# RANCHOS LOS AMIGOS

# SOUTH CAMPUS

ISD + Probation | Volume 1 | CP 69823 & 69824 Narrative, Program and Room Data Sheets March 2019





Gensler

# **Table of Contents**

# 01

Executive Summary	
LA County Mission, Vision & Goals	10
RLASC Overview	12
RLASC Mission	14

## 02

Ca	ampus Overview	17
	RLASC Vision	18
	RLASC Planning Objectives	18
	Planning Principals	19
	Plan Description	21
	Linkages and Connections	23

Project Program + Planning Criteria	
Program Description + User Group Findings	28
Project Description + Planning Factors	30
Site Planning Criteria + Adjacencies	30

# **Table of Contents**

Design Criteria Narrative	
Site + Landscape + Traffic	36
Civil, Demolition + Authorities Having Jurisdiction	42
Exterior Building Design	50
Interior Building Design	55
Parking Structure	60
Structural	64
Mechanical	71
Electrical	78
Plumbing	87
Lighting	94
Fire Alarm	106
Fire Protection + Life Safety	107
Security	109
IT/Communications	114
Audiovisual	126
Vertical Transportation	136
Acoustics	139
FF&E	154
Environmental Graphics + Wayfinding	160
Sustainability/Energy	168
Food Service Program	181

# 05

Detailed Programs		195
RLASC Program Su	ımmary	196
Probation Departm	nent Summary	198
ISD Summary		200
Campus Shared Su	mmary	202
Probation Departm	nent Org. Structure	204
ISD Department O	rg. Structure	220

Ro	oom Data Information	245
	Offices	246
	Workstations	250
	Meeting Rooms	252
	Auditorium/ XXL Meeting Room	256
	Collaboration Space, Touchdown	257
	Interview Room	259
	Cashier's Office with Safe	260
	Central Reprographics, Production Room	261
	Restrooms (Typical)	263
	Entry Lobby	264

# **Table of Contents**

# 06

#### **Room Data Information (Continued)**

Copy/Print Station, Planning/Plotters Room	265
Employee Badging Area	266
Storage Rooms, File Room	267
Local Copy / Print Area	268
Food Service Program	269
Mail Rooms	270
Wellness Room	271
Pantry, Custodial Assembly/Lunch Room	272
Reception + Waiting Area	273
BEAS + EEMIS Network Operations	274
Cleaning Supply Storage Room	275
Computer Repair Room. Computer Training Room	276
Custodian Locker Room	278
Dedicated IT Closet	279
Department Emergency Ops Center	280
Disaster Operations Center (ISD)	281
Gym/ Fitness Center	283
Help Desk/ Enterprise Command Center + War Room	285
Lab/ Testing Room	287
ITS Innovation/ Display Space	288

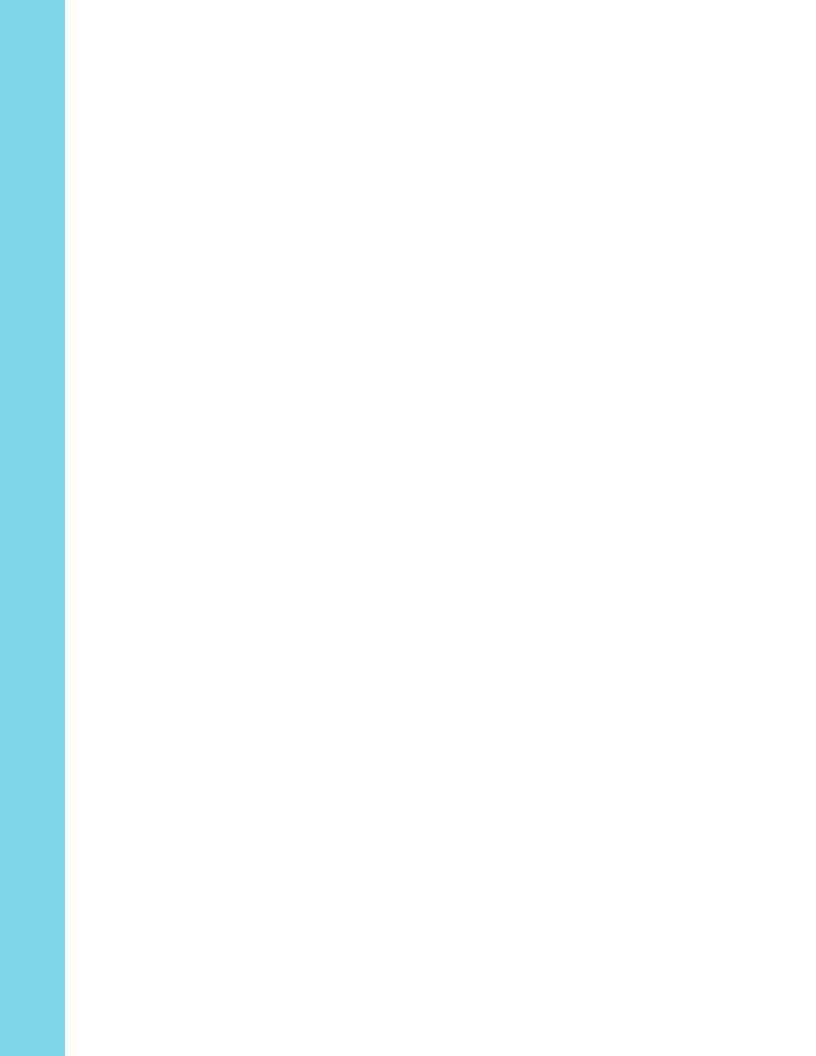
# **Table of Contents**

## 06

#### **Room Data Information (Continued)**

Professional Standard Video Viewing Station	289
A+I Library, Plan Archive, Local Plotter Area	290
Surplus Vault Room	291
Loading Dock	292
Auditor Controller	293

Acronym/ Abbreviation Summary 297	
-----------------------------------	--





# **EXECUTIVE SUMMARY**

Mission, Vision, Values and Goals	10
RLASC Overview	12
RLASC Mission	14

# **Executive Summary**

#### A. MISSION, VISION, VALUES AND GOALS

The Rancho Los Amigos South Campus (RLASC) Design Build Scoping Documents have been developed for Los Angeles County to establish a clear definition of the space program, functional relationships, building and site design criteria and performance specifications. It was developed in coordination with User Groups, Technical Stakeholders, Utility Companies and DPW and is intended to provide a design framework for the Design Build teams during the next phase of work. RLASC has been envisioned as a <u>multi-phase</u> and multi-project development with the goal to create a vibrant Los Angeles County administrative center to support their mission to *Transform Public Service*. Included in this first phase of development are the following projects:

- **1. Parcel A, RLASC Sports Center** the scope of work includes multiple soccer fields, a new concession building and surface parking.
- 2. Parcel B, ISD Headquarters/Probation Headquarters, and Parking Structure the scope of work includes the ISD Headquarters, Probation Headquarters, Parking Structure and site improvements.
  Also included in this scope are new streets, sidewalks, landscape, lighting and primary campus utilities infrastructure inside the designated parcel limits.
- **3. Campus Demolition Project** includes the demolition of all buildings, site features, sheds and above ground electrical stations, tanks, etc... within the South Campus but outside the Parcel A and B boundaries.

It is intended that each parcel project be designed and constructed by separate design/build teams, however it is important to recognize that to create a future cohesive campus-like environment, those teams will need to coordinate their work with the Campus Demolition Project and DPW to insure a cohesive and seamless integration of the parts.

The Rancho Los Amigos South Campus Plan represents a unique opportunity to reinforce the mission, vision and core values for the County of Los Angeles per the 2016-2021 Strategic Plan.

#### Mission

Establish superior services through inter-departmental and cross-sector collaboration that measurably improves the quality of life for the people and communities of Los Angeles County.

#### **Vision**

A value driven culture, characterized by extraordinary employee commitment to enrich lives through effective and caring service, and empower people through knowledge and information.

#### **Values**

- 1. Integrity: We do the right thing: being honest, transparent, and accountable.
- 2. Inclusivity: We embrace the need for multiple perspectives where individual and community differences are strengths.
- 3. Compassion: We treat those we serve, and each other, the way we want to be treated.
- 4. Customer Orientation We place our highest priority on meeting the needs of our customers

#### Goals

- 1. Make investments that transform lives
- 2. Foster vibrant and resilient communities
- 3. Realize tomorrow's government today



Figure A1 - Los Angeles County District Map

#### B. RLASC OVERVIEW

The County has owned and continually operated the Rancho Los Amigos property, comprised of two campuses, for a variety of purposes for more than 120 years. The Rancho Los Amigos North Campus (RLANC), which is currently undergoing significant redevelopment for the Rehabilitation Center, and the Ranch Los Amigos South Campus (RLASC) are the subject of this scope of work. The property is located within the City of Downey with portions bounded by the cities of Paramount, South Gate, and Lynwood. Nearby freeways include the Long Beach Freeway (I-710) and the Century Freeway (I-105).

The South Campus Plan area occupies a significant portion the 212.5-acre County-owned property and is effectively divided into a north and south portion by Imperial Highway, generally bounded by Gardendale Street on the south, Rives Avenue to the east, and Garfield Ave to the west. The property is irregularly shaped and is characterized by the single family residential uses on the east side, industrial uses along the west and civic functions along Imperial Highway on the northern edge. Several civic buildings and a long-term business park lease are not included in the Campus Plan area but define the character of the area.

The 74-acre South Campus Planning Area is currently undergoing an Environment Impact Report and is planned to incorporate demolition, upgrades to aging infrastructure and a City of Downey Sports Center, as well as new facilities for the Internal Services Department (ISD) and Probation Department that will serve the entire County.

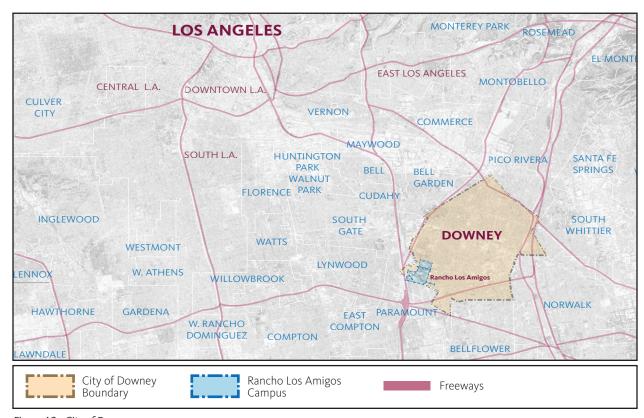


Figure A2 - City of Downey

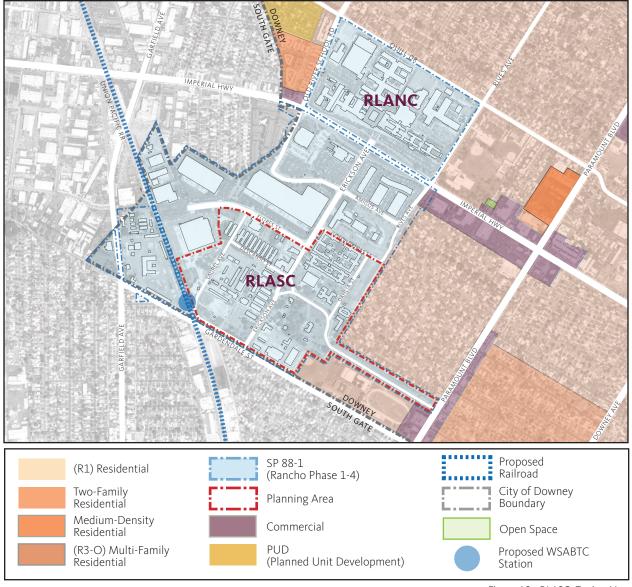


Figure A3 - RLASC Zoning Map

Now, with the ongoing development and implementation of the North Campus, the County of Los Angeles has authorized the initial phase of a long-term plan to redevelop the South Campus and create a vibrant County administrative center, in the letter from the Board of Supervisors, dated August 9, 2016. The project is comprised of the consolidation and relocation of several existing programs including:

- 1. ISD Headquarters building for 1572 employees (Parcel B)
- 2. Probation Headquarters building for 840 employees (Parcel B)
- 3. Parking structure to accomodate shared parking needs for ISD and Probation (Parcel B)
- 4. Site work immediately surrounding Parcel B, and required streets and infrastructure upgrades necessary for a cohesive, functioning project.

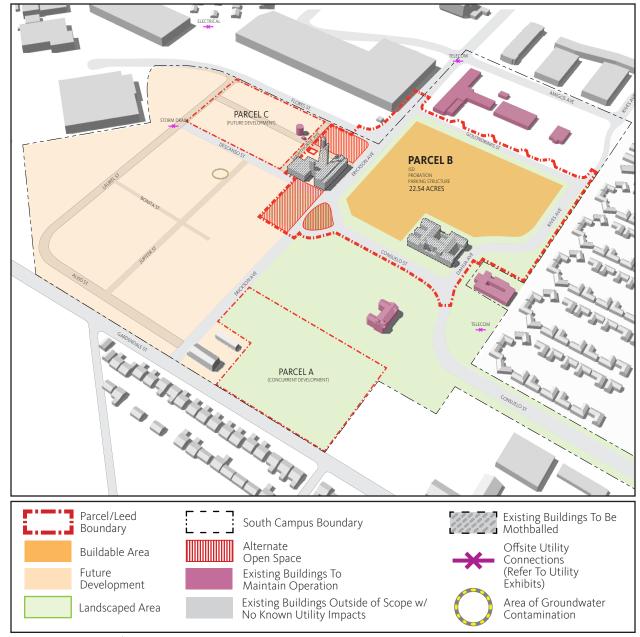


Figure A4 - RLASC Parcel Diagram

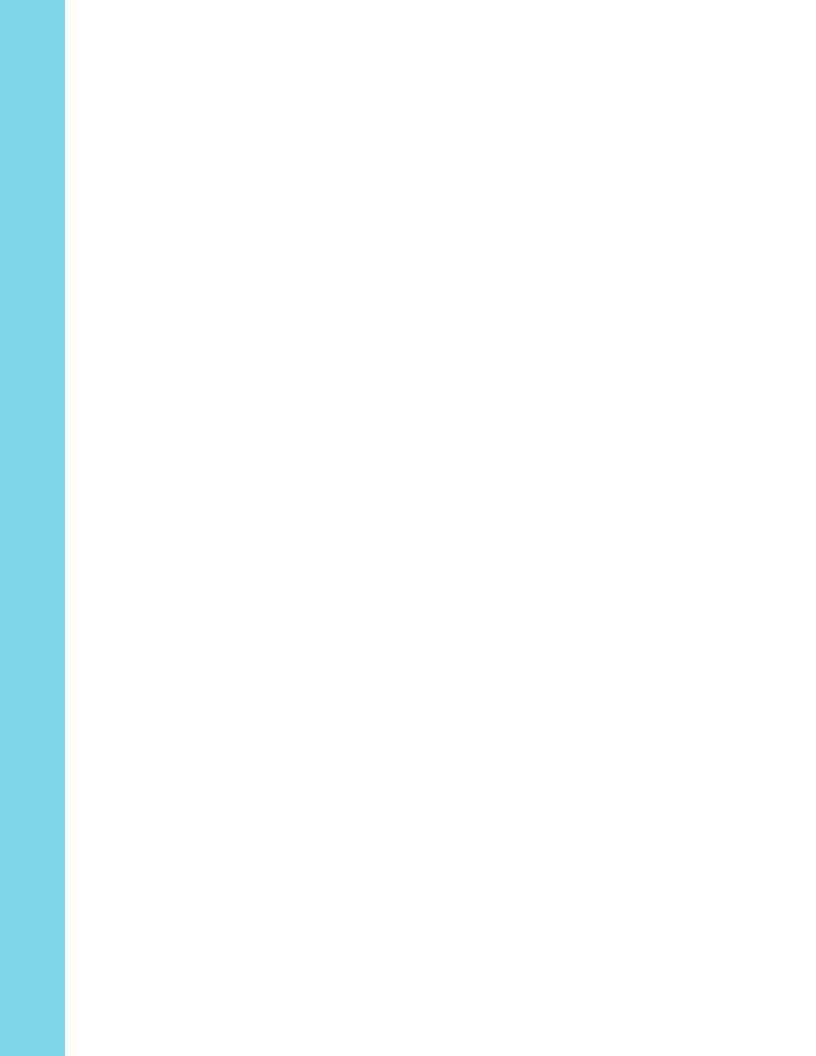
#### Additional functions include:

1. RLASC Sports Center Project – a 5-acre site which includes multiple soccer fields with nighttime lighting, restrooms, concession stand, equipment storage room, and a surface parking lot. (Parcel A)

#### C. RLASC MISSION

A partnering session was held on May 3, 2017 in which representatives from ISD, Probation, the Sheriff, CEO, and DPW agreed that the mission for the Rancho Los Amigos South Campus Project is to "Transform Public Service".

[Intentionally Left Blank]





# **CAMPUS OVERVIEW**

RLASC Vision	18
RLASC Planning Objectives	18
Planning Principals	19
Plan Description	21
Linkages and Connections	23

# **Campus Overview**

#### A. RLASC VISION

To support the transformation of public service, the Los Angeles County administrative campus should be an asset to the County and the City of Downey and serve as a model for future developments. To that end, the Vision for the RLASC includes the following:

- 1. The plan concept is envisioned as a sustainable, accessible, landscaped multiple building campus.
- 2. The historic authenticity of the original campus should be integrated into the new development. Buildings, courtyards, and open spaces should be organized around important historic structures.
- 3. The campus streets, sidewalks, and defining landscape should be publicly accessible with adjacent passive recreation spaces.
- 4. To promote a future transit-oriented, mixed use government center campus with compact design principals of complete streets, an open space network, bicycle circulation and an enhanced pedestrian orientation.

#### B. RLASC PLANNING OBJECTIVES

Through engagement with various user groups, several objectives have been identified relative to specific programs. They are:

- 1. A Place of Pride
- 2. Support our Best Work
- 3. Design for Wellness
- 4. Break down Silos
- 5. Flexible Design for Future
- 6. Integrate Technology

These have been broadened into the following campus planning goals and objectives which begin to inform the planning principles:

- 1. Consolidation, modernization and revitalization of a new County Administrative campus.
- 2. Demonstration of a commitment to sustainability through policy and design strategies.
- 3. Integration and enhancement of historic and cultural components in the development of the Plan.

#### C. PLANNING PRINCIPLES

#### **Campus**

- 1. Create a comprehensive campus feel.
- 2. Create a clear Identity of the south campus Parcel B precinct within the larger Rancho Los Amigos campus.
- 3. Articulated arrival sequence and the pathways that connect gateway, parking entrance, court yards, building entrance, department entrance.
- 4. Provide a connected and robust open space network at a variety of scales.
- 5. Forward-thinking campus that takes into account a variety of public and private modes of transit, access and parking systems.
- 6. Create a compact, walkable, sustainable neighborhood that encourages future mixed uses.
- 7. Leverage existing historic structures for future shared campus amenities could include a gymnasium, food market, dining, childcare tenant spaces.
- 8. Develop a garden-like campus environment that can benefit the neighboring context and become a welcoming place for the surrounding community.

#### Signage and Wayfinding

#### General

A comprehensive signage/graphics program will be developed for the Rancho Los Amigos South Campus by the Parcel B Design-Builder. The program will include campus exterior signage to facilitate wayfinding for visitors, vendors, staff members and emergency vehicles; regulate campus wide vehicular and pedestrian traffic; and address all applicable code requirements.

#### **Applicable Code and Standards**

The following signage codes and standards are applicable to the signage/graphics program.

- 1. California Building Code (CBC)
- 2. ADA Signage Requirement for Accessible Design as referenced in CBC
- 3. Local Fire Authority life/safety requirements

In order to provide information for the efficient use of the facility, the signage system components provided by the design build team must set the standard for the future campus wide signage / graphics program and communicate needed information to facilitate user movement within the project defined boundary. The signage should be uniform in design, have clarity of message presentation, be consistent in the use of typography and be visually integrated with the interior and exterior architectural treatments using materials, colors and placement.

#### **Building**

- 1. Create an open and flexible plan.
- 2. Reflect the workplace of the future change the private office status.
- 3. Improve collaboration inside and outside of the office.
- 4. Enhance the quality of work life by offering a variety of seating/work environment options (from quiet/ focused to social/active) and amenities.
- 5. Activate the ground floor and/or roof terraces with shared employee program amenities that can extend outdoors.
- 6. Create department socializing and collaboration areas around common shared spaces to enhance connectivity.
- 7. Promote a sustainable and healthy environment by creating vibrant work-place focused spaces with access to daylight, open stairs and circulation paths with places to meet informally.
- 8. Designing for wellness natural light, views, access to the outdoors, air quality, temperature, comfort, and fitness.
- 9. Design spaces that support all work modes Focus, Collaboration, Learning, and Socializing.
- 10. Group loud and quiet activities appropriately.
- 11. Provide intuitive technology integration.

#### **County Civic Art Policy**

- 1. To encourage innovative approaches to Civic Art by artists into LA County neighborhoods for all to experience art and culture.
- 2. The Civic Art Policy mandates that Eligible County Capital Improvement Projects, funded wholly or in part by the County, allocate 1% of eligible project costs for the design, construction, integration, acquisition, delivery, and conservation of Civic Art unless otherwise ordered by the Board of Supervisors.
- 3. Civic Art can be classified as any of the following: sculpture, murals or portable paintings, earthworks designed by an artist, exhibit/performance space, restoration of County owned artwork, performing arts (theatre, dance, music and performance art), literary art, media art, education (lectures, presentations, and training about art/culture, special events, or similar art services as approved by the LA County Arts Commission.
- 4. Refer to the LA County Civic Arts Policy in the Appendix

In addition to meeting many of the principles noted above, the future designs will also emphasize utilization of state-of-the-art sustainability techniques and enhancement of the historic fabric that gives Rancho Los Amigos its unique character.

#### D. PLAN DESCRIPTION

The Rancho Los Amigos Campus Plan consists of numerous elements that when taken together, represent the overarching vision, principles, and goals that were delineated at the outset of the planning process. These elements include:

- 1. Land Use Designations
- 2. Landscape and Open Space Plans
- 3. Transportation, Circulation, and Parking
- 4. Utilities and Infrastructure
- 5. Development Standards
- 6. Design Guidelines
- 7. Sustainability

The design of the site and landscape requires a rigorous approach that encourages collaborative and positive exterior environments that take advantage of the mild Southern California climate. Planning criteria encourages an "indoor-outdoor concept", where each sub-area or complex of office space is organized around a courtyard, creating an identifiable place.

Essential components of the design should consider:

- 8. Soft perimeter edges open to the campus
- 9. (Highly amenitized courtyards with an appropriate level of security depending on function and use)
- 10. Historic structures as organizing elements and neighborhood identifiers
- 11. Pathways as connective tissue
- 12. Low, narrow buildings that are axially oriented east-west

The "indoor-outdoor concept" uses courtyards to organize the new buildings respecting important historic structures to locate and orient view corridors and iconic markers and connect them through paths. This gives each courtyard an opportunity to have a unique character and identity. The courtyards break the large site into a series of humanly scaled spaces and each historic structure lends to each courtyard identity. Additionally, each courtyard complex helps define a development site. Where possible, courtyards should front the large central park and a 100-year-old Moreton Bay fig tree located in the historic core of the south campus.

Weaving the different courtyards together creates a series of paths that encourage pedestrian movement. The circulation network optimizes human interaction and promotes an experiential connectivity that unites the large site. Planning shall address the overall site by first providing a "soft", public facing, perimeter edge, serving as a landscape belt park around the campus. The physical characteristics of this linear open space are designed to integrate the needs of adjacent activities and infrastructure. For example, the open space form would be different near a retention area than it would be adjacent to a parking structure.

By being figuratively clear, and programmatically and formally varied, the designed edge provides a macro-scale urban identity. This creates a spatial threshold between the campus and the community, and user access for shared outdoor activities. Various strategies shall be used to establish future development as a model for sustainability. Maximum building widths of 120 feet will optimize cross ventilation and allow natural light to the building interiors. Buildings, primarily oriented east/west shall be higher in height than those portions running north/south, thereby maximizing the amount of square footage with optimal solar oriention while providing a hierarchical order to the campus form. Accessible planted roofs should be considered over campus parking garages and /or accessible roof terraces to provide additional usable areas while softening the massing of these structures and providing greater permeable surface area.

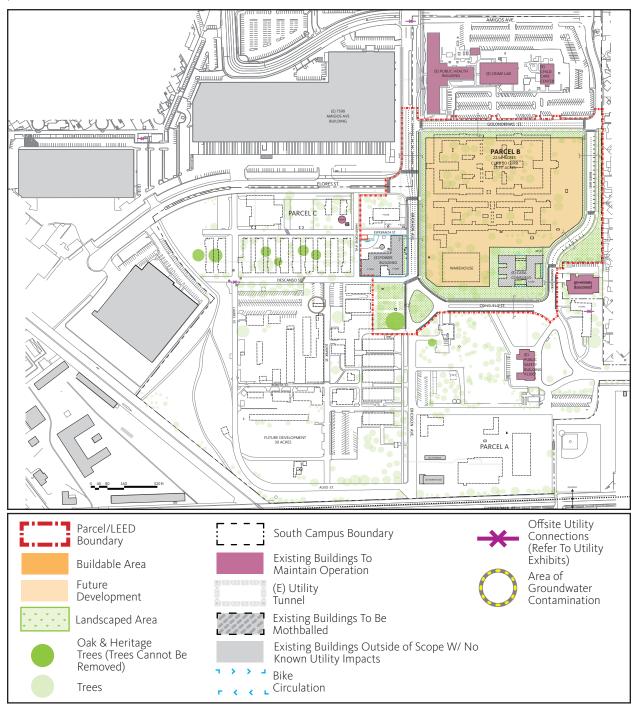


Figure A5 - South Campus Site Plan

Overall, future development on the Rancho Los Amigos Campus shall combine development flexibility with enough specificity of architecture and landscape to create a place that accommodates the programmatic needs of the County, minimizing the development's impact on the immediate environment and providing an integrated experience between the campus and the surrounding communities.

#### E. LINKAGES AND CONNECTIONS

#### **Vehicular Circulation**

Regional access to the Rancho Los Amigos Campus is provided by the I-105, Glenn Anderson Freeway (also known as the Century Freeway) and by the Long Beach Freeway (I-710). Interchanges are located at Imperial Highway (on I-710) and at Garfield Avenue and at Paramount Boulevard (on I-105). Local access is provided by the existing street system within the developed area of the Rancho Los Amigos Campus, in Downey and in other surrounding cities. Imperial Highway and Paramount Boulevard are classified as major arterials, Garfield Avenue is a primary arterial, Gardendale Street is a secondary arterial, and Rives Avenue is a collector street.

#### **Public Transportation Services**

The Rancho Los Amigos campus is served by existing bus transit service operated by the Los Angeles County Metropolitan Transportation Authority (Metro) and by the City of Downey (Downey Link). The Lakewood Boulevard station on the Metro Green Line light rail transit line lies approximately one mile southeast of the campus. Metro Line 117 operates on Imperial Highway between Los Angeles International Airport and the Lakewood Boulevard station on the Metro Green Line. It provides service with headways of approximately 15 to 30 minutes. More frequent service is provided westbound in the morning peak period and eastbound in the afternoon peak period. Metro Line 121 operates on Imperial Highway between Willowbrook and Whittier. It provides service with headways of approximately 30 minutes throughout the day on weekdays.

Metro Line 265 operates on Paramount Boulevard with peak period headways of approximately 30 minutes and 45 minutes during the midday and evening periods. This line stops at the Lakewood Boulevard station on the Metro Green Line. Metro Line 258 operates on Garfield Avenue between Alhambra and Paramount. Throughout the day on weekdays, it operates with headways of approximately 45 minutes. The Metro Green Line provides light rail transit service between Redondo Beach and Norwalk, generally along the median of the I-105 Freeway. Weekday service is provided in each direction on headways of less than 10 minutes. The Downey Link Southwest line, one of four lines operated by the City of Downey, runs in a clockwise loop westbound along Imperial Highway and northbound along Rives Avenue. It operates on weekdays between 6:30 a.m. and 6:30 p.m. with headways of approximately 45 minutes.

The RLASC Parcel B proposed plan should relate to active planning and potential future development along the West Santa Ana Branch transit corridor. The proposed future Gardendale Metro station provides the opportunity for RLASC to be a transit oriented, mixed use government center and each parcel must contribute to that vision for the larger campus. The Gardendale station will be a transformative addition to the campus with reduced vehicle miles traveled, improved air quality, increased transit ridership and improved economic development. The plan for Parcel B should identify ways to support and take advantage of this future infrastructure. The station's proximity encourages RLASC and its parcels to have planning strategies that may be influenced by Metro's Transit Oriented Communities Policies that encourage integrated design, land use and transportation planning for enhanced pedestrian and bicycle circulation.

A campus shuttle shall be considered in the future to provide for non-auto circulation within the campus and to provide links to surrounding destinations, including other public transit services. The routing of this shuttle has not yet been determined, but the potential future size of the campus dictates that several transit stops will be needed to provide an elevated level of convenience for riders. The level of specificity within the campus plan includes generalized locations for buildings but does not dictate building orientation or entrance locations. Transit stops on campus should be clearly marked and equipped with appropriate amenities, such as shelters and benches. They should be located within a reasonable walking distance of building entrances and activity centers. Curbside bus bays may be desirable to allow through traffic to pass as the shuttle buses dwell at the stops. Where these are located, the width of the curb lane should be increased by eight feet at the stop, as well as widened to provide the appropriate tapered sections for shuttle vehicles entering and exiting.

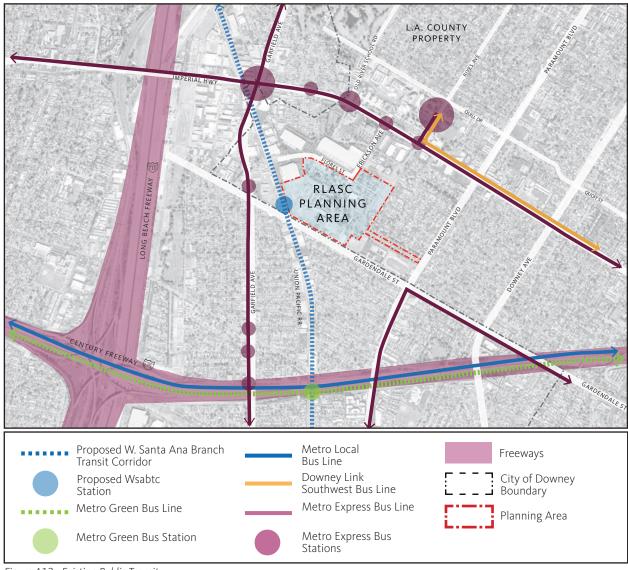


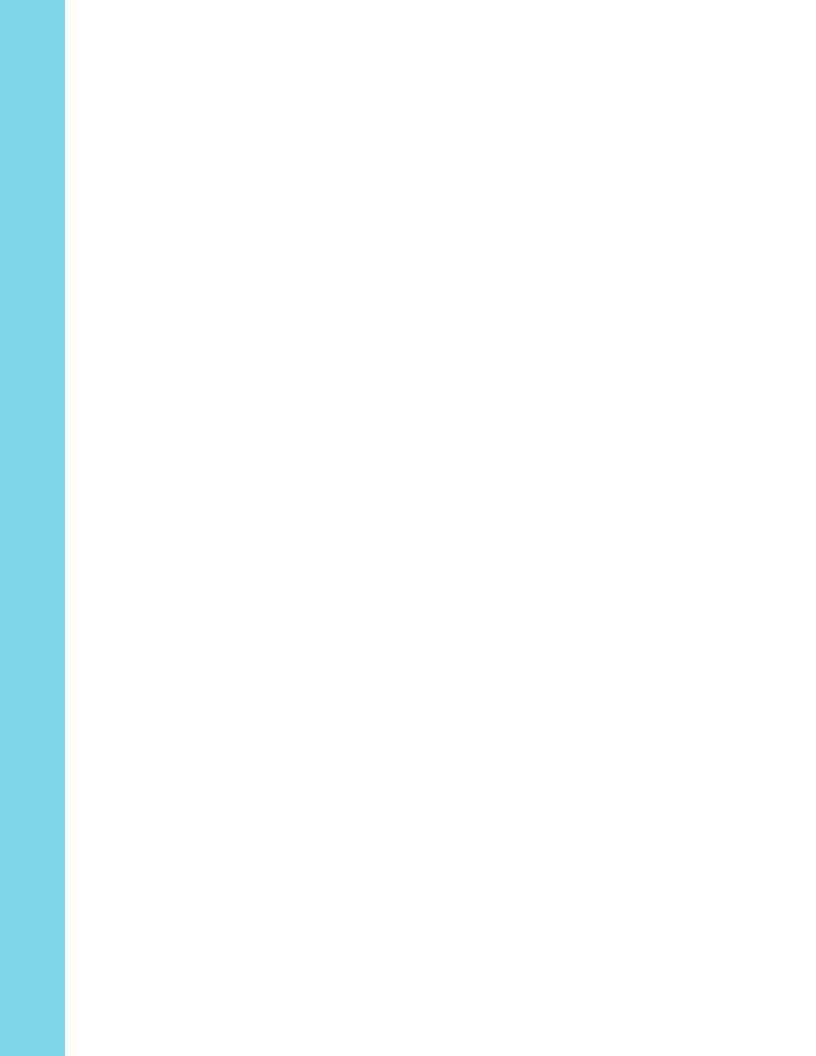
Figure A12 - Existing Public Transit

#### **Parking and Bicycle Circulation**

Sufficient on-site parking will be provided to adequately serve the proposed uses. The proposed parking ratios and standards are described later in this document. Parking lots or garages located at the perimeter of the campus are intended to intercept most of vehicular traffic before it enters the campus. Their location near future campus shuttle stops will help to limit the use of personal vehicles within the campus. Bicycle circulation within the Parcel B boundary shall be provided for future connection to the proposed Gardendale transit station and surrounding communities. Bike parking and storage shall be provided on campus for County employees and visitors in accessible locations.

#### **Pedestrian Circulation**

Pedestrian circulation within the campus shall occur on sidewalks along the internal streets or on pedestrian pathways that more directly connect pedestrian destinations, including the on-site parking facilities. As those parking facilities are designed, consideration should be given to locating pedestrian access to provide the most direct and convenient connections to the uses they will serve. Most internal streets will have sidewalks on each side. Pedestrian crossings are anticipated at each internal intersection and mid-block pedestrian crossings of internal streets at strategic locations.





# PROJECT PROGRAM +PLANNING CRITERIA

Program Description + User Group Findings	28
Project Description + Planning Factors	30
Site Planning Criteria + Adjacencies	31

# **Project Program + Planning Criteria**

# A. PROGRAM DESCRIPTIONS + USER GROUP FINDINGS

#### **Internal Services Department**

The Internal Services Department (ISD) services Los Angeles County departments in a variety of ways, including technological support and implementation, facility maintenance, contracts development and purchasing, sustainable initiatives, and administrative functions. Though predominantly serving clients within Los Angeles County at their various sites, providing maintenance, installation, or repairs, ISD may also serve other departments remotely through call centers, electronic monitoring, or bulk purchasing/receiving. Additionally, ISD also provides programs where County departments or employees will visit the Rancho Los Amigos campus from other locations for group computer training or meetings to learn about new products or set up bids for external purchases.

As stated on their website, the Los Angeles County Internal Services Department's purpose is to "provide essential services to support the County mission," and their values of "Service, Quality, Creativity, Teamwork, and Sustainability", along with the findings of the user group interactions are to be reflected in their new headquarters.

#### **Probation**

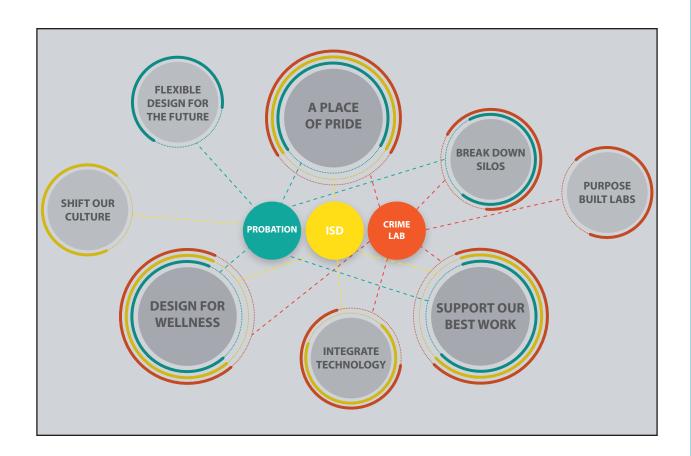
The Los Angeles County Probation Department is the largest probation department in the world, with over 6,500 employees across fifty different facilities within the County. The Probation Department works with both adults and juveniles throughout the County through services including residential treatment, detention services, school-based programs, pretrial programs, rehabilitation services, and supervision. The Rancho Los Amigos campus building will serve as the new Probation Department Headquarters, centralizing the department's executive team, District Chiefs, and administrative staff. While the headquarters will serve some visitors, including vendors, contractors, and other County staff, the Probation Department's public-facing services occur at District sites distributed throughout the County.

The Probation Department's mission statement is to: "enhance public safety, ensure victims' rights and affect positive probationer behavioral change," in-order-to achieve their vision to "Rebuild lives and provide for healthier and safer communities." The new headquarters will reflect these aspirations and the user group findings, as well as support their values of "dignity and respect, integrity, leadership, rehabilitation, contribution, commitment, collaboration, and evidence-based practices and policies."

#### **User Group Findings**

#### **Campus Objectives**

To define the scope for the new headquarters building(s) for the Los Angeles County ISD (Internal Services Department) and Probation Department at the Rancho Los Amigos South Campus, ISD and Probation leadership and employees were engaged. The engagement included both qualitative and quantitative analysis and included visioning sessions, programming questionnaires, leadership interviews, existing space and completed office tours, and electronic staff surveys. Initially, the Rancho Los Amigos South campus was to include three County departments: The Internal Services Department (ISD), the Probation Department, and the Sheriff's Crime Lab. As noted in the diagram below, the primary goals for the campus are to develop a place of pride, that promotes wellness, and supports the work of these three departments. Summary findings are included in this section and translated into planning principles for the buildings.



#### B. PROJECT DESCRIPTION + PLANNING FACTORS

The Parcel B buildable area is bounded by and incorporates Erikson Avenue to the west, Golondrinas Street to the north, Rives Avenue on the east, and Casa Consuelo and Consuelo Blvd to the south.

Given this location and in response to the future development of the entire campus there are several planning factors that should be considered in relationship to the siting of the Parking Structure, ISD and Probation programs. They are:

- » Program Provide flexible, modern office space for ISD and Probation users that serves as a model for sustainability.
- » (Historical/Cultural Preserve the history of Rancho Los Amigos by retelling the past through the re-use of historic elements, interpretive exhibits, and sensitivity to historic resources.)
- » **Character -** Create a design that organizes development, facilitates way-finding and allows for recognizable and unique iconic elements within a density model that respects the community context.
- » **Community -** Be a good neighbor and become an integral part of the greater community by contributing to the area's open space, cultural amenities, and neighborhood commercial offerings.
- » **Open Space -** Define the campus's historic and pedestrian-oriented character and provide an area for passive recreation in a central open space and system of walkways.
- » **Economic** A development that considers appropriate capital investment, operational costs and cost benefit balance.
- » **Process -** Provide a planning and development process for the County to use as a model for future development.

The intent of this development is to promote 24/7 access along the public edges, with new sidewalks, bicycle pathways and publicly accessible open space immediately adjacent to the surrounding streets. Courtyard(s) shared with the County program spaces (i.e. around and adjacent to Casa Conseulo) shall be visually connected to the public edge, with the ability to secure and monitor these open space(s) when supporting programs that are not open to the public.

#### C. SITE PLANNING CRITERIA + ADJACENCIES

The proposed buildings are to be developed to promote a campus feel, wherein employees from all departments have access to a variety of shared programs and amenities that can be accessible from the ground level with clear wayfinding. Security measures shall be incorporated that promote open, visual connections to the public edge, with the ability to control public access. See campus shared spaces and campus interface diagram on the following page.

Entry points for each program are to be secure, clearly identified and visible from primary access points to the site (both pedestrian and vehicular access), understanding that programs will serve both employees housed on the campus, and other county or public visitors who may not be familiar with the site.

Ground level programs are to be developed to support indoor/outdoor use, where appropriate, for example a food service program that opens to the outside, an outdoor fitness component adjacent to the fitness center, or space for the shared auditorium to extend to an outdoor patio. Access to landscape features such as walking paths and casual outdoor seating (benches) should be incorporated throughout the campus and connect with shared spaces and building entries/exits to promote active travel to, from, and around the various buildings.

Elevators and stairs serving the upper floors should be located near building entrances and should be easy to locate. Natural light in public corridors and other circulation spaces is highly desirable and should be used as an orientation and way finding device wherever possible.

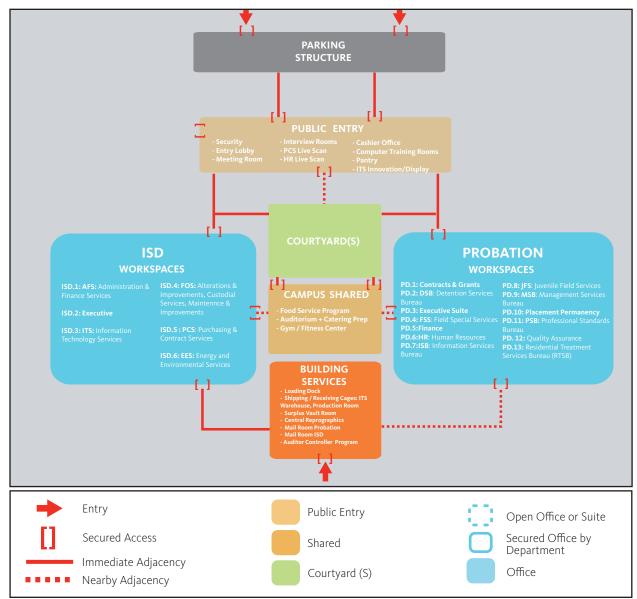


Figure A13 - ISD + Probation Site Adjacency Diagram

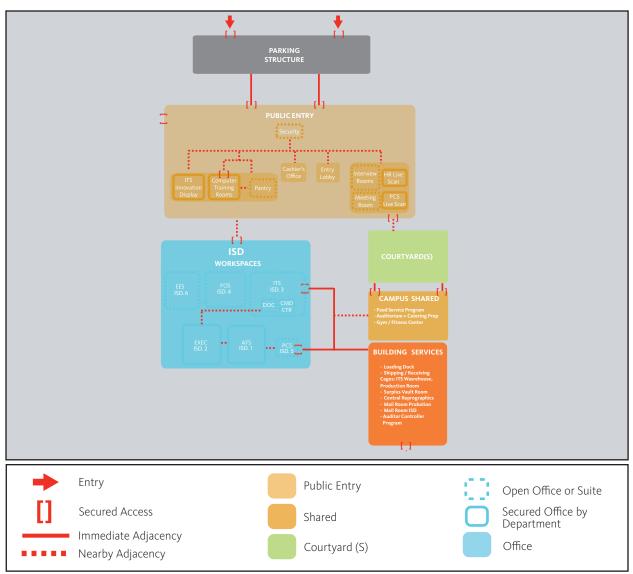


Figure A14 - ISD Adjacency Diagram

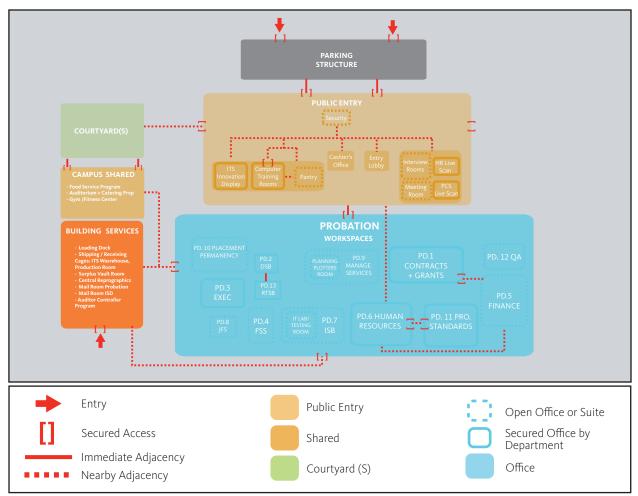
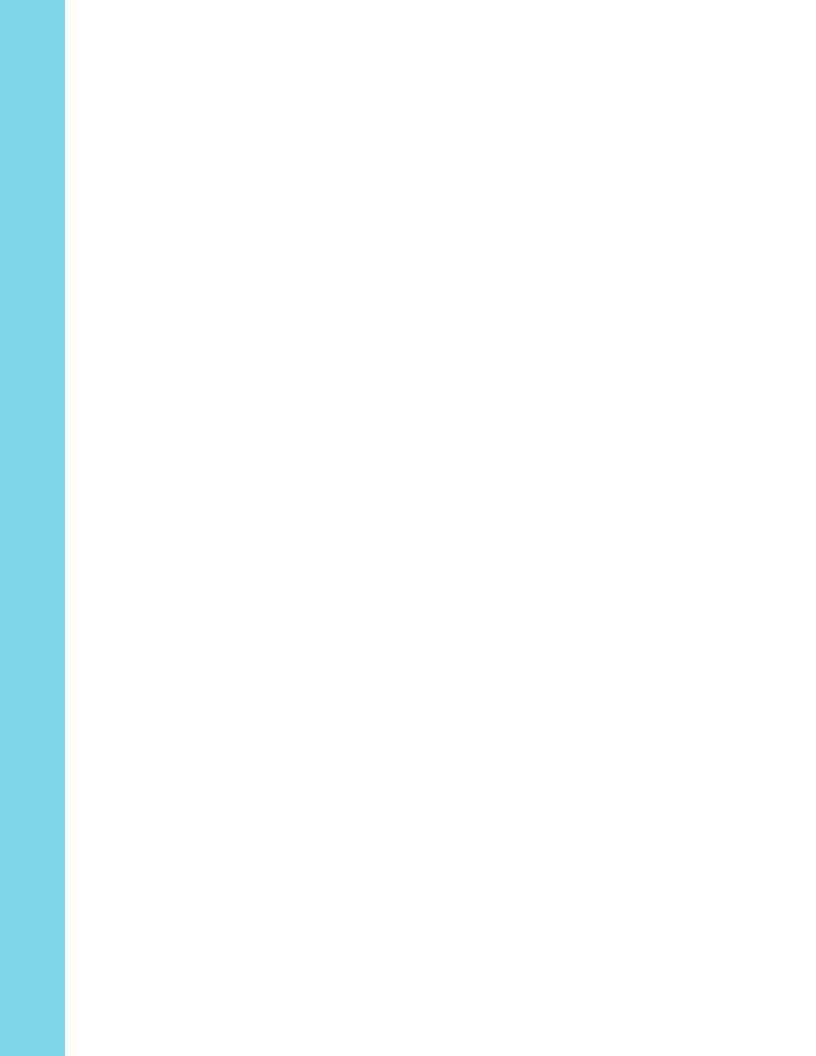


Figure A15 - Probation Adjacency Diagram





# **DESIGN CRITERIA NARRATIVE**

Site + Landscape + Traffic	36	Fire Protection/LS	107
Civil, Demolition + Jurisdiction	42	Security	109
Exterior Building Design	50	IT/Communications	114
Interior Building Design	55	Audiovisual	126
Parking	60	Vertical Trans.	136
Structural	64	Acoustics	139
Mechanical	71	FF&E	154
Electrical	78	Enviro. Graphics	160
Plumbing	87	Sustainability/ Energy	168
Lighting	94	Food Service Program	181
Fire Alarm	106		

# **Design Criteria Narrative**

#### A. SITE + LANDSCAPE + TRAFFIC

Collectively, the ISD, Probation, and Parking Structure building(s) will serve as the core of RLASC. Consequently, the associated landscape will have a variety of meeting spaces, gardens, and gracious streetscapes. Similar façade treatments, plant material, site furnishings, and hardscape will weave through this portion of the campus to reinforce the collective whole of the heart of the campus.

The landscape will form the connective fiber between all buildings. Specifically, the open spaces of the ISD/ Probation building(s), and Parking Structure will consist of courtyards, a potential landscape corridor(s), and perimeter streetscapes. These spaces will accommodate small to large group gatherings, provide space for dining, and cleanse and capture stormwater for reuse. All open space must be durable and multi-functional.

The following items represent important design considerations to be addressed during the design of the ISD/ Probation building, and parking structure surroundings:

- 1. As a minimum, open space within the buildable area of the parcel shall be no less than 30% of the total buildable area (including the building footprint). Bounded by Erickson Avenue, Golodrinas Street, Rives Avenue, and Consuelo Street, a minimum 50% of the buildable area's open space shall be vegetated. Paved areas shall not exceed 50% of open space, (surface parking & loading/service areas are excluded).
- 2. Impervious vs pervious paved areas within Parcel B shall consist of a 33% pervious to 66% impervious ratio (streets, surface parking & loading/service areas are excluded).
- 3. Lighting should be of an ambient quality throughout while meeting code requirements and complying with LEED v4 standards. Additional lighting shall occur at specimen, scenic and heritage trees, as well as at site features, seating areas and fitness areas.
- 4. Green roof systems are encouraged at roof terraces and balconies accessible to employees.

#### **The Courtyards**

Building program elements should be designed to create intimate and sheltered landscaping zones. Courtyards should be situated adjacent to indoor program uses to foster an indoor-outdoor experience. The Courtyards should serve as a link between building and program elements.

To provide a diverse set of outdoor experiences, vegetation will be used to frame seating areas of various scales. These seating areas shall accommodate large groups for outdoor team meetings, more intimate collaboration spaces, and terraces for dining. Seating areas should be designed to accommodate groups of 5 persons minimum. Seating options may include movable tables and chairs, fixed benches, and seat walls. Outdoor seating throughout the site must accommodate at least 8% of full-time building users inclusive of the requirement for outdoor dining tables and seating for 40-50 people adjacent to the interior food service program. Seating options should be available in both shaded and non-shaded areas for those seeking shade or sun. Shade may be provided by trees, shade structures, trellises or other architectural elements. Trash and recycling receptacles should be provided within seating areas.

Pedestrian pavement materials may include integral colored finished concrete paving, unit pavers, and/or stabilized decomposed granite paving.





Interior courtyard spaces should be delineated by decorative fencing. Fencing strategies should provide a secure environment with entry points that can be monitored, while still maintaining an open campus aesthetic. Fencing should be designed to allow the pedestrian to view the interior spaces from outside of the fence line and vice versa. Fencing should be no taller than 6 feet.

Planting areas should feature shade trees and specimen trees, drought-tolerant ornamental planting and soft landscape lighting.

## Landscape Corridor(s)

If the siting of the building(s) requires fire access lanes in addition to the surrounding streets, landscape corridor(s) shall serve the primary role of emergency vehicle access as required by the Los Angeles County Fire Department. Beyond the primary role of emergency access, these corridors will provide shaded seating and gathering areas and thus expand the functionality of the otherwise utility corridor.

Within the extent of the landscape corridor, the design builder must provide a 28' minimum fire lane that complies with all requirements of the County of Los Angeles Fire Code. Materials, planting, and amenities must be selected and located in accordance with these code requirements.

Approved food vendors may be allowed to temporarily park and share their culinary specialties with employees and the public. Fixed and movable tables and chairs may be located along the landscape corridor in paved courtyard-like seating areas. Trees in tree grates or planting areas shall be included within the landscape corridor to soften the space and provide shade. All furnishings or plant materials must be located outside of the fire lane boundaries.

The landscape corridor(s) will also serve as an important circulation linkage within the campus, connecting to the adjacent streetscapes walkways and surroundings. They will serve as an axis tying together the outdoor spaces within the site. This pedestrian-oriented connection will encourage employees to take walks in their free time, increasing the overall health and well-being of the employees. Three separate flag poles are required at the main entrance to the facility; for US, State, and County flags.



## **Perimeter Streetscapes + Setbacks**

Four key campus streets surround the ISD/Probation parcel of the RLASC (Erickson Ave., Golondrinas St., Rives Ave, and Consuelo St.). Varying right-of-ways, building setbacks, and adjacent land use help to shape the program for each street.

The edge conditions surrounding the ISD/Probation parcel are vital to the overall aesthetic and character of the site. Building setbacks are to be composed of plant materials that buffer the buildings from the streets, softening the edge condition. Building setbacks are defined as the distance from the building edge to the back of sidewalk and provide a great opportunity to implement bio-retention features. Building setbacks can also provide a physical barrier from the public sidewalk to the building edge, discouraging vandalism and helping to guide pedestrians to appropriate building entries.

Perimeter open space across the surrounding Parcel B streets with new and existing landscape and fitness equipment are to be considered by the design builder. These areas include the triangular-shaped green space just north of the existing HOME facility to the east; the round-about green space at the intersection of Erickson and Consuelo; the Moreton Bay Fig green space to the south of Descanso; and the green space created by the demolition of the steam building north of Esperanza Street.

## **Bicycle Facilities**

Bicycle parking facilities shall be provided to achieve the applicable LEED credit and to meet code requirements. Outdoor, short-term bicycle parking should meet the requirements of the LEED certification as they relate to distances from building entries and required quantities. Bicycle racks should be located within a secured area. Bicycle parking areas may be screened with planting, yet must be easily accessible from building entries and exits. Racks should be selected to achieve visual continuity with other materials used in the site and/or building exterior.



## **Par Course Outdoor Fitness Loop**

In support of an environment that encourages health and wellness, an outdoor fitness loop shall circumvent the building and parking structure. The ¾ mile minimum path should include a minimum of 4 clusters of 3-5 pieces of par course exercise equipment to encourage employees and the public alike to take full advantage of the campus. The clusters may be proposed at the open space surrounding the Heritage Moreton Bay Fig tree; along the Consuelo Street parkway; the area north of the HOME building parking lot; and other areas as appropriate to the design builder's plan. Equipment at each cluster shall be shaded, lit at night, and selected in order to fulfill a full body workout with machines designated to upper body, lower body, core, and cardio. The equipment will promote social interaction and appeal to users with any level of fitness experience. All fitness zones shall meet LA County Dept. of Parks and Recreation standards set out in Section 5.5 - Fitness Zones of 'Park Design Guidelines and Standards' including the requirement for shade structures or mature trees shading all fitness zones as approved by the County.

The fitness loop will provide an outdoor training opportunity that promotes a healthier community, including the employees and nearby residents as well. The par course will combine the benefits of indoor exercise (blood flow, improved cardiovascular health, improved strength, increases energy levels, flexibility, endurance, etc.) with the benefits of outdoor exercise (reduced emotional and physiological stress, increased levels of vitamin D). The inclusion of the par course outdoor fitness loop into the program of the ISD/Probation Center campus facilitates a holistic wellness of its future users.

## **Planting Strategies**

Planting within the site should be composed of regionally appropriate plant and tree species. Plant species should be selected with consideration for the existing, native, and historical planting palette on the site and within the region. Plant palette shall be approved by LA County.

New trees species should be selected to maximize canopy and shade. 25% of trees shall be 36" box or larger, 50% shall be 48" box or larger, 15% shall be 60" box or larger, and 10% shall be 72" box or larger. Where trees are planted in formal arrangements, spacing shall be no more than 25' on center. Quantity of new trees planted on site shall

consist of a minimum of two (2) trees per 1,000 square feet of open space, or 1:1 replacement for demolished trees, whichever is greater. All specimen, scenic and heritage trees shall be electrically lit.

At minimum, ornamental planting materials will consist of 50% -1-gallon container size; 25% -5-gallon container size; and 25% -15-gallon material size. The spacing should not exceed 24" on center for 1 gallon materials, 30" on center for 5 gallon materials or 48" on center for 15 gallon materials unless species mature size warrants an increase in the spacing dimension. All trees and plant materials shall be full, dense, specimen quality upon planting.

Tree and ornamental plant species shall consist of drought-tolerant, low water use species (WUCOLS 'low' rating or below). Turf grass species used at event lawns are considered an exception. To achieve the LEED water conservation credit, plant species should be selected to achieve a reduction of the baseline irrigation water use on site. Any use of turf grass must function as an occupied activity or event space.

Plant species shall consist of drought tolerant, low water use species. All landscapes shall follow and comply with all applicable Best Management Practices including the following:

- » The County of Los Angeles Low Impact Development Standards Manual https://planning.lacity.org/eir/ CrossroadsHwd/deir/files/references/G06.pdf
- » The California Code of Regulations Chapter 2.7 Model Water Efficient Landscape Ordiance https://govt. westlaw.com/calregs/Browse/Home/California

All planting areas shall be 100% irrigated, with automatic rain sensor controllers. A high-efficiency irrigation system should be designed and implemented to reduce water use across the site. Drip irrigation shall be used at trees and all ornamental planting areas, while high-efficiency spray shall be used at turf areas. Currently, recycled water service is not available at the RLASC. Landscape irrigation components, however, shall meet the requirements for recycled water systems in anticipation of future availability. Brass quick coupling valves shall be installed in valve boxes along the irrigation mainline at a minimum frequency of every 100 feet on center. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

The design-builder shall procure an Arborist of Record. For existing tree species and their locations within the site, refer to Arbor Exhibits in the Appendix. All trees designated as 'Scenic Trees' – shall be protected in place where feasible. If not feasible to the Design-Builder's proposed design, 'Scenic Trees' should be replaced with mature specimen trees, minimum of 96" box. All trees designated by the arborist as having an overall health of 'D' or 'F' are recommended for removal and replacement in appropriate locations to be in compliance with the County's Interim Tree Removal and Replacement Policy which states: "Any tree removal within Public Works' rights-of-way, including but not limited to, parkways, public rights-of-ways, flood control facilities, and public buildings will be replaced at a minimum 1:1 ratio or higher. Replacement should be as close as possible to the location of removal, but can be planted elsewhere if the original location is not feasible."

The design-builder's arborist shall determine the treatment of all other existing trees: to be protected, transplanted or replaced. Transplanting or removing existing trees will require approval by Los Angeles County DPW.

## **New Streets and Traffic Strategies**

The streets at the perimeter of Parcel B include Consuelo St. to the south, Erickson Ave. to the west, Golondrinas St. to the north, and a re-aligned Dahlia St./ Rives Ave. to the east. Streetscape exhibits along each of these streets are included in the appendix, which require pedestrian walkways, bicycle lanes, multi-modal pathways, new paving, curbs and medians. In addition to what is shown on these exhibits, the Design Builder is required to provide directional and traffic signage, shuttle stops, lighting, security, landscape and fitness equipment as required to align with the RLASC Vision and Planning Principles to create a safe and robust, transit-oriented community. All roadway standards,

including widths, curvatures, sight distance, pavement markings, and traffic controls shall be designed by the design builder's traffic consultant to conform to the requirements of the County of Los Angeles, Department of Public Works, Traffic Operations.

## **Speed Limits**

- All internal streets shall be posted at 25 miles per hour (mph), with the exception of Erickson Avenue north of Flores Street which has the width and capacity for 30 mph.
- The roundabout at Erickson Avenue and Consuelo Street will include speed reduction signage to 15 mph through the roundabout.

## **Bicycle Paths**

- Bicycle paths which are required to cross public streets should be met at intersections with traffic control and/or with crosswalks to safely move bicycles and pedestrians across vehicular paths.
- Multi-modal trails (where two-way bicycles and pedestrians share the terrain) will be at least 12-feet wide and include signage prior to entering vehicular crossings.

## **Crosswalks**

- All internal pedestrian crosswalks will conform to Americans with Disabilities Act (ADA) standards as referenced by the County of Los Angeles, including curb ramp connectivity to sidewalks, and clearance areas at corners.
- · High-visibility crosswalks at Erickson Avenue and Flores Street should include continental (zebra) striping.
- Other planned crosswalks must meet all County and ADA standards including adequate sight distances and advanced signage.

## **Traffic Control**

- All traffic controls, striping and signage will conform to the requirements of the County of Los Angeles, Department of Public Works, Traffic Operations.
- The intersection of Flores Street/Erickson Avenue will operate with all-way stop control.
- The intersection of Erickson Avenue/Golondrinas Street will operate with stop control on Goldondrinas Street.
- The intersection of Rives Avenue/Golondrinas Street will operate with all-way stop control.
- The intersection of Rives Avenue/Consuelo Street will operate with stop control on Rives Avenue (southbound) and Consuelo Street (northbound), allowing Consuelo Street (eastbound) to move freely.
- The roundabout will operate with yield signs for all entry legs.
- The roundabout at Erickson Avenue and Consuelo Street will operate in a counter-clockwise direction with a single traffic lane. All entering portals will be marked with yield signage.
- The two-way left-turn lane on Golondrinas Street should include a minimum of 13-feet in width to allow safe harbor for left turning vehicles and provide adequate separation from through moving traffic.

# B. CIVIL, DEMOLITION + AUTHORITIES HAVING JURISDICTION

All site civil work within the design builder's scope of work shall be designed and built with consideration of future campus infrastructure requirements, and to meet minimum quality standards of the following entities, as applicable:

- 1. Standard Specifications for Public Works Construction (SSPWC)
- 2. American Public Works Association (APWA)
- 3. ASTM International (formerly American Society for Testing and Materials)
- 4. American Water Works Association (AWWA)
- 5. Asphalt Institute (AI)
- 6. American Concrete Institute (ACI)
- 7. American National Standards Institute (ANSI)
- 8. Concrete Reinforcing Steel Institute (CRSI)
- 9. Factory Mutual/ Underwriters Laboratories (FM/UL)
- 10. National Fire Protection Association (NFPA)
- 11. NSF International (formerly National Sanitation Foundation)
- 12. ASME International (formerly American Society of Mechanical Engineers)
- 13. American Association of State Highway and Transportation Officials (AASHTO)
- 14. Cast Iron Soil Pipe Institute (CISPI)

## **Grading**

The grading design shall comply with the current editions of the California Building Code with Los Angeles County Amendments, the Americans with Disabilities Act (ADA), and California Disabled Accessibility Guidebook (CalDAG), with the most restrictive standard governing. Site design shall include accessible features such as curb ramps, hand rails, wheel guards, tactile warning devices (such as truncated domes), and slip resistance grooves as required. Additional requirements for grading design are provided in the County of Los Angeles Department of Public Works, Building and Safety Division "Grading Guidelines" manual.

