimate uses, and users, of the property.

The photos are examples of territoriality in the exterior boundaries of an apartment building. The horizontal bars are not desired because it creates an easy climbing – ladder like opportunity.

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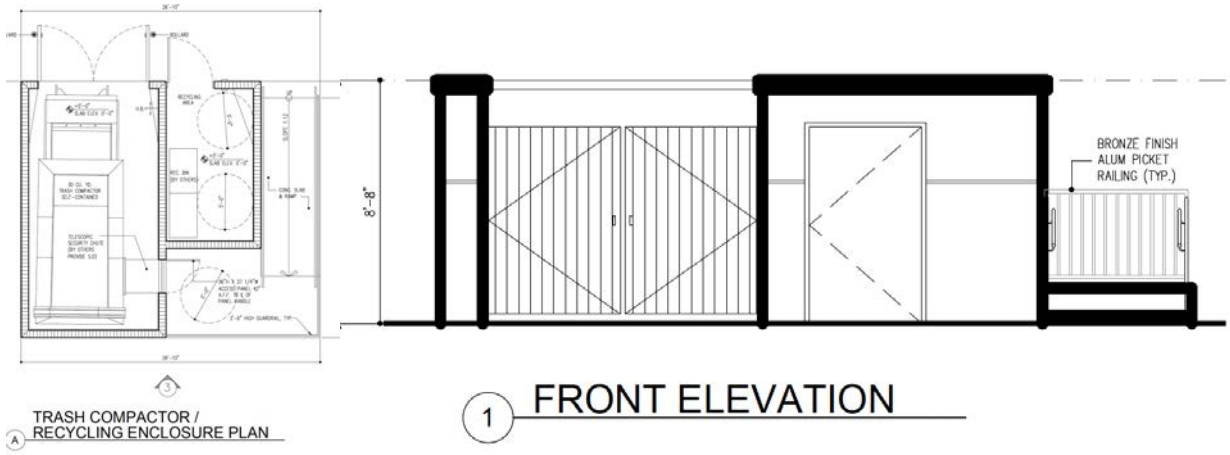
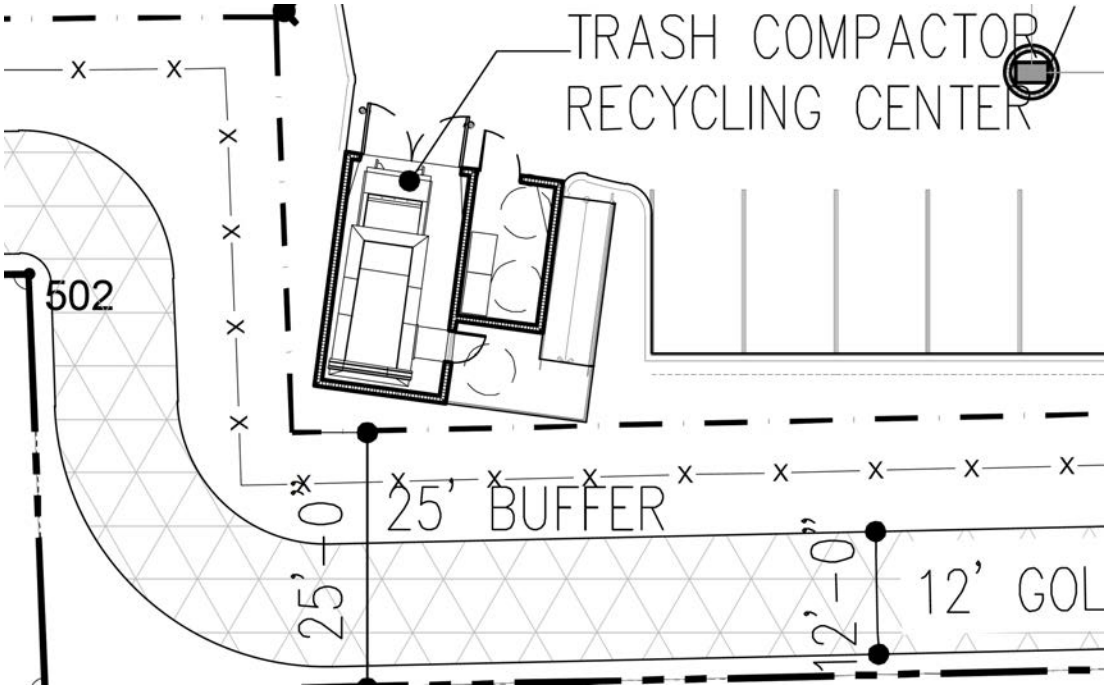


The details above show the dumpster enclosure wall. What is not shown is the construction of the wall, and the gates. The gates should have ground clearance of 6-8 inches so there is visibility in the area if there are trespassers. The dumpster area should be lighted, and under video surveillance.



