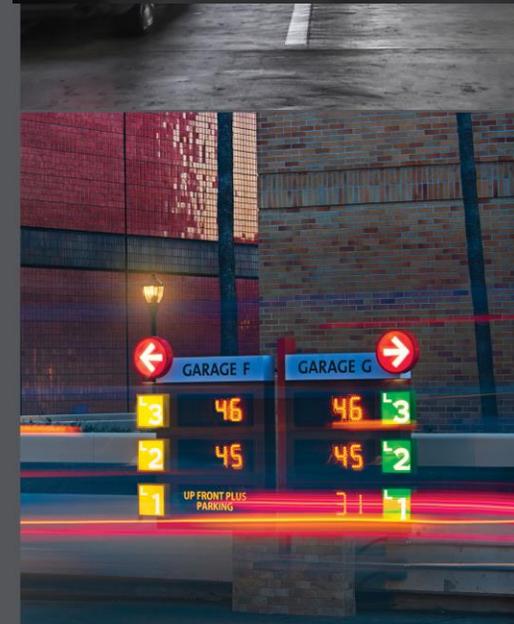# TKH Security (Park Assist) Proposal For
City of Hollywood
Garfield Garage

Automated Parking
Guidance System

Proposal Presented to
City of Hollywood
May 6th , 2025

Automated Parking
Guidance System (APGS)

May 6th, 2025

City of Hollywood
2600 Hollywood Blvd
P.O. Box 229045
Hollywood, FL 33022

Hello Sir/Madam,

Thank you for the opportunity to submit a proposal for the Garfield parking garage in Hollywood, FL. We greatly appreciate the opportunity and are confident that our solution and organization are the best fit for this project.

Park Assist is the pioneer of imaging technology in the parking industry and invented the first camera-based parking guidance solution. Today, Park Assist is the industry leader with successful installations of its patented camera solution with over 200 projects in the US. Park Assist has the largest portfolio of camera based projects in the US ranging from airports, casinos, convention centers, hospitals, shopping centers, corporate campuses, mixed-use developments, municipalities, and universities.

In this proposal you will find why Park Assist has the best automated parking guidance solution with features that include:

- Proven, patented camera-based guidance technology & license plate inventory
- 99%+ vehicle detection accuracy with monthly verifiable reports
- Cloud-based software, *INX*™, with real-time dashboards delivering rich data analytics
- Real-time alerts to enhance operations & Open API's for website & mobile app integrations
- Optional live streaming surveillance to enhance overall security & safety

On behalf of Park Assist, I want to assure you of our commitment to make parking at the City of Hollywood as enjoyable and valuable as the asset itself. Equally important to us is your complete satisfaction. We appreciate the opportunity to continue working with the City of Hollywood and look forward to the next steps!

Sincerely,

Thomas Alexander

Thomas Alexander
Senior Regional Account Executive
t.alexander@tkhsecurity.com
(954) 816-9888

Company History

Park Assist is a business intelligence technology company that utilizes camera-based sensor applications to improve the parking experience. Park Assist's patented camera-based sensor systems are highly regarded in over 45 countries around the globe for their ability to improve the overall parking experience, integrate with other systems in place, and enhance operational efficiencies and security coverage. Park Assist is the global leader in parking sensor technology and the pioneer of camera based parking systems. TKH Security is part of the TKH Group (Euronext: TWEKA), a $1.8 billion publicly traded company headquartered in the Netherlands.

About Park Assist

1. Headquartered in the United States, Park Assist has the most experience of any guidance manufacturer worldwide in designing, deploying, and supporting guidance systems for parking.

2. Park Assist has a fully staffed, US based technical support team and local team to assist with maintenance and support after installation.

3. Park Assist has the most camera-based installations in North America compared to its competitors, and is the world's only patented camera based parking guidance system.

Company Overview

Company Name & Year Founded:	TKH Security LLC, 2005 (Park Assist)
Parent Company & Year Founded:	TKH Group NV, 1930
TKH Security State of Incorporation:	Delaware
TKH Security Corporate HQ:	125 Commerce Court, Suite 11, Cheshire, CT 06410
TKH Security Employees:	50
TKH Security Federal Tax ID#:	26-2047919
Account Manager's Contact:	Thomas Alexander, t.alexander@tkhsecurity.com
Account Manager's Phone Number:	(954) 816-9888

Park Assist/TKH Security Project Team Resumes

Park Assist is the only parking technology company to have implemented over 200 camera based parking guidance systems in major hospitals, corporate headquarters, shopping centers, universities, airports, casinos, and mixed-used developments. The team below all have extensive experience with a keen understanding of the requirements to ensure the successful implementation of this type of technology. This team will be the key individuals that will work throughout the project. Additionally, and just as important, is the team that works behind the scenes that keeps this well-oiled machine running and will be an integral part of the overall success of the project.

Jason Dechello, _Director of Project Management at Park Assist_

Project Role: Oversee all projects, project management team, project planning, client relationships, and project timelines

Experience: Jason joined in 2015. Prior to joining Jason gained 20+ years' experience in parking industry technology implementing PARCS throughout North America

Past Project Experience: Foxwoods Resorts Casino, Mohegan Sun Resorts Casino, Nashville International Airport, Capital One HQ, Mall of America, Eppley Field Airport, Louisville International Airport, Chicago O'Hare International Airport, Miami International Airport, Los Angeles International Airport, Newark International Airport, Princeton University, & Abbott Northwestern Hospital.

Brett Johnson, _Director of Technical Operations at Park Assist_

Project Role: Networking and Commission of the APGS, post installation support oversight

Experience: Brett is responsible for overseeing a team of 10 Engineers who provide project specific as required. As Director of Technical Operations, Brett will oversee both the Systems Engineering and Technical Services teams. Brett and his teams will be responsible for activating sites once they are installed and providing consistent, quality support for those sites throughout the system's lifetime.

Past Project Experience: Brett has worked on or been involved in every project Park Assist has ever been awarded since he joined the company in 2016.

Thomas Alexander, *Senior Account Executive at Park Assist*

Project Role: Account management and installation support

Experience: Thomas has great experience with the procurement/bid process and managing accounts post-installation. He joined the company in 2016 and has helped manage all business development for the entire North American branch. Thomas places an emphasis on customer experience to ensure all details are covered from start to finish and is responsible for all sales in the Southeast of the United States. Thomas has played a critical role in growing the North American branch with his meticulous approach and attention to detail and has a deep product knowledge.

Past Project Experience: Nashville International Airport, Nashville Music City Center, Duke University Hospital, Atrium Wake Forest Baptist Medical Center, Children's Healthcare of Atlanta, Raleigh-Durham International Airport, Asheville Regional Airport, Royal Caribbean Cruise Line, Savannah Hilton Head International Airport, and University of Miami Health System amongst others.

Carlton Campbell, *Senior Project Manager at Park Assist*

Project Role: Manage the subcontract team to ensure compliance with the subcontract terms and conditions and performance baseline commitments. Ensure that all company core values, and safety protocols are followed and enforced. Coordinate and integrate the activities of all the project team members and support functions. Establish priorities for the project staff based on client and project requirements. Review and approve all major purchase orders, change orders, and contractor/vendor requisitions as prepared by the project staff.

Establish regularly scheduled meetings to review the following: shop drawing preparation / approval, equipment/material lead times and required on-site dates, manpower projections vs the project schedule, quality/performance issues on and off site. Obtain client's acceptance of the work, and sign-off for the completed project. Responsible for the preparation and submission of the final project report, and prompt closeout of the subcontracts.

Experience: Carlton joined Park Assist in 2016. Prior to joining the company Carlton was involved in various rolls in the Networking/ Telecommunication field and worked at Blackberry and Nokia with a focus on software and product development.

Past Project Experience: Miami International Airport, Fort Lauderdale International Airport, Atrium Health Wake Forest, Children's Healthcare of Atlanta, the City of Hollywood, Bal Harbour Shops, PortMiami Royal Caribbean Cruise Line, Miami-Dade County Metrorail Stations, the Plaza Coral Gables, Austin International Airport, and the University of Miami Health System among others.

Will Mayer, *Director of Client Services & Support at Park Assist*

Project Role: Network Design & Implementation, Post Installation Support

Experience: Will is responsible for designing and implementing network designs for Park Assist projects. Additionally, Will oversees all support during and post installation of the APGS. Prior to joining Park Assist, Will was a network Administrator at municipal emergency services and currently serves in the United States Marine Corp with a rank of Sergeant.

Past Project Experience: Will has been involved in every Park Assist project since he joined the company in 2017.

Pete Messman, *General Manager at Park Assist*

Project Role: Operational oversight

Experience: With more than 20 years of executive and operational positions in a diverse set of businesses, Pete has in-depth experience in sales, product development, marketing, and project management. As General Manager, Pete is responsible for all North American operations activities for Park Assist. Pete is responsible for managing client accounts totaling over 60,000 parking spaces. Pete's commitment and dedication to customer satisfaction ensures that all client needs are addressed with the utmost attention and sensitivity. Pete works out of our Mid-Atlantic region.

Proposed Solution

Park Assist M5 Camera Solution

The M5 Camera System is a network of sensing, processing, and displaying elements. The array of sensors collect data about parking status across the facility and then distribute that information to the network for use in guiding drivers and assisting operations staff.

The M5 Camera Sensor offers the ability to sense, identify, and count vehicles **per individual parking space.** Configured with one or two CMOS digital cameras, the M5 sensor can monitor up to six parking spaces simultaneously. Captured images are continuously processed to detect parking space occupancy changes using proprietary image processing software.

The sensor sends parking status and images to the site's Core Server for management and reporting. Because the M5 sensor is based on digital imaging, it is the key enabling element for license plate recognition.

To indicate parking status to visitors, a highly visible Light Emitting Diode (LED) indicator is built into the M5 Camera Sensor, capable of displaying thousands of different colors. Each M5 Camera Sensor autonomously manages its own occupancy status and indicator color, providing visitors with real-time parking information.

Installation of the M5 System

The M5 system is installed down the center of the drive aisle. Each sensor is capable of monitoring up to six (6) parking spaces. Bright LED lights will remain green if one of the six (6) monitored spaces are available and it will turn red if all of the spaces are taken. The M5 sensors operate on low voltage power and connect to the level garage controller via Ethernet cable.

Park Assist's proprietary channel is designed to work with all garage designs for a clean installation. Our channel uses specially designed joiners to maneuver around beams and obstacles inside the garage. We are able to install our camera sensors with minimum affect to clearance height.

Park Assist understands the difficulty and unpredictable cost involved in clearing sections of an operating garage for installation. Since Park Assist's installation is down the center of the drive aisle, we do not require parked cars to be removed during installation. We will select slow traffic hours for installation to minimize disruption to operations.

The main reason for the installation of an APGS is to enhance visitor/guest experience. We know that when an APGS installation requires closure of sections of the garage for long periods of time, it can have a negative effect on guest parking experience. We have designed a system to ideally prevent this from ever occurring.

Installation Flexibility

Park Assist understands that no two garage designs are the same, and with installations in more than 45 countries, Park Assist has experienced and accommodated it all. Our proprietary channel has been designed with the utmost flexibility to allow the same product to be installed regardless of design obstacles such as low clearance, beams, drop ceilings, tiled ceilings, etc.

Dynamic Digital Signage

For the City of Hollywood, the parking experience makes a crucial first impression on residents and visitors. To complement our revolutionary camera based smart-sensor system for parking guidance, Park Assist has developed a diverse portfolio of leading-edge wayfinding signage elements. This wealth of advanced options helps provide parkers with assurance and peace-of-mind from the moment they arrive, creating a positive experience that encourages repeat visits in a brand-building way. Park Assist offers our dynamic signage as a standalone signage offering as well as the option to incorporate the dynamic signage into custom enclosures to offer a seamless and consistent message to your customer.

Photo: Sample Wall Mounted Sign

Interior Aisle & Level Signage: VMS-NAV

Park Assist VMS-NAV (variable message navigational) signs are equipped with full-matrix LED displays for unprecedented design freedom. Ownership will have free rein to create and broadcast an expansive set of digital messages – including detailed RGB custom graphics – in millions of colors. These can be populated with dynamic 24-bit RGB text and icons, instead of a limited set of predefined messages and graphics. The variety of colors/gradations enable the signage to be tightly aligned with brand and architectural palettes. With enhanced brightness pixels, these continuously adjustable signs are easy to view and customize so your customers receive the detailed information they need to make quick, informed parking decisions.

Additional Digital Signage Sample Photos
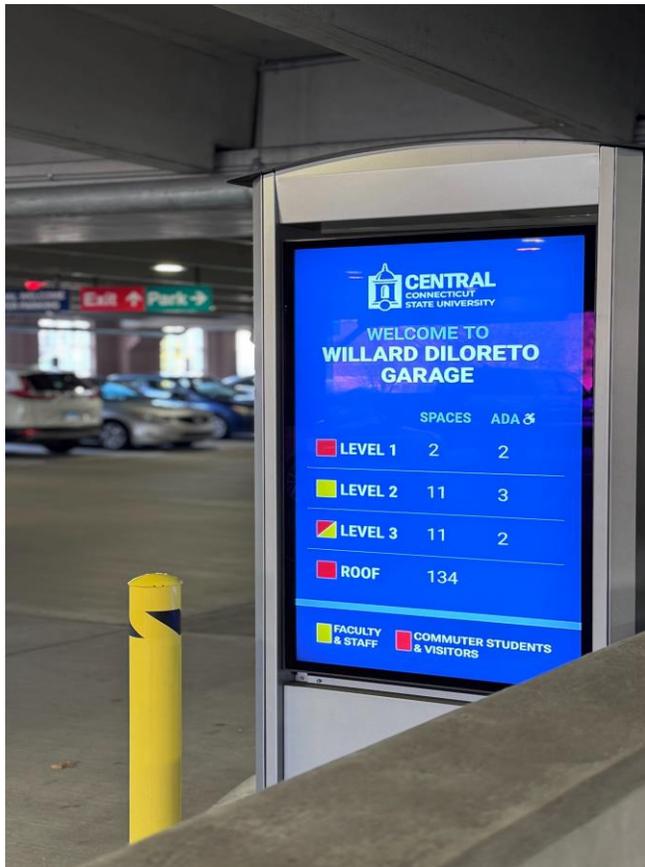
C5 Camera Solution (Rooftop Counting)

TKH Security/Park Assist will provide our C5 camera solution for the rooftop of the parking garage. Traditionally, loop counting solutions can be used to count space availability at the entrance levels or rooftop of a parking deck. Unfortunately, loops require saw cutting into the deck floor and are outdated technology that requires high maintenance. Our C5 camera system uses AI and machine learning to help accurately count vehicles.