The proposed Development Site is generally flat, with a gradual slope. Proposed grading shall transition into the existing grades at the join locations. Where this is not possible, low retaining walls shall be designed and constructed such that the grades outside the limits of the Development Site will not be disturbed. Use of retaining walls and retaining wall heights shall be minimized where possible.

Provide a flat grade (2% or less) around all backflow preventers, water meters, electrical manhole vault covers, and similar devices to allow for maintenance access. There shall be a minimum 1/4" drop in elevation from the building finished floor to the finished surface outside of proposed building entrances and exits to prevent flooding.

## **Paving**

The exterior paving design shall be sufficient to serve the proposed development and meet the site design criteria herein. The extent and durability of the design shall be sufficient to accommodate, without damage, the levels and types of traffic that can be reasonably assumed for the project based on the project program. New paving shall conform to the design recommendations of the approved geotechnical report to be provided by the design builder.

The design-builder shall apply an approved selective pre-emergent, surface-applied herbicide in all areas where non-vegetative materials are to be installed. The application shall be per manufacturer recommendation.

## **Stormwater Pollution Prevention Plan (SWPPP)**

The construction site must implement Best Management Practices (BMPs) to control erosion, debris and construction related pollutants. The following BMP handbooks provide guidance on BMPs to be implemented on the construction site:

- 1. County of Los Angeles Stormwater Pollution Prevention Plan (SWPPP) Preparation Manual, latest edition.
- 2. County of Los Angeles Contractor's Guide to Best Management Practices, latest edition.
- 3. California Storm Water BMP Handbook Construction, latest edition.

The design builder shall comply with the National Pollutant Discharge Elimination (NPDES) general permit for storm water discharges associated with construction and shall prepare and/or obtain approval of all necessary SWPPP documents from the State of California Water Resources Control Board.

## **Wet Utilities**

For the purposes of this document, "wet utilities" shall refer to the storm drain, water distribution, and sanitary sewer systems. All wet utilities shall be designed and coordinated for the full development of the South Campus. The design builder is responsible for the demolition and reconstruction of utilities to the extent required to make the connection to the purveyor main. In addition, the design builder shall generate the necessary legal documents required to establish the alignment of all utility easements and process all utility easements required for the proposed development. The design builder shall submit calculations supporting the design of all wet utilities.

Standard plans for Public Works Construction shall be utilized for wet utility system.

The design builder shall provide for all utilities acid- and alkali-resistant polyethylene film warning tape manufactured for marking and identifying underground utilities, six inches wide and four mils thick, continuously inscribed with a description of the utility. Color coding shall be according to APWA Standards.

Manholes and cleanouts shall be located outside of main pedestrian walkways and building entryways unless otherwise approved by the County. All underground utilities shall be protected from corrosion according to the recommendations in the design builder's approved Geotechnical Report.

Underground tanks to be located around the site will need anchorage and review by the design builder's California licensed Structural Engineer, as well as jurisdictional review and approvals by the Fire Department, Environmental Programs, and Regional Water Quality Control Board. The water table and associated buoyancy forces of the displacement due to the volume of the tanks shall be considered in the design. If these upward forces are greater

than the accumulated empty weight of the system, the use of concrete dead men, or equal, shall be required to anchor the unit

#### Stormwater

Campus drainage shall conform to the requirements of the Los Angeles County Hydrology Manual, Los Angeles County Flood Control District (LACFCD), and the Los Angeles County Low Impact Development Standards Manual. The proposed design shall account for run-on from other Development Sites, off-site run-on due to proposed grading, and all stormwater generated by the full build-out of Parcel B.

The design builder shall reference the Storm Drain Concept Exhibit within the Appendix. The design builder shall be limited to discharge overflow at a rate of 1.0 cubic foot per second per acre from the Parcel B Development Site per the LACFCD requirement provided on May 22, 2016. The design builder may discharge up to fifty percent of the total allowable discharge to Rives and Dahlia Streets to the east, and the remaining allowable discharge to Erickson Avenue and Consuelo Street. The design builder shall not connect to or increase runoff to the existing storm drain lines along Flores Street. The design builder shall install new storm drain main lines and associated infrastructure to convey runoff from Parcel B and any off-site run-on to the LACFCD Hollydale Line "A." The design builder shall be responsible for the drainage system design, including, but not limited to, storm drain lines, LID systems, catch basins, area drains and street conveyance systems. The design builder shall provide adequate drainage in accordance with all applicable codes, regulations, and standard industry practices. The design builder shall submit design drawings and calculations to confirm that the Parcel B Development Site overflow is adequately conveyed by the streets and campus infrastructure to the LACFCD Hollydale Line "A" located beneath Laurel Street. Per the County of Los Angeles Hydrology Manual, streets must be designed to convey the 25-year storm event in the street section below the curb line. If the street section is not adequate, storm drain lines shall be installed under the street to alleviate flooding and convey the 10-year storm event at a minimum.

General drainage patterns shall be designed to have the lowest impact to the surrounding campus and off site properties. The design builder shall remove trash, debris, and brush to facilitate drainage away from the existing buildings. New development shall be designed with the intent to maximize pervious areas and increase green space. The intent of pervious areas is to limit the increase in stormwater runoff due to the proposed construction.

The design builder's approved Geotechnical Report shall conform to the County of Los Angeles Guidelines for Geotechnical Investigation and Reporting and shall provide all field test data sheets for all infiltration tests performed and clarification on each of the correction factors used on infiltration rates. Infiltration rates provided must be applicable for the proposed type, location, and invert of stormwater infiltration in relation to other proposed structures on site.

Storm drain laterals and main lines shall be designed with sufficient cover to allow water lines and service laterals to be built over the storm drain piping with a minimum of six inches vertical clearance. Site drainage shall be designed to flow by gravity. Grading and placement of inlets shall be designed to prevent ponding and eliminate nuisance water surface flows.

The design builder shall review the mothballing reports and address drainage requirements to convey water away from the base of the existing buildings to be mothballed to the street.

Building foundations and retaining walls shall have a sub-surface foundation drain system and conform to the recommendations listed in the site-specific Geotechnical Report. Sub-surface drains shall be a minimum of 4-inches in diameter and drain by gravity to the storm drain system where possible. In the case that gravity drainage is not possible, a sump pump and pit shall be provided to pump the water into the storm drain system.

## **Water Distribution**

The existing water distribution system includes a combined domestic and firewater looped system. The combined system is currently served by three local wells, owned by the County of Los Angeles, and the back-up emergency water source, Municipal Water District (MWD).

Due to the age of the existing combined water system, the intent of the development is to replace the existing County water system with a new combined domestic, irrigation, and firewater system owned and maintained by the City of Downey. All new water service on the Rancho Los Amigos South Campus (RLASC) shall be provided from the City of Downey water source. The design builder shall coordinate with City of Downey to design and construct water main systems to support water requirements for Parcel B, future developments, and those existing buildings that remain operational within the RLASC. New City of Downey water main shall be constructed up to the Parcel B scope limit and capped for future developments. The City of Downey will be the owner of all meters and appurtenances incidental thereto. The facilities located downstream of the customer valves (including a post indicator valve) and outside of the meter box/vault shall be owned by the users and are the design builder's responsibility to design and construct. In addition, the design builder is to provide a shutoff valve at the water service main and the entry point to the building in order to provide service flexibility for future maintenance procedures. No water service connection to any premises will be installed or maintained by the County unless the public water supply is protected as required by said State and County regulations, this Rule, and the "Cross-Connection Control Manual for Service Protection in the Los Angeles County Waterworks Districts". A reduced pressure back flow device shall be provided on all water service lines and meters.

The design builder shall reference the Water Concept Exhibit within the Appendix. Parcel B water service shall be sized to serve the full build-out for the site. It is anticipated that the existing City of Downey water supply lacks adequate water pressure to service the full build-out of Parcel B, therefore booster pumps shall be provided. For the location of booster pumps, coordinate with the County of Los Angeles. Fire hydrants shall be protected from possible vehicular damage through the use of bollards or similar site features when appropriate. Hydrants shall be located such that a hose line running from a hydrant to the FDC does not cross any driveways, fire lanes, similar access path, or have any adverse effect on emergency response or evacuation activities.

The design builder shall design and construct water stub-outs for all existing buildings to remain. Stub-outs shall be constructed up to Parcel B scope limit. Water services to the following existing buildings: Public Health; Crime Lab; Child Care; HOME; and Public Safety are currently provided by a Rancho Los Amigos well water loop whose eastern-most leg is located below an existing portion of Dahlia Street that is being removed to provide a contiguous Parcel B site. It is the design builder's responsibility to maintain a continuity of water service with consistent pressure and flow to these existing buildings, as well as all other existing buildings served by this water loop to the north. This shall be accomplished through modification to the existing County well water, or through a connection to an extended City of Downey water loop.

All water lines shall be installed with 36-inches minimum cover from the top of the pipe to finished grade, unless otherwise approved. The minimum size for a water main shall be 12-inches. The design builder shall not use asbestos-cement (transite) pipe. Thrust blocks or mechanical joint restraints are required for all water lines 4-inches and greater. For water lines or stub-outs capped for future use, mechanical joint restraints shall be used instead of thrust blocks.

## **Reclaimed Water**

The design builder shall design and construct future reclaimed water mains to support recycled water requirements for Parcel B and future developments within RLASC. New reclaimed water mains shall be constructed up to the Parcel B scope limit and capped for future developments. Reclaimed water shall not be used in water features and cooling towers. The design builder shall coordinate with the County to determine the exact point of connection to the future reclaimed water main. The design builder shall provide a temporary irrigation water connection to serve the development until the future reclaimed water is available. Purple pipe shall be used for all reclaimed water system distribution piping.

## **Sanitary Sewer**

The existing sanitary sewer system of the Rancho Los Amigos South Campus has one connection into the Los Angeles County Sanitation District (LACSD) owned 42-inch trunk line (with 36-inch liner) at the intersection of Gardendale Street and Garfield Avenue. The majority of the South Campus currently drains to this point of connection through a 12-inch sewer lateral. As-built drawings provided by LACSD show that the Downey Court House, Library and commercial developments north of Amigos Avenue connect into the LACSD-owned 66-inch line and a 78-inch trunk line, running north and south under Rives Avenue. Per record drawings, these buildings do not discharge into the South Campus system in existing conditions. The commercial developments north of Flores Street as well as the County buildings north of Golondrinas Street discharge into the South Campus sewer system in existing conditions.

The design builder shall reference the Sewer Concept exhibit within the Appendix and install site sewer piping to serve the project. The design builder shall connect to the existing LACSD 66-inch trunk line with a new manhole connection. The design builder shall also reconnect Casa Consuelo sewer service laterals to this new sewer infrastructure. The design builder shall be responsible for the entire sewer system design, including but not limited to points of connection to the existing main line, the Casa Consuelo lateral, and manhole locations.

The design builder shall confirm the functionality of the existing sewer system and shall not disrupt existing active sewer lines. The design builder shall provide adequate sewer service in accordance with all applicable codes, regulations and standard industry practices. Design and installation of sewer piping shall comply with the County of Los Angeles Plumbing Code (Title 28), or the most recent code at the time of plan submittal. The design builder shall coordinate with LACSD for necessary permits.

LACSD Agency Contact:

Rosann Paracuelles

Los Angeles County Sanitation District

(562) 908-4288

## **Civil + Demolition**

Subject to EIR approval, the design builder is to anticipate the demolition of all buildings on the parcel. Known buildings and structures to be demolished are listed below with several potential historic district contributors noted with asterisks. However, the design builder is responsible to remove all above grade structures, hazardous materials, and shall selectively demolish and remove (or slurry fill) existing tunnels and additional structures only as they are in the way of proposed improvements. A Hazardous Materials Report for the entire Parcel, inclusive of the tunnels, is provided in the Appendix. The design builder is also responsible to maintain wet and dry utilities to existing buildings outside of Parcel B that may be affected by tunnel and/or utility demolition within the project site boundaries. Where feasible, the design builder shall protect in place, all trees designated as 'Scenic Trees'. For existing tree species, designations and their locations within the site, refer to the Landscape Narrative and Arbor Exhibits in the Appendix.

Existing wet utility systems within Parcel B shall be demolished, removed, and relocated, only as they are in the way of proposed improvements, unless otherwise noted. Temporary provisions shall be made for any demolished piping or other appurtenances within the tunnel serving buildings not to demolished within and outside of the Parcel B development site. Existing natural gas service extended to all existing buildings shall remain in place.

Design builder shall coordinate with the County of Los Angeles to identify critical water mains to be protected within RLASC that supply water to Rancho Los Amigos Hospital on the North Campus. Additionally, design builder shall maintain continuous, adequate utility services to existing buildings to remain operational.

Design builder shall cut and cap existing water service to Casa Consuelo and provide a hose bib for yard maintenance purposes.

Existing utility tunnel systems within Parcel B that are demolished shall be removed and backfilled in compliance with the design builder's approved Geotechnical Report. At the design builder's option, a portion of the existing tunnel under the existing Casa Consuelo building can remain in place but shall be capped as it exits the building footprint. Refer to capping recommendations below. Temporary provisions shall be made for any demolished piping or other appurtenances within the tunnel serving buildings not to be demolished within and outside of the Parcel B development site. Design builder must abate all hazardous materials in any tunnel that is disturbed by development.

At the open ends of the remaining tunnel segments (adjacent to demolition), provide a cap to close off the tunnel. Cap shall be designed to mechanically attach to the existing tunnel and provide support against soil and surcharge loading based on the design builder's approved Geotechnical Report recommendations. Take care to avoid undermining existing building foundations or tunnels as part of the demolition or capping of the tunnels.

Record drawings and site walks with facilities personnel indicate existence of asbestos within the campus. Design builder shall remove asbestos appropriately as recommended by their asbestos consultant.

#### Known LA County buildings on site to be demolished:

1163	1240*	1246*	2434	3820	6407
1202*	1241*	1247	2435	5513	7000
1203*	1242*	1251	2436	5548	Shed
1204*	1243*	1254*	2437	5798*	
1205*	1244*	1265	3020	6223	
1239*	1245	1312	3021	6225	

<sup>\*</sup> Potential contributor to historic district, ultimate disposition of these buildings is subject to EIR findings.

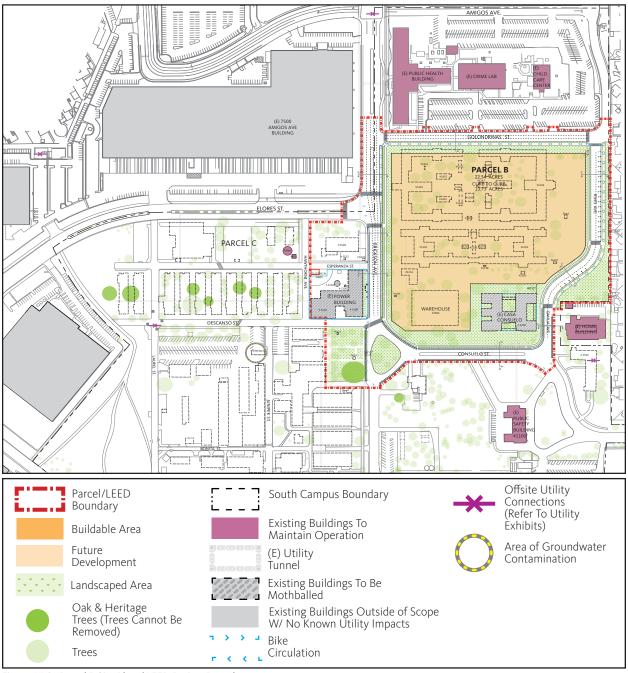


Figure A16 - Parcel B Site Plan / LEED Project Boundary

The building site is located immediately adjacent to the Women's Ward/Casa Consuelo (building 1238), constructed in 1930. Appropriate protective measures (including graffiti resistant coating) for the Women's Ward/Casa Consuelo, the Power Building, Water Tower, and Stack (#1238, #1300, #1301, & #1302) shall be put in place by the design builder during construction, according to the mothballing reports and applicable guidelines developed by the National Park Service and referenced in the Appendix.

The proposed new construction for this building site is immediately north and west of the Women's Ward/Casa Consuelo where it would not interfere with or detract from viewing and fully experiencing the primary south façade of the historic building facing Consuelo Street and east facade facing Rives Avenue. The west- and north-facing facades will be separated from the proposed new construction by wide expanses of landscape area. The original massing, configuration, and important architectural features of Casa Consuelo will remain fully visible from all sides. As proposed, new construction adjacent to Casa Consuelo will be of varying heights, rising anywhere from one to six stories. The full height of the new buildings will be pulled away from Casa Consuelo to the west and north through setbacks to moderate the difference in heights.

## **Authorities Having Jurisdiction (AHJ)**

The design build team will ensure the proper planning for and implementation of project reviews by the County as the AHJ, Public Safety of the same discipline at both the County and City levels, as well as the applicable public utilities. In emergency situations, first responders to the site will be from the City of Downey Fire and Police Departments. The requirements of those City agencies will be enforced for the applicable planning, design and specification of products to be utilized on-site. The City of Downey shall be presented with an advance set of plans and specification that will be submitted for permit for their comments prior to submitting plans to the County of Los Angeles who will be responsible for final approvals. City of Downey comments shall be incorporated into the drawings and specifications prior to issuance to the County of Los Angeles Department of Building and Safety for approval.

#### 1. Fire Protection:

- a. Code to conform to: Downey Fire Department Fire Code;
- b. Initial Review: City of Downey Fire Department;
- c. Final Review: County of Los Angeles Fire Department

#### 2. Safety:

- a. Initial Review: City of Downey Police Department;
- b. Final Review: Los Angeles County Sheriff's Department

#### 3. Utilities reviewers:

- a. Initial Review, Water: City of Downey Water;
- b. Initial Review, Power: Southern California Edison
- c. Initial Review, Gas: Southern California Gas Company
- d. Initial Review, Telecom: Spectrum and Frontier
- e. Final Review: Los Angeles County

## C. EXTERIOR BUILDING DESIGN

The following represent important design considerations to be addressed during the design phase of the Internal Services Department, Probation Headquarters and Parking Structure and shall be undertaken in concert with the other sections in this scoping document.

## **General Character and Expression**

The Architectural character of the RLASC is defined by a clear and direct use of materials - the expression of the structure along with the honest use of building materials yields a simple and modest dignity. Buildings express a character of repose and restraint - grounded to RLASC's unique landscape setting and integrated within its campus-scaled structures - rather than standing alone or in contrast to them.

For the design of the Internal Services Department Offices, Probation Headquarters and Parking Structure, building materials shall be deployed in a manner that reinforces the logic of the building(s), responding to both internal (program driven) and external (site and climate driven) conditions.

## Priorities for the Internal Services Department, Probation Headquarters and Parking Structure

- 1. Work in concert with adjacent structures to form a gateway along Erickson Avenue.
- 2. Use the Internal Services Department, Probation Headquarters and Parking Structure as an opportunity to integrate architectural and planning elements of the campus into a cohesive and unified expression of RLASC.
- 3. Give meaningful shape and form to future outdoor public spaces adjacent to the historic structures.
- 4. Organize and arrange building massing, fenestration, and program elements in ways that will reinforce and contribute to the success of the outdoor spaces articulated in the Site and Landscape design narrative, by tying together indoor and outdoor spaces.

## **Entrances & Outdoor Spaces**

Planning solutions shall include a secured Level 1 public entrance on Erickson and a dedicated entrance from the secured parking area. Off-campus visitors are assumed to arrive from either public transit or the new parking structure on site. Entrances shall be emphasized as a significant component of the expression of the building(s)

- 1. Building orientation relative to the site and entrances should be well-defined, providing a clear identity by incorporating elements such as canopies and deep overhangs.
- 2. Organize and arrange building massing, fenestration, and program elements in ways that will reinforce and contribute to the success of the outdoor spaces articulated in the Site and Landscape design narrative.
- 3. Consider the placement of active uses such as shared amenities.

- 4. Provide separate, covered entrances and covered walkways for access from the secured parking area.
- 5. Secondary, employee-only and delivery entrances should be covered with card-reader access, and sized appropriately for their use. Refer to Security Narrative for additional information.

## **Building Service, Loading + Fire Department Access**

Loading dock(s) for ISD and Probation Building(s) are suggested along the east edge of the parcel to enable access to service vehicles from Rives Avenue. The vehicular / loading edge also extends along Golondrinas to accommodate potential access to the parking garage. All on-site roadways shall accommodate required fire truck access and associated turning radii, and code required hose pull lengths. The loading dock shall be fully screened and integrated into the building or parking garage facade. Exterior loading areas require a secured perimeter with card reader and a gate arm at vehicular access point(s). Allow for turning maneuvers for a 40° long tractor trailer.

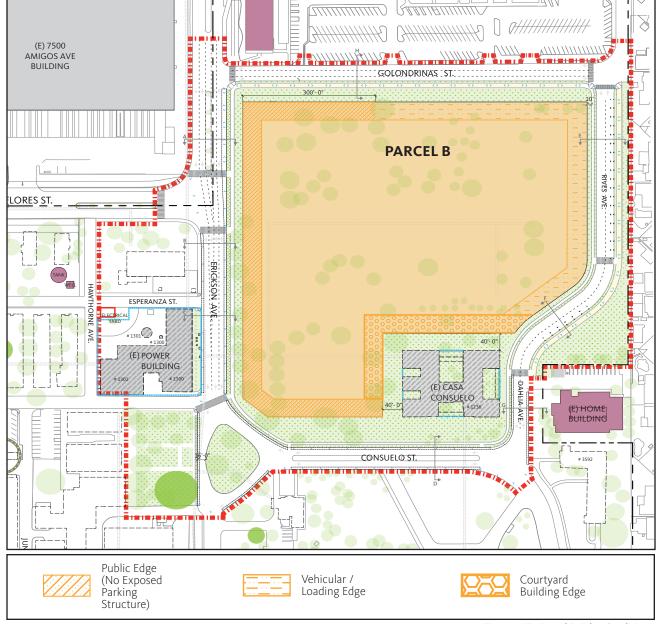


Figure A17 - Parcel B Edge Conditions

## **Materials and Details**

The buildings on Parcel B are intended to be County occupied for a minimum of 50 years. As such, material selection should be durable and timeless, with special attention to minimizing required maintenance.

The selection of materials and color palette shall be harmonious with the existing RLASC including the planned buildings for ISD, Probation and the Parking Structure. Materials shall have textural variety and be used in a clear and direct way that reinforces the logic of the building(s) massing and organization.

Materials used in the construction of the facility shall support heavy building use and should be selected based upon characteristics such as durability, minimal maintenance, aesthetic longevity, sustainability, color retention, structural integrity, ease of upkeep and replacement.

Materials should be selected for recycled content, regional availability and low-emitting materials to meet or exceed LEED version 4 requirements. Materials selected shall be graffiti proof, or a non-sacrificial graffiti proof coating will be required up-to the nearest transition point at a minimum of 10' above adjacent grade.

Materials that are encouraged include:

- 1. Exposed architectural concrete: Connects back to the historical use of concrete on campus.
- 2. Clear anodized or pre-finished aluminum: Curtain wall and infill panels.
- 3. Pre-finished aluminum or unfinished zinc: Rain-screen, cladding systems, and equipment screens.
- 4. Exposed, shop painted architectural steel with high performance coatings: At sunshades, railings, projections, canopies, etc.

Materials that are discouraged include:

- 1. Cement plaster and EIFS: Painted metal cladding in brightly or deeply saturated colors
- 2. Glass: Reflective (i.e., in excess of PPG Solarban 70), or deeply tinted. Special care shall be given to the detail of materials especially at transitions, to express their essential qualities, characteristics, and methods of construction.
- 3. Other building elements that demand special attention in detailing the key focal points of the building such as entrance canopies and sunshades should be part of an integrated system of components that are functional and clearly expressed.
- 4. Unfinished or sacked, exposed structural concrete.

## Form, Massing, and Fenestration

Building massing, scale and functional planning shall relate to the surrounding neighborhood of buildings. Building massing, fenestration and shading devices shall be optimized to the actual climate and orientation of the site to:

- 1. Minimize solar heat gain on the façade, and
- 2. Maximize year-round outdoor thermal comfort for occupants and pedestrians.

Building elevations should recognize that as campus buildings, there are no backs or fronts, but rather distinct characteristics as related to internal program, external solar orientation and campus orientation - building forms

should be responsive to the context in an ordered manner. Massing and articulation should be broken down into smaller elements to reduce overall scale, including:

- 1. The expression of structural bays, vertical circulation and special common spaces within the building
- 2. Horizontal break down of form express floors with addition of vertical organization of the rain screen and window system scaled and proportioned relative to the program
- 3. A different but related expression of different programs that break down the overall building form

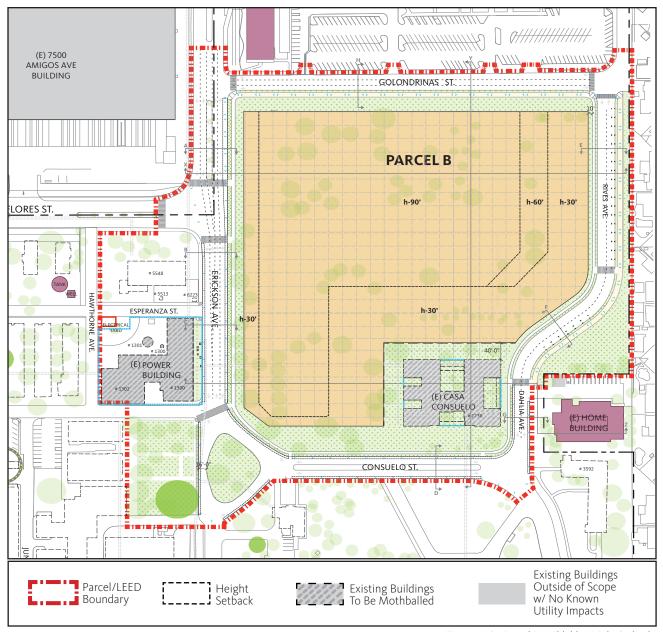


Figure A18 - Parcel B Buildable Height Setbacks

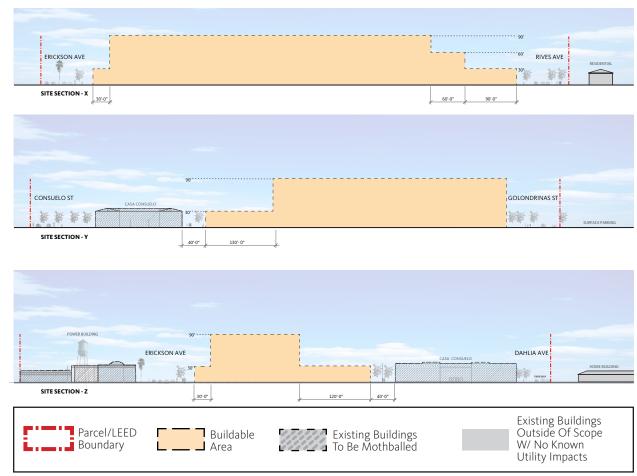


Figure A19 - Parcel B Site Section

Building massing and wall composition should acknowledge a base, middle and top (mechanical screen). The scale of multistory walls should be broken down by introducing horizontal bands that approximately correspond to the floor levels, or window sill lines. Flat roofs should be used and parapets set back from the main building edge visually to reduce the overall height of the building. All roof top mechanical equipment shall be well-organized and fully screened from view, both from the ground as well as adjacent buildings.

Rooftop equipment shall not extend above the equipment screen except for exhaust stacks, which shall be of uniform height, aligned, evenly spaced and clad in metal with a high-performance coating. Exterior electrical switchgear, transformers, back-flow preventers, and other ground mounted MEP related equipment on site require screening.

## **Fenestration**

- 1. Solar orientation and shading devices should be incorporated to maximize daylight while controlling heat gain and glare.
- 2. Sun-shading should be demonstrably functional, and should be part of a clear system, integrated with the design of fenestration, MEP systems, and the selection of glazing.
- 3. Windows in masonry walls shall be recessed to give the appearance of weight.
- 4. Provide indentations for covered terraces.

## D. INTERIOR BUILDING DESIGN

## General

This section addresses the interior space characteristics as well as the specific attributes and requirements for the design within the ISD and Probation buildings. In general, finish materials used throughout the facility should be durable, washable/cleanable, require minimal upkeep and maintenance, and support the sustainability mission of the project and the RLASC Design Guidelines. Recycled content, regional availability and low-emitting materials shall be provided in-order to meet or exceed LEED version 4 requirements. The overall design concept shall include a selection of materials that are complimentary and have sufficient color, texture, and scale to create an attractive and inviting environment that conveys the collaborative spirit of ISD and Probation.

## **Interior Space Characteristics**

## **Public Spaces**

The project's identity shall be implemented in the public spaces as the connective tissue of the building in a way that supports chance encounters. This includes circulation spaces such as lobbies, hallways, stairs, and elevators. These spaces should be considered as setting the overall tone of the experience of the building.

From a planning standpoint, building circulation paths shall be apparent from main entrances, so visitors unfamiliar with the facility can quickly orient themselves, and intuitively find their way to their destinations. Elevators and stairs serving the upper floors shall be located near building entrances and be easy to locate. Natural light in public corridors and other circulation space is highly desirable and should be used as an orientation and way finding device wherever possible. Planning layouts should emphasize opportunities for "found" space such as nooks, intersections, and ends of circulation paths, and designed to encourage serendipitous encounters with amenities such as seating, writing and display surfaces, and specialty lighting.

## **Designing for Wellness**

ISD and Probation users stated a desire for the buildings to place a focus on employee health and wellness. For context, the existing spaces currently housing these departments include repurposed warehousing buildings with deep floor-plates and limited access to daylight. Current facilities are aging with limited climate control, variable air quality, few outdoor spaces, and predominantly paved parking lots without programmed space or walking paths.

For the proposed building(s), wellness should remain a priority both in the placement of interior spaces as well as in campus development.

## Natural Lighting, Views and Access to the Outdoors

Connections to the exterior space should be made wherever possible to connect indoor and outdoor spaces. The building and floor plate organization should allow the maximum amount of access to light and views to employees and desk areas. Ideally, open office desks/workstations should be grouped towards the perimeter of the building, with enclosed rooms and desks located towards the core to allow for maximum light penetration.

Natural light must be managed for solar heat gain, presentation and displays, and individual comfort and adjustability. An integrated strategy of daylight management and lighting controls shall be incorporated and include:

#### Shades

- 1. Window shades at all exterior windows, except where noted.
- 2. In addition to window shades, provide blackout shades at all AV enabled spaces unless otherwise noted.
- 3. Shades shall be durable and require limited maintenance.

## Lighting

- 1. LED lighting and individual controls should be utilized whenever possible to support energy efficiency goals.
- 2. Task lighting shall be provided at all desks to support individual work environment to limit the use of overhead lighting.
- 3. Zoned lighting shall be incorporated to allow for discrete control adjacent to projection screens or video display monitors.
- 4. Control of glare and reflection shall also be considered relative to bright surfaces, marker boards and computer/projection screens.
- 5. Refer to Electrical and Lighting Design Narratives for more detailed requirements.

#### Glazing

- 1. Incorporate interior glazing for borrowed daylight to spaces without direct access to exterior windows where functionally appropriate.
- 2. Interior glazing should also be utilized to provide visual access between spaces.

#### Air Quality, Temperature and Comfort

Though many of the stated concerns about air quality, temperature and comfort will be addressed by the move to a new building, the proposed building shall be developed with user control where possible (temperature, lighting levels, window shades), to allow employees to adjust their environment. Specific design considerations are addressed in the Mechanical and Electrical narratives.

#### **Fitness and Space to Take Breaks**

The importance of access to fitness amenities and break spaces is critical to the health and wellbeing of employees and their ability to promote great work. From program required pantries, and collaboration spaces, to outdoor amenities, the potential fitness center, and walking trails, program spaces should be developed and distributed to promote movement, wellbeing, and support multiple uses; both break space and potential collaboration spaces.

## **Supporting Great Work**

#### We vs. Me

The existing workspaces for ISD and Probation include few options of places to work, and most space is designed around individual desks and offices. Amenity spaces are small or not present, and meeting rooms mostly support large groups with fixed tables. For the proposed building(s), the departments are seeking a more balanced approach to introducing different spaces that vary in scale for employees to work or collaborate. Individual desk or office 'Me' Space is reduced and shared spaces are increased to better support the work of the departments.

Based upon benchmarking for IT and Law Enforcement functions, and using planning ratios developed to serve Los Angeles County on this and other projects, the ratios noted below have been recommended and utilized in our programming efforts for the ISD and Probation building(s).

## **Balance of Enclosed Offices to Open Workstations**

Utilizing the square footage of desk or office space, the ISD and Probation current program included later in this document has a range between 10-15% of enclosed office space, with 85-90% of open workstation space.

## **Shared Space Ratios: Meeting Spaces**

Space ratios were developed to ensure that multiple types of spaces are available both for formal collaboration (larger groups), quick small group meetings, and individual focus work.

Ratios for meeting spaces are as follows:

Space Type	Ratios
Small Meeting Room	1:50 Staff
Touchdown Room	1:100 Staff
Medium Meeting Room	1:100 Staff
Large Meeting Room	1:400 Staff
XL Meeting Room	1:400 Staff
Auditorium / XXL Meeting Room	1: ISD/Probation Development Site

## **Shared Space Ratios: Standard Support Spaces**

Planning ratios were also developed for standard support space as follows:

Space Type	Ratios
Central Copy Station	1:200 Staff
Local Copy Station	1:50 Staff
Health/Mother's Room	1:300 Staff
Local Pantry	1:200 Staff
Food Service Program	1: ISD/Probation Development Site

## **Designing for All Work Modes**

When asked about 'How they work' through the employee survey, both ISD and Probation identified focus work as being of critical importance and the task they engage in most of the time. They also identified working in person or via technology as important, as well as a need for spaces to support this type of work. Learning and professional development, and socializing were other work modes lacking appropriate spaces in the current facilities.

The proposed building(s) are programmed and planned to include spaces to support all work modes, allowing staff to choose the most effective space for their work. Programmed support and meeting spaces are to be distributed throughout the workplace; the design shall seek to provide variety within the department spaces at intervals that will encourage ad-hoc use instead of grouping all meeting rooms together: Small meeting, open collaboration, touch down rooms, pantries, and copy rooms shall be distributed throughout the building, both to effectively provide access to all staff and to encourage use.

Planning layouts should also emphasize opportunities for "found" space such as nooks, intersections, and ends of circulation paths, and be designed to encourage serendipitous encounters through amenities such as seating, writing and display surfaces, and specialty lighting.

## **Group Loud + Quiet Appropriately**

The design shall aim to group more active or 'noisy' spaces (both visual and auditory noise) together, and protect quieter spaces from the distraction of these nosier spaces. Desk zones, touchdown and small group meeting rooms shall be grouped away from much more active spaces like the pantries, training rooms, large group meeting zones or other active facilities. This balance is a critical criterion to ensure work efficiency and productivity for the employees because most of their tasks require a quiet/focused environment. However, both departments recognize the importance of collaboration and interaction to create a flourishing work environment.

Staff in both the Probation and ISD Headquarters cited noise and lack of separation of desk zones from adhoc collaboration areas as being disruptive to their work and well-being. While recognizing the importance of collaboration and interaction, they identified the importance of balancing this with space to focus. The proposed program identifies a variety of spaces to suit these activities, and the proposed design will need to group them in a way that allows both types of activities to flourish.

## **Intuitive Technology Integration**

Technology is to be integrated into all work modes for the staff, whether they are working with computers at their desks, collaborating digitally, presenting within a meeting room, or keeping in touch while out of the office.

The users recognized the importance of integrating technology to support group work, access to plugs and ports, and ability to connect to personal technology. Working presentation screens and access to video conference technology was noted as being most important to support work.

For the proposed design, technology systems should be selected with intuitive use in mind:

- 1. Meeting rooms shall allow for easy presenting and default to a screen with instructions on how to use the system, connection points should be visually easy to find, either stored on walls or integrated into tables.
- 2. Touchdowns, pantries, lobbies, dining areas, outdoor amenities, and other shared locations shall provide for charging and Wi-Fi/network connections to support working away from the desk.
- 3. Lounge furniture shall be selected to include work tables or integrated power where possible.
- 4. Products shall be chosen in association with technology departments to take advantage of existing knowledge. For ISD there is a desire to utilize the new building as a testing center for modern technology, to showcase products to other County departments. As such, the selection and provisioning of technology for the site will need to serve emerging and future needs.
- 5. Where possible, barriers shall be removed, choosing systems that support multiple product types (computers, mobile devices), and limiting or integrating cord designs where possible.

## E. PARKING STRUCTURE

As part of the overall development of the Rancho Los Amigos South Campus, the County requires the design builder to provide a minimum of 2.5 spaces per 1000 square feet as the base scope of work in a covered parking structure. An additive alternate shall be provided for an additional .5 spaces per 1000 square feet. Additional vehicle parking is required adjacent to the loading dock (4 stalls for deliveries), refer to Loading Dock Room Data Sheet 5.1-5.12.

The design builder shall assume the sole responsibility ensuring that all design, construction, and installation is in full conformance with the most recent LACBC code in place at the time, the agencies of the authorities having jurisdiction, the Americans with Disabilities Act, and to all applicable provisions of the Building, Zoning, Plumbing, HVAC and Electrical codes and ordinances as adopted and amended by the County of Los Angeles.

The criteria specified are intended to be minimum design criteria. It is the desire of Los Angeles County to construct a facility that will provide its users a high level of comfort, convenience, safety, and security.

If after reviewing these scoping documents, the design builder wishes to exceed the design requirements presented here, the design builder may do so. However, it is the design builder's responsibility to identify changes for the County, where their design proposals deviate from the scoping documents. In no case shall the design builder's proposal deviate from the design criteria presented here in a manner that results in the reduction of the quality or the quantity of the project. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

## **Required Parking**

#### **ISD Headquarters**

- 1. In addition to the 2.5 spaces per 1000 square feet requirement, ISD requires an additional 10 stalls for fleet parking (these are currently comprised of 6 plug-in hybrid sedans, 2 cargo vans, and 2 passenger vans). All 10 stalls are required to have EVSE, Level 2 charging stations. Fleet parking shall have ADA required height clearances.
- 2. In addition to the 2.5 spaces per 1000 square foot requirement, ISD requires an additional 17 stalls of visitor parking.
- 3. Provide one additional fleet parking space for the Auditor Controller van.

## **Probation Headquarters**

- 1. In addition to the 2.5 square feet requirement, Probation requires an additional 92 stalls for fleet parking.

  Fleet parking shall have ADA required height clearances.
- 2. In addition to the 2.5 spaces per 1000 square feet requirement, Probation requires an additional 10 stalls for visitor parking.

#### **Parking Structure**

- 1. There shall be a minimum of two vehicular entry/exit locations from the parking structure with the required number of entrance and exit lanes (minimum total of 3 drive aisles in each direction) to minimize vehicle stacking at AM and PM rush times. Curb cuts for vehicular driveway entrances into parking structure shall be a minimum of 100' from roadway intersections. Provide at least one employee only entrance / exit driveway per location.
- 2. There shall be a minimum of two pedestrian access points to the parking structure.
- 3. Standard parking stall and drive aisle widths shall comply with the Los Angeles County parking standards.
- 4. Accessible parking shall comply with:
  - a. California State Building Code and;
  - b. the Americans with Disabilities Act and;
  - c. U.S. Department of Energy ADA Requirements for Workplace Charging Installation: DOE/GO-102014-4563 November 2014.
- 5. Accessible parking stalls shall be located as near as practicable to a primary entrance.
- 6. A minimum of 6% of the required parking spaces shall be designated as electric vehicle charging stations (EVCS) with the appropriate infrastructure, wiring, and charging devices. Of this 6%, a total of four (4) EV Spaces are to be Level 3, DC Fast Charger enabled, located for ease of access in and out of the garage. The balance of the EVCS are to be Level 2 charging stations distributed evenly in visitor, employee and Fleet parking areas located in preferred areas within; i.e.: spaces closest to entrances and elevators (for upper levels) but after ADA required spaces.
- 7. Clean Air Vehicles such as low emitting, fuel efficient, carpool/van pool vehicles shall comply with the California Green Building Standards Code or as follows; whichever is more stringent.
  - a. 8% of the installed motorized parking spaces shall be assigned to low emitting, fuel efficient, carpool/van pool vehicles and be located in preferred locations; i.e.: spaces closest to entrances and elevators (for upper levels) but after ADA required spaces.
- 8. Bicycle parking shall comply with the California Green Building Standards Code or as follows; whichever is more stringent.
  - a. Provide secure bicycle parking for 5% of the tenant vehicular parking spaces.
  - b. Provide secure bicycle parking for 5% of visitor parking spaces.
- 9. It is desirable to have a naturally ventilated open parking structure with maximized day light.
- 10. Drivers and pedestrians shall have clear visibility throughout the interior of the structure for safety.
- 11. All parking spaces shall be accessible for self-parking; i.e., no spaces shall be "buried", or situated in such a manner that it would become necessary to move another car to utilize the parking space.

- 12. Average lighting levels are as follows:
  - a. Vehicular entry locations: 40 fc
  - b. Elevator lobbies and at stairs: 20 fc
  - c. Drive aisles: 8 fc
  - d. Parking stalls 5 fc
- 13. For further lighting, information refer to Electrical and Lighting narratives.
- 14. All equipment shall be enclosed in secure, weather-tight rooms for maintenance and security purposes.
- 15. For parking structure security refer to the Security narrative.
- 16. For parking structure exterior enclosure, exposed structural concrete is not acceptable. Refer to the Exterior Building Design section of the narrative for acceptable materials.
- 17. Reserved parking spaces, (not limited to the identified sub section below and final list and quantities of each to be coordinated with the County prior to execution), to be incorporated into parking structure through signage or striping. Note: No reserved parking spaces shall be closer to entrances or elevators (for upper levels) than ADA or low emitting, fuel efficient, carpool/van pool vehicles noted above.
  - a. Department Head
  - b. Chief Deputy
  - c. Executive Level Managers as appropriate
  - d. Employee of the Month
  - e. Other spaces required by the County
  - f. Visitors
- 18. Provide for manned, interior parking booths at all primary parking entry / exits. Booth(s) shall be heated and cooled, as well as sized to accommodate one attendant with a desk and storage area. Phone, data lines and electrical outlets are to be provided, as well as IT and Security connections back to lobby security desk.

[Intentionally Left Blank]

## F. STRUCTURAL

## Introduction

This section presents an overview of the various structural engineering aspects and requirements pertaining to the Parking Structure, ISD and Probation Buildings. This section contains the following information:

- 1. Design Loads
- 2. Structural Design Requirements
- 3. Serviceability and Durability Requirements
- 4. Material Requirements
- 5. Quality Control

Provide design, engineering, and installation of the structural systems and related components. Design criteria to be followed appear in this document. Review all of the documents and comply with the requirements.

Provide detailed engineering calculations for all systems prior to construction to confirm final sizes and connections, and submit for review by the governing jurisdiction. Performance Criteria identify minimum levels of quality, materials and workmanship. If there are conflicting requirements in the documents, the most stringent requirements shall apply.

## **Design Loads**

#### **Dead Loads**

Use the weight of all construction materials and fixed service equipment incorporated into the building including but not limited to, walls, floors, roofs, ceilings, stairways, built-in partitions, finishes, cladding, utilities, MEP equipment and their housekeeping pads as well as other similarly incorporated architectural, MEP and structural items.

#### **Live Loads**

Design live loads shall be as required by code. Normal partition loads need not be added to live loads, except as required by code. Heavy partitions such as CMU or partitions supporting heavy finishes shall be included in the dead loads. The design live loads may be reduced in accordance with code provisions for live load reduction based on the tributary area supported by the specific members.

#### **Lateral Earth Pressure Loads**

All underground structures including basement walls, retaining walls and pits shall be designed for lateral earth pressure, hydrostatic pressure, and surcharge loads, as applicable. Design lateral loads shall be as prescribed in the project geotechnical investigation report provided by the design builder.

#### **Seismic Loading**

Seismic loads shall comply with the Code. Seismic design parameters, load factors, and coefficients shall be consistent with code requirements. Seismic site-specific parameters shall be as prescribed in the project geotechnical investigation report provided by the design builder.

#### **Wind Loading**

A building structure and exterior building components and elements shall be designed to resist wind loads. Exterior wall elements shall be designed and detailed to prevent damage to components, connections, and sealants.

#### **Load Combinations**

Load Combinations shall be in accordance with the applicable building codes.

## **Structural Design Requirements**

#### General

The new buildings shall be constructed with non-combustible materials to meet the fire rating requirements per code. As such, consideration should be given to either a structural steel or reinforced concrete structural system. The structural design shall also be coordinated with all other disciplines to attain the design intent and performance requirements presented throughout this document.

The layout of the structural system should accommodate the parking structure program and operational requirements when part of the design concept. The structure system shall allow for long-span systems to maximize column spacing and minimize congestion for drive and parking aisles. The design should also provide for an integration of building services, and allow for the desired architecture and the durability requirements of the building.

The new building structure shall be coordinated with existing conditions, including but not limited to, constraints presented by existing utilities, utility tunnels, and adjacent building structures. All existing underground structures, including tunnels, shall be checked for adequacy to support surcharge dead and live loads that were not previously present, and be structurally strengthened, as required, to support these loads.

## **Gravity Framing**

The gravity framing shall be configured and designed to adequately support all the design loads. Location and spacing of building columns shall be compatible with the current program requirements, but should also allow for future flexibility for the building. The depth of the floors and framing shall be coordinated fully with the design build team. and the various services within the building to maintain the desired ceiling height in various areas and avoid constraint to future flexibility.

#### **Lateral Load-Resisting System Requirements**

The lateral load-resisting system shall be configured and designed to support the design lateral loads. Location and configuration of vertical lateral elements shall be compatible with the current program requirements. A well configured lateral load-resisting system with sufficient ductility and strength is essential to reducing earthquake damage and to ensure the continuation of operations in the facility after a major earthquake. A well-configured system would have minimum irregularities and shall be highly redundant.

#### **Seismic Joints**

Seismic joints and separations shall be identified and detailed on the structural drawings, with architecturally integrated transitions. The magnitude of required movement, in all directions, that must be accommodated by the joint shall be identified. Seismic separations shall account for the physical characteristics of seismic joint assemblies and hardware. Further, utilities crossing seismic joints shall be detailed to accommodate differential movement between independent building segments.

#### **MEP Equipment**

Provide anchorage and seismic restraint for all mechanical, electrical, plumbing, information technology, and for all other equipment that are required by code to be seismically anchored.

## **MEP Utility Routing Anchorage & Seismic Restraint**

Provide seismic anchorage and seismic bracing for all overhead mechanical, electrical, plumbing, fire sprinklers, information technology, and for all other distribution and utility lines that are required by code to be seismically anchored. Provide flexible connections to accommodate seismic relative displacements and movement due to thermal expansion.

#### **Interior Architectural Components and Finishes**

Provide seismic anchorage and seismic bracing for all architectural components, including but not limited to, partitions, ceilings, soffits, casework, counters, fixtures, high density shelving and for all other architectural features that are required by code to be seismically anchored. Locating high density shelving on ground level slab on grade is preferred due to deflection criteria. Interior partition walls and other interior components shall be designed and detailed to accommodate floor vertical deflections and lateral seismic deformations to prevent damage. Out-of-plane deflection of interior partition walls shall be limited to meet code requirements.

#### **Exterior Walls & Façade Fenestrations**

Design and anchorage of exterior wall systems and façade fenestrations shall consider seismic effects including inelastic story drift, wind effects, floor vertical deflections, and thermal movement of the building without damage to the exterior wall system, architectural cladding, and the supporting structure. Out-of-plane deflection of exterior wall systems shall be limited to meet code requirements. Design components either directly or indirectly exposed to weather to resist applicable potential ambient air differential temperature range from 20 deg to 110 deg F with adequate provisions for noiseless movement in expansion and contraction and prevention of binding, joint-opening, breakage, or undue stress in and between members.

## **Delegated Design of Non-Structural Components and Attachments**

All non-structural components including equipment and utility anchorage, exterior walls and their attachments, and all other non-structural systems that are not designed by the structural engineer of record (SEOR) for the project, shall be designed by a California registered professional engineer, and reviewed by the SEOR for compatibility with building structural framing.

#### **Foundation System Requirements**

Design the foundation system per recommendations provided by the geotechnical engineer for the project. The preliminary geotechnical information and soil boring data furnished by the County are provided for reference only. As such, it's the design builder's responsibility to perform adequate due diligence in consultation with the project structural and geotechnical engineers, and with jurisdictional agencies to insure the viability and acceptability of the proposed foundation system and foundation design criteria for the project. All assumptions made by the design builder without appropriate due diligence, including but not limited to, acceptable type of foundations, design water table level, consolidation and liquefaction settlements, appropriate foundation drainage and water proofing requirements should be made at design builder's own risk.

Foundations may consist of spread footings, mat slab, drilled piles, or other deep foundation system as required. They shall be designed to adequately support all applicable design loads and load combinations. Driven piles are discouraged due to concerns of disturbing neighboring occupancies, aging underground infrastructure and adjacent historic buildings. Building structure, building finishes, and utilities shall be designed to accommodate - without any damage - the maximum foundation settlement and maximum differential settlement indicated in the geotechnical report.

The new foundations shall not surcharge existing tunnels, existing utilities, or other existing underground structures. Provide all necessary underpinning and temporary shoring for existing buildings and other impacted existing structures, and for temporary excavations.

Provide slabs on grade, or structural slabs on grade where required, with adequate thickness and reinforcement to provide support for imposed loads without settling or cracking. Provide adequate control and expansion joints in the slab on grade to control shrinkage cracks. Provide sufficient space above the foundations (and below the slab on grade) to accommodate utilities and plumbing fixtures.

Provide waterproofing and drainage system behind all new retaining walls and below floors on grade as required. Design basement walls, building foundations and floor slabs for any hydrostatic loads specified by the project geotechnical report. Repair waterproofing membranes and drainage systems behind existing basement walls and below slabs that are impacted by the new building.

## **Serviceability and Durability Requirements**

#### **Deflection Criteria**

Serviceability concerns should be considered and allowed for in the design. Brittle floor finishes are highly susceptible to cracking due to excessive floor deflections and should be given special consideration. Structural-framing members shall be designed to limit deflections to within Code limitations or other more stringent system-

specific criteria. Floor deflections should also be limited to accommodate the vertical-slip detailing of non-load bearing partitions and exterior wall systems.

#### Vibration Criteria

Vibrations from machinery and from footsteps can be very disturbing to building occupants and shall be considered in the design of the floor framing. All occupied floors shall be designed to provide human comfort as per the recommendations contained in AISC Design Guide 11, "Floor Vibration Due to Human Activity".

## **Durability Requirements**

The selected structural material and structural components shall be consistent with the durability requirements of the building. All new material and systems shall be designed and detailed to have a minimum life-span of 50 years. Design and construction should ensure long-term performance of the structural systems related to crack control of concrete and masonry, and corrosion protection of structural steel. The geotechnical report should address and provide recommendations and measures to prevent corrosion and deterioration of structural and non-structural components that are directly in contact with the soil. Please refer to "Material Requirements" section below for additional information.

## **Material Requirements**

All products and assemblies shall have approved current testing reports as required by the Code.

#### Concrete

This section applies to all reinforced concrete components incorporated in the project. Design of concrete components shall be in accordance with governing codes, and shall comply with the following:

- 1. All concrete materials, testing methods and construction practices shall conform to all applicable codes, and ACI and ASTM Standards.
- 2. Aggregates for normal weight concrete shall conform to requirements and tests of ASTM C-33.
- 3. Aggregates for light weight concrete shall be of the expanded shale type conforming to all the requirements and tests of ASTM C-330.
- 4. Concrete reinforcement shall conform to ASTM 615, Grade 60. Welded reinforcing steel shall confirm to ASTM A706. All reinforcement and their testing methods and construction practices shall conform to all applicable ASTM standards.

#### Masonry

This section applies to all masonry structures and components incorporated in the project. Masonry components shall be designed to resist all applied vertical and lateral loads in accordance with governing codes, and shall comply with the following:

- 1. All masonry materials, testing methods and construction practices shall conform to all applicable codes, and ACI and ASTM Standards
- 2. Incorporate vertical shrinkage control joints in walls of which masonry units are a part.
- 3. All structural and non-structural masonry walls shall be reinforced, solidly grouted, and adequately braced to meet code requirements.
- 4. Minimum compressive strength of masonry components shall be not less than 1500 psi.

#### Steel

This section applies to all structural steel components and miscellaneous metal items:

- 1. All structural steel materials, testing methods, and construction practices for manufacturing, fabricating and erecting shall conform to all applicable codes and ASTM standards.
- 2. All structural steel shall be detailed, fabricated and erected by an approved and licensed fabricator in accordance with AISC.
- 3. All welding shall be done by certified welders per AWS requirements.
- 4. Use hot dip G90 galvanized steel members and connections exposed to weather, high humidity or water spray to protect against corrosion. Bolts, nuts and washers used with galvanized structures shall also be galvanized. Localized corrosion likely to occur from entrapped water, excessive condensation, or from other factors, shall be minimized by suitable design and detail. Where necessary, positive means of drainage shall be provided.

#### **Cold-Formed Metal**

This section applies to all installations utilizing cold-formed metal including but not limited to, exterior walls, interior partitions, interior and exterior soffits, furring, and hard ceilings:

- 1. All cold-formed steel products including studs, joists, tracks and all other accessories shall be G90 galvanized for all interior and exterior applications.
- 2. At a minimum, use 18 GA metal studs at interior partition walls, and where welding is required.
- 3. At a minimum, use 16 GA metal studs, metal tracks and all other accessories at all exterior applications including but not limited to, walls, soffits, and furring.
- 4. At a minimum, all exterior metal studs, shall be 6-inch deep, un-punched, C-shape with 15/8" wide flange.
- 5. All welds of galvanized steel shall be touched up with zinc-rich paint.
- 6. All metal studs and joists shall have a maximum spacing of 16-inch on center.
- 7. All metal studs shall have stiffened flanges.

## **Quality Control**

All structural material specified and used on the project shall be consistent with code requirements, and of quality consistent with the durability requirements of a 50-year building.

#### **Structural Observation**

Structural Engineer of Record (SEOR) shall provide observation reports at critical stages of construction of structural systems. These critical stages shall be specified on construction documents. A site observation report shall be submitted for each of these stages.

#### **Testing & Inspection**

Testing and inspection in accordance with the code is required for the project and to be provided by a qualified Testing and Inspection company retained by the County. The SEOR shall identify all special inspections and testing requirements for the project.

## G. MECHANICAL

## **HVAC General**

This narrative is intended to describe the proposed scoping documents for HVAC systems on the South Campus. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

## **Codes & Standards**

The HVAC systems for the project shall be designed to conform to the spaces on the architectural plans. They shall be provided in accordance with the latest codes & standards, including but not limited to:

Latest building codes, including:

- 1. California Building Code
- 2. California Title-24 Building Energy Efficiency Standards
- 3. California Mechanical Code
- 4. CalGREEN
- 5. All relevant City & County laws, ordinances & standards.
- 6. ASHRAE 55 "Thermal Environmental Conditions for Human Occupancy".
- 7. ASHRAE 62.1 "Ventilation of Acceptable Indoor Air Quality."
- 8. ASHRAE 90.1 "Energy Standards for Buildings except Low-Rise Residential Buildings".
- 9. Other ASHRAE Standards applicable to the project.
- 10. ANSI/SMACNA 006-2006 HVAC Duct Construction Standards Metal and Flexible
- 11. National Electrical Manufacturers' Association (NEMA).
- 12. Occupational Safety and Health Act (OSHA)
- 13. Underwriters' Laboratories, Inc., Standards for Safety (UL)

#### **HVAC Basic Criteria**

Outdoor Design Conditions: Outdoor summer and winter conditions shall be in accordance with 0.1% design conditions for summer and 0.2% design condition for winter for the City of Downey from Climatic Data for Zone 8 as published by Golden Gate and Southern California Chapters of ASHRAE, 5th Edition, 1982 as outlined below:

## **Space Design Temperatures**

	Summer		Winter		
	Criteria	Dry Bulb	Wet Buld Mean	Criteria	Dry Bulb
			Coincident		
City of Downey	0.1%	98°F	73°F	0.1%	37°F

Application	Dry Bulb Temperature		Control Range	Relative Humidity
	Sum. (F)	Win. (F)		(%)
General Areas	72	74	2	30%-60%
Commercial Kitchen	75	70	2	30%-60%
Mechanical Rooms	73	-	2	30%-60%
Elevator Machine	90	50	0	30%-60%
Rooms				
Electrical Rooms	85	-	10	30%-60%
IT/MPOE Rooms	75	-	2	30%-60%
UPS Rooms	75	-	2	30%-60%

Cooling shall be provided to all areas except where noted below:

- 1. Service Corridors, Stairs, and Emergency Exit Ways
- 2. Mechanical Rooms with air handling units
- 3. Toilet Rooms
- 4. Janitor/EVS closets
- 5. For garage mechanical and electrical rooms, cooling can be provided by means of fans rather than airconditioning.
- 6. Warehouse spaces (ventilation and radiant panel heating only).

## **Ventilation Criteria**

- 1. Air from contaminated areas or areas with odors present shall be exhausted directly to the outside, and shall maintain a negative pressure compared with surrounding areas.
- 2. Outside air shall be provided for all spaces per Title-24 Building Energy Efficiency Standards, LAMC, and LABC. The most stringent shall govern.

- 3. The Basis of Design: 15 CFM/person for occupied spaces.
- 4. Toilets: Minimum of 10 air changes per hour or 75 CFM/fixture, whichever is larger.
- 5. Fitness Center: Provide a minimum of 8 air changes per hour.
- 6. Pantries: Provide a minimum of 6 air changes per hour
- 7. Hydraulic elevator machine rooms shall be provided with exhaust.
- 8. If the parking structure is to be mechanically ventilated, the exhaust rate shall be a minimum of 0.75 cfm/sq. ft. in accordance with the CMC. Exhaust air shall be made up by an equal amount of outside air provided by an outside air system.
- 9. Commercial kitchens: Exhaust airflow rate will be based on hoods' air flow requirements as obtained from design builder's kitchen consultant.

# **Design Considerations**

#### **Heat Load Calculations**

Heat load calculations shall be performed using load calculation procedures from ASHRAE and shall be based on the actual proposed occupancy. Lighting loads and equipment loads will be based on the lighting & equipment proposed for each space rather than a W/SF basis.

## **Ductwork Sizing**

Supply, return, exhaust and transfer duct sizing shall be sized in accordance with the requirements defined by the design-build team's mechanical consultant to minimize energy consumption and meet acoustical requirements.

## **Pipe Sizing**

Pipework sizing shall be sized in accordance with the requirements defined by the design-build team's mechanical consultant to minimize energy consumption and meet acoustical requirements.

## **Airside Equipment Component Sizing**

The maximum allowable face velocity in feet per minute (FPM) for various components shall be as follows:

1. Chilled water/ DX Coils: 500 FPM

2. Hot Water Heating Coils: 600 FPM

3. Filters: 500 FPM

4. Outside Air Intakes: 500 FPM

5. Exhaust Air Outlets: 800 FPM

Note: The maximum allowable face velocity as indicated above shall include the 10% extra capacity for aging and additional capacity to compensate for duct leakage as stated in the "Equipment Sizing & Redundancy Section" later in the document.

## **Equipment Sizing + Redundancy**

- 1. All equipment shall be provided with 10% extra capacity due to both aging effects of the system and for future flexibility.
- 2. Air handling units and fans, in addition to the 10% extra capacity, shall have the additional capacity to compensate for duct leakage. Duct leakage rate will be based on SMACNA criteria.
- 3. Air handling units shall have fan-array configuration, minimum of four fans per fan array section. In the event that one fan is out of service; the remaining fans shall be sped up to provide the full required airflow. Each fan-array section shall be controlled by one variable speed drive (VSD) plus one back-up VSD.
- 4. Each chilled water and heating hot water pumping system shall have a minimum of two pumps per system, and shall be sized for minimum 50% of their system total capacity, and plus one extra stand-by pump (N+1).
- 5. The supply, return, and exhaust air duct main loops shall be sized for 10% extra capacity. This requirement does not apply to branch ducts.
- 6. The supply and return pipe main loops shall be sized for 10% extra capacity. This requirement does not apply to branch pipes.
- 7. BAS control panels shall have 20% extra terminal connections/capacity for future expansion.
- 8. Equipment will be provided with a minimum 5-year warranty (extended to 20 years for pressure vessels).

# Sustainability + LEED

The design build team shall incorporate sustainable design features into the systems as feasible. The buildings are proposed to meet LEED Gold certification, and the selection of systems shall be appropriate to meet this.

# **Specific Design Considerations**

The following issues shall be addressed during the design phase by the Design-Build team:

- 1. Building shall be zoned appropriately. Spaces with different exposures shall be provided with separate terminal units. No more than 3 perimeter offices with the same exposures, function, and comparable size shall be zoned together. No more than 3 internal rooms with the same function and comparable size shall be zoned together.
- 2. Shafts shall be coordinated and located in the building interior to minimize duct & pipe sizes as well as the impact on programmed spaces.
- 3. Location of louvers, exhaust caps or other mechanical inlets/outlets on the exterior of the building shall be coordinated with the design-builder's architect.
- 4. Mechanical equipment and ducts located outdoors and on the roof, shall not be visible from the ground.

- 5. All mechanical equipment shall be provided with appropriate & safe service access. Access shall be carefully considered to avoid maintenance occurring in critical spaces or areas with 24/7 operation.
- 6. Equipment shall have appropriate acoustical and vibration control to meet NC levels specified by the design-build team's acoustical consultant.
- 7. Building Automation System (BAS) shall be designed per building and should be the same make/manufacturer throughout Parcel B. During the design phase, the design build team is to review proposed system, manufacturer, and integration with other building control systems including lighting control and security.
- 8. Exhaust terminations shall be appropriately designed to mitigate the impact of odors.
- 9. If the design builder's LEED Strategy includes seeking credit under Indoor Environmental Quality 1: Enhanced Indoor Air Quality Strategies, interior cross contamination prevention shall be designed for, including separately exhausting all areas where chemicals of concern may occur. Return air grills shall be equipped with MERV 13 filtration.
- 10. Locate all floor mounted major mechanical equipment components on 6" high housekeeping pads.