The trash compactor is centrally located in The Oaks of Palm Aire. There is a trash compacter dumpster proposed on the site, and they should be enclosed, and provide visual screening. The gates doors should be closable and lockable, to prevent dumpster diving and trespass, or illegal dumping. Bollards should be placed to protect the enclosure walls. The tops of the enclosure walls should be beveled, or terraced to prevent climbing, sitting or walking on top of. The dumpster area should have a concrete pad to support the dumpster and allow washing down if there is spillage. The gates of the dumpster should be raised off the ground 8 inches to allow visibility by others, if there are unauthorized persons in the dumpster area. The dumpster area, should be illuminated at night to increase natural surveillance, and deter trespass and unauthorized access to the dumpster.

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A very good example of a CPTED compliant dumpster. Notice the raised gates for natural surveillance, and the terraced top of the dumpster wall. This wall has a terraced top that through design deters climbing, sitting, and walking on top of the fence.

This example of a perimeter block wall uses creative terracing to achieve the crime prevention goal. Having a rounded top works equally as well. The picture above shows a mindfully designed dumpster space that has the exterior wall with a terraced top, that through its design, deters climbing, sitting, and walking on top of the dumpster.

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Additional examples of good CPTED design dumpsters, with good shielding, raised gates off the floor, lockable gates, and difficult to climb and sit on walls.

Dumpster signage. Dumpster areas will be under video surveillance as well.

The property easement wall in this picture separates the uses of single family residential from mid-rise residential functions.

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The exterior walls should be treated with graffiti resistant resin to resist potential vandalism attacks.

Where plantings are specified along the building exterior, courtyards, paths of travel, etc. the Landscape Architect will design in dense, low-profile, and or harsh thorny type obstructive landscaping in any vulnerable areas, such as under windows, around fencing or walls, remote property lines, as a deterrent to loitering, trespassing, and to deny any concealed staging by unauthorized persons to reduce the opportunity for ambush or potential criminal activity.

The Landscape Plan for proposed development is shown on the site plan for now. The planting choices will comply with CPTED best practices and standards of care by permitting natural surveillance over the ground cover, and under the tree canopies. The selections of plantings that are low maintenance, and don't require frequent trimming or pruning is desired, and should permit natural surveillance. Landscaping and plantings will be low and allow for natural surveillance, along with good lighting integrated with motion detection to detect movement. The sidewalk promenade along the perimeter of building will be using Defensible Space principles of security layering, and encourage legitimate uses and users of the property.

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CPTED PRINCIPLE #4 MAINTENANCE STRATAGIES

CPTED Maintenance Strategies include:

• Mature Tree canopies should be maintained clear under 8 feet, with a tree trunk that is six inches in diameter or greater.

• The exterior building walls, should be treated with a graffiti resistant resin to prevent vandalism, up to the wainscot and will facilitate easy cleaning.

• Lighting luminaires will be energy efficient LED fixtures or equivalent, which require little or no maintenance.

Examples of low maintenance shielded LED lighting

• Ground planting and hedges should be less than 2'-6" feet, and mature tree canopies over 8 feet to allow clear zone of natural surveillance for police to be able to have un-obscured sight around the perimeter and into the property.

• Design in Dense, low profile and/or harsh thorny like non-obstructive (maximum height 2'-6" feet) landscaping plantings in any vulnerable areas, such as under windows, around fencing or walls, and remote property lines. These climb resistant plantings serve as a deterrent to loitering activity, trespassing, and to deny any concealed staging, and ambush opportunity for potential criminal activity.

• In combination with fencing, the plantings will create a hedge, or buffer, that will deter persons from accessing the resident apartment ground floor windows.