Our C5 cameras are mounted & installed above the driving lanes & can detect tailgating vehicles, vehicles driving in the wrong direction, and tune themselves to the environment by analyzing traffic patterns. Our C5 cameras will communicate directly back to the server and send information regarding the quality of the counts and availability. This solution can be deployed easily at the entrances of the parking garage or expanded/upgraded to display counts for each level. Parking availability will also communicate back to dynamic messaging signs at the parking facility and the cloud. See below sample images of C5 camera in action.
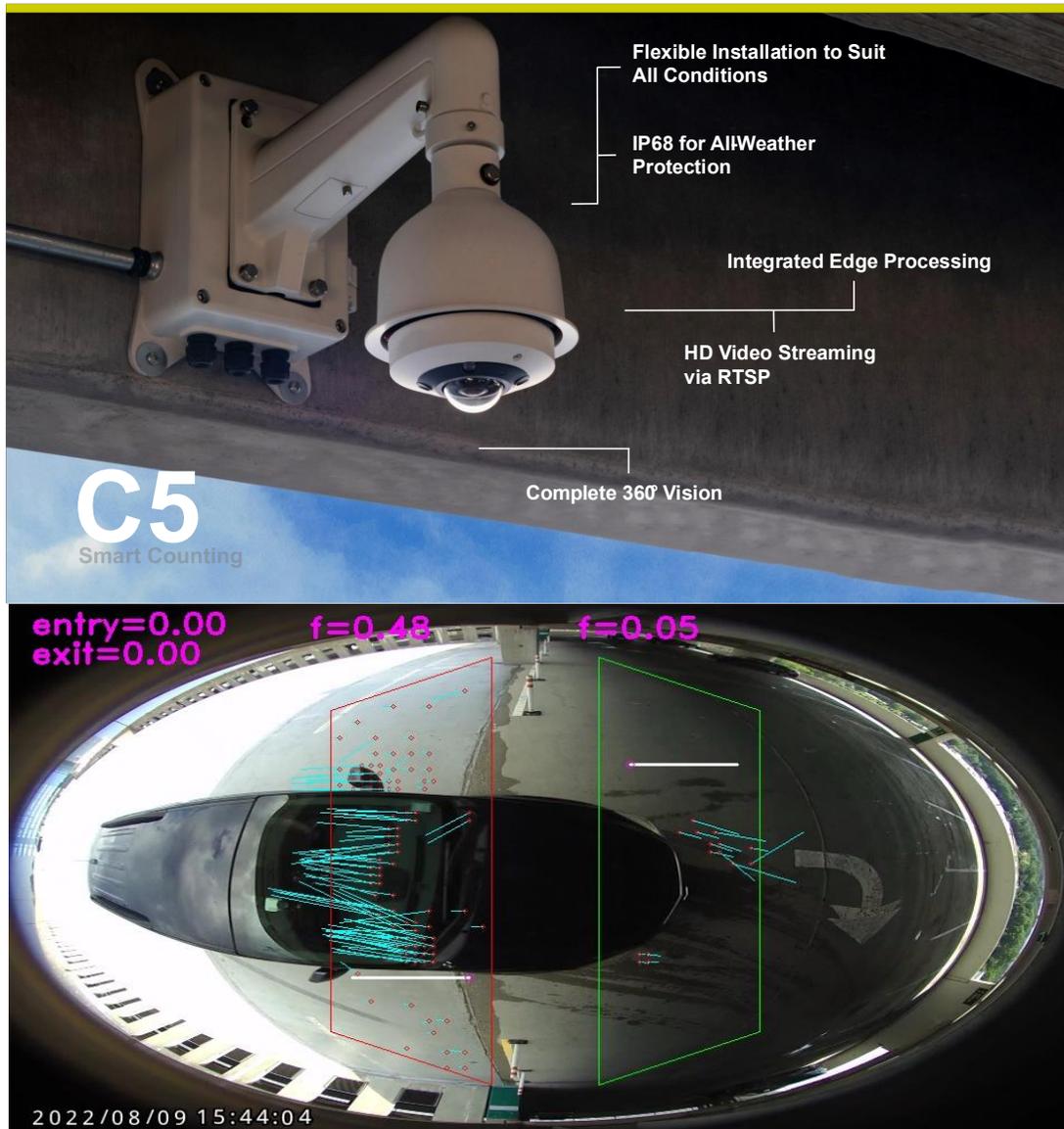
Networking/System Hardware

Setting the standard for digital networks for parking, the TKH Security M5 System empowers a parking structure with knowledge and capabilities never before possible. This section provides system-level description and specifications, to understand overall system traits and behavior.

The M5 System consists of a network of camera sensor units providing image-based surveillance of every bay in a parking garage. Each unit contains one or two cameras, a bright, multicolor LED indicator light, and Ethernet network communication capabilities. The collection of camera sensors in the network communicates with the Core Server, a central management system. This server provides centralized management of the sensor network, updates connected signage for driver guidance, performs advanced processing steps, and responds to external inquiries for information.

Designed from the beginning for adaptability, the network architecture is expandable to support many bays. Camera sensors are grouped into daisy-chained 'strings'; a Floor Cabinet, acting as a network concentrator and central power supply, hosts multiple strings. All Floor Cabinets at an installation connect to a core switch, completing the network. *INX* can drive signage external to its immediate network and is accessible remotely for reporting and basic configuration. For direct customer guidance, *INX* can also provide information to customer kiosks, enabling features such as *Finder*.

Some system functions are distributed, whereas others are centralized. For example, camera sensors individually perform detection of a vehicle in a bay/space and setting LED color from unoccupied to occupied. The Core Server performs license plate recognition. Regardless of where the function occurs, driver guidance via LED indicators and adjustments to signage are provided in real time. The system is extensible, with future updates adding new capabilities to the system.

Camera sensor units use machine vision processing to determine if a vehicle is present in a parking bay. Upon system installation, a four-sided polygon is defined in the camera sensor's software for every bay. The cameras capture images constantly, each being processed within the camera sensor for activity within the polygons. When a valid change in the state of a bay is detected, the camera sensor follows its assigned rules for changing the color of the LED indicator (for example, green to red), and reports the event to *INX*.

Each floor or region of a TKH Security system installation includes at least one POE Cabinet, housing a network switch, video storage, and power supplies supporting our sensors and signage.

Network Topology below describes our standard M5 network/design interface:
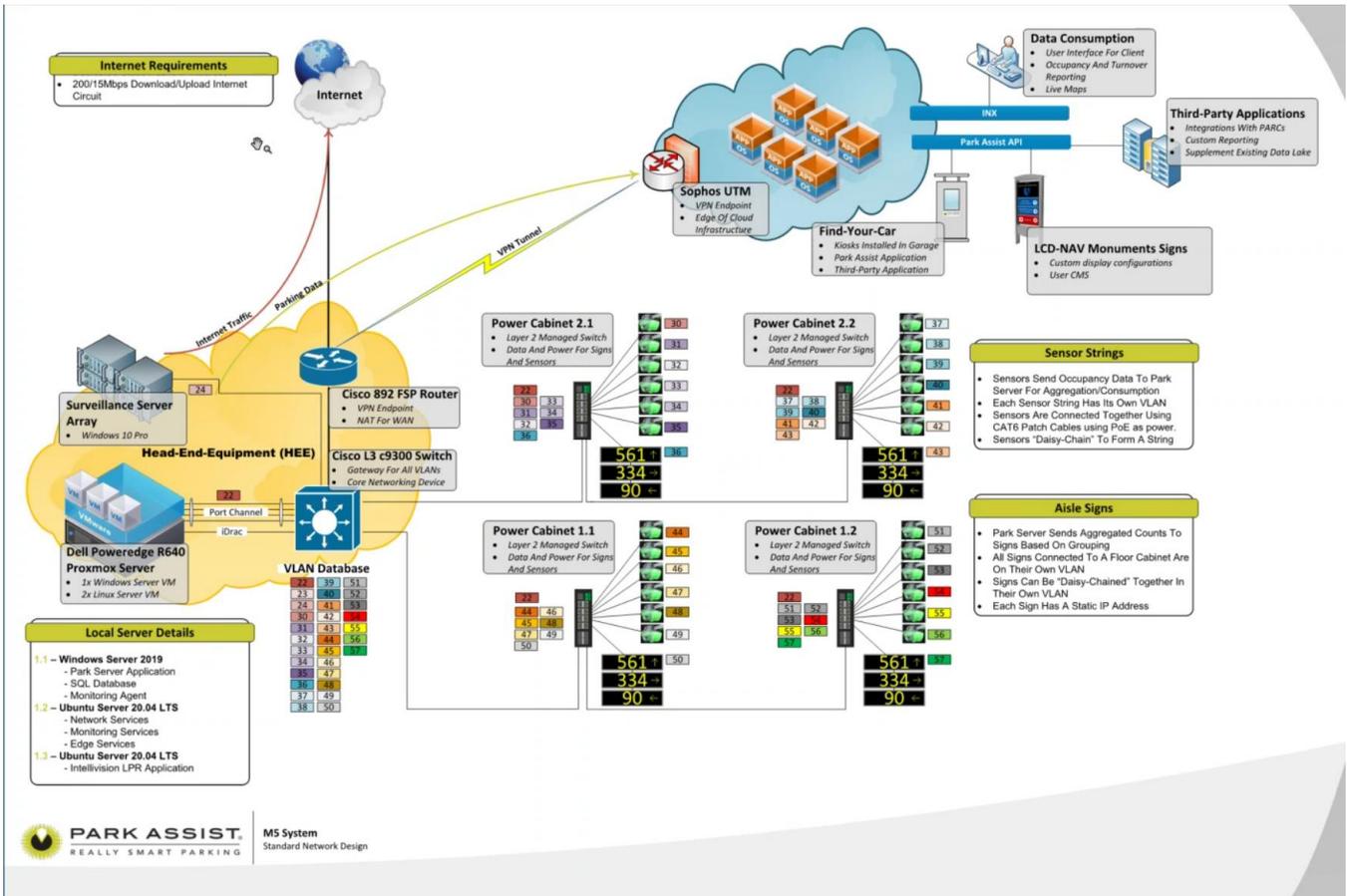
Next-Gen Software Platform – INX™

Reporting Tools

INX, a cloud-based interface provides Management, Operators and Marketing teams with real-time data using dashboards, historical reports and comparative analyses to seamlessly improve the parking experience, operational efficiencies and create new revenue opportunities. Offering a simple, single point of access to parking garage data, it helps asset owners measure the performance of their garage and gather insights into user behavior. Live maps capture the current state of the facility, and in-progress and historic visitor patterns can be analyzed to drive staffing for parking, security, and customer service staff. All reports can be accessed remotely via the public web through unique secure user logins. *INX* securely connects to each M5 site's Core Server installation via an encrypted HTTPS connection at 1 AM local time daily. Data from each site is analyzed, aggregated, and distributed to the *INX* reporting system.

INX is installed in a private, dedicated, and load-balanced server farm, offering a 99.9% availability guarantee with twice daily secure back-ups. Furthermore, the centralized architecture for *INX* allows for the controlled release of new software upgrades, maintenance services, and new innovations seamlessly. As a privacy and security measure, *INX* does not collect or store any images from sites' Core Servers. *INX* is fully compliant with industry security standards, including ISO 27001. Data in *INX* is fully encrypted to enhance security and data protection. This includes data & images encrypted communication enforced with certificates between sensors and the cloud. Also, multi-factor authentication (MFA) for all data administration and platform development.

Data is reported in real time, with information typically less than 5 minutes old. The home page dashboard contains moveable widgets, displaying a variety of data. These widgets can also be embedded in other end-user applications. Sample dashboard image and additional sample photos below:

Dwell Time
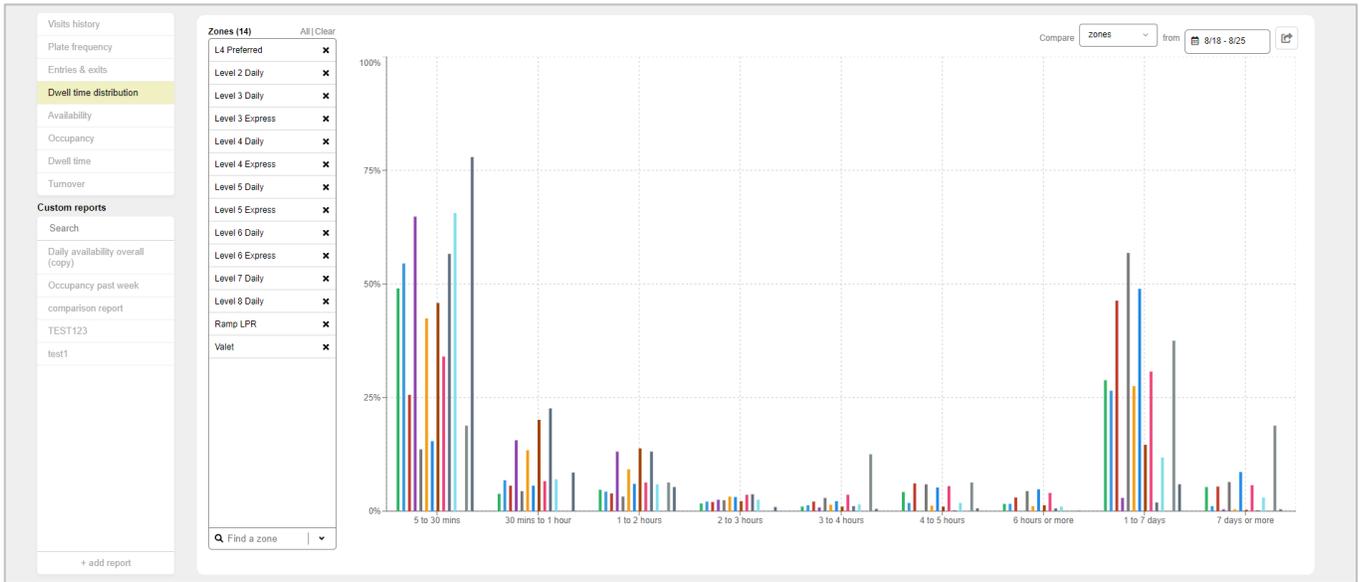
Availability
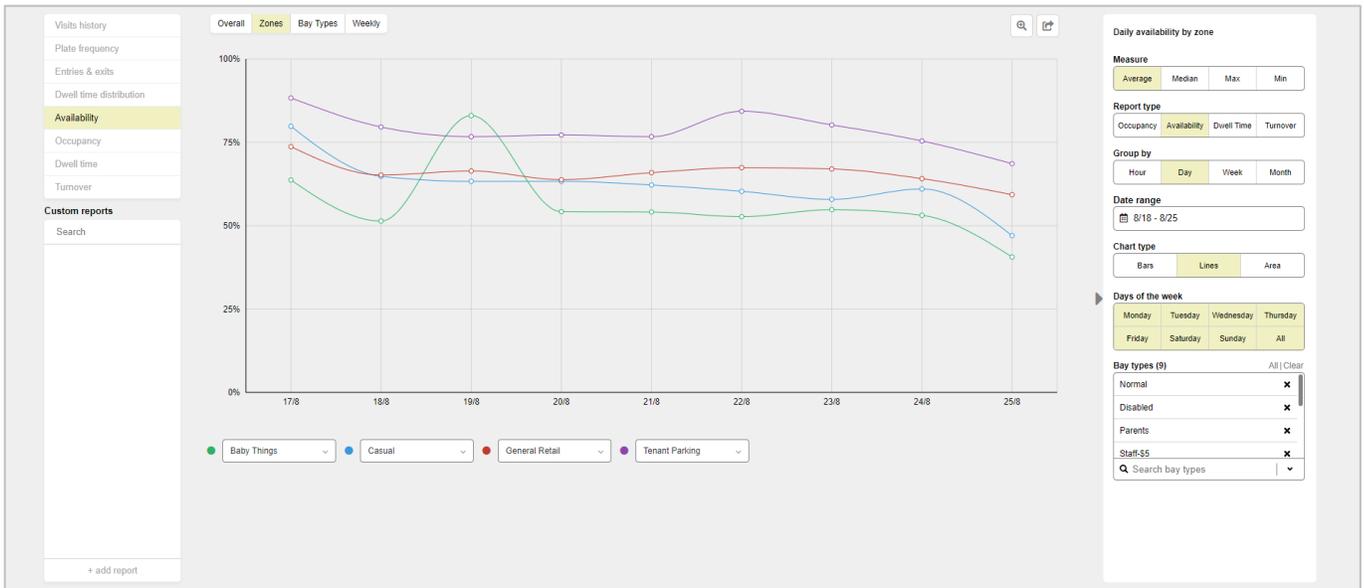
Enhancing Customer Experience/Operations

Alerts – (Included at no cost)

Alerts is our powerful **business logic engine**, which enables operators to automate rule-based alerts and/or actions across our solution and API's that assess each individual car against the relevant set of rules or zones. Tapping into the integrated LPR built into our camera-based system, these alerts can be conditionally triggered by license plates, schedules, system conditions, zones, durations, and/or bays. This is configured by a simple drag & drop "if this, then that" visual interface. *Alerts* integrates seamlessly with some of the well-known PARCS and mobile payment platforms.
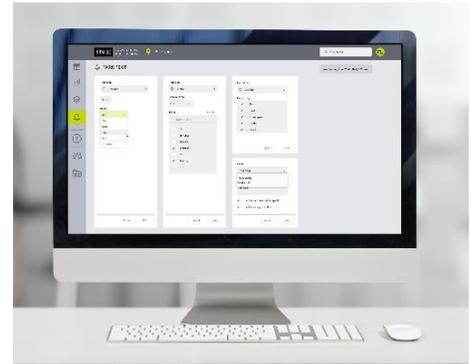
Customer Experience API/Access to Mobile App – (Optional)

Our next generation *Mobile API* allows for integrating the Park Assist system data into mobile apps and websites to allow for an array of functionality. Utilizing our Mobile API brings real-time parking availability straight to the customer's phone and computer directing them as to which lots, garages, and specific levels have parking availability. The Mobile API also brings Park Assist *Finder* functionality to any mobile device allowing customers to find their lost vehicle right from their phone.