# **Mechanical System Description**

The mechanical system for the ISD and Probation Headquarters shall be designed & constructed based on the following assumptions:

- 1. The design of the HVAC system will be on a per-building basis; it is not proposed to use a central utility plant for the south campus.
- 2. Cooling for the ISD and Probation Headquarters shall be through an air-cooled or water-cooled chiller system with primary / secondary pumps. (Heating shall be provided by modular condensing gas boilers with a maximum size of 2MMBTU per boiler. Water-cooled towers shall be closed-circuit.)
- 3. All distribution pumps shall be provided with variable frequency drives and designed to operate as a variable-speed system.
- 4. Air distribution systems shall be variable volume systems with appropriate zoning.
- 5. It is encouraged that individual occupancy controls be provided to all workstations, offices and conference rooms.
- 6. Split system air conditioners or heat pumps shall not be used as the main cooling system, although they may be used for room-by-room applications such as conditioning IT/MPOE, electrical or mechanical rooms.
- 7. Specific Materials:
  - a. Chilled water & heating water pipework:
    - i. Below 2": Type L copper, brazed fittings
    - ii. 2" & above: Schedule 40 steel, long radius butt welded fittings or mechanical joint.
  - b. Condensate Drainage shall by Type L copper with insulation.
  - c. Dish washing exhaust systems shall be stainless steel.

- d. Chilled water & heating water equipment shall be installed with insulation to meet California Title-24 Building Energy Efficiency Standards. Outdoor pipework shall be installed with aluminum jacketing. Indoor pipework shall be installed with FSK/ASJ jacketing.
- 8. Building Automation System: Refer to next section for description of controls.
- 9. HVAC system shall receive inputs from fire alarm system and should automatically shut off in an alarm condition. If smoke exhaust systems are required for atrium exhaust or other specific applications, they shall be coordinated with the fire alarm designer and design builder's architect.
- 10. All systems shall be tested and commissioned by independent AABC or NEBB certified company, including pressure testing of ductwork and piping, flushing & cleaning of pipework systems and equipment startup.
- 11. If the parking structure is located above ground, the garage ventilation shall be via natural ventilation as defined in the CMC (perimeter walls to be at least 40% open on all sides).
- 12. If the parking structure is located underground, the garage exhaust air shall be via floor-mounted centrifugal blower units located in mechanical rooms on each floor. Propeller fans shall be an acceptable alternative, provided sound attenuation is not required. Outside air shall be provided by similar fans located in separate mechanical rooms. Inlet and outlet locations shall be determined based on the principles of engineering and mechanics; a CFD model shall be produced if required to demonstrate effective air distribution to the County.
- 13. Mechanical garage exhaust ventilation systems shall utilize carbon monoxide sensing to control supply and exhaust fans.
- 14. Exhaust ductwork shall be provided for Type 1 & Type 2 hoods installed in servery and kitchen areas. Exhaust ducts for Type 1 hoods shall run up to the roof either in dedicated rated shafts, or utilizing listed fire wrapping insulation. Exhaust systems will be located on the roof and located to avoid odors. Kitchen hoods shall be provided with temperature and optical sensors for demand control kitchen ventilation. Exhaust fans will be equipped with variable speed drives to vary exhaust in response to the DCKV controller. Neutral or conditioned make up air shall be provided to the kitchen, and the kitchen will maintain a negative pressure from other areas. Where practical, transfer air will be used to provide makeup for hoods. Make-up airflow will be controlled in response to the exhaust airflow to maintain proper pressure differential in the exhausted area. Make-up air fans will be equipped with variable speed drives.

# **Controls Description**

- 1. Provide a new DDC BAS (Building Automation System), including all field level network controllers, automation level network controllers, head-end workstation, programming & graphics, wiring, conduit, and appropriate testing & commissioning.
- 2. Prior to design of the control system, the design build team will coordinate with the facilities team to verify whether there is a preference for a control system manufacturer to be used.
- 3. Each building shall have a single, concise integrated BAS system incorporating controls and monitoring input from all MEP equipment. BAS shall be a complete system designed for use with the IT systems. Highlevel devices residing on the automation-level network shall be fully IP compatible devices that mount and communicate directly on the IT infrastructure in the facility. The design build team shall provide their own IT server for this BAS and connect to the County's IT network. Connection to the County's IT Network may take place after the completion of this project, therefore, the design build team shall coordinate with County's Representative on the connection timing.

- 4. All points of user interface shall be on standard PCs that do not require the purchase of any special software from the BAS manufacturer for use as a building operations terminal. The primary point of interface on these PCs shall be a standard web browser.
- 5. Mechanical equipment controls including air handling units, fans, chiller & boiler systems, pumps, air terminals, valves & dampers and all other heating and cooling equipment shall be DDC with electric actuators, monitored by the BAS.
- 6. New controls shall be ASHRAE BACnet open protocol compatible.
- 7. The BAS contractor shall have a facility within a 30-mile radius of the job site, supplying complete maintenance and support services on a 24 hour, 7 day-a-week basis.
- 8. As evidence and assurance of the contractor's ability to support the County's system with service and parts, the contractor must have been in the BAS business for at least 10 years and have successfully completed total projects of the similar value of this contract in each of the preceding 5 years.
- 9. The BAS architecture shall consist of the products of a manufacturer regularly engaged in the production of Building Automation Systems, and shall be the manufacturer's latest standard of design.
- 10. The BAS system shall have the ability to deliver advanced analytics, fault detection, and system optimization. An energy dashboard option shall be provided for the buildings.
- 11. Provide metering and integrate the following systems into the BAS:
  - a. Lighting control systems.
  - b. Security and access control systems.
  - c. Life safety systems.
  - d. Domestic water & gas metering.
  - e. Sump pumps, sewer ejectors & circulator pumps (including flow / temperature / pressure, start/stop/ status, alarm points and VFDs).
  - f. Fire pump control panel.
  - g. Generator control panel.
  - h. UPS/Battery monitoring.
  - i. Fuel Management System(s)
  - j. Leak Detection System(s)
  - k. Any other MEP/FP equipment or system requested by the County.
  - I. Kitchen exhaust & makeup air systems
- 12. Software program flow charts for each system shall be submitted by the Controls Contractor and reviewed by Facility personnel prior to the actual programming effort.

## H. ELECTRICAL

This narrative describes the proposed scoping documents for electrical lighting, normal and emergency power, photo voltaic, and fire alarm systems. The Design Builder is responsible, without limitation, to check the other sections of this document for information and requirements related to electrical work, in addition to all codes applying to the project. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

## **Codes and Standards**

Design, manufacturer, testing and method of installation of all apparatus and material furnished shall conform to the latest publications or standard rules of the following:

- 1. Institute of Electrical and Electronic Engineers IEEE
- 2. National Electrical Manufacturer's Associations NEMA
- 3. California Fire Code CFC
- 4. California Building Code CBC
- 5. Underwriters Laboratories Inc. UL
- 6. National Fire Protection Association NFPA (All Related Sections)
- 7. American Society for Testing and Materials ASTM
- 8. American National Standards Institute ANSI
- 9. California Electrical Code CEC
- 10. National Electrical Code NEC
- 11. National Electrical Safety Code NESC
- 12. Insulated Power Cable Engineers Association IPCEA
- 13. Public Utilities Commission PUC
- 14. California Title-24 Building Energy Efficiency Standard
- 15. Occupational Safety and Health Administration OSHA
- 16. Los Angeles County Building Code LACBC
- 17. Illumination engineering Society of North America IESNA
- 18. National Fire Alarm Code and Life Safety NFPA
- 19. American with Disabilities Act ADA
- 20. Uniform Building Code with Amendments UBC
- 21. Occupational Safety and Health Administration OSHA

- 22. California Energy Commission
- 23. California State Fire Marshall

## **Site Electrical**

#### Introduction

The design build contrator shall contact Southern California Edison (SCE) and request a new 12kV service for the site. Service shall be provided from the 12kV switchgear with utility metering, which will provide the necessary power for three (3) RLASC programs (ISD, Probation, and the Parking Structure). Each program shall receive a separate dedicated sub-metered feed from the campus main switchgear; the corresponding sub-meter for each program shall be located within the associated building integral to each building service switchboard(s).

The design build contractor shall coordinate with SCE for the point of connection, site routing, and main electrical utility yard equipment layouts prior to proceeding with the program's electrical service installation. The design-builder shall extend the 12KV ductbanks with 12kV, MV105 cables underground to 12KV-480/277V, 3Phase, 4Wire transformer(s), provided and installed by the program design build contractor.

The design builder shall generate the necessary legal documents required to establish the alignment of all utility easements and process all utility easements as required for the proposed development.

The design-builder shall install 480/277V-3Phase-4Wire feeder from each transformer to the main service switchboard(s). Quantities and sizes of services shall be determined by the design-build contractor. The design-builder shall extend the 12kV ductbanks to the existing Sheriff / Public Safety building.

# **Building Electrical**

#### **Basic Criteria**

- 1. Electrical service to the building will be 480/277V, 3 Phase, 4 Wire system. The design build contractor shall provide a comprehensive load calculation and size of the service based on the actual design loads.
- 2. The electrical work shall accommodate all electrical requirements noted in other sections of these scoping documents.
- 3. Materials, equipment, and installation will comply with applicable codes, Standards and Agencies.
- 4. The main service switchboard shall be in a dedicated main electrical room. The service switchboard and transformer shall be sized according to the design load for the building and shall include a main switch with ground fault protection, sub-metering with remote access capability, and electronic adjustability over current protection in conformance with UL 891 or UL1558 as applicable.
- 5. Short circuit, coordination, and arc flash study shall be performed for the entire distribution system. The interrupting current of the distribution equipment shall meet or exceed calculated values.
- 6. A Mechanical Distribution Board shall be provided with distribution breakers feeding mechanical and plumbing equipment.

- 7. Food service distribution board should be provided with distribution breakers feeding food service equipment.
- 8. Lighting and Power Distribution Boards shall be provided with distribution breakers feeding electrical lighting panels at 480/277V and step-down transformers 480V to120/208V, 3Phase, 4Wire. Step-down transformers will feed 120/208V panels located throughout the building for 120/208 loads.
- 9. Locate all floor mounted major electrical equipment components on 6" high housekeeping pads.

#### 10. Energy Efficiency

- a. Motors 1/2 HP and above will be premium efficiency type.
- b. Efficient, long-life sources such as LED shall be used as applicable.
- c. Two-level lighting switches will be used for areas larger than 80 square feet as applicable.
- d. Opportunities for natural day lighting shall be explored fully. Automatic dimming and control will provide for artificial lighting to reduce electric consumption when day lighting is effective.
- e. The project shall be designed to achieve LEED Gold or higher level.

## **Lighting Controls**

- 1. Occupancy sensors (manual on, automatic off) shall be provided in offices, conference rooms, single occupant restrooms, and similar locations.
- 2. Central lighting controls shall be utilized to control the lights on normal power in corridors and public circulation areas, as applicable.
- 3. Emergency lighting shall be on emergency power and will activate upon power failure.
- 4. Dimming system shall be provided for conference and meeting rooms.

### **System Flexibility**

- 1. The Normal Electrical Service and Emergency Electrical system capacities and their distribution systems shall be designed based on calculated loads for each program and shall not be less than minimum code requirements, plus 25% spare capacity.
- 2. The essential system shall be designed for life safety and equipment loads.
- 3. Spare breakers and equipped spaces shall be provided in all gear.
- 4. Neutral Conductors: Full size shall be used in all 4 wire feeders.

### Grounding

1. The incoming service shall be solidly grounded to a wall mounted ground bus assembly in the main Switchgear electric room. Additional ground bus assemblies shall be provided in each floor electrical rooms and MDF / IDF rooms.

### **Electric Vehicle Charging Station (EVCS)**

- 1. Parking Structure will have the infrastructure for installation of EVCS system (per California Green Building Code). Refer to Parking Structure narrative for quantities. Appropriate branch circuits shall be provided to all floors to support charging station system equipment per floor. The branch circuits must home-run from their respective parking stall to the parking structure electrical room.
- 2. Provide fast charging power source for electric/hybrid vehicles in the parking structure and surface parking in conformance with California Green Building Code. Provide wiring for both AC and DC EV charging stations with push-button disconnect for each. Provide 240-Volt AC Level 2 charging for and 500-Volt DC Fast Charge high-current charging for the respective quantity of charging stations indicated in the Section 4E, Parking Structure.

### **Standby/Emergency Power**

- 1. Provide 480/277V, 3Phase, 4Wire generator service for each program (ISD, Probation & Parking). The generator(s) shall be located at a minimum of 8' away from any windows and entrances. The generator(s) should be NEMA-rated with sound attenuation enclosure of 55db sound rating and in compliance with the County noise ordinance. Provide diesel particulate filter for installation within 150'-0" of sensitive receptors. The generator shall be considered to have 72 hours of fuel capacity, which may be contained within either sub-base fuel tank(s) or aboveground fuel storage. The generator shall be considered to be capable of supporting the building loads, such as egress lighting, UPS, critical loads, critical HVAC loads, elevators, security systems, IT loads, noted program spaces, card readers, parking gates, BMS systems, fire alarm systems, smoke evacuation systems (for atria), and other optional systems, requiring emergency power either by code or the County.
- 2. Provide connection(s) for a roll-up generator for flexibility upon failure of or for maintenance of permanent emergency generator(s).

## Photovoltaic (PV) System

- 1. The project should consider the installation of a PV system, including modules, inverters, combine boxes, metering, and related DC & AC wiring. PV may be considered to be roof mounted on the building(s) and/ or parking structure and on top of the surface parking. PV modules efficiency shall be considered to be at minimum 19% and be of highest efficiency available and listed by the State of California. The source of power for the inverters should be considered to comply with NEC article 690.
- 2. The design configuration of the PV panels should optimize power generation while providing adequate provisions for maintenance and regular cleaning.
- 3. The project should consider the installation of a complete battery storage system to offset the peak kW demand.
- 4. System should be considered to carry a full warranty for twenty (20) years for PV modules, and for ten (10) years for the inverters and other components. Full warranty should be considered to cover the cost of replacement materials, shipping, and associated labor.

# **Electrical Systems Description**

#### **Normal Power Service**

- 1. The main service switchgear/switchboard(s) shall include 100% fully rated electronically operated circuit breaker for circuit breakers sized 400A and above, as well as utility metering, ground fault protection. Switchgear shall have capabilities for reading instantaneous kw demand, historical peak demand (kw), resetting kWh, kWh per rate period, kVA, Volts, Amps, power factor, and harmonics.
- 2. The electrical service will have adequate spare capacity to provide the required minimum 15% spare power for future expansion.

### **Emergency Power Distribution System**

- 1. Diesel engine generator will feed emergency distribution boards via number of Automatic Transfer Switches (ATS) as follows. The following loads shall be supported:
  - a. ATS dedicated to all fire life safety and egress lighting loads.
  - b. Additional ATS shall be provided for non-life safety loads such as security, BAS, UPS, telecom, elevators, critical HVAC equipment, and noted program spaces.
  - c. All ATS will be equipped with bypass/isolation in normal and emergency positions.

## **Distribution Equipment**

- 1. Bus bars in all switchboards, distribution panel boards, motor control centers, lighting, and appliance panels shall be copper with silver plated joints. Transformers shall have copper windings.
- 2. Circuit breaker types and interrupting capacities shall be selected based on the results of a short circuit study. Circuit breaker, panelboard, transformer, and feeder load capacities will be selected based on completion of the design and appropriate load calculations. Circuit breakers shall be fully rated with interrupting rating no less than 110% of the available fault current. A short circuit and coordination study shall be provided by the design builder to finalize the proper circuit breaker settings to maintain an acceptable level of protection and selectivity. The circuit breakers in the emergency distribution must be selectively coordinated.
- 3. An Arc flash study shall be prepared based on the short circuit study and the time needed for line side circuit breakers to open. Based on the result of the Arc flash study, appropriate labels shall be provided on the distribution equipment, recommending the protective gear to be worn by the Electricians working on the equipment line.
- 4. Switchboards and distribution panel boards shall include spare circuit breakers of numerous sizes and a minimum of 25% space for future additional circuit breakers. All lighting and appliance panelboards shall be a minimum 42 circuits with a circuit breaker for each pole. All switchboards, distribution panelboards, lighting, and appliance panelboards shall have 25% spare load capacity.
- 5. Equipment shall be painted with the factory standard color.

- 6. All circuit breakers shall be the bolt-on type.
- 7. All equipment shall be provided with screw-on engraved nameplates.
- 8. Switchboards and panel boards shall be circuit breaker type. Switch and fuse equipment is not anticipated unless specifically described.
- 9. Dry type 480 V-120/208 V, 3-Phase, 4-Wire Transformers (K-13) shall be provided for all 120 and 208 Volt loads.
- 10. Uninterruptable Power System (UPS): Dual input Central UPS shall supply power to IT loads, including rack mounted servers, IDF, MDF, critical receptacles, and critical equipment, security, telecom, and other critical loads. Refer to room data sheet matrix for any additional critical load requiring UPS Power. The UPS shall be 480V-120/208V, 3 Phase, 4 Wire dual input with static by-pass and a 60-minute battery back-up at full load with internal step-down transformer, and shall be supported by emergency generator for longer sustained operation during a power outage. UPS shall feed security systems IDF, MDF, IT equipment, parking structure gates, BMS, and any other load critical to the operation.

#### **Power Utilization Normal**

- 1. 480 Volt power will be utilized for HVAC, select food service/kitchen equipment (refer to Food Service Program narrative), and Plumbing equipment. 277 Volt circuits for LED lighting. 208 Volt and 120 Volt circuits for select food service/kitchen equipment (refer to Food Service Program narrative), miscellaneous power and general convenience outlets.
- 2. No more than 6 duplex receptacles on a 20-A-1P circuit.
- 3. Convenience general duty receptacles in corridors not to exceed 40 feet on center.
- 4. In addition to what is noted in the room data sheets, provide minimum of one quad receptacle for each work station and TV monitor, and minimum of (2) flush mounted receptacle/data outlets with removable covers under each conference room table.
- 5. In addition to what is noted in the room data sheets, provide GFCI receptacles 36" on center above the counter in each of the work areas to be controlled via On/Off switch.

#### Raceways

- 1. In general, use of various raceways shall be coordinated with the County, and shall be sized based on CEC and installed according to CEC.
- 2. Conduit shall be rigid, electrical metallic tubing as permitted by CEC. Flexible steel conduit shall be no more than 6 feet long, shall not be used for the emergency system, and shall only be used for normal system lighting whips, connections to vibrating equipment and seismic connections.
- 3. No aluminum conduit (rigid or flexible) is permitted.
- 4. Electrical Metallic Tubing (EMT) is permitted.
- 5. Fittings for conduit shall be threaded steel type. Connectors shall be insulated throat type.

6. Minimum size conduit per NEC.

#### Wire and Cables

- 1. All conductors to be copper, solid for #10 AWG and smaller, and stranded for #8 AWG and larger.
- 2. Minimum conductor size shall be No. 12 AWG.
- 3. All conductors larger than #4 to have Type XHHW insulation.
- 4. All other conductor insulation shall be Type THHN/THWN-2.
- 5. Factory color coding to be utilized for appropriate system voltages and phase identification.
- 6. All conductors shall be new and manufactured within 12 months of installation.
- 7. All wiring for occupancy sensor power packs (high and low voltage) to the makeup junction box shall be in conduit.
- 8. Medium voltage cables shall be 12kV, MV105 rated.

#### **Outlet Boxes**

- 1. Four-inch square or octagonal, zinc coated sheet steel boxes.
- 2. Provide 3/8 inch no-bolt fixture studs for fixture outlets.
- 3. Provide covers set to come flush with finished walls.
- 4. Utility or sectional switch boxes shall not be used.
- 5. All outlet boxes in the food service/kitchen shall have stainless steel covered plate.

### **Wiring Devices**

- 1. In addition to what is noted in the room data sheets, provide a minimum of one quad receptacle for each work station, TV monitors and all telecom equipment. Provide a minimum of (2) flush mounted combination data/ receptacles under each conference room table and GFCI receptacles above the counter. In all laboratories, provide above counter GFCI receptacles at a minimum 36" on center controlled via On/Off switch(es).
- 2. A.C. quiet operating type switches 20 amp.
- 3. Cover plates shall be factory painted stainless steel. Cover plates shall be engraved with the panel board designation and circuit number throughout the project.
- 4. All wiring will be installed in conduit.
- 5. Connections for #8 wire and smaller to be made with UL approved pressure connectors. Connections for #6 wire and larger to be made with approved lugs and/or connectors. No splices are to be made within the conduit

- 6. The color of wiring devices on normal power and emergency power shall be per industry standard.
- 7. Provide dedicated GFCI type receptacles on dedicated 120/208 V circuits for plug-in as well as hard wired food service/kitchen appliances including but not limited to refrigerators, garbage disposal, soda bars, coffee bars, Ansul System, walk in freezers, plumbing equipment, dish washing machine, etc. Refer to Food Service Program narrative for more information.

#### Switchboard and Panel boards

- 1. Switchboards shall be self-supporting structures with silver plated copper busing rated at 1000 A per square inch, 98% conductivity. Full size neutral and ground buses are required. Units shall be dead front with all terminations front accessible. Main circuit breakers shall be vertically mounted.
- 2. Panel boards shall be provided with full size neutral and ground bars, copper bus with thermal magnetic type molded case, and main/branch breakers. Main circuit breakers shall be vertically mounted. Main lugs only panel boards shall be equipped with double lugs.
- 3. Panel boards shall be provided with an isolated ground bus in addition to the Equipment ground bus.
- 4. Provide double sized neutral in panel boards if required for a specific application.
- 5. Provide a dedicated distribution system for food service/kitchen to accommodate approximate load of 300KVA. Provide panel boards with stainless steel covers with adequate number of circuit breakers for all the food service/kitchen equipment.

#### **Transformers**

- 1. Transformers shall be two winding type for each phase, with silicon steel cores and copper windings in compliance with NEMA ST-20.
- 2. Units shall have 150°C class insulation with six taps at 2-1/2 percent rated at full capacity; two above and four below normal voltage.
- 3. 30 kVA and below shall be 115°C rise. Above 30 kVA, use 150°C rise.
- 4. Provide NEMA Standard testing results specifically for each unit.
- 5. Provide K-13 rated transformers.
- 6. Provide a dedicated transformer for food service/kitchen.

## **Mechanical Equipment and Wiring Connections**

- 1. Provide all line voltage power for mechanical equipment motors and motor starters furnished under HVAC/ Plumbing scope of work.
- 2. Provide feeder circuits to mechanical equipment and motor starter, and make all connections.
- 3. Provide disconnect switches (heavy duty, HP rated, quick-make quick-break, fusible or non-fusible) and/or

thermal overload switches as required. Disconnects for equipment located on the roof, or where exposed to weather or indoor wet locations, are to be "weatherproof."

- 4. Liquid-tight flexible metallic conduit is to be used for connections to motors and other equipment where vibration is encountered, or as required, and for all flexible connections exposed to the weather.
- 5. Provide a minimum of (1) GFCI, weather proof quad receptacle within 25' of all roof mounted mechanical equipment.

### Grounding

- 1. All service equipment, conduit systems, supports, cabinets, equipment, fixtures, and the grounded circuit conductor shall be properly grounded in accordance with the latest issue of CEC and Los Angeles County electrical codes. Provide bonding jumpers, grounding bussing, clamps, etc. for complete grounding. All ground clamps or such devices shall be listed for such purposes. All welded connection shall be the exothermic weld type. Set screw lugs not acceptable.
- 2. For all 208/120 Volt branch circuits, provide equipment grounding conductor together with the phase conductors. Size the conduit accordingly.
- 3. Provide a green grounding jumper from the ground screw to a box grounding screw or clip for all grounding type devices. Use insulated wire.

## **Power for Existing-to-Remain Buildings**

The existing Home building is currently fed from a 12kV utility pole. The 12kV line to the Home building is routed underground to a 12kV/120/208V pad-mounted transformer. The Sheriff/Public Safety building is currently fed from an underground 4160V feeder to a 4160V-120/208V transformer. The existing Crime Lab, Child Care Center, and Public Health buildings located on the north of Golondrinas street are currently fed by existing 4160V-120/208V transformers.

The design-builder shall investigate and confirm the exact location of the above. The design builder shall maintain continuous operation of these buildings and is responsible for the demolition and reconstruction to the extent required to make the connection to the purveryor main.

## Power to Buildings to be Mothballed

Coordinate shut off of electrical service to existing Casa Consuelo Building and Power Building in accordance with Mothballing plan included in Appendix.

## I. PLUMBING

The design of the plumbing systems is based of the California Code of Regulations Title 24, California Plumbing Code, NFPA-101, and the design criteria established for the specific occupancy of the facility. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

# **Plumbing General**

#### **Latest Codes and Standards**

#### 1. Codes

- a. Applicable City of Downey codes including local ordinances.
- b. California Building Code (CBC)
- c. California Plumbing Code (CPC)
- d. California Mechanical Code (CMC)
- e. California Electric Code (CEC)
- f. California Fire Code (CFC)
- g. South Coast Air Quality Management District. (SCAQMD)

#### 2. Standards

a.	ADA	Americans with Disabilities Act Accessibility Guidelines
b.	ANSI	American National Standards Institute, Inc.
C.	ASTM	American Society for Testing Materials
d.	FGI Facility	Guidelines Institute (FGI) – 2010
e.	NFPA	National Fire Protection Association
f.	NFPA 101	Life Safety Code
g.	OSHA	Occupational Safety and Health Administration
h.	IPC	International Plumbing Code
i.	UBC	Uniform Building Code with Amendments
j.	UPC	Uniform Plumbing Code with Amendments
k.	UL	Underwriters' Laboratories, Inc

# **Plumbing Design Criteria**

- 1. Technical Design Criteria Assumptions
  - a. Outdoor Conditions: It is assumed that there will be no prolonged (more than 4 hours) freezing conditions at this site. Freeze protection will not be required for any of the piping systems.
  - b. Water Quality: Cold and hot water will be softened, including water for the cooling tower (as required), and makeup water.
  - c. Water Pressure:
    - i. Pressure available at the building: To be determined, water flow test report to be provided by design-builder after award, however a water pressure booster pump is required.
    - ii. Pressure required at the most remote flush valve fixture: 35 psi residuals.
    - iii. Calculated Pipe Sizing: 3psi/100ft.
  - d. Water Velocities:
    - i. Cold Water: 6ft/second
    - ii. Hot Water: 5ft/second
  - e. Domestic Hot water Temperatures:
    - i. Hot Water supply Loops: 120°F
    - ii. Hot Water Return Piping: 114 to 116°F
  - f. Rainfall per Hour: 2"
  - g. Slopes for Plumbing Piping per Foot:
    - i. Sanitary Sewer: 1/4" or 2%
    - ii. Storm Drainage: 1/8" or 1%
    - iii. Vent Piping Above Grade: No sloping required.
    - iv. Vent Piping Below Grade: 1/4" or 2%
  - h. Natural Gas:
    - i. Upstream of gas regulators: 10 psi
    - ii. Downstream of gas regulators: 5 psi

# **Description of Systems and Equipment**

### **Domestic Water System**

- 1. The new building shall be connected to the site water system to serve all plumbing fixtures and other equipment requiring water via City available water pressure. Through preliminary testing, it is anticipated that the water pressure is not adequate for plumbing fixtures that are located at higher building elevation and a water pressure booster pump is required. A flow test shall be performed by the design builder prior to construction to determine water supply and pressure.
- 2. Each floor shall have its own valve pipe distribution system and individual groups of fixture branches shall be isolated with shut-off valves.
- 3. A water softener shall be provided as follows:
  - a. Soft cold water for domestic hot water.
  - b. Soft cold water for cooling tower make-up (as required).
  - c. Soft cold water for space heating hot water make-up.
- 4. Dual plumbing shall be provided for reclaimed water to water closets, and urinal fixtures.

## **Domestic Hot Water System**

- 1. Hot water shall be heated to 140°F by redundant, natural gas fired, condensing storage type water heaters, and heat exchangers connected to a central mixing valve system that will supply 120°F hot water to all plumbing fixtures and equipment requiring hot water.
- 2. The hot water return system shall be provided with a circulating loop and pumps with balancing valves in each major branch.
- 3. Domestic hot water shall be distributed throughout the space at 120°F. Hot water circulation systems with in-line circulating pumps to maintain 120°F hot water to all fixtures requiring hot water.
- 4. The domestic hot water supply shall be designed with a maximum velocity of 4 fps.
- 5. Domestic Hot Water piping system not to exceed 3 psi/100 feet.
- 6. Kitchen will be provided with 140 degree hot water by redundant direct fired storage type condensing water heaters. Dish washing equipment will be provided with booster heater by kitchen equipment contractor.
- 7. Hand sinks located in kitchen will be provided with point of use mixing valves to prevent scalding.

## **Sanitary Waste and Vent System**

1. All waste from plumbing fixtures shall be drained by gravity where possible, and connected to the site sanitary system.

- 2. Sanitary vent termination on building roofs will be unobtrusively located where possible. Vent terminations shall be coordinated with outside air intakes per code.
- 3. Kitchen will be provided with floor sinks, trench drains and floor drains as required. Kitchen equipment such as 3- compartment sinks, soda dispensers, etc will be drained indirectly to floor sinks. Floor drains and wash sinks will be directly connected to grease waste system and individually vented.

### **Grease Waste and Vent System**

- 1. All waste from floor sinks and kitchen equipment will be drained by gravity to a grease interceptor located underground exterior to the building. Drainage system will be vented the same as building sanitary system and vents will be collected with building sanitary venting system.
- 2. All piping conveying waste from kitchen equipment will be sloped to provide 4 ft per second velocity to provide adequate scouring action of fats, oils and grease suspension.
- 3. Piping downstream of the grease interceptor will be connected to the site sanitary system.
- 4. Grease Interceptor will be fiberglass, with two man ways, high level alarm system and located for accessibility of periodic pumping.
- 5. Grease interceptor capacity will be sized as required per local code enforcement regulations.
- 6. Underground grease waste piping and fittings will be service weight cast iron hub and spigot with rubber gaskets. Above ground grease waste and vent piping and fittings will be no-hub cast iron with standard weight rigid stainless steel couplings and neoprene gaskets.

#### **Storm Drainage System**

- 1. Primary and overflow roof drain system shall be sized based on a rainfall of 2" per hour per California Plumbing Code.
- 2. Primary and Secondary roof drains shall be connected to a piping system which will drain by gravity. Primary roof drain system shall be connected to the underground site storm drain system. Secondary roof drain system shall discharge to the building exterior at minimum 6" above finished grade level. Secondary drain terminations shall be provided with architectural downspout nozzles.
- 3. Primary roof leaders and overflow roof leaders located inside the building shall be concealed above ceiling, within interior partitions, exterior walls and in building column wraps.
- 4. Architectural scuppers may be provided in lieu of Secondary drain and piping system per CA Plumbing Code. Scupper openings shall be no less than 4-inches high and have a width equal to the circumference of the roof drain required for the area served, sized in accordance with CA Plumbing Code.

### **Plumbing Fixtures**

1. Water closets, lavatories, and clinic sinks to be vitreous china, white color.

- 2. All counter mounted sinks, etc. to be of stainless steel Type 304. Faucets to be battery operated, electronic sensor type. Separate under sink exposed mounted thermostatic mixing valve adjusted to 105°F is required. Faucet water flow: 0.5 gpm. All service sinks shall be floor mounted. All drinking fountains shall be ADA compliant.
- 3. Kitchen/Food service floor sinks will be cast iron body with enameled interior and either 1/2 or 3/4 grate as required. Floor sinks will have bottom drain outlet and will be a minimum of 3-inch nominal diameter..
- 4. Kitchen/Food service trench drains will be stainless steel, with heel proof grate and length as required. Trench drain will have bottom outlet and the outlet will be a minimum of 3-inches nominal diameter.
- 5. Toilet Room Plumbing Fixtures:
  - a. Water closets to be wall mounted, hard-wired, sensor operated flush valve ADA, and non-ADA type.
  - b. Lavatories to be wall hung or counter mounted, hard-wired, sensor operated faucet with mixing valve. Faucet Water flow: 1.5 gpm.
  - c. Shower drains to be 5" round with nickel bronze finish. Pressure balancing mixing valve with built-in integral stops, fixed swivel shower heads. For ADA shower heads, fixed head shall be replaced with a hand-held handle, flexible hose with vacuum breaker and 24" sliding bar. Shower head water flow: 1.5 gpm.

#### 4. Hose Bibs

- a. With integral vacuum breakers provided for maintenance and wash down purposes at roof air handlers, equipment rooms and garage.
- 5. Garage drains shall be cast iron body, vandal proof, and promenade type with heel-proof grate.
- 6. Primary drains for building roofs will be cast iron body, vandal proof, promenade type with heel-proof grate, and 2-inch high integral dam. It shall connect to piping that conveys storm water through the building and it shall connect to the underground site utility system.
- 7. Emergency drains for building roofs shall be cast iron body, vandal proof, promenade type with heel-proof grate, and 2-inch high integral dam connect to piping that conveys storm water through the building and shall discharge above grade in a location observable by building occupants or maintenance personnel.
- 8. Seismic Support
  - a. All plumbing equipment and pipes shall be supported and anchored by details to be provided by the structural engineer.

### **Natural Gas - Site**

- 1. All new natural gas supplies to be in accordance with the local supply authority requirements.
- 2. The design-builder shall generate the necessary legal documents required to establish the alignment of all utility easements, and process all utility easements required for the proposed development.
- 3. All underground natural gas piping shall be provided with detectable type warning tape in accordance with

the APWA Recommended Marking Guidelines for Underground Utilities and the local supply authority requirements.

- 4. Gas pressure (5 psi to 9 psi) will be provided to each building.
- 5. The natural gas pipe material shall be PE Pipe: ASTM D 2513, SDR 11 or approved equal.
  - a. PE Fittings: ASTM D 2683, socket-fusion type or ASTM D 3261, butt-fusion type with dimensions matching PE pipe.
- 5. PE Transition Fittings: Factory-fabricated fittings with PE pipe complying with ASTM D 2513, SDR 11; and steel pipe complying with ASTM A 53/A 53M, black steel, Schedule 40, Type E or S, Grade B.
- 6. Anodeless Service-Line Risers: Factory fabricated and leak tested.
  - a. Underground Portion: PE pipe complying with ASTM D 2513, SDR 11 inlet.
  - b. Casing: Steel pipe complying with ASTM A 53/A 53M, Schedule 40, black steel, Type E or S, Grade B, with corrosion-protective coating covering.
  - c. Aboveground Portion: PE transition fitting.
  - d. Outlet shall be threaded or flanged or suitable for welded connection.
  - e. Tracer wire connection.
  - f. Ultraviolet shield.
  - g. Stake supports with factory finish to match steel pipe casing or carrier pipe.
- 7. Coordinate shut-off of gas service to existing Casa Consuelo and Power building in accordance with Mothballing Plans included in Appendix.

# **Natural Gas - Building**

- 1. The natural gas system shall be provided for water heaters, food service program and HVAC equipment.
- 2. The main gas meter (supplied by gas company) with earthquake valve shall be provided for each gas service.
- 3. Gas pressure shall be regulated downstream of the utility provided gas meter to 5 psi.
- 4. Natural gas piping shall penetrate the exterior wall above grade to enter the building where it will be routed to the applicable equipment.
- 5. Gas pressure shall be reduced to 7-14 inches water column via gas pressure regulators located as close to the equipment connect as possible.
- 6. Gas piping located inside the building shall be ASTM A53 Schedule 40 black steel. Fittings for gas piping systems 2-inch and smaller will be 150 psi NPT threaded malleable iron fittings.
- 7. Fittings for gas piping larger than 2-inches shall be schedule 40 carbon steel welding fittings.

[Intentionally Left Blank]

# I. LIGHTING

# **General Lighting**

The lighting system design shall be based on an overall level of quality and maintainability required by Los Angeles County. The design shall incorporate proven technology and equipment. Illumination levels shall be provided as recommended by the Illumination Engineering Society Handbook, 9th Edition, Title 24 California Energy Standard. The lighting power density shall be lower than the State of California T-24 allotments by 10% while providing appropriate illumination levels.

Products and Components - Performance:

- 1. Lamps shall be LED with pleasant and consistence appearance. Utilize lamps with Color Rendering Index (CRI) of 80 and temperature of 3500k.
- 2. LED luminaires and components shall be UL listed or UL classified.
- 3. All LED luminaires shall be subjected to the Reliability Tests for Lead-free Semiconductors.
- 4. To ensure luminaire quality, luminaire shall have been tested under accelerated life test conditions, including an operating temperature span of 360 degrees F and cyclic loading up to 60G.
- 5. All LED components shall be mercury and lead-free.
- 6. All manufacturing processes and materials shall conform to the requirements of the European Union's Restriction on the Use of Hazardous Substances in Electrical and Electronics Equipment (RoHS) Directive, 2002/95/EC.
- 7. LEDs shall comply with ANSI/NEMA/ANSLG C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products. Color shall remain stable throughout the life of the lamp. Color shall match approved sample.
- 8. LEDs shall comply with IESNA LM-80 Standards for Lumen Maintenance of LED Lighting Products.
- 9. White LEDs shall have a rated source life of 50,000 hours under normal operating conditions. RGB LEDs shall have a rated source life of 100,000 hours. LED "rated source life" is defined as the time when a minimum of 70% of initial lumen output remains.

# **Interior Lighting**

The overall goal of establishing interior lighting guidelines for the Rancho Los Amigos South Camps (RLASC) Project is to create a unifying experience with consistent/similar lighting fixtures throughout the Parcel's building. This section covers the interior lighting for the entire Parcel. All Parcel interior lighting fixtures shall aesthetically match all other Parcel interior lighting fixtures. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility. Interior emergency lighting shall be provided via emergency source "generator". In general, emergency lighting shall provide a minimum of 1 fc or as required by Title 24.

This document specifies illuminance levels and uniformity criteria, and provides guidance on acceptable luminaire

and lamp selections. Also included are general guidelines for creating a cohesive interior lighting design.

## **Interior Lighting Goals and Guidelines**

Implementing a cohesive interior lighting approach will support the vision of unifying the Parcel through a consistent lighting design.

#### Illuminance Guidelines

Meet or exceed the lighting level and uniformity recommendations outlined in the following sections based on the Illuminating Engineering Society (IES) Handbook and all relevant IES Recommended Practice Guidelines.

#### Illuminance Criteria

The design builder shall provide the design, layout, furnishing, and installation of interior lighting equipment and controls for all new interior spaces. Lighting power densities shall be lower than the State of California Title 24 allotments by 10%, while providing the appropriate illumination levels in accordance with Illuminating Engineering Society of North America (IESNA) recommended standards for each area and task. General guidelines for interior uniform horizontal illumination levels measured at 30 inches above finish floor are as follows:

1. Offices	30-40fc
2. Workstations	30-40fc
3. Small Meeting Room	30-40fc
4. Medium Meeting Room	30-40fc
5. Large Meeting Room	30-40fc
6. XL Meeting Room	40-50fc
7. Open Collaboration Meeting Space	30-40fc
8. Touchdown, Interview Room	30-40fc
9. Central Reprographics	40-50fc
10. Restroom / Janitor's Closet	10-20fc
11. Communication Closet, Lan/ It / UPS Room	30-40fc
12. Copy Area / Local Print Station	30-40fc
13. Employee Badging Area + Live Scan	40-50fc
14. Cashier's Office w/Safe, Office Level Storage Room / File Room	30-40fc
15. Mail Room	40-50fc
16. Wellness Room	40-50fc

17. Pantry, Custodial Assembly Lunch Room	15-20fc
18. Reception + Waiting Area	15-20fc
19. BEAMS + EEMIS Network Operations	40-50fc
20. Computer Training Room	30-40fc
21. Lab Testing Room, IT Data Center	40-50fc
22. Department Emergency Operations Center	50-100fc
23. Fitness Center	5-10fc
24. Help Desk, Enterprise Command Center + War Room	50-100fc
25. ITS Innovation / Display Space	10-15fc
26. Library, Plan Archive, Local Plotter	30-40fc
27. Surplus Vault	20-30fc
28. Back of House Storage / Custodial Storage	10-15fc
29. Loading Dock / Receiving	20-30fc
30. Warehousing	30fc
31. Stairs	10fc
32. Mechanical Room	30fc
33. Electrical Room	30fc
34. UPS Room	30fc
35. Battery Rooms	30fc
36. MF/IDF Rooms	30fc
37. Food Preparation	50fc
38. Training Room	30fc
39. Vestibule	10fc
40. Elevator	10fc
41. Elevator Machine Room	10fc
42. Building Entry	10fc
43. Auditorium / XXL Meeting Room	30fc

#### Maintenance

- 1. Minimize luminaire and lamp types to reduce spare stock requirements for maintenance.
- 2. Reduce maintenance costs by utilizing long-life lamp sources. Minimum lamp life for most luminaires must be 30,000 hours, with 50,000-hour minimum for LED's.
- 3. Use of longer life lamps is encouraged to aid in long term maintenance.

## **Lighting Control**

- 1. A programmable lighting control panel shall be provided adjacent to the lighting panels. Each panel shall be provided with 32 relays microprocessor based with a processor in each panel suitable for standalone operation or networking. The network system shall work as one control system for each building.
- 2. Lighting for selected areas in each building shall be controlled via the lighting control system. Provide PC based software package for system programming and control. Control screens shall enable field programming.
- 3. Lighting control system shall be energy code compliant with daylight harvesting capabilities, and based on zones defined by architectural drawings and in conformance with T-24.
- 4. Lighting control system shall be integrated with dimming system and occupancy sensors, other means of controls, and an override system.
- 5. The design shall provide stand-alone wall or ceiling mounted occupancy sensors with wall mounted override switches in all restrooms, janitor closets, and storage rooms. Electrical and Mechanical rooms including elevator equipment rooms (per elevator code) will have single throw switch.
- 6. Multi-level Lighting Controls for uniform reduction of lighting with local control shall be provided for all interior spaces.
- 7. Lighting controls shall include manual on with dual technology vacancy sensing for automatic lighting shut off for the following interior spaces:
  - a. Private Offices
  - b. Shared / Open Offices
  - c. Copy/File Rooms
  - d. Break Rooms
  - e. Conference Rooms
  - f. Product Service Manuals/Print Storage
  - g. Locker Rooms
  - h. Restrooms
  - i. Circulation areas

- j. Personnel and Misc. Storage Rooms
- k. Mechanical Plenum Spaces
- I. Basements and Mezzanine spaces
- m. Food service/ Kitchen
- 8. Daylight sensors shall be provided for automatic lighting shut off for all areas containing skylights, clearstories, or exterior windows where the day lighting contributions contributes to interior space illumination. Day lighting controls shall comply with California Title 24 requirements for day light harvesting in interior spaces.
- 9. Provide adequate un-switched night lighting for security and egress path lighting. Coordinate the night lighting design with the security systems design to ensure good visibility and picture quality for CCTV monitoring.
- 10. Provide full range dimmable lighting for the following interior spaces:
  - a. Control Rooms.
  - b. Private offices.
  - c. Shared offices.
  - d. Conference rooms
- 11. Lighting in stairwells and common area corridors shall be controlled with occupant sensing controls that automatically reduce lighting power by at least 50 percent when the areas are unoccupied. The occupant sensing controls shall be capable of automatically turning the lighting fully ON only in the separately controlled space, and shall be automatically activated from all designed paths of egress.
- 12. Daylighting can provide a wide range of benefits, including enhancements to the visual environment, the potential to improve worker occupant satisfaction and productivity, possible enhancement of circadian rhythm entrainment through exposure to higher luminance, and energy saving through a reduction of the electric load.
- 13. Daylight delivery systems include all elements that collect, transmit, reflect, control, and distribute daylight to building interiors, which include the aperture, its glazing material, exterior and/or interior shading devices of all types, and any optical devices that help to direct or control daylight transmission or distribution to the interior while alleviating glare.

## **Reflective Properties of Surfaces**

- 1. Daylight systems perform best with relatively high room surface reflectance's that:
  - a. Increase the amount of daylight delivered.
  - b. Increase daylight penetration.
  - c. Provide more daylight to surfaces facing away from a daylight aperture, thus reducing shadows.

- d. Reduce the contrast between the daylight aperture and adjacent interior surfaces, making aperture viewing conditions more comfortable.
- 2. Recommended reflectance are shown below, with higher values preferred.

a. Ceilings: 90% or greater

b. Walls: 60% or greater

c. Floor: 20% or greater

d. Partition: 40% or greater

### **Product Requirements**

- 1. All lighting shall be LED type. LED fixtures will allow dimming capabilities to meet Title 24 mandatory multilevel lighting controls requirements.
- 2. LED lamps shall have color rendering index (CRI) of 80 and temperature of 3500k-4100k.
- 3. LED fixtures shall be provided with field replaceable modules to reduce costs of replacements and maintenance.
- 4. Provide a luminaire layout and control zones that are coordinated with the applied zone.
- 5. Photo sensors shall be used to automatically control day-lit zone luminaires when sufficient ambient light is present or when the space is unoccupied. Provide LED type exit signs and exterior LED egress lighting.
  - a. Luminaire manufacturer shall have a minimum of five (5) years of experience in the manufacture and design of LED products and systems, and no less than one hundred (100) North American installations.
  - b. Unless otherwise specified, all LED luminaires and power/data supplies shall be provided by a single manufacturer to ensure compatibility.
  - c. All components, peripheral devices, and control software are to be provided by and shall be the responsibility of a single entity. All components shall perform successfully as a complete system.
  - d. Include all components necessary for a complete installation. Provide all power supplies, synchronizers, data cables, and data terminators for a complete working system.
  - e. All LED sources used in the LED luminaire shall be of proven quality from established and reputable LED manufacturers, and shall have been fabricated after 2015.
- 6. Manufacturers of LED equipment and lighting shall provide written guarantee of the following:
  - a. Manufacturer shall keep record of original bin for each LED module and have replacement modules from the same bin available for three (3) years after date of installation.
  - b. Manufacturer shall keep an inventory of replacement parts (source assembly, power, and control components).
  - c. Manufacturer's LED system shall not become obsolete for ten (10) years. Manufacturer shall provide exact replacement parts, or provide upgraded parts that are designed to fit into the original

provide exact replacement parts, or provide upgraded parts that are designed to fit into the original luminaire, and provide equivalent distribution and lumen output to the original, without any negative consequences.

- d. System shall carry a full warranty for five (5) years. Manufacturer shall be responsible for cost of labor, and cost of shipping, to replace any component of the system that fails within 2 years of installation.
- 7. Back of the House: Combination of LED strip and LED downlight will be used for back of the house lighting, including all mechanical rooms.
- 8. Provide LED type exit signs.
- 9. Lighting control system shall tie in to the overall Building Management System (BMS). Compatibility with BMS shall be via BACnet protocol to ensure the capability to monitor and provide load shedding for all lighting through the BMS.
- 10. Switched receptacles shall be provided in all offices areas as required by Title 24.
- 11. All fixtures shall have dimmable and addressable lighting control ballasts.
- 12. Exterior egress / security lighting shall operate dusk-to-dawn via photo cell control.
- 13. Electrical Products:
  - a. To the extent possible, products, and equipment intended for similar duty shall be of the same manufacturer.

# **Exterior Lighting**

The overall goal for the Parcel B exterior site lighting is to establish a unifying standard for the Rancho Los Amigos South Campus (RLASC) Project with consistent/similar lighting fixtures throughout the campus. This section covers the exterior lighting for the entire Parcel. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

This document specifies illuminance levels and uniformity criteria, and provides guidance on acceptable luminaire and lamp selections. Also included are general guidelines for creating a cohesive exterior lighting design. All exterior lighting shall be equipped with photo cell and controlled via time clock/lighting control system.

## **Site Lighting Goals and Guidelines**

Implementing a cohesive site lighting approach shall support the vision of unifying the South Campus project through a consistent lighting design. The light will be utilized to create areas of visual hierarchy and interest. Unique lighting zones shall be created with varying lighting approaches. In doing so, the site shall become easier to navigate during the nighttime hours.

## **Safety and Comfort**

- 1. Improve campus safety by utilizing high color rendering lamp sources for better visibility. Lighting sources shall have a Color Rendering Index (CRI) of 80 or better and temperature of 3500k-4100k.
- 2. Add visual interest to the site, including accentuating key landscape and architectural features.
- 3. Improve consistency of lighting appearance by utilizing organized fixture families.
- 4. Assist wayfinding by creating a visual hierarchy between different campus zones.
- 5. Support staff and patron gathering with a welcoming environment in plazas and courtyards.
- 6. Encourage unique lighting expressions in plaza and courtyard areas to create intimate spaces within the site.
- 7. Differentiate primary pathways from outlying pathways to organize pedestrian traffic patterns on campus.
- 8. Exterior commercial grade solar lighting systems shall be used for pedestrian pathway lighting, wayfinding, Emergency Call Box lighting, etc.

## Sustainability

Lighting systems shall be designed to comply with all applicable energy code requirements and project energy goals. Additional lighting energy reduction should be pursued where practical.

- 1. Utilize Energy efficient lamp sources.
- 2. Minimize glare from fixtures.
- 3. Minimize light trespass and uplight.
- 4. Meet additional energy efficiency and light pollution requirements.
- 5. Lamp/Luminaire
  - a. Provide LED fixtures with field-replaceable modules to reduce the cost of future replacements/ maintenance.
- 6. Provide a consistent and pleasant lighting appearance by utilizing sources with Color Rendering Index (CRI) of 80 and temperature of 3500K.
- 7. Luminaire aesthetics shall be compatible with the aesthetics of the adjacent architecture and landscape elements.

#### Illuminance Guidelines

Meet or exceed the lighting level and uniformity recommendations outlined in the following sections based on the Illuminating Engineering Society (IES) Handbook and all relevant IES Recommended Practice Guidelines. In general, provide 3-5 foot candle (FC) for illumination level.

#### Illuminance Criteria

A summary of the recommended lighting levels for the Exterior areas of the building based on the IESNA Lighting Handbook, 10th Edition light level recommendations is found below. The lighting specifier must also incorporate best practices found in the applicable IES Recommended Practice (RP) manuals. The project must also comply with all applicable codes.

All recommended light levels are maintained and targeted for the work planes in each specific area of the project.

#### Maintenance

- 1. Minimize luminaire and lamp types to reduce spare stock requirements for maintenance.
- 2. Reduce maintenance costs by utilizing long-life lamp sources. Minimum lamp life for most luminaires must be 30,000 hours, with 50,000-hour minimum for LED's.
- 3. Use of longer life lamps is encouraged to aid in long term maintenance.

## **Lighting Controls**

Exterior lighting control system shall be comprised of photocells, and programmable lighting controls to provide time control of lighting as required based on program requirements.

Refer to the Electrical section of the narrative for further information.

### **Product Requirements**

- 1. Light fixtures shall be commercial specification grade to ensure quality and performance, and shall be assembled with components of new, good quality.
- 2. Lamps shall be "high performance" and extra-low mercury content type.
- 3. LED luminaire manufacturer shall have a minimum of five (5) years' experience in the manufacture and design of LED products and systems, and no less than one hundred (100) North American installations. All components, peripheral devices, and control software are to be provided by and shall be the responsibility of a single entity. All components shall perform successfully as a complete system. All parts of the system shall be replaceable in the field with a preference for third-party supported LED modules and systems.
- 4. LED Luminaire assemblies shall include a method of dissipating heat to not degrade the life of the source, electronic equipment, or lenses. LED luminaire housing shall be designed to transfer heat from the LED board to the outside environment. Luminaire housing shall have no negative impact on the life of components.
- 5. LED manufacturer shall have performed photometric testing and shall provide upon request: The Luminaire Efficacy (lm/W), total luminous flux (lumens), luminous intensity (candelas) chromaticity coordinates, CCT and CRI, optical performance, polar diagrams, and relevant luminance and illuminance photometric data.

6. Painted finishes of fixtures and accessories shall be weatherproof enamel using proper primers or hot dipped galvanized and bonderized epoxy, in accordance with manufacturer's requirements. Unless otherwise specified, all painted surfaces shall have a life expectancy of not less than twenty years.

# **Site Lighting**

- 1. The fixture family can vary from tall poles to pedestrian scale poles, low-level lighting, and landscape lighting, as appropriate to the task. The intent is to unify the campus elements while allowing flexibility to create unique experiences. Fixtures must be selected that are of high-quality design, meet good practice code requirements, and project sustainability goals.
- 2. Fixtures shall be contemporary/timeless with clean lines and simple aesthetic gestures, but not industrial or institutional. Period specific/Historic styling is to be avoided. Light sources shall be shielded or lensed to mitigate glare and provide soft illumination.
- 3. It is preferred that poles have hinged/articulating shafts to allow poles to be maintained from the ground.
- 4. Pole heights shall vary in accordance with areas of use:
  - a. Pedestrian paths: Poles to be in a range of 10'-14'.
  - b. Shared path: Poles to be of a slightly larger scale (14'-20') to reflect the processional character of the space, and provide necessary light levels at vehicular circulation and drop-off areas.
  - c. Poles for special occasion use: Poles shall be in the range of 20'-30'. Fixture heads shall be shielded to prevent glare, and it is recommended that such poles not be used at the perimeter of the site to avoid light trespass onto adjacent properties.
  - d. Roadways, loading docks, and surface parking: Pole height maximum of 20' and lower when adjacent to the perimeter of the site.

## **Low-Level Lighting**

- 1. For areas with pedestrian activities, lighting mounted at waist level or below can add to the patron's experience in creating a safe and intimate atmosphere. Care must be taken to ensure that fixtures have long lamp life, are easily accessible, and are adequately shielded for users in wheelchairs.
- 2. Fixtures to provide sufficient light for pedestrians with normal vision to perceive other pedestrians, to enhance the patron's feeling of safety. Fixtures must be cool to the touch to avoid burning patrons, and any glass is to be heavily tempered or avoided to prevent damage or injury.
- 3. Tree uplighting is be accomplished by surface mounted adjustable fixtures in areas with shrubs or elevated planting elements (as opposed to grass or lawn). Flush in-grade fixtures are to be used judiciously in limited areas.
- 4. All in-grade fixtures to be high quality, cool to the touch, and sealed to prevent water build up and limit condensation.

### Roadways, Parking areas and Warehouse

Because the parking structure may be located adjacent to existing residential housing units, care shall be taken to minimize roof-top light spilling on the surrounding residential properties. It is not acceptable for interior parking structure lighting or headlights from cars moving or parking within the structure to spill onto the surrounding properties. All exterior lighting should be integrated into the facade.

The following approaches are to be utilized for the roadways and parking areas:

- 1. Roadways Shielded luminaires with on-center spacing as required to meet illuminance and uniformity criteria.
- 2. Loading Docks Luminaires with good glare control and no uplight component shall be used. Occupancy sensing for some or all fixtures may be utilized if there is no compromise to safety.
- 3. Surface Parking Luminaires with good glare control and no uplight component shall be used.
- 4. Parking Entrances Luminaires with good glare control and no uplight components shall be used.
- 5. Warehouse Lighting
  - a. Provide LED luminaries for warehouse with protective guards. The emergency lighting for the warehouse shall be supplied through emergency source "generator". The lighting shall be controlled by occupancy sensors and lighting control systems. The illumination level shall be per IES and in conformance with T-24.

[Intentionally Left Blank]

## K. FIRE ALARM

The Fire/Life Safety system shall be addressable, multiplex, and microprocessor based. The design builder shall include all costs associated with the design, local, state and federal authority/jurisdictional interface, submittal and approval process, and the installation/construction and final approval of the system. The design builder shall be responsible for obtaining all approval of the Fire/Life Safety System from all required authorities. Final concepts shall be approved by County of Los Angeles Fire Department. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

The Fire/Life Safety system shall include, at a minimum, the following:

- 1. New Single Fire/Life Safety system for the entire building.
- 2. Remote annunciator panel located at the primary entrance.
- 3. Main Fire Alarm panel located in Electrical Room closest to primary entrance.
- 4. Duct smoke detectors shall be provided in supply and return air paths.
- 5. Addressable area smoke detectors shall be provided in electrical and mechanical rooms, elevator machine rooms, food service/ kitchen, and elevator pits.
- 6. Addressable heat detectors with elevator shunt trip shall be provided in elevator machine rooms and hoist ways protected by sprinkler coverage.
- 7. The system shall monitor all sprinkler flow and tamper switches.
- 8. Manual pull stations where required by Fire Department.
- 9. A voice evacuation paging system, including fire alarm speakers in all areas of the building, shall be provided to permit fire alarm signals and emergency public address announcements.
- 10. Audio/visual alarm indicating devices shall be provided to comply with the local fire code and ADA requirements.
- 11. A fireman's intercom system shall be provided to permit two-way emergency communication between the central fire command center and areas of the building as required by Code.
- 12. Elevator capture and control devices shall be provided on each floor in the elevator lobbies. Provide smoke detectors in elevator machine rooms and elevator pits.
- 13. Provide interface with the food service/kitchen Ansul System.

## L. FIRE PROTECTION / LIFE SAFETY

The Fire/Life Safety system shall be addressable, multiplex, and microprocessor based. The design builder shall include all costs associated with the design, local, state and federal authority/jurisdictional interface, submittal and approval process, and the installation/construction and final approval of the system. The design builder shall be responsible for obtaining all approval of the Fire/Life Safety system from all required authorities. Final concepts shall be approved by County of Los Angeles Fire Department.

# **Summary Scope of Work**

Provide new supervised design build/design assist fire protection system in the new building. The design shall be in accordance with all local, state, and federal codes. The design of the Fire Protection systems is based on NFPA 13 and the design criteria established for the specific occupancy of the facility. The system shall be hydraulically calculated by a licensed fire protection engineer. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

# **Design Criteria**

#### **Latest Codes and Standards**

- 1. Codes
  - a. California Building Code (CBC), Title 24, Part 1
  - b. California Fire Code (CFC)

#### 2. Standards

a.	ADA	Americans with Disabilities Act Accessibility Guidelines
b.	ANSI	American National Standards Institute, Inc.
C.	ASTM	American Society for Testing Materials
d.	FM	Factory Mutual
e.	IFC	International Fire Code
f.	ISO	International Organization for Standardization
g.	NFPA	National Fire Protection Association
h.	NFPA 13	Standard for the Installation of Sprinkler Systems
i.	NFPA 14	Standard for the Installation of Standpipe and Hose Systems
j.	NFPA 20	Standard for the Installation of Stationary Fire Pumps
k.	NFPA 25	Standard for the Testing of Water Based Fire Sprinkler Systems

- I. NFPA 72 National Fire Alarm Code
- m. NFPA 101 Life Safety Code
- n. OSHA Occupational Safety and Health Administration
- o. UBC Uniform Building Code with Amendments
- p. UL Underwriters' Laboratories, Inc
- 3. City water supply per on site fire flow test (testing to be performed by the design build team):
  - a. Flow test date TBD
  - b. Static pressure = TBD
  - c. Residual pressure = TBD
  - d. Flow = TBD
  - e. Flow at 20 PSI = TBD

### **Technical Design Criteria and Assumptions**

- 1. Based on the limited fire water pressure available at the service entry to the campus, a fire water pressure booster pump shall be required.
- 2. Standpipe system with fire hose valves in all exit stairs.
- 3. Fire department connection on address side of building.
- 4. Fire pump test connection on vehicle accessible side of building.
- 5. Use of quick response sprinklers.

### M. SECURITY

System components installed should be compatible with department and County standards. Systems include Access Control, Video Surveillance and Intrusion Detection, Intercoms, and Emergency Phones. Currently central station monitoring is via a 3rd party contract. This will continue in the new facility, though the first point of response will be the local security desk within the facility.

This section focuses primarily on physical security and the electronic security systems. It does not address other security considerations such as information security or the larger issue of security policies and procedures beyond the impact on the design of the physical security systems. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

### **Circulation and Flow**

- 1. Circulation and flow can be defined by three general zones: public, internal, and restricted. The zones are increasingly secure, and at each transition between zones, there is a control point. As part of this control, there must also be physical barriers in place to define the boundaries between areas.
- 2. Public areas include the lobbies of all buildings, which will be open to the public. There is free circulation between the outside and lobbies of any of the buildings. The point of transition from public to escorted is the gateway to the elevator lobby.
- 3. Internal office spaces are generally open to all County personnel and guests if they are escorted.
- 4. Restricted areas include departments supporting sensitive functions. For these spaces, staff must have additional authorization for access. Some areas are regulated and require escorts for staff. Other spaces allow unescorted access, only by invitation of the host. The boundary defining the restricted space is normally a wall with a controlled door. Outside entrances to restricted areas of the building must be separated from public facing entrances.
- 5. External areas should be designed with a Crime Prevention Through Environmental Design (CPTED) approach. Requirements for fences, gates, bollards, and other physical barriers shall be balanced with the overall Campus Planning Principles and Objectives discussed earlier in this narrative. Staff parking, non-lobby building entrances, and service / loading areas and functions shall be isolated from public areas and circulation of vehicles and pedestrians.
- 6. Staff parking in the garage shall be separated from visitor parking.

# **Principal Security Work**

### **Video Surveillance System**

The Video Surveillance System (VSS) shall include cameras, storage servers, and management software to provide a comprehensive monitoring system throughout the site and facility. The video from the cameras is stored on servers. The security department utilizes a server solely for the surveillance system. Network transportation of IP signals is supported via the ISD IT network. The cameras are IP-based allowing footage to be monitored from any network location, which means any desktop monitor can become a security surveillance monitoring location with the correct authorization and password. This is especially useful where video monitoring is requested by designated personnel.

Cameras should be specified as such to provide a 60 pixel per foot resolution in the primary field of view. Locations and required field of views should be confirmed with the County prior to final installation. Housing shall be vandal proof and appropriate for the environment to which it will be installed.

### **Access Control and Alarm Monitoring**

The access control/alarm monitoring (ACAM) sub-system, whose components are card readers, door controllers, and a server to audit and control the system. The current LA County system is Sielox. The access control system shall be consistent and compatible with this system.

#### **Access Controllers**

The proximity card reader technology complies with Americans with Disability Act (ADA) requirement that stipulates a normal movement for apparatus manipulation. This means that insertion or swipe cards are not considered ADA compliant as an orientation, with respect that a card reader requires a specific hand movement. Proximity cards have a chip in the card so that when placed in proximity to the reader mounted at a permanent location, the chip is activated, sending relevant data through the reader to the door controller. As a proximity card may be in any position in relation to the card reader, no specific hand movement is required.

In addition to card readers, the County is looking towards migration to other technologies including keypads, and smart phone based credentials. This will allow for eventual migration away from physical tags and cards, and movement toward virtual credentials and ID verification. This transition should accommodate all levels of technical comfort and physical limitations. For locations requiring single challenge credentials, these locations should be configured to work with card readers OR any of the additional technologies. This will accommodate the full range of County personnel.