• Exterior common area space doors, excluding the resident doors in the project, will have non-removable door hinge pins, and if needed, have the capacity for electronic door position switches, to notify the head end security system that a door has been opened, that should not be open, and send notification to the appropriate parties.

• All exterior sliding glass patio doors, and sliding windows will have ventilation locks that prevent burglary, but allows natural air ventilation on nice weather days. The

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openings shall not exceed 4 inches.
• A maintenance manual will be provided to tenants describing their responsibilities to upkeep their apartments and common area spaces, as well as defining Building Maintenance responsibilities.
• The exterior border wall along the building perimeter and public path of travel should be treated with a graffiti resistant resin to prevent vandalism.

CPTED PRINCIPLE # 5 MANAGEMENT STRATEGIES

CPTED strategies for Management's role in CPTED support include:
• All tenants will be thoroughly screened and background checked for prior criminal history.
• The lease will comply with U.S. HUD requirements for "one-strike you're out" policy and practice, related to crime and drug activity in the apartments.
• Staff will be trained to recognize signs for domestic and workplace violence.
• Property Management will establish a relationship with local police to acquire police incident reports that occur on the property.
• Staff and management will attend and participate in Crime Free Multi-Housing program trainings taught by local police agencies, where available.
• Property Management will keep records of incident reports for at least three years.
• Property Management will register all resident's cars and vehicles, and issue decals, or access control fobs.
• All requests for service repairs and maintenance will be addressed in a timely manner by Property Management.
• A maintenance manual will be provided to tenants describing their responsibilities to upkeep their apartments and common area spaces, as well as defining Building Maintenance responsibilities.

CPTED PRINCIPLE #6 LEGITIMATE ACTIVITY SUPPORT

This apartment building will be operating 24 hours a day, and have residents using the building on a continual basis, and subsequently provide eyes on the street. The residents serve as capable guardians of the property, and can challenge trespassers, and call police for quick response.

The value of legitimate activity support from having residents living on the site around the clock, serves as the strongest deterrent to crime on and around the property. The apartments, walkways, and amenities will provide opportunities for residents and visitors to observe the environment around them, and report suspicious or loitering activity.

Groundrules will be clear, and visible, and spell out the rules of legitimate activities on the property, as well as having the required posted signage for unauthorized access and trespass. Building groundrules will be posted on the perimeter fencing, and on the mailboxes and bike rack areas.

CPTED strategies for activity support include:

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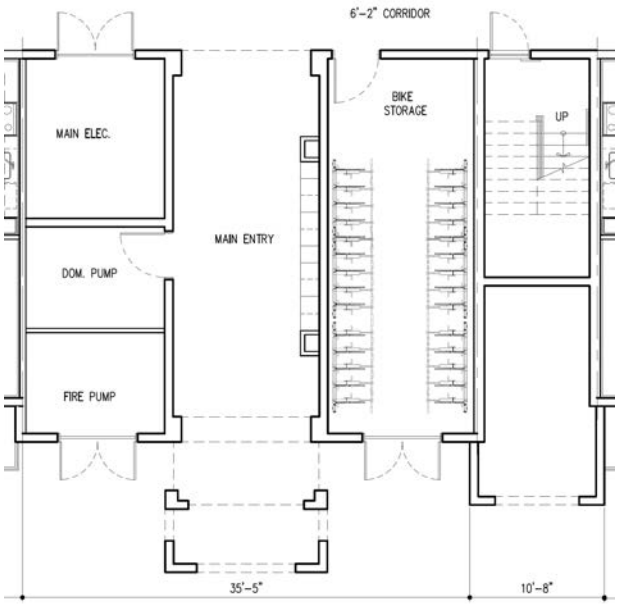
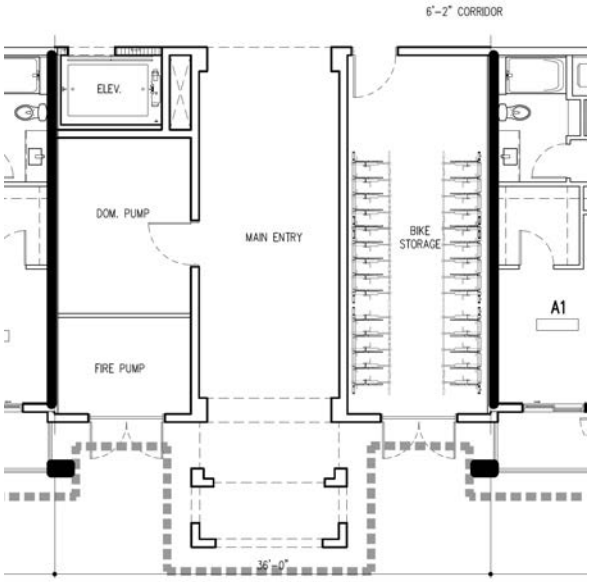
• Groundrules of behavior will be clear and visible, and spell out clearly the rules of legitimate activities on the property, as well as, having the required posted signage for unauthorized access, and trespass.
• Legitimate activity support is increased from having residents, on the site around the clock. This is the strong deterrent to crime, on and around the property.
• The residents serve as capable guardians of the property, and can challenge trespassers, and call police for quick response.
• Way-finding signage must be clear and prominently posted in appropriate areas indicating safe directional travel routes, to avoid users from getting confused and wandering into potentially unsafe and dangerous areas.
• Secure bicycle storage in the secure anchored bike rack device, that will provide space to place bikes, without having to have them on balconies or patios.