Park Assist's mobile app is currently available on iOS and Android. The Park Assist app will allow users to search for available parking ahead of time so they can plan their commute accordingly. If ownership prefers to develop an interface to be part of their own mobile app or website, Park Assist can provide the Web API for their developers. Many of our clients have utilized this API to develop their own custom applications.
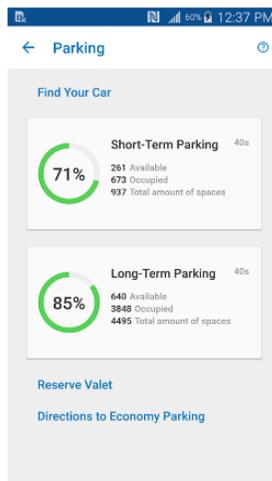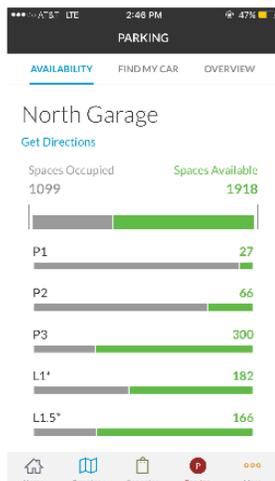
Park Surveillance – (Included)

With Park Surveillance, Park Assist's M5 system can capture streaming surveillance video whenever motion is detected in or around a space. Or continuously, if desired. Since the M5 system is perched above the driving lane, their dual CMOS cameras have an unobstructed view of each vehicle during its entire stay in a parking space. This provides an expanded level of security that would otherwise be cost-prohibitive. The majority of CCTV surveillance systems do not monitor the parking spaces. Ownership can have the peace of mind knowing that their guests/visitors have an additional eye in the sky to keep them safe.
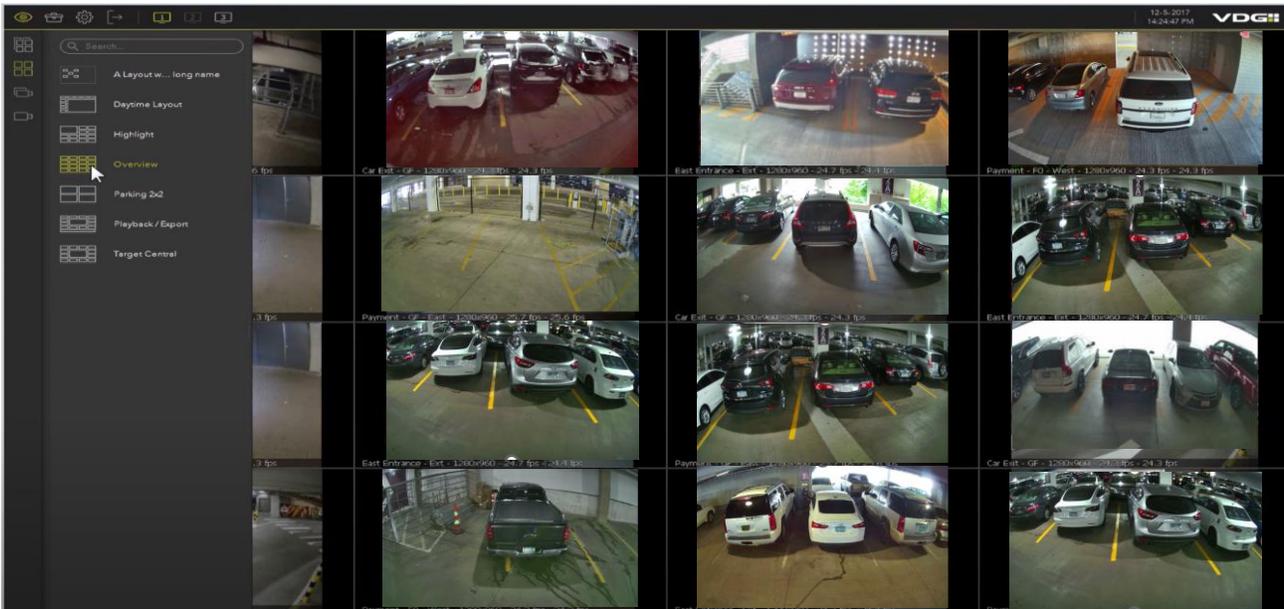
Find Your Car – (Optional)

Our Find Your Car (FYC) functionality allows a visitor to enter the number for a license plate using the smartphone app, pay station, or a touchscreen kiosk. In seconds, the system scours a database of currently parked vehicles, which were identified through our integrated LPR when they entered a space. Guests and visitors will see exact locations of their vehicle on a digital map or alternatively ownership can assist guests via the INX platform to find their vehicle.
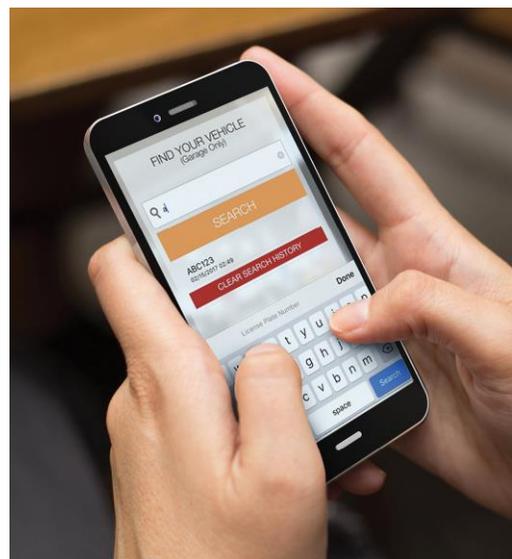
Support & Maintenance

Park Assist has a full in-house team dedicated to support and maintenance. Unique only to Park Assist system is a quarterly accuracy reading report breaking down accuracy, occupancy, trends by zones, levels and garage. Every M5 sensor will be constantly monitored for connectivity, performance and accuracy. For systems under our service and maintenance agreements, ownership can have peace of mind that the large majority of issues can be detected and resolved before they impact system performance and customer experience. With different plan levels, Park Assist will be proactive in monitoring and troubleshooting any and all issues before they affect operations.

Park Assist maintenance goes far beyond a basic check on system operation; rather, it follows a detailed, holistic approach to every aspect of the sensor network, from hardware to software. With Park Assist taking numerous proactive measures to ensure system operation, your network will provide years of trouble-free operation and high performance. Our inspection program is customized for each site, which assures complete coverage for each system's unique aspects.

Software maintenance is a key component of Park Assist maintenance package. At its foundation are basic information technology maintenance practices, with remote inspections for the entire network. Using modern, secure remote access technology, Park Assist monitors and adjusts your sensor network without the need for intervention or presence. Software updates for sensing components and head-end gear are also applied using this approach.

Another advantage of Park Assist's software design is the built-in capacity for customization. If parking conditions or site design change in the future, Park Assist can create customized detection patterns tailored to the unique aspects of a site.

Warranty

This proposal includes **One-Year Warranty** on all parts and labor for defects in materials or manufacture. Park Assist will repair or replace all work delivered under the contract and correct any defect within the warranty period at no additional cost. Software updates to the current installed version of our software are also included as required. This warranty does not apply to situations where damage or malfunctions resulting from fire, flood, earthquakes, elements of nature or acts of God, strikes, riots, collision, vandalism, misuse, electrical surges, power failure, use of non-manufacturer approved parts, or any other similar cause beyond the reasonable control of Park Assist.

TKH Security/Park Assist Warranty Statement

For one (1) year from the date of substantial completion (the "Equipment Warranty Period"), TKH Security warrants the Replacement Equipment will be free from substantial defects in materials and workmanship under conditions of normal use (the "Equipment Warranty"). If applicable, TKH Security further warrants for a period of thirty (30) days from substantial completion, Installation Services shall be performed in accordance with industry standards.

EXCLUSIVE REMEDY

TKH Security's exclusive obligation under the Equipment Warranty shall be to, at its sole option, repair or replace defective Equipment, at no charge to Customer, so long as notice describing the nature of the defect and location of the Equipment is received by TKH Security within the Equipment Warranty Period and within fourteen (14) days after the defect is discovered. If Customer purchased Installation Services to install the Equipment originally, the Equipment Warranty shall also include the necessary labor required to replace a defective part if TKH Security, in its reasonable judgment, determines that such replacement is required. In no event shall the Equipment Warranty Period be extended by the repair or replacement of an item of Equipment. For the avoidance of doubt, to the extent there are any labor costs that are the responsibility of TKH Security in connection with the Equipment Warranty, any such labor shall be arranged by TKH Security and TKH Security will not reimburse Customer for any costs incurred by Customer to service the Equipment.

WARRANTY EXCLUSIONS

- The Equipment Warranty shall not apply to any defect, loss or damage arising in connection with:
- Installation, maintenance or attempted repairs that are not performed by TKH Security or its designees.
- Improper system maintenance not performed by TKH Security or its designees.
- Improper software configuration not performed by TKH Security or its designees.
- Product operation outside of specifications.
- Unauthorized modification or tampering.
- Any act or omission of a person or entity other than TKH Security or from fire, water, burglary, accident, transit, vandalism, acts of God, terrorism.

DISCLAIMER

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU ANY AND ALL OTHER WARRANTIES WHETHER WRITTEN, EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE). TKH SECURITY FURTHER DISCLAIMS ANY AND ALL WARRANTIES WHETHER WRITTEN, EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) RELATED TO PRODUCTS OR HARDWARE NOT PROVIDED BY TKH SECURITY, WHETHER OR NOT TKH SECURITY INSTALLS SUCH PRODUCTS OR HARDWARE.

WARRANTY START DATE: TBD

Post Warranty - Maintenance Service Packages

The Park Assist approach goes far beyond a basic check on system operation; rather, it follows a detailed, holistic methodology addressing every aspect of the sensor network, from hardware to software and accuracy. With Park Assist taking numerous proactive measures to ensure system operation, your sensor network will provide years of trouble-free operation and high performance. Three package types Basic Software, Premium and Comprehensive tailor the maintenance approach to the site's specific needs.

Basic Software

At its foundation are basic information technology maintenance practices, with remote inspections for the entire network. Using modern, secure remote access technology, Park Assist monitors and adjusts your sensor network without the need for intervention or presence. Software updates for sensing components and head-end equipment are also applied using this approach. Because TKH Security understands the importance of a reliable and accurate system; software maintenance includes daily detection performance monitoring. Vehicle detection and license plate recognition accuracy are routinely checked, with remote support for corrective action if necessary, included in the package. Customers receive detailed monthly and annual performance reports.

Premium

Our Premium package includes the Basic Software plan and introduces on-site quarterly system service and monthly inspections, and remote system monitoring. This forms the baseline of Park Assist's integrated maintenance approach. From servers to sensors, cabling to network infrastructure, each inspection takes a critical eye to every physical and software component making up the system to foresee problems before they impact functionality. The program is customized for each site, which assures complete coverage for each system's unique aspects. If, during our inspections, we find hardware that needs replacement due to normal wear and tear we offer a 25% discount on parts, which will be quoted before performing any corrective work.

Comprehensive

Our Comprehensive packages take software and hardware maintenance a step further by including an additional range of advanced monitoring metrics, proactive system improvements, replacement parts at no costs and on-site labor if necessary - removing uncertainty from budgeting for maintenance. This includes monthly onsite inspection and preventative maintenance visits. One package takes care of everything and is uniquely priced based on the needs and equipment in your unique implementation.

Bill of Materials – Budget Proposal

The M5 system is highly adaptable to fit any parking structure and usage needs. This Bill of Materials lays out the base system and options recommended by Park Assist expert teams for the Garfield parking garage in the City of Hollywood, FL.

Base System Cost – Garfield Parking Garage (330 covered spaces, 96 uncovered)

Item No.	Description	Unit of Measure	Unit Price	Estimated Qty
1	M5 Sensors	Each	$238.40	69
2	C5 Camera (rooftop)	Each	$1,039.29	1
3	Network and Head End Equipment (server, floor cabinet, router, etc.)	Lump Sum	$46,118.71	1
4	Cable and Channel	Lump Sum	$5,986.58	1
5	Entrance Monument Signs (six level insert)	Each	$4,118.73	2
6	Monument Sign (one insert on A1A)	Each	$4,125.75	1
7	VMS NAV Digital Sign Inserts	Each	$600.08	17
8	Installation, Project Management, CAD Design, Logistics, Commissioning and Networking	Lump Sum	$127,181.99	1
9	Video Surveillance	Each	$11,662.50	1
10	Alerts Software	Each	$0.00	1

Final Total System Cost $231,003.24 (excluding applicable taxes)

Recurring Annual Fee Below Starts Afer Year 1

Models	Type	Price
INX Core Software Suite	Annual license	$1,997.50

Optional API and Software Features (Recurring Annual SaaS fees below)

API Features	Type	Price
Park Finder	Annual License	$1,063.50
Customer Experience API (Mobile App Access)	Annual License	$1,305.40
Ops Command API (Website Integration)	Annual License	$1,226.35

Optional Maintenance Package Post Warranty (Annual Fees Below)

Year	Basic	Premium	Comprehensive
1	$14,000	$42,000	$56,000
2	$14,300	$43,260	$57,680
3	$14,609	$44,557	$59,410
4	$14,927	$45,893	$61,192
5	$15,254	$47,269	$63,027

Standard Payment Schedule: (*Invoice due upon receipt, Net 30 days)

Phase	Amount
*Deposit due upon order	20%
*Upon delivery/shipping	50%
*Upon final completion/system acceptance	30%

Proposal Terms/Conditions

General

1. The specifics of timing and pricing in this proposal are valid for a period of 90 days from issue date. Pricing beyond this period is subject to change and excludes taxes.
2. Assumes access to restrooms and waste container.
3. Any insurance requirements outside of standard coverage carried by Park Assist are not included in this proposal and shall be provided at an additional charge based upon additional requirements and terms of coverage.
4. Project is subject to a 25% restocking fee plus shipping.

Park Assist Responsibilities

1. Park Assist will provide a fully automated parking guidance system and all required equipment as shown and described in this proposal for the Garfield parking garage in Hollywood, FL.
2. Install and commission the new M5 system in accordance with the approved project schedule.
3. M5 channel/raceway system to be installed at a maximum height above floor to be determined upon further garage details being provided such as beams, pipes, lights, and sprinkler systems. This Contractor shall meet minimum clearance heights provided throughout the garage.
4. Park Assist shall provide all head-end equipment required to operate the system. This includes 2-D design and software setup, server hardware, server licenses and core switch.
5. All areas of work will be cleaned and debris free at the end of each shift.

Exclusions Include

1. Any power for power cabinets and exterior signage, at designated final termination points.
2. Owner to provide all conduit, cabling, and termination for data feeds from cabinets, exterior signage, at designated demarcation points.
3. Owner to provide a dedicated static public IP address for PARK server. Speed should be 100 Mbps upload/download at minimum, prior to commence of installation.
4. Owner to provide a secure area for material storage on site.
5. Owner to provide a temperature-controlled room to house head-end equipment (server, router, switch etc.)
6. Any costs to integrate the technology with other third part platforms or customized reports not specified in the proposal.
7. Any required permits or stamped engineering drawings.
8. Any required civil, concrete, coring work, or GPR scanning is not included.
9. Any required night work or overtime work is not included.
10. Any removal of existing ultrasonic systems.

Client Acceptance

By signing below, the client accepts the quotation and proposal terms in this document and signals their intent to proceed to purchase.

Client/Customer representative signature: _____

Client/Customer representative printed name: _____

Client/Customer representative's title: _____

Date: _____

Preliminary Design Layout & Cut Sheets

HOLLYWOOD BEACH FIRST ADDITION
(1-31)
BLOCK 6

LOT 12   LOT 11   LOT 10   LOT 9   LOT 8   LOT 7   LOT 6   LOT 5

BUILDING

CONCRETE WALK

CONNECTICUT STREET

GARFIELD STREET

S.R. A-1-A - OCEAN DRIVE

SURF ROAD

HOLLYWOOD   FLORIDA

GARFIELD STREET
PARKING FACILITY

EXISTING PARALLEL PARKING SPACES
8"(W) PAINTED STRIPE (SEE CIVIL ENG. DWG.'S)
10'-0" SETBACK
PROPERTY LINE
(4) PROPOSED PARALLEL PARKING SPACES
LANDSCAPED AREA
CONCRETE SIDEWALK
SOLAR SHADES ABOVE. REFER TO DTL. 6/A-4.2
LANDSCAPED AREA (SEE LANDSCAPE ARCHITECTS DWGS.)
CONCRETE SIDEWALK
CONCRETE WALKWAY
CONCRETE SIDEWALK
LANDSCAPE AREA
2'-0" CONCRETE VALLEY GUTTER
REFER TO DETAIL 1/ A-2.5 FOR DUMPSTER FLOOR PLAN AND 2/ A-9.5 FOR WALL SECTION
LANDSCAPE AREA
2'-0" CONCRETE VALLEY GUTTER
REFER TO DETAIL 1/ A-7.2 FOR STAIR #3 FLOOR PLAN BLOW-UP AND 2/ A-7.2 FOR SECTION
COASTAL CONSTRUCTION CONTROL LINE

EXISTING BUS SHELTER TO REMAIN
POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)
ELECT. TRANSFORMER
ELECTRICAL ROOM +7'
4"D STANDPIPE (SEE PLUMB. PLANS)
ENTRY
TABLES/ CHAIRS +8
WOMEN +8
COVERED AREA +8
SHARNOV PARK PROJECT (N.I.C.)