Within the building, certain sensitive spaces may require a secondary challenge before access is granted. Keypads will work in conjunction with a card reader so that possession of a security badge is not enough to grant access. In these locations, the credentials should be card reader AND one or more of the other challenge technologies. The secondary challenge device will allow for management and control to be centralized, allowing unique codes to be assigned to staff that can be disabled whenever a change in personnel occurs.

Card readers connect to door controllers via individual cables. Each door controller will accept multiple card readers and several alarm point inputs. The information as to who may enter a door, what time within any 24 hour/365-day periods, and which door, is resident within the door controller. Door controllers require editing periodically

for staff movement and reassignments with the use of software resident on the server. The server need not be running the program for the system to operate in auto-mode. This function is called "distributed intelligence". Each door controller is, therefore, an independent operating unit. Information is uploaded whenever communication is established with the server. Connections made to the door controller as inputs are considered alarm points. Reactions per point programmed into the door controller will determine the system response.

The door controller manages the lock-set, door position switch, and other associated hardware. Power for the electrified door hardware is typically provided by the door controller or remote power supply. Remote power supplies are typically used for door hardware that requires greater power than that available at the door controller. When a remote power supply is necessary, it must be mounted near the door controlled to prevent ineffective operation. Coordination with the Design Builder's door hardware consultant and electrical engineer on the project design team will determine actual connectivity.

- 1. Doors to be controlled with card readers may include the following:
  - a. Stairway Doors
  - b. IDFs and other low-level IT spaces
  - c. Mechanical Rooms and specified programs
- 2. Doors to be controlled with card readers secondary challenges include the following:
  - a. Secure testing areas
  - b. Mission Critical spaces
  - c. Server Rooms and other high level IT spaces
- 3. All elevators may be equipped with integrated card readers as part of this project. We recommend the card readers be activated with the following policies:
  - a. During normal office hours, elevator card readers will not be active but may be programmed for restricted access if program requirements dictate a higher level of security.
  - b. Other floors and Buildings: After-hours access to be restricted to assigned floors only.
- 4. Doors to be controlled with off line cypher (keypad) locks include offices and non critical store rooms.

#### **Intrusion Detection**

Intrusion Detection functionality will be included as part of the ACAM system. Sensitive areas and buildings shall be equipped with motion detection, glass break sensors, and other means to detect unauthorized entry into those areas. Notification of alarm conditions shall include both local security personnel and central station monitoring, either through the Sheriff's Department or via a third party central station monitoring firm. Protocols for notification and event escalation will need to be developed with input from the County and key stakeholders.

### **Emergency Telephones**

Emergency telephone units shall be placed in all public areas including parking areas and walkways; these should be vandal proof and appropriate for the environment to which it will be installed. Emergency Phone shall include integrated video cameras. Call buttons shall also act as duress buttons and trigger emergency alarm at the monitoring station and to on duty security staff responsible for monitoring security events.

# **Security System Description**

### Monitoring

There will be a security desk within the ISD and Probation Headquarters which will serve as the local monitoring location for the Parcel B security systems. Access Control, Intrusion Detection, VMS, and intercom will all be monitored from this location. Alarm monitoring workflow between the local desk and remote central station monitoring will include coverage for afterhours and backup scenarios. In addition to monitoring at the security desk, the manager offices will be provided with monitoring and a control station as noted in the room data sheet.

#### Infrastructure

Communications Infrastructure will be utilized to support the security system. Copper and fiber cabling shall match the single manufacturer solution utilized by the Telecommunications system and follow all standards and warranty requirements for this system.

#### **Headend Systems**

All electronic security subsystems shall be integrated into a common Parcel B headend. Servers supporting individual sub systems such as ACAMS and VSS shall be located in communication rooms and managed from Primary monitoring locations. Primary monitoring locations shall be located at Lobbies and reception desks that are public facing. Security managers workstation shall be connected to the headend over the data network in order to perform System administration and maintenance tasks.

### **Equipment Racks and Cabinets**

Rack space in the main communications equipment room will be required to house the video surveillance equipment. These shall match any other computer racks, cabinets and associated components being installed in other parts of this project.

Wall mounted cabinets shall be required in Distributor Rooms to support ACAM equipment. Exact locations of panels shall need to be developed and coordinated with other systems.

### **UPS System**

Core devices of the security system such as controllers, servers, video recorders, and main operator work stations shall be provided with UPS power for the security system to remain active during a power outage. UPS power requirements shall be incorporated into the overall load requirements of the generator. The UPS shall be connected to the generator distribution infrastructure. Refer to Electrical section for loading and uptime requirements.

### **Network Video Storage**

Network Video Storage shall be sized to allow for 365 days recording at a minimum of 10 FPS from all cameras. Storage shall be configured for RAID 5 or RAID 6 redundancy. The number of cameras per storage device shall be developed per the selected manufacturer's engineering recommendations. Storage capacity shall accommodate additional cameras located within parking structure.

#### **Network Cameras**

Generally, cameras shall be connected to the local area network via category 6 copper cabling and shall utilize Power over Ethernet where possible. Cameras to be located on the building exterior shall provide full perimeter coverage, including driveways, sidewalks, and fire lanes. Specific camera coverage shall be provided for all entrances, including public entrances, secondary employee entrances, and service entrances such as the loading dock and gates at perimeter walls, fences, and landscape/hardscape barriers. The parking garage entrances shall have camera coverage. Comprehensive coverage requirements throughout the parking areas shall need to be confirmed during design. Full camera coverage shall also be provided at all exterior courtyard spaces.

Cameras shall be located internally at all entrance lobbies and check in desks. Cameras shall also be provided at all elevator lobbies including upper floor lobbies, as well as at cash stations and POS locations in food service areas. Other protected doors such as stairwells and IDF's shall have cameras associated with the locations. Secured areas that have secondary challenge keypads will also be equipped with cameras to monitor access. In addition to cameras monitoring access to secure spaces, there are departments that require surveillance within their respective work spaces. These departments and their specific requirements shall be identified as program requirements are revalidated during the design process. For bidding purposes, assume one additional camera for every 500 sqft of program space in addition to the locations identified in these requirements and specifications. Provide unit pricing for cameras including all associated costs for each individual camera including labor, cabling, licensing and programming

### **Intercom System**

The intercom system is a smaller system that is usually included as part of the security design. The purpose of an intercom system is to allow direct communication via a private telephone network consisting of intercom stations and one or more master stations. The system is also independent of the building voice communication system. The purpose of this system is to allow a remote person to respond to an inquiry at the station by a person seeking to gain entrance. The operator at the intercom master, with proper recognition, remotely releases the electrified door hardware to allow the person entrance into the building. This system affords the operator time to distinguish the identity of the person at the station without prematurely opening the door for questions, thereby exposing themselves to possible attack. A camera will be located to view the activity immediately adjacent to the door where the station is located.

An integrated intercom system is required at gates and main building locations for access locations for access purposes. The remote intercom stations shall be co-located with access control and video surveillance cameras. The intercom Master station shall be integrated with the video surveillance and access control systems to allow monitoring and remote door release of gates and doors if security personnel clear the visitor for entry.

# N. IT / COMMUNICATIONS

### **Telecommunications General**

The telecommunication system and all related connections shall be designed to conform, as a minimum, to the following codes:

- 1. California Building Code
- 2. California Electrical Code (same as NFPA 70)
- 3. California Green Building Standards Code
- 4. NFPA 13, 14, 20, 22, 24, 54, 70, 72, 96, 101, and 418 Standards.
- 5. Local Fire Authority Standards.

The Telecommunication system and all related connections shall be designed to conform, as a minimum, to the following standards:

- 1. TIA 568-D Telecommunications Cabling for customer premises standard.
- 2. TIA 569-D Telecommunications Pathways and Spaces
- 3. TIA 606-C Administration Standard for Telecommunications Infrastructure
- 4. TIA-607-C Telecommunications Bonding and Grounding (Earthing) for Customer Premises
- 5. TIA 758-B Customer Owned Outside Plant Telecommunications Infrastructure Standard
- 6. TIA 862-B Structured Cabling Infrastructure Standard for Intelligent Building Systems

- 7. Building Industry Consulting Services International (BICSI) Telecommunications Distribution Methods Manual (TDMM) Current Edition
- 8. FCC Part 15 Federal Communications Commission document relating to allowable radiated emissions.
- 9. ISO 9000 Manufacturing Quality Control Standard (Certification)
- 10. Institute of Electrical and Electronic Engineers (IEEE) 802.3 and 802.11 standards.
- 11. National Fire Protection Association (NFPA)
- 12. Underwriters' Laboratories Inc., Standards for Safety (UL)
- 13. County ISD Commercial Building Telecommunications Standard document 902. (Attached within appendices)
- 14. OSHA standards
- 15. Motorola Standards and Guidelines for Communications sites (R56)
- 16. The low voltage installation shall follow the most stringent requirements set out in the fore mentioned client specifications, codes, industry standards ordinances and regulations in the event of conflicts.

# **Scope Demarcation**

The following responsibility matrix provides a guide for scope demarcation within this project:

Item	Scoped By	Design + Installed By	
Telecommunications Pathways and Spaces, including Conduits, Back boxes, Stub-ups, Sleeves, Slots	Scoping Engineer-ICT (Information and Communication Technology)	Design-Build Contractor	
Telecom Room Power and Lighting	Scoping Engineer - MEP	Design-Build Contractor	
Telecom outlet location and mounting height coordination w/Architecture and Furniture	Scoping Architect and Engineer - ICT	Design-Build Contractor	
Supplemental Cooling in IDF and Server Room	Scoping Engineer - MEP	Design-Build Contractor	
Pathway Outside IT Room	Scoping Engineer - ICT	Design-Build Contractor	
Telecom Horizontal Cabling, Terminations, Patching and Testing	Scoping Engineer - ICT	Design-Build Contractor	
Network and Computer Hardware	Client IT	Client IT	
Telephone Instrument Selection, Design and Coordination	Client IT	Client IT	
Security	Scoping Engineer - ICT	Design-Build Contractor	
Wireless System/Access Point Locations	Scoping Engineer - ICT	Design-Build Contractor	
Grounding Backbone	Scoping Engineer - MEP	Design Build Contractor	

Item	Scoped By	Design + Installed By	
Components Grounding	Scoping Engineer - ICT	Design-Build Contractor	
Non-Mechanical Fire stopping of Telecom Pathways (i.e., stub-ups, conduits, etc.)	Scoping Engineer - ICT	Design-Build Contractor	
Plywood in Server Room	Scoping Engineer/Architect	Design-Build Contractor	
Rack/Cabinets within Technology Spaces	Scoping Engineer	Design-Build Contractor	
Telco Services	Service Provider	Cabling and Systems by Service Provider / Pathways and infrastructure by Design Build Contractor	

# **Principal Telecommunication Work**

### Internet of Things (IOT)

The design intent for the RLASC HQ shall embrace systems integration between all data systems through the concepts of Internet of Things (IOT) and have a dynamic global network infrastructure of which capabilities interface with telecommunication systems, IT systems, energy management systems, building automation, smart irrigation control, lobby management, parking, fire ,access control, CCTV, conference room management, security systems, power management systems, emergency power management (generators and UPS), audio/video systems within the RLASC campus and outside world. The engineering of these systems shall address the life cycle, reliability and capability for expansion, ongoing operations and status.

### **Technology Cabling System**

Technology cabling and its associated infrastructure are the foundation on which networks, systems, applications, and services are built on. Physical elements can have an impact on building architecture as well as building systems. The two main components of IT infrastructure are the cabling and spaces that support the systems. Consideration to future requirements needs to be included throughout the design process. While a building may be utilized for 50 or even 100 years, the data cabling may only last for 10 or 15 years. Demands and requirements within each space may change even more frequently during occupancy, and the technology design should be adaptable enough to cope with minor changes with as little disruption as possible.

## **Telecommunications and Low Voltage Site works**

1. Provision for Telecommunications outside plant infrastructure and connection locations shall be confirmed by the Design-Builder during design. A set of dedicated conduits and manholes for Low Voltage systems will route throughout the local campus area for the new buildings; including a minimum of two (2) 4" conduits for Frontier, two (2) 4" for Spectrum, and two (2) 4" for County Use or spare. The Design-Builder shall be responsible for installing and supplying these, as well as matching sets of four-inch conduits originating from the Building Entrance Room (Main Point of Entry) and connected to all local manholes for redundant

- connectivity to this infrastructure. Route diversity is required, and this will be in the form of duplicated connections at each end of the building to maximize redundancy. Completion of a conduit loop within the parcel boundary shall be required of the design builder. Coordination with service providers will be required to ensure easy connectivity of their services within the building during the final stages of the project.
- 2. Existing Low Voltage infrastructure within the Parcel connecting to occupied and/or unoccupied buildings outside of the scope of the project shall be surveyed prior to any demolition. Where live low voltage services exist, coordination shall occur with the County in order to arrange relocation and cut over of circuits, so continuous service shall be maintained to these locations. Care shall be taken so that no cables, fiber, or copper shall be cut prior to full investigation and confirmed cut over. Existing services to Crime Lab, Child Care Center, Public Health building, and HOME building shall be relocated as required to maintain continuous operation.
- 3. All conduits installed will be four (4) inches in size, containing three (3) rigid inner ducts, and should follow requirements laid out within the TIA-758-B outside plant standard, including depth of installation, acceptable bend radii, and encasement requirements. The maximum allowable pull length between manholes shall not exceed 400 ft., and additional manholes should be installed as required to maintain this distance requirement.
- 4. Externally rated Outside plant cabling must terminate within 50 feet upon entering the building at the Entrance Room due to fire rating properties of external rated cable. The room size and location should ensure this is possible.
- 5. Conduits for ISD only use shall also be installed within the parcel connecting the ISD Headquarter to the Probation Headquarter and Parking structure for ISD controlled low voltage connectivity and local system support. These connections will be separate from those listed above and consist of two (2) four-inch conduits with 3 rigid inner ducts installed.
- 6. Each conduit installed will be clearly marked with the intended user and sealed to reduce the chance of water ingress.
- 7. External Site Cabling within the parcel boundary devices, such as WiFi Access points, CCTV cameras, emergency telephones, and controls for Electrical systems will require connections to be run from the Telecom space within the nearest building. For horizontal device connections, a 2" rigid conduit will be installed within the site to run to these locations. External outlet locations will be weather proof and connected via continuous conduit. Conduit installation shall conform to TIA758-B as a minimum, with a minimum bend radii of 6x OD being applied for 2" conduit. All conduits will be sealed and fire-stopped upon completion of cable installation. Category 6 Cable distances for external systems shall conform to the ANSI TIA 568-D standard; where cables are likely to exceed distance requirements, Optical Fiber shall be utilized. Such installations will need to be coordinated with the electrical designer to ensure power provision.

# **General Telecommunication Space Requirements**

Architectural	
Size	Dependent on building service requirements, sizes laid out within ISD Telecommunication standard 902, and in accordance with TIA 569-D sizing requirements, see section below for minimum room sizing.
Ceiling	8' 6" minimum clearance AFF, no dropped ceiling. Ceiling to be waterproof if located close to washrooms or pantry.
Doors + Access	Lockable access by access control system. 1 hour Fire Rated Door hinged to open outward. Camera Surveillance on access. Door shall be a minimum of 42" wide and 84" high, the MER may require a double door no smaller than 72" wide and 90" high.
Locks + Security	Access card required to enter room. Door should also have keyed lock (County Standard Key Number 3450). Spare located within lock box on the door.
Occupancy	Frequent to Rarely.
Floor Type	Polished/sealed concrete or anti-static tile.
Floor Load	Floor loading (static and dynamic) capacity shall be sufficient to bear the distributed and concentrated loads of the installed equipment.
Floor Void	None, unless required to match rest of building.
Windows	None
Walls and Partitions	Light colored Dust proof finish. Walls capable of equipment support. No skirting. AC grade plywood finish applied to all walls (mounted 12" AFF).
Seismic	All components of the installation should be seismically braced Per AHJ requirements and certified by a structural engineer.
HVAC	
Heat Load	W/m² to be determined during design.
Humidity Control	Require 30-55%, 24hrs/day for 365days/year.
Temperature Control	Require 64 - 75F, 24Hrs/day.
Ventilation	Require fresh filtered air frequently to pressurize space.
Redundancy	Required for failure of main system. Main Communication Equipment Room may require full internal redundancy depending on heat load.
Power	
Power Distribution	Minimum of two (2) duplex twist lock outlets each on separate circuits for each rack, cabinet or plywood backboard location. Assume Server cabinets will require 30A. The specific number, location, and amperage to be determined during design.
Convenience Power	On each wall and at plywood panels spaced 6 feet apart, on a separate circuit to
Outlets	other power within the room.
Emergency Power	All circuits provided for this room to be on the Emergency Power Generator and UPS, as described within the Electrical section of the narrative
Telecommunications Ground	Required in all rooms, per TIA 607-C (including all annexes) and applicable equipment manufacturer requirements.

Architectural (Continued)	
Power Strips	Two (2) power strips will be supplied per rack or equipment cabinet.
Uninterruptable Power Supply (UPS)	Required for all non-convenience outlets.
Power Load	Number of watts each outlet to be determined during design.
Lighting	500 Lux at 36" AFF on the face and rear of each equipment in Racks.
Fire Protection	
Protection	Smoke detectors installed in each room connected to the fire alarm.
Sprinklers	High temperature type heads, minimum per code with protective wire cages. Dry Pipe, pre-action system, or clean agent fire suppression should be considered unless cost prohibitive.
Extinguishers	As Required by Code.
Fire Stopping	All penetrations through fire rated barriers to be fire stopped using approved methods and materials.
Miscellaneous	
Leak Detection	Required in raised floors, under HVAC equipment whether floor based or ceiling mounted (in drip tray).
	NOTE: Drip trays should be installed above Equipment racks only if infrastructure cannot otherwise be located/routed out from above equipment racks.
Drainage	Any below grade rooms shall include a floor drain and sump pump.

Where possible, Telecommunications spaces should be stacked to allow for riser connectivity to be located within the same room, limiting the requirement for additional riser spaces. Telecommunication Spaces may need to be fast tracked during construction so that client supplied low voltage systems can be installed and tested in place prior to final building completion. This will also allow for design builder provided systems to be integrated within Client provided network equipment.

### **Building Entrance Room**

- 1. The building entrance room will be the location of demarcation for all incoming telecommunications cabling and pathways. Ideally, entrance rooms should be located on the ground floor of the building as close as possible to an outside wall and any incoming conduit locations. For full service provision redundancy, multiple building entrance rooms may be required. The room(s) should be located so it is within a dry area of the building and will not be subjected to possible flooding. The entrance room(s) should be designed to accommodate a minimum of two service providers, as well as any client owned campus backbone connections required. The Entrance Room will be sized to have sufficient cabinet space for a minimum of three cabinets, plus any projected expansion requirements. A current set of service provider standards and requirements shall be obtained and followed for this space.
- 2. NEC code for circuits requiring protectors shall be applied to all metallic cables entering or exiting the building; these protectors will be located within this room.

#### **Distributor Rooms**

- 1. Distributor Rooms will serve as a central point of distribution for the horizontal cabling system and house the local network switches required for data connectivity. Where possible, distributor spaces should be centrally located within the floor plan and stacked throughout the building, allowing for direct riser connectivity. Distributor rooms will be located on each level and designed to serve a specific zone or area within that level. Horizontal cables from each distributor room should conform to the TIA-568-D standard channel length requirement of 296ft (90m) maximum distance. In order to ensure this is met, the maximum linear distance between the distributor room and the work area should not exceed 275 feet. Where floor plate layouts result in this maximum cable distance being exceeded, multiple rooms should be constructed. The maximum distance between rooms should not exceed 450ft.
- 2. Spaces should be based on an 80SF area minimum for distribution rooms within each zone. Room sizes should be designed based on cable count, systems, and equipment to be housed within each space. All spaces should be designed to allow for at least one additional rack in the future; this should include all additional clearance requirements.
- 3. Distributor rooms will house all horizontal and backbone cabling termination hardware and racks/cabinets. All cabling will be terminated on rack/cabinet mounted patch panels. The Distributor room will house all local LAN switches and other Data communications equipment. Active equipment shall be provided and configured by the client. Distributor rooms shall also be sized to house additional building low systems such as, but not limited to, Fire, Security, paging, CATV, and Audio-visual systems.
- 4. The Distributor Room selected as the first point of connection from the Entrance rooms shall be classed as the Main Communications Equipment Room. This will need to be sized to allow for head and building based servers and other systems to be housed in this space. Systems such as Data Storage servers, Fire, Security, Telephony, BAS, AV, paging, and radio may all have equipment that resides within this room.
- 5. Telecommunications spaces within the parking structure shall be used mostly for termination of Security, Paging, and emergency telephone systems. Parking solution systems and other low voltage connections may also be housed within these spaces, so they should be sized accordingly.

#### Microwave/Radio Room

 A Microwave and/or Radio room located at the top of the building or roof penthouse shall be used to house main radio and microwave requirements for the building. This room will have a minimum size of 18' x 20'. Layouts for this room will be developed with the client's RES team. Two 4" conduit shall be installed between the Microwave room and any roof top antenna locations. This room will house head end equipment and connections for the Public Service network DAS. Backbone conduits used for the Public Safety DAS system shall be encased in a 2-hour rated enclosure per California Fire Code.

### **Room Layouts**

1. Each room shall be laid out to the TIA 569-D standard. A minimum of 3ft. clearance shall be maintained in front and behind all cabinets, racks or wall mounted assemblies. Where equipment requires a larger clearance area, the design should be altered to accommodate accordingly.

- 2. Racks and cabinets should be no taller than 7ft in height, with ladder trays installed at six (6) inches above each row. Ladder trays shall be designed in a way to minimize cable distance and allow for easy distribution to each floor.
- 3. Racks, cabinets, and tray utilized within the building shall be seismically braced according to code requirements and certified by the structural engineer of record.

### **Building Risers**

- 1. Building risers shall be integrated into each distributor room with the use of sleeves or slots. Vertical runs of cable tray shall be installed within each riser area to support cabling using these pathways.
- 2. A conduit pathway to the roof shall be installed to accommodate possible antenna or other roof based communications systems, such as radio antennas. Roof terminating conduits shall be fitted with a service entrance cap or weather cap to eliminate water ingress.

### Uninterruptable Power Supply (UPS) System and Backup Generator Power

All telecommunication and security circuits shall be covered by the building UPS and generator backup power.
UPS adds protection to network equipment by preventing damage from power surges and other outages.
Other Systems such as telephony, paging, and emergency radio systems shall also be connected to backup generator power. Refer to the electrical section for detailed information about length of support.

# **Structured Cabling System**

#### **Horizontal Distribution Routes**

- 1. Fire proof assemblies, such as pre fire stopped sleeves or EZ-Path, shall be used to allow horizontal cables to transition from the Distributor room ladder tray to the main distribution containment system within each floor. The main distribution containment solution within the building shall take the form of basket tray either mounted within the ceiling void or within any raised floor. Outlet Back-box locations shall connect to this common pathway via conduit. For a ceiling installation, this conduit shall run from the ceiling void into the wall structure to the back box. Floor installations shall utilize a minimum of 10 ft. of flex conduit, additional cable slack shall be installed to allow for flexibility. Wall mounted outlet boxes shall be a minimum of 4 11/16" x 4 11/16" x 2 14/16". Conduit shall be sized based on a 40% fill ratio depending on cable size used, and be a minimum of 1 ¼" in six. Riser rated cable running within the horizontal plenum between technology spaces shall be contained within continuous rigid conduit.
- 2. Conduits bends shall be sweep bends based on 6x OD for conduit less than 2" and 10x OD for conduits 2" and over in size. Pull boxes shall be installed within any conduit that has more than two 90-degree bends or the conduit run exceeds 300 feet (100m). All metallic raceways shall be grounded in accordance with TIA 607-C.
- 3. Poke through locations should be sized for a minimum of 6" for data and power only, and a minimum of 8" for locations with AV connectivity.

### **Cabling**

- 1. The Data Network system is comprised of two parts: Backbone and Horizontal. The backbone of the network shall be comprised of fiber and copper connections, which connect distributor rooms to the Main Equipment Room and the Entrance room, or between buildings via entrance room in a star topology, and enable transmission of data, voice, and video around the site. Fiber cabling shall be sized and specified to meet required performance criteria. It should be assumed that all fiber shall be terminated in rack mounted modular enclosure. Fiber cable shall conform to the following minimums: Multimode fiber will be OM4 or better, and all Single-mode fiber shall be OS2 or better; LC connectors shall be used as standard unless requested otherwise. Fiber connections between buildings shall consist of 24 Multimode and 12 Single mode as a minimum; fiber connections between Telecommunication spaces within the building shall consist of 24 Multimode and 24 Single-mode fiber connections. All backbone cable shall be installed with 15ft of slack to future proof any required changes. All backbone cable shall be rated for the installation it is intended for. Copper Backbone shall comprise of Category 6 multi pair cables and terminated on 110 style punch down terminations; the number of cables between telecommunication rooms will be 24 as a minimum. Backbone cables shall be housed within an independent pathway solution even if the pathway routes are parallel to the horizontal system.
- 2. Horizontal Cabling shall be installed to each required outlet location to a maximum of 296ft (90m). Cabling shall be Category 6 compliant, with connections at WAP or AV locations requiring Category 6A compliance. Cabling used within the horizontal system should be plenum rated. All components within the system shall be supplied by a single manufacturer so that an extended warranty can be provided at the completion of works. Cables shall be terminated according to the T568A termination standard with a minimum of 10 foot of slack for Wireless and under floor installations. As a rule, each desk outlet location shall be terminated with a minimum of two (2) RJ45 jack connections, although this may differ in locations, such as the IT lab and the EOC. Some locations may also require fiber terminations at the desktop; these should be confirmed with the client in the one-on-one meetings prior to award.
- 3. Within the Distributor rooms, cables shall be dressed within each rack using suitable horizontal and vertical cable management, and terminated on flat patch panels. The use of plastic cable ties is prohibited anywhere within the installation. If cables need to be bundled, this should be achieved via Velcro type cable wraps. All patch cables supplied shall conform to the TIA 568-D standard. The number of patch cables to be supplied shall be based on a one-to-one basis within the Distributor room for patch panel jacks and a two for every three workstation outlets; workstation patch cords shall be a maximum of 5m in length. All patch cables shall be white. Patch cables within the distributor room shall be sized according to project specific requirements.
- 4. Quantities and types of cabling listed in item #1 and #2 above are for the purposes of baseline systems and pricing. Design build contractor shall confirm all requirements with County as part of their detailed design after award.

# **Active Network Connections and Equipment**

#### **Local Area Network Switches**

The local area network will be comprised of layer 2 and layer 3 switches and routers provided by the client, and rack mounted and patched by the design builder. Coordination between the client IT group and the design builder shall

be required to confirm IP addresses and connectivity requirements for low voltage systems being installed under this contract. Switches specified to be supplied for systems such as security and BAS if not utilizing a common network hardware shall be approved by the client prior to purchase.

### **Wireless Technology**

A wireless system shall be designed to conform with requirements set out within the client standards and shall be connected to the data network via two (2) category 6A structured cables back to the distributor room. Wireless Access Point (WAP) locations shall be confirmed via radio signal surveys post construction. The wireless system design shall be based on total coverage within the building and for coverage of all courtyard and common areas adjacent to the building within the project parcel. Considerations during design include bandwidth requirements, the number of users, security, and applications to be utilized. While currently there is no Client BYOD policy in place, the system shall be designed to handle such roll-outs. Wireless controller will need to be deployed to manage RF distribution, WAP authentication, software updates, and SSIDs as a minimum. Coverage shall be calculated based on the number of users, range, and environmental conditions; however, in open spaces WAPs should be placed approximately 50' apart.

### **Telephone System**

Telephone system locations and requirements shall be developed with the client to ensure compatibility with other solutions utilized within existing County buildings. While design and procurement shall be by the County, the design builder should be aware that installation and connectivity to other sites will be via IP to allow for utilization of the Wide Area Network for calls. Installation of such connections shall be required prior to handover for system testing. The functionality of the system shall include voice mail and messaging, call logging, call center functionality, enhanced 911 capabilities, and other standard features within a modern telephone switch such as call routing. Building installation and coverage requirements of the telephone system shall be confirmed during the design phase with the client, including any additional wireless requirements.

### **Radio System**

Each building, including the parking structure will be installed with a Public Safety Network DAS as needed to conform to Local Building Code requirements. This system may need to be compatible with several local agencies including City of Downey and LA County Fire Departments. While the system will be primarily for the use of the Local Fire Department, other law enforcement entities (e.g. Sheriff's Department, etc.) may also require connection, which should be confirmed during design.

Connectivity to the CWIRS is required by L.A. County. CWIRS EOS operations require redundant links to the CWIRS cores at EAV and Fire Command Control Facility (FCCF). Link requirements to be confirmed during design discussions with ISD Radio Engineering Section (RES). Coverage and transceiver requirements shall be designed according to the County standards, with separate roof conduit connections being installed as needed.

'Walkie-Talkie' solutions shall be based on existing County standards and be supported via the design builder provided, Distributed Antenna System (DAS). External areas of the parcel shall also be covered via this system if required. The DAS solution installed shall also support other services such as cellular and paging over a common infrastructure

### **Master Clock System**

A master clock system shall be installed within the building; this system shall include connectivity to a roof antenna. Master clocks shall be connected to an NTP server located within the main distributer room.

### **Overhead Public-Address System**

An overhead paging solution shall be designed and installed, covering the whole building and the courtyard areas. The system shall be designed so it can be integrated with the telephone/VOIP system. The paging system shall be configurable to cover several levels of coverage from zonal to site wide. Zones of paging shall be developed according to the floor plate layout. Minimally, zones shall include, department, floors, all call, dining room and shared campus spaces.

Overhead paging shall utilize speakers that are zoned per department or area. All speakers are to be tied into an amplifier and overhead paging headend located in the telecommunications closet.

- 1. Paging system shall tie into telephone system.
- 2. Paging system shall be separate from the life safety paging requirements.
- 3. Paging System shall utilize the IP network for distribution throughout facility.
- 4. Paging speakers within zones to be laid out to provide +/- 6db of coverage.
- 5. Paging system shall be capable of simultaneous paging to separate zones from separate telephone inputs, with all call override.

### **Television System**

Connectivity to a Master Antenna System for Television signal shall be required within the building. This system shall be fed from either the local cable provider or a broadcast satellite. The head end shall allow for streamed content to be selected on a channel by channel basis alongside County provided channels. The distribution system shall be run through the building via the Telecommunications Distributor rooms. The television solution can be IP and category cable based, utilizing an IPTV server and a channel encoder. This will allow for distribution for normal TV endpoints, as well as PC's or other non-traditional end points.

### **Emergency Telephone System**

Emergency Telephone system requirements shall be developed with the County to ensure compatibility with the County provided, main telephone system. The functionality of the system shall include call logging, duress notification, enhanced 911 capabilities, and other standard features within a modern telephone switch such as call routing. Units shall be highly visible and colored to stand out from local decoration. Units shall have video cameras built in for remote monitoring and strobe capabilities to confirm activation. Parking and external area coverage requirements of the telephone system shall be confirmed during the design phase with the County. It shall be assumed that Emergency telephones shall be in elevator and stair lobbies of the parking structure, as well as in larger public spaces like courtyards. Up to 2 additional units per floor shall be located at strategic positions within the parking structure as required.

Internally within the building, emergency telephones shall be located within points of refuge. Such devices shall be mounted in compliance with ADA height requirements. Devices shall be mounted to avoid possible accidental activation where possible.

# O. AUDIOVISUAL

### **Codes and Standards**

The audiovisual system and all related connections shall be designed to conform, as a minimum, to the following codes and standards:

- 1. Local Electrical Code
- 2. National Fire Protection Association
  - a. NFPA 70 National Electrical Code current and applicable sections (including but Not Limited To):
    - i. Article 250 grounding
    - ii. Article 800 Communications Circuits
- 3. Underwriters laboratories, Inc.
  - a. UL Listed
  - b. UL Approved
- 4. Buildings Officials and Code Administrators (BOCA) International, Inc.
  - a. International Building Code 2012
- 5. InfoComm International Standards
  - a. ANSI/INFOCOMM 1M-2009 Audio Coverage Uniformity in Enclosed Listener Areas
  - b. ANSI/INFOCOMM 3M-2011 Projected Image System Contrast Ratio
  - c. ANSI/INFOCOMM 10-2013 Audiovisual System Performance Verification
  - d. ANSI/INFOCOMM V202.01:2016 Display Image Size Content in Audio Visual Systems
- 6. Building Industry Consulting services International (BICSI) Telecommunications Distribution Methods Manual (TDMM) Current Edition.
- 7. FCC Part 15 Federal Communications Commission document relating to allowable radiated emissions.
- 8. ISO 9000 Manufacturing Quality Control Standard (Certification).
- 9. Institute of Electrical and Electronic Engineers (IEEE) 802.3 and 802.11 standards.
- 10. County ISD Commercial Building Telecommunications Standard document (902).

# **General Requirements**

Minimum AV Infrastructure shall be installed in all audiovisual spaces, including those not identified on the summary below. This will minimize the impact of future AV installations. AV infrastructure includes the following:

- 1. Wall boxes for input panels and wall mounted equipment
- 2. Floor boxes for movable tables and core drills for fixed tables
- 3. Power / data connectivity
- 4. Empty conduit and pull string at all boxes
- 5. Other infrastructure as required for special applications
- 6. Functional and Performance Requirements:
  - a. Display System
    - i. For all wall-mounted applications of flat panel display system, the wall shall be able to structurally support five times (5x) the total weight of the display system.
  - b. Display Sizing Criteria:
    - i. Displays shall be sized according to requirements set out in ANSI/INFOCOMM V202.01:2016
       Display Image Size Content in Audio Visual Systems standard. Refer to the Principal
       Telecommunication Work section for more information on the Internet of Things (IOT)
       considerations for the facility.

#### 7. Estimate electrical load

- a. Power receptacles intended for audiovisual equipment within a space shall be on the same circuit.
- b. For the larger spaces being designed, confirm that a 20-amp circuit will be sufficient for all a/v equipment in each space; each area in a divisible room shall be considered as a separate space.
- c. (1) 20a circuit dedicated for AV rack.
- d. (1) 20a circuit dedicated for projector.
- e. (1) 20a circuit dedicated for all flat panel display and power outlets to portable sources.

#### 8. Estimated HVAC load

- a. Heat load output from projectors and flat panel display systems within rooms is estimated at 1,500 btu/hr for projectors and 500 btu/hr for flat panel displays.
- 9. Recommended lighting criteria for support of AV program requirements:
  - a. The lighting system shall provide a visually comfortable, quality illuminated environment for all occupants. The lighting options shall be developed to control surface brightness and minimize glare for the occupants and on the screens. It is critical that vertical illumination is provided on the wall surfaces within the space. Such illumination of the walls creates the backdrop for the camera's view. The lighting system shall provide a consistent level of illumination and color of light throughout the

- space. The sources of illumination shall all provide a consistent color temperature of 3500k. This is a "neutral" source which does not strongly favor the blue or red wavelengths of the color spectrum; it is complimentary for skin tones as well as multiple variations of finishes. The minimum color rendering index for all light sources within the space should be 85.
- b. The lighting system shall provide flexibility for the various events and AV requirements that occur within each individual space. Multi-scene, preset dimming systems shall support the flexibility of creating various illuminated environments which support the various functions within the room. Designation of multiple control zones shall further enhance the flexibility and performance of the AV environment. For example, the lighting fixtures which are located adjacent to screens or monitors shall be in a separate dimming zone. The preset dimming controls shall interface with the AV controls to streamline the operation of the room. All scene select stations shall be labeled to ease the understanding of the various scenes for the occupants.
- 10. The following levels of illumination are recommended:

Dedicated Video Conference Rooms		
Table	60fc horizontal	
	30-35fc vertical at the face	
Front (monitor) wall	Less than 20fc	
Rear and Side Walls	20-35fc (Vertical Illumincation)	
Multi-purpose rooms - Video Conferencing		
Uniform distribution of lighting throughout the room with multiple		
control zones for maximum flexibility. Horizontal levels of illumination at		
30" aff should range between 50-60fc.		

The guidelines above are only baseline criteria based on the audiovisual functionality of the room. Lighting fixture types, quantities, exact locations and zoning shall be as specified during the design build phase.

- 11. Room finishes for video conferencing:
  - a. Surfaces viewed by the camera shall be lighted and colored to produce a pleasing picture, suitable for video conferencing. This is with regard to the video compression processing and need to avoid distractions to remote site conference participants. Video conference room guidelines shall be followed.
  - b. The following guidelines shall be followed during design:
    - i. There shall not be excessive contrast between wall and furniture colors; blue/gray matte colors are ideal.
    - ii. Busy patterns, weaves, and wood grains, along with Reflective hardware, such as chrome chairs, door hardware or wall plates, are not recommended.
    - iii. The tabletop should have a non-reflective, neutral colored finish.
    - iv. Paintings with glass covers should be avoided.
    - v. Windows shall be avoided if possible; otherwise they shall be treated with appropriate light blackout shading.

#### 12. Noise criteria for audiovisual rooms:

a. Noise with all video conferencing rooms as well as spaces with distance learning requirements shall be minimized to increase clarity of conversation between locations. All walls, ceilings, and floors shall be provided with acoustical treatment to absorb unwanted noises and minimize sound reflection. In addition, the room must pass the following requirements:

Wall Treatment	nrc 75
Sound transmission	stc 55
Noise Criteria	nc 30 or less

#### 13. Shade System

- a. A light blocking shade system shall be provided where windows are installed within an AV space. A motorized shade system with multiple station controls is required.
- b. Any drapery fabric(s) shall be heavy weight (20 oz. per sq.yard or heavier) for sound absorption and to block the outside light.

#### 14. User Experience

a. User Interface Control Panel shall be installed in all rooms indicated. This Control panel shall allow direct control of all AV systems within the room including but not limited to Screens, PC's projectors, Shades and privacy glass.

#### 15. Rack Equipment

a. All audio equipment to be housed in equipment rack is to be rack-mountable and provided with mounting brackets as needed to accommodate EIA 19" standards.

#### 16. Centralized Room Scheduling

- a. Room scheduling to be centralized utilizing a central server and integrated with County active directory services. System shall be able to provide analytics to determine the use of conference rooms.
- b. Room scheduling unit to be fixed to the external wall of each room. Panel shall display current centrally stored bookings and be capable of local room reservation and over site.

#### 17. Infrastructure versus Equipment

- a. Though the actual amount of purchased equipment for initial installation may change, the intent is to provide complete infrastructure planning for eventual fit out. If proper infrastructure provisions have been made, equipment can be added later as requirements change, without jeopardizing the integrity of the overall audiovisual systems design.
- b. Infrastructure can be thought of as part of the overall building design. Audiovisual infrastructure refers to the necessary base building provisions such as operable walls, power outlets, conduit, junction boxes, projection screens, shades, projector mounting support, etc., needed to make a room audio visually functional. It must be planned and included for initial occupancy, whether the audiovisual equipment is purchased or not.

- c. Equipment refers to audio-visual devices which have specific costs and capabilities associated with them. Equipment can be thought of as furniture; various choices can be made about its quality and quantity. Equipment noted in this AV Narrative and on Room Data Sheets is to be provided by the design builder.
- d. It is important that equipment and infrastructure are planned simultaneously.

#### 18. Dedicated, Portable and Future Provision

- a. The recommendations for equipment are presented on a system-by-system basis.
- b. Equipment is referred to as having one of the following installation statuses: dedicated, portable, or future provisions.
- c. Dedicated: indicates that the equipment will likely be used frequently and is permanently dedicated or installed in a specific room.
- d. Portable: indicates that the equipment is needed less frequently, can be shared with other meeting rooms, and can be stored in a central Equipment pool. "Portable" equipment may also be located and specified in a specific room, but would be available for use in other areas of the building.
- e. Future Provisions: indicates that the capability may not be required initially, but infrastructure and systems design provisions shall be made to accommodate equipment at some time in the future.

#### 19. Internet Protocol Television (IPTV)

a. IPTV is to be utilized to distribute the audiovisual signal to all spaces for cable networks and digital signage content utilizing the telecommunications network.

# **Audiovisual Spaces and Configuration**

Equipment standards are outlined within the specifications, and additional information has been provided in the room data sheets. Where no County or specific requirements are identified, equipment shall be selected to meet Infocomm/ANSI standards for performance. If there are conflicting requirements in the documents, the most stringent requirements shall apply.

### 2.1 Small Meeting Rooms

Rooms for meetings with 4-6 people shall include the following:

- 1. Interactive Touch/Pen display for collaboration
- 2. Tabletop input device
- 3. Dedicated VTC system
- 4. Bring your own device
- 5. Voice Activation
- 6. Control Button Panel

- 7. Room Scheduler
- 8. Table Microphone
- 9. PC with built in Blu-ray player

### 2.2 Medium Meeting Rooms

Rooms for meetings with 8-10 people shall include the following:

- 1. Presentation display, with size based on room size.
- 2. Tabletop input devices
- 3. Dedicated VTC system
- 4. Bring your own device
- 5. Voice Activation
- 6. Control Button Panel
- 7. Room Scheduler
- 8. Tabletop Microphone
- 9. Sound Reinforcement Speakers
- 10. PC with built in Blu-ray player

### 2.3 Large Meeting Rooms

Rooms for meetings with 12-16 people shall include the following:

- 1. Presentation displays, with size based on room size. Additional displays as need for ease of content visibility.
- 2. Tabletop input devices
- 3. Overhead microphone array
- 4. Dedicated VTC system
- 5. Bring your own device
- 6. Voice Activation
- 7. Control button panel
- 8. Room Scheduler
- 9. Tabletop Microphone
- 10. Sound Reinforcement Speakers

- 11. IPTV
- 12. PC with built in Blu-ray player

### 2.4 - XL Meeting Rooms

Rooms for meetings with 16-25 people shall include the following:

- 1. Presentation displays, with size based on room size. Additional displays as need for ease of content visibility.
- 2. Main image screen sized for total room depth.
- 3. Tabletop input devices
- 4. Overhead microphone array
- 5. Dedicated VTC system
- 6. Bring your own device
- 7. Voice Activation
- 8. Control Button Panel
- 9. Room Scheduler
- 10. Zoned Tunable Ceiling Microphone
- 11. Sound Reinforcement Speakers
- 12. Podium
- 13. Document Camera
- 14. Confidence Monitoring
- 15. Ceiling Camera
- 16. IPTV
- 17. PC with built in Blu-ray player

### 2.5 Auditorium / XXL Meeting Space

A room with a large audience (greater than 50 people) shall include the following:

- 1. Manual Dual Image Displays sized for total depth and layout. Additional displays as needed for ease of content visibility.
- 2. Dedicated VTC system
- 3. Bring your own device

- 4. Overhead microphone array
- 5. Control Button Panel
- 6. Room Scheduler
- 7. Sound Reinforcement Microphone/Speakers
- 8. Podium
- 9. Document Camera
- 10. Confidence Monitoring
- 11. Ceiling Camera
- 12. PC with built in Blu-ray player

### 2.6 Collaboration Spaces

Spaces for meetings with 2-4 people shall include the following:

- 1. Presentation display with size based on size of space.
- 2. Tabletop input device
- 3. Dedicated VTC system

### **1.1 & 1.2 - Office Types**

Office types 1.1 and 1.2, shall include the following:

- 1. Presentation Display with size based on room size.
- 2. Tabletop input device
- 3. Dedicated VTC system
- 4. Voice Activation
- 5. Control Button Panel
- 6. Table Microphone
- 7. IPTV

### 3.4 - Entry Lobby Area

Open area(s) for public signage and company information shall include the following:

- 1. Multi-Screen, Flat Panel Display per Room Data Sheets
- 2. Digital Signage

### 3.12 - Dining Room; 3.15 - Pantries; and 4.5 - Custodial Assembly Lunch Room

Spaces used for dining and staff breaks shall include the following:

- 1. Wall or ceiling mounted displays
- 2. IPTV feed and playback device

# 4.1 Network Operations Center; 4.8 Department Emergency Operations Center; & 4.9 Disaster Operations Center

Command centers utilized for operations shall each include the following:

- 1. Multiple Displays
- 2. Integrated Control System
- 3. Sound reinforcement Microphone/Speakers
- 4. Full control and routing of all sources to any display or breakout room associated with the Operations center

#### 4.3 - Computer Repair Room & 4.12 Lab Testing Room

Spaces utilized for IT support shall include the following:

- 1. Monitor for testing computers
- 2. Multiple bench input devices
- 3. Bring your own device

#### 4.4 - Computer Training Room & 4.13 - ITS Innovation / Display Space

A space utilized for user training shall include the following:

- 1. Multiple Displays
- 2. Dedicated VTC system
- 3. Control button panel
- 4. Room Scheduler

- 5. Sound Reinforcement Microphone/Speakers
- 6. Podium
- 7. Document Camera
- 8. Ceiling Camera

### 4.10 - Gym / Fitness Center

A space utilized for exercise shall include the following:

- 1. Wall or ceiling mounted displays
- 2. IPTV feed and playback device
- 3. Wall mounted high powered loud speakers
- 4. Streaming music device with bluetooth input
- 5. Wall mounted source / volume control

### 4.11 - Help Desk / Enterprise Command Center

A command center utilized for operations shall include the following:

- 1. Multiple Displays
- 2. Integrated Control System
- 3. Sound reinforcement Microphone/Speakers

### P. VERTICAL TRANSPORTATION

# **Vertical Transportation Analysis**

The purpose of this report is to establish vertical transportation for a multi-floored office facility and parking garage with a density of 1.2 persons per parking stall.

Building or garage Core locations shall be kept within a 200-foot walking distance from the furthest space or parking stall. General rule is one elevator for every 50,000 gross square feet of space plus a minimum of one service or swing elevator.

Several vertical transportation schemes should be studied along with several different building occupancy accessibility routes with relationship to elevators.

### **Criteria and Analysis**

Experience with projects of similar nature and industry standards have established criteria in which to judge the quality and quantity of service provided during a peak five-minute period of time or other peak period of time. The primary goal is to move people efficiently based on established venue of property.

There are instances where the vertical transportation for special applications is outside the norm of industry standards, and judgment on the part of the Design Build team must be taken into consideration as to what approach to take, what might be an acceptable handling capacity during peak periods, and how long one should have to wait for an elevator for service. It becomes a team effort in deciding on what feels right, how that compares to industry standards, and what is tolerable by the user. Criteria, analysis, and recommendations follow.

## **Public Passenger Elevators**

Passenger Elevator Criteria:

1. Average Interval: 30 Seconds or Less

2. Estimated Demand: 12% of Population in Five Minutes

3. Peak Traffic Condition: AM / UP Peak

4. Population Density sf/person: Per program

5. Occupancy: 110%

### **Staff Passenger Elevators**

Passenger Elevator Criteria:

1. Average Interval: 40 Seconds or Less

2. Estimated Demand: 12% of Population in Five Minutes

3. Peak Traffic Condition: AM / UP Peak

4. Population Density sf/person: Per program

5. Occupancy: 110%

6. Unequal attraction: 15% inter floor traffic

### **Parking Passenger**

Parking Passenger Elevator Criteria:

1. Average Interval: 60 Seconds or Less

2. Estimated Demand: 10% of Population in Five Minutes

3. Peak Traffic Condition: AM / UP Peak

4. Population Density sf/person: 1.2 passengers per parking stall

5. Occupancy: 110%

Other Factors to Consider:

1. Hydraulic elevators vs. Traction elevators

- a. Hydraulic elevators are designed for low-rise and low-use applications. They are ideal for almost any type of two-story building including offices, laboratories, hospitals, museums, parking structures, hotels, etc. It is when the building is three stories or more that a closer look at the type of elevator must be considered. With the advent of the EPA and economic restraints, it is recommended hydraulic elevators be of the hole less twin post or out of ground application when hydraulic elevators are appropriate to use.
- 2. Overhead Traction vs. Machine Room-Less (MRL) Traction Elevators
  - a. Established for mid-rise applications, Machine Room-Less traction elevators utilize a gearless Permanent Magnetic Motor (PMM) and machine that is located within the top of the hoistway on an independent set of structural beams for mounting; thereby, eliminating the need for an overhead elevator equipment room. Most systems on the market today require a room or closet for the controllers and drive units. Some offer the ability for this space to be remote from the hoistway. Newer technology has also allowed the MRL product to be available for a low-rise application. It is self-supporting from the elevator guide rails and relieves the structural requirements associated with higher rise MRL applications. MRL units are now available from all manufacturers. Not all duties are carried by all manufacturers, and not all manufacturers provide the same performance requirements for

all applications, which may limit competition depending on the application. Additionally, the hoistway configuration and machine location for the various manufacturers of MRL type elevators vary widely and it can be difficult to design a generic sized hoistway that will accommodate all manufacturers.

#### 3. Dedicated vs. Swing Service Elevators

a. Industry standard criteria dictates a dedicated service elevator when the total building area approaches 350,000 GSF for office buildings or when specific tenant needs warrant such for buildings having less than 350,000 GSF. Most buildings having less than 350,000 GSF can satisfactorily operate with a part time service elevator (swing car) that provides passenger service as its primary duty and service needs during off passenger peak periods. Unless there is a specific requirement for a dedicated service elevator, buildings less than 350,000 GSF shall be provided with a swing passenger/service elevator. Rear doors at all floors for the swing car be utilized opening into service vestibules to keep freight activities out of the passenger lobbies. This arrangement also maximizes the amount of time the elevator is used for passenger needs as the swing car can swing in and out of the service mode automatically from the rear hall button riser. For most applications, a 4500# or 5000# duty with a 4'-6" door opening is ideal.

#### 4. Stretcher Elevator

a. The California Building Code requires that one elevator serving all floors can handle an emergency stretcher that is 24" wide by 84" long in a horizontal position. The minimum size elevator that can accommodate this stretcher is a 3500-pound capacity passenger shaped elevator utilizing a 3'-6" side opening door. Other configurations that can also accommodate this stretcher are the 4000-pound capacity passenger elevator with a 4'-0" center opening door or 4500-pound capacity service shaped elevator with a 4'-0" side opening door.

#### 5. Acoustical Considerations

a. Elevator equipment sound control measures are limited to approximately 85 db in machine rooms, 55 db in elevator cars and 50 db in elevator lobbies. The design team must take precautionary measures when considering location of elevator hoistways and machine rooms in relation to sensitive occupied spaces. Buffer zones such as storage rooms, toilet rooms, corridors and stairways between elevator spaces and noise sensitive occupancies as well as sound deadening of hoistway enclosures should be considered. The Design-Builder's acoustical consultant shall review noise and vibration issues associated with all elevators and equipment.

# Q. ACOUSTICS

The ISD and Probation headquarters building will play an important role in providing appropriate acoustic environments for the staff using the facility. As such, special attention will need to be paid to the acoustic environments inside and outside the new building. Work included in this section to address acoustics includes: exterior noise, interior background noise levels, sound isolation, room acoustics, open office acoustics, footfall noise impact, vibration levels, and building systems noise and vibration control.

The design build team shall retain the services of a qualified acoustical consultant to provide professional acoustical consulting design services for the project. The qualified acoustical consultant shall be an independent acoustical consulting firm that is a member of the National Council of Acoustical Consultants.

The acoustical design input resulting from the collaboration of the design build team shall be incorporated into the design-build construction documents such that the design meets or exceeds the acoustical requirements below. The acoustical design criteria provided below shall be considered minimum requirements. The design-build team shall submit an acoustical report prior to the start of construction, and one at the end of construction showing compliance with the acoustical criteria.

### **Exterior Noise**

The design build team's acoustical consultant shall ensure that the exterior facade of the new building provides sufficient sound isolation to meet the acoustical requirements of the California Green Building code. The consultant shall perform environmental noise surveys, as needed, to ensure compliance with the acoustical requirements of the building code.

In addition, the design build team's acoustical consultant shall perform necessary acoustical analysis and provide noise and vibration control recommendations as needed to ensure that all noise producing systems (mechanical, electrical, plumbing equipment, emergency generators, etc.) associated with the building(s), and parking structure comply with the daytime and nighttime limits of the City noise ordinance at all adjacent property lines.

Outdoor noise intrusion, due to outdoor noise producing equipment and systems associated with the new building(s) and parking structure, shall be analyzed to ensure the outdoor noise levels combined with the indoor generated noise complies with the maximum allowable background noise levels inside the building(s). Provide noise and vibration control on all equipment and parking structure noise producing systems as needed to achieve the indoor background noise level criteria.

Noise generated from equipment associated with the new parking structure should not interfere with activities within existing buildings Provide noise control for all equipment associated with the parking structure to limit exterior noise to 70 dBA or less at the façade of existing buildings.

### **Exterior Sound Isolation**

The design build team's acoustical consultant shall ensure that the exterior facade of the new building provides sufficient sound isolation to meet the acoustical requirements of the California Green Building code. The consultant shall perform environmental noise surveys and provide noise control recommendations, as needed, to ensure compliance with the building code.

### **Interior Sound Isolation**

Demising constructions play an important sound isolation role in limiting distractions and interruptions, and in some cases, maintaining confidential speech privacy between spaces. Partitions and floor/ceiling assemblies shall provide sufficient sound isolation to yield distraction free environments, and where needed, confidential speech privacy.

Sound isolation performance for airborne noise is expressed in terms of Sound Transmission Class (STC) rating. The STC rating expresses the sound isolation performance of an assembly under ideal laboratory conditions in accordance to ASTM E90 – Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

Demising partitions (excluding doors) and floor/ceiling constructions separating spaces (as outlined below) shall be designed to achieve the minimum STC ratings listed in the Room Datasheets. Since specific adjacencies are not known at this time, the more stringent STC value for a given room shall be used when STC values differ between two room adjacencies. For example, for an office and conference room adjacency, if the office requires STC 45 performance and the conference room STC 50, the STC 50 value shall be used. This logic carries throughout the project. Partitions with ratings of STC 45 or higher shall be full height partitions – gypsum board and metal studs extending slab to slab. Stud gauge and spacing shall be taken into consideration when selecting partitions. The use of heavier gauge studs will reduce the sound isolation performance of the wall assembly. Provide necessary partition construction (additional layers, resilient clips, staggered studs, etc.) based on the stud type/gauge and stud spacing used on the project to achieve the required sound isolation performance. The measured Noise Isolation Class (NIC) shall not be more than 5 decibels below the STC rating of the specified demising construction.

Floor/ceiling assemblies between floor shall provide STC 55 minimum sound isolation performance.

Partitions enclosing equipment rooms (mechanical, electrical, elevator machine rooms, etc.) with noise producing equipment in them shall provide STC 60 minimum sound isolation performance, unless it can be shown that the equipment noise levels and proposed sound isolating construction will be sufficient to achieve the NC Criterion in the receiving room when considering all interior and exterior noise that may impact the receiving room.

Penetrations (duct, pipe, conduit, outlet boxes, etc.), recessed elements and other elements such as HVAC return openings in acoustic partitions shall not compromise the sound isolation properties of the partition or floor/ceiling assembly. Provide sound attenuation as needed to maintain the sound isolation performance of the demising construction. The measured Noise Isolation Class (NIC) value of the installed assembly (excluding doors) shall not be more than 5 decibels below the STC rating of the demising partition. Partitions with doors in them will be limited by the sound isolation performance of the door, which will range between STC 20-22 for sliding glass doors and STC 25-30 for gasketed framed swing doors. Thus, partitions with doors in them would typically yield NIC 20 to 30 sound isolation performance.

Doors and vision windows between adjacent sound sensitive spaces (such as meeting room to meeting room or private office to private office) shall be avoided, otherwise STC rated sound control doors and windows equal to the STC ratings listed in the room datasheets will be required to maintain sound isolation performance.

Vision windows in doors or next to doors of office fronts of occupied enclosed rooms, such as private offices and meeting rooms, shall consist of ½-inch thick minimum glass, unless a higher rating is indicated on the room datasheets.

Avoid the use of sliding glass doors on the entry wall of noise sensitive rooms, such as offices, as they provide poor sound isolation performance. Where this cannot be avoided due to space constraints, provide electronic sound

masking inside and outside of all rooms (except AV enabled rooms) equipped with sliding glass doors. AV-enabled rooms shall not be equipped with sound masking as the sound masking would interfere with the AV systems.

Sheet metal boots shall be provided on top of return air grilles wherever ceiling plenum electronic sound masking systems are used. This is necessary to prevent hot spots in the occupied spaces below.

Entrance doors into all AV enabled rooms shall be framed doors equipped with adjustable, full perimeter (head, jamb, meeting stile and door bottom) acoustical door gaskets to provide STC 30 sound isolation performance.

Monolithic glass wall, vision lite or door construction shall not be used where confidential speech privacy is required, unless electronic sound masking (set to a level of 45-48 dB(A)) is used outside the room requiring confidential speech privacy.

Doors at mechanical, electrical (equipped with transformers) and hydraulic elevator machine rooms shall be equipped with adjustable, full perimeter acoustical door gaskets when they are within 30-ft of a room with an NC 35 or lower background noise level criterion. The door leaf shall either be 1-3/4-inch solid core wood or damped hollow metal. STC 30 sound isolation performance shall be achieved with fully adjustable, heavy duty door gaskets at the head, jamb and door bottom. A gasketed threshold shall also be used at the door bottom.

Partitions with STC 45 or higher sound isolation performance shall be full height with wall heads sealed airtight with acoustical material to maintain the sound isolation performance of demising the assembly.

Duct, pipe and conduit penetrations through floor assemblies shall be sealed airtight.

End of wall partitions shall seal against exterior window mullions, not the glass. Plan and/or jog the walls as needed to provide closure at the window mullions. Wall construction connections at exterior window mullions shall be sealed airtight with continuous closed cell neoprene foam and acoustical sealant on both sides of the partition. Window mullions intersecting partitions with STC 50 or higher sound isolation performance shall be equipped with an appropriate acoustical solution to ensure that specified demising wall sound isolation performance is not compromised.

The transfer of return air in ceiling plenums shall not compromise the sound isolation performance of the demising walls between occupied rooms. Provide lined "U-shaped" sheet metal transfer ducts only in walls common with hallways. Do not transfer air across occupied rooms.

Electrical junction boxes or recessed back boxes on opposite sides of the same demising partition should be separated by a minimum of 24-inches and one stud row. When this condition cannot be satisfied, the junction boxes or back boxes serving each side of the wall shall be covered on their back and sides with fire stop moldable putty pads. The perimeter of the boxes shall also be caulked airtight to the gypsum board with acoustical sealant.

Keep plumbing chases and toilets off partitions demising other occupied noise sensitive spaces, such as conference rooms, private offices, etc. If this adjacency cannot be avoided, provide a demising wall assembly that yields plumbing noise at least 5 decibels below the background noise levels for the occupied room.

### **Room Acoustics**

Reverberation is the persistence of sound within an enclosed space and is related to the room volume, geometry and the quantity of sound absorptive surfaces within a room. Reverberation time (RT60) is expressed in seconds. It is important to have a reverberation time below 1.0-second in spaces where intelligible speech communication is important.

Spaces shall be designed so that their unoccupied reverberation time (RT60) values in the 500, 1,000 and 2,000 hertz octave bands do not exceed the maximum values listed in Table 1 below. The table also provides general recommendations for achieving the RT60 values.

Table 1 - ISD and Probation Building Reverberation Time Criterion and Acoustical Surface				
Sound Absorptive Surface Finish				
Room Type	RT60 (sec)	Ceiling	Floor	Walls
Private Offices, Meeting Rooms (Non-AV Enabled), Interview Rooms, Touchdown Rooms, Live Scan/Employee Badging Area, Wellness Room/Health Room and Computer Training Room.	0.80	1	2	N/A
Meeting Rooms (AV enabled)	0.60	1	2	3
Open Office Areas, ITS Innovation/Display Space, ITS Help Desk/Enterprise Command Center/War Room, Department Emergency Operations Center, BEAS, & EEMIS Network Operations	1.0	1*	2	3*
Auditorium	1.0 or less	1	2	3
Reception and Waiting Area, Open Collaboration Spaces, Copy Area/Local Print Station, Pantry, Food Service Program, Mail Room, Central Reprographics, Custodial Assembly Lunch Room, Fitness Center, A&I Library/Plan Archive/Local Plotter Area, and PCS Surplus Vault.	1.25	1	N/A	N/A

Table 1 (Cont.)	
NOTES	
1	Sound absorptive, NRC 0.70 minimum
1*	Sound absorptive ceiling, NRC 0.90 minimum
2	Carpet for sound absorption and impact noise reduction
3	Sound absorptive wall panels (NRC 0.80 min.) as needed to achieve reverberation time criterion, to avoid flutter echo and provide a neutral room acoustic. Coverage required should be determined by design build team's acoustical consultant.
3*	Incorporate sound absorptive wall panels (NRC 0.65 min.) on available vertical wall surfaces to reduce reflections and improve speech privacy between open office workstations.
N/A	Sound absorptive finish not required.

# **Open Office Acoustic Design Guidelines**

Speech privacy and limiting distractions from adjacent open office workstations is important for employee satisfaction and productivity. The acoustical design guidelines outlined below are intended to maximize speech privacy as much as possible between adjacent open office workstations. Incorporating all the recommendations is essential in shrinking the "radius of distraction" between workstations so that as few workers as possible are distracted in the open office workplace.

Note that "confidential speech privacy" cannot be obtained between workstations in an open office environment. Workers requiring confidential speech privacy use an appropriately designed private office.

### Office Layout/Space Planning

- 1. Create separate zones for workers that require focus and concentration, and those that require collaboration. Locate incompatible groups/departments far apart from one another.
- 2. Workstations should be separated as much as possible from one another. Ideally, workers should be separated by at least 8ft.
- 3. Orient workers so that they do not face each other. Directivity of the voice provides significant and free attenuation when not directly facing others.
- 4. Provide enough focus/huddle/telephone rooms where workers can collaborate or take private phone calls without distracting other workers.
- 5. Carefully locate support activities, such as copy rooms, printer stations, etc. in separate enclosed areas away from neighboring workstations.

### **Sound Absorptive Treatments**

1. The floor should be carpeted to prevent sound reflections off the floor surface, but also to minimize footfall noise intrusion to adjacent spaces on the same floor and to the floor below.

- 2. The ceiling above the open office areas should be highly sound absorptive. Select acoustical ceiling tile with a minimum noise reduction coefficient (NRC) rating of 0.90.
- 3. Incorporate sound absorption (NRC 0.65) on available wall surfaces to increase distance attenuation and limit sound reflections from workstation to workstation.