The proposed development does have bike storage rooms in the Type I and II buildings. A bike storage area shall be placed close to the building entrances, providing convenience, well illuminated, and maximum natural and there will be mechanical/ video surveillance in the rooms, to deter theft or vandalism.

This apartment building will be operating 24 hours a day, and have residents using the building on a continual basis, and subsequently provide eyes on the street. The residents serve as capable guardians of the property, and can challenge trespassers, and call police for quick response if they observe suspect behavior.

The value of activity support from having a number of residents living on the site around the clock, serves as the strongest deterrent to crime on and around the property. The apartments and walkways will provide opportunities for residents and visitors to observe the environment around them, and report suspicious or loitering activity.

Parking spaces are positioned in the open lot to maximize natural surveillance and supervision by residents, and will have video surveillance.

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Streetscape amenities: Any publicly accessible seating benches or platforms at the development in the exterior common area spaces should be designed with intermittent railings to deter loitering or sleeping by vagrants/ trespassers. An example would be to incorporate individual seating on a bench, by including arm bars between designated single seating positions. Large horizontal platforms should incorporate an anti-loitering/ sleeping design feature.

Streetscape amenities should be well defined, with CPTED bench seating with intermittent rails, and have trash containers close by, to facilitate disposal of litter and garbage. Any publicly accessible seating benches or platforms should be designed with intermittent railings to deter loitering/ sleeping by vagrants/ and trespassers. An example would be to incorporate individual seating on a bench by including arm bars between designated single seating positions. Large horizontal platforms should incorporate an anti-loitering/ sleeping design features like divots, or beveling.

Seating benches will have intermittent railings to deter persons sleeping on the benches.

The benches are clearly intended for seating only, not sleeping or loitering. Trail amenities should be well defined, with CPTED bench seating with intermittent rails, and have trash containers close by, to facilitate disposal of litter and garbage.

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The streetscape bench is designed for seating, not sleeping. A rainbow-colored bench could be fun. The benches are clearly intended for seating only, not sleeping or loitering. Seating benches will have intermittent railings to deter persons sleeping on the benches.

The proposed apartment development will include incorporation of curbs, and structural elements to deflect a car crashing into the building facade. Pedestrian safety will be considered on the walking paths, by intermittent placement of trees, metal lightpoles, street furniture, and anchored planters where appropriate. The apartment entrance foyers may have some planters in front, to protect the building facade from an accidental, or intentional car crash, or vehicle ramming attack.

Having textured surfaces removes the ability for skateboarders to damage the surface.

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An example of damage from skateboarders to an unprotected retaining wall surface.

BUILDING CPTED FEATURES

CPTED features for doors, windows, overhangs, fences, etc. should include:

• Install either a reinforced security glazing vision panel window, or a 180-degree wide-angle door viewer, on all exterior doors including the lobby foyer, and service doors, to provide the opportunity to monitor and observe exterior spaces, and also to avoid being ambushed upon exiting. This also provides an opportunity to visually identify and screen visitors, in the event of an attempted criminal ruse entry. The doorbell system may be Ring video doorbell or equal. https://it-it.ring.com

• Any existing or future fencing should be CPTED oriented, such as metal railing 'see-through' to maintain critical Natural Surveillance.