CONCRETE SIDEWALK
SLOPE UP
FIRE PROTECTION PUMP ROOM +7'
FENCED STORAGE AREA +5'
BELLSOUTH ROOM +7'
ELEVATORS
STAIR UP
POF (PAY ON FOOT)
PRO SHOP +8'
MEN
REFER TO SHEET A-6.5 FOR SERVICE AREA BLOW-UP
TYP. 4' PIPE BOLLARDS 5' O.C.
COVERED AREA
NEW 3'-0" X 7'-0" CHAIN LINK GATE TO MATCH EXISTING FENCE
CONCRETE COLUMN, SEE STRUCT. DWG'S
EXISTING PADDLEBALL COURT FENCE TO REMAIN
ASPHALT
REFER TO DETAIL 1/ A-5.1 FOR COMMUNITY CENTER FIRST FLOOR BLOW-UP
NEW 3'-0" X 7'-0" CHAIN LINK GATE TO MATCH EXISTING FENCE
ONE STORY BUILDING

PARKING SPACES
SEE PLUMB. ENG. DWG'S
F.D.
PARKING SPACES
CONCRETE SIDEWALK
PARKING SERVICE OFFICE +7'
HANDRAIL
OBSERVATION CANOPY DOWNSPOUT (SEE CIVIL ENG. DWG.'S)
POF (PAY ON FOOT)
CONCRETE
ASPHALT
CONCRETE
CONCRETE
CONCRETE
ASPHALT

4"D STANDPIPE (SEE PLUMB. PLANS)
PARKING SPACES
4"D STANDPIPE (SEE PLUMB. PLANS)
SLOPE DN
HANDRAIL
RAMP #2 SLOPE UP
RAMP #3 SLOPE DN
EXISTING PADDLEBALL COURTS (N.I.C.)
CONCRETE
ASPHALT

STAIR #2
PARKING SPACES
PARKING GARAGE (NOTE: FOR FURTHER PARKING GARAGE DIMENSIONS, DETAILING & STRIPING, SEE "WALKER PARKING CONSULTANTS" DWG'S, A1 SERIES SHEETS)
FLASHING PEDESTRIAN CROSSING LIGHTS
OBSERVATION CANOPY DOWNSPOUT (SEE CIVIL ENG. DWG.'S)
EXIT
STAIR #4
POF (PAY ON FOOT)
ASPHALT
RESTROOMS
ONE STORY BUILDING
CONCRETE
ASPHALT

REFER TO SHEET A-7.1 FOR STAIR #2 FLOOR PLAN BLOW-UP AND FOR SECTION
LANDSCAPED AREA (SEE LANDSCAPE ARCH. DWGS.)
EXISTING PARALLEL PARKING SPACES
SOLAR SHADES ABOVE, REFER TO DTL. 6/A-4.3
POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)
LANDSCAPED AREA
SOLAR SHADES ABOVE. REFER TO DTL. 6/A-4.3
CURB RAMP W/ DETECTABLE WARNING (SEE CIVIL DWG.'S)
POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)
CONCRETE WALKWAY
REFER TO SHEET A-7.1 FOR STAIR #4 FLOOR PLAN BLOW-UP AND 4/ A-7.2 FOR SECTION
EXISTING PADDLEBALL COURT FENCE TO REMAIN
COASTAL CONSTRUCTION CONTROL LINE

GARFIELD STREET

CONCRETE WALK

HOLLYWOOD BEACH FIRST ADDITION
(1-31)
BLOCK 4

LOT 16   LOT 17   LOT 18   LOT 19   LOT 20   LOT 21   LOT 22   LOT 23   LOT 24

BUILDING

GENERAL SITE PLAN NOTES:

1. REFER TO SURVEY PREPARED BY "GIBBS LAND SURVEYORS" FOR ADDITIONAL INFORMATION, LEGAL DESCRIPTION, VERIFICATION OF SITE DIMENSION AND BENCHMARK ELEVATIONS.
2. FOR SITE LIGHTING AND SITE DRAINAGE DRAWINGS, SEE ELECTRICAL AND CIVIL ENGINEER'S DRAWINGS.
3. REFER TO SURVEY DRAWINGS FOR PROPERTY LINES, DISTANCES AND ANGLES, STREET NAMES, WIDTHS, EASEMENTS, ETC.
4. REFER TO CIVIL ENGINEER'S DRAWINGS FOR ALL PAVING, CURBS, DRAINAGE CALCULATIONS AND TEMPORARY CONSTRUCTION BARRIERS, ETC.
5. ALL INTERSECTIONS WITH DRIVE ISLES AND STREETS, SHALL BE DESIGNED WITH RAMPS IN ACCORDANCE WITH THE "AMERICANS WITH DISABILITIES ACT" (ADA) AND THE "FLORIDA ACCESABILITY CODE" (F.A.C.) AND AS PER THE DRAWINGS.
6. REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR ALL VEGETATION, PLANTING PLAN, IRRIGATION PLANS AND LANDSCAPING DETAILS.
7. REFER TO "WALKER PARKING CONSULTANTS" FOR DRIVEWAY AND PARKING DIRECTIONAL PAVING DETAILS AND PARKING GARAGE SIGNAGE.
8. FOR CONCRETE PAVER DETAIL PLAN, SEE SHEET A-2.1(b).

ISSUED:

NO.	DESCRIPTION	DATE	DRAWN	CHECKED
1	CITY COMMENTS	6-1-2006		
2	CITY COMMENTS	6-6-2006		
3	ADDENDUM #3	7-12-2006		
4	ADDENDUM #3	8-18-2006		
5	CITY COMMENTS	10-18-2006		
6	ADDENDUM #5	10-31-2006		
7	ADDENDUM #6	11-15-2006		
8	ADDENDUM #7	12-12-2006		
	ISSUED FOR CONSTRUCTION			
	ASI #1	01-19-2007		

SEAL

SHEET TITLE:
GROUND LEVEL AND SITE PLAN

Scale: AS NOTED
Project No. 15-1610.00
Sheet No.

01 GROUND LEVEL AND SITE PLAN

N   1/16" = 1'-0"

A2.1

NO.	DESCRIPTION	DATE	DRAWN	CHECKED
	CITY COMMENTS	6-4-2006		
1	ADDENDUM #7	11-15-2006		
2	ISSUED FOR CONSTRUCTION	12-12-2006		
3	ASI #1	01-18-2007		

ISSUED:

REFER TO DETAIL
1/ A7.2 FOR STAIR #3
FLOOR PLAN BLOW-UP
AND 2/ A7.2 FOR
SECTION

STAIR No. 5

STAIR No. 3

STAIR/ELEVATOR No. 1

BANQUET ROOM
1,735 SQ FT

REFER TO SHEET
A-8.1 FOR STAIR #1
BLOW-UP AND SHEET
A-8.2 FOR SECTIONS

4"D STANDPIPE
(SEE PLUMB. PLANS)

ELEVATOR
MACHINE

+20'-0"
UP   STAIR   DN

DECORATIVE
METAL FINNIALS,
SEE DTL. 4/A-4.3

SOLAR SHADES
ABOVE. REFER TO
DTL. 6/A-4.3

PARKING SPACES

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2/A-4.3)

SLOPE 0% UP

REFER TO DETAIL
1/A-6.2 FOR COMMUNITY
CENTER SECOND FLOOR
PLAN BLOW-UP

LINE OF
CANOPY
ABOVE.

SEE PLUMB.
ENG. DWGS.

4"D STANDPIPE
(SEE PLUMB. PLANS)

PARKING SPACES

F.D.
(SEE PLUMB. & CIVIL
ENG. DWGS.)

PADDLEBALL COURTS
BELOW

PARKING GARAGE:
(NOTE: FOR FURTHER PARKING GARAGE
DIMENSIONS, DETAILING & STRIPING, SEE
"WALKER PARKING CONSULTANTS" DWGS. A-1
SERIES SHEETS)

SLOPE UP

PARKING SPACES

R139'-1"

STAIR No. 2

4"D STANDPIPE
(SEE PLUMB. PLANS)

NAUTICAL DECORATIVE
ELEMENT, REFER TO
DTL. 7a/A4.2

REFER TO DETAIL
3/ A7.2 FOR STAIR #4
FLOOR PLAN BLOW-UP
AND 4/ A7.2 FOR SECTION

STAIR No. 4

TOP LEVEL
5TH LEVEL
4TH LEVEL
3RD LEVEL
2ND LEVEL
GROUND LEVEL

REFER TO DETAIL 1-4
ON SHEET A7.1 FOR
STAIR #2 FLOOR PLAN
BLOW-UP AND 6/A7.1
FOR SECTION

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2/A-4.3)

SOLAR SHADES
ABOVE. REFER TO
DTL. 6/A-4.3

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2/A-4.3)

DECORATIVE
METAL FINNIALS,
SEE DTL. 4/A-4.3

CONNECTICUT ST.

GARFIELD ST.

ISOMETRIC

GARFIELD STREET
PARKING FACILITY

HOLLYWOOD   FLORIDA

SEAL

SHEET TITLE:

SECOND
LEVEL PLAN

Scale: AS NOTED
Project No. 15-1610.00
Sheet No.

A2.2

| 01 | SECOND LEVEL PLAN |

1/16" = 1'-0"

GARFIELD STREET
PARKING FACILITY
HOLLYWOOD   FLORIDA

NO.	DESCRIPTION	DATE
1	ADDENDUM #3	12-12-2006
	ISSUED FOR CONSTRUCTION	01-19-2007
2	ASI #1	
3	ASI #3	06-14-2007

SEAL

SHEET TITLE:

TYPICAL
LEVEL PLAN

Scale: AS NOTED
Project No. 15-1610.00
Sheet No.

A2.3

REFER TO SHEET
A-8.1 FOR STAIR #1
BLOW-UP AND SHEET
A-8.2 FOR SECTIONS

STAIR/ELEVATOR No. 1

DECORATIVE
METAL FINNIALS,
SEE DTL. 4/A-4.3

4"D STANDPIPE
(SEE PLUMB. PLANS)

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

PARKING SPACES

+40'-0"

UP   STAIR   DN

A/C ROOF TOP UNIT
SEE MECHANICAL
ENGINEERS DRAWINGS.

LINE OF COMMUNITY
CENTER ROOF BELOW

V.T.R.
V.T.R.
R.D.   R.D.   R.D.   R.D.
O.F.   O.F.   O.F.

ROOF SERVICE
STAIR #7 (AT FOURTH
FLOOR ONLY)(SEE
1 /A-4.3 FOR DTL.)

SLOPE 3.5%
UP

SEE PLUMB.
ENG. DWGS.
F.D.

4"D STANDPIPE
(SEE PLUMB. PLANS)

PARKING SPACES

SEE PLUMB.
ENG. DWGS.
F.D.

SLOPE

SLOPE

SLOPE

SLOPE

RAIN WATER
COLLECTION BOX
W/ DOWNSPOUT
TO BELOW
(TYP. OF "4")

OBSERVATION DECK
BELOW CANOPY

CANOPY AT
THIRD LEVEL
ONLY

RAIN WATER
COLLECTION BOX
W/ DOWNSPOUT
TO BELOW
(TYP. OF "4")

REFER TO DETAIL
1/A-6,3 FOR COMMUNITY
CENTER ROOF PLAN
BLOW-UP

STAIR No. 2

4"D STANDPIPE
(SEE PLUMB. PLANS)

NAUTICAL DECORATIVE
ELEMENT, REFER TO
DTL. 7a/A4.2

REFER TO DETAIL 1-4
ON SHEET A7.1 FOR
STAIR #2 FLOOR PLAN
BLOW-UP AND 6/A7.1
FOR SECTION

PARKING GARAGE
NOTE: FOR FURTHER PARKING GARAGE
DIMENSIONS, DETAILING & STRIPING, SEE
"WALKER PARKING CONSULTANTS" DWGS. A-1
SERIES SHEETS)

SLOPE 3.5%
UP

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

PARKING SPACES

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

DECORATIVE
METAL FINNIALS,
SEE DTL. 4/A-4,3

TOP LEVEL

5TH LEVEL

4TH LEVEL

3RD LEVEL

2ND LEVEL

GROUND LEVEL

SR-A1A

CONNECTICUT ST

GARFIELD ST.

ISOMETRIC

| 01 | TYPICAL LEVEL PLAN (THIRD, FOURTH AND FIFTH LEVELS) |

N   1/16" = 1'-0"

NO.	DESCRIPTION	DATE
1	ADDENDUM #3	12-12-2006
	ISSUED FOR CONSTRUCTION	01-19-2007
2	ASI #1	
3	ASI #3	06-14-2007

ISSUED:

DATE DRAWN CHECKED

GARFIELD STREET
PARKING FACILITY

HOLLYWOOD   FLORIDA

Drawing labels:

DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3

REFER TO SHEET A-8.1 FOR STAIR #1 BLOW-UP AND SHEET A-8.2 FOR SECTIONS

STAIR/ELEVATOR No. 1

4"D STANDPIPE (SEE PLUMB. PLANS)

A/C ROOF TOP UNIT SEE MECHANICAL ENGINEERS DRAWINGS

LINE OF COMMUNITY CENTER ROOF BELOW

PARKING SPACES

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

+40'-0"
UP   STAIR   DN

V.T.R.   O.F.   O.F.   O.F.
R.D.   R.D.   R.D.   R.D.

ROOF SERVICE STAIR #7 (AT FOURTH FLOOR ONLY)(SEE 1 /A-4.3 FOR DTL.)

SLOPE 3.5% UP

SEE PLUMB. ENG. DWGS.

F.D.

PARKING SPACES

4"D STANDPIPE (SEE PLUMB. PLANS)

RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")

SLOPE

OBSERVATION DECK BELOW CANOPY

SEE PLUMB. ENG. DWGS.

CANOPY AT THIRD LEVEL ONLY

PARKING GARAGE NOTE: FOR FURTHER PARKING GARAGE DIMENSIONS, DETAILING & STRIPING, SEE "WALKER PARKING CONSULTANTS" DWGS. A-1 SERIES SHEETS)

SLOPE 3.5% UP

STAIR No. 2

4"D STANDPIPE (SEE PLUMB. PLANS)

RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")

NAUTICAL DECORATIVE ELEMENT. REFER TO DTL. 7a/A4.2

PARKING SPACES

REFER TO DETAIL 1-4 ON SHEET A7.1 FOR STAIR #2 FLOOR PLAN BLOW-UP AND 6/A7.1 FOR SECTION

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3

REFER TO DETAIL 1/A-6.3 FOR COMMUNITY CENTER ROOF PLAN BLOW-UP

Isometric levels:
TOP LEVEL
5TH LEVEL
4TH LEVEL
3RD LEVEL
2ND LEVEL
GROUND LEVEL

CONNECTICUT ST.
GARFIELD ST.
SR-A1A

ISOMETRIC

SEAL

SHEET TITLE:
TYPICAL LEVEL PLAN

Scale: AS NOTED
Project No. 15-1610.00
Sheet No.

01 TYPICAL LEVEL PLAN (THIRD, FOURTH AND FIFTH LEVELS)

N   1/16" = 1'-0"

A2.3

ISSUED:			
NO.	DESCRIPTION	DATE	DRAWN	CHECKED
	ADDENDUM #3	12-12-2006		
1	ISSUED FOR CONSTRUCTION	01-19-2007		
2	ASI #1			
3	ASI #3	06-14-2007		

GARFIELD STREET
PARKING FACILITY

FLORIDA

HOLLYWOOD

SEAL

SHEET TITLE:

TYPICAL
LEVEL PLAN

Scale: AS NOTED
Project No. 15-1610.00
Sheet No.