### **Systems Furniture Selection**

- 1. Low systems furniture partitions (typically less than 44-inches tall) allow access to daylight and views while allowing coworkers to be aware of other nearby workers. Note that this approach to open office acoustics relies on workers using reduced vocal effort as they can see their coworkers. This approach typically requires a change in workplace etiquette and possibly culture if workers are coming from cubicles with tall systems furniture panels or private offices.
- 2. Office furniture partitions taller than 42-inches should be equipped with an impermeable septum of Masonite, sheet metal or other sound blocking material to prevent sound from going through the partition. The partition should have a minimum sound transmission class (STC) rating of STC 20.
- 3. Systems furniture partition panels should have a minimum noise reduction coefficient (NRC) rating of 0.65.
- 4. Storage compartments, file bins, etc. integral to systems furniture often reduces the sound absorptive properties of the furniture and thus should be avoided or minimized.

### **Background Noise Levels**

- 1. Obtaining speech privacy between open office workstations is determined primarily by the amount to which the intruding speech from adjacent offices exceed the ambient sound levels at the listener's ears. Precise control of the background noise levels is one essential component for achieving speech privacy between workstations. The appropriate level of background noise makes it more difficult to hear speech from adjacent workstations. The background noise levels inside an open office and circulation spaces should be NC 40 to NC 45. This noise is sometimes provided by the HVAC system serving the open office area, but the HVAC system rarely provides uniform coverage throughout the open plan office floor area, resulting in quiet areas where speech privacy is significantly degraded. As such, the design build team shall provide electronic sound masking to serve the open office and surrounding circulation areas to artificially raise the background noise levels. This is the only way to ensure uniform sound masking coverage across the entire open office floor plan.
- 2. The electronic sound masking system should provide unobtrusive sound levels of 45 to 48 dBA in the open office/circulation areas with spatial uniformity throughout the coverage area of +/- 1 decibel. The sound masking system should be properly designed, installed and adjusted to be effective.
- 3. Sound masking shall also be provided in all areas identified in the room data sheets.

### **Footfall Noise Impact**

Impact noise intrusion (due to footfall noise, moving chairs or tables) due to hard floor finishes has the potential to cause disruption and annoyance in rooms, particularly in noise sensitive rooms, such as AV enabled rooms. Impact Isolation Class (IIC) measures the ability of a floor/ceiling assembly to resist the transmission of structure-borne or

impact noise. Floor/ceiling assemblies, above the conference room (multipurpose), shall provide a minimum Impact Isolation Class (IIC) of 50.

# **Building Systems Noise and Vibration Control**

Controlling noise and vibration from building systems will be critical in minimizing unwanted noise inside the building. Building systems are comprised of the mechanical, electrical, plumbing and vertical transportation systems. Each can transmit intrusive noise into the building unless each is properly addressed. The building systems equipment noise levels shall not exceed the values listed in Table 2.

# **Background Noise**

Table 2 – ISD and Probation Building Background Noise Level Criteria			
Room Type	Noise Criteria		
Auditorium and Meeting Rooms (AV Enabled)	NC 25		
Meeting Rooms (Non-AV Enabled), Interview Rooms, Touchdown Rooms and Computer Training Room.	NC 30		
Private Offices, Wellness Room, ITS Help Desk/Enterprise Command Center/War Room, Department Emergency Operations Center and BEAS & EEMIS Network Operations.	NC 35		
Open Office Areas, Open Collaboration Spaces, Mailroom, Central Reprographics, Copy Area/Local Print Area, Employee Badging Area/Live Scan, ITS Lab Testing Room, ITS Innovation/Display Space, A&I Library/Plan Archive/Local Plotter Area and PCS Surplus Vault.	NC 40		
Reception and Waiting Areas, Lobbies, Corridors, Pantry, Food Service Program, Custodial Assembly Lunch Room, Fitness Center, and Restrooms.	NC 45		

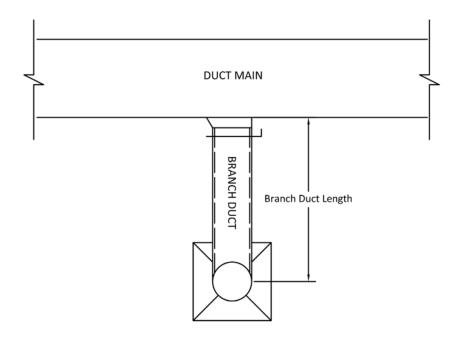
# **Airflow Velocity Guidelines**

Maximum recommended airflow velocities in ducts passing through, but not serving an occupied space based on NC criterion, ceiling type and duct shape are provided in Table 3 below.

Table 3 – Maximum In-Duct Air Flow Velocities, FPM				
Duct Main Location	NC	Rect. Duct	Circular Duct	
Inside occupied space	45	2,000	3,900	
(no ceiling)	35	1,450	2,600	
	25	950	1,700	
Above suspended	45	2,500	4,500	
acoustic ceiling	35	1,750	3,000	
	25	1,200	2,000	
Above gypsum board	45	3,500	5,000	
ceiling	35	2,500	3,500	
	25	1,700	2,500	

Maximum recommended airflow velocities in ducts serving occupied spaces are provided in Table 4 below.

Table 4 – Maximum Airflow Velocities						
	Branch Duct and At	Duct Main w/ 2-1/2-ft	Duct Main w/ 5-ft			
	Diffuser Neck	Branch Duct	Branch Duct			
Supply Side						
NC 30	500	720	1,170			
NC 35	600	880	1,200			
NC 40	700	1,020	1,200			
Return Side						
NC 30	600	1,050	1,155			
NC 35	700	1,200	1,200			
NC 40	800	1,200	1,200			



**HVAC** Acoustic Fixture

# **HVAC Acoustic Design**

- 1. Provide appropriate noise and vibration control devices for mechanical equipment and associated piping to minimize noise and vibration transmission from this equipment.
- 2. Select the quietest feasible equipment when designing the mechanical systems.
- 3. Design duct systems for good aerodynamic flow conditions to minimize turbulence and regenerated noise. Utilize low pressure drop fittings, such as 45-degree taps, on all supply and return branch duct take offs from duct mains. Use the lowest possible duct velocities consistent with the system parameters.
- 4. Air-handling units or rooftop package units should be configured for top, end or side inlet and discharge ductwork when serving or located above NC 35 or lower spaces. If bottom duct discharge configurations cannot be avoided, utilize circular ductwork, duct lagging or other noise control measures to control duct radiated noise in the spaces below. Specific noise control shall be provided by the design build team's acoustical consultant.
- 5. Select fan coil units serving rooms with an NC 35 or lower background noise level for low or medium speed operation.
- 6. VAV boxes, exhaust fans or fan coil units shall not be located inside ceilings of NC 35 or lower rooms. This equipment should be in non-noise sensitive spaces, such as corridors or storage closets, and should be located several feet from the wall of the occupied space.
- 7. Avoid crosstalk conditions by locating main ducts along corridors and branching into rooms from the corridor

to maximize duct pathway length between spaces. Branch duct shall be equipped with 3-ft of acoustical flex duct to reduce the potential for cross talk between adjacent spaces. When ducts must be run through a pair of noise sensitive rooms in which the HVAC system is serving both rooms, provide sufficient noise control (sufficient duct path length, duct liner, and/or duct silencers) to eliminate cross talk between rooms.

- 8. Diffusers and grilles (for NC 35 or lower spaces) shall not be equipped with integral volume dampers. Locate balancing dampers in supply and return ducts at least 5-ft from diffusers/grilles. Branch ducts shall be equipped with 3-ft of acoustical flex duct or 1-inch duct liner between the balancing dampers and diffusers/grilles.
- 9. Select diffusers and grilles with a published NC rating of at least 5 to 10 points below the background noise level criterion for the occupied space.
- 10. When ducted returns cannot be utilized, return air from occupied spaces shall be ducted via lined return air transfer ducts. Return air transfer ducts should be "U" shaped with a 3-ft minimum length between inside edges of the elbows and 12-inch long upturn lined elbows at each end. The transfer duct shall be located above a ceiling on both sides of the wall with the openings pointed to the slab/roof above.
- 11. Locate outdoor mechanical equipment away from adjacent property lines. Provide noise control in the form of sound walls, silencers, enclosures, mufflers, etc. to reduce outdoor equipment noise levels to the limits of the noise ordinance.
- 12. A thorough acoustical analysis shall be carried out by the design build team's acoustical consultant to determine the noise control measures (duct silencers, acoustical flex ducts, roof construction, etc.) that will be required to achieve the maximum recommended background noise levels inside occupied spaces. The analysis and recommendations shall be provided for all indoor and outdoor mechanical equipment that may impact spaces inside the building. In addition, provide a thorough analysis and noise control recommendations for outdoor equipment to ensure compliance with the daytime and night limits of the noise ordinance.

## **Vibration Isolation Design**

Mechanical equipment shall be vibration isolated in accordance with the Table 5 below. Equipment not listed below shall be vibration isolated in accordance to Chapter 48 of the latest edition of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers HVAC Applications Handbook.

Table 5 – Mechanical Equipment Vibration Isolation					
		Slab on Grade		Above Grade	
Equipment	Size	Base Type	Isolation	Base Type	Isolation
			Type [1]		Type [1]
Air-handling units (2)	All	В	4	В	4
Fan coil units	All	В	3	А	3
Axial and Inline Exhaust	<2.0 in SP	-	-	В	3
Fans, Suspended <sup>3</sup>					

Equipment	Size	Base Type	Isolation Type [1]	Base Type	Isolation Type [1]
Axial and Inline Exhaust Fans, Suspended <sup>3</sup>	>2.1 in SP	-	-	С	3
Axial and Inline Exhaust Fans, Suspended <sup>3</sup>	<2.0 in SP	-	-	В	3
Centrifugal Exhaust Fans, Floor Mounted <sup>3</sup>	<40 HP	В	4	В	4
Centrifugal Exhaust Fans, Floor Mounted <sup>3</sup>	>40 HP	С	4	С	4
Pumps, end suction/ closed coupled	All	С	4	С	4
Pumps, inline	All	А	4	А	4
Condensing units	All	А	1	А	1
Air compressors	All	С	4	С	4
Base Types:	3. For fan speeds of 500 RPM or higher. Project acoustical consultant to provide vibration isolation requirements when fan speeds are 499 RPM or less.  A. No base, isolators attached directly to equipment unless equipment manufacturer takes exception.  B. Structural steel rails or base.				
	C. Concrete inertia base.  D. Vibration isolated curb base.				
Isolation Types:	1. Neoprene pad, 60 durometer max, 0.5-inch thick min, 0.1-inch static deflection. Utilize neoprene bushings/grommets at all bolt holes.				
	2. Neoprene mounts, 60 durometer max, 0.25-inch minimum static deflection.				
	3. Spring hangers, 2-inch minimum static deflection with appropriate seismic restraint.				
	4. Spring mounts, 2-inch minimum static deflection with appropriate seismic restraint.				

- 1. HVAC piping vibration isolation: Unless otherwise specified, provide resilient support for all HVAC pipes throughout the building. No such piping shall come into rigid contact with the building.
- 2. Where piping systems are required to be vibration isolated in a certain room or for a certain distance from a piece of equipment, piping systems shall include all pipes, valves, strainers, tanks, converters, and all other connected components.
- 3. Support all piping in mechanical equipment rooms on vibration isolators sized for the same static deflection as the connected equipment vibration isolation.
- 4. Vibration isolate all piping outside of mechanical equipment rooms that is connected to and within a 50-ft distance from the equipment room walls. If the piece of equipment is supported on neoprene isolators, support pipes on neoprene mounts or hangers sized for 0.20-inch minimum static deflection. If the piece of equipment is supported on spring isolators, support pipes on spring mounts or hangers sized for 1.0-inch minimum static deflection.
- 5. Throughout the rest of the building not covered above, use 1-inch thick minimum, 10pcf density glass fiber pipe insulation with suitable bearing plates to prevent crushing of insulation. There shall be no rigid connection through the insulation between the bearing plates and supported pipes.
- 6. Provide resilient pipe anchors/guides where anchors or guides are required in horizontal and vertical piping.
- 7. Locate all major mechanical equipment on the stiffest parts of the floor or roof, such as at major column lines, above loaded bearing walls, etc. Avoid locating equipment in the middle of floor or roof spans.
- 8. Locate suspended equipment so that it can be suspended from major structural elements and not from lightweight roof deck or floor diaphragms.
- 9. HVAC ductwork, piping and electrical connections to vibrating equipment shall be made via flexible connections.
- 10. Housekeeping pads shall be located below mechanical equipment, especially when the equipment is located above grade. Reinforced housekeeping pads should be at least 6-inches thick and be designed and sized to accommodate the seismic loads that may be imparted on the equipment.
- 11. Seismic restraints shall not bind or prohibit the vibration isolators from functioning properly.

## **Plumbing Equipment Noise and Vibration Control**

- 1. Provide appropriate noise and vibration control devices for plumbing equipment and associated piping to minimize noise and vibration transmission from this equipment.
- 2. Locate plumbing equipment, such as domestic water pumps, sump pumps, sewage ejectors, pressure reducing valves, etc. as far away from sound sensitive spaces as physically possible.
- 3. Plumbing equipment and associated vertical and horizontal piping shall be vibration isolated from the building structure so that there is no perceptible plumbing vibration in the building structure. Neoprene flexible connections shall be used between plumbing pumps and associated piping.
- 4. Avoid routing plumbing piping above or immediately adjacent to rooms with a background noise level

criterion of NC 30 or lower.

- 5. Shafts for plumbing piping shall not be located on a demising wall of a NC 35 or lower sound sensitive room.
- 6. Resilient piping clamps and supports shall be provided for all plumbing piping located in walls of rooms with a background noise level criterion of NC 35 or lower. Plumbing piping shall not rigidly contact structure at any point within the wall.
- 7. All plumbing fixtures (flush valves, water closets, urinals and lavatory valves) shall be selected for quiet operation.
- 8. Plumbing fixtures located on a demising wall of a sound sensitive room will require special wall construction mostly likely double stud wall construction or if the sound sensitive room is particularly sensitive a triple layer wall construction.
- 9. Use cast iron waste and vent piping to serve or pass through acoustically sensitive areas. The piping shall be the no-hub type with neoprene gaskets.
- 10. Limit water velocity to 5 fps in hot water pipes, and 6 fps in cold water pipes.
- 11. Seismic restraints shall not bind or prohibit the vibration isolators from functioning properly.

### **Electrical Equipment Noise and Vibration Control**

- 1. Provide appropriate noise and vibration control devices for electrical equipment and electrical connections to minimize noise and vibration transmission from this equipment.
- 2. Floor mounted transformers shall be vibration isolated either on seismically restrained neoprene mounts or neoprene pads and bushings through bolt holes. Connections made to the transformers shall be made via grossly slack flexible conduit connections.
- 3. Avoid wall mounted transformers on all but heavy concrete walls. Wall mounted transformers adjacent to lightweight demising walls of sound sensitive rooms shall be installed on steel framework independent of the wall and vibration isolated using neoprene pads and bushings through bolt holes.
- 4. Provide flexible electrical connections to all equipment mounted on vibration isolators.
- 5. Do not locate electrical outlets or switches and other back boxes back-to-back in partitions designed to provide acoustical isolation between adjacent spaces. Electrical outlet boxes and/or back boxes on opposite sides of the same demising wall shall be separated by a minimum of 24-inches and one stud row. When this cannot be accomplished, outlet boxes shall be covered on their back and sides with fire stop moldable putty pads.
- 6. Outlet boxes in walls or sound isolated gypsum board ceilings of sound sensitive rooms with an NC criterion of NC 35 or less shall be covered on their back and sides with fire stop putty pads.
- 7. Locate outdoor electrical equipment (especially emergency generators) away from adjacent property lines.

Provide noise control in the form of sound walls, silencers, enclosures, mufflers, etc. to reduce outdoor equipment noise levels to the limits of the local noise ordinance.

8. Seismic restraints shall not bind or prohibit the vibration isolators from functioning properly.

#### **Elevator Machine Room Noise and Vibration Control**

- 1. Provide appropriate mufflers and vibration control devices for hydraulic power units and associated piping and electrical connections to minimize noise and vibration transmission from this equipment.
- 2. Elevator machine rooms shall not be located adjacent to rooms with an NC criterion of 40 or lower.
- 3. The doors to the elevator machine rooms shall be solid core wood or damped hollow metal doors with full perimeter adjustable acoustical door gaskets including gasketed threshold.
- 4. The ceiling and two adjacent walls of the elevator machine room shall be covered with 2-inch thick fiberglass duct liner to provide sound absorption inside the room.
- 5. The power unit (motor/pump/tank) shall be vibration isolated from the building structure via seismically restrained neoprene mounts that provide 0.35-inch minimum static deflection under the operational load of the power unit.
- 6. Isolate hydraulic pipes from the building structure via neoprene lined clamps from the tank to the piston base.
- 7. Hydraulic pipes shall be isolated from walls and floors at penetrations via foam neoprene pipe insulation. Pipe shall not come in rigid contact with the building structure.
- 8. Provide an oil line muffler in the oil line near the pump.
- 9. Provide Isolation Couplings in the oil line near the pump unit and near the jack unit.
- 10. Electrical conduit and raceway connections made to the power unit shall be resiliently mounted to building structure via neoprene pads or mounts.

# **Pre-Construction Acoustical Report**

The design build team's acoustical consultant shall furnish an acoustical report including acoustical analysis, calculations and recommendations for review at least 3-weeks before the start of construction. The report shall include:

- 1. The results of the environmental noise measurements made at the site.
- 2. Calculations and support data that show that the exterior envelope of the building will comply with all acoustical requirements.
- 3. Calculations that show that the HVAC noise levels will comply with all acoustical requirements based on worst case duct paths.
- 4. Calculations that show that all outdoor equipment complies with the daytime and night noise limits of the local noise ordinance at adjacent property lines.

- 5. Calculations that show that all equipment associated with the new parking structure complies with the maximum allowable noise levels at the façade of all existing buildings.
- 6. Calculations that show that the reverberation times within the auditorium, AV enabled conference rooms, and open office areas comply with the requirements above.
- 7. Summary of vibration isolation devices incorporated to reduce vibration from all mechanical, electrical and plumbing equipment in accordance with the requirements above.
- 8. Provide explanation of where and how plumbing noise and vibration control has been incorporated into the project.
- 9. Compliance letter indicating that all sound isolation recommendations have been properly incorporated into the design of the building in accordance with the design building team's acoustical consultant's recommendations and that no exceptions have been taken.
- 10. Specifications sections relating to acoustical components designed into the building.

# **Post-Construction Compliance Testing**

The design build team's acoustical consultant shall carry out post construction verification testing and submit an acoustical report summarizing the results.

- 1. Background noise level measurements in 20 occupied rooms using a Type 1 or Type 2 precision sound level meter in accordance with ANSI Standard S12.72 Measuring the Ambient Noise Level in a Room.
- Interior sound isolation measurements of 15 demising partitions in accordance with ASTM E 336 Standard
  Test Measurement for Measurement of Airborne Sound Attenuation between Rooms in Buildings and ASTM E
  413 Classification for Rating Sound Insulation
- 3. The sound isolation performance of STC doors (should any be used on the project) shall be tested in accordance with ASTM E2964 Standard Test Method for Measurement of the Normalized Insertion Loss of Doors.
- 4. The results of the measurements shall be calculated and reported in accordance with applicable ASTM, ANSI, ISO acoustical standards. Submit an acoustical report outlining the testing procedures, measurement locations, conditions and results for each test identified above.

# R. FURNITURE, FIXTURES, AND EQUIPMENT (FF&E)

The design builder will be responsible for providing and installing Furniture, Fixtures, and Equipment (FF&E) for the building as part of their design proposal. The intent of this project is to appropriately furnish all programmed spaces. For space furnishings not specifically addressed in this document, the design builder shall collaborate with the County to make final determinations on such requirements.

The County desires to have interior furniture that is contemporary in color, material, and design, consistent with previously-stated goals of achieving a work place environment that is open, inviting, cheerful and conducive to interaction while still being highly-durable. Workstations need to provide a moderate level of privacy while maintaining an open environment and allowing disbursement of natural light throughout the space.

The information that follows illustrates the types of furniture that the design builder should consider. Final design, specifications, procurement and installation is the responsibility of the design builder.

# **Systems Furniture - Design Criteria**

- 1. Dealer/manufacturer shall only provide bids for those systems that they are authorized by the manufacturer to install and service.
- 2. The following manufacturers may be considered:
  - a. Haworth
  - b. Herman Miller
  - c. Knoll
  - d. Steelcase
- 3. When bidding systems furniture, refer to room data information.
- 4. Systems furniture for private offices shall have no panels. A freestanding application of systems furniture and case-goods shall be used. Power and data will be direct from wall partitions or floor. Overhead storage cabinets shall be supported by systems framework in lieu of being fixed to wall partitions.
- 5. All drawer pedestals and later file cabinets in workstations or offices shall be individually keyed, no duplication; provide set of master keys.
- 6. Design builder's dealer / manufacturer to verify all quantities.
- 7. Furniture should include all bracketing, hardware, trim pieces, power feeds, electrical components, etc. as required for a complete installation.
- 8. Office design shall provide the users with options for tackable or writable areas.

- 9. All lateral cabinets shall have counterweights. The heights of lateral cabinets shall be 2-drawer, 3-drawer, 4-drawer and 5-drawer. The various widths shall be 30", 36" and 42".
- 10. Design builder's dealer/manufacturer is to provide all connectors, finished end covers and panel height transition covers as required.
- 11. Provide LED Task Lighting at every workstation.

# **Ecosystems of Workspaces**

#### **Private Executive Suites**

- 1. This office space has the larger per person footprint than the open plan workspaces.
- 2. Minimize distraction yet invite collaboration by planning private offices in zones. This way it will create chance encounters and further collaboration right outside the office door.
- 3. Maximize space efficiency by eliminating dead space, and using vertical space to make a small office feel larger, more open.
- 4. Provide zones for different work modes to allow people to switch back and forth between concentration and contemplation, then collaborate and converse.

## **Open Office**

- 1. Create a light and open environment with customizable options for privacy.
- 2. The space shall promote both intentional and chance encounters with coworkers
- 3. An open plan work space is an ecosystem of different spaces that support different work modes, postures, and privacy levels.
  - a. Strategic Anonymity: Allow working in an area where an individual doesn't know anyone, which leads to less interruptions.
  - b. Selective Exposure: To give workers more control by enabling them to select what others see as far as personalizing their space.
  - c. Confidential Sharing: Spaces where people can share a confidential conversation without being overheard

- d. Intentional Shielding: To provide screens or configure furniture in a way that discourages disruptions.
- e. Purposeful Solitude: To create areas for complete isolation to have time alone for deep focus or rejuvenation.
- f. Open plan workspaces should be separated by section or department to account for the different work styles and noise levels between departments.

# **In-Between Spaces**

- 1. Leveraging real estate in lounge spaces, hallways, and common areas to give users control, comfort, and collaboration.
- 2. The office shall capitalize on in-between nooks of spaces that can create spaces to collaborate or work away from one's designated space.
- 3. This will allow an individual to change their work environment to encourage innovation and/or induce critical thinking.

## **Collaborative Open Spaces**

- 1. A convenient space to quickly gather and work together by being a place to touch down and plug in.
- 2. Comfortable lounge seating supports informal, relaxed collaboration
- 3. Storage provides visual privacy and access to tools.

### **Furniture Design Qualities:**

- 1. Durability: The furniture shall be durable with a long life-cycle to comply with the long expectancy of the building.
- 2. Clean Aesthetic: The furniture shall have a low profile and open base that will create a light aesthetic throughout the office.
- 3. Defined Space: The office spaces shall be open, but maintain customizable privacy screens for focused work areas. The boundary screens will define personal space and create a sense of privacy in an open-plan work space.
- 4. Integrated Power: The furniture shall provide quick access to power and data throughout the space to ensure an efficient and productive work environment making it easy to collaborate.
- 5. Flexible Solutions: The furniture shall have flexible storage and accessory pieces that can customize each work space to an individual's needs.
- 6. Ergonomics: The furniture shall also provide good posture and comfort for a more efficient work space. Powered, sit-stand, height adjustable desks are required for all workstations which allows employees to transition from seated to standing height postures throughout the day, stimulating mental and physical activity to promote wellbeing in individual and group workspaces.

- 7. LEED compliant: The furniture shall also be LEED compliant to further help the County reach their LEED goals. Qualities of LEED compliant furniture are as follows:
  - a. Recycled material
  - b. Material Reuse
  - c. Low-emitting materials
  - d. Interiors life-cycle Impact reduction
  - e. Design for flexibility
  - f. Daylight and Views
  - g. Planning
  - h. Environmentally Preferable finishes and furnishings
  - i. Social equity in the supply chain

### **Specific Furniture Requirements**

- 1. Office solutions systems furniture is to be designed using typical panel sizes and components. Dealer/manufacturer must adhere to standard workstation dimensions. Prior to award, dealer/manufacturer must provide ½" scale plans indicating product-specific dimensions, included in design builder's technical submission. All parts will be assumed to be standard cataloged products. Any custom or modified pieces must be noted on drawings. Provide an itemized list of parts and components with cost breakdown required for each workstation and office type along with ½" scale plans.
- 2. One panel height will be utilized. The main spine of workstation clusters shall be 42" plus an upper 12" of transparent glass to allow light, vision and maintain reduced noise levels. Panels at the reception counter may be between 38" and 42" high. All panels to provide full privacy between work surfaces and the floor.
- 3. All file drawers shall accept both legal and letter hanging file folders. Include all hang bars and hardware. Lateral file drawers must be 18"-24" deep; storage pedestal drawers must be full depth of work surface.
- 4. When an open workstation is less than 30" from an exterior wall, panels will not be used against the wall. A freestanding application of the systems furniture will be utilized to support the work surfaces and components instead.
- 5. Office and open workspace solution furniture should allow for storage of books, files, office supplies, personal items and a secure drawer for items/equipment that is easily stolen (i.e., mouse, keyboard, purse, backpack, etc).
- 6. Provide keyboard trays for all office desks.
- 7. Provide a mix of office and open workplace solution furniture configurations that allow users to choose between additional storage units or additional collaboration tables for 2-4 people.
- 8. Provide monitor support arms and required hardware to support up to two monitors per desk.

### Wiring and Cabling

- 1. All panels and frames shall be capable of power and communications management. Power and communications must be available at beltline. Baseline provisions for power and communications will not be used. Electrical capability is to be for an eight-wire system with two (2) utility circuits and two (2) data circuits. Refer to IT and AV design narratives; and room data sheets for specific wiring and communications specifications.
- 2. Design builder's dealer/manufacturer to supply all power feeds as well as all harnesses, electrical assembly, connectors, receptacles and any other equipment required to power the panels or frames designated on workstation plans. Hardwiring of power feeds to building power supply is to be provided by design builder's electrical contractor.
- 3. The installed system must be able to add cable without disconnecting frames or panels. Internal panel construction shall not inhibit cable from passing vertically or diagonally from baseline to beltline points of distribution or termination through panels.
- 4. The system must accommodate the bending radius of all cables specified by the cable design guidelines and comply with the cable manufacturer's warranty requirements; the system must physically handle a maximum number of cables and wiring for a 6-10 station cluster. The system must also provide separation between telephone/data and power cables, provide required number of outlets per workstation and provide a means of concealing excess cable with troughs, grommets, trays as required.
- 5. Power and communications outlets must be accessible to users to connect and disconnect equipment.
- 6. The system must provide the ability to modify wiring and cabling.

#### **Cost Criteria**

- 1. Initial cost: Purchase of furniture for initial order, including freight and tax, to be part of design builder's base bid.
- 2. Price list guarantee: Net pricing discount shall be guaranteed for four years from time of estimate with a willingness to negotiate a long-term pricing structure.
- 3. Labor cost required for initial installation; willingness to negotiate subsequent labor costs required to facilitate future systems changes.

#### Schedule

- 1. Manufacturing lead time: design builder's manufacturer must be willing to negotiate a delivery policy with a guaranteed cycle time from date of order entry to the dock ready to ship, and a consequence for failure to meet delivery time.
- 2. Product modifications and special finishes: design builder's manufacturer must also be willing to negotiate a cost and delivery policy for non-standard and catalogued product.

## **Product Support**

- 1. Design builder's manufacturer/dealer shall, upon award of contract, provide CAD shop drawings in the form of installation drawings, indicating dimensions, panel layout, power/communications layout and work surface / componentry layout.
- 2. Design builder's manufacturer/dealer shall provide a local representative to handle clarifications and questions.
- 3. Manufacturer/dealer to provide the following information:
  - a. Warranty: Include all product warranty information in the bid package.
  - b. Replacement policy: Include information detailing procedure and process for replacing damaged or defective product.

# S. ENVIRONMENTAL GRAPHICS + WAYFINDING

This environmental graphics and wayfinding program is the first step to establishing the Rancho Los Amigos South Campus's identity and unifying its streets, pedestrian paths, open spaces, and buildings with the interior program. Arrival at the campus boundaries can be physically defined and celebrated, and a sense of place created, by the character of its campus environment.

# **Effective Wayfinding**

Wayfinding is a comprehensive experience that encompasses many activities and touchpoints. Planning, orienting, navigating and arriving are key modes of that wayfinding experience, often repeating as a person moves through their journey. These modes shall each be supported by coordinated and well-designed elements and touchpoints that instruct, direct, identify and reassure. The wayfinding experience is also personal and responds to everyone's needs, emotions and the journey visitors are taking. The design builder shall provide an effective wayfinding program that makes the user experience legible by:

- 1. Allowing users to determine their whereabouts at all times
- 2. Humanizing the scale of the built environment
- 3. Simplifying choices, helping all users to feel equally at ease
- 4. Incorporating information generally considered to be "universal" to all users
- 5. Communicating at varying levels of comprehension
- 6. Addressing a variety of possible choices for users with disabilities

The best wayfinding systems set up conditions that create enjoyable user experiences. The design builder is required to include an environmental graphic design (EGD) consultant on their team who can work collaboratively to incorporate a comprehensive site and building specific wayfinding experience that establishes a high quality standard for future phases of campus development.

# **Methods**

The intention is to develop a comprehensive plan for wayfinding across the ISD/Probation and Parking Garage site. A carefully orchestrated wayfinding system that is integrated throughout a user's journey will appear quite seamless but will provide noticeable support for locating destinations. Listed below are methodologies the design builder is expected to employ.

### **User Scenario Development**

Identify the exterior and interior site conditions, programmatic needs and constraints by evaluating key places of interaction–locations where users will typically look for information, direction, and reinforcement by anticipating a variety of potential responses to different instructions. Within the context of these user scenarios, the design builder is to provide environmental graphics and wayfinding elements to the following areas:

- 1. Key site entry points
- 2. Key intersections
- 3. Key connection points to neighboring spaces or activity areas
- 4. Program zone boundaries (interdepartmental, recreational, and business)
- 5. Key zone connection points within the site and buildings
- 6. Primary and secondary destination points: entrance gates, buildings, parking, and special use areas
- 7. Pedestrian paths and view corridors
- 8. Interior connections and destination points
- 9. Street and vehicular areas

#### **Context Studies**

The design builder is to identify environmental and architectural opportunities, allowing the context of the project to help determine the solutions. Campus signage types within the infrastructure scope of work are currently under development. Site specific signage within the design builder's scope should be similar in material selection, font size and approach, illumination type, and color temperature. In addition to identifying landmarks and directing circulation, the signage will provide an ideal format to subtly endorse the site's identity.

#### **Human Factors**

Integral to the EGD design process is the study of people's needs and behavior, particularly the most easily disoriented or challenged (first-time users, visitors, disabled, elderly), as well as the needs of users already familiar with the site. The design builder's environmental graphics and wayfinding solution shall simplify information so that each user is able to quickly comprehend, assimilate and retain information. Issues to consider include determination of viewing and legibility factors, flexibility, modular components, changeable message surfaces, background-to-graphic color ratios, lighting, message-size ranges and spacing appropriate to viewing distance.

### **Functionality**

A key factor in an environmental graphics solution and its continuation is its ability to become a functional reality. Therefore, information such as flexibility, changeable messages, housekeeping and maintenance capabilities shall be considered and will directly affect final solutions. Final design documents shall include required signs, colors, materials, modularity, flexibility, mounting heights, and locations.

### **Regulatory and Code-Required Signage**

During the design process, the design builder shall work closely with governing officials to address the practical concerns of building, County and State signage codes, where applicable. Regulatory signage requirements shall be applied to the overall program and all signs required by building, and handicap codes, laws and regulations shall be incorporated into the project.

## **Cost Monitoring and Future Phase Budgeting**

Controlling costs on large multi-phased projects is of paramount importance. The design build team is to establish a well-defined, conceptual signage and graphics package with proposed signage locations, signage types and families as part of their competition submittal, along with realistic budgeting that meets the performance requirements of this scoping package.

# **Project-wide Wayfinding Summary of Sign Types**

The design build contractor will be responsible for the design, translation fabrication and installation of all signage in the following categories:

- 1. Code Required
- 2. Interior Wayfinding
- 3. Exterior Wayfinding
- 4. Exterior Building Address
- 5. Room Name / Numbering
- 6. Suite Name / Numbering

The signage design is to be coordinated with the County to ensure the desired image and aesthetic is achieved.

The following is a minimum list of sign types that shall be included in the project. Once a thorough site analysis has been conducted, this list may be revised to address the specific needs of the ISD and Probation users. The sign types shall be executed in English and Braille, and follow all disability requirements by the State of California.

## **Exterior Parking Garage**

- 1. Parking Garage Entry
- 2. Reserved Parking Signage
- 3. Parking Regulations Signage
- 4. Vehicular Parking Directional
- 5. Guest Drop-Off / Pick-up
- 6. Uber / Lyft / Pick-up
- 7. Valet Signs (as required)
- 8. Metro Sign (as required)
- 9. Garage Level identification super graphics

# **Exterior Temporary Signage**

- 1. Lamppost Banner
- 2. Sandwich Board
- 3. Banner
- 4. Construction Fence Supergraphic
- 5. Agency required temporary signage

# **Exterior/ Interior Building Identification**

- 1. Primary Site Identification Monument Sign
- 2. Building Identification, Visitor, and Primary
- 3. Building Identification, Visitor, and Secondary
- 4. Building Identification and Non-Visitor
- 5. Building Address Sign
- 6. Elevator Identification
- 7. Evacuation Map

## **Exterior Directional Signage**

- 1. Campus Directory
- 2. Street Name
- 3. Primary Directional
- 4. Secondary Directional
- 5. Walking Path Sign
- 6. Do Not Enter Signage
- 7. Uber / Lyft, Drop-Off / Pick-up
- 8. Street and Traffic Signage
- 9. Fitness Trail Signage

## **Exterior Entry Signage**

- 1. Site Entry Identification and Vehicular
- 2. Site Entry Identification and Pedestrian
- 3. Welcome & Campus Regulatory
- 4. Directional Wall Mounted and Pedestrian
- 5. Directional Freestanding and Pedestrian
- 6. Directional Vehicular

# **Specific Site Signage Requirements**

Project I.D. Monument Sign (quantity 1) – located in front of the main reception area of each building (6'-0" maximum height – 25 sq. ft. maximum allowed by City. 3'-0" high  $\times$  6'-0" wide  $\times$  12" deep double-sided aluminum sign cabinet with paint finish and either routed push-thru translucent acrylic logotype and symbol graphics with internal LED illumination or external LED ground illumination with the applied dimensional aluminum logotype and symbol graphics with paint finish. Sign cabinet to sit on a 2'-0" high  $\times$  6'-0" wide  $\times$  12" deep poured-in place concrete base with integral color and a 6" concrete mow strip. 6" high minimum project address to be either applied dimensional aluminum copy to a concrete base with paint finish or incorporated into aluminum sign cabinet.

Vehicular Directional – located at visitor parking entrance, at delivery/receiving and employee parking/light (4'-0" maximum height – 6 sq. ft. maximum allowed by City). Post and panel sign consisting of 2'-0" high x 3'-0" wide x 4" deep double-sided aluminum sign panel with paint finish attached to a 4" square x 4'-0" high aluminum double posts with paint finish and cast in place concrete footings. Graphics to be applied vinyl film copy with a satin clear coat. The sign is nonilluminated.

Entry Notice – located at off-street parking entries. Post and panel sign consisting of 1'-6" wide x 3'-0" high x 1/8"

thick aluminum sign panel with paint finish and applied vinyl film copy with satin clear coat attached to 3" square aluminum post with paint finish and cast in place concrete footings. Copy to include accessible parking notice, fire lane notice, private property notice, and Proposition 65 notice.

Accessible Parking Stall Sign – located at each parking stall for accessible vehicles. Post and panel sign consisting of 12" wide x 1'-6" high x 1/8" thick aluminum sign panel with paint finish and applied vinyl film copy with a satin clear coat. Attached to a 3" square aluminum post with paint finish and cast in place concrete footing or attached directly to the fence.

Stop Sign – located at parking and driveway exits. 2'-0" wide aluminum sign panel with paint finish and applied vinyl film copy with a satin clear coat. Attached to 3" square aluminum post with paint finish and cast in place concrete footing.

EV Charging Parking Stall Sign – located at each EV parking stall within visitor, staff, and fleet parking areas. Post and panel sign consisting of 12" wide  $\times$  1'-6" high  $\times$  1/8" thick aluminum sign panel with paint finish and applied vinyl film copy with a satin clear coat. Attached to a 3" square aluminum post with paint finish and cast in place concrete footing or attached directly to the fence.

EV Wayfinding Signage – located within staff and fleet surface parking areas. Post and panel sign consisting of 12" wide  $\times$  1'-6" high  $\times$  1/8" thick aluminum sign panel with paint finish and applied vinyl film copy with a satin clear coat. Attached to a 3" square aluminum post with paint finish and cast in place concrete footing or attached directly to the fence.

Additional signage as required to establish an effective and safe Wayfiding Program.

# **Specific Exterior Building Signage Requirements**

Wall Signage – project identification adjacent to the primary building entrance. 1/2" thick x 4" minimum high flat cut aluminum letters with paint finish pin mounted to the building face. Non-illuminated.

Building Address – adjacent to the primary building entrance. 1/2" thick x 6" minimum high flat cut aluminum numerals with paint finish pin mounted to the building face. Non-illuminated.

Building Entry Graphics – located at all accessible public entries. Applied vinyl film graphics on glass doors or sidelights consisting of the international symbol of accessibility, No Smoking, Proposition 65, hours of operation and LEED certification.

Restricted Entry Sign – located at all secure vehicular and pedestrian gate entries mounted to gates/fencing. 12" square  $\times$  1/8" thick aluminum panel with screen printed copy.

Additional signage as required to establish an effective and safe Wayfiding Program.

# **Specific Interior Building Signage Requirements**

Project Identification Wall Sign – located in reception lobby behind the reception desk. Project logo type consisting of individual acrylic flat cut letters with paint finish and pinned off the wall.

Digital Video Wall - located in the main lobby reception area.

Mission Statement – located in the reception lobby. Consisting of a wall-mounted 2'-0" wide x 3'-0" high x 1/2" thick minimum tempered glass panel with silkscreened or applied vinyl film graphics and stainless-steel escutcheons.

LEED Certification Wall Sign – located in the reception lobby. Consisting of a wall mounted 2'-0" wide  $\times$  3'-0" high  $\times$  1/2" thick minimum tempered glass panel with silkscreened or applied vinyl film graphics and stainless-steel escutcheons.

Wayfinding Directional – located at all decision-making points along the path of travel. Consisting of a wall mounted 1'-3" wide  $\times 2'-0"$  high  $\times 1/4"$  thick acrylic panel with paint finish and applied vinyl film graphics with clear coat.

Room I.D. Sign – located at entries to individual rooms, labs and service areas (ADA compliant). 8" square x 1/4" thick acrylic panel with .064" thick etched zinc face with raised tactile room number, copy and associated Braille with paint finish.

Office I.D. Sign – located at private offices (ADA compliant). 8" square x 1/4" thick acrylic panel with 0.64" thick etched zinc header with raised tactile room number and associated Braille with paint finish. Footer of sign to be layered acrylic for changeable paper inserts for employee's name and title.

Workstation I.D. Sign – located at private cubicles (ADA compliant). 8" square x 1/4" thick acrylic panel with .064" thick etched zinc header with raised tactile space number and associated Braille with paint finish. Footer of sign to be layered acrylic for changeable paper inserts for employee's name and title. Fastening clip to be provided for attachment to specific workstation system.

Conference Room Sign – located at conference rooms (ADA compliant). 8" square x 1/4" thick acrylic panel with .064" thick etched zinc header with raised tactile room number and associated Braille with paint finish.

Wellness Room Sign – located at rooms designed for this purpose (ADA compliant). 8" square x 1/4" thick acrylic panel with .064" thick etched zinc header with raised tactile room number and associated Braille with paint finish. Footer of sign to be layered acrylic for sliding "Vacant" / "In Use" message.

Restroom Signs – located at all restrooms (ADA and Title 24 compliant). Wall sign: 8" square x 1/4" thick acrylic panel with .064" thick etched zinc face with raised tactile pictograms, copy and associated Braille with paint finish. Door sign: 12" circle or equilateral triangle x 1/4" thick acrylic with paint finish and applied vinyl film pictogram with a satin clear coat.

Maximum Occupancy Sign – located at all public assembly rooms. 8" square x 1/4" thick acrylic panel with paint finish and applied vinyl film copy with a satin clear coat.

Evacuation Plan – located at all elevator landings and immediately inside all public entrances. 12" wide x 1'-6" high x 1/8" thick acrylic with subsurface silkscreened graphics on 1/8" thick non-glare acrylic face.

Tactile Exit Sign – located at grade level exit door or exit access door (ADA compliant). 4" wide x 3" high x 1/4" thick acrylic panel with .064" thick etched zinc face with raised tactile copy and associated Braille with paint finish.

Restricted Entry Sign – located at all secure access entries mounted to door, wall or gates. 12" square x 1/8" thick acrylic panel with screen printed copy.

EV Charging Station Sign – located at charging station within heavy-duty and light-duty vehicle test areas. 12" wide x

1'-6" high x 1/8" thick aluminum panel with paint finish and applied vinyl film copy with a satin clear coat.

Hazardous Materials Storage Sign – located adjacent to storage rooms entries and testing and chemical hazardous material storage areas as required by fire code official. 12" square x 1/8" thick acrylic panel with a screen-printed copy as specified in California Fire Code 500.15 and NFPA 704.

Additional signage as required to establish an effective and safe Wayfiding Program.

## **Design Submittals**

Design Development Submission – The following signage drawings and related specifications shall be included in the Design Development submission:

- 1. Elevations of all exterior and interior sign types. Elevations to be drawn at an architectural scale of 1/2" = 1'-0" or larger. Drawings to be fully dimensioned and show front, side, and top views of all sign types.
- 2. Sections and details shall be provided for each sign type that clearly reflects the method of fabrication construction and methods of support or attachment. Details such as materials, colors, and types of finishes shall be noted for each sign type. Methods of illumination for illuminated sign types shall be provided. All copy shall be dimensioned for each type showing the capital letter height, the space between lines of copy, and left and right margin dimensions.
- 3. Sign location plans showing the proposed locations shall be provided for all exterior and interior signage. All signs shall be numbered by sign type accompanied by a sign location number (1.1, 1.2, 1.3, etc.). The sign location plan shall include a sign legend that describes each sign type and shows the quantity required.
- 4. A comprehensive preliminary message schedule shall be provided that indicates the proposed copy and/ or accompanying symbol(s) for each sign identified on the sign location plan. Arrow directions shall be graphically shown (right, left, and up or down) as required for wayfinding/directional signs.
- 5. Specifications shall be provided that fully describe the requirements for materials, paints, primers, finishes, and adhesives. Shop drawing and submittal requirement should also be included.

50% CD Submission – The 50% CD submission shall consist of all the documents required for the Design Development submission and include any changes and/or refinements noted by the County based on their review of the 50% submission. Where necessary additional details and notes shall be added to the drawings to clarify any concerns or issues noted by Los Angeles County.

100% CD Submission – The 100% submission shall incorporate all comments from the County resulting from their review of the 50% submission. All drawings should be fully detailed and have notes clearly describing all materials, colors, finishes, and materials of support or attachment. The sign drawings, specifications, sign location plans, and message schedule shall be completed in all respects and be checked to verify that all County and Plan Check review comments have been addressed and incorporated into the documents where required.

# T. SUSTAINABILITY / ENERGY

Enhanced energy performance is an integral component to sustainable design development. A variety of design strategies for both active and passive energy demand reduction should be studied, along with opportunities to create renewable energy and specify state of the art mechanical equipment, to maximize efficiencies.

The Rancho Los Amigos South Campus will follow an integrated approach to sustainable design, including technologies and practices that proactively address the impact of the Plan on the environment, and demonstrate by example the benefits and the on-going operational advantages of resilient design, infrastructure, and operations. Refer to the Principal Telecommunication Work section for more information on the Internet of Things (IOT) considerations for the facility.

Sustainability issues will influence such things:

- 1. Building Design
- 2. Site Development
- 3. Landscape and Hardscape
- 4. Mass and Scale
- 5. Waste Management
- 6. Energy Management
- 7. Water Management
- 8. Materials
- 9. Health and Wellbeing

One of the ways to measure the County's success will be to obtain a Gold level of certification under the most current version of the Leadership in Energy and Environmental Design (LEEDv4) program, administered by the Green Building Institute (GBCI), and created by the US Green Building Council (USGBC), for all new buildings greater than 10,000 square feet.

An integrated sustainability delivery model allows for thoughtful study and informed design strategy. A third-party review of LEED strategy and supplemental supporting LEED Documentation validates the holistically sustainable design concept to confirm completeness. All consultant teams should have experience designing and coordinating sustainable attributes, and shall be led by a LEED facilitator hired by the design builder who has a deep bench of knowledge and experience in aligning project scope to achieve the appropriate key performance indicators. It is imperative to identify an individual or team to coordinate the LEED facilitation, documentation and certification submission process - including LEED certification planning and analysis – to provide documentation oversight of all credits, coordinate the documentation of credits assigned to all consultants, contractor and client, and to complete the submission to GBCI up-to, and including responses to all requested clarifications and appeals until final certification is awarded.

Teamwork is critical in achieving LEED certification. Owner, architect, landscape architect, engineers, lighting designer, contractor, and commissioning agent will all be integral team members in this process. For example, a significant percentage of the anticipated credits are either achieved solely through the efforts of the design builder's

team or cannot be earned without that team's contributions. As part of LEED consulting & coordination, coordinate the efforts of all team members in the LEED certification process. Design builder, architect, engineers, consultants, commissioning agent, sub-contractors, owner's representative and the client will all be responsible for documenting specific credits as agreed to by the team during the initial eco-charrette, which will be led by the design builder's LEED facilitator at commencement of project kick-off. The eco-charrette should include an open dialogue related to each LEED credit, and further explore client-related issues as they occur.

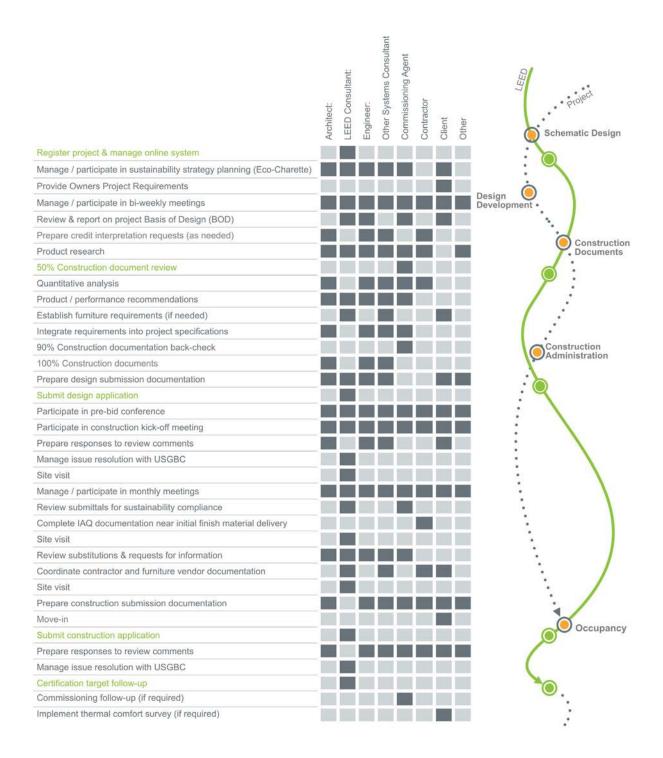
#### Schedule of Deliverables

Establishing a schedule of specific deliverable items early in the project allows the process to move effectively and stay on-target with the project's end goals. Included is a sample set of tasks connected with an understanding of which parties will be engaged in each. The design builder is to ensure full coordination, cooperation and timely participation with all LEED related requirements. Team members will be responsible for the submittal of the LEED design review package to GBCI within 30 days of issuing of final construction documents. The design builder will ensure timely communication and coordination with the engaged commissioning agent that allows for all commissioned systems to be coordinated within 90 days of final client move-in for each of the individual building applications. Moreover, the design builder will deliver LEED construction review documentation within the same 90-day period immediately following substantial completion of construction, and tenant move-in.

### Milestone Schedule

The project schedule may follow a different path than the certification program, however major milestones for both are to remain connected. Communication between the design builder and its LEED facilitator are key to prevent gaps in knowledge and schedule. The exhibit below indicates tasks and responsibility of the design builder's various team members in the LEED certification process.

The County requires the project to achieve a minimum level of LEED® Gold certification. The design builder shall be required to pursue the credits indicated by its LEED facilitator as "Building Code Related", as well as the "Mandatory" credits identified in the attached LEEDv4 BD&C Scorecard. The design builder will then identify a minimum number of "Discretionary" credit strategies that allow the project to achieve the required number of points to meet the minimum Gold point threshold, inclusive of a 15% excess to allow for potential point losses. Pursuit of a minimum number of credits + buffer credits does not relieve the design builder of the responsibility to achieve final certification. It is the responsibility of the design builder to ensure that the appropriate quantity of credits is pursued to secure the minimum level of certification defined herein. The design builder should pursue the most appropriate strategy, which adheres to the project requirements, streamlines project expenses, and does not rely on the credits noted as "Exempt", which are indicated in the LEED Scorecard later in this section.



LEED Milestone Schedule LEED Version 4: Building Design + Construction The submittal shall be registered under the LEEDv4 BD&C rating system. At the beginning of the project, the LEED project boundary should be reconfirmed, and any additional buildings over 10,000 sf shall be discussed to determine with the client if additional buildings will pursue LEED certification. Additionally, the design builder should ensure that project is registered in LEED Online in a timely manner working toward the same guidelines, LEED version 4 program.

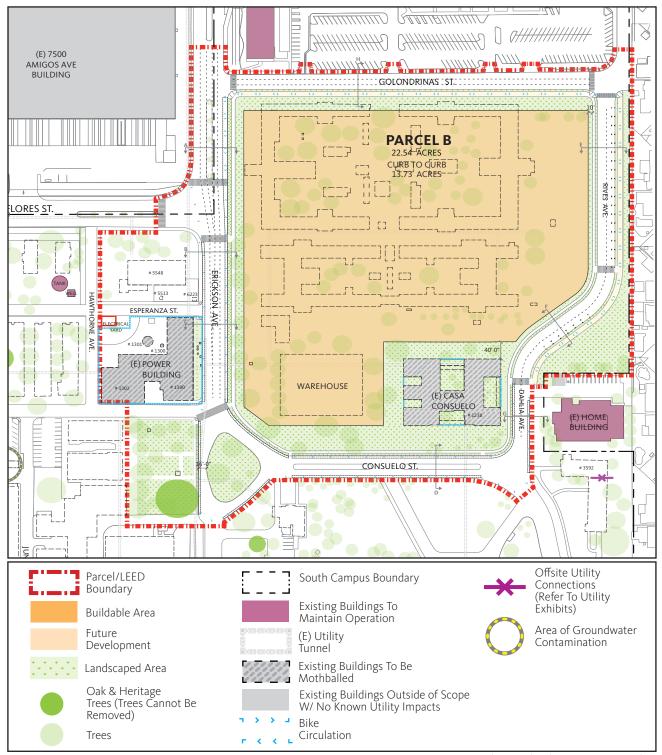


Figure A16 - Parcel B Site Plan / LEED Project Boundary

## **LEED Credit / Code-Related Strategies + LEED Prerequisites**

There may be strategies partially or entirely connected to building codes governing design and construction of the facility. In such cases where the building code aligns with or exceeds the LEED strategy at time of permitting, these strategies are required to be incorporated into the project scope. Additionally, all LEED Prerequisites must be achieved. Where the prevailing building code is less stringent than the LEED strategy, the design builder may choose to incorporate the LEED strategy into the project scope, pending approval of the client.

### **Mandatory Strategies**

Strategies listed as mandatory are required to be incorporated into the project scope.

### **Discretionary Strategies**

The design builder should decide which of the discretionary strategies are required in addition to the prerequisites, code-related strategies, and mandatory strategies required, to satisfy the stated certification goal plus identified 15% buffer.

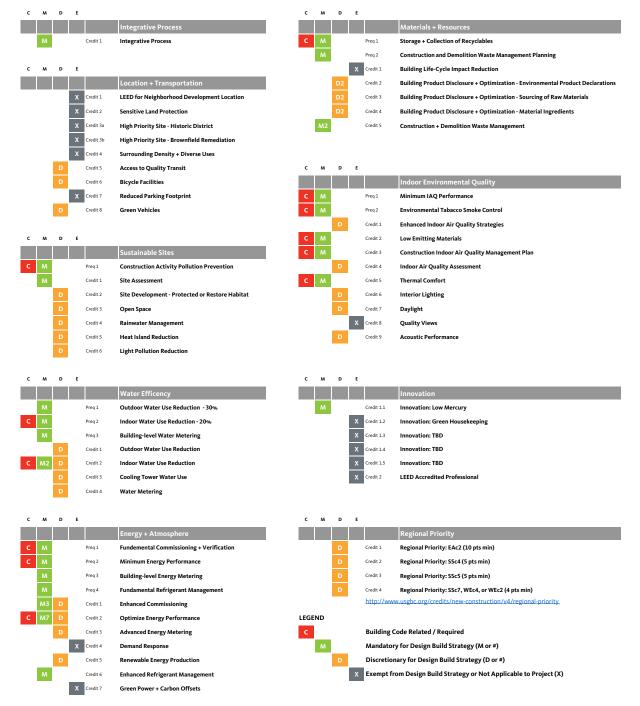
### **Exempt or Client-Contributing Strategies**

Strategies listed as exempt may fall into the following categories: a) those which are infeasible based on limiting site conditions; or b) achievement requires client implementation of scope or policies that may or may not be aligned with the operational or financial aspirations of the project. The design builder may not count exempt credits toward the project's certification pursuit without express written permission of intended implementation by the client.

Refer to the LEED Scorecard Exhibit in this section, indicating which LEED credits or strategies align with which of the above categories.

#### Rancho Los Amigos - South Campus

Projecct Location: 7601 Imperial Highway, Downey CA 90242



LEED Version 4 for New Construction

# **Description of LEED-Related Services**

The design builder will integrate sustainable design principles as an element of its design philosophy for the Project. To pursue US Green Building Council (USGBC) LEED Certification, managed and implemented by the Green Building Certification Institute (GBCI), the design builder and all its consultants shall prepare the additional documentation necessary to support the application for certification.

The design builder will coordinate the LEED documentation and certification submission process, including LEED certification planning and analysis, providing documentation of all design and construction-related credits, coordinating the documentation of credits assigned to the design builder's consultants, contractors and client, and completing the submission to GBCI.

#### **Initial Eco-Charette**

The design builder's LEED facilitator will coordinate LEED-related team education, as well as facilitate an initial Eco-Charrette to familiarize the client and key project team members with the principles of sustainable design. The eco-charrette will further outline the LEED process and establish the target sustainable/LEED strategies to incorporate in Project.

Thereafter, the LEED facilitator will document the LEED Credit Strategy (LEED Scorecard), including assignment of team responsibilities and thereafter, monitor credit submission status. Ongoing coordination meetings will be held as required to moderate LEED design and construction issues. A review of the competition submittal for LEED related issues shall be performed. The LEED facilitator shall register the projects with USGBC and manage the LEED Online portal. Coordinate with all team members to access the project through LEED Online.

### **Design Development**

Continue coordination of LEED-related team education and progress, as well as reviews of LEED-related efforts of the team members throughout the Project. Bi-weekly meetings for LEED Issues shall be coordinated as needed. The design builder's LEED facilitator shall keep an updated LEED Credit Scorecard, including status of LEED Online documentation. Reviews and reports on MEP Basis of Design, Owner's Project Requirements, design development, 50% and 95% construction drawings, as well as specifications shall be completed to coordinate LEED-related issues.

### **Manage LEED Online**

The design builder's LEED facilitator shall manage status of LEED Online credit documentation for all team members for their various credit assignments. Thereafter, the LEED facilitator will coordinate submission of Credit Interpretation Requests, as required, by team members for credits assigned to them, and complete LEED Online Design Review submittal to GBCI.

#### Construction Documentation + Close-Out

The design builder's LEED facilitator shall continue to coordinate LEED-related team education and progress. The faciliator shall conduct a conference to orient subcontractors to LEED requirements, and plan and facilitate a construction kick-off meeting with the construction management team, including key subcontractors to review tracking and submittal requirements.

The Facilitator shall document the LEED Credit Strategy (LEED Scorecard) and track progress toward certification, including assignment of team responsibilities and credit submission status all credits. A review of the contractor required LEED construction plans (e.g. Waste Management, Indoor Air Quality and Pollution Prevention, etc.) shall be performed as a measure of quality assurance and conformity to LEED minimum requirements.

Additional review of all material submittals and commissioning report shall occur as required. LEED Facilitator shall further participate bi-monthly at construction meetings to review LEED credit performance and documentation status, and visit site during construction to monitor and document LEED compliance.

The LEED Facilitator will coordinate LEED Online documentation submittal and coordinate and review LEED Online Construction Review documentation submittals by all team members.

Any Interpretation Requests submission by team members shall be reviewed and coordinated, and LEED Online Construction Review shall be submittal to GBCI. Facilitator shall coordinate LEED audit and credit appeals as needed.

## **Sustainable Design Guidelines**

The ISD + Probation Building Headquarters, shall be designed to meet a minimum level of Gold certification per the Sustainable Requirements section outlined above. The design builder shall comply with the Code-Related LEED measures, as well as the Mandatory Measures, and establish a strategy for achieving the remaining points required to pursue a 15% margin above the minimum requirements for LEED Gold (60 points), which align with Client objectives, project schedule, availability of materials, and financial limitations.

# **Overarching Sustainable Concepts**

A discovery eco-charrette was held with the County in May 2017 to redefine what aspects of sustainable design were truly important to be captured in the design of the South Campus projects. Attendees included members of the Scoping Document team, and included architectural and consulting engineers as well as ownership representation.

Overarching concept topics included:

- 1. Ecology
- 2. Water
- 3. Energy
- 4. Materials
- 5. Wellness
- 6. Community
- 7. Wild Card / 'Miscellaneous'

Design strategies which were identified as being of importance are as follows:

### **Ecology**

Biodiversity - Examples of strategies may include specification of native planting, urban agriculture, green roofs or living walls, and site remediation (as required).

#### Water

Overall protection and enhancement of water supplies that improve quality of life.

- 1. Collection / Reclamation Examples of strategies may include collection of rainwater, creation of wells for ground water, reclaiming and/or treating grey water, and reclaiming HVAC condensate.
- 2. Use Reduction Examples of strategies may include low flow or zero-water fixtures, native plants that require minimal or zero irrigation, xeriscaping, and non-potable water opportunities in HVAC equipment.

### **Energy**

- 1. Use Reduction Examples of strategies may include efficient and well-designed lighting, high performance / efficient HVAC equipment, high performance building envelope, an enhanced plug load/equipment strategy, underfloor air, and building management / systems controls.
- 2. Renewable Energies Examples of strategies may include integration of photovoltaics, making use of natural wind power, turbine or hydrogen fuel cell technology, and purchasing renewable energy contracts to offset emissions.

#### **Materials**

1. Recycling & Waste Management - Examples of strategies may include designing recycling / composting collection areas, creating a construction waste management plan, using modular systems, specifying products with less to no packaging, re-using existing buildings / materials, designing with reclaimed materials, and investigating opportunities to 'up-cycle'.

- 2. Transparency / Healthy materials Examples of strategies may include specification of materials that have published HPDs (health product declarations), or EPDs (environmental product declarations); red list chemical avoidance, and specifying low VOC materials.
- 3. Responsible Sourcing Examples of strategies may include FSC certified wood, rapidly renewable materials; materials with high values of recycled content; locally sourced materials; salvaged or reused materials, or materials from suppliers who are Just certified (social justice label) or participate in Fair Trade best practices.

#### Wellness

- 1. Active Design Examples of strategies may include incorporating ergonomics into furniture selections; providing activated interior paths and stairs, designing amenities that support exercise and physical activities, and creating opportunities for walking, jogging or biking near or on site.
- 2. Atmosphere Examples of strategies may include providing outdoor ventilation beyond code minimum requirements, creating an IAQ management plan for use during and after construction; designing and performing analysis for optimal access to natural daylight and views; providing user controllability over light levels and thermal comfort; designing for noise control.
- 3. Restorative Environments Examples of strategies may include incorporating Biophilic strategies / connections and access to nature; providing areas for retreat, deep focus and contemplation, and social activities.
- 4. Health & Nutrition Examples of strategies may include providing options for healthy food service, hydration access and awareness; providing access to health care and family support facilities, and health and nutrition education.

## **Community**

- 1. Amenities Examples of strategies may include promoting health, wellness and wellbeing; prioritizing safety; creating open / park space; contributing to retail/economy, food and agriculture, and connection to public transportation.
- 2. Arts & Culture Examples of strategies may include engaging artists / commissioning public art; promoting local culture and practices; embracing heritage, and hosting community events on site.
- 3. Resiliency Examples of strategies may include designing for catastrophic environmental conditions, planning for emergencies, mitigating heat islands, providing access to safe zones, water and food, and contributing to community ecologies.
- 4. Outreach and Community Engagement Examples of strategies may include hosting community meetings, providing feedback loops, and extending into social media.

#### Wildcard

Examples of strategies may include exemplary performance of LEED-related strategies, red list chemical avoidance, and overlapping health and wellness strategies identified by other 3rd party wellbeing certification systems.