• Fences should limit or not have easily accessible horizontal bars, which could be used for climbing, and breaching any security fencing. Use narrow spacing to prevent footholds.

• Do not block the Natural Surveillance benefit of 'see-through' fencing by placing high hedges in front of it. Any landscaping in front of fencing should be indigenous low ground cover, with a maximum height of 32 inches above the ground level.

• Costly equipment such as ground floor exterior air conditioning air-handler units, should be clearly and permanently marked, with serial numbers and photos stored, for criminal investigation if ever needed. This identification information must be readily available in the event of a theft or burglary, to help law enforcement try to quickly track and recover the stolen items.

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• Address Emergency Radio Signal Ordinance, NFPA 72, to ensure Law Enforcement and Fire rescue can operate unimpeded within the structure if applicable.
• Exterior windows should have security latches, if they are operable. The glazing should be South Florida Hurricane rated laminated glazing, which serves as forced entry-level protection (burglary resistance).
• All exterior doors, excluding tenant apartment doors, should be monitored with door position switches (DPS), along with interior space protection alarm to easily and effectively supervise the spaces from intrusion. The alarm should be centrally monitored and recorded. If there is an alarm condition, the service will immediately notify law enforcement to investigate and respond. Doors should be hollow metal steel, and not wood. Door locks should be rated for intrusion protection, and resistance from tampering. Apartment doors will have a one-inch throw deadbolt lock, with 3" screws anchoring the plates and jamb into the door frame. Sliding glass doors and windows will have ventilation locks that secure the opening to be no greater than 4 inches. Resident building and access control may be a Bluetooth enabled keypad smart deadbolt locking mechanism.
• As part of the interior space protection alarm system, a video surveillance system will be used to provide coverage of the building entry, garage and common area elements. Video coverage may not be actively monitored, but recorded and stored remotely as forensic evidence for law enforcement should they need it.
• Building surfaces, such as the perimeter wall, should be coated with graffiti resistant resin for easy removal of tagging and vandalism.
• Bike storage racks are placed in the parking garage, within view of the access door to the lobby foyer, providing convenience, and maximum natural and electronic surveillance.
• All exterior low walls, or any surface that could be used by skateboarders, shall have divots placed every 3 feet, to deter vandalism and misuse of the exterior architecture for extreme skateboarding activity.
• Exterior A/C condenser and compressor equipment, if on the roof, should not be accessible to the public. However, if the equipment is placed on the ground, then the compressors should be protected by screening, and secured to the concrete pad. Equipment serial numbers and images of the equipment should be stored if ever needed for potential criminal investigation. This information must be readily available in the event of a theft, vandalism, or burglary to help law enforcement investigators quickly track down and recover the stolen items. The equipment must be secured robustly, to deter or prevent theft.

GENERAL PROPERTY NOTES:
Parking lot - and adjacent access perimeters:
• User's (Guests/ Employee's) personal vehicles are vulnerable to be burglarized in parking lots, leading to significant property loss, and the theft of personal identification, which has resulted in identity theft fraud. This property is designing CPTED features into the parking areas to reduce this opportunity for crime and loss.
• Violent Robbery incidents, primarily in parking garages/lots, have resulted in serious personal injuries and death to persons, customers and employees; therefore, no surveillance camera coverage gaps shall exist.

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• Comprehensive parking lot area surveillance camera coverage/ capture. Sight “cones” of camera views are demonstrated in the video surveillance plan.
• Posted parking rules signage, and painting curbs red in parking areas forbidding vehicles, other than owner's/ authorized guests/ employees, to park and loiter in private parking lot.
• It this project may utilize a Blue Light warning emergency call systems to assist in reporting of incidents if deemed appropriate.
• Proposed improvements to the site and proposed building developments include: having attractive fencing, and low height CPTED compliant plantings and landscaping on the boundaries, will accomplish Natural Access Control and Natural Surveillance.
• All parking spaces shall be assigned and marked for authorized resident, and or their guests.