A2.3

DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3

REFER TO SHEET A-8.1 FOR STAIR #1 BLOW-UP AND SHEET A-8.2 FOR SECTIONS

4"D STANDPIPE (SEE PLUMB. PLANS)

STAIR/ELEVATOR No. 1

A/C ROOF TOP UNIT (SEE MECHANICAL ENGINEERS DRAWINGS)

LINE OF COMMUNITY CENTER ROOF BELOW

PARKING SPACES

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

+40'-0"

UP STAIR DN

V.T.R.
V.T.R.
R.D.
O.F.
R.D.
O.F.
R.D.
O.F.
R.D.

ROOF SERVICE STAIR #7 (AT FOURTH FLOOR ONLY)(SEE 1 /A-4.3 FOR DTL.)

SLOPE 3.5% UP

SEE PLUMB. ENG. DWGS.

F.D.

PARKING SPACES

4"D STANDPIPE (SEE PLUMB. PLANS)

F.D.

SEE PLUMB. ENG. DWGS.

PARKING SPACES

RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")

OBSERVATION DECK BELOW CANOPY

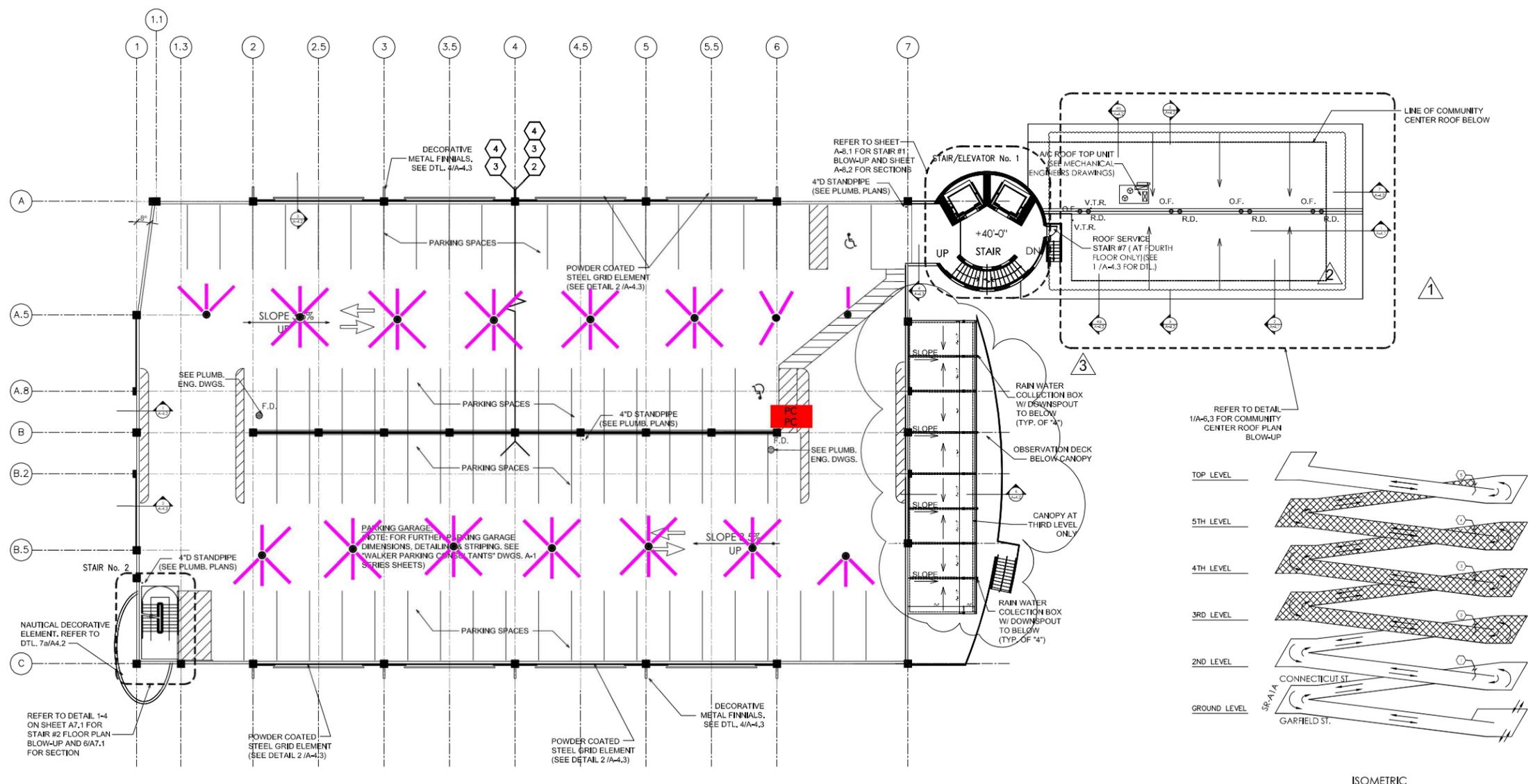REFER TO DETAIL 1/A-6.3 FOR COMMUNITY CENTER ROOF PLAN BLOW-UP

PARKING GARAGE NOTE: FOR FURTHER PARKING GARAGE DIMENSIONS, DETAILING & STRIPING, SEE "WALKER PARKING CONSULTANTS" DWGS. A-1 SERIES SHEETS)

SLOPE 3.5% UP

CANOPY AT THIRD LEVEL ONLY

STAIR No. 2

4"D STANDPIPE (SEE PLUMB. PLANS)

NAUTICAL DECORATIVE ELEMENT. REFER TO DTL. 7a/A4.2

RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")

TOP LEVEL
5TH LEVEL
4TH LEVEL
3RD LEVEL
2ND LEVEL
GROUND LEVEL

SR-A1A
CONNECTICUT ST.
GARFIELD ST.

ISOMETRIC

REFER TO DETAIL 1-4 ON SHEET A7.1 FOR STAIR #2 FLOOR PLAN BLOW-UP AND 6/A7.1 FOR SECTION

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

PARKING SPACES

DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3

| 01 | TYPICAL LEVEL PLAN (THIRD, FOURTH AND FIFTH LEVELS) | N | 1/16" = 1'-0" | **A2.3** |

LINE OF COMMUNITY
CENTER ROOF BELOW.

DECORATIVE
METAL FINNIALS.
SEE DTL. 4/A-4.3

REFER TO SHEET
A-8.1 FOR STAIR #1
BLOW-UP AND SHEET
A-8.2 FOR SECTIONS.

STAIR/ELEVATOR No. 1

4"D STANDPIPE
(SEE PLUMB. PLANS)

+60'-0"
UP   STAIR   DN

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

OPEN TO BELOW

LIGHTPOLE
LOCATION @ TOP
LEVEL

PIPE
BOLLARDS @
(TYP. OF "6")

F.D
SEE PLUMB.
ENG. DWGS.

4"D STANDPIPE
(SEE PLUMB. PLANS)

SEE PLUMB.
ENG. DWGS.

PARKING SPACES

PARKING GARAGE
(NOTE: FOR FURTHER PARKING GARAGE
DIMENSIONS, DETAILING & STRIPING, SEE
WALKER PARKING CONSULTANTS DWGS.)

SLOPE 3.5%
UP

4"D STANDPIPE
(SEE PLUMB. PLANS)

STAIR No. 2

NAUTICAL DECORATIVE
ELEMENT. REFER TO
DTL. 7a/A4.2

PARKING SPACES

REFER TO DETAIL 1-4
ON SHEET A7.1 FOR
STAIR #2 FLOOR PLAN
BLOW-UP AND 6/A7.1
FOR SECTION

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

DECORATIVE
METAL FINNIALS.
SEE DTL. 4/A-4.3

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

TOP LEVEL
5TH LEVEL
4TH LEVEL
3RD LEVEL
2ND LEVEL
GROUND LEVEL

CONNECTICUT ST.
GARFIELD ST.
SR A1A

ISOMETRIC

GARFIELD STREET
PARKING FACILITY

HOLLYWOOD   FLORIDA

SEAL

SHEET TITLE:

TOP
LEVEL PLAN

Scale: AS NOTED
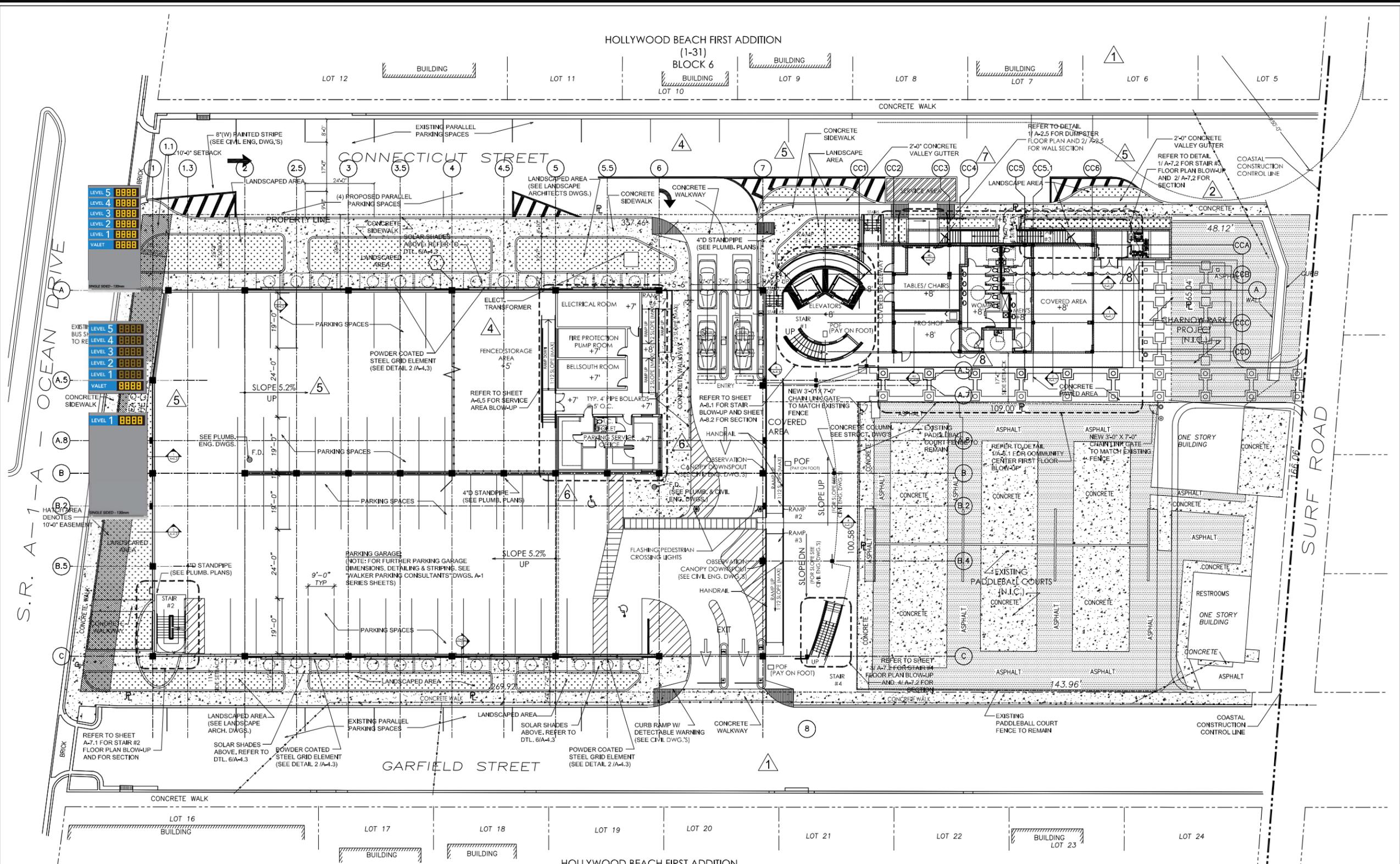Project No. 15-1610.00
Sheet No.

01 | TOP ROOF LEVEL PLAN   N   1/16" = 1'-0"

A2.4

HOLLYWOOD BEACH FIRST ADDITION
(1-31)
BLOCK 6

LOT 12   LOT 11   LOT 10   LOT 9   LOT 8   LOT 7   LOT 6   LOT 5

CONNECTICUT STREET

CONCRETE WALK

S.R. A-1-A OCEAN DRIVE

SURF ROAD

GARFIELD STREET
(vertical title block)
PARKING FACILITY
HOLLYWOOD   FLORIDA

HOLLYWOOD BEACH FIRST ADDITION
(1-31)
BLOCK 4

LOT 16   LOT 17   LOT 18   LOT 19   LOT 20   LOT 21   LOT 22   LOT 23   LOT 24

GARFIELD STREET

GENERAL SITE PLAN NOTES:

1. REFER TO SURVEY PREPARED BY "GIBBS LAND SURVEYORS" FOR ADDITIONAL INFORMATION, LEGAL DESCRIPTION, VERIFICATION OF SITE DIMENSION AND BENCHMARK ELEVATIONS.
2. FOR SITE LIGHTING AND SITE DRAINAGE DRAWINGS, SEE ELECTRICAL AND CIVIL ENGINEER'S DRAWINGS.
3. REFER TO SURVEY DRAWINGS FOR PROPERTY LINES, DISTANCES AND ANGLES, STREET NAMES, WIDTHS, EASEMENTS, ETC.
4. REFER TO CIVIL ENGINEER'S DRAWINGS FOR ALL PAVING, CURBS, DRAINAGE CALCULATIONS AND TEMPORARY CONSTRUCTION BARRIERS, ETC.
5. ALL INTERSECTIONS WITH DRIVE ISLES AND STREETS, SHALL BE DESIGNED WITH RAMPS IN ACCORDANCE WITH THE "AMERICANS WITH DISABILITIES ACT" (ADA) AND THE "FLORIDA ACCESABILITY CODE" (F.A.C.) AND AS PER THE DRAWINGS.
6. REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR ALL VEGETATION, PLANTING PLAN, IRRIGATION PLANS AND LANDSCAPING DETAILS.
7. REFER TO "WALKER PARKING CONSULTANTS" FOR DRIVEWAY AND PARKING DIRECTIONAL PAVING DETAILS AND PARKING GARAGE SIGNAGE.
8. FOR CONCRETE PAVER DETAIL PLAN, SEE SHEET A-2.1(b).

ISSUED:

NO.	DESCRIPTION	DATE
1	CITY COMMENTS	6-12-2006
2	CITY COMMENTS	6-14-2006
3	ADDENDUM #3	7-12-2006
4	ADDENDUM #4	8-18-2006
5	CITY COMMENTS	10-18-2006
6	ADDENDUM #6	10-31-2006
7	ADDENDUM #7	11-15-2006
8	ISSUED FOR CONSTRUCTION	12-12-2006
	ASI #1	01-19-2007

SHEET TITLE:
GROUND LEVEL AND SITE PLAN

Scale: AS NOTED
Project No. 15-16100.00
Sheet No.

01   GROUND LEVEL AND SITE PLAN

1/16" = 1'-0"

A2.1

REFER TO DETAIL
1/ A7.2 FOR STAIR #3
FLOOR PLAN BLOW-UP
AND 2/ A7.2 FOR
SECTION

STAIR No. 5

STAIR No. 3

BANQUET ROOM
1,735 SQ FT

ELEVATOR
MACHINE

STAIR/ELEVATOR No. 1

+20'-0"
UP   STAIR   DN

REFER TO SHEET
A-8.1 FOR STAIR #1
BLOW-UP AND SHEET
A-8.2 FOR SECTIONS

4"D STANDPIPE
(SEE PLUMB. PLANS)

DECORATIVE
METAL FINNIALS,
SEE DTL. 4/A-4.3

SOLAR SHADES
ABOVE. REFER TO
DTL. 6/A-4.3

PARKING SPACES

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

SLOPE 3.5%
UP

F.D.

1234

PARKING SPACES

4"D STANDPIPE
(SEE PLUMB. PLANS)

R.C.

R.D.
(SEE PLUMB. & CIVIL
ENG. DWGS.)

PARKING SPACES

LINE OF
CANOPY
ABOVE.

REFER TO DETAIL
1/A-8.2 FOR COMMUNITY
CENTER SECOND FLOOR
PLAN BLOW-UP

TOP LEVEL

5TH LEVEL

4TH LEVEL

3RD LEVEL

2ND LEVEL

GROUND LEVEL

PADDLEBALL COURTS
BELOW

PARKING GARAGE:
(NOTE: FOR FURTHER PARKING GARAGE
DIMENSIONS, DETAILING & STRIPING, SEE
"WALKER PARKING CONSULTANTS" DWGS. A-1
SERIES SHEETS)

SLOPE 3.5%
UP

STAIR No. 2

4"D STANDPIPE
(SEE PLUMB. PLANS)

NAUTICAL DECORATIVE
ELEMENT. REFER TO
DTL. 7a/A4.2

PARKING SPACES

REFER TO DETAIL
3/ A7.2 FOR STAIR #4
FLOOR PLAN BLOW-UP
AND 4/ A7.2 FOR SECTION

STAIR No. 4

CONNECTICUT ST.