# **Contextual Sustainability: Site**

Understanding the context of the existing site, and environmental and sustainable attributes therein, is a critical component of an overall integrated sustainable strategy for the Project.

#### Climate

Downey has a semi-arid climate, abbreviated as "BSK" on climate maps, according to the Koppen Climate Classification system. On average, Downey experiences approximately 287 sunny days per year, with a high temperature of around 83 degrees in July, and a low of 55 degrees in December. Therefore, the potential for the design team to incorporate a robust daylighting strategy should be closely studied. Elements such as building orientation, façade construction, high efficiency glazing, tubular daylighting devices, and skylights should be considered. Shading is a critical component of user satisfaction in daylighting strategies, and as such, the design-build team should study active and passive opportunities for glare and solar heat gain control, including but not limited to the use of electro-chromatic glazing, solar shades, architectural fins, manual or motorized interior or exterior shades, and shading through natural landscaping, among other potential strategies.

Downey experiences the greatest percentage of participation in February, anticipating approximately 3.6 inches of rain. The design team should study a variety of active and passive rainwater management opportunities to capture and potentially harvest stormwater as a gray water source for the project.

Downey's air quality index is 49% worse than the national average. The design team should study a variety of active and passive design strategies to prevent potential contamination of indoor air quality, as well as possible methods for mitigating outdoor air contaminants.

### **Energy**

Enhanced energy performance is an integral component to sustainable design development. A variety of design strategies for both active and passive energy demand reduction opportunities should be studied, along with opportunities to create renewable energy, and specification of state of the art mechanical equipment to maximize efficiencies. Specific strategies will not be prescribed in these documents to allow for design team creativity, opportunities to pursue future advances in technology, and to maximize economic flexibility within the project. However, a whole-building energy model simulation shall be performed for each building, and energy efficiency shall exceed ASHRAE 90.01-2010 by no less than 18%.

# **Community Connectivity**

The City of Downey is home to more than 115,000 residents living in over 35,000 housing units, and an average population density of 8,893 per square mile reported to the Census Bureau in 2010. The existing South Campus Floor Area Ratio (FAR) is approximately 0.5, with new build out increasing the value to approximately 0.76.

The Rancho Los Amigos South Campus is located within ½ mile radius of an existing established residential community, and provides pedestrian connection to existing publicly available diverse uses to serve the occupants needs. The design team should analyze ideal site entrances that support walkability and accessibility to the existing community and planned amenities.

#### **Health & Wellness**

The existing spaces housing these departments include repurposed, aging warehouse facilities with deep floorplates, limited access to daylight, climate quality and control; and make use of predominately paved parking lots with insufficiently programmed outdoor space, lacking walking paths.

The design of a holistically sustainable campus must embrace an integrated approach that includes not only environmental stewardship, but also a focus on health and wellness, or wellbeing, for the users of the site.

The on site fitness loop, as well as the Sports Center project to the south will play a critical role in promoting a culture that brings people outdoors, supports the natural environment, increases physical activity and play, and encourages site walkability. Together with County and State Building Code requirements for open space, the Sports Center will support and enhance the overall project goals for health and wellness of the community and occupants of the Rancho Los Amigos Campus site.

The ISD + Probation Headquarter buildings will achieve next-level performance efficiencies through the designed LEEDv4 Gold requirements; however, the above-mentioned strategies pertaining to health and wellness should be studied closely by the design build team, and be included in the program where feasible. Additional strategies that should be studied include designing wellness rooms that includes sinks and refrigerators, use of an integrated emergency notification system, and a robust plan for addressing air quality, which may include an enhanced specification process of materials and furniture; enhanced air filtration methods; and / or increased outdoor air ventilation rates to name a few.

## **Parking**

Parking is a necessary amenity for suburban developments where mass transit opportunities are either unavailable or are unable to meet the needs of the development. Critical factors in planning for parking include mitigating heat island effect, which can be caused by paving a significantly sized area with low-albedo (non- reflective) materials. Low-albedo materials absorb solar energy, and thereafter radiate that energy back into the environment as heat, creating increased ambient temperatures.

Strategies shall be studied to reduce the likelihood of creating heat island effect. These may include, but not be limited to, designing architectural shading devices such as roofs or trellises at parking areas (which may or may not include integral photovoltaics or green roofs); utilizing plant materials or plant structures that provide adequate shading; designing open-grid paving systems; or using highly reflective paving materials.

# **Bicycle Facilities**

Existing streets surrounding the Project campus do not currently include dedicated bicycle lanes, bicycle parking, nor bicycle sharing / rental infrastructure. However, dedicated bicycle lanes shall be provided on the streets within the current project boundary. The intent is that a future bicycle circulation system will connect to public transit and community amenities outside the current project boundary, as part of an overall strategy to limit vehicular traffic on campus and to support an overarching campus goal for enhanced health and wellness through increased modes of physical activity. Bicycle racks shall be provided in accordance with CalGreen requirements for visitors and full-time staff.

### **Operations and Maintenance**

Provide a complete operations & maintenance manual covering all systems, components, equipment and controls. O&M manual shall comply with LEED v4 requirements. Manual shall include training guidelines, equipment & systems cutsheets, and maintenance requirements. The training shall be by factory certified technicians. All trainings shall be videotaped for facilities personnel use in the future. Training shall be provided to facilities maintenance staff for the following systems & equipment:

- 1. BAS Control system
- 2. Mechanical equipment including chillers, boilers, air handling units, terminal units, and air conditioning units.
- 3. Domestic water & gas equipment, including meters, sump pumps, sewer ejectors & circulator pumps.
- 4. Fire protection systems including fire pumps and fire alarm systems.
- 5. Security and access control systems
- 6. Life safety systems
- 7. Fuel Management System(s)
- 8. Main Service Switchboards
- 9. Distribution Boards
- 10. UPS and Batteries
- 11. Generators and Fuel System
- 12. Roll Up Generator Connections
- 13. Load Banks
- 14. Auto Transfer Switches
- 15. Metering Equipment
- 16. Photo Voltaic System
- 17. Any other systems requested by the County

## U. FOOD SERVICE PROGRAM

The County of Los Angeles is planning to provide a new Cafeteria to serve the staff and visitors as part of the new Rancho Los Amigos South Campus development. The Cafeteria shall not be open to the general public without them first gaining visitor clearance through the main building lobby.

This Narrative is intended to provide food service design direction and support information for this operation.

# **Design Process**

Food Service Design Process and Requirements:

- 1. The design build contractor shall provide a food service design consultant and a food service operations programming consultant during the design-build competition. These consultants must have demonstrable experience and success with similar projects.
- 2. Design build contractor is to use this narrative as a guide when developing food service plans.
- 3. The food service design contractor and the food service operations programming consultant must be engaged at the beginning of the design process and be integrally involved through permitting, construction and commissioning of the food service space(s).
- 4. Food service plans must be approved by LA County Health as a condition of building department plan approval.
- 5. Construction must begin within one year of health permit issue date

# **Operational Programming**

Programming is to include service levels and menu options consistent with current County facilities with the addition of extensive health focused menu options. Programming to consider the following:

- 1. The County will not be providing subsidies for the operator.
- 2. Campus population with reasonable access to the cafeteria is approximately 2,450.
- 3. Locate on ground floor with access to outdoors.
- 4. Projected participation is 25% at peak (lunch). See Space Programming matrix for dining seating estimates.
- 5. Catering opportunities are projected to be minimal. (approximately 3-5 events per week).
- 6. Operator selected will likely be a local vendor as the population, participation rate and lack of subsidy does not meet the minimal criteria for a national vendor.
- 7. Cafeteria is expected to be in operation for breakfast, lunch and snacks on weekdays except holidays.

- 8. Marché style of service is preferred with the following stations required. (See Design Criteria section for details):
  - a. Beverages
  - b. Grill
  - c. Hot Entrée
  - d. Made to Order Salad/Deli
  - e. Salad bar
  - f. Healthy Options
  - g. Dessert
  - h. Grab 'n Go
  - i. Flex/Exhibition
- 10. Production kitchen as required to support service programming (See Design Criteria section for details).
- 11. Dishwashing program to accommodate:
  - a. Disposable ware (plates, bowls, forks, knives, spoons, beverage glasses and cups, etc) for general customer use
  - b. Permanent ware (china, glassware, flatware) for special catering use for up to 100 guests.
  - c. Pots, pans, utensils, bulk service ware.
- 12. Dining room sized to accommodate projected dining requirements. Additional outdoor seating shall be provided refer to Landscape Narrative.

# **Design Criteria**

The following criteria is intended as a general guide for food service design and equipment selections for the design build contractor. See Equipment Recommendations and Space Programming for additional equipment information.

- 1. Servery to be Marché style with distinct stations placed in such a manner as to separate access to each station.
- 2. Servery stations
  - a. Beverage Station with two (2) fountain beverage dispensers including ice and chilled, filtered water dispenser and bottle filler. Provide space, power and plumbing for a total of eight (8) additional beverage dispensers such as coffee brewer, espresso machine, iced tea, juice, lemonade and / or other specialty dispensers. (All filters and other equipment shall be located for ease of access for regular maintenance.)
  - b. NOTE: There is a desire among the projected users of this facility to have a separate coffee bar with

- limited prepackaged food offerings. Ideally this would be adjacent to the servery and open throughout the day allowing the servery to be open only during peak periods (i.e., 7-9am, 11-2pm).
- c. Grill Station with grease exhaust hood, griddle, fryer, charbroiler, refrigerated equipment base, service counter with refrigerated sandwich table, panini press, TurboChef type high speed oven (small), hand sink, trash, sneezeguards, etc.
- d. Hot Entrée station with service counter including hot wells, sneezeguard, heat lamps, carving station, rear support including hot food holding cabinet and work counter with hand sink.
- e. Healthy Options Station with service counter including hot food wells and refrigerated sandwich table, sneezeguards, rear counter with hand sink and back-up hot and cold food storage. This concept could be integrated into other stations with menus that highlight healthy options, this will eliminate the need for a dedicated station. Current design trend is to integrate healthy options into appropriate stations and highlight selections.
- f. MTO Salad/Deli Station with service counter including refrigerated sandwich table, toaster, sneezeguard, hot food well, heat lamp, rear support including back-up refrigeration, work counter with slicer and hand sink.
- g. Soup & Salad Bar with sneezguard, soup wells, refrigerated cold pan and ambient space for bread, bowls, condiments, etc.
- h. Dessert Station, service station only with ice cream novelty freezer, refrigerated and ambient display cabinets, sneezeguards as appropriate.
- i. Cash Stands as appropriate to accommodate peak periods.
- j. Condiment Counter placed after the cash stands to accommodate flatware, napkins and condiments as required.
- 3. Kitchen design to support the projected servery and catering requirements including equipment recommendations listed in the equipment section of this narrative.



- 4. Dishroom design to accommodate disposable ware and special occasion use of permanent ware for small (maximum 100 meals) events.
- 5. Janitor closet to house janitor sink, tools and chemicals for cleaning
- 6. Office, staff restrooms and locker space as per code and operating requirements.
- 7. Dining room to be sized as per the Space Programming section of this narrative. Seating to be flexible and mixed as per similar County facilities. Specified seating to be of durable materials and construction so as to withstand food service use and consistent with similar County facilities. Dining room to include trash/recycling cabinets in appropriate locations and constructed for food service application. (All trash and recycling containers shall be integrated with Waste Management requirements as dictated by the County. Shall also include a microwave and chilled / filtered water station / bottle filler to support diners bringing food from other sources.
- 8. Servery and Kitchen shall be easy to secure by roll-down grilles or other means.
- 9. Security cameras shall be provided for viewing of all POS / financial transaction areas.
- 10. Vending alcove with space for two large, owner furnished vending machines with electrical and plumbing infrastructure shall be provided adjacent to dining area for after hours access.

# **Dining Room Furnishings and Finishes**

The dining room shall be an oasis from the work stations and offices. The furnishings and finishes shall be of high quality and durability, easily cleanable and support the intended use of the space. See details below.

There shall be two (2) seating areas in the dining room. One approximately 70% of the space for quick turnover with hard seating, flooring and walls with bright colors and lighting. One approximately 30% of the space for a more relaxing environment, using upholstered seating, carpet tiles and other sound absorbing finishes. Television zone to include the 30% soft seating space.

### FURNITURE (all furniture is to be included as part of this project)

- 1. 30-50% Fixed seating (booths, banquettes) and 50-70% chairs
- 2. Use materials specified by the manufacturers for food service use (stain resistant, fire resistant (check applicable codes), durable, easily cleanable, etc
- 3. Booth and banquette seat bottoms to be vinyl. Must be easy to slide across. Backs can be fabric or vinyl. Crumb rails between the back and seat required. Booth framing to be hardwood. Seat bottom springs must be heavy duty as specified for food service. Piping is not allowed.
- 4. Chairs shall be hardwood or metal. If metal, frame shall be fully welded construction, no screws, nuts or bolts. If chairs are to be upholstered, seat bottoms shall be vinyl, backs shall be vinyl or fabric. Same considerations as booths
- 5. Chairs shall slide easily on the chosen flooring. Sled bases on carpet, glides or sled bases on hard flooring.
- 6. Tables shall all be on movable bases, no permanent anchoring.



- 7. Bases must be size and weight appropriate for table size, spider bases with chairs, round weighted bases with booths. Bases shall have easily cleanable finishes (no matte, polished or chrome). Bases shall have self-leveling feature.
- 8. Table tops shall be constructed of wood with self edge or wood with laminate insert and wood edge. Provide with eased corners on square or rectangular tables and bull nose or rounded top edges on all tables.

### **Flooring**

Seating areas shall be carpet tile, traffic areas shall be hard surface. Carpet tile shall be a product specified by the manufacturer for food service, stain resistant, durable, easily cleanable with short, tight nap, etc. Vinyl and wood are not allowed for the hard surfaces. Acceptable hard flooring surfaces are terrazzo, color core tile with minimal or no grout lines and polished and sealed concrete.

### **Walls and Doors**

- 1. Acceptable materials shall be stain resistant, durable and easily cleanable such as painted drywall or vinyl wall paper. Noise attenuation must also be considered. Refer to acoustics narrative.
- 2. Base boards should be easily cleanable.
- 3. Provide corner and edge guards on all exposed corners and edges
- 4. Provide protective wainscot where chairs or tables contact the walls
- 5. Provide architecturally integrated features and environmental graphics depicting themes such as the County mission; history of LA County / City of Downey; significant civic events or accomplishments; or other themes appropriate to the design builder's solution, subject to LA County approval.
- 6. Exterior doors shall be vermin proof and self-closing.
- 7. Noise attenuation measures such as acoustical wall panels shall be provided.

### Ceiling

- 1. Material shall be easy to clean and maintain with no perforations.
- 2. Noise attenuation shall be provided on the ceilings.
- 3. Finished ceiling height to be minimum 11 feet above finished floor.
- 4. Acceptable finishes include acoustical plaster, drywall, wood and other upgraded materials. Acoustical tile or T-bar is not acceptable.

### Lighting

- 1. All fixtures shall be of high quality and durability and meet Title 24 standards.
- 2. Lighting levels shall be commensurate with desired comfort level, bright for high turnover, lower for more comfortable environment.
- 3. Provide pendant fixtures over fixed seating, recessed lighting over the balance of the space. Wall sconces are acceptable where applicable, as approved by LA County.
- 4. Refer to lighting narrative for additional information.

### IT/AV

Provide power and data for television in the "TV Zone". Provide WiFi for the entire space. Provide power and data connections at each booth. Refer to AV Narrative.

## **Servery Finishes**

The servery square footage shall be 50% circulation and 50% service. The servery shall be designed so that when a customer crosses the threshold they will have an unobstructed view of all of the stations / options. The flow must have a clearly defined entry and exit. Cashiers shall be placed so as to have a full and clear view of the servery. Servery shall be brightly lit. Servery, including cash stands and kitchen areas, shall be securable through lockable doors, gates and / or grills.

### **Flooring**

Provide hard surface flooring, impervious to stains chip resistant and easy to clean and maintain. Flooring behind the counters shall be quarry tile with integral 3/8 radius cove base and epoxy grout. Color core tile with minimal or no grout and terrazzo are acceptable flooring in the circulation areas. If grout is to be used, it shall be epoxy grout. Coefficient of friction to be considered. Vinyl and epoxy flooring are not acceptable.

### Walls

Walls in food preparation areas must be smooth, impervious to grease, light in color and easily cleanable. Suggest

wall tile or FRP. Drywall painted with white semi-gloss enamel is acceptable except in "wet" areas (anywhere there is a sink). Must use stainless steel or tile on walls behind cooking equipment. Tile with minimal grout (epoxy grout required) is the best choice for all of the food prep areas.

### Ceiling

Provide painted drywall with high reflectant value (white) at minimum 9 feet.

### Lighting

Lighting design to be bright and cheerful, providing a focus on the food. Provide pendants over the counters, recessed lighting in the circulation areas and lighting in the sneezeguards. Lighting behind the counters shall be recessed with minimum 50 foot candles. All lighting in the servery shall be shatterproof or shielded. Refer to lighting narrative for additional information.

### IT/AV

Provide data accommodations for POS system, WiFi with access to building occupants for web ordering, etc.

## **Kitchen Finishes**

## **Flooring**

Provide quarry tile with epoxy grout or troweled epoxy with integral 3/8" radius cove base. Vinyl is not acceptable.

### **Walls and Doors**

Provide FRP on walls from top of cove base to bottom of ceiling except under grease exhaust hood. Provide stainless steel from top of cove to bottom of ceiling under grease exhaust hood. Provide stainless steel on exposed exterior of cold storage rooms. Provide stainless steel wall caps or corner guards, as appropriate, up to minimum 48" A.F.F. on all exposed wall ends and corners. For interior doors provide solid core wood with push and kick plates. Kitchen delivery doors shall be 4'-0" wide.

## Ceiling

Provide T-bar with washable tiles throughout.

### Lighting

Provide 2 x 4 and 2 x 2 fixtures with minimum 50 foot candles. Refer to lighting narrative for additional information.



### IT/AV

Provide data accommodations for POS system, WiFi with access to building occupants for web ordering, etc.

# **Equipment Design-Build Contractor Provided**

Design builder shall make a best effort to incorporate energy efficient equipment that meets long-term operational, maintenance and functionality goals of this facility. The following is a list of required food service equipment and fixtures. Equipment and fixtures are listed by work area.

- 1. Kitchen Storage
  - a. Dry storage shelving
  - b. Cold storage rooms, including refrigeration system, with shelving
- 2. Cold Food Preparation
  - a. Work tables
  - b. Prep sinks-one with scrap collector
  - c. Hand sink(s)
  - d. 2 Each two section reach-in refrigerators (minimum)
  - e. Transport racks and carts
  - f. Utensil storage
  - g. Trash / recycliing containers (integrated with Waste Management requirements as dictated by the building department).

### 3. Hot Food Preparation

- a. Double stack convection oven
- b. Double stack steamer
- c. Single combination oven
- d. Four burner range with oven base
- e. 3' griddle with oven base
- f. Two (2) 6 gallon steam jacketed kettles with stand
- g. Tilt skillet
- h. Chef's table(s)
- i. 1 Each two section reach-in refrigerator
- j. Transport carts and racks
- k. Utensil storage
- I. Trash / recycliing containers (integrated with Waste Management requirements as dictated by the building department).
- m. Grease exhaust hood/system
- n. Hand sink(s)

### 4. Dishroom

- a. Minimum 12' four compartment scullery sink with scrap collector, heaters and agitators
- b. Single rack high temperature dishmachine with booster heater
- c. Soiled dish table with scrap collector, pre-rinse and quick drain
- d. Clean dishtable with overshelf
- e. Ware drying and storage racks
- f. Chemical storage
- g. Hand sink(s)
- h. Exhaust hood for dishmachine
- i. Trash / recycling containers (integrated with Waste Management requirements as dictated by the building department).

### 5. Servery

a.  $\,$  All counters, trayslides, sneezeguards with lights and heat lamps as appropriate

- b. Minimum 2 each refrigerated merchandisers, 6' long by 6'-6' tall for packaged beverages and food
- c. Tray box(s)
- d. Grill equipment: single split vat fryer with built-in filter and dump station 4' griddle, 3' charbroiler, refrigerated sandwich table(s), single hot well, refrigerated equipment stand, grease exhaust hood and system, freezer to support fryer, toaster, high speed counter top oven, panini press
- e. Hand sinks as required
- f. Rear support counters and prep sinks as required
- g. Five (5) hot wells for hot entrée station with carving station
- h. Dry storage shelving
- i. Hot and refrigerated support storage
- j. Refrigerated sandwich tables as necessary
- k. Three (3) soup wells and minimum 10' refrigerated cold pan for salad bar
- l. Ice cream freezer
- m. Refrigerated and ambient dessert display merchandisers
- n. Cash stands-Two (2) double sided, one (1) single sided
- o. Condiment counter-minimum 12' with integral trash
- p. Trash / recycliing containers (integrated with Waste Management requirements as dictated by the building department).

### 6. Miscellaneous

- a. Remote refrigeration system (outdoors or in temperature controlled mechanical room)
- b. General signage
- c. Soap and towel dispensers
- d. Ice machine(s)
- e. Janitor sink, mop & broom rack, chemical shelving
- f. Trash / recycliing containers (integrated with Waste Management requirements as dictated by the building department).

### 7. Dining Room

- a. All tables, chairs, booths, etc.
- b. Microwave counter with water glass filler and four (4) microwave ovens and trash
- c. Trash/recycling cabinet(s) with tray rails located so as to efficiently allow customer disposal of trash

- and recycling and efficiently allow food service staff to remove with minimal customer disruption.
- d. Chilled, filtered water dispenser and bottle filler. (Filters shall be located in centralized, easily accessible area for future access and regular maintenance.)

# **Equipment Operator Provided**

The following list is typical in this type of operation. However it is all subject to negotiation with the operator.

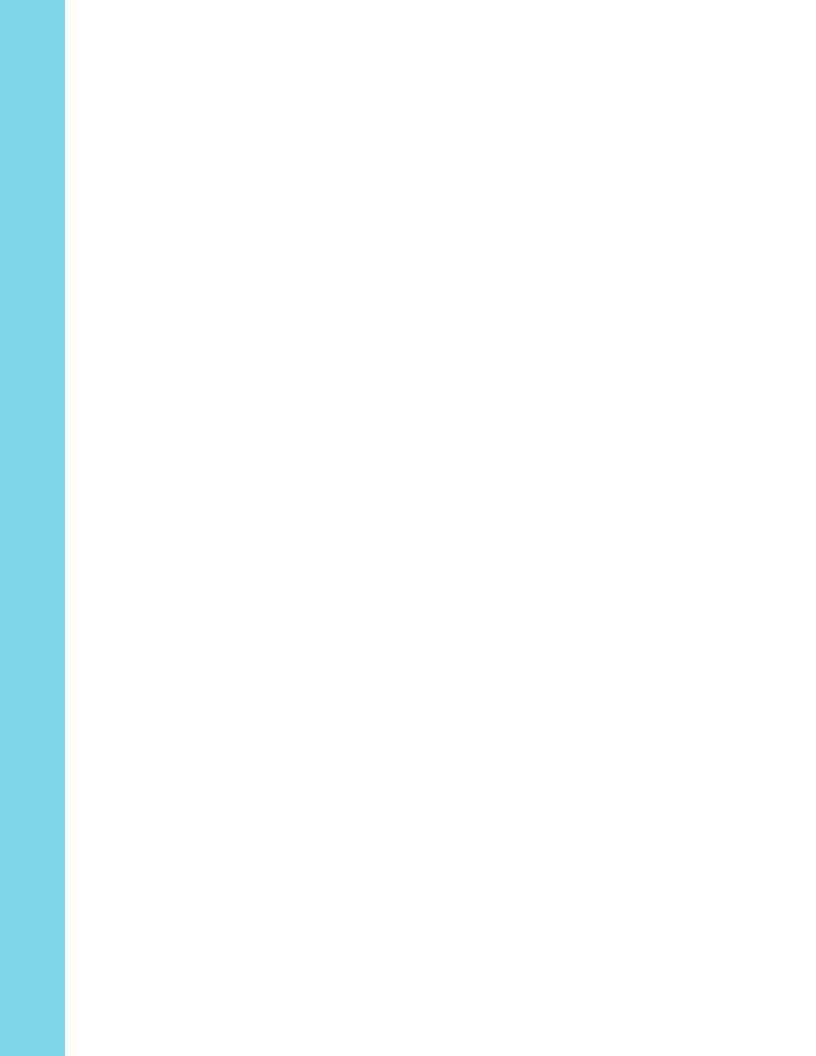
- 1. POS System
- 2. Menu boards and/or monitors
- 3. Smallwares-utensils for prep and service, specialty service ware
- 4. Slicer
- 5. Processor
- 6. 20 qt. mixer
- 7. 60 qt. mixer
- 8. Chemical dispensers
- 9. Beverage dispensers and systems
- 10. Napkin, flatware and condiment dispensers
- 11. Soda systems
- 12. Specialty preparation equipment
- 13. Proprietary signage

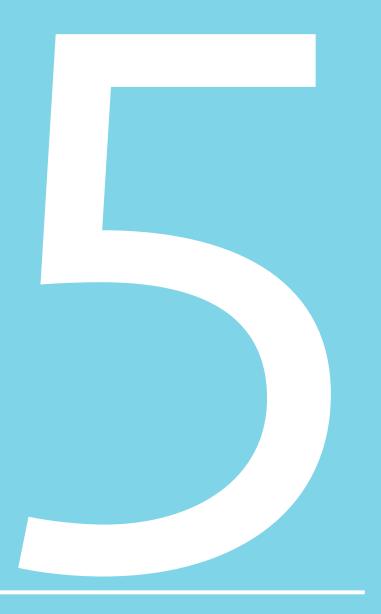
# **Food Service Space Program**

June	30, 2018				
Jseab	ole Square Footage				
SPAC	Fl	USF/	QTY	USF	REMARKS
0. 7.0		SPACE	~		
	Cafeteria/Dining				
1.01	Servery	2,640	1	2,640	
1.02	Dining Room	2,760	1	2,760	115 Seats
1.03	Coffee Kiosk	2,700	'	2,700	Not Applicable
1.04	Janitor Closet				In Kitchen
1.05	Vending		1	120	
1.06	Public Toilet			120	Not Included, must be within 200'
	Total			5,520	
	Total			5,520	
	Receiving and Dry Storage				
1.10	Receiving and Staging	80	1	80	
1.11	Storage, Dry Food, Beverages, Paper	450	1	450	
1.12	Storage Detergent/Cleaning Supplies	50	1	50	
1.13	Storage, Refrigerated and Frozen	500	1	500	
	Total			1,080	
	Bulk Food Prep Area				
	Bulk Food Prep Area				
1.07	Cold Prep	450	1	450	
1.08	Hot Prep	400	1	400	
1.09	Ice	50	1	50	
	Total			900	
	Warewashing				
1.14	Pot Wash	120	1	120	
1.15	Dish Wash	280	1		Disposables Only
1.16	Cart Wash	50	1	50	
1.17	Garbage Holding	50	1	50	
1.18	Janitor Closet	50	1	50	
	Total			550	

SPACE		USF/	QTY	USF	REMARKS
		SPACE			
	10.5				
	Administrative and Staff				
1.19	Office Food Comice Manager	100	1	100	
1.19	Office, Food Service Manager Office, Production Manager/Chef	80	1	80	
1.21	Staff toilet	80	2	160	
1.22	Staff lockers	60	1		Maximum 7 staff per shift not
1.23	Starriothers	- 00		00	required to change clothes
1.20	Total			400	required to change cicanes
	. 0.00			.00	
	Miscellaneous				
1.24	Refrigeration System	100	1	100	Locate outdoors or in mechanical room
	Total			100	
	Grand Total			8,550	
	1		1		1

Note: These USF include departmental grossing factor of walls, shafts, internal circulation etc. Apply 12% building grossing factor to 8550 USF to get gross program sf of 9716 GSF.





# **DETAILED PROGRAM**

RLASC Program Summary	196
Probation Department Summary	198
ISD Summary	200
Campus Shared Summary	202
Probation Department Organization Structure	204
ISD Organizational Structure	220

# **RLASC Program Summary**

Updated: June 30, 2018

Overall Program Summary				
	NSF	Circulation	USF	GSF
Campus Shared	40,704 SF	7,183 SF	47,887 SF	54,417 SF
ISD	150,539 SF	92,266 SF	242,805 SF	275,915 SF
Probation	77,327 SF	47,394 SF	124,721 SF	141,728 SF
Total	268,570 SF	146,843 SF	415,413 SF	472,060 SF
		•		•

USF is achieved by adding a circulation factor to the NSF. Circulation factors are 38% for office space and 15% for shared campus functions. GSF is achieved by adding a 12% building factor to the USF. These factors are based on GSA standards for office buildings with a similar ratio of open to closed spaces.

This Program Summary has been replaced with Revised Program Summary included with Notice to Proposers I = GSF 460,070 sf

ID No.	Space Type	Probation	ISD	Campus Shared	Total Count	Total NSF	Division Code	Division-Specific Spaces  Division Name
1.0	Workspace							
1.1	Office 15'x20'	1	1		- 2	600		
1.2	Office 12'-6"x20'	2	1		- 3	750		
1.3	Office 12'-6"x12'	21	10		- 31	4,650		
1.4	Office 10'x10'	87	205		- 292	29,200		
1.5	Workstation 8'x8'	26	171		197	12,608		
1.6	Workstation 6'x8'	753	1222	7		95,136		Campus Shared: Auditor Controller
	Total	890	1,610	7	2,507	142,944		
2.0	Meeting Space							
2.1	S Meeting Room	18	33	1	52	7,800		1 per 50 people, one adjacent to 5.11
2.2	M Medium Room	9	16		- 25	7,500		1 per 100 people
2.3	L Meeting Room	5	8	-	- 13	6,500		1 per 200 people
2.4	XL Meeting Room	2	4		- 6	4,500		1 per 400 people
2.5	Auditorium / XXL Meeting Room	-	-	1		2,300		
2.6	Collaboration Space	9	17		- 26	3,900	ISD.3	Information Technology Services (ITS)
2.7	Touchdown	9	16		- 25	1,875		1 per 100 people
2.8	Interview Room	10	3		- 13	1,950	PD.6	Human Resources
							PD.11	Professional Standards
							ISD.1	Administration & Finance Services (AFS)
	Total	62	97	2	161	36,325		
3.0	Support Space							
3.1	Cashier's Office with Safe	-	1		- 1	350	ISD.1	Administration & Finance Services (AFS)
3.2	Central Reprographics Room	-	1		- 1	1,500		To be co-located with 3.16 and 3.8
3.3	Not Used	-	-					
	Entry Lobby	_	-	1	1	1,100		
3.4								
-	Copy / Print Station	5	8		- 13	2,340		1 per 200 people
3.5					- 13	2,340 632	PD.6	1 per 200 people Human Resources
3.5	Copy / Print Station Employee Badging Area and Live Scan	5	8 2	-			PD.6	Human Resources
3.5		5		-				Human Resources
3.5 3.6 3.7	Employee Badging Area and Live Scan	5	2	-	3	632	ISD.1	Human Resources Administration & Finance Services (AFS)
3.5 3.6 3.7 3.8	Employee Badging Area and Live Scan  Executive Restroom Check Warrants Room	5 1 3	2 2 1	-	5 - 1	875 700	ISD.1 PD.3	Human Resources Administration & Finance Services (AFS) Executive
3.5 3.6 3.7 3.8 3.9	Employee Badging Area and Live Scan  Executive Restroom Check Warrants Room File Room	5 1 3	2	-	- 5	632 875	ISD.1 PD.3	Human Resources Administration & Finance Services (AFS) Executive
3.5 3.6 3.7 3.8 3.9 3.10	Employee Badging Area and Live Scan  Executive Restroom  Check Warrants Room  File Room  Not Used	3 - 15	2 1 -	-	3 - 5 - 1 - 15	875 700 4,750	ISD.1 PD.3	Human Resources Administration & Finance Services (AFS) Executive ITS
3.5 3.6 3.7 3.8 3.9 3.10 3.11	Employee Badging Area and Live Scan  Executive Restroom  Check Warrants Room  File Room  Not Used  Local Copy / Print Area	3 - 15 - 18	2 2 1 -	-	3 - 5 - 1 - 15 - 51	875 700 4,750	ISD.1 PD.3	Human Resources Administration & Finance Services (AFS) Executive
3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12	Employee Badging Area and Live Scan  Executive Restroom Check Warrants Room File Room Not Used Local Copy / Print Area Food Service Program	3 - 15 - 18	2 1 - - 33	-	3 - 5 - 1 - 15 - 51	875 700 4,750 1,224 7,268	ISD.1 PD.3 ISD.3	Human Resources Administration & Finance Services (AFS) Executive ITS  1 per 50 people
3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12 3.13	Employee Badging Area and Live Scan  Executive Restroom Check Warrants Room File Room Not Used Local Copy / Print Area Food Service Program Mail Room	5 1 3 - 15 - 18 - 1	2 1 - - 33 - 1	-	3 - 5 - 1 - 15 - 51 - 51 - 2	875 700 4,750 1,224 7,268 900	ISD.1 PD.3	Human Resources Administration & Finance Services (AFS) Executive ITS
3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12 3.13	Employee Badging Area and Live Scan  Executive Restroom Check Warrants Room File Room Not Used Local Copy / Print Area Food Service Program Mail Room Wellness Room	5 1 3 - 15 - 18 - 1	2 1 - - 33 - 1		3 - 5 - 1 - 15 - 51 - 1 - 2	875 700 4,750 1,224 7,268 900	ISD.1 PD.3 ISD.3	Human Resources Administration & Finance Services (AFS) Executive ITS  1 per 50 people  Purchasing & Contract Services (PCS)
3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12 3.13 3.14 3.15	Employee Badging Area and Live Scan  Executive Restroom Check Warrants Room File Room Not Used Local Copy / Print Area Food Service Program Mail Room Wellness Room Pantry	5 1 3 - 15 - 18 - 1	2 2 1 - - 333 - 1		3 - 5 - 1 - 15 - 51 - 51 - 2 - 8 - 8	875 700 4,750 1,224 7,268 900 864 5,200	ISD.1 PD.3 ISD.3	Human Resources Administration & Finance Services (AFS) Executive ITS  1 per 50 people  Purchasing & Contract Services (PCS) Management Services
3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12 3.13 3.14 3.15 3.16	Employee Badging Area and Live Scan  Executive Restroom Check Warrants Room File Room Not Used Local Copy / Print Area Food Service Program Mail Room Wellness Room	5 1 3 - 15 - 18 - 1 3 5	2 2 1 		3 5 1 15 5 51 1 2 8 13	875 700 4,750 1,224 7,268 900 864 5,200	ISD.1 PD.3 ISD.3 ISD.5, PD.9	Human Resources Administration & Finance Services (AFS) Executive ITS  1 per 50 people  Purchasing & Contract Services (PCS)
3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12 3.13 3.14 3.15 3.16	Employee Badging Area and Live Scan  Executive Restroom Check Warrants Room File Room Not Used Local Copy / Print Area Food Service Program Mail Room Wellness Room Pantry	5 1 3 - 15 - 18 - 1	2 2 1 - - 333 - 1	1	3 - 5 - 1 - 15 - 51 - 51 - 2 - 8 - 8	875 700 4,750 1,224 7,268 900 864 5,200	ISD.1 PD.3 ISD.3	Human Resources Administration & Finance Services (AFS) Executive ITS  1 per 50 people  Purchasing & Contract Services (PCS) Management Services
3.5 3.6 3.7 3.8 3.9 3.10	Employee Badging Area and Live Scan  Executive Restroom Check Warrants Room File Room Not Used Local Copy / Print Area Food Service Program Mail Room  Wellness Room Pantry Production Room	5 1 3 - 15 - 18 - 1 3 5	2 2 1 	1	3 5 1 15 5 51 1 2 8 13	875 700 4,750 1,224 7,268 900 864 5,200	ISD.1 PD.3 ISD.3 ISD.5, PD.9 ISD.5, PD.7 PD.7, 6, PD.7	Human Resources  Administration & Finance Services (AFS) Executive  ITS  1 per 50 people  Purchasing & Contract Services (PCS) Management Services  Purchasing & Contract Services (PCS)  Executive Suite, Human Resources, Information Services Bureau, Management Services

# **RLASC Program Summary**

4.0	Specialty Space							
				Campus			Division	
D No.	Space Type	Probation	ISD	Shared	Total Count		Code	Division Name
4.1	BEAS and EEMIS network operations (requested space minus 6 small desks for staff)	-	1		1	1,045	ISD.6	Energy and Environmental Service
1.2	Cleaning Supply Storage Room	1	-		1	500	PD.9	Management Services Bureau
4.3	Computer Repair Room	1	-		- 1	300	PD.7	Information Services Bureau
4.4	Computer Training Rooms	-	9		9	8,100	ISD.1 & ISD.3	Administration & Finance Services (AFS and Information Technology Services (ITS)
4.5	Custodian Assembly/Lunchroom	1	-		- 1	400	PD.9	Management Services Bureau
4.6	Custodian Locker Room	1	-		1	200	PD.9	Management Services Bureau
1.7	Dedicated IT Closet	1	-		. 1	300	PD.7	Information Services Bureau
1.8	Department Emergency Ops Center (Probation)	1	-		1	300	PD.3	Executive
1.9	Disaster Operations Center (ISD)	-	1		1	1.800	ISD.1	Administration & Finance Services (AFS
4.10	Gym / Fitness Center	-	-	1	1	3,500	100.1	, tallimet attent a 1 maries services (x ii s
4.11	Help Desk / Enterprise Command Center, full description in program backup and Room Info Sheet (total space minus 88 sm desks, 16 lrg desks, 1 pantry, and 2 small meeting rooms)	-	1		1	7,518	ISD.3	Information Technology Services (ITS)
1.12	Lab / Testing Room	1	-		. 1	300	PD.7	Information Services Bureau
4.13	ITS Innovation / Display Space	-	1		1	1,600	ISD.3	Information Technology Services (ITS)
4.14	Planning / Plotters Room	1	-		. 1	300	PD.9	Management Services Bureau
1.15	Professional Standards Video Viewing Station	3	-		. 3	144	PD.10	Professional Standards
1.16	A&I Library, Plan Archive, Local Plotter Area	-	1		1	3,000	ISD.4.1	Facilities Operation Services (FOS) Alterations & Improvements (A&I)
4.17	Surplus Vault Room	-	1	:	. 1	600	ISD.5	Purchasing & Contract Services (PCS)
	Total	11	15	1	27	29,907		
5.0	Loading Dock							
5.1	Not Used			-	-			
5.2	Floor Care Equipment Storage			1	1	800	ISD.4.2	Facilities Operation Service (FOS) Custodial Services
i.3	IT Warehouse / Storage	ı		1		2,000	PD.7	Information Services Bureau
.4	Loading Dock	-		1		500		
.5	Material Management Records Cage			1		2,400	ISD.5	Purchasing & Contract Services (PCS)
.6	Paper Storage for Central Reprographics			1		450	ISD.3	Information Technology Services (ITS)
i.7 i.8	PCS Warehouse (including 12 staff workstations), Property Management Salvage Cage			1		10,067 2.300	ISD.5	Purchasing & Contract Services (PCS)  Purchasing & Contract Services (PCS)
5.9	Property Management Salvage Cage Property Management Tagging Cage			1		450	ISD.5	Purchasing & Contract Services (PCS)  Purchasing & Contract Services (PCS)
.1	Receiving / Shipping Supply Room Office			1		533	ISD.5	Purchasing & Contract Services (PCS)
.1	Auditor Controller Print Function			1		3,844	130.5	Auditor-Controller
.11	JOC archive file room			1		2.000	ISD 4.1	Information Services Bureau
	ITS Warehouse			-	1	1,192	ISD 4.1	Information Services Bureau
.13								

# **Probation Department Summary**

# **Probation Department Summary**

(included in RLASC Program Summary)

Updated: April 13, 2018

	Department Headcount	İ			
ID No.	Division	Headcount	Offices	Workstations	NSF Total
PD.1	Contracts and Grants	26	1	25	1,300 SF
PD.2	Detention Services Bureau	9	2	7	602 SF
PD.3	Executive Suite	47	20	27	4,428 SF
PD.4	Field Special Services	127	28	99	7,960 SF
PD.5	Finance	147	6	141	7,368 SF
PD.6	Human Resources	134	5	129	6,708 SF
PD.7	Information Services Bureau	115	10	105	6,056 SF
PD.8	Juvenile Field Services	25	2	23	1,320 SF
PD.9	Management Services Bureau	38	7	31	2,220 SF
PD.10	Placement Permanency	5	2	3	410 SF
PD.11	Professional Standards Bureau	86	13	73	4,870 SF
PD.12	Quality Assurance	108	9	99	5,734 SF
PD.13	Residential Treatment Services Bureau	23	6	17	1,482 SF
	Total	890	111	779	50,458 SF

1.0	Workspace				
ID. No.	Space Type	Count	SF	NSF Total	
1.1	Office 15'x20'	1	300	300 SF	
1.2	Office 12'-6"x20'	2	250	500 SF	
1.3	Office 12'-6"x12'	21	150	3,150 SF	
1.4	Office 10'x10'	87	100	8,700 SF	
1.5	Workstation 8'x8'	26	64	1,664 SF	
1.6	Workstation 6'x8'	753	48	36,144 SF	
	Total	890		50,458 SF	

2.0	Meeting Space			
ID. No.	Space Type	Count	SF	NSF Total Ratio
2.1	S Meeting Room	18	150 SF	<b>2,700 SF</b> 1 per 50 people
2.2	M Medium Room	9	300 SF	2,700 SF 1 per 100 people
2.3	L Meeting Room	5	500 SF	2,500 SF 1 per 200 people
2.4	XL Meeting Room	2	750 SF	1,500 SF 1 per 400 people
2.6	Collaboration Space	9	150 SF	1,350 SF 150sqft, 1 per 100 people
2.7	Touchdown	9	75 SF	675 SF 1 per 100 people
2.8	Interview Room	10	150 SF	1,500 SF PD.6, PD.11
	Total	62		12.925 SF

# **Probation Department Summary**

3.0	Support Space			
ID. No.	Space Type	Count	SF	NSF Total
3.5	Copy / Print Station	5	180 SF	900 SF 1 per 200 people
3.6	Employee Badging Area and Live Scan	1	144 SF	144 SF PD.6 HR Photo / Fingerprint Room
3.7	Executive Restroom	3	175 SF	525 SF PD.3 Executive Suite
3.9	File Room	15	varied	<b>4,750</b> SF PD.1, PD.3, PD.6, PD.9, PD.11
3.11	Local Copy / Print Area	18	24 SF	<b>432 SF</b> 1 per 50 people
3.13	Mail Room	1	300 SF	300 SF PD.9 Management Services
3.14	Wellness Room	3	108 SF	<b>324 SF</b> 1 per 300 people
3.15	Pantry	5	400 SF	2,000 SF 1 per 200 people
3.17	Reception and Waiting Area	5	varied	750 SF PD.3, PD.6, PD.7, PD.9
3.18	Storage Rooms	7	varied	900 SF PD.3, PD.6, PD.7, PD.9
	Total	64		11,200 SF

4.0	Specialty Space			
ID. No.	Space Type	Count	SF	NSF Total Notes
4.2	Cleaning Supply Storage Room	1	500 SF	500 SF PD.9 Management Services
4.3	Computer Repair Room	1	300 SF	300 SF PD.7 Information Services Bureau
4.5	Custodian Assembly/Lunchroom	1	400 SF	400 SF PD.9 Management Services
4.6	Custodian Locker Room	1	200 SF	200 SF PD.9 Management Services
4.7	Dedicated IT Closet	1	300 SF	300 SF PD.7 Information Services Bureau
4.8	Department Emergency Ops Center (Probation)	1	300 SF	300 SF PD.3 Executive Suite
4.12	Lab / Testing Room	1	300 SF	300 SF PD.7 Information Services Bureau
4.14	Planning / Plotters Room	1	300 SF	300 SF PD.9 Management Services
4.15	Professional Standards Video Viewing Station	3	48 SF	<b>144 SF</b> PD.11 Professional Standards
	Total	11		2,744 SF

Probation Program Summary	
Total NSF	77,327 SF
Circulation (38%)	47,394 SF
Total USF	124,721 SF

#### Notes

Circulation Factor of 38% is based on GSA standards for open offices.

No touchdown spaces are currently accounted for in the workspace count, although interviews indicated need for some touchdown space for County employees, auditors, and vendors.

# **ISD Summary**

# ISD Summary

(included in RLASC Program Summary)

Updated: April 13, 2018

	Department Headcount					
ID No.	Divisions	Headcount (Current)	Offices	Workstations	NSF Total	
ISD.1	AFS - Administration & Finance Service	172	17	155	9,446 SF	
ISD.2	Executive	6	3	3	876 SF	
ISD.3	ITS - Information Technology Service	1,098	104	994	60,202 SF	
ISD.4	Facilities Operation Service (FOS)	143	63	80	10,510 SF	
ISD.5	PCS - Purchasing & Contract Services	163	25	138	9,222 SF	
ISD.6	Energy and Environmental Service	28	5	23	1,894 SF	
	Total	1,610	217	1,393	92,150	

1.0	Workspace			
ID. No.	Space Type	ISD Count	SF	NSF Total
1.1	Office 15'x20'	1	300	300 SF
1.2	Office 12'-6"x20'	1	250	250 SF
1.3	Office 12'-6"x12'	10	150	1,500 SF
1.4	Office 10'x10'	205	100	20,500 SF
1.5	Workstation 8'x8'	171	64	10,944 SF
1.6	Workstation 6'x8'	1222	48	58,656 SF
	Total	1,638		92,150 SF

2.0	Meeting Spaces			
ID. No.	Space Type	ISD Count	SF	NSF Total Ratio
2.1	S Meeting Room	33	150 SF	<b>4,950 SF</b> 150sqft, 1 per 50 people
2.2	M Medium Room (incl A&I, M&O)	16	300 SF	4,800 SF 300sqft, 1 per 100 people
2.3	L Meeting Room	8	500 SF	4,000 SF 500sqft, 1 per 200 people
2.4	XL Meeting Room	4	750 SF	<b>3,000 SF</b> 750sqft, 1 per 400 people
2.6	Collaboration Space	17	150 SF	2,550 SF 150sqft, 1 per 100 people, 8 dedicated ITS
2.7	Touchdown	16	75 SF	<b>1,200 SF</b> 75sqft, 1 per 100 people
2.8	Interview Room	3	150 SF	<b>450 SF</b> <i>ISD.</i> 1 two off of reception, 1 in Internal Affairs area
	Total	97		20,950 SF

# **ISD Summary**

Support Space

3.0

ID. No.	Space Type	ISD Count	SF	NSF Total Notes
3.1	Cashier's Office with Safe	1	350 SF	350 SF ISD.1: Administration & Finance Services (AFS)
3.2	Central Reprographics Room	1	1,500 SF	1,500 SF ISD.3 ITS: Space to be co-located with 3.16
				and Loading Dock
3.5	Copy / Print Station	8	180 SF	1,440 SF 1 per 200 people
3.6	Employee Badging Area and Live Scan	2	varied	488 SF ISD.1 AFS, ISD.6: PCS (2 rooms, 144SF each
				with controlled access), Waiting Area, 200SF,
				for 6 chairs off of reception can be shared
3.7	Executive Restroom	2	175 SF	350 SF ISD.2 Executive
3.8	Check Warrants Room	1	700 SF	700 SF ISD.3 ITS Space to be co-located with 3.2
3.11	Local Copy / Print Area	33	24 SF	<b>792 SF</b> 1 per 50 people
3.13	Mail Room	1	600 SF	600 SF ISD.6 PCS
3.14	Wellness Room	5	108 SF	<b>540 SF</b> 1 per 300 people
3.15	Pantry	8	400 SF	<b>3,200 SF</b> 1 per 200 people
3.16	Production Room	1	450 SF	450 SF ISD.5: PCS Confidential bid document printing
				co-located with 3.2
3.17	Reception and Waiting Area	2	varied	600 SF ISD.2 Executive, ISD.5 PCS
3.18	Storage Rooms	8	varied	2,766 SF ISD.1, ISD.3, ISD.5
		73		13,776 SF
4.0	Specialty Space			
ID. No.	Space Type	ISD Count	SF	NSF Total Notes
4.1	BEAS and EEMIS network operations	1	1,045 SF	1,045 SF ISD.6 Contains 8 desks, assumed 8x8' desks
	(requested space minus 6 small desks for			removed from overall 1,557 sqft. Space 4.1 not
	staff)			to be combined with ITS Call Center (4.11),
				located with proximity to FOS M&O
4.4	Computer Training Rooms	9	900 SF	8,100 SF   ISD.3   ITS
4.9	Disaster Operations Center (ISD)	1	1,800 SF	1,800 SF ISD.1 AFS
4.11	Help Desk / Enterprise Command Center,	1	7,518 SF	7,518 SF ISD.3 sqft total minus desks, pantry and small
	full description in program backup and Room Info Sheet (total space minus 88 sm			meeting rooms, War room +/- 1,000 SF
	desks, 16 lrg desks, 1 pantry, and 2 small			
	meeting rooms)			

ISD Program Summary	
Total NSF	150,539 SF
Circulation (38%)	92,266 SF
Total USF	242,805 SF

15

1,600 SF

3,000 SF

600 SF

Notes:

Area

Surplus Vault Room

ITS Innovation / Display Space

A&I Library, Plan Archive, Local Plotter

4.13

4.16

4.17

Circulation Factor of 38% is based on GSA standards for open offices.

1,600 SF ISD.3 ITS

23,663 SF

3,000 SF ISD 4.1 A&I Small Library, sample room & plan archive(all 1 room - 2000 SF) in secure room;

600 SF ISD.5 PCS: Adjacent to loading dock

Space Planning large library & sample room (1 room 500 SF) in secure room, 3000 SF total.

# **Campus Shared Summary**

### (Included in RLASC Program Summary)

Updated: June 30, 2018

2.0	Meeting Space				
ID. No.	Space Type	Count	SF	NSF Total Notes	
2.5	Auditorium / XXL Meeting Room	1	2,300	2,300 SF	
	Total	1		2,300 SF	

3.0	Support Space			
ID. No.	Space Type	Count	SF	NSF Total Notes
3.4	Entry Lobby	1	1,100	1,100 SF
3.12	Food Service Program	1	7,268	7,268 SF 8,550 USF minus Circulation at 15%
	Total	2		8.368 SF

4.0	Specialty Space			
ID. No.	Space Type	Count	SF	NSF Total Notes
4.10	Gym / Fitness Center	1	3,500	3,500 SF
	Total	1		3,500 SF

5.0	Loading Dock				
ID. No.	Space Type	Count	SF	NSF Total	Notes
5.1	Not Used -	-	-		
5.2	Floor Care Equipment Storage	1	800 SF	800 SF	
5.3	IT Warehouse / Storage	1	2,000 SF	2,000 SF	
5.4	Loading Dock	1	500 SF	500 SF	
5.5	Material Management Records Cage	1	2,400 SF	2,400 SF	
5.6	Paper Storage for Central Reprographics	1	450 SF	450 SF	Located nearby 3.2, storage is for this function
5.7	PCS Warehouse (including 12 staff workstat	1	10,067 SF	10,067 SF	
5.8	Property Management Salvage Cage	1	2,300 SF	2,300 SF	
5.9	Property Management Tagging Cage	1	450 SF	450 SF	
5.1	Receiving / Shipping Supply Room Office	1	533 SF	533 SF	
5.11	Auditor Controller Print Function	1	3,844 SF	3,844 SF	To be co-located with 3.2
5.12	JOC archive file room	1	2,000 SF	2,000 SF	
5.13	ITS Warehouse	1	1,192 SF	1,192 SF	
	Total	12		26,536 SF	

Campus Shared F	Program Summary
Total NSF	40,704 SF
Circulation (15%)	7,183 SF
Total USF	47,887 SF

### **Notes:**

Campus Shared Spaces are joint ISD / Probation elements to be accessible to both groups.

Care is to be taken to ensure Loading Dock shipping / receiving functions work well for both departments, and placement within the site creates a logical delivery pattern.

[Intentionally Left Blank]

# **Probation Department Organizational Structure**

# Probation Department Organization Structure

PD	Probation Department
PD.1	Contracts and Grants
PD.1.1	Contract Management
PD.1.2	Grants Management
PD.2	Detention Services Bureau
PD.3	Executive Suite (DIST 151)
PD.4	Field Special Services (AB109, SB678, SEO, CORE/ATC, Adult Investigative Services, Population Caseload Mgmt.)
PD.4.1	AB109
PD.4.2	Adult Investigative Services
PD.4.3	Special Services
PD.5	Finance (System Accouting Resource)
PD.5.1	Budget
PD.5.2	Fiscal Services
PD.5.3	Collections
PD.5.4	Procurement
PD.6	Human Resources
PD.6.1	Badge Reconciliation
PD.6.2	Civil Litigation
PD.6.3	Employment Services
PD.6.4	Operations
PD.6.5	Payroll
PD.6.6	Return to Work
PD.6.7	Risk Management

PD.7	Information Services Bureau
PD.7.1	CIO: Information Systems Security
PD.7.2	CIO: Project Management Office
PD.7.3	Infrastructure and Operations: Client Support
PD.7.4	Infrastructure and Operations: Desktop Support
PD.7.5	Infrastructure and Operations: Network Support
PD.7.6	Business Applications and Data Management: Business Intelligence / Data Mining
PD.7.7	Business Applications and Data Management: Electronic Medical Records
PD.7.8	Business Applications and Data Management: Enterprise Application Analysis
PD.7.9	Business Applications and Data Management: Enterprise Application Development
PD.7.10	Business Applications and Data Management: Enterprise Data Architecture
PD.7.11	Business Applications and Data Management: Mobile Development
PD.7.12	Business Applications and Data Management: Web Development
PD.8	Juvenile Field Services
PD.9	Management Services Bureau (MSB, ASB)
PD.9.1	Administrative Support
PD.9.2	Communications
PD.9.3	Facilities Maintenance / Special Projects
PD.9.4	Facilities Operations
PD.9.5	Facilities Planning
PD.9.6	Fleet Management
PD.10	Placement Permanency
PD.11	Professional Standards Bureau
10.11	1 Totossional Standards Baread
PD.12	Quality Assurance (Community/Intergovernmental Relations, DOJ, Research, Spt/Prog DSN, Compliance, Policy Mgmt.
PD.12.1	DOJ
PD.12.2	Contracts Monitoring
PD.12.3	Centralized Master Training Program (CMTP)
PD.12.4	Community / Intergovernmental Relations
PD.12.5	Research and Evaluation
PD.13	Residential Treatment Services Bureau (RTSB)

### PD.1: Contracts and Grants

- Two independent sections (Contract Management Section & Grants Management Section) sit as an integrated team.
- Need to be within a secure suite.
- Contracts has a 12 year retention period and files are accessed frequently. Need individual storage, storage in hallways, and a file room. Would not need secure file room if within a secure suite.
- Bidders Conferences require space for 50-75 people 6-8 times/year.
- Adjacency to Procurement nice to have but not required.

Workspaces	Count	SF	NSF Total
1.1 Office 15'x20'		300	-
1.2 Office 12'-6"x20'		250	-
1.3 Office 12'-6"x12'		150	
1.4 Office 10'x10'	1	100	100
1.5 Workstation 8'x8'		64	
1.6 Workstation 6'x8'	25	48	1,200
Total	26		1,300
Dedicated Meeting Spaces	Count	SF	NSF Total
Total	0		-
Dedicated Support Spaces	Count	SF	NSF Total
3.9 Contract File Room	1	400	400
Total	1		400
Specialty Space	Count	SF	NSF Total
Total	0		-
Separated Suite Requests		# de	esks or offices
Entire Department			26

Total NSF	1,700
-----------	-------

## PD.2: Detention Services Bureau (DSB)

- $\bullet$  DSB oversees three juvenile halls, Intake Detention Control (IDC), and Transportation.
- $\bullet$  Staff currently sit in Executive area. DSB Staff have close proximity to executives.
- Would like meeting space for Bureau meetings nearby.
- Need secure file space (do not require separate file room).
- Would like training space for 20-50 people in building. All-day trainings are held approx. 2 times/week.
- Need video conferencing capabilities to communicate with outside facilities.
- Critical adjacencies to RTSB.

Workspaces	Count	SF	NSF Total
1.1 Office 15'x20'		300	-
1.2 Office 12'-6"x20'		250	-
1.3 Office 12'-6"x12'	1	150	150
1.4 Office 10'x10'	1	100	100
1.5 Workstation 8'x8'	1	64	64
1.6 Workstation 6'x8'	6	48	288
Total	9		602
Dedicated Meeting Spaces	Count	SF	NSF Total
Total	0		-
Dedicated Support Spaces	Count	SF	NSF Total
Total	0		-
Specialty Space	Count	SF	NSF Total
Total	0		-
	F	Total NSF	602

## PD.3: Executive Suite

- $\bullet$  Separate suite necessary for security and controlled access.
- Bureau Chief of Special Services may need gun locker.
- County Counsel

Wc	orkspaces	Count	SF	NSF Total
1.1	Office 15'x20'	1	300	300
1.2	Office 12'-6"x20'	2	250	500
1.3	Office 12'-6"x12'	12	150	1,800
1.4	Office 10'x10'	5	100	500
1.5	Workstation 8'x8'	2	64	128
1.6	Workstation 6'x8'	25	48	1,200
	Total	47		4,428
De	dicated Meeting Spaces	Count	SF	NSF Total
2.1	Assistant CPO Conference Room	2	150	300
2.1	Small Conference Room	1	150	150
2.2	Medium Meeting Room	2	300	600
2.4	Executive Conference Room (XL Meeting Room)	1	750	750
	Total	6		1,800
De	dicated Support Spaces	Count	SF	NSF Total
3.5	Executive Copier Room	2	180	360
3.7	Executive Restroom	3	175	525
3.9	Executive Central File Room	1	600	600
3.15	Dedicated Executive Pantry	1	400	400
3.17	Executive Reception and Mail Area	1	400	400
3.18	Executive Supply Room	1	100	100
	Total	10		2,560
Sp	ecialty Space	Count	SF	NSF Total
4.8	Department Emergency Ops Center	1	300	300
	Total	1		300
Se	parated Suite Requests		# des	sks or offices
	Entire Department			47
		Г	Total NSF	9,088
		<u></u>	. 0.0	.,500

### PD.4: Field Special Services

- Includes 3 Bureaus: AB109, Adult Investigative Services, and Special Services that are being brought together in the HQ.
- Need locked cabinets within workspace and space for confidential discussions.
- Meeting requirements include field director meetings (50-110 people), contractor presentations (10-15 people), and budget/fiscal meetings (10-15 people).
- An Interview Room would be nice to have nearby.
- · Ideal to have all the bureaus located together.
- · Nice to have XL meeting space for up to 150 in building.

Workspaces	Count	SF	NSF Total
1.1 Office 15'x20'		300	
1.2 Office 12'-6"x20'		250	-
1.3 Office 12'-6"x12'	4	150	600
1.4 Office 10'x10'	24	100	2,400
1.5 Workstation 8'x8'	13	64	832
1.6 Workstation 6'x8'	86	48	4,128
Total	127		7,960
Dedicated Meeting Spaces	Count	SF	NSF Total
2.1 Small Conference Room	1	150	150
Total	1		150
Dedicated Support Spaces	Count	SF	NSF Total
Total	0		-
Specialty Space	Count	SF	NSF Total
Total	0		-
	<b>.</b>	LINCE	0.110
	1	otal NSF	8,110

## PD.5: Finance

### **General Notes**

- Finance includes Budget, Fiscal Services, Collections, and Procurement.
- Preference for separate locked storage spaces for Cashiering, Collections, Fiscal, and Procurement.
- Need space for 20-25 person meetings in building. Space requested for 120 person staff meetings in building.
- Need some additional workspaces for interns,120 day retirees, CEO employees on special assignment (4).
- Touchdown work area for auditors required.
- Require payment box / kiosk in the main building reception.
- Requested library/layout space for Budget; could double as a conference room or auditor space.
- Would be nice but not critical to have adjacency between Contracts and Management Service Bureau & HR.

Workspaces	Count	CE	NCE Total
Workspaces	Count	SF	NSF Total
1.1 Office 15'x20'		300	-
1.2 Office 12'-6"x20'		250	-
1.3 Office 12'-6"x12'		150	-
1.4 Office 10'x10'	6	100	600
1.5 Workstation 8'x8'		64	-
1.6 Workstation 6'x8'	141	48	6,768
Total	147		7,368
Dedicated Meeting Spaces	Count	SF	NSF Total
2.1 Small Conference Room	1	150	150
Total	1		150
Dedicated Support Spaces	Count	SF	NSF Total
Dedicated Support Spaces  3.9 Finance File Room	Count 1	SF 600	NSF Total
· · · · · · · · · · · · · · · · · · ·			
3.9 Finance File Room	1	600	600
<ul><li>3.9 Finance File Room</li><li>3.9 Procurement File Room</li></ul>	1	600	600
<ul><li>3.9 Finance File Room</li><li>3.9 Procurement File Room</li><li>3.11 Finance Copier Area</li></ul>	1 1 2	600 300 24	600 300 48
<ul><li>3.9 Finance File Room</li><li>3.9 Procurement File Room</li><li>3.11 Finance Copier Area</li><li>3.11 Procurement Copier Area</li></ul>	1 1 2 1	600 300 24	600 300 48 24
<ul><li>3.9 Finance File Room</li><li>3.9 Procurement File Room</li><li>3.11 Finance Copier Area</li><li>3.11 Procurement Copier Area</li></ul>	1 1 2 1	600 300 24	600 300 48 24
<ul> <li>3.9 Finance File Room</li> <li>3.9 Procurement File Room</li> <li>3.11 Finance Copier Area</li> <li>3.11 Procurement Copier Area</li> <li>Total</li> </ul>	1 1 2 1 5	600 300 24 24	600 300 48 24 972

Total NSF

8,490

### PD.6: Human Resources

- Includes Risk Management, Employment Services, Payroll, Operations, Badge Reconciliation, Civil Litigation, and Return-to-Work
- Need secure file rooms for confidential personnel files noted below. Need several different print areas for confidentiality.
- Need secure suite. Both Payroll & Return-to-Work need separate secure suites within the HR suite.
- Need various spaces for meetings. Large conference rooms can be shared with other Divisions.
- · Nice to have adjacency to Professional Standards. Convenient to have adjacency to Management Services Bureau and Finance.
- Need reception area for Probation staff visiting HR near the Payroll suite.
- Need storage rm. for emergency equipment (water, blankets) and ergonomic supply inventory (should hold keyboards, 10 chairs, and keyboard trays).