• Post towing sign, and enforce tow away policy consistently, concerning non-resident/ non-authorized guests, and abandoned vehicles. Posted towing signs, and enforce tow away policies consistently concerning abandoned vehicles, illegally parked vehicles, and non-authorized vehicles. Post signage, and paint curbs red, in parking areas forbidding vehicles, other than owner's/ authorized guests/ employees, to park and loiter in private parking lot. Post towing signage, and enforce tow away policy consistently, concerning non-resident/ non-authorized guests, and abandoned vehicles.

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Illustrations of signage regarding consequences of illegal parking.

Wi-Fi Systems - If the building has a Wi-Fi system, it needs to be encrypted and password protected. An open Wi-Fi system will attract non-legitimate users to loiter and use the open free Wi-Fi.

Motion Sensors - Vandal resistant motion sensors and security alert lights shall be installed over all exterior doors and overhangs including main entry doors, porch doors, garage doors, storage doors, and sheds if applicable.

Water Spickits -All exterior water spickits should have a locking device on it, in order to prevent unauthorized users from using the water, and or hoses for inappropriate or illegitimate uses.

Exterior Electrical Outlets - All exterior electrical sockets should have a locking device placed on a closable cover to prevent unauthorized use by illegitimate users.

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Waste Management / Garbage - The disposal of waste material of the apartment buildings will be brought to exterior dumpsters/compactor by a valet trash service. The resident would take their garbage to a trash room or trash container located at each building. The waste management company is scheduled for pick up, twice a week.

Emergency responder access – Provide an Emergency Access Method/ System to Law Enforcement. A Fire Rescue Knox Box located at an assigned designated point by the Fire Marshall, which will assist in the event of a law enforcement/ criminal incident inside the facility. To ensure unimpeded emergency access to Law Enforcement's Emergency Response, the entry access system must be able to dial 911, for emergency alert and access.

Since these are mid-rise buildings five stories high, the **Emergency Radio Signal Ordinance** shall ***not*** apply in this facility. In high-rise buildings greater than 75 feet, this involves having repeaters put in the stairwells, garages, and other areas where emergency responder radio coverage could be blocked by the concrete and steel. With the building being five stories, the signal should be able to get through the building exterior. A minimum signals strength of 96 dB received by the radio system of a first responder is the standard of care. Both the ICC International Fire Code and the NFPA Fire Code recommend requirements related to emergency responder radio coverage in new and existing buildings. First responders need to be able to communicate with each other and response time is critical. Although improvements are continuously being made to responders' communications equipment, an increasing number of states are mandating that buildings ensure certain minimum levels of radio signal strength. The Florida Fire Prevention Code, Florida Statutes §633.202(18), specifies that local authorities "shall determine the minimum radio signal strength for fire department communications in all **new high-rise** and **existing** high-rise buildings." It also sets the dates for compliance; legislation approved in 2016 established the current timeframe, in order to provide properties additional time to prepare for potential related costs.

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Emergency responder access –A Knox lock box will be provided at the lobby foyer to allow access to first responders for after-hours access due to a call for service as per current standards. https://www.knoxbox.com/Products/Commercial-KnoxBoxes

Signage – Groundrules will be clear, and visible, and spell out the rules of legitimate activities on the property, as well as having the required posted signage for unauthorized access and trespass. Posted signs will be at least 18"x 24" consistent with Broward County regulations. No Trespassing signs to be used with proper State Statute references, and enforced by the appropriate law enforcement agency.

Posting warning signage is critical for establishing personal responsibility and management liability limits.

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Proper signage must state who is the enforcing agency, and cite chapter and verse of the state law that is being enforced, as demonstrated above. This kind of signage will be displayed around to the proposed site. It is recommended that additional legally qualified posted warning trespass signage, be added on the perimeter fencing/wall, and the entrances. The proposed no-trespass signs may be posted on the site perimeter every 100 feet, and within the parking lots. Trespassers cannot be successfully arrested and prosecuted, if the notice is not properly worded and posted. The Developer will submit a No Trespass Program Affidavit with the application to the Broward Sheriff's Office.