GARFIELD ST.

ISOMETRIC

REFER TO DETAIL 1-4
ON SHEET A7.1 FOR
STAIR #2 FLOOR PLAN
BLOW-UP AND 6/A7.1
FOR SECTION

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

SOLAR SHADES
ABOVE. REFER TO
DTL. 6/A-4.3

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

DECORATIVE
METAL FINNIALS,
SEE DTL. 4/A-4.3

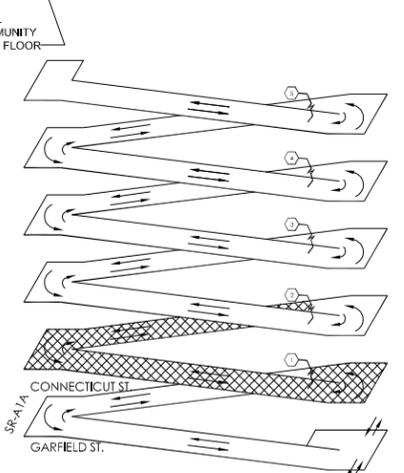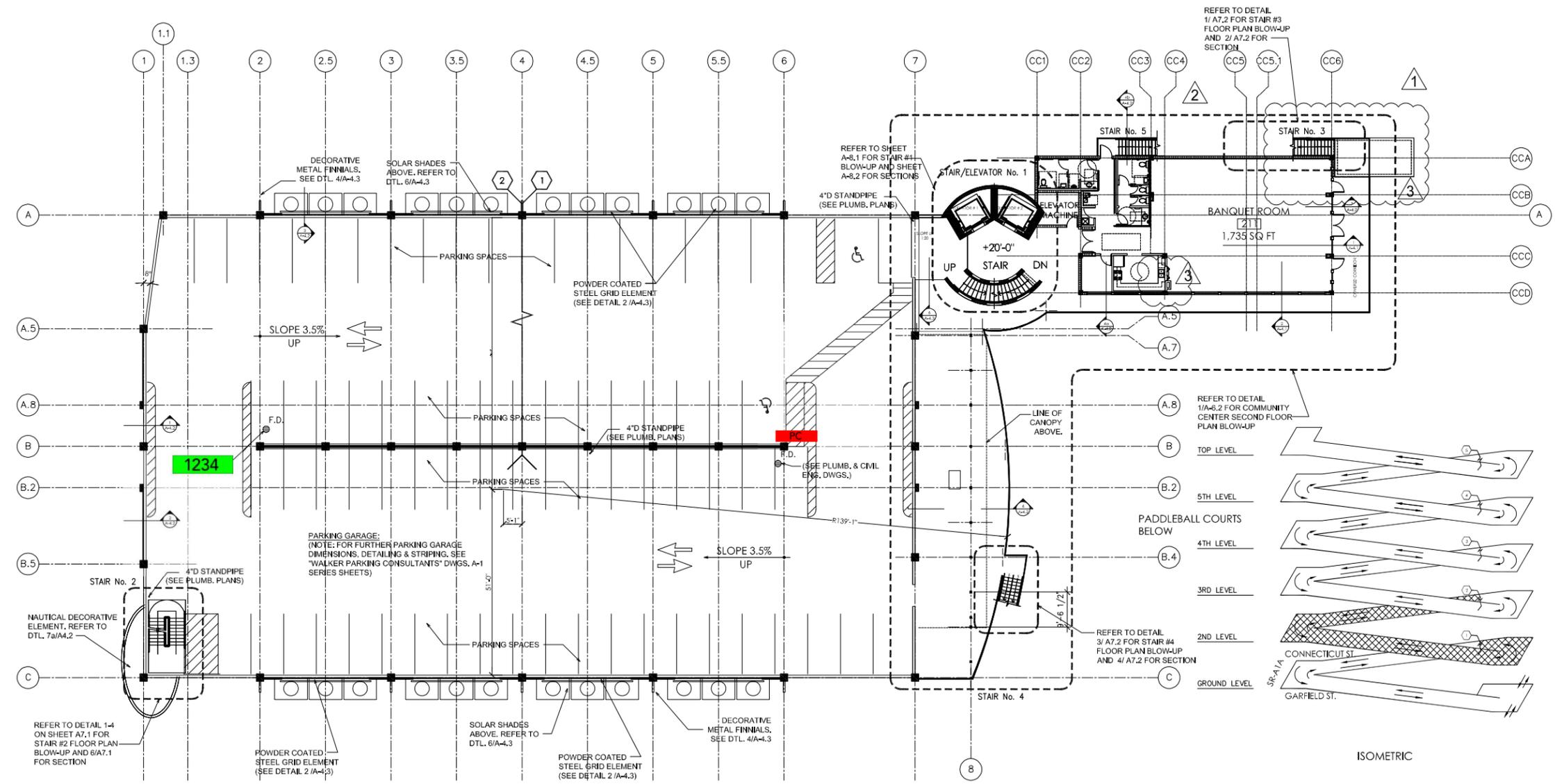GARFIELD STREET
PARKING FACILITY

HOLLYWOOD   FLORIDA

SEAL

SHEET TITLE:

SECOND
LEVEL PLAN

Scale: AS NOTED
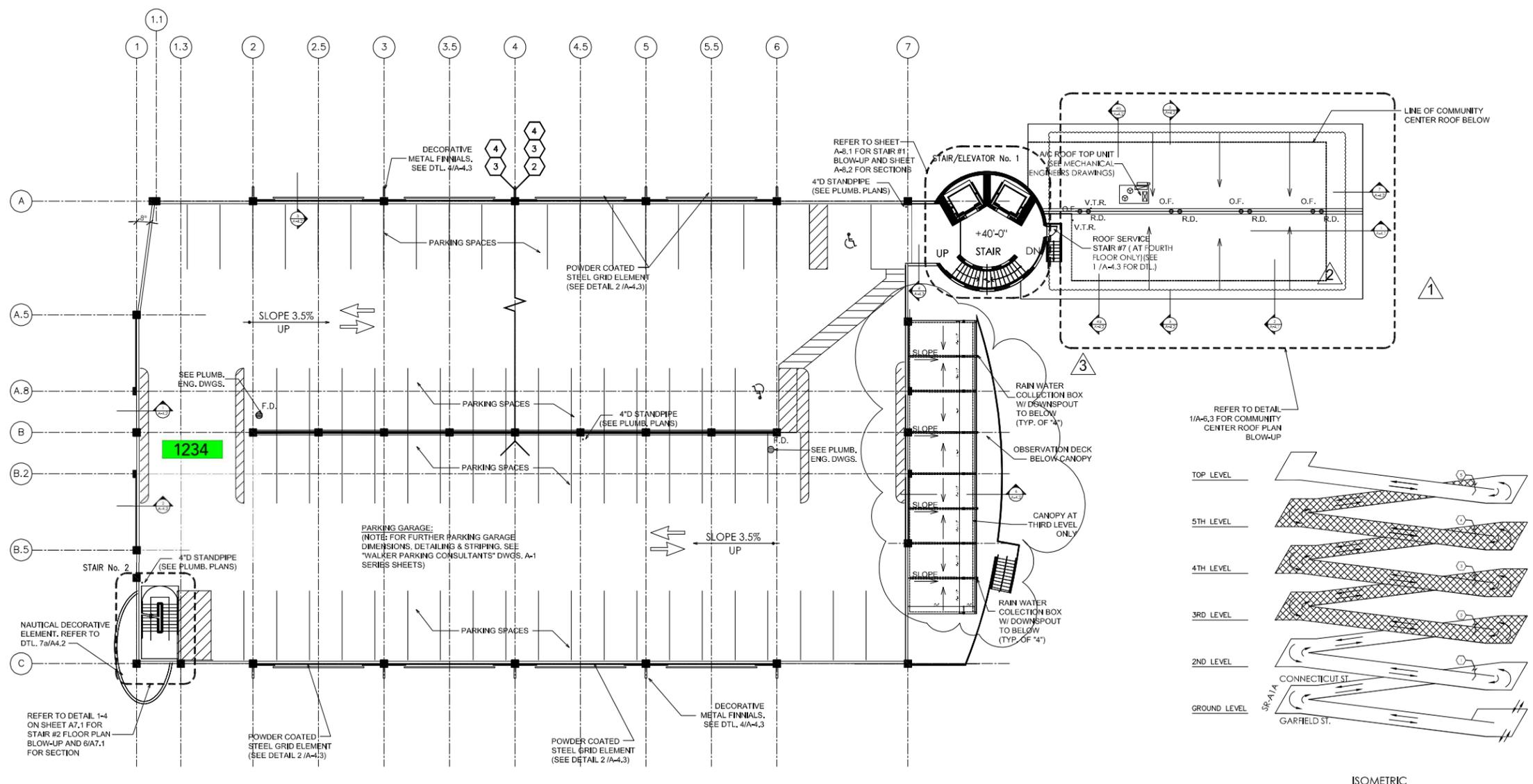Project No. 15-16110.00
Sheet No.

A2.2

01 SECOND LEVEL PLAN   N   1/16" = 1'-0"

GARFIELD STREET
PARKING FACILITY

HOLLYWOOD   FLORIDA

Plan Notes

- DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3
- REFER TO SHEET A-8.1 FOR STAIR #1 BLOW-UP AND SHEET A-8.2 FOR SECTIONS
- 4"D STANDPIPE (SEE PLUMB. PLANS)
- STAIR/ELEVATOR No. 1
- PARKING SPACES
- POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)
- SLOPE 3.5% UP
- SEE PLUMB. ENG. DWGS.
- F.D.
- 1234
- 4"D STANDPIPE (SEE PLUMB. PLANS)
- PARKING GARAGE: (NOTE FOR FURTHER PARKING GARAGE DIMENSIONS, DETAILING & STRIPING, SEE "WALKER PARKING CONSULTANTS" DWGS. A-1 SERIES SHEETS)
- SLOPE 3.5% UP
- STAIR No. 2
- 4"D STANDPIPE (SEE PLUMB. PLANS)
- NAUTICAL DECORATIVE ELEMENT. REFER TO DTL. 7a/A4.2
- REFER TO DETAIL 1-4 ON SHEET A7.1 FOR STAIR #2 FLOOR PLAN BLOW-UP AND 6/A7.1 FOR SECTION
- POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)
- POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)
- DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3
- +40'-0"
- UP STAIR DN
- ROOF SERVICE STAIR #7 (AT FOURTH FLOOR ONLY)(SEE 1 /A-4.3 FOR DTL.)
- A/C ROOF TOP UNIT (SEE MECHANICAL ENGINEERS DRAWINGS)
- V.T.R. R.D. O.F. O.F. O.F.
- V.T.R. R.D. R.D. R.D. R.D.
- LINE OF COMMUNITY CENTER ROOF BELOW
- RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")
- OBSERVATION DECK BELOW CANOPY
- CANOPY AT THIRD LEVEL ONLY
- RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")
- REFER TO DETAIL 1/A-6.3 FOR COMMUNITY CENTER ROOF PLAN BLOW-UP

Isometric Levels

- TOP LEVEL
- 5TH LEVEL
- 4TH LEVEL
- 3RD LEVEL
- 2ND LEVEL
- GROUND LEVEL
- SR A1A
- CONNECTICUT ST.
- GARFIELD ST.

ISOMETRIC
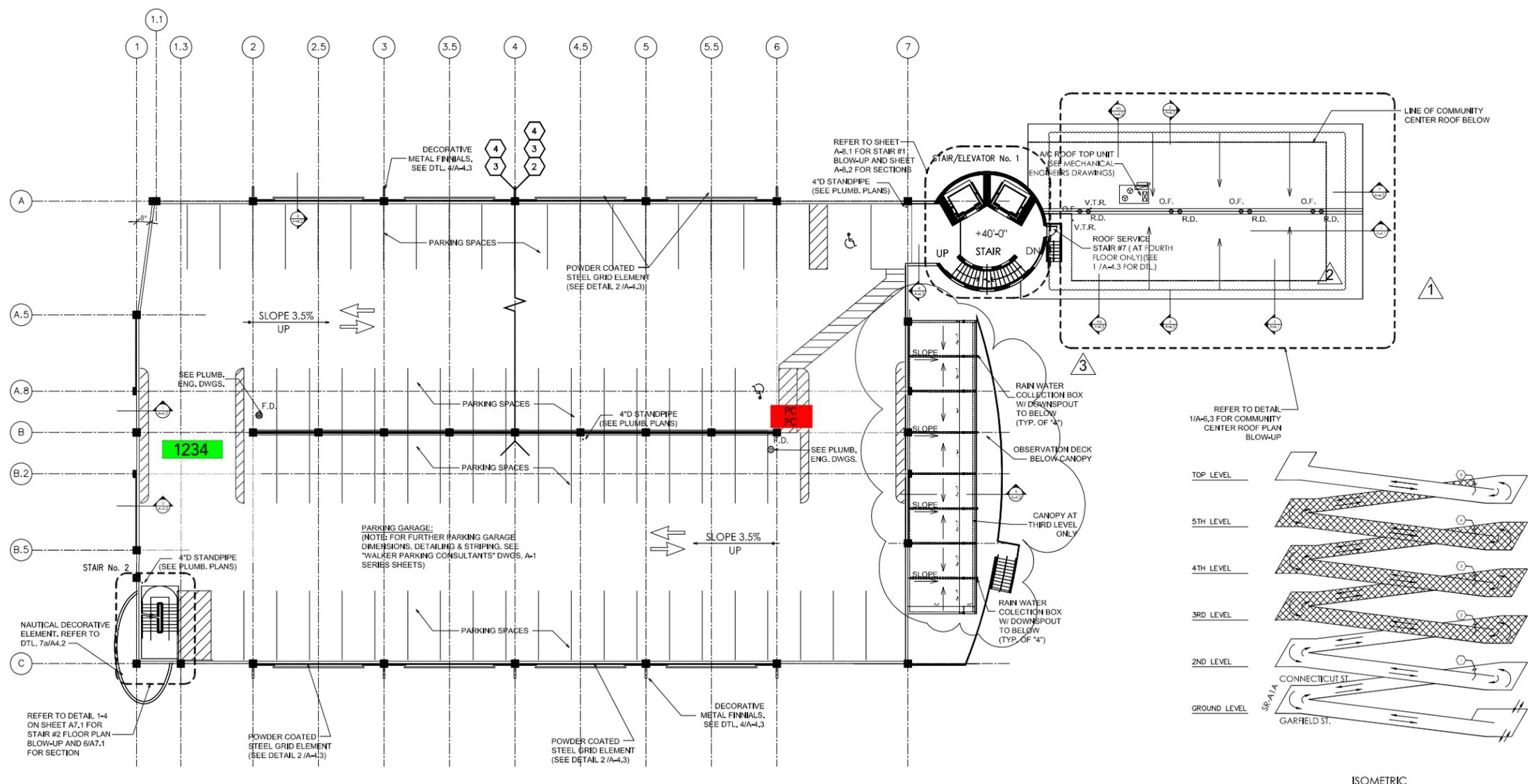
SHEET TITLE:
TYPICAL LEVEL PLAN

Scale: AS NOTED
Project No. 15-1610.00
Sheet No.

| 01 | TYPICAL LEVEL PLAN (THIRD, FOURTH AND FIFTH LEVELS) | 1/16" = 1'-0" | **A2.3** |

GARFIELD STREET
PARKING FACILITY

HOLLYWOOD   FLORIDA

SEAL

SHEET TITLE:

TYPICAL
LEVEL PLAN

Scale: AS NOTED
Project No. 15-1610.00
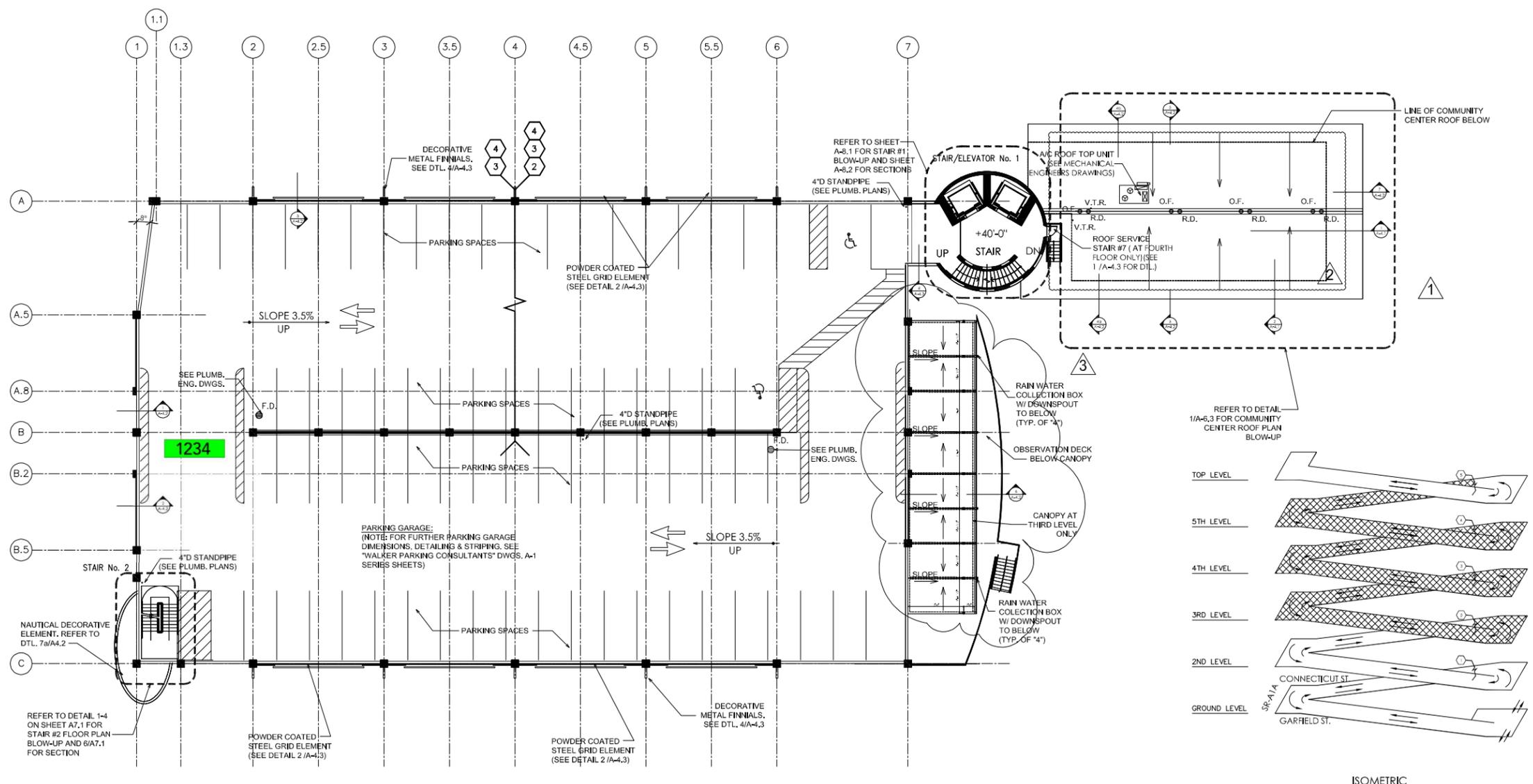Sheet No.

A2.3

ISSUED:

NO.	DESCRIPTION	DATE	DRAWN	CHECKED
1	ADDENDUM #3	12-12-2006		
	ISSUED FOR CONSTRUCTION	01-19-2007		
2	ASI #1			
3	ASI #3	06-14-2007		

DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3

REFER TO SHEET A-8.1 FOR STAIR #1 BLOW-UP AND SHEET A-8.2 FOR SECTIONS

STAIR/ELEVATOR No. 1

4"D STANDPIPE (SEE PLUMB. PLANS)

A/C ROOF TOP UNIT (SEE MECHANICAL ENGINEERS DRAWINGS)

LINE OF COMMUNITY CENTER ROOF BELOW

V.T.R.   O.F.   O.F.   O.F.
R.D.   R.D.   R.D.   R.D.

V.T.R.
ROOF SERVICE STAIR #7 (AT FOURTH FLOOR ONLY) (SEE 1 /A-4.3 FOR DTL.)

+40'-0"
UP   STAIR   DN

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

PARKING SPACES

SLOPE 3.5% UP

SEE PLUMB. ENG. DWGS.

F.D.

1234

PARKING SPACES

4"D STANDPIPE (SEE PLUMB. PLANS)

PC PC

F.D.

SEE PLUMB. ENG. DWGS.

PARKING SPACES

RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")

OBSERVATION DECK BELOW CANOPY

CANOPY AT THIRD LEVEL ONLY

REFER TO DETAIL 1/A-6.3 FOR COMMUNITY CENTER ROOF PLAN BLOW-UP

SLOPE 3.5% UP

SLOPE
SLOPE
SLOPE
SLOPE

PARKING GARAGE:
(NOTE FOR FURTHER PARKING GARAGE DIMENSIONS, DETAILING & STRIPING, SEE "WALKER PARKING CONSULTANTS" DWGS. A-1 SERIES SHEETS)

4"D STANDPIPE (SEE PLUMB. PLANS)

STAIR No. 2

NAUTICAL DECORATIVE ELEMENT. REFER TO DTL. 7a/A4.2

RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")

REFER TO DETAIL 1-4 ON SHEET A7.1 FOR STAIR #2 FLOOR PLAN BLOW-UP AND 6/A7.1 FOR SECTION

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

TOP LEVEL
5TH LEVEL
4TH LEVEL
3RD LEVEL
2ND LEVEL
GROUND LEVEL

CONNECTICUT ST.
SR-A1A
GARFIELD St.

ISOMETRIC

| 01 | TYPICAL LEVEL PLAN (THIRD, FOURTH AND FIFTH LEVELS) | | N 1/16" = 1'-0" |

ISSUED:

NO.	DESCRIPTION	DATE	DRAWN	CHECKED
1	ADDENDUM #3	12-12-2006		
	ISSUED FOR CONSTRUCTION	01-18-2007		
2	ASI #1			
3	ASI #3	06-14-2007		

GARFIELD STREET
PARKING FACILITY

HOLLYWOOD   FLORIDA

DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3

REFER TO SHEET A-8.1 FOR STAIR #1 BLOW-UP AND SHEET A-8.2 FOR SECTIONS

4"D STANDPIPE (SEE PLUMB. PLANS)

STAIR/ELEVATOR No. 1

+40'-0"

UP   STAIR   DN

A/C ROOF TOP UNIT (SEE MECHANICAL ENGINEERS DRAWINGS)

V.T.R. R.D.   O.F.   O.F.   O.F.   O.F.
V.T.R. R.D.   R.D.   R.D.   R.D.

LINE OF COMMUNITY CENTER ROOF BELOW

ROOF SERVICE STAIR #7 (AT FOURTH FLOOR ONLY)(SEE 1 /A-4.3 FOR DTL.)

PARKING SPACES

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

SLOPE 3.5% UP

SEE PLUMB. ENG. DWGS.

F.D.

1234

PARKING SPACES

4"D STANDPIPE (SEE PLUMB. PLANS)

R.D.

SEE PLUMB. ENG. DWGS.

RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")

OBSERVATION DECK BELOW CANOPY

SLOPE
SLOPE
SLOPE
SLOPE

CANOPY AT THIRD LEVEL ONLY

REFER TO DETAIL 1/A-6.3 FOR COMMUNITY CENTER ROOF PLAN BLOW-UP

TOP LEVEL
5TH LEVEL
4TH LEVEL
3RD LEVEL
2ND LEVEL
GROUND LEVEL

PARKING GARAGE: (NOTE FOR FURTHER PARKING GARAGE DIMENSIONS, DETAILING & STRIPING, SEE "WALKER PARKING CONSULTANTS" DWGS. A-1 SERIES SHEETS)

SLOPE 3.5% UP

4"D STANDPIPE (SEE PLUMB. PLANS)

STAIR No. 2

PARKING SPACES

RAIN WATER COLLECTION BOX W/ DOWNSPOUT TO BELOW (TYP. OF "4")

CONNECTICUT ST.

SR-A1A

GARFIELD ST.

NAUTICAL DECORATIVE ELEMENT. REFER TO DTL. 7a/A4.2

REFER TO DETAIL 1-4 ON SHEET A7.1 FOR STAIR #2 FLOOR PLAN BLOW-UP AND 6/A7.1 FOR SECTION

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

POWDER COATED STEEL GRID ELEMENT (SEE DETAIL 2 /A-4.3)

DECORATIVE METAL FINNIALS, SEE DTL. 4/A-4.3

ISOMETRIC

SEAL

SHEET TITLE:

TYPICAL LEVEL PLAN

Scale: AS NOTED
Project No. 15-16110.00
Sheet No.

01 TYPICAL LEVEL PLAN (THIRD, FOURTH AND FIFTH LEVELS)   N   1/16" = 1'-0"

A2.3

ISSUED:
NO. | DESCRIPTION | DATE | DRAWN | CHECKED
1 | ISSUED FOR CONSTRUCTION | 12-12-2006 | |

GARFIELD STREET
PARKING FACILITY

HOLLYWOOD   FLORIDA

LINE OF COMMUNITY
CENTER ROOF BELOW.

REFER TO SHEET
A-8.1 FOR STAIR #1
BLOW-UP AND SHEET
A-8.2 FOR SECTIONS

STAIR/ELEVATOR No. 1

4"D STANDPIPE
(SEE PLUMB. PLANS)

+60'-0"

UP   STAIR   DN

DECORATIVE
METAL FINNIALS.
SEE DTL. 4/A-4.3

5

A

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

OPEN TO BELOW

A.5

LIGHTPOLE
LOCATION @ TOP
LEVEL

4"D STANDPIPE
(SEE PLUMB. PLANS)

A.8

PIPE
BOLLARDS
(TYP. OF "6")

F.D.

SEE PLUMB.
ENG. DWGS.

B

4"D STANDPIPE
(SEE PLUMB. PLANS)

B.2

PARKING SPACES

F.D.

SEE PLUMB.
ENG. DWGS.

B.5

PARKING GARAGE
(NOTE: FOR FURTHER PARKING GARAGE
DIMENSIONS, DETAILING & STRIPING, SEE
WALKER PARKING CONSULTANTS DWGS.)

SLOPE 3.5%
UP

4"D STANDPIPE
(SEE PLUMB. PLANS)

STAIR No. 2

NAUTICAL DECORATIVE
ELEMENT. REFER TO
DTL. 7a/A4.2

C

PARKING SPACES

DECORATIVE
METAL FINNIALS.
SEE DTL. 4/A-4.3

REFER TO DETAIL 1-4
ON SHEET A7.1 FOR
STAIR #2 FLOOR PLAN
BLOW-UP AND 6/A7.1
FOR SECTION

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

POWDER COATED
STEEL GRID ELEMENT
(SEE DETAIL 2 /A-4.3)

1 1.1 1.3 2 2.5 3 3.5 4 4.5 5 5.5 6 7

TOP LEVEL

5TH LEVEL

4TH LEVEL

3RD LEVEL

2ND LEVEL

GROUND LEVEL

SR A1A

CONNECTICUT ST.

GARFIELD ST.

ISOMETRIC

SEAL

SHEET TITLE:

TOP
LEVEL PLAN

Scale: AS NOTED
Project No. 15-1610.00
Sheet No.

A2.4

| 01 | TOP ROOF LEVEL PLAN |

N   1/16" = 1'-0"

M5 Smart-Sensor

DESCRIPTION

The camera-based M5 Smart-Sensor has the ability to sense, identify, and count vehicles for individual parking spaces. Configured with one or two CMOS digital cameras, each smart-sensor can monitor up to six (6) parking spaces simultaneously.

Using a distributed processing ecosystem, Camera images are continuously processed by smart AI algorithms to detect parking space occupancy changes using proprietary image processing software. For surveillance purposes, the output of the cameras can be streamed over the network. The Smart-Sensor's housing has a seal rating of IP66, preventing the ingress of water and dirt.

Built into the M5 Smart-Sensor is a full spectrum RGB (LED) indicator, configurable to any of thousands of colors to indicate the status of the spaces it monitors. In a typical configuration, the indicator is green when at least one monitored space is unoccupied, and red when all monitored spaces are occupied. Status colors can be set remotely via software to meet local standards and/or address special needs.

Each M5 Smart-Sensor operates locally, managing its own occupancy status and indicator color. Data and images flow from sensors to the central server via a proprietary PoE (Power over Ethernet) based TCP/IP Ethernet network. The smart-sensors also feature network-accessible interfaces for remote configuration and maintenance.

PART NUMBER	DESCRIPTION
M5-1000	Camera Sensor, 5th Generation, single camera, daisy chain
M5-2000	Camera Sensor, 5th Generation, dual camera, daisy chain

Model	M5-1000	M5-2000
Architecture		
Processor	ARM	
Imaging	Single Camera	Dual Camera
Network	RJ45 PoE Ethernet connection designed for daisy chained installation	
Indicator		
Technology	12 RGB LEDs; color mixing for thousands of possible colors	
Imaging		
Field of View	105° Horizontally (3 adjustable aiming positions)	
Min Illumination to Operate	25 lux	
Interfaces		
Network	TCP/IP	
Video	4.0 megapixel	
Environment		
Operating Temperature	-30° to 50+°C (-40° to 122+°F)	
Humidity Range	10% - 95%	
Environment Sealing	IP66	
Mechanical		
Mounting	Removable "snap-click" brackets	
Material	ABS and polycarbonate plastic	
Electrical		
Voltage	20-60v DC	
Power Draw	5.5W typical	
Product Safety	Conforms to ANSI/UL Std 62368-1, Certified to CSA Std C22.2 NO. 62368-1	
Dimensions		
Height	125 mm (4.9")	
Width	170 mm (6.7")	
Depth	170 mm (6.7")	
Weight	1.0 kg (2.2 lbs)	

Channel System

DESCRIPTION

The specially-designed aluminum mounting channel simplifies the installation of the Park Assist smart-sensor system. From initial hanging to mounting smart-sensors, the channel reduces the time to get a system up and running.

Park Assist smart-sensors attach to the channel without tools. The open channel holds the wiring that connects each unit to the high-speed network. Channel sections can be assembled into long straight runs, or junction pieces can be used to alter the channel's path in height and direction. The channel hangs from the ceiling using standard anchors, threaded rods, and nuts attached to Park Assist hanger clips that fit inside the channel.

PART NUMBER	DESCRIPTION
CS-CHNL-3	Channel, aluminum, 10' / 3.05 m
CS-HANGER-0	Channel system, Hanger clip, short profile
CS-JS	Channel system, Straight junction
CS-JH90	Channel system, 90° junction
CS-JH45	Channel system, 45° junction
CS-JT	Channel system, T junction
CS-JX	Channel system, X junction
CS-JV45U	Channel system, 45° up junction
CS-JV45D	Channel system, 45° down junction
CS-CAP	Channel system, End-caps
CBL-CC100	Channel system, Cable clamp
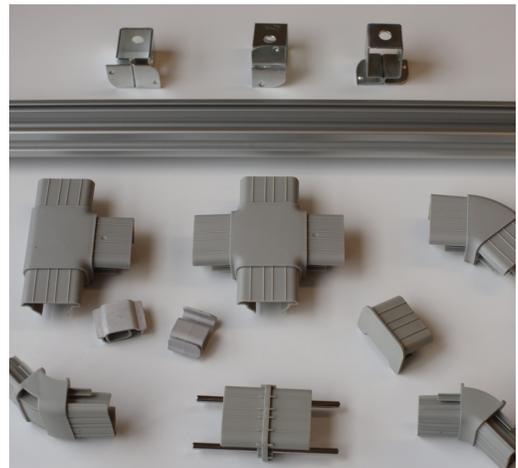
Specs

Channel	
Material	Aluminum 6063-0
Finish	Iridite per MIL-C-5541E, Class 3
Drainage	Two 5 mm (0.2") weep holes, centered on width, 1016 mm (40")from each end of a standard 3 m (10') length
Wall Thickness	1.25 mm (0.05") ± 0.125 mm (0.005")
Length	3.05 m (10') ± 3.175 mm (0.125")
Width	49.1 mm (1.9") ± 0.125 mm (0.005")
Height	28 mm (1.1") ± 0.125 mm (0.005")-
Weight	1.7 kg (3.7 lbs) per piece
Packaging	Bundle of 16
Shipping Weight	26.7 kg (58.9 lbs) per bundle
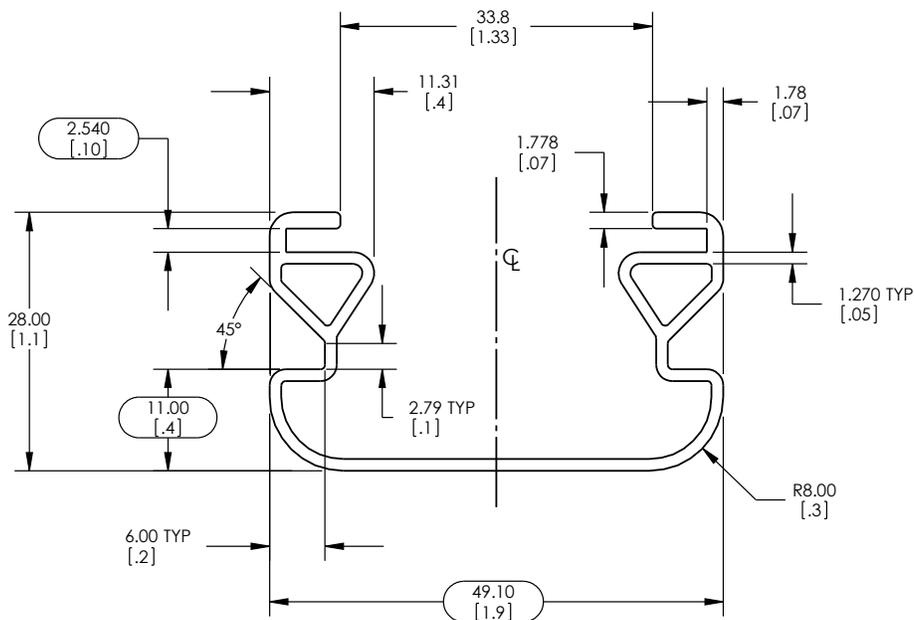
VMS-NAV
1x2 Aisle Sign

DESCRIPTION

With a Park Assist smart-sensor system, digital variable messaging signs are placed at key driver wayfinding decision points within parking structures.