1.1   Office 15x20'   250   -1	Wc	orkspaces	Count	SF	NSF Total	
1.3       Office 12'-6'x12'       150       -         1.4       Office 10'x10'       5       100       500         1.5       Workstation 8'x8'       1       64       64         1.6       Workstation 6'x8'       128       48       6,144         Total       134       6,708         Dedicated Meeting Spaces       Count       SF       NSF Total         2.1       Small Conference Room       1       150       150         2.2       Medium Conference Room       1       300       300         2.8       Interview Room       4       150       600         Total       6       1,050         Dedicated Support Spaces       Count       SF       NSF Total         3.5       HR Copier Room       1       180       180         3.9       HR File Room (Civil Litigation)       1       300       300         3.9       HR File Room (Employment Services)       1       300       300         3.9       HR File Room (Employment Services)       1       300       300         3.9       HR File Room (Reployment Services)       1       300       300         3.9       HR File R	1.1	Office 15'x20'		300	-	
1.4 Office 10'x10'         5         100         500           1.5 Workstation 8'x8'         1         64         64           1.6 Workstation 6'x8'         128         48         6,144           Total         134         6,708           Dedicated Meeting Spaces         Count         SF         NSF Total           2.1 Small Conference Room         1         150         150           2.2 Medium Conference Room         1         300         300           2.8 Interview Room         4         150         600           Total         6         1,050           Dedicated Support Spaces         Count         SF         NSF Total           3.5 HR Copier Room         1         180         180           3.9 HR File Room (Civil Litigation)         1         300         300           3.9 HR File Room (Employment Services)         1         300         300           3.9 HR File Room (Employment Services)         1         300         300           3.9 HR File Room (Epoloyment Services)         1         300         300           3.9 HR File Room (Reployment Services)         1         300         300           3.9 HR File Room (Reployment Services)         1         300 </td <td>1.2</td> <td>Office 12'-6"x20'</td> <td></td> <td>250</td> <td>-</td>	1.2	Office 12'-6"x20'		250	-	
1.5         Workstation 8'x8'         1         64         64           1.6         Workstation 6'x8'         128         48         6,144           Total         134         6,708           Dedicated Meeting Spaces         Count         SF         NSF Total           2.1         Small Conference Room         1         150         150           2.2         Medium Conference Room         1         300         300           2.8         Interview Room         4         150         600           Total         6         1,050           Dedicated Support Spaces         Count         SF         NSF Total           3.5         HR Copier Room         1         180         180           3.9         HR File Room (Civil Litigation)         1         300         300           3.9         HR File Room (Employment Services)         1         300         300           3.9         HR File Room (Examination)         1         300         300           3.9         HR File Room (Health and Safety)         1         300         300           3.9         HR File Room (Pso//Payorl/Fm Rel)         1         500         500           3.1 <td< td=""><td>1.3</td><td>Office 12'-6"x12'</td><td></td><td>150</td><td>-</td></td<>	1.3	Office 12'-6"x12'		150	-	
1.6   Workstation 6x8'   128   48   6,144     Total   134   6,708     Dedicated Meeting Spaces   Count   SF   NSF Total     2.1   Small Conference Room   1   150   150     2.2   Medium Conference Room   1   300   300     2.8   Interview Room   4   150   600     Total   6   1,050     Dedicated Support Spaces   Count   SF   NSF Total     3.5   HR Copier Room   1   180   180     3.9   HR File Room (Civil Litigation)   1   300   300     3.9   HR File Room (Employment Services)   1   300   300     3.9   HR File Room (Examination)   1   300   300     3.9   HR File Room (Health and Safety)   1   300   300     3.9   HR File Room (Pso/Payroll/Emp Rel)   1   650   650     3.9   HR File Room (Return to Work)   1   500   500     3.17   HR Payroll Reception Area   1   125   125     3.17   HR Receptionist/Mail Area   1   200   200     3.18   Risk Management Equipment Storage   1   300   300     Total   1   3,455     Specialty Space   Count   SF   NSF Total     3.6   HR Photo/Fingerprint Room   1   200   200     Total   1   200   200     Total   1   200   200     Separated Suite Requests   # desks or offices	1.4	Office 10'x10'	5	100	500	
Dedicated Meeting Spaces	1.5	Workstation 8'x8'	1	64	64	
Dedicated Meeting Spaces         Count         SF         NSF Total           2.1         Small Conference Room         1         150         150           2.2         Medium Conference Room         1         300         300           2.8         Interview Room         4         150         600           Total         6         1,050           Dedicated Support Spaces         Count         SF         NSF Total           3.5         HR Copier Room         1         180         180           3.9         HR File Room (Civil Litigation)         1         300         300           3.9         HR File Room (Employment Services)         1         300         300           3.9         HR File Room (Examination)         1         300         300           3.9         HR File Room (Health and Safety)         1         300         300           3.9         HR File Room (Payroll)         1         300         300           3.9         HR File Room (Payroll)         1         650         650           3.9         HR File Room (Payroll)         1         650         650           3.9         HR File Room (Return to Work)         1         500	1.6	Workstation 6'x8'	128	48	6,144	
2.1       Small Conference Room       1       150       150         2.2       Medium Conference Room       1       300       300         2.8       Interview Room       4       150       600         Total       6       1,050         Dedicated Support Spaces       Count       SF       NSF Total         3.5       HR Copier Room       1       180       180         3.9       HR File Room (Civil Litigation)       1       300       300         3.9       HR File Room (Employment Services)       1       300       300         3.9       HR File Room (Employment Services)       1       300       300         3.9       HR File Room (Employment Services)       1       300       300         3.9       HR File Room (Eatlant and Safety)       1       300       300         3.9       HR File Room (Payroll)       1       300       300         3.9       HR File Room (PSO/Payroll/Emp Rel)       1       650       650         3.9       HR File Room (Return to Work)       1       500       500         3.17       HR Payroll Reception Area       1       125       125         3.17       HR Receptionist/M		Total	134		6,708	
2.2 Medium Conference Room       1       300       300         2.8 Interview Room       4       150       600         Total       6       1,050         Dedicated Support Spaces       Count       SF       NSF Total         3.5 HR Copier Room       1       180       180         3.9 HR File Room (Civil Litigation)       1       300       300         3.9 HR File Room (Employment Services)       1       300       300         3.9 HR File Room (Examination)       1       300       300         3.9 HR File Room (Health and Safety)       1       300       300         3.9 HR File Room (Payroll)       1       300       300         3.9 HR File Room (Payroll)       1       300       300         3.9 HR File Room (Payroll)       1       500       550         3.9 HR File Room (Return to Work)       1       500       500         3.17 HR Payroll Reception Area       1       125       125         3.17 HR Receptionist/Mail Area       1       200       200         3.18 Risk Management Equipment Storage       1       300       300         Total       1       200       200         Total       1 <td< td=""><td>De</td><td>dicated Meeting Spaces</td><td>Count</td><td>SF</td><td>NSF Total</td></td<>	De	dicated Meeting Spaces	Count	SF	NSF Total	
2.8         Interview Room         4         150         600           Total         6         1,050           Dedicated Support Spaces         Count         SF         NSF Total           3.5         HR Copier Room         1         180         180           3.9         HR File Room (Civil Litigation)         1         300         300           3.9         HR File Room (Employment Services)         1         300         300           3.9         HR File Room (Examination)         1         300         300           3.9         HR File Room (Payroll)         1         650         650           3.9         HR File Room (Return to Work)         1         500         500           3.17         HR Payroll Reception Area         1         125         125           3.17         HR Receptionist/Mail Area         1         200         200           3.18         Risk Management Equipment Storage         1	2.1	Small Conference Room	1	150	150	
Total   6	2.2	Medium Conference Room	1	300	300	
Dedicated Support Spaces         Count         SF         NSF Total           3.5         HR Copier Room         1         180         180           3.9         HR File Room (Civil Litigation)         1         300         300           3.9         HR File Room (Employment Services)         1         300         300           3.9         HR File Room (Examination)         1         300         300           3.9         HR File Room (Health and Safety)         1         300         300           3.9         HR File Room (Payroll)         1         300         300           3.9         HR File Room (Payroll)         1         300         300           3.9         HR File Room (Payroll)         1         500         550           3.9         HR File Room (Payroll)         1         500         500           3.9         HR File Room (Return to Work)         1         500         500           3.17         HR Payroll Reception Area         1         125         125           3.17         HR Receptionist/Mail Area         1         200         200           Total         11         3.455           Specialty Space         Count         SF <td>2.8</td> <td>Interview Room</td> <td>4</td> <td>150</td> <td>600</td>	2.8	Interview Room	4	150	600	
3.5       HR Copier Room       1       180       180         3.9       HR File Room (Civil Litigation)       1       300       300         3.9       HR File Room (Employment Services)       1       300       300         3.9       HR File Room (Examination)       1       300       300         3.9       HR File Room (Health and Safety)       1       300       300         3.9       HR File Room (Payroll)       1       300       300         3.9       HR File Room (PSO/Payroll/Emp Rel)       1       650       650         3.9       HR File Room (Return to Work)       1       500       500         3.17       HR Payroll Reception Area       1       125       125         3.17       HR Receptionist/Mail Area       1       200       200         3.18       Risk Management Equipment Storage       1       300       300         Total       11       3,455         Specialty Space       Count       SF       NSF Total         3.6       HR Photo/Fingerprint Room       1       200       200         Total       1       200       200         Separated Suite Requests       # desks or offices		Total	6		1,050	
3.9       HR File Room (Employment Services)       1       300       300         3.9       HR File Room (Employment Services)       1       300       300         3.9       HR File Room (Health and Safety)       1       300       300         3.9       HR File Room (Payroll)       1       300       300         3.9       HR File Room (PSO/Payroll/Emp Rel)       1       650       650         3.9       HR File Room (Return to Work)       1       500       500         3.17       HR Payroll Reception Area       1       125       125         3.17       HR Receptionist/Mail Area       1       200       200         3.18       Risk Management Equipment Storage       1       300       300         Total       11       3,455         Specialty Space       Count       SF       NSF Total         3.6       HR Photo/Fingerprint Room       1       200       200         Total       1       200       200         Separated Suite Requests       # desks or offices	De	dicated Support Spaces	Count	SF	NSF Total	
3.9 HR File Room (Employment Services)       1       300       300         3.9 HR File Room (Examination)       1       300       300         3.9 HR File Room (Health and Safety)       1       300       300         3.9 HR File Room (Payroll)       1       300       300         3.9 HR File Room (PSO/Payroll/Emp Rel)       1       650       650         3.9 HR File Room (Return to Work)       1       500       500         3.17 HR Payroll Reception Area       1       125       125         3.17 HR Receptionist/Mail Area       1       200       200         3.18 Risk Management Equipment Storage       1       300       300         Total       11       3,455         Specialty Space       Count       SF       NSF Total         3.6 HR Photo/Fingerprint Room       1       200       200         Total       1       200       200         Separated Suite Requests       # desks or offices	3.5	HR Copier Room	1	180	180	
3.9       HR File Room (Examination)       1       300       300         3.9       HR File Room (Health and Safety)       1       300       300         3.9       HR File Room (Payroll)       1       300       300         3.9       HR File Room (PSO/Payroll/Emp Rel)       1       650       650         3.9       HR File Room (Return to Work)       1       500       500         3.17       HR Payroll Reception Area       1       125       125         3.17       HR Receptionist/Mail Area       1       200       200         3.18       Risk Management Equipment Storage       1       300       300         Total       11       3,455         Specialty Space       Count       SF       NSF Total         3.6       HR Photo/Fingerprint Room       1       200       200         Total       1       200       200         Separated Suite Requests       # desks or offices	3.9	HR File Room (Civil Litigation)	1	300	300	
3.9       HR File Room (Health and Safety)       1       300       300         3.9       HR File Room (Payroll)       1       300       300         3.9       HR File Room (PSO/Payroll/Emp Rel)       1       650       650         3.9       HR File Room (Return to Work)       1       500       500         3.17       HR Payroll Reception Area       1       125       125         3.17       HR Receptionist/Mail Area       1       200       200         3.18       Risk Management Equipment Storage       1       300       300         Total       11       3,455         Specialty Space       Count       SF       NSF Total         3.6       HR Photo/Fingerprint Room       1       200       200         Total       1       200       200         Separated Suite Requests       # desks or offices	3.9	HR File Room (Employment Services)	1	300	300	
3.9       HR File Room (Payroll)       1       300       300         3.9       HR File Room (PSO/Payroll/Emp Rel)       1       650       650         3.9       HR File Room (Return to Work)       1       500       500         3.17       HR Payroll Reception Area       1       125       125         3.17       HR Receptionist/Mail Area       1       200       200         3.18       Risk Management Equipment Storage       1       300       300         Total       11       3,455         Specialty Space       Count       SF       NSF Total         3.6       HR Photo/Fingerprint Room       1       200       200         Total       1       200       200         Separated Suite Requests       # desks or offices	3.9	HR File Room (Examination)	1	300	300	
3.9       HR File Room (PSO/Payroll/Emp Rel)       1       650       650         3.9       HR File Room (Return to Work)       1       500       500         3.17       HR Payroll Reception Area       1       125       125         3.17       HR Receptionist/Mail Area       1       200       200         3.18       Risk Management Equipment Storage       1       300       300         Total       11       3,455         Specialty Space       Count       SF       NSF Total         3.6       HR Photo/Fingerprint Room       1       200       200         Total       1       200       200         Separated Suite Requests       # desks or offices	3.9	HR File Room (Health and Safety)	1	300	300	
3.9       HR File Room (Return to Work)       1       500       500         3.17       HR Payroll Reception Area       1       125       125         3.17       HR Receptionist/Mail Area       1       200       200         3.18       Risk Management Equipment Storage       1       300       300         Total       11       3,455         Specialty Space       Count       SF       NSF Total         3.6       HR Photo/Fingerprint Room       1       200       200         Total       1       200       200         Separated Suite Requests       # desks or offices	3.9	HR File Room (Payroll)	1	300	300	
3.17 HR Payroll Reception Area       1       125       125         3.17 HR Receptionist/Mail Area       1       200       200         3.18 Risk Management Equipment Storage       1       300       300         Total       11       3,455         Specialty Space       Count       SF       NSF Total         3.6 HR Photo/Fingerprint Room       1       200       200         Total       1       200       200         Separated Suite Requests       # desks or offices	3.9	HR File Room (PSO/Payroll/Emp Rel)	1	650	650	
3.17 HR Receptionist/Mail Area         1         200         200           3.18 Risk Management Equipment Storage         1         300         300           Total         11         3,455           Specialty Space         Count         SF         NSF Total           3.6 HR Photo/Fingerprint Room         1         200         200           Total         1         200         200           Separated Suite Requests         # desks or offices	3.9	HR File Room (Return to Work)	1	500	500	
3.18 Risk Management Equipment Storage         1 300 300           Total         11 3,455           Specialty Space         Count SF NSF Total           3.6 HR Photo/Fingerprint Room         1 200 200           Total         1 4 desks or offices	3.17	HR Payroll Reception Area	1	125	125	
Total         11         3,455           Specialty Space         Count         SF         NSF Total           3.6         HR Photo/Fingerprint Room         1         200         200           Total         1         200         200           Separated Suite Requests         # desks or offices	3.17	HR Receptionist/Mail Area	1	200	200	
Specialty SpaceCountSFNSF Total3.6HR Photo/Fingerprint Room1200200Total1200Separated Suite Requests# desks or offices	3.18	Risk Management Equipment Storage	1	300	300	
3.6 HR Photo/Fingerprint Room         1         200         200           Total         1         200           Separated Suite Requests         # desks or offices		Total	11		3,455	
Total 1 200  Separated Suite Requests # desks or offices	Sp	ecialty Space	Count	SF	NSF Total	
Separated Suite Requests # desks or offices	3.6	HR Photo/Fingerprint Room	1	200	200	
		Total	1		200	
Payroll & Return to Work suite within overall suite, confirm desk count	Se	parated Suite Requests		# (	desks or offices	
		Payroll & Return to Work suite within overall suite, confirm desk count				

Total NSF	11,413
rotal Noi	,

## PD.7: Information Services Bureau

#### **General Notes**

#### Includes:

- CIO (Project Management Office, Information Systems Security)
- Infrastructure and Operations (Network Support, Client Support, Desktop Support)
- Business Applications and Data Management (Enterprise Application Analysis, Web Development, Enterprise Application Development, Mobile Development, Electronic Medical Records, Enterprise Data Architecture, Business Intelligence/Data Mining)

#### Security

- 4 secure suites: 1) Client Support (Enterprise Application Support and Systems Registration/DOJ Support) and Electronic Medical Records, 2) Desktop Support, 3) IT Security and Network Support, 4) Enterprise Application Analysis, Enterprise Application Development, Web Development, Mobile Development, Enterprise Data Architecture, Business Intelligence/Data Mining, and Project Management Office
- Desktop Support team needs a secure room for equipment

#### Meetings:

· Weekly 5-20 person meetings, weekly 12-14 person vendor meetings; monthly 10-25 person meetings; quarterly meetings of 40-100 people

#### Visitors:

- Infrastructure and Operations need space to give DPOs laptops and do 1:1 training
- Business Application and Data Management need touchdown workspace and meeting space for vendors and contractors (some are long-term contractors)

### Special Needs:

- Infrastructure and Operations needs Lab for staging new equipment. Would include 3-4 stations.
- Infrastructure and Operations needs a supply room for equipment.
- ISB requested an IT warehouse to receive and ship equipment for the department. Desktop Support also has salvaged equipment. No Data Center is needed (originally part of overall request).
- Include communication closets within building program.
- Developer groups should have open collaboration areas embedded within the workspace.

Wo	orkspaces	Count	SF	NSF Total
1.1	Office 15'x20'		300	-
1.2	Office 12'-6"x20'		250	-
1.3	Office 12'-6"x12'		150	-
1.4	Office 10'x10'	10	100	1,000
1.5	Workstation 8'x8'	1	64	64
1.6	Workstation 6'x8'	104	48	4,992
	Total	115		6,056
De	edicated Meeting Spaces	Count	SF	NSF Total
De 2.2	edicated Meeting Spaces  Medium Conference Room	Count 1	SF 300	NSF Total
2.2	Medium Conference Room	1		300
2.2	Medium Conference Room Total	1	300	300 300
2.2 De	Medium Conference Room  Total  edicated Support Spaces	1 1 Count	300 SF	300 300 NSF Total
2.2 De 3.5	Medium Conference Room  Total  edicated Support Spaces  Copier Network Printer Room  Information Services Reception	1 1 Count	300 SF 180	300 300 NSF Total 180

Specialty Space	Count	SF	NSF Total	
4.3 Computer Repair Room	1	300	300	-
4.7 Dedicated IT Closet	1	300	300	
4.12 LAB - Testing Room	1	300	300	
Total	3		900	-
Loading Dock	Count	SF	NSF Total	
5.3 IT Warehouse	1		-	Refer to Campus Shared
Total	1		-	Summary for Loading
Separated Suite Requests		# d	esks or offices	Dock Program SQFT
Client Support and Electronic Medical Records	conf	firm desk co	ount with users	•
Desktop Support	conf	firm desk co	ount with users	
IT Security and Network Support	conf	firm desk co	ount with users	
Enterprise Services	conf	firm desk co	ount with users	

## PD.8: Juvenile Field Services

- Juvenile Services has operated on a distributed District model. They are moving to a centralized model, bringing all Juvenile Bureau Chiefs back to the headquarters.
- Need space for monthly 50-60 person meetings and weekly 20-30 person meetings in the building.
- Need touchdown space for County partners.
- · Need video conferencing capability.
- Includes Director Office, Supervisor Workstations, and Line Staff Workstations added for CCTP (Camp Community Transition Program) and PAUR Unit (Prospective Authorization and Utilization)

Workspaces	Count	SF	NSF Total
1.1 Office 15'x20'		300	-
1.2 Office 12'-6"x20'		250	-
1.3 Office 12'-6"x12'		150	-
1.4 Office 10'x10'	2	100	200
1.5 Workstation 8'x8'	1	64	64
1.6 Workstation 6'x8'	22	48	1,056
Total	25		1,320
Dedicated Meeting Spaces	Count	SF	NSF Total
2.1 Small Conference Room	1	150	150
Total	1		150
Dedicated Support Spaces	Count	SF	NSF Total
Total	0		-
Specialty Space	Count	SF	NSF Total
Total	0		-
	Tot	al USF	1,470

## PD.9: Management Services

- Includes Administrative Support, Facilities Planning, Facilities Maintenance/Special Projects, Communications, Facilities Operations, and Fleet Management.
- Need flat file storage, storage for plans, library for material samples, locked communications storage room, building mail room with reception.
- Need space for vendors to come in can be a shared meeting room.
- · No critical adjacencies.
- Need custodial room with access to a computer and common space.
- Have fleet of approx 30-40 vehicles for Bureau Chiefs and sections with assigned vehicles.
- Probation Warehouse supplies office and camp/detention juvenile halls with centralized ordering and distribution. Houses Facilities Operation staff out of warehouse. Function currently operates at Dorothy Kirby Center. Would require a caged area for equipment.
- Need access to 20 person meeting room in the building.
- · Staff is in and out of the office frequently.

Wo	rkspaces	Count	SF	NSF Total
1.1	Office 15'x20'		300	-
1.2	Office 12'-6"x20'		250	-
1.3	Office 12'-6"x12'		150	-
1.4	Office 10'x10'	7	100	700
1.5	Workstation 8'x8'	2	64	128
1.6	Workstation 6'x8'	29	48	1,392
	Total	38		2,220
Dedicated Meeting Spaces		Count	SF	NSF Total
2.1	Small Conference Room	1	150	150
	Total	1		150
Dedicated Support Spaces		Count	SF	NSF Total
3.9	File / Library Room	1	300	300
3.11	Copier Area	1	24	24
3.13	Departmental Mail Room	1	300	300
3.17	Reception	1	75	75
3.18	Cleaning Cart Storage	1	200	200
3.18	Equipment Storage Room	1	150	150
3.18	Supply Room	1	50	50
	Total	6		1,099
Specialty Space		Count	SF	NSF Total
4.2	Cleaning Supply Storage Room	1	500	500
4.5	Custodians Assembly / Lunchroom	1	400	400
4.6	Custodians Locker Room	1	200	200
4.14	Planning/Plotters Room	1	300	300
	Total	3		1,400
		Γ	Total NSF	4,869

# PD.10: Placement Permanency

Workspaces		Count	SF	NSF Total	
1.1	Office 15'x20'		300	-	
1.2	Office 12'-6"x20'		250	-	
1.3	Office 12'-6"x12'	1	150	150	
1.4	Office 10'x10'	1	100	100	
1.5	Workstation 8'x8'	1	64	64	
1.6	Workstation 6'x8'	2	48	96	
	Total	5		410	
Dedicated Meeting Spaces		Count	SF	NSF Total	
	Total	0		-	
Dedicated Support Spaces		Count	SF	NSF Total	
	Total	0		-	
Specialty Space		Count	SF	NSF Total	
	Total	0		-	
		Total NS		F 410	
				4	

### PD.11: Professional Standards

- Includes Child Abuse Special Investigations, Internal Affairs, Affirmative Action Compliance, Performance Management, and Backgrounds Investigations Unit.
- Suite required for the entire group with some clear internal separations. The Background Investigations Unit must be separate from Internal Affairs. Criminal and internal investigations must be separate. There needs to be separate printing areas.
- (2) Separate file storage areas are needed for Background and Internal Affairs/Performance Management/Equity. Primarily paper storage but some videos/dvds. Need additional individual storage at desks for active investigations. Need a locked storage closet for physical evidence.
- Interview rooms needed for Internal Affairs and Background Investigations 3 for each would be ideal. Ideal adjacency of interview rooms to reception area. They should be located outside of the suite.
- Need dedicated conference room for 10-12 people.
- Backgrounds has public visitors for interviews. Need a small reception area with a telephone or buzzer.
- Adjacency to HR nice to have but not critical. Adjacency to County Counsel convenient.
- · Gun locker with 6 cubbies needed.
- Need 3 video viewing stations away from the main circulation.

Worksp	paces	Count	SF	NSF Total
1.1 Office	15'x20'		300	-
1.2 Office	12'-6"x20'		250	-
1.3 Office	12'-6"x12'	1	150	150
1.4 Office	10'x10'	12	100	1,200
1.5 Works	station 8'x8'	1	64	64
1.6 Works	station 6'x8'	72	48	3,456
Total		86		4,870
Dedica	ted Meeting Spaces	Count	SF	NSF Total
2.2 Mediu	m Meeting Room	1	300	300
2.8 Intervi	ew Room	6	150	900
Total		7		1,200
Dedica	ted Support Spaces	Count	SF	NSF Total
3.9 File R	oom	1	600	600
3.9 File R	oom (Affirmative Action)	1	200	200
Total		2		800
Specia	Ity Space	Count	SF	NSF Total
4.15 Profes	ssional Standards Video Viewing Station	3	48	144
Total	-	0		144
Separa	ited Suite Requests		#	desks or offices
Entire	Department			86
	ation between Background Investigations & Internal	Affairsuite within ov	erall suite, cor	nfirm desk count
		Ī	Total NSE	7 014

## PD.12: Quality Assurance

- Includes DOJ, Contracts Monitoring, Centralized Master Training Program (CMTP), Community/Intergovernmental Relations, Research and Evaluation.
- Contracts Monitoring has a lot of filing needs but locked cabinets are fine no need for separate room.
- 10-20 person weekly meetings, 50-60 person monthly Bureau meetings.
- DOJ and Contract Monitoring are in the field 2/3 of the time.
- · No critical adjacencies.

Workspaces	Count	SF	NSF Total
1.1 Office 15'x20'		300	
1.2 Office 12'-6"x20'		250	-
1.3 Office 12'-6"x12'	1	150	150
1.4 Office 10'x10'	8	100	800
1.5 Workstation 8'x8'	2	64	128
1.6 Workstation 6'x8'	97	48	4,656
Total	108		5,734
Dedicated Meeting Spaces	Count	SF	NSF Total
Total	0		-
Dedicated Support Spaces	Count	SF	NSF Total
Total	0		-
Specialty Space	Count	SF	NSF Total
Total	0		-
	_		
	Tota	al NSF	5,734

### PD.13: Residential Treatment Services Bureau (RTSB)

- Critical adjacency to Education Reform operation, DSB.
- Access to training rooms within the building needed.
- Need space for monthly manager meetings (20-25 people), weekly CIR meeting (10-15 people) in building.
- Need touchdown spaces for visitors / short term special projects, could be shared.

Wo	orkspaces	Count	SF	NSF Total
1.1	Office 15'x20'		300	-
1.2	Office 12'-6"x20'		250	-
1.3	Office 12'-6"x12'	1	150	150
1.4	Office 10'x10'	5	100	500
1.5	Workstation 8'x8'	1	64	64
1.6	Workstation 6'x8'	16	48	768
	Total	23		1,482
De	edicated Meeting Spaces	Count	SF	NSF Total
	Total	0		-
De	edicated Support Spaces	Count	SF	NSF Total
	Total	0		-
Sp	ecialty Space	Count	SF	NSF Total
	Total	0		-
		To	otal NSF	1,482

# **ISD Organizational Structure**

# **ISD Organizational Structure**

ICD	Internal	Comicac	Donortmont
ISD	internai	Services	Department

ISD.1	Administration & Finance Services (AFS)
ISD.1.1	Finance
ISD.1.2	Human Resources (HR)
ISD.1.3	Operations
ISD.2	Executive
ISD.3	Information Technology Services (ITS)
ISD.3.1	Computing Services
ISD.3.2	Customer Applications
ISD.3.3	ITS Administration
ISD.3.4	Shared Services
ISD.3.5	Telecom
ISD.4	Facilities Operation Service (FOS)
ISD.4.1	Alterations & Improvements (A&I)
ISD.4.2	Custodial Services
ISD.4.3	Maintenance & Operations (M&O)
ISD.5	Purchasing & Contract Services (PCS)

**Energy and Environmental Service (EES)** 

ISD.6

[Intentionally Left Blank]

## ISD.1: Administration and Finance Services (AFS)

Wo	rkspaces	Count	SF	NSF Total	
1.1	Office 15'x20'		300	-	
1.2	Office 12'-6"x20'		250	-	
1.3	Office 12'-6"x12'	1	150	150	
1.4	Office 10'x10'	16	100	1,600	
1.5	Workstation 8'x8'	16	64	1,024	
1.6	Workstation 6'x8'	139	48	6,672	_
	Total	172		9,446	
De	dicated Meeting Spaces	Count	SF	NSF Total	
2.1	S Meeting Room	0	150	-	-
2.2	M Medium Room (incl A&I, M&O)	0	300	-	
2.3	L Meeting Room	1	500	500	Beside Interview Rooms nea Reception
2.4	XL Meeting Room	0	750		
2.6	Collaboration Space	0	150		
2.7	Touchdowns	0	75	-	
,					
	Interview Room	3	150	450	Two off of reception / HR, 1 Internal Affairs area
2.8	Interview Room	3	150	450 950	,
2.8	Interview Room  dicated Support Spaces	3 Count	150 SF		,
2.8				950	Internal Affairs area
<b>De</b> 3.1	dicated Support Spaces	Count	SF	950 NSF Total 350	Internal Affairs area  Need separate live scan space for PCS and HR (2
<b>De</b> 33.1 3.6	dicated Support Spaces  Cashier's Office and Safe  Employee Badging Area, Waiting Zone and Live	Count 1	SF 350	950 NSF Total 350	Need separate live scan space for PCS and HR (2 rooms, 144SF with controlle access), HR Room to have divider panel, refer to room
<b>De</b> 33.1 3.6	dicated Support Spaces  Cashier's Office and Safe  Employee Badging Area, Waiting Zone and Live Scan (HR and PCS)	Count 1 1	SF 350 344	950 NSF Total 350 344	Need separate live scan space for PCS and HR (2 rooms, 144SF with controlle access), HR Room to have divider panel, refer to room data sheet.
<b>De</b> 33.1 33.6	dicated Support Spaces  Cashier's Office and Safe  Employee Badging Area, Waiting Zone and Live Scan (HR and PCS)	Count 1 1	SF 350 344	950 NSF Total 350 344	Need separate live scan space for PCS and HR (2 rooms, 144SF with controlle access), HR Room to have divider panel, refer to room data sheet.
2.8  De 3.1 3.6  Sp	dicated Support Spaces  Cashier's Office and Safe  Employee Badging Area, Waiting Zone and Live Scan (HR and PCS)  Locked File Room	Count 1 1	SF 350 344	950 NSF Total 350 344 500 1,194	Need separate live scan space for PCS and HR (2 rooms, 144SF with controlle access), HR Room to have divider panel, refer to room data sheet.
2.8  De 3.1 3.6  Sp	dicated Support Spaces  Cashier's Office and Safe  Employee Badging Area, Waiting Zone and Live Scan (HR and PCS)  Locked File Room	Count  1 1 1 Count	SF 350 344 500	950 NSF Total 350 344 500 1,194 NSF Total	Need separate live scan space for PCS and HR (2 rooms, 144SF with controlle access), HR Room to have divider panel, refer to room data sheet.
2.8  De 3.1 3.6  Sp 4.9	dicated Support Spaces  Cashier's Office and Safe  Employee Badging Area, Waiting Zone and Live Scan (HR and PCS)  Locked File Room	Count  1 1 1 Count	SF 350 344 500	950  NSF Total  350 344  500  1,194  NSF Total  1,800	Need separate live scan space for PCS and HR (2 rooms, 144SF with controlle access), HR Room to have divider panel, refer to room data sheet.
2.8  De 3.1 3.6  Sp 4.9	Cashier's Office and Safe Employee Badging Area, Waiting Zone and Live Scan (HR and PCS)  Locked File Room  ecialty Space Disaster Operation Center (DOC)	Count  1 1 1 Count	SF 350 344 500	950  NSF Total  350 344  500 1,194  NSF Total 1,800	Need separate live scan space for PCS and HR (2 rooms, 144SF with controlle access), HR Room to have divider panel, refer to room data sheet.

Adjacencies	Departments
Finance Department to PCS	AFS to PCS
Finance to HR	AFS to AFS
Finance to other department PLAD Divisions	AFS to ALL
HR to all Divisions	AFS to ALL
Executive management to Executives	AFS to Exec

Total NSF 11,590
------------------

- Administration and financial services provides financial (responsible for budgets), human resource (including
  Operations, Personnel, Internal Investigations, Training, Risk management, and Litigation), and support services
  (Including Executive Management, Emergency Response, Charitable Giving, Rideshare programs, and Parking), in
  addition to payment inquiry for vendors doing business with ISD, a billing hotline for questions and employment
  verification.
- Human Resources Division will need waiting spaces for internal and external visitors and possibly work areas for visitors, associated with a staffed reception area. 1 large meeting room will be needed for training with 2 small meeting rooms directly adjacent and off reception for interviews.
- HR Division to be located in their own suite, auditorily and visually separate from other departments with card access control. HR Work area has confidential meetings and orientations, and will need touch down spaces for outside investigators to come in for the day.
- Computer training rooms are needed for training, can be shared building wide and should be near AFS, will have constant daily use.
- Locked File Room for Personnel needed in suite.
- Internal Affairs will need private areas to conduct interviews and work stations for outside auditors, they will need to be in a separated suite (4-6 desks) with an interview room.
- DOC: The Disaster Operations Center (DOC) will be activated during an emergency. Space could be multi-use, needs to be a secure room.

# ISD.2: Executive

Wo	rkspaces	Count	SF	NSF Total	
1.1	Office 15'x20'	1	300	300	
1.2	Office 12'-6"x20'	1	250	250	
1.3	Office 12'-6"x12'	1	150	150	
1.4	Office 10'x10'		100	-	
1.5	Workstation 8'x8'	2	64	128	
1.6	Workstation 6'x8'	1	48	48	_
	Total	6		876	
De	dicated Meeting Spaces	Count	SF	NSF Total	
2.1	S Meeting Room				-
2.2	M Medium Room (incl A&I, M&O)			-	
2.3	L Meeting Room	1		500	director's conf. room
2.4	XL Meeting Room			-	
2.6	Collaboration Space			-	
2.7	Touchdowns			-	
2.8	Interview Room			-	_
				500	
	dicated Support Spaces	Count	SF	NSF Total	_
3.7	Executive Restroom	2	175	350	_
3.17	Reception and Waiting Area	1		400	serving offices and director's conference room
				750	_
A -1	acencies			Departments	_
Aa				EXEC to ALL	
Aa	Exec to Service General Managers				
Aa	Exec to Service General Managers  Exec to PIO  Exec to Exec Management Services			EXEC to AFS	

- The Executive Branch provides the Vision for the Department and is responsible for the overall effectiveness of accomplishing the Purpose of the Department to "Provide essential services to support the County mission".
- Waiting space is required for meetings in the Director's Conference Room.
- In the future, this department will become more mobile, spending more time at other sites instead of driving to a central location. Meeting with department heads and board offices happens off-site fairly often.
- New design should be more open, visible, non-segregated environment to other staff, should be welcoming with room for impromptu collaboration and meetings. Collaboration space should not just be for executive staff, but open for other departments to use, should have whiteboards and digital presentation capability. Googilization of the office, more welcoming culture, privacy still needed (small meeting rooms nearby).

# ISD.3: ITS Overall

VVO	rkspaces	Count	SF	NSF Total	
1.1	Office 15'x20'		300	-	
1.2	Office 12'-6"x20'		250	-	
1.3	Office 12'-6"x12'	5	150	750	
1.4	Office 10'x10'	99	100	9,900	
1.5	Workstation 8'x8'	115	64	7,360	
1.6	Workstation 6'x8'	879	48	42,192	
	Total	1,098		60,202	
Ded	dicated Meeting Spaces	Count	SF	NSF Total	
2.2	M Medium Room (see security division notes below)	1	375	375	
2.6	Collaboration Space	8	150	1,200 1,575	
				1,575	
Dec	dicated Support Spaces	Count	SF	NSF Total	
3.2	Central Reprographics Room	1	1,500	1,500	Space to be co-located with 3.8, 3.16 and Loading Dock
3.8	Check Warrants Room	1	700	700	secure storage room for check warrants within central reprographics (3.2)
3.18	ITS Storage Rooms (one per group, 4x200 SF, and one 16 SF locked roomf or Security Investigations storage, see below separated suite request)	5	varies	816	
				3,016	
Spe	ecialty Space	Count	SF	NSF Total	
4.4	Computer Training Rooms (ITS)	9	900	8,100	shared with AFS, locat near lobby
4.11	ITS: Help Desk / Enterprise Command Center and War Room, see descrition next page and Room Data Sheet (total space minus 91 sm desks, 19 lrg deks, 1 pantry, 2 small meeting rooms)	1		7,518	sqft total minus desks, pantry and small meeting rooms, War room +/- 1,000 SF
4.13	ITS Innovation / Display Space	1		1,600	locate near reception
		18		17,218	•
Loa	ading Dock	Count	SF	NSF Total	_
5.6	Central Reprographics Paper Storage	1		-	Refer to Campus share summary for loading
5.13	ITS Warehouse	1		-	
	Total	2		-	•
Sep	parated Suite Requests			# desks	
Sep	Security Investigations area (6 desks, secure meeting room (m meeting room), and 4x4' locked			# desks 6 desks plus meeting room, see	

- The mission of ISD's Information Technology Service (ITS) is to deliver centralized, reliable and secure solutions that support Los Angeles County's diverse technology needs in a cost-effective and transparent manner. ITS is responsible for the provision of technology services to a workforce of more than 100,000 employees in over 35 County Departments through the safeguarding and support of mission-critical systems, networks and data. These comprehensive information technology offerings are encompassed within four branches of service that include Shared Services, Customer Applications, Computing Services and Telecommunications. ITS Administration also includes Planning and Administration (PLAD), the service group responsible for developing the annual ITS budgets and monitoring the ongoing financial performance of its four branches.
- The vision for ITS is to continually facilitate transformational change that guides and supports the shifting technology needs of customers while continuing to improve upon the dependability of delivering high quality and reliable IT services.
- The future of ISD ITS is focused on facilitating transformational change that promotes increased productivity and collaboration. As such, the workplace design should account for: An open plan with design features (e.g., high-traffic staircases, lounge furnishings, overlap zones, etc.) that encourage spontaneous interactions/unplanned collaboration, Hospitality and residential influences (including biophilic design), More common areas than are strictly necessary, such as multiple cafeterias and other places to read or work that encourage employee comfort outside of confined office spaces, Recreational and wellness amenities, Evaluation of hoteling/hot-desking office management strategies for relevant service areas (dynamic space utilization), Adaptable furniture/modularity, Emphasis on areas that hold two or more people, rather than single-occupancy office spaces, Purpose-free generic "thinking" or "brainstorming" areas in open spaces that encourage employee thought in the presence of other employees from diverse service areas, Utilization of location-based services.
- Computer Training Rooms (Training Center): used for onboarding staff (AFS HR request, ITS), and training of both ISD and county employees on new technologies, these are permanently set up classroom style spaces with computers and a digital display for teaching.
- Lab Testing, Innovation, and Security Service Rooms: these are spaces used for testing software and hardware builds or staging new technology prior to rolling out to county facilities. Tables with full-time set up computers with moveable furniture. Whiteboards and work tables (project room), enclosed space that could double as a meeting room.
- Help Desk / Enterprise Command Center, Layout Area, War Room, Security Incident Area: This area includes some full-time employee desks and a call center component, along with monitoring through large visible display screens of network deployments. Associated to the space is a drop-in war room for emergencies, and meeting space for teams. Refer to Room Data Sheet for additional detail on staff counts and divisions included.
- Central Reprographics Large volume print shop, printing for ISD and the County as a whole.
- ISD ITS requires additional seating to accommodate consultants and vendors that are contracted to provide professional support. Additionally, waiting areas are also needed (preferably viable for touchdown work) to accommodate Departmental customers and guests.
- 24x7 building access/utilization of workspace for all of ITS is required.

### ISD.3.1: (Within ITS) Computing Services

Workspaces		Count	SF	NSF Total
1.1	Office 15'x20'		300	-
1.2	Office 12'-6"x20'	See ISD.3: ITS	250	-
1.3	Office 12'-6"x12'	Overall Page for	150	-
1.4	Office 10'x10'	Offices and	100	
1.5	Workstation 8'x8'	Workstation counts	64	
1.6	Workstation 6'x8'		48	-
	Total	0		-

Total NSF	•

- The Computing Services Branch (CSB) manages the ISD Data Centers and processes millions of transactions each day from over 45,000 computers. CSB is currently implementing state-of-the-art technologies for cloud computing, network security, and disaster recovery. Four (4) Divisions provide comprehensive data center services and information security that includes the following:
- Midrange computing services This service area includes the operation of customer applications on midrange computing platforms at the ISD Data Center, and provides system administration and project management services to customer departments for small, medium, and large scale application systems in Operating Systems, Databases, and Application Server software.
- Data Center operations This service area includes the implementation of the County's next generation data center coupled with a hybrid cloud environment to provide centralized management and orchestration of a secure and stable IT environment, flexibility and robust data analytics. The new LA Model Data Center will be optimized for current physical and virtual applications and agile toward facilitation of future emerging technologies.
- · County security standards and practices
- · Cloud computing services
- · Business backup and recovery
- Disaster planning
- CSB is also responsible for providing the County's primary Internet access solution, with all the necessary security protection mechanisms (e.g., firewalls, Intrusion Protection Systems, Internet Content Filtering, etc.). Additionally, the ITS Computing Services Branch's Security Division requires at least two network ports per office/cubicle as well as a connection to building UPS and backup generators to provide onsite IT security services during a disaster and/or power outage.
- In the ITS Computing Services Branch's Midrange Division, access to the workstations should be physically secured since they are used by system administrators with administrative access to critical infrastructure systems that host applications with HIPPA, PHI data, etc.
- In the ITS Computing Services Branch's Security Division, both the Security Applications Section and Security Operations Section need secure office space due to the confidential nature of their daily duties.
- The ITS Computing Services Branch's Security Division often deals with confidential IT security investigations in collaboration with the
  County Office of Investigations, the District Attorney, Department of Homeland Security and the FBI. A secure area where staff can speak
  freely without being overheard by non-security staff is vital to maintaining confidentiality.
- o Enterprise Operations Section (EOS) This service area monitors and responds to service environment interruptions via 24/7 network monitoring, including routers, switches, uninterruptable power supplies (UPS); centralized diagnosis and remote repair; dispatched field repair; resolution of complex network issues; and network performance analysis.

## ISD.3.2: (Within ITS) Customer Applications

Workspaces		Count	SF	NSF Total
1.1	Office 15'x20'		300	-
1.2	Office 12'-6"x20'	See ISD.3: ITS	250	
1.3	Office 12'-6"x12'	Overall Page for	150	-
1.4	Office 10'x10'	Offices and	100	-
1.5	Workstation 8'x8'	Workstation counts	64	-
1.6	Workstation 6'x8'		48	-
	Total	0		•

Total NSF	-
-----------	---

- The Customer Applications Branch (CAB) is responsible for the development of custom application solutions on a wide variety of software platforms, as well as maintenance for County Departmental IT systems. Five (5) Divisions provide services that focus on application development and ongoing maintenance for business systems across all County Departments and Commissions. These divisions are organized along departmental synergies (e.g., Health Care, Children's Family Welfare, Public Safety/Justice Systems, General Government, and Internal Services solutions). Solution development services include the following:
- Enterprise Content Management (ECM) This service area manages vital County records, including case file information for various departments, property information and Los Angeles County citizen data.
- Custom Applications and Applications Maintenance These service areas include computer applications development and management over an extensive range of IT-related projects, including integration of Commercial off-the-shelf (COTS) solutions, new development of systems, reports, and dashboards, etc.
- · Collaboration, Workflow and e-Form Tools
- Office of Strategic Sourcing (ITSSMA/ESMA) IT Service Master Agreements
- CWMDM- Countywide Master Data Management
- Data Analytics

## ISD.3.3: (Within ITS) ITS Administration

Wo	rkspaces	Count	SF	NSF Total
1.1	Office 15'x20'		300	
1.2	Office 12'-6"x20'	See ISD.3: ITS	250	-
1.3	Office 12'-6"x12'	Overall Page for	150	-
1.4	Office 10'x10'	Offices and	100	-
1.5	Workstation 8'x8'	Workstation counts	64	-
1.6	Workstation 6'x8'		48	
	Total	0		

Total NSF	-
-----------	---

### ISD.3.4: (Within ITS) Shared Services

Workspaces		Count	SF	NSF Total
1.1	Office 15'x20'		300	-
1.2	Office 12'-6"x20'	See ISD.3: ITS	250	-
1.3	Office 12'-6"x12'	Overall Page for	150	-
1.4	Office 10'x10'	Offices and	100	-
1.5	Workstation 8'x8'	Workstation counts	64	-
1.6	Workstation 6'x8'		48	-
	Total	0		

Total NSF	-
-----------	---

### **General Notes**

The Shared Services Branch (SSB) is responsible for the County's centralized technical support and infrastructure management functions, as well as the expansion of Information Technology Shared Services. Three (3) Divisions provide shared services that include the following:

- Internet Development Division (IDD) This Division provides a full range of services to all County Departments for the design, development, testing, and maintenance of robust websites. This Division is responsible for the Countywide Web Portal in eighteen (18) County Departments, and performs updates to these sites on a daily, weekly and monthly basis. In addition, as the centralized repository for the County's geocoding data, the Geographic Information Systems (GIS) Solutions group assists County Departments with developing sophisticated mapping applications that allow customers to locate their services, utilize census data to allocate resources and recover federal funding, and analyze demographic data to view service trends.
- IT Shared Services Division (ITSS) This Division provides desktop computer support for over 14,000 desktop computers, Microsoft Office 365 support which includes supporting approximately 90,000 email/messaging accounts, centralized messaging and file/print services, Microsoft Active Directory support, virtualized desktop hosting and support, and hardware and software installation and moves for County Departments.
- Customer Assistance Division (CAD) This Division aids County Departments with technical questions and account service needs through the Information Technology Service Desk, as well as providing centralized information to the public about essential County services through the 411 County Information Line. This Division receives over 9,000 calls each month for assistance with IT-related issues and provides a 24x7 point of contact for problem resolution.

## ISD.3.5: (Within ITS) Telecommunications

Workspaces		Count	SF	NSF Total
1.1	Office 15'x20'		300	-
1.2	Office 12'-6"x20'	See ISD.3: ITS	250	-
1.3	Office 12'-6"x12'	Overall Page for	150	-
1.4	Office 10'x10'	Offices and	100	-
1.5	Workstation 8'x8'	Workstation counts	64	-
1.6	Workstation 6'x8'		48	-
	Total	0		

Total NSF -

- The Telecommunications Branch is responsible for a County infrastructure that includes more than 900 network locations, 100,000 telephone lines, Fire/Sheriff radio systems, microwave communications network, and videoconferencing hubs. Five (5) Divisions provide cost-effective and reliable voice, data, public safety and video communications services with oversight of a vast telecommunications network. The Branch's primary focus is the planning, design, project management, installation and ongoing maintenance of telecommunications systems covering Local and Wide Area Networking, WiFi, telephony, video and radio systems. Telecom warehouse (radio shop, microwave shop, and AV shop) to remain at Eastern avenue with FOS warehouses. These services include the following:
- o Voice and video services This service area includes all telephony and video-related services, such as Unified Communications (VoIP), Contact Centers, collaboration, videoconferencing and surveillance systems (analog and IP CCTV).
- o Telephone analysis, installation, support and maintenance This service area responds to and supports customer Departments' requests for new voice services, changes to existing services, systems equipment, or features, repair services, and the acquisition, project management and implementation of new telephone and contact center systems.
- o Radio systems This service area facilitates the planning, design, acquisition, maintenance and operations of radio communications equipment for public safety and 2nd responders; existing radio systems include the Countywide Integrated Radio System (CWIRS) radio infrastructure and end user equipment.
- Countywide Emergency Communications This service area also supports the CWIRS to provide County
  Departments with an integrated means of communicating utilizing two-way radio communications, particularly during
  emergencies (e.g., earthquakes, civil unrest, etc.)
- Los Angeles Regional Interoperability Radio System (LARICS) This service area provides engineering and project management resources in support of the emerging LARICS public safety radio communication, composed of a private Broadband LTE system and Land Mobile Radio system.
- Network systems This service area includes planning, design, acquisition, project management, and maintenance
  of Countywide LAN/WAN/WiFi and microwave infrastructures.

### ISD.4.0: FOS Overall

Wo	rkspaces	Count	SF	NSF Total
1.1	Office 15'x20'		300	
1.2	Office 12'-6"x20'		250	-
1.3	Office 12'-6"x12'	1	150	150
1.4	Office 10'x10'	62	100	6,200
1.5	Workstation 8'x8'	20	64	1,280
1.6	Workstation 6'x8'	60	48	2,880
	Total	143		10.510

Total NSF	10,510
-----------	--------

### **General Notes**

Summary Page of Offices and Workstations for FOS Department.

See ISD.4.1, ISD.4.2, and ISD.4.3 pages for detailed support space and other requirements for A&I, Custodial, and M&O divisions.

## ISD.4.1: (Within FOS) A&I

Wo	rkspaces	Count	SF	NSF Total	
1.1	Office 15'x20'		300		
1.2	Office 12'-6"x20'	See ISD.4.0: FOS	250	-	
1.3	Office 12'-6"x12'	Overall Page for	150	-	
1.4	Office 10'x10'	Offices and	100	-	
1.5	Workstation 8'x8'	Workstation counts	64	-	
1.6	Workstation 6'x8'		48	-	_
	Total	0		•	
De	dicated Meeting Spaces	Count	SF	NSF Total	
2.1	S Meeting Room			-	_
2.2	M Medium Room (incl A&I)	1		300	
				300	
Spe	ecialty Space	Count	SF	NSF Total	
4.16	A&I Library, Plan Archive, Local Plotter Area	1		3,000	A&I Small Library, sample room & plan archive(all 1 room - 2000 SF) ir secure room; Space Planning large library & sample room (1 room 500 SF) in secure room, 3000 SF total.
				3,000	-
Loa	ading Dock	Count	SF	NSF Total	
5.12	JOC archive file room	1		-	Refer to Campus Shared Summary for Loading Dock Program overall
	Total	1		-	SQFT.
Adj	acencies			Departments	
	A&I to PLAD (FOS)			A&I to FOS	_
	A&I to M&O			A&I to M&O	
	A&I to PCS			A&I to PCS	

## Total NSF 3,300

- As the primary source of centralized services to maintain and support Los Angeles County facilities, ISD oversees many projects including alterations and improvements, maintenance and custodial services, and special ceremonies. Alterations & Improvements (A&I) Division provides a wide range of construction and maintenance services for Los Angeles County facilities, including modifying, remodeling, planning and installing new facilities capabilities through inhouse personnel, as well as with contractors. Maintenance and refurbishment services for small and medium scale projects, full time staff including project managers, architects, engineers and estimators. Also include in-house crafts services.
- Department requires touchdown work areas for visitors e.g. contractors, vendors, consultants & etc., +/- 3 desks.
- Alterations & Improvements (A&I) Plotter Room, Reference Library, Space planning library, A&I Sample Room, Space planning sample room, and plan archive room: The A&I division has architectural divisions storing drawing sets, with unique plotter needs, and sample storage.

## ISD.4.2: (Within FOS) Custodial

Workspaces		Count	SF	NSF Total
1.1	Office 15'x20'		300	-
1.2	Office 12'-6"x20'	See ISD.4.0: FOS	250	-
1.3	Office 12'-6"x12'	Overall Page for	150	-
1.4	Office 10'x10'	Offices and	100	-
1.5	Workstation 8'x8'	Workstation counts	64	-
1.6	Workstation 6'x8'		48	-
	Total	0		

<b>Dedicated Support Spaces</b>		Count	SF	NSF Total	_
5.2	Floor care equipment Storage	1			Part of loading dock

Adjacencies	Departments
CSD to A&I	FOS Cust. To A&I
CSD to M&O	FOS Cust. To M&O

Total NSF	-
-----------	---

- Custodial Services Division provides Custodial and Landscape services at over 300 County locations covering more than 20 million square feet of County facilities. They assist departments with maintaining a safe, clean, productive and sustainable environment for staff, clients and citizens of Los Angeles County. They can provide regular service on a weekly/daily basis or one-time clean-up for ceremonies, trainings or other special events.
- Some staff are in and out of the office, but all need an assigned office space. About 60% are in the field most of the time: Section manager in all the time, Building complex manager in field half time, and Contract monitors more in the field.
- Storage Needs: Requested more filing cabinets because they do have Finance + Contracts section requires a lot of paperwork (retained for 7 years) need more storage than other 2 divisions of FOS. Will include archives at Eastern Ave for longer retention items.
- Touchdown areas needed for visitors from other locations or field staff coming in for training.
- Floor care equipment storage for large custodial equipment, requires mop sink, venting (storage of some cleaning chemicals), and electrical for charging machine batteries. Locked space with racking for supplies.

### ISD.4.3: (Within FOS) M&O

	orkspaces	Count	SF	NSF Tota
1.1	Office 15'x20'		300	-
1.2	Office 12'-6"x20'	See ISD.4.0: FOS	250	-
1.3	Office 12'-6"x12'	Overall Page for	150	-
1.4	Office 10'x10'	Offices and	100	-
1.5	Workstation 8'x8'	Workstation counts	64	-
1.6	Workstation 6'x8'		48	
	Total	0		-
	dicated Meeting Spaces	Count	SF	NSF Total
2.1	S Meeting Room			-
2.2	M Medium Room (incl A&I, M&O)	1		300
2.3	L Meeting Room			-
2.4	XL Meeting Room			-
2.6	Collaboration Space			-
2.7	Touchdowns			-
2.8	Interview Room			
				300

Spe	ecialty Space	Count	SF	NSF Total
3.15	Dedicated FOS Pantry	1	400	400
				400

Adjacencies	Departments
M&O to Alterations	M&O to A&I
M&O to CSD	M&O to Custodial
M&O to AFS	M&O to AFS
M&O to Purchasing	M&O to PCS

Total NSF	700
-----------	-----

- Facilities Operations Service (FOS) provides building management and repair, alterations and improvements, custodial and landscape services.
- The mission of the Maintenance & Operations Division (M&O) is to maintain building systems and equipment in County facilities and provide limited alterations & improvements and related services, primarily through in-house crafts. M&O provides services in tenant improvement, general maintenance, and as-needed repairs for emergencies.
- Waiting space is needed for visitors (LA county department reps), such as vendors (contractors, furniture suppliers), customers and candidates being interviewed for jobs by managers and supervisors (could be shared with HR reception and interview rooms if in same building). A workspace is needed for an IT manager supporting the service's business information system.

[Intentionally Left Blank]

### ISD.5: PCS

Wo	rkspaces	Count	SF	NSF Total	
1.1	Office 15'x20'		300		
1.2	Office 12'-6"x20'		250	-	
1.3	Office 12'-6"x12'	1	150	150	
1.4	Office 10'x10'	24	100	2,400	
1.5	Workstation 8'x8'	3	64	192	
1.6	Workstation 6'x8'	135	48	6,480	
		163		9,222	_
Dec	dicated Meeting Spaces	Count	SF	NSF Total	
2.1	S Meeting Room				_
2.2	M Medium Room (incl A&I, M&O)	1		300	Adjacent to reception for bids
2.3	L Meeting Room				7
2.4	XL Meeting Room				
2.6	Collaboration Space				
2.7	Touchdowns				
2.8	Interview Room				
				300	_
Dec	dicated Support Spaces	Count	SF	NSF Total	
3.6	Live Scan Room with Associated Waiting Area, combined with badging area	1		144	share between PCS/HR, Waiting Area for 6 chairs, shared with PCS
3.13	Mail Room	1		600	ISD department shared space
3.16	Print Production Room (Purchasing)	1		450	Confidential bid document printing co- located with 3.2
3.17	Waiting area for Bids and touchdown desks	1		200	4 touchdown desks in work zone, sma waiting area, desks listed in program, waiting area 200 sqft
3.18	Storage / File Room (Purchasing)	1		1,000	
3.18	Storage Room (Contracting)	1		450	
		6		2,844	-
Spe	ecialty Space	Count	SF	NSF Total	
4.17	Surplus Vault Room (Purchasing)	1		600	adjacent to loading dock
		1		600	
Loa	ading Dock	Count	SF	NSF Total	
5.5	Material Management Records Cage	1			Refer to Campus Shared Summary for
5.7	PCS Warehouse (including 12 staff workstations), Telecom and CSB Cages	1			Loading Dock Program SQFT.
5.8	Property Management Salvage Cage	1			
5.9	Property Management Tagging Cage	1			
5.10	Receiving / Shipping Supply Room Office	1			

Adjacencies	Departments
Finance to Accounts Payable	PCS to AFS
PCS to Agreements and Service Response	PCS to ITS
PLAD to Budgeting	PCS to FOS

Total NSF	12,96
i ulai Nor	12,90

- Purchasing and Contract Services (PCS) provides centralized purchasing services for, and on behalf of, all County departments, as well as contract and key administrative support services for ISD and other County departments. PCS services include:
- o Acquisition of goods and sundry services
- o Master agreements for goods
- o Purchasing and contract training and guidance
- o Facility services master agreement
- o Fleet maintenance and repair services
- o Technical equipment maintenance services
- o Oversight of the County's service contracting process
- o Information technology services master agreement
- o Living Wage and EEO Contract Compliance
- o Parking services & Messenger/Mail Services
- Contracting Division requires A small workstation to be shared by three (3) 120-day employees under the Countywide Policies and Standards Section. In Purchasing Division, a touchdown work area and reception is needed to accommodate staff from County departments to review bids for recommendation of awards.
- Meetings are held with various County Departments and vendors. A waiting area is needed for visitors. Off of
  reception, waiting area and 8-10 person conference room is needed for review of bids and bid opening. Bids are
  received for contracts with particular requirements could be combined into a centralized mail room with a counter to be
  staffed, would need to be adjacent to reception for bid drop-off.
- Surplus Vault Room: Lost and Found items from all county facilities end up in the surplus vault room. This space must have security doors with an alarm system for access control.
- Procurement folders, unclaimed personal property, and warrants located in rooms are to be secured. Staff work within vault to sort items.
- Print Production Room to be combined with ISD Central Reprographics.

## ISD.6: Energy and Environmental Service (EES)

Wo	rkspaces	Count	SF	NSF	
1.1	Office 15'x20'		300		
1.2	Office 12'-6"x20'		250	-	
1.3	Office 12'-6"x12'	1	150	150	
1.4	Office 10'x10'	4	100	400	
1.5	Workstation 8'x8'	15	64	960	
1.6	Workstation 6'x8'	8	48	384	8 desks located in BEAS and EEMIS network operations (space 4.1), see below. 1 desk Icoated in ECC (space 4.11), see room data sheet
	Total	28		1,894	-
De	dicated Support Spaces	Count	SF	Total	
4.1	BEAS and EEMIS network operations	1		1,045	Contains 8 desks, assumed 8xt desks removed from overall 1,557 sqft. Space 4.1 not to be combined with ITS Call Center (4.11), located with proximity to FOS M&O
				1,045	-
Adj	acencies			Departments	
	EES to EMD Management			EES to FOS	-
	otal NSF			2,939	1

Provide 3 additional 6'x8' workspaces for Civic Spark interns and contracted grant writers, as well as a touchdown work area for up to 4 (6'x8') visiting contractors.

#### **General Notes**

The County Office of Sustainability, now EES was formed in 2009 to respond to legislation, regulation and policy related to Climate Change and to serve as a central hub for coordination of energy efficiency, conservation and sustainability programs within the County, its facilities and the region. Made up of Energy Management Division + Environmental Initiatives Division. EES develops and implements programs that impact and benefit the constituents of Los Angeles County, such as: Energy Upgrade California (an energy efficiency home improvement program), Environmental Service Centers, SolarMap.LACounty.gov and Green.LACounty.gov websites, The Energy Network, and the Southern California Regional Energy Center (SoCalREC). In addition, EES is playing an important role in coordinating and implementing Energy and Environmental policy, County Green Building programs and Climate Action activities for the State, region and all County departments.

There are two divisions within EES; Environmental Initiatives Division (EID) and Energy Management Division (EMD).

EID works internally with County departments and also represents the County in local and statewide organizations to promote energy efficiency, sustainability, climate action planning, legislative review and advisement, and environmental programs and policies. These efforts are supported through various funding sources, such as grants and utility ratepayer programs.

EMD operates and maintains systems that provide a variety of information about energy usage and consumption within facilities. This Section operates a centralized Building and Environmental Automation (BEAS) System for heating, ventilation, air-conditioning and lighting control; while the Enterprise Energy Management Information System (EEMIS) monitors and archives "real time" operational data. This data provides users with invaluable information regarding an organization's energy related activities and costs including:

- Presenting how your facility, tenants or equipment are operating in "real time"
- Standardizing data presentation from different manufacturers available through a single front enc
- Managing utility accounts and automatically verifying monthly bills from providers
- Easily identifying, tracking and reporting your greenhouse gas emissions across your facility inventory
- Competitively ranking performance and cost, using baselines & benchmarking tools down to the equipment level
- Ability to easily submit facility energy data for "Energy Star" ranking against the national database

The BEAS and EEMIS network operations in the EMD Systems Section includes desk top computers, servers and staff that operate both the Enterprise Energy Management Information System (EEMIS) and the Building Environmental Automation System (BEAS). Both of these systems utilize both in house and virtual off-site servers to gather data from facilities County wide from various utility providers. Staff operate the call center where they address trouble calls and service requests from customers, and then dispatch field personnel. These operations control building automation systems such as Heating Ventilation Air Conditioning and Lighting Systems. Staff manages and operate these systems in an office type environment, with 7 or 8 employees staffed with the office space. This space is utilized for operational hardware and supporting documents & file storage.

Since EES operates a County wide Enterprise System, they have up to 25 active IP addresses to communicate in a multitude of TC/IP languages. The system isolates and collects data from various electronic data gathering databases, building controls systems and other inputs, so Emergency Power is necessary to prevent essential critical County buildings operation program data from becoming corrupted, as well as to maintain the ability to remotely monitor and operate these buildings.