The property management will be required to post sufficient No Trespass signage so that it is easily readable, and available at the main entrance, and all sides of the property. All Trespass signs should be securely fastened with robust fasteners, at all corners to prevent vandalism or removal. Trespassers cannot be successfully arrested, and prosecuted, if the notice is not properly worded and posted. There should also be signage that the facility is under video surveillance that serves as a notice to trespassers and criminals. Signage should be placed on the visitor parking areas and access routes for vehicles and pedestrians involved.

No Trespassing signs are to be posted and secured along the perimeter boundaries, using proper State Statute references, and enforced by the appropriate law enforcement agency.

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Video surveillance signage should be displayed at conspicuous areas to create notice to the users. There should also be signage that the facility is under video surveillance, which serves as a notice to trespassers and criminals. Groundrules signage is critical for achieving compliant behavior by employees and visitors. Unwanted non-guest parking and vehicles should be discouraged, and no parking tow away signs, will be posted on the boundaries. Groundrules will be clear, and visible, and spell out the rules of legitimate activities on the property, as well as having the required posted signage for unauthorized access and trespass.

Examples of groundrule signage appropriate for the hotel entrance and parking lot

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This apartment building will be operating 24 hours a day, and have residents using the building on a continual basis, and subsequently provide eyes on the street level and parking lots and common area spaces. The residents serve as capable guardians of the property, and can challenge trespassers, and call police for quick response, if they observe any suspicious behavior.

Critical Infrastructure Considerations:
All utilities that come into the property, and that tie into the building exterior, should be considered vulnerable from an attack by weather or persons, and should be reasonably secured. Power boxes should have locks on them. Water valves should be chained, and not be easily accessible to the public or residents. Power lines should be inaccessible to any person, other than the FPL lineman. Mechanical and electrical rooms should be secured, and only accessible to building maintenance personnel. A Knox lockbox should be provided on the primary entrances, to facilitate after hour access by emergency personnel responding to a fire alarm.

Protecting Mechanical Equipment – Costly equipment, such as ground floor air-conditioning units or water pumps, etc. will be clearly and permanently marked, and serial numbers and photos stored for potential criminal investigation in the event of loss or theft or vandalism. This identification information must be readily available in the event of a theft or burglary to help law enforcement try to quickly track and recover the stolen items, and the perpetrators.

Exterior A/C condenser and compressor equipment, if on the roof, should not be accessible to the public. However, if the equipment is placed on the ground, then the compressors should be protected by screening, and secured to the concrete pad. Equipment serial numbers and images of the equipment should be stored if ever needed for potential criminal investigation. This information must be readily available in the event of a theft, vandalism, or burglary to help law enforcement investigators quickly track down and recover the stolen items. The equipment must be secured robustly, to deter or prevent theft. Costly equipment such as ground floor exterior air conditioning air-handler units, should be clearly and permanently marked, with serial numbers and photos stored, for criminal investigation if ever needed. This identification information must be readily available in the event of a theft or burglary, to help law enforcement try to quickly track and recover the stolen items.

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Examples of protecting the AC compressors on ground level.

It is recommended that the mechanical and electrical rooms have their exterior doors equipped with non-removable hinge pins, monitored for accountability, and have door position switches (DPS) on the doors. Door closers will be on every door to ensure proper closer and latching of the locks. If there is a roof access door, it should also have a door contact switch, to create an alarm condition if it is being used, other than through authorized and approved maintenance personnel and vendors.

Conclusion:

This proposed residential development has been designed using Crime Prevention Through Environmental Design (CPTED) approaches and strategies. CPTED is having the built environment designed to reduce the opportunity for stranger-to-stranger crime and the fear of crime, and thus improve the quality of life, where we live, work and play. These proposed rental apartments, have successfully been planned to employ the CPTED principles of natural and mechanical access control, natural and mechanical surveillance,

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territoriality and boundary definition, preventative maintenance, good management policies and procedures, and legitimate activity support.

I am very pleased to have had the opportunity to conduct a security and CPTED review of The Oaks at Palm Aire Apartments. It is my belief that the recommendations made will be adopted with a minimum of expense or disruption to the operations. Having a safe living environment is to the benefit of the owners, visitors, and community. The proposed Oaks at Palm Aire Apartments complies with the standards and best practices of CPTED review process, and will be a valuable contribution to the City of Pompano Beach.

Respectfully yours,

Randy Atlas Ph.D., FAIA, CPP, CPTED
CPTED Certified Practitioner and Instructor

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