Each Park Assist VMS-NAV aisle sign can display a wide range of guidance information, including the number of currently available spaces for its indicated area, icons, and textual messages enabling visitors to quickly make decisions about where to park.

Park Assist VMS-NAV 1x2 Aisle Sign is specifically designed to be installed stand-alone or can be incorporated into an enclosure with one or more inserts.

Light emitting diodes (LEDs) are the key optical element, forming the basis for all illuminated characters and symbols. Character display color is selectable to meet client preferences. Power and network access are provided by Park Assist Floor Cabinets, which make wayfinding signage an extension of the smart-sensor network.

PART NUMBER	DESCRIPTION
VMS-NAV 1x2	Sign insert, full 16 x 64 LED matrix, 8mm pitch, high brightness for outdoor use, True RGB 16.7M colors, 128 x 512 mm active area

Specs

Content Display:	
Capabilities	Static text or dynamic digits, icons, static or scrolling arrows
Font	8 x 14 (112 mm character height) or 9 x 16 (128 mm character height)
Active Area	128 mm x 512 mm (5" x 20.2")
Digit Color	24-bit RGB for 16.7M colors
Brightness	Continuously adjustable via software, up to 6400 nits
Maximum Viewing Range	78 m @ 24-40 km/h (256' @ 15-25 mph)
Maximum Viewing Angle	Legible viewing maintained at ± 60° off-axis in any direction
LED Service Life	100,000 hours MTBF
Communications	
Communication	2x switched Ethernet ports for daisy chaining comms.
Protocols Supported	TCP, UDP, DHCP, SNMP, MQTT
Environment	
Operating Temperature	-20° to 50°C (-4° to 122°F)
Environmental Sealing	IP65
Mechanical	
Mounting Options	2x M8x1.25 threaded inserts on top 2x 3/8" threaded inserts on top 2x L-brackets bolted to back housing
Service Access	From front. Case is hinged on top, secured by 2x screws on bottom
Case Material	Black powder-coated aluminum
Case Impact Resistance	IK08
Electrical	
Voltage	18 - 30V DC | 24V DC nominal
Power Draw	30W nominal | 50W maximum
Protection	Reverse polarity protected
Power Connection	2x parallel internal connectors, up to 5.2 mm² (10AWG)
Product Safety	UL Listed to UL Std. 48
Dimensions	
Height	128 mm (5")
Width	512 mm (20.2")
Depth (cabinet only)	90 mm (3.4")
Weight	3 kg (6.6 lbs)

M5 Power Cabinet

DESCRIPTION

The TKH Security Power Cabinet underpins a revolutionary change in the architecture of Automated Parking Guidance Systems (APGS). The POE Cabinet is the foundation of the parking sensor solution system, providing power and network connectivity to the APGS sensor and signage network.

Each floor or region of an M5 installation includes at least one Power Cabinet. The equipment housed in the cabinet includes a Power over Ethernet (PoE) network switch to provide power and data for the camera based smart-sensor network and digital wayfinding aisle signs.

PART NUMBER	DESCRIPTION
CAB-C601	Cabinet for M5 ecosystem, 6 ports 1Gb Passive PoE++, 2 ports 1Gb Active PoE+ 802.3at (90W total budget), 4 ports 1Gb SFP, global 85-264VAC 6A @120VAC / 3A @230VAC
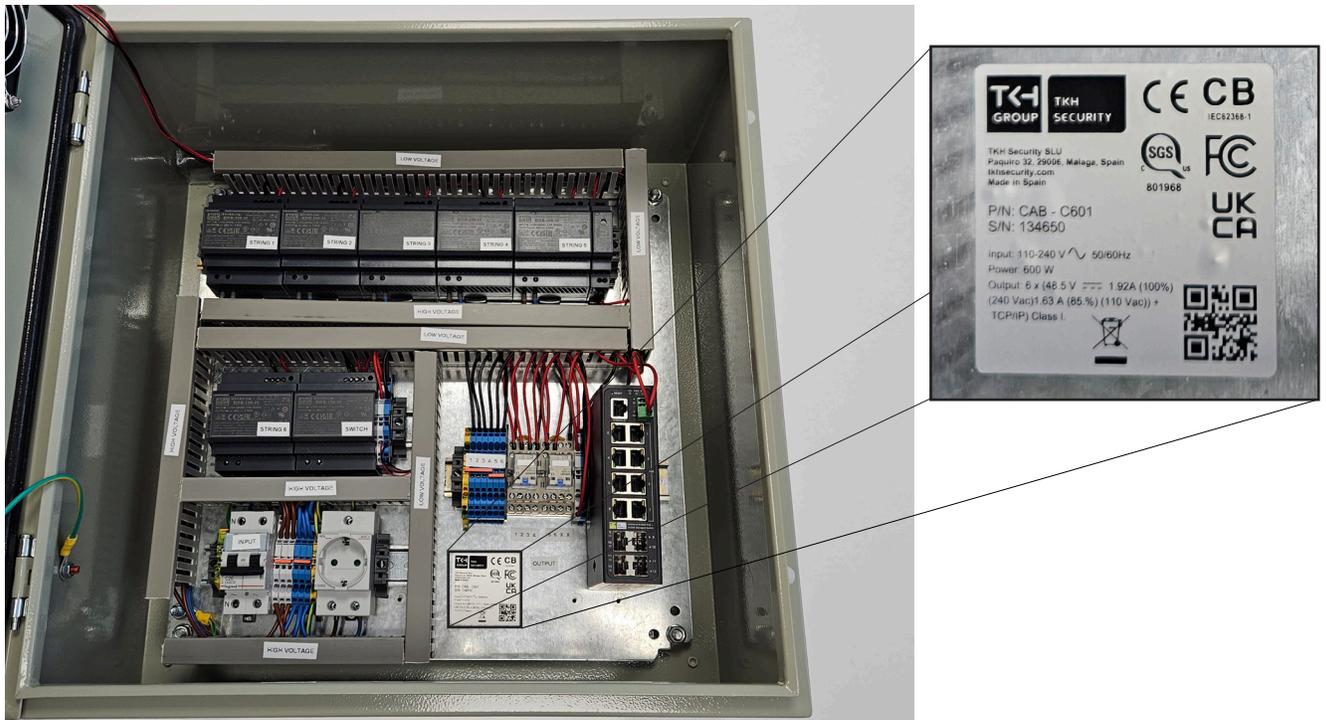
All pictures shown are for illustration purposes only.
Actual product may vary due to product enhancement.

Communications

Ethernet	Contains 12-port Layer 2 managed Ethernet switch 4 ports: 1Gb Ethernet PoE+ (100W budget) 4 ports: 1Gb SFP port

Environment

Operating Temperature	-25° to 50°C (-13° to 122°F)
Environmental sealing	IP66 / NEMA 4

Electrical

Power Input	85-264V AC 50/60 Hz 6A/3A
Power Output	(6) 48V DC 100W Class 2-compliant LPS outputs 8 ports 802.3at PoE+ (100W total budget)
Product Safety	UL 62368

Construction

Body	1.5 mm (16 ga) Powder-coated steel
Door	2 mm (14 ga) Powder-coated steel with PU seal
Color	Light gray (RAL 7035)

Dimensions

Height	500 mm (19.7")
Width	500 mm (19.7")
Depth	250 mm (9.8")
Weight	20.4 kg (45 lbs)

Core Server

DESCRIPTION

The Park Assist Core Server is the central manager of the entire camera based smart sensor system. It consists of an industry standard rackmount server running multiple virtual machines, each tasked with a different aspect of system operation. At the heart of the Core Server is our *Park Server* software, occupying one of the virtual machines. In total, the responsibilities of the Core Server include:

- Receiving and processing transactional data from smart-sensors

- Updating information displayed on signage: interior and exterior

- Processing images from smart-sensors with License Plate Recognition (LPR) software

- Network management (e.g. IP addressing, time synchronization)

- Supporting advanced optional software features

- Communication with other onsite systems being used (e.g. kiosks for Park Finder, PARCS or other systems)

- Time-limited local storage of all data

- Transmitting data (excluding images) to INX: a cloud-based portal to access the parking data gathered by the system

- Presenting a web-accessible interface for commissioning, configuration and ongoing administration of the camera based smart-sensors

PART NUMBER	DESCRIPTION
IT-DELL-PE-R640	IT head end, Core server, standard, 1RU
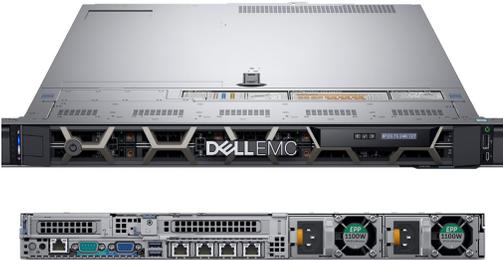
Specs

Hardware	
CPU	Dual Intel Xeon Silver 4114
DRAM	64 GB
Storage	3 x 300 GB HDD with RAID5
Network	4 x Gigabit Ethernet
Mounting	1U height rack mount

Software	
Operating Systems	Windows Server 2016 Ubuntu Linux
Database	SQL Server Standard
Virtualization	VMware®

Electrical	
Power Input	100-240 V AC, 50-60 Hz
Power Supply	Redundant 750W
Thermal Output	2891 BTU/hr (max)

Core Router

DESCRIPTION

The Core Router allows the Park Assist network to securely connect to the internet for a variety of purposes including Park Assist's data mining applications, API access, and remote support. It includes a firewall, providing robust security coming in and out of the network, access control for users via IPsec VPN, and NAT of local subnets for internet access.

PART NUMBER	DESCRIPTION
IT-CISCO-892-FSP	IT head end, Core Router, 2x 1Gb RJ45 WAN, 1x Gb SFP WAN, 8x 1Gb RJ45 LAN, managed switch, rack mount kit not incldued
IT-CISCO-ACS-890-RM-19	1U rack mount kit for IT-CISCO-892-FSP

Specs

Network	
WAN Ports	2x 1Gb Ethernet RJ45, 1x 1Gb SFP
LAN Ports	8x 1Gb Ethernet RJ45
Security	50x IPsec VPN tunnels, MAC filtering & port security, Stateful inspection transparent firewall, Dynamic and static port security

Electrical	
Input Voltage	100-240V AC, 50-60 Hz
Power Supply	12V DC 60W
Heat Output	205 BTU/hr (max)

Regulatory	
Emission	FCC Part 15, CISPR22, EN55022, others
Immunity	CISPR24, EN55024, others

Dimensions	
Mounting	1U height rack mount
Weight	2.5kg (5.5lbs)

Core Switch

DESCRIPTION

At the center of the Park Assist network is the Core Switch. Data from all types of sensors is concentrated at the Core Switch, which features ample ports and room for expansion via network modules. All switch configuration is controlled by Park Assist to manage traffic, ports, and security protocols.

For installations with high bandwidth requirements, this switch can be used for distribution within parking structures to allow dedicated 1G links to each floor cabinet. Uplink from the distribution switch to the core switch at the head end would be via 10G network module.

PART NUMBER	DESCRIPTION
IT-CISCO-C9300-24T-E	IT head end, Core Switch, 24x 1G RJ45 ports, support for 4x 1G SFP or 8x 10G SFP network module
IT-CISCO-C9300-NM-4G	Network module, 4x 1G SFP (optional)
IT-CISCO-C9300-NM-8X	Network module, 8x 10G SFP (optional)

Specs

Network

Switch type	Managed layer 3
Ports	24x 1G RJ45 4x 1G SFP network module 8x 10G SFP network module

Electrical

Input Voltage	100-240V AC, 50-60 Hz 350W Power Supply
Input Current	2-4A
Thermal Output	1207BTU/hr

Regulatory

Product Safety	UL 60950-1, CSA-C22.2 No. 60950-1, EN 60950-1, IEC 60950-1, CCC, CE Marking
EMI	FCC Part 15 Class A, ICES-003 Class A, EN 55022 Class A, CISPR 22 Class A, AS/NZS 3548 Class A, others

Dimensions

Mounting	1U height rack mount

Uninterruptible Power Supply

DESCRIPTION

The Uninterruptible Power Supply protects the Park Assist Core Server from electric power fluctuations, including surges, spikes, lightning, and other disturbances. If power is interrupted the UPS supplies power to the Core Server from its internal battery, providing the server time to shut down gracefully. Internal systems manage the battery, maximizing battery life by regulating recharging operations.

PART NUMBER	DESCRIPTION
IT-UPS-2200-110	IT head end, UPS, 2200VA, 2RU, 110V AC
IT-UPS-2200-230	IT head end, UPS, 2200VA, 2RU, 230V AC

Specs

Electrical

Nominal Input Voltage	120V AC (-110) 230V AC (-230)
Input Frequency Range	57-63 Hz (-110) 47-53 Hz (-230)
Input Voltage Range	90-140V (-110) 160-280V (-230)
Output type	Sine wave
Output capacity	1800W / 2200VA
Output connections	4x NEMA 5-15R (-110) 4x IEC 320 C13 (-230)
Surge suppression	500 joules

Regulatory

Approvals (-110)	UL 1778, FCC Part 15 Class A RoHS
Approvals (-230)	CE, EN/IEC 62040-1, EN/IEC 62040-2

Physical

Mounting	2U height rack mount
Weight	43 kg (95 lbs)
Online Thermal Dissipation	306 BTU/hr
Management Port	RJ45 Ethernet, SNMP

Equipment Rack

DESCRIPTION

The Equipment Rack provides a mounting frame for Park Assist head-end hardware. Designed for standard 19" rack-mount equipment, racks are available with vertical capacity of 12U, 25U, or 42U depending on project-specific requirements. Rack rails are adjustable to accommodate different sizes of equipment. Ventilation on multiple sides facilitates cooling by convection. Removable side panels are lockable, and the front door is lockable and reversible.

PART NUMBER	DESCRIPTION
IT-RACK12	IT head end, Enclosed equipment rack, 12RU
IT-RACK25	IT head end, Enclosed equipment rack, 25RU
IT-RACK42	IT head end, Enclosed equipment rack, 42RU

Specs

Dimensions			
Rack height	12U	25U	42U
Unit height	637.5 mm (25.1")	1245 mm (49")	2000 mm (78.5")
Unit width	600 mm (23.6")	600 mm (23.6")	600 mm (23.6")
Unit depth	851 mm (33.5")	1092 mm (43")	1092 mm (43")
Maximum rack depth	826 mm (32.5")	940 mm (37")	940 mm (37")
Unit weight	47.6 kg (105 lbs	88.5 kg (195 lbs)	128 kg (281 lbs
Weight capacity (stationary)	453.6 kg (1000 lbs	1360 kg (3000 lbs)	1360 kg (3000 lbs)
Weight capacity (rolling)	453.6 kg (1000 lbs)	1020 kg (2250 lbs)	1020 kg (2250 lbs
Color	Black	Black	Black