### **5.11 Auditor Controller**

Updated: April 9, 2018

Wo	rkspaces	Count	SF	NSF Total	
1.1	Office 15'x20'		300		
1.2	Office 12'-6"x20'		250		
1.3	Office 12'-6"x12'		150	-	
1.4	Office 10'x10'		100	-	
1.5	Workstation 8'x8'		64		
1.6	Workstation 6'x8'	7	48	336	_
	Total	7		336	
Dec	dicated Meeting Spaces	Count	SF	NSF Total	
2.1	S Meeting Room (Can be shared, needs to be adjacent to A-C Space)	1	150	150	included in Campus Summary
2.2	M Medium Room				
2.3	L Meeting Room				
2.4	XL Meeting Room				
2.6	Collaboration Space			-	
2.7	Touchdowns				
2.7 2.8	Interview Room	Count	SF	- - 150 NSF Total	
2.7 2.8 <b>De</b> e		Count 1	SF 828		
2.7 2.8 <b>Dec</b> 5.11	Interview Room			NSF Total	
2.7 2.8	Interview Room  dicated Support Spaces  Vault  Mail Room	1	828	NSF Total 828 1,840	total space minus desks
2.7 2.8 <b>Dec</b> 5.11 5.11	Interview Room  dicated Support Spaces  Vault	1 1	828 1,840	NSF Total 828 1,840 780	total space minus desks To fit minimum 2 mail cages, each cage 2.5x4x5 ft. (WxDxH). min 6x10
2.7 2.8 <b>Dec</b> 5.11 5.11	Interview Room  dicated Support Spaces  Vault  Mail Room  Staff Room with Meeting Table and Small Kitchenette	1 1 1	828 1,840 780	NSF Total 828 1,840 780	To fit minimum 2 mail cages, each
<b>Dec</b> 5.11 5.11 5.11	Interview Room  dicated Support Spaces  Vault  Mail Room  Staff Room with Meeting Table and Small Kitchenette	1 1 1	828 1,840 780	NSF Total  828 1,840 780 60	To fit minimum 2 mail cages, each
2.7 2.8 <b>Dec</b> 5.11 5.11 5.11	Interview Room  dicated Support Spaces  Vault  Mail Room  Staff Room with Meeting Table and Small Kitchenette  Lockbox	1 1 1	828 1,840 780 60	NSF Total  828 1,840 780 60 3,508	
Dec 5.11 5.11 5.11 Loa	Interview Room  dicated Support Spaces  Vault  Mail Room  Staff Room with Meeting Table and Small Kitchenette  Lockbox  adding Dock	1 1 1 1	828 1,840 780 60	NSF Total  828 1,840 780 60 3,508	To fit minimum 2 mail cages, each cage 2.5x4x5 ft. (WxDxH), min 6x10  Refer to Campus shared summary fo
Dec 55.11 55.11 Loa	Interview Room  dicated Support Spaces  Vault  Mail Room  Staff Room with Meeting Table and Small Kitchenette  Lockbox  adding Dock  Auditor Controller Mail Room Function	1 1 1 1 Count	828 1,840 780 60	NSF Total  828 1,840 780 60 3,508  NSF Total 3,994	To fit minimum 2 mail cages, each cage 2.5x4x5 ft. (WxDxH), min 6x10  Refer to Campus shared summary fo
Dec 5.11 5.11 5.11 5.11	Interview Room  dicated Support Spaces  Vault  Mail Room  Staff Room with Meeting Table and Small Kitchenette  Lockbox  adding Dock  Auditor Controller Mail Room Function	1 1 1 1 Count	828 1,840 780 60	NSF Total  828 1,840 780 60 3,508  NSF Total 3,994	To fit minimum 2 mail cages, each cage 2.5x4x5 ft. (WxDxH), min 6x10  Refer to Campus shared summary fo

#### **General Notes**

The Department of Auditor-Controller's Mailing Operation (A-C) and the Internal Services Department's Printing Operation (ISD) currently share space at the Downey location (9150 E. Imperial Highway). The A-C and ISD are responsible for printing and mailing payments on behalf of all County departments and special districts. In FY16-17, the County disbursed approximately 2.7 million payments valued at \$16.2 billion dollars to vendors, public assistance and child support, property tax refunds, election poll-workers, jury services, worker's compensation, garnishments, etc. In addition, the A-C is responsible for processing and mailing IRS tax forms annually that report payments issued to non-employee compensation. This results in 15,000 to 20,000 forms that are mailed at the end of January.

Additionally, in October 2017, the County's payroll printing contract with Proforma expired. This provided the County an opportunity to reduce operating costs by having the A-C and ISD absorb the additional volume of printing and distributing the payroll warrants, remittances, and W-2s.

The program for the A-C Mailing Operation contains five main spaces: Vault, Mail Room, Staff Area, Lockbox, and Meeting Room, with descriptions listed below. Refer to Room Data Sheet 5.11 for layout and detailed requirements. It is expected that this space will be located at the back of the building with direct adjacency to the loading dock and central reprographics.

The Daily Disbursement and mail Process consists of the following activities (locations involved noted in parentheses):

- 1. Previous Day: A-C distributes blank warrant and remittance stock to ISD for printing. (From vault to Central Reprographics.)
- 2. Overnight: ISD prints warrants and remittances. (Central Reprographics.)
- 3. By 7:30am: A-C received the printed items from ISD. (Staff Area Reception.)
- 4. By 9:30am: A-C reconciles all printed items (work area / warrant check-in table).
- 5. By 2:00pm: A-C folds, inserts warrants into envelopes and meters and adds postage. (Mail Room)
- 6. By 3:00pm: A-C prepares the mail for USPS for pickup. (Mail Room and Lockbox).

#### Space Descriptions:

Vault: The vault is used to store paper stock for warrants as well as provide storage for other supplies. Its size has been reduced from the current allocation favoring a more 'on-demand' shipping approach vs. the storage of a year's worth of stock at a time.

Mail Room: The Mail Room processes envelopes (filling and metering), and contains many pieces of specialized equipment. It is a very loud space and will need to be carefully acoustically separated from the staff area while still providing glazed visibility into the room.

Staff Area: This space contains the desks of A-C staff with close vicinity to Central Reprographics, small kitchenette, and work area for deliveries.

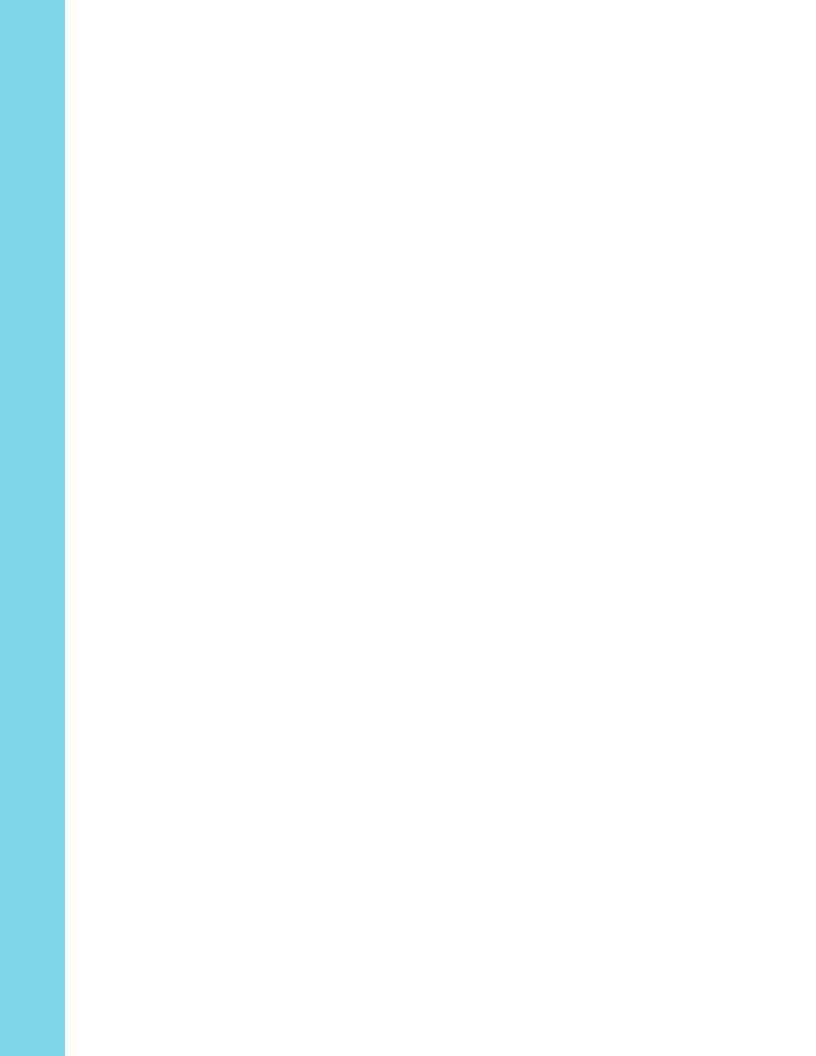
Meeting Room: Private small meeting room to be provided nearby the staff area for A-C use.

Lockbox: This space to be provided in the loading dock will provide a space for staff to securely store USPS pickup items (in two APC carts) for

#### Other Considerations:

- Direct adjacency to the loading dock is critical for bulk deliveries of warrant stock (multiple times per year, 18-wheel truck, USPS pickups, and for the use of shared equipment).
- The A-C staff share forklift use with the ISD loading dock function.
- · Doors from the loading dock and into the vault will need to be designed to fit both forklifts and pallet-jack equipment uses.
- Parking: The A-C department has 1 fleet van that will require designated parking within the parking structure.
- Loading zone will need to be accessible for the A-C van for daily deliveries or pickups.

This Program Summary has been replaced by revised Program Summary included with Notice to Proposers I





# **ROOM DATA SHEETS**

1.0	Workspace	246
2.0	Meeeting Spaces	252
3.0	Support Spaces	260
4.0	Specialty Spaces	274
5.0	Loading Dock	292

# OFFICE (15'x20')

### **DESCRIPTION:**

Enclosed Executive office.

### **# OCCUPANTS:** 1-9

### **FURNITURE REQUIREMENTS:**

- 1 Executive workstation with sit/stand component and adjacent side and rear worksurfaces, integrated Power/IT, and associated upper and lower storage credenza, size to suit room layout
- 1 Movable Workstation Chair
- 2 Movable Occasional Chairs
- 1 Meeting/ Conference Table with 6 Chairs

### **EQUIPMENT:**

- 1 Computer per workstation (By Owner)
- Wall Monitor / TV Display refer to AV narrative
- Phone
- Refer to AV Narrative for additional information

### **FINISHES**

**FLOORS:** Carpet

### **WALLS + WALL BASE:**

Painted G.W.B with 4" base, Insulated wall assembly for sound control.

**CEILING:** ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

### LIGHTING:

See Lighting Section of Narrative.

# POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation
- 2 Port for data and 1 duplex power per TV screen
- 2- Housekeeping power outlets

### **SECURITY REQUIREMENTS:** Controlled access.

#### **ACOUSTICS:**

- STC 50 demising walls
- STC 45 corridor wall
- STC 35 glazed corridor wall (excluding door)

**SPECIAL REQUIREMENTS:** Locate offices away from exterior glazing to allow greater daylight penetration to work spaces.

# OFFICE (12'-6"x20')

### **DESCRIPTION:**

Enclosed Executive office.

### **# OCCUPANTS:** 1-7

### **FURNITURE REQUIREMENTS:**

- 1 Executive workstation with sit/stand component and adjacent side and rear worksurfaces, integrated Power/IT, and associated upper and lower storage credenza, size to suit room layout
- 1 Movable Workstation Chair
- 2 Movable Occasional Chairs
- 1 Meeting/ Conference table with 4 chairs

### **EQUIPMENT:**

- 1 Computer per workstation (By Owner)
- Wall Monitor / TV Display refer to AV narrative
- Phone
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS:** Carpet

### **WALLS + WALL BASE:**

Painted G.W.B with 4" base, Insulated wall assembly for sound control.

**CEILING:** ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

### **LIGHTING:**

See Lighting Section of Narrative.

# POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation
- 2 Port for data and 1 duplex power per TV screen
- 2 Housekeeping power outlets

### **SECURITY REQUIREMENTS:** Controlled access.

### **ACOUSTICS:**

- STC 50 demising walls
- STC 45 corridor wall
- STC 35 glazed corridor wall (excluding door)

**SPECIAL REQUIREMENTS:** Locate offices away from exterior glazing to allow greater daylight penetration to work spaces.

# OFFICE (12'-6" x 12')

### **DESCRIPTION:**

Enclosed office.

### **# OCCUPANTS:** 1-3

### **FURNITURE REQUIREMENTS:**

- 1 Executive workstation with sit/stand component and adjacent side and rear worksurfaces, integrated Power/IT, and associated upper and lower storage credenza, size to suit room layout
- 1 Movable Workstation Chair
- 2 Movable Occasional Chairs

### **EQUIPMENT:**

- 1 Computer per workstation (By Owner)
- Phone

### **FINISHES NOTES**

**FLOORS:** Carpet

### **WALLS + WALL BASE:**

Painted G.W.B with 4" base, Insulated wall assembly for sound control.

**CEILING: ACT** 

CEILING. ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

### LIGHTING:

See Lighting Section of Narrative.

# POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation
- 2 Housekeeping power outlets

### **SECURITY REQUIREMENTS:** Controlled access.

### **ACOUSTICS:**

- STC 50 demising walls
- STC 45 corridor wall
- STC 35 glazed corridor wall (excluding door)

**SPECIAL REQUIREMENTS:** Locate offices away from exterior glazing to allow greater daylight penetration to work spaces.

The building manager's office for both ISD AFS (ISD.1) and Probation Management Services (PD.9), (total of 2 locations) shall have a video system monitoring station separate from the PC so they can work on documents but keep camera images up to view and manipulate cameras, and coordinate security or emergency evacuation situations. Refer to AV Narrative for Offices 1.1 and 1.2 for required additional equipment for these two locations.

# OFFICE (10'x10')

### **DESCRIPTION:**

Enclosed office.

### **#OCCUPANTS: 1**

### **FURNITURE REQUIREMENTS:**

- 1 Executive workstation with sit/stand component and adjacent worksurface, integrated Power/IT, and associated upper and lower storage credenza, size to suit room layout
- 1 Movable Workstation Chair

### **EQUIPMENT:**

- 1 Computer per workstation (By Owner)
- Phone

### **FINISHES NOTES**

**FLOORS:** Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, Insulated wall assembly for sound control.

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

### LIGHTING:

See Lighting Section of Narrative.

# POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation
- 2 Housekeeping power outlets

**SECURITY REQUIREMENTS:** Controlled access.

### **ACOUSTICS:**

- STC 50 demising walls
- STC 45 corridor wall
- STC 35 glazed corridor wall (excluding door)

**SPECIAL REQUIREMENTS:** Locate offices away from exterior glazing to allow greater daylight penetration to work spaces.

# WORKSTATION (8x8')

### **DESCRIPTION:**

Open office workstations.

### #OCCUPANTS: 1

### **FURNITURE REQUIREMENTS:**

- 1- Workstation with Integrated Power/IT, 'sit-stand' capability, and adjacent worksurface return
- 1 Movable Workstation Chair
- · Lower Storage

### **EQUIPMENT:**

- 1 Computer per workstation (By Owner)
- Phone

## **FINISHES NOTES**

**FLOORS:** Varies

WALLS + WALL BASE: N/A

**CEILING:** Varies

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** N/A

**LIGHTING:** See Lighting Section of Narrative.

# POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation

### **SECURITY REQUIREMENTS:** N/A

**ACOUSTICS:** Sound masking and sound-absorptive ceiling elements above this area to limit sound transfer to adjacent focus zones. See Acoustical Section for requirements.

**SPECIAL REQUIREMENTS:** N/A

# WORKSTATION (6'x8')

### **DESCRIPTION:**

Open office workstations.

### #OCCUPANTS: 1

### **FURNITURE REQUIREMENTS:**

- 1- Workstation with Integrated Power/IT, 'sit-stand' capability, and adjacent worksurface return
- 1 Movable Workstation Chair
- 1 Movable Storage Pedestal with worksurface top

### **EQUIPMENT:**

- 1 Computer per workstation (By Owner)
- Phone

## **FINISHES NOTES**

**FLOORS:** Varies

WALLS + WALL BASE: N/A

**CEILING:** Varies

**CEILING HEIGHT:** Min. 9'-0"

DOORS / SCREENS: N/A

**LIGHTING:** See Lighting Section of Narrative.

# POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation

### **SECURITY REQUIREMENTS:** N/A

**ACOUSTICS:** Sound masking and sound-absorptive ceiling elements above this area to limit sound transfer to adjacent focus zones. See Acoustical Section for requirements.

**SPECIAL REQUIREMENTS:** N/A

## SMALL MEETING ROOM

### **DESCRIPTION:**

Enclosed meeting room with mix of solid and glazed walls. See program for size, minimum distance from edge of table to wall: 3'-0".

### #OCCUPANTS: 4-6

### **FURNITURE REQUIREMENTS:**

- Meeting Room Table with integrated Power and Data
- 6 Movable Conference Chairs

### **EQUIPMENT:**

- Wall monitor / TV refer to AV narrative
- 1 White-board, as follows: Probation area: 1 Wall full width, 4'-0" AFF with Marker Tray + ISD area: Full-height writable surface, max 6'-0" wide, 1 wall per room.
- Tackable wall surface (min 6 linear ft x 4' tall)
- Phone
- Clock
- Refert to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS:** Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, One wall accent painted or wallpaper finish. Sound absorptive wall panels, one short wall.

Glazed Walls - Percentage of each meeting room's walls to be glazing to values below. Glazed walls to be adjacent to doors where possible, with applied film distraction banding for privacy (typical application, film from 18" AFF to 78" AFF). Probation: 30% of room's walls to be glazed, ISD: 50%. Aluminum frame.

**CEILING:** ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame.

**LIGHTING:** See Lighting Section of Narrative.

# POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation
- 2 Port for data and 1 duplex power per TV screen
- 1 Outlets for wall telephone
- 2- Housekeeping power outlets

### **SECURITY REQUIREMENTS:** N/A

### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)
- STC 45 glazed corridor wall (including door) when adjacent to public areas or gathering zones

**SPECIAL REQUIREMENTS:** Room type to be distributed throughout office spaces to allow staff to utilize on an as-needs basis for focus work.

### MEDIUM MEETING ROOM

### **DESCRIPTION:**

Enclosed meeting room with mix of solid and glazed walls. See program for size, minimum distance from edge of table to wall: 4'-0".

### **# OCCUPANTS:** 8-10

### **FURNITURE REQUIREMENTS:**

- Meeting Room Tables with integrated power, data, and AV connection to monitor
- 10 Movable conference chairs
- 1 Storage Credenza with adjustable shelves
- 1 6'x0" linear (minimum) Credenza

### **EQUIPMENT:**

- Wall monitor / TV refer to AV narrative
- 1 White-board, as follows: Probation area: 1 Wall full width, 4'-0" AFF with Marker Tray + ISD area: Full-height writable surface, max 6'-0" wide, 1 wall per room.
- Phone or Polycom equivalent
- Tackable wall surface (min 6 linear ft x 4' tall)
- Wall Mounted Video Conference Unit [50% of rooms]
- Clock
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS:** Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, One wall accent painted or wallpaper finish, Sound absorptive wall panels on two adjacent walls.

Glazed Walls - Percentage of each meeting room's walls to be glazing to values below. Glazed walls to be adjacent to doors where possible, with applied film distraction banding for privacy (typical application, film from 18" AFF to 78" AFF). Probation: 30% of room's walls to be glazed, ISD: 50%. Aluminum Frame.

CEILING: ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame.

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per table
- 1 Quad power outlet per table
- 2 Port for data and 1 duplex power per TV screen
- 1 Outlet for wall telephone
- 2 Housekeeping power outlets

### **SECURITY REQUIREMENTS:** N/A

### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)
- STC 45 glazed corridor wall (including door) when adjacent to public areas or gathering zones

**SPECIAL REQUIREMENTS:** Room type to be located along main circulation corridors where possible to avoid disruption to quiet office zones.

### LARGE MEETING ROOM

#### **DESCRIPTION:**

Enclosed meeting room with mix of solid and glazed walls. See program for size, minimum distance from edge of table to wall: 4'-0".

### **# OCCUPANTS:** 12-16

### **FURNITURE REQUIREMENTS:**

- Movable meeting room tables with integrated power, data, and AV connection to wall monitor
- 16 Movable conference chairs
- 1 minimum 8 linear ft Storage Credenza with adjustable shelves

### **EQUIPMENT:**

- Wall monitors / TVs refer to AV narrative
- 1 White-board, as follows: Probation: 1 wall full width, 4'-0" AFF with Marker Tray + ISD: Full-height writable surface, max 6'-0" wide, 1 wall per room
- Phone or Polycom equivalent
- Tackable wall surface (min 6 linear ft x 4' tall)
- Wall Mounted Video Conference Unit
- Clock
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS:** Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, One wall accent painted or wallpaper finish, Sound absorptive wall panels on two adjacent walls.

Glazed Walls - Percentage of each meeting room's walls to be glazing to values below. Glazed walls to be adjacent to doors where possible, with applied film distraction banding for privacy (typical application, film from 18" AFF to 78" AFF). Probation: 30% of room's walls to be glazed, ISD: 50%. Aluminum Frame.

CEILING: ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame.

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per pair of tables
- 1 Quad power outlet per pair of tables
- 2 Port for data and 1 duplex power per TV screen
- 1 Outlet for wall telephone
- 4 Housekeeping power outlets

### **SECURITY REQUIREMENTS: N/A**

### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)
- STC 45 glazed corridor wall (including door) when adjacent to public areas or gathering zones

**SPECIAL REQUIREMENTS:** Room type to be located along main circulation corridors where possible to avoid disruption to quiet office zones.

### XL MEETING ROOM

### **DESCRIPTION:**

Enclosed meeting room with mix of solid and glazed walls. See program for size, minimum distance from edge of table to wall: 4'-0".

### **# OCCUPANTS:** 16-25

### **FURNITURE REQUIREMENTS:**

- Movable meeting room tables with integrated power, data, and AV connection to monitor
- 25 Movable conference chairs
- 1 minimum 8 linear ft Storage Credenza with adjustable shelves

### **EQUIPMENT:**

- Wall monitors / TVs refer to AV narrative
- 1 White-board, as follows: Probation: 1 wall full width, 4'-0" AFF with Marker Tray + ISD: Full-height writable surface, max 6'-0" wide, 1 wall per meeting room
- Phone or Polycom equivalent
- Tackable wall surface (min 12 linear ft x 4' tall)
- Wall Mounted Video Conference Unit
- Clock
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS:** Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, One wall accent painted or wallpaper finish, Sound absorptive wall panels on two adjacent walls.

Glazed Walls - Percentage of each meeting room's walls to be glazing to values below. Glazed walls to be adjacent to doors where possible, with applied film distraction banding for privacy (typical application, film from 18" AFF to 78" AFF). Probation: 30% of room's walls to be glazed, ISD: 50%. Aluminum Frame.

**CEILING:** ACT

**CEILING HEIGHT:** Min. 11'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame.

### LIGHTING:

See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per pair of tables
- 1 Quad power outlet per pair of tables
- 2 Port for data and 1 duplex power per TV screen
- 1 Outlet for wall telephone
- 4 Housekeeping power outlets

### **SECURITY REQUIREMENTS: N/A**

#### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)
- STC 45 glazed corridor wall (including door) when adjacent to public areas or gathering zones

**SPECIAL REQUIREMENTS:** Room type to be located along main circulation corridors where possible to avoid disruption to quiet office zones.

### **AUDITORIUM / XXL MEETING ROOM**

### **DESCRIPTION:**

Campus-shared auditorium space for large group meetings and training with raised presenter stage/podium space with adjacent storage room for chairs/tables. Refer to program for size. This is a feature space to receive upgraded finishes.

**DESCRIPTION (CONT.):** Room to be located nearby a pantry or catering space, and be laid out to support classroom table groupings, large group presentations, and flexible group work space (i.e. if a county facility is temporarily shut down, staff could use this space as a work zone). Included in square-footage given is associated space for table and chair storage required to serve space.

# OCCUPANTS: 50-150

### **FURNITURE REQUIREMENTS:**

- 36 Minimum Movable / Stacking Tables
- 150 Movable / Stacking conference chairs
- 1 Movable podium (min 10' x 6')

### **EQUIPMENT:**

- Retractable presentation screen and 1 ceiling mounted projector
- Phone
- Large wall TV/Monitor displays refer to AV narrative
- Video Conference Capability
- Refer to AV Narrative for additional information

#### **FINISHES NOTES**

**FLOORS:** Resilient Flooring, Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, One wall accent painted or wallpaper finish, Sound absorptive wall panels on rear and side walls.

**CEILING:** ACT and G.W.B Mix

**CEILING HEIGHT:** Min. 11'-0", min 9'-0" in storage room.

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed screen adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per presentation location
- 1 Quad power outlet per presentation location
- 2 Port for data and 1 duplex power per TV screen
- 2 Outlets for wall telephone
- Housekeeping outlets at minimum 6'-0" intervals on room's perimeter
- Floor boxes with integrated power (min. 2 duplex) spaced throughout space min. 6 connections.

### **SECURITY REQUIREMENTS: N/A.**

#### **ACOUSTICS:**

- STC 55 demising walls
- STC 45 corridor walls
- STC 45 glazed corridor wall (including door) when adjacent to public areas or gathering zones
- Refer to acoustic narrative detailed requirements

**SPECIAL REQUIREMENTS:** Campus-shared configuration and space requirements to be closely developed with user groups.

### **COLLABORATION SPACE**

### **DESCRIPTION:**

Small group open meeting space in office or amenity zones. See program for sizes.

### #OCCUPANTS: 2-4

### **FURNITURE REQUIREMENTS:**

- 50% of collaboration spaces to have Lounge Furniture in groupings of 4 seats with adjacent beverage table
- 50% of collaboration spaces to have 4 movable chairs and 1 - 3' diameter work table

### **EQUIPMENT:**

- 1 Portable White-board
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS:** Carpet

WALLS + WALL BASE: N/A

**CEILING:** Varies

**CEILING HEIGHT:** Min. 9'-0"

DOORS / SCREENS: N/A

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per furniture grouping
- 1 Quad power outlet per furniture grouping
- 2 Port for data and 1 duplex power per TV screen (IF APPLICABLE)

### **SECURITY REQUIREMENTS: N/A**

**ACOUSTICS:** Sound masking and sound absorptive ceiling elements above this area to limit sound transfer to adjacent focus zones.

**SPECIAL REQUIREMENTS:** Collaboration spaces to be located in office spaces, grouped towards more active/loud zones to prevent distraction to others.

### **TOUCHDOWN**

### **DESCRIPTION:**

Enclosed room with glazed corridor wall. See program for sizes.

### **# OCCUPANTS:** 1-2

### **FURNITURE REQUIREMENTS:**

- 70% of rooms with 1 person workspace:
  - 1 5 Linear ft work surface or table
  - 1 Movable Conference Chair
  - 1 occasional seating chair or pedestal
- Alternate 30% of touchdown Rooms to have Lounge Chairs
  - 2 Lounge Chairs
  - 1 Beverage Table with integrated power

### **EQUIPMENT:**

- Phone
- Clock

### **FINISHES NOTES**

**FLOORS:** Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, one wall accent painted or wallpaper finish. Sound absorptive wall panels, one short wall.

Glazed wall with applied film distraction banding for privacy (typical application, film from 18" AFF to 78" AFF).

**CEILING:** ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame.

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per table
- 1 Quad power outlet per table
- 2 Housekeeping outlets

### **SECURITY REQUIREMENTS: N/A**

#### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)

#### **SPECIAL REQUIREMENTS:**

Room type to be distributed throughout office spaces to allow staff to utilize on an as-needs basis for focus work.

### **INTERVIEW ROOM**

### **DESCRIPTION:**

Enclosed room with glazed corridor wall. See program for sizes.

### **# OCCUPANTS:** 1-3

### **FURNITURE REQUIREMENTS:**

- 1 Table with integrated power / IT
- 4 Movable Conference Chairs

### **EQUIPMENT:**

- Phone
- Clock

### **FINISHES NOTES**

**FLOORS:** Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, one wall accent painted or wallpaper finish. Sound absorptive wall panels, one short wall.

Glazed wall with applied film distraction banding for privacy (typical application, film from 18" AFF to 78" AFF).

**CEILING:** ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame.

LIGHTING: See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per table
- 1 Quad power outlet per table

### **SECURITY REQUIREMENTS: N/A**

### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)
- STC 45 glazed corridor wall (including door) when adjacent to public areas or gathering zones

### **SPECIAL REQUIREMENTS: N/A**

### CASHIER'S OFFICE WITH SAFE

### **DESCRIPTION:**

Cashiers office to include secure counter with safe, located adjacent to lobby for receiving and processing payments.

### #OCCUPANTS: 1

### **FURNITURE REQUIREMENTS:**

- 1 Reception pass through counter with roll down security shutter
- 1 Built in desk with space for safe
- 1 Movable Conference Chair

### **EQUIPMENT:**

- Phone
- Clock
- Safe

### **FINISHES NOTES**

**FLOORS:** Carpet

WALLS + WALL BASE: Painted G.W.B with 4" base. Sound

absorptive wall panels, one short wall.

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame. Rolling counter window with shutter

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets for workstation
- 1 Quad power outlet for workstation
- 1 Housekeeping Outlet

**SECURITY REQUIREMENTS:** Secured Access to room and counter.

### **ACOUSTICS:**

• STC 45 demising walls

### **SPECIAL REQUIREMENTS:**

Room type to be located adjacent to building lobby. Confirm safe requirements with users.

## 3.2, 3.8, 3.16

# CENTRAL REPROGRAPHICS, PRODUCTION ROOM, CHECK WARRANT ROOM [ 1 of 2 ]

### **DESCRIPTION:**

Centralized large-batch printing and packaging for Los Angeles County, includes machines from ITS and PCS departments (ISD). Associated secure production print room and check warrants storage room included.

# OCCUPANTS: 2-6 staff

### **FURNITURE REQUIREMENTS:**

- PLAM storage, work surfaces, and counters with solid surface top
- 6 Standing work surface height movable workstation chairs

### **EQUIPMENT:**

- Photocopiers and Printers (By Owner)
- Clock
- Phones 1 at counter, 1 on wall
- Tackable wall surface (min 6 linear ft x 4' tall)
- · Anti-fatigue mats in work zones and at machines

### **FINISHES NOTES**

**FLOORS:** 3mm Sports Flooring or Rubber Floor

**WALLS + WALL BASE:** Painted G.W.B with 4" base, Insulated all assembly for sound control.

**CEILING:** ACT

**CEILING HEIGHT:** Min. 10'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

Glazed walls to be with applied film distraction banding for privacy (typical application, film from 18" AFF to 78" AFF).

Rolling Service Window Door, Factory Finished Rolling Delivery Door, Factory Finished

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per work point
- 1 Quad power outlet per work point
- Power and data requirements as needed for owner supplied printers.
- 2 Outlets for wall telephones
- Housekeeping outlets at minimum 6'-0" intervals on room's perimeter.

**SECURITY REQUIREMENTS:** Controlled access required to room, printer area within, production print room, and delivery door.

#### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)

**SPECIAL REQUIREMENTS:** Room to be negatively pressured for exhaust, multiple high-volume printing machines, filters required for return air vents to prevent toner infiltration at ductwork.

Exact owner furnished contractor installed printer / copier machine sizes, power requirements, and clear work area to be confirmed with user groups.

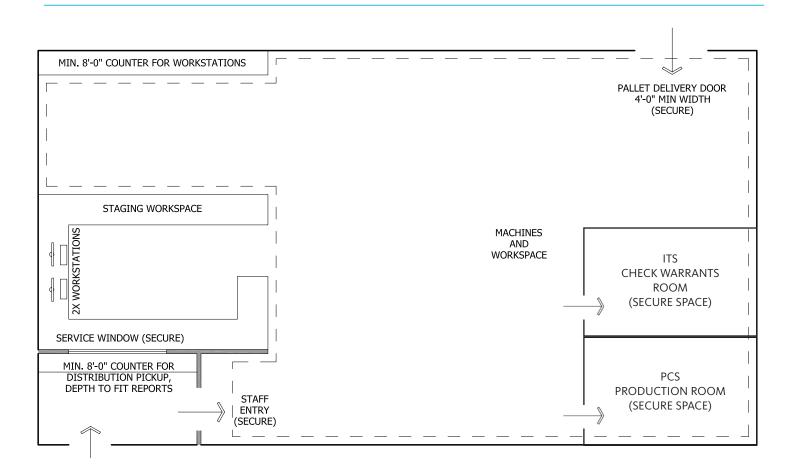
To be located directly adjacent to loading dock paper storage, and auditor controller function, to include secure storage for check warrants.

Layout given is representative of ideal arrangement and not intended to be the exact configuration of the space.

## 3.2, 3.8, 3.16

# CENTRAL REPROGRAPHICS, PRODUCTION ROOM, CHECK WARRANT ROOM [ 2 of 2 ]

Layout diagram coordinated with users.



## 3.3, 3.7

## **RESTROOMS (TYPICAL)**

### **DESCRIPTION:**

Typical requirements for restrooms.

### # OCCUPANTS: Varies

### **FURNITURE REQUIREMENTS:**

· Sink zone with solid-surface Vanity

### **EQUIPMENT:**

- · Mirrors above vanity
- Washroom Partitions, solid surface with integrated dispensers

### **FINISHES NOTES**

FLOORS: Non-slip porcelain tile

**WALLS + WALL BASE:** Painted G.W.B with 5" tile base with metal cap, Insulated wall assembly for sound control. Full height porcelain tile behind fixtures.

**CEILING:** Painted G.W.B, insulated for sound control

**CEILING HEIGHT:** Min. 9'-0"

DOORS / SCREENS: Solid-core factory finished wood veneer

door.

**LIGHTING:** See Lighting Section of Narrative.

### POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND

**CODE GIVEN):** Provide power as required to suit all equipment

and cleaning requirements.

### **SECURITY REQUIREMENTS:** N/A

### **ACOUSTICS:**

• STC - 45 demising and corridor walls

### **SPECIAL REQUIREMENTS:**

Add Alternate:

Gender inclusive single accommodation toilet rooms to be paired with every men's and women's multi-fixture restrooms.

### **ENTRY LOBBY**

#### **DESCRIPTION:**

Building shared reception area with waiting area. This is a feature space to receive upgraded finishes.

### #OCCUPANTS: 1-8

### **FURNITURE REQUIREMENTS:**

- 1 Reception/ Security workstation with integrated power/IT and 1 - Storage Credenza, minimum desk width to be 8-'0"
- 2 Minimum 3'-0" diameter beverage tables with integrated power
- 8 Movable Lounge seats

### **EQUIPMENT:**

- 1 Computer with dual monitors (By Owner)
- Wall Mounted Monitor / TVs. Provide minimum of 6' high and 12' wide, fully recessed, panelized video display wall.
   Display wall to be fully Internet and CATV enabled, provide content for digital signage directory.
- Phone
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS:** Upgraded Floor Finish.

WALLS + WALL BASE: Upgraded Wall Finishes.

**CEILING:** Upgraded Ceiling Finishes. **CEILING HEIGHT:** Varies, Min. 11'-0"

**DOORS / SCREENS:** N/A

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data Outlets per workstation
- 1 Quad power outlet per workstation
- 2 Port for Data and 1 duplex power per TV screen (If applicable)
- Power to Table
- · Housekeeping outlets as needed

**SECURITY REQUIREMENTS:** Desk to function as security Desk with integrated monitoring needs and requirements to be coordinated with user groups. Security turnstiles required and should be designed to match surrounding finishes and traffic patterns. Provided direct IT Security feed to parking booth(s) in parking structure.

**ACOUSTICS:** Sound masking and sound absorptive ceiling elements above this area to limit sound transfer to adjacent zones.

### **SPECIAL REQUIREMENTS:**

Reception to be located at Building Public entry, shared lobby for ISD, and Probation. Programs to be accessible/directly adjacent to the lobby as follows:

- · Interview Rooms
- · PCS and HR Live Scan
- · Cashier Counter
- · Computer Training Rooms
- Pantry
- · Medium Meeting Room
- Parking Structure

Reception desk to have wall behind for signage or wayfinding.

## 3.5, 4.14

### COPY / PRINT STATION, PLANNING / PLOTTERS ROOM

#### **DESCRIPTION:**

Partially enclosed copy area. See program for sizes.

### #OCCUPANTS: 1-3

### **FURNITURE REQUIREMENTS: -**

 Upper / Lower millwork cabinets with adjustable shelving (PLAM) and solid surface top, min 20 linear ft

### **EQUIPMENT:**

- Copier Unit(s) (by Owner) or Plotters (by Owner)
- · Recycling Bins
- Tackable wall surface (min 6 linear ft x 4' tall)
- Phone

### **FINISHES NOTES**

**FLOORS:** Carpet or Resilient Floor

WALLS + WALL BASE: Painted G.W.B with 4" base

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** N/A

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- Provide power and data as required for owner supplied equipment
- Provide 2 power + data duplex outlets above counter in storage/ work zone.

### **SECURITY REQUIREMENTS: N/A**

**ACOUSTICS:** Sound masking and sound absorptive ceiling elements above this area to limit sound transfer to adjacent focus zones.

**SPECIAL REQUIREMENTS:** Exact printer / copier machine sizes, power requirements, paper storage needs and clear work area to be confirmed with user groups.

For copy areas provide additional exhaust venting for larger machines to prevent printer / toner smells from spreading to adjacent areas.

Group larger copy areas along circulation paths and away from quiet desk zones.

### EMPLOYEE BADGING AREA + LIVE SCAN

### **DESCRIPTION:**

Enclosed HR / Contractor badging zone with photo and badge creation machines and workstation. Desk to be aligned to face entry, badging machines adjacent.

### #OCCUPANTS: 2-3

### **FURNITURE REQUIREMENTS: -**

- 1 8 x8' Sit-Stand Workstation
- 1 Movable workstation chair
- · 2 Movable occasional chairs
- 1 7' high, 24" wide free standing divider panel (ISD HR Room only) to separate machines.

### **EQUIPMENT:**

- 1 Computer per workstation (by Owner)
- Phone
- Livescan Machine (by Owner)
- Badging Machine (by Owner)

### **FINISHES NOTES**

**FLOORS**: Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, one wall accent painted or wallpaper finish.

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets at workstation
- 1 Quad power outlet at workstation
- 1 Outlet for wall telephone
- Power / data connections as required for owner-supplied equipment
- 2 Housekeeping outlets

Coordinate exact connection points with user equipment locations.

### **SECURITY REQUIREMENTS:**

Controlled access required to room.

#### **ACOUSTICS:**

- STC 45 demising wall
- STC 35 glazed corridor wall

#### **SPECIAL REQUIREMENTS:**

Space must be located adjacent to the building lobby (as staff are badging new or prospective employees) and in close proximity to the HR department.

## 3.9, 3.18

### STORAGE ROOMS, FILE ROOMS

### **DESCRIPTION:**

Typical requirements for storage and file rooms.

#OCCUPANTS: 1-2

### **FURNITURE REQUIREMENTS:**

• File Cabinets (if applicable)

• Shelving (if applicable)

**EQUIPMENT:** N/A

**FINISHES NOTES** 

**FLOORS:** Resilient Flooring

WALLS + WALL BASE: Painted G.W.B with 4" base

**CEILING:** ACT

**CEILING HEIGHT:** Min. 9'-0"

DOORS / SCREENS: Solid-core factory finished wood veneer

door, aluminum frame.

**LIGHTING:** See Lighting Section of Narrative

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per wall
- 2 Duplex power outlet per wall
- 1 Outlet for wall telephone
- 2 Housekeeping outlets
- Additional power as needed to suit owner-supplied equipment

**SECURITY REQUIREMENTS:** Controlled access required

**ACOUSTICS: N/A** 

**SPECIAL REQUIREMENTS:** Coordinate locations with user

requirements.

### LOCAL COPY / PRINT AREA

### **DESCRIPTION:**

Local small machine area. See program for sizes.

### **# OCCUPANTS:** 1-3

### **FURNITURE REQUIREMENTS: -**

• Lower millwork cabinet or furniture system credenza, minimum 4 linear ft

### **EQUIPMENT:**

• Printer or Copier Unit(s) (by Owner)

### **FINISHES NOTES**

**FLOORS:** Carpet or Resilient Floor

WALLS + WALL BASE: Painted G.W.B with 4" base

**CEILING:** Varies

**CEILING HEIGHT:** Varies, Min. 9'-0"

**DOORS / SCREENS: N/A** 

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

Power and data as required for owner-supplied equipment

**SECURITY REQUIREMENTS: N/A** 

**ACOUSTICS:** Sound masking and sound absorptive ceiling elements above this area to limit sound transfer to adjacent focus zones.

**SPECIAL REQUIREMENTS:** Exact printer / copier machine sizes, power requirements to be confirmed with user groups.

For copy areas provide additional exhaust venting where possible for larger machines to prevent printer / toner smells from spreading to adjacent areas.

Group copy areas along circulation paths and away from quiet desk zones.

### **FOOD SERVICE PROGRAM**

### **DESCRIPTION:**

Campus-shared Lunch room space with full-service kitchen, includes Dining Room, Servery, and Full-Service Kitchen.

Refer to Food Service Narrative for details and full program.

### MAIL ROOMS

### **DESCRIPTION:**

Mail receiving and sorting room. Separated functions for ISD and Probation.

### #OCCUPANTS: 1-3

### **FURNITURE REQUIREMENTS: -**

- Reception counter (6'-0" linear ft. minimum) with integrated storage and solid surface countertop.
- Sorting worksurface counter sized appropriately for number of mail slots, coordinate with user groups

### **EQUIPMENT:**

- · Mail slots
- Computer Workstation at reception (By Owner)
- Phone
- Clock
- Tackable wall surface (min 6 linear ft x 4' tall)

#### **FINISHES NOTES**

FLOORS: 3mm Sports Flooring or Rubber Floor

**WALLS + WALL BASE:** Painted G.W.B with 4" wall base. Vinyl wall protection to 4'-0" AFF full perimeter.

**CEILING: ACT** 

CEILING HEIGHT: Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets for counter
- 1 Quad power outlet per workstation
- 1- Outlet for wall telephone
- 2 Housekeeping outlets

### **SECURITY REQUIREMENTS:** Controlled access required.

#### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)

### **SPECIAL REQUIREMENTS:**

Separate mail sorting and reception area, mail room staff only access to sorting zone.

### **WELLNESS ROOM**

### **DESCRIPTION:**

Health room for use by staff, with lounge chair. Size per program.

### #OCCUPANTS: 1-2

### **FURNITURE REQUIREMENTS:**

- 1 Lounge chair
- Lower cabinets with adjustable shelving (PLAM) with solid surface top
- 1 Sink

### **EQUIPMENT:**

- 1 Refrigerator, integrated into millwork
- Phone

### **FINISHES NOTES**

**FLOORS**: Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, one wall accent painted or wall paper finish

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame.

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 1 Duplex power outlet per wall, above counter height at millwork
- 1 Outlet for wall telephone
- · Duplex power outlet for fridge
- 2 Housekeeping outlets

**SECURITY REQUIREMENTS:** Controlled access, thumb turn lock from inside to have occupied/vacant indicator to exterior.

#### **ACOUSTICS:**

• STC - 45 Demising walls

**SPECIAL REQUIREMENTS:** Room to be located away from desk areas and active zones for privacy and quiet.

## 3.15, 4.5

### PANTRY, CUSTODIAL ASSEMBLY / LUNCH ROOM

#### **DESCRIPTION:**

Kitchenette area with food reheat and prep area, eating area adjacent, separated from workspaces as partially enclosed space. Sizes per program.

**# OCCUPANTS:** 2-16

### **FURNITURE REQUIREMENTS:**

- Movable Tables for 4 occupants each
- 16 Movable Cafeteria Chairs (4 per table)
- Upper and Lower Millwork: Plastic Laminate with Solid surface countertop.

### **EQUIPMENT:**

- 2 Refrigerators
- 1 Microwave
- · Sink with garbage disposal
- Chilled, Filtered Water Dispenser / Water Bottle Filter (locate filters in easily accessible area for regular maintenance).
- Coffee Maker (by Owner)
- TV/ Monitor(s) refer to AV narrative
- Tackable wall surface (min 4 linear ft x 4' tall)
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

FLOORS: Non-slip resilient floor

#### **WALLS + WALL BASE:**

- Painted G.W.B with 4" base
- Tile above counters and wet areas

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS: N/A** 

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 4 Duplex power outlets at above counter height on pantry counter
- 1 Outlet for Wall Telephone
- 2 Port for Data and 1 Duplex power for TV screen
- Power as required for equipment

### **SECURITY REQUIREMENTS: N/A**

**ACOUSTICS:** Sound masking or acoustic ceiling element to limit sound transfer to adjacent focus zones.

**SPECIAL REQUIREMENTS:** Pantry areas to be grouped toward more active / loud zones to prevent distraction to focus / desk areas. Provide ventilation per Mechanical Narrative.

### **RECEPTION & WAITING AREA**

### **DESCRIPTION:**

Typical reception and waiting area zone within department space. (See 'Entry Lobby' page for building entry information). See program for sizes.

#OCCUPANTS: 1-6

### **FURNITURE REQUIREMENTS:**

- 1 Reception Desk workstation with integrated power/IT and 1 Storage/Credenza, minimum desk width to be 8'-0"
- 1 beverage table with integrated power.
- 4 Movable Lounge seats

### **EQUIPMENT:**

- 1 Computer (by Owner)
- 1 Phone

### **FINISHES NOTES**

**FLOORS**: Carpet

WALLS + WALL BASE: Painted G.W.B with 4" base.

**CEILING:** ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS: N/A** 

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation and power to table
- 1 Quad power outlet per workstation
- 2 Port for Data and 1 duplex power per TV screen (IF APPLICABLE)
- 2 Housekeeping Outlets

**SECURITY REQUIREMENTS:** N/A

**ACOUSTICS:** Sound masking and sound absorptive ceiling elements above this area to limit sound transfer to adjacent focus zones.

### BEAS + EEMIS NETWORK OPERATIONS

### **DESCRIPTION:**

Call center and monitoring room for BEAS + EEMIS networks for the Energy and Environmental Service (EES). Size as noted in the program. Room includes 8 full time staff desks, and is to be located with proximity to EES.

### **# OCCUPANTS:** 8-10

### **FURNITURE REQUIREMENTS:**

- 8 8'x8' Sit-Stand Workstations with integrated power
- 8 Movable desk chairs

### **EQUIPMENT:**

- 1 Computer per workstation (By Owner)
- 1 4'-0" AFF, 1 wall full width whiteboard with marker tray
- Phones
- Clock
- Multiple Monitor Displays, refer to AV Narrative
- Tackable wall surface (min 6 linear ft x 4' tall)
- Refer to AV Narrative for additional information

#### **FINISHES NOTES**

**FLOORS:** Carpet or Resilient Floor

**WALLS + WALL BASE:** Painted G.W.B with 4" base, one wall accent painted or wallpaper finish

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF)

**LIGHTING:** See Lighting Section of Narrative

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation
- 2 Port for Data and 1 duplex power per TV screen
- 1 Outlet for wall telephone
- Housekeeping outlets at min. 6'-0" intervals on room's perimeter

### **SECURITY REQUIREMENTS:** Controlled access required

#### **ACOUSTICS:**

- STC 50 Demising walls
- STC 45 Corridor wall
- STC 35 Glazed corridor wall

**SPECIAL REQUIREMENTS:** Room may be staffed 24/7.

### CLEANING SUPPLY STORAGE ROOM

### **DESCRIPTION:**

Storage Room for cleaning supplies.

# OCCUPANTS: 1

**FURNITURE REQUIREMENTS:** N/A

**EQUIPMENT:** 90 linear feet of 6' tall, 18" adjustable metal shelving, secure seismically.

**FINISHES NOTES** 

**FLOORS**: Resilient flooring with integrated cove base to 5" AFF.

**WALLS + WALL BASE:** Painted G.W.B with wall protection to 5'-0" AFF, Insulated wall assembly for sound control.

**CEILING:** Painted G.W.B

**CEILING HEIGHT:** Min. 9'-0"

DOORS / SCREENS: Solid-core factory finished wood veneer

door.

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

Provide Power as required to suit all equipment and cleaning requirements.

**SECURITY REQUIREMENTS:** Controlled access

#### **ACOUSTICS:**

• STC - 45 demising and corridor walls (excluding door)

**SPECIAL REQUIREMENTS:** N/A

### COMPUTER REPAIR ROOM

### **DESCRIPTION:**

Software deployment and roll-out testing room, computer build area. Sizes as noted in program. Desks and work areas along perimeter with movable table work zone in center.

#OCCUPANTS: 2-8

### **FURNITURE REQUIREMENTS:**

- 8 workstation tables with integrated power/IT
- 12 Movable desk chairs
- Min 8 linear ft 6 shelf Tall adjustable metal shelves

#### **EQUIPMENT:**

- 2 Computer monitors per workstation (By Owner)
- 1 4'-0" AFF, 1 wall full width whiteboard with marker tray
- Wall Monitor / TV refer to AV narrative
- Phone
- Tackable wall surface (min 6 linear ft x 4' tall)
- Refer to AV Narrative for additional information

#### **FINISHES NOTES**

**FLOORS:** Carpet or Resilient Floor

WALLS + WALL BASE: Painted G.W.B with 4" base

**CEILING:** ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF)

**LIGHTING:** See Lighting Section of Narrative

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 4 Data outlets per workstation
- 1 Quad power outlet per workstation
- 2 Port for Data and 1 Duplex power per TV screen
- 1 outlet for wall telephone
- Housekeeping outlets at min 6'-0" intervals on room's perimeter

**SECURITY REQUIREMENTS:** Controlled access required to room.

### **ACOUSTICS:**

- STC 45 Demising walls
- STC 35 Glazed corridor wall

**SPECIAL REQUIREMENTS: N/A** 

### COMPUTER TRAINING ROOM

#### **DESCRIPTION:**

Classroom style computer training room.

# OCCUPANTS: 15-24

### **FURNITURE REQUIREMENTS:**

- 12 2 person workstation tables with integrated power/IT (11 student tables, 1 teacher position)
- 24 Movable desk chairs

#### **EOUIPMENT:**

- 2 Computers per workstation (By Owner)
- 1 1 wall full width whiteboard with marker tray
- Wall Monitor(s) / TV(s) refer to AV narrative
- · Video conferencing system
- Phone
- Clock
- Tackable wall surface (min 6 linear ft x 4' tall)
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS**: Carpet or Resilient Floor

**WALLS + WALL BASE:** Painted G.W.B with 4" base, one wall accent painted or wallpaper finish

**CEILING:** ACT

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF)

**LIGHTING:** See Lighting Section of Narrative

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 4 Data outlets per table
- 2 Quad power outlet per table
- 2 Port for Data and 1 Duplex power per TV screen
- 1 outlet for wall telephone
- Housekeeping outlets at minimum 6'-0" intervals on room's perimeter.

**SECURITY REQUIREMENTS:** Controlled access required to room.

#### **ACOUSTICS:**

- STC 45 Demising walls
- STC 35 Glazed corridor wall
- STC 45 glazed corridor wall (including door) when adjacent to public areas or gathering zones

**SPECIAL REQUIREMENTS:** Furniture and configuration to be coordinated with user groups.

### **CUSTODIAN LOCKER ROOM**

### **DESCRIPTION:**

Locker Room for custodial staff within Management Services (Probation).

### **# OCCUPANTS:** 1-18

### **FURNITURE REQUIREMENTS:**

- · Solid-surface vanity
- · Wooden benches in locker area

### **EQUIPMENT:**

- Minimum 18 Storage Lockers, vented double tiered 'z-shaped' to hang longer garments.
- Mirrors above vanity
- · Bench in locker zone
- Phone
- Clock

### **FINISHES NOTES**

FLOORS: IIC Controlled non-slip porcelain tile

**WALLS + WALL BASE:** Painted G.W.B with 4" base (5" tile base with metal cap for locker room), insulated wall assembly for sound control.

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head jamb, and door bottom acoustical gaskets, aluminum frame.

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 1 Outlet for wall telephone
- Housekeeping outlets at 6'-0" intervals along perimeter of room

**SECURITY REQUIREMENTS:** Controlled access required to room.

### **ACOUSTICS:**

• STC - 45 demising and corridor walls (excluding door)

### **SPECIAL REQUIREMENTS: N/A**

### **DEDICATED IT CLOSET**

### **DESCRIPTION:**

Data Center for Probation Information Services Bureau.

#OCCUPANTS: 1

**FURNITURE REQUIREMENTS:** N/A

### **EQUIPMENT:**

- · Servers Racks
- Phone
- Clock

### **FINISHES NOTES**

FLOORS: Anti-static resilient floor

WALLS + WALL BASE: Painted G.W.B with 4" base insulated

wall assembly for sound control.

**CEILING:** None

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head jamb, and door bottom

acoustical gaskets, aluminum frame.

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 1 Outlet for wall telephone
- Coordinate additional requirements with users.

**SECURITY REQUIREMENTS:** Controlled access required to room.

#### **ACOUSTICS:**

• STC - 45 demising and corridor walls (excluding door)

### **SPECIAL REQUIREMENTS:**

Coordinate HVAC requirements with equipment. Refer to Mechanical narrative for critical cooling. Refer to Electrical narrative for emergency and UPS power requirements.

### DEPARTMENT EMERGENCY OPS CENTER (PROBATION)

### **DESCRIPTION:**

Enclosed Meeting Room that will act as Department Emergency Operations Center.

**# OCCUPANTS:** 12-16

### **FURNITURE REQUIREMENTS:**

- Movable Meeting Room Tables with integrated power, data, and AV connection to monitor
- 16 Movable conference chairs
- 1 minimum 8 linear ft Storage Credenza with adjustable shelves

### **EQUIPMENT:**

- Monitor / TV refer to AV narrative
- 1 White-board, 1 wall full width, 4'-0" AFF with Marker Tray
- · Phones for each station at table
- Wall Mounted Video Conference Unit
- · Phone or Polycom equivalent
- · SMART Board
- Tackable wall surface (min 6 linear ft x 4' tall)
- Clock
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS:** Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, One wall accent painted or wallpaper finish, Sound absorptive wall panels on two adjacent walls.

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head jamb, and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per seat
- 1 Quad power outlet per seat
- 2 Port for data and 1 duplex power per TV screen
- 2 Outlets for wall telephone

**SECURITY REQUIREMENTS:** Controlled access required to room.

### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)
- STC 45 glazed corridor wall (including door) when adjacent to public areas or gathering zones

**SPECIAL REQUIREMENTS:** Located near pantry zone for catering purposes.

### DISASTER OPERATIONS CENTER (ISD) [ 1 of 2 ]

#### **DESCRIPTION:**

Emergency operations room, see attached diagram.

**# OCCUPANTS:** 2-20

### **FURNITURE REQUIREMENTS:**

- 2 custom built operations tables with integrated power, data, and AV connection to monitors with storage drawers
- Movable desk and meeting chairs sizes and locations as shown in diagram, 28 desk chairs, 8 conference chairs
- 1 8 person meeting table with integrated power
- 4 sit-stand workstations with integrated power/ IT and storage
- 1 Printer Table
- 1 Storage Credenza with adjustable shelves

### **EQUIPMENT:**

- Multiple monitor displays and whiteboards required. (Refer to AV narrative)
- Phones for each station at work tables and at each workstation
- Wall Mounted Video Conference Unit in both main room and meeting room
- 1 Computer per workstation (By Owner)
- Printer and Fax Machine
- · SMART Board
- Clocks (One in main space, one in associated conference room.)
- Tackable wall surface (min 6 linear ft x 4' tall)
- 1 White-board, 1 wall full width, 4'-0" AFF with Marker Tray
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

**FLOORS:** Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base. Sound absorptive wall panels (NRC 0.80min.) On upper rear and side walls.

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

Room to be fully supported by buse during emergencies.

Layout given is representative of ideal arrangement and has been provided by the user group.

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head jamb, and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation / equipment item
- 1 Quad power outlet per workstation / equipment item
- 2 Port for data and 1 duplex power per TV screen
- Housekeeping outlets at 6'-0" intervals along perimeter of room.

**SECURITY REQUIREMENTS:** Controlled access required to room, and integrated storage function.

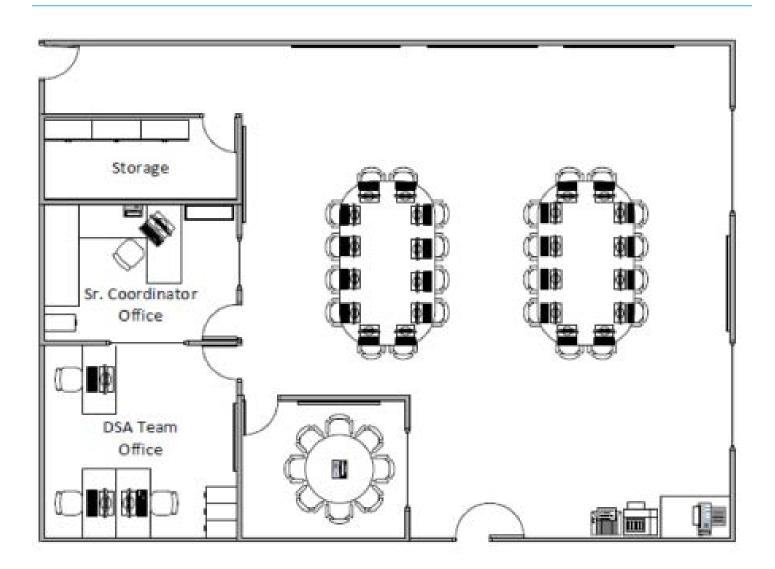
### **ACOUSTICS:**

- STC 45 demising walls
- STC 35 glazed corridor wall (excluding door)
- STC 45 glazed corridor wall (including door) when adjacent to public areas or gathering zones

**SPECIAL REQUIREMENTS:** Room to be located above first floor of building with view to outdoors.

## DISASTER OPERATIONS CENTER (ISD) [ 2 of 2 ]

Layout diagram provided by user group.



### **GYM/ FITNESS CENTER**

### **DESCRIPTION:**

Campus-shared fitness center and associated locker / shower area. Fitness area to be for machine workouts only (no classroom zone, or free-weights). See program for size. This is a feature space to receive upgraded finishes.

**# OCCUPANTS:** 5-35

### **FURNITURE REQUIREMENTS:**

Locker Room:

- Sink zone with solid-surface vanity
- · Wooden benches in locker area

## EQUIPMENT (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- Minimum 40 Storage Lockers in each locker room, vented double tiered 'z-shaped' to hang longer garments.
- Minimum 3 showers in each locker room, provide additional as required to comply with LEED requirements, confirm count with total FTE.
- Mirrors above vanity in locker room, and along one wall of fitness center.
- Washroom Partitions, powder coated steel with integrated dispensers
- Benches within locker space
- Fitness equipment types and final quantity to be confirmed with users in one-on-one meetings prior to award, minimum 20 machines
- Wall Mounted Monitors / TV refer to AV narrative
- Integrated speaker system with audio input in fitness area
- Phone
- Clock
- Tackable wall surface (min 6 linear ft x 4' tall)
- Refer to AV Narrative for additional information

### **FINISHES NOTES**

### **FLOORS:**

- Locker Room: IIC Controlled non-slip porcelain tile
- Fitness Area: 3mm sports flooring or rubber floor

**WALLS + WALL BASE:** Painted G.W.B with 4" base (5" tile base with metal cap for locker room), insulated wall assembly for sound control.

Shower area + Behind vanity: Full height porcelain tile

**CEILING:** ACT, Painted G.W.B in wet zones

CEILING HEIGHT: Min. 11'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head jamb, and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Port for Data and 1 duplex per TV screen
- 1 Outlet for wall telephone
- 1 Power flush floor mounted outlet for electrified fitness equipment, requirements to match equipment
- Housekeeping outlets at 6'-0" intervals along perimeter of room.

**SECURITY REQUIREMENTS:** Controlled access required to room.

### **ACOUSTICS:**

- STC 50 Demising walls
- STC 35 Glazed corridor wall (excluding door)
- Refer to Room Acoustics Narrative for additional requirements.

**SPECIAL REQUIREMENTS:** Where possible locate with views to the outdoors and direct access to grounds.

Minimum of 3 showers per gender or as required for LEED points, provide restrooms within or adjacent to locker area.

### HELP DESK/ENTERPRISE COMMAND CENTER [ 1 of 2 ]

### **DESCRIPTION:**

Call center and monitoring areas, War Room for incident coordination, associated Pantry and Meeting Rooms. See program for size.

# OCCUPANTS: 100-140 total, War Room (20-25)

### **FURNITURE REQUIREMENTS:**

- 8x8 workstations, quantities in diagram next page, back row to be sit-stand capable, desks may be unassigned or shared in some cases
- 8x10 Sit-Stand Workstations, quantities in diagram next page
- 2 Small Meeting Rooms (refer to 2.1 sheet for requirements)
- Designated pantry Area (refer to 3.15 sheet for requirements)
- · War Room:
  - Movable meeting tables with integrated power, data and AV connection to monitors
  - 25 Movable conference chairs
  - 1 8 linear ft minimum storage credenza with adjustable shelves

### **EQUIPMENT:**

Within Call Center:

- White-boards with Marker Tray and Tackable Wall Surfaces throughout space and within War Room, confirm quantity, sizes, and locations.
- Video conference / SPARK board unit for War Room
- 3 printers to be shared within space (By Owner)
- Computers (By Owner)
- Stacked Monitor / TV Monitoring Screens minimum required:
  - EOS 8 75" screens
  - PS 6 75" screens
  - Service Desk and Service Request 5 75" screens
  - Telephone Operations 2 75" screens
  - War Room minimum 3 75" screens, with local news feed linked, and av connections to workpoints in room
  - All screens will need switching capability for different shift needs and the ability to present any workstation feed. All monitor fees should also be accessible to be rerouted into the War Room.
  - All screens should be visible to all staff in sub-group zone.
- Refer to AV Narrative for additional information

**FINISHES NOTES** 

FLOORS: Carpet

**WALLS + WALL BASE:** Painted G.W.B with 4" base, sound absorptive wall panels as needed. Glazed walls to be G.W.B to 4'-0" A.F.F, glass above.

**CEILING:** Mix of ACT and G.W.B **CEILING HEIGHT:** Min. 11'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head jamb, and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF).

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstations/equipment
- 1 Quad power outlet per workstation/equipment
- 2 Port for data and 1 duplex power per TV screen
- Housekeeping duplex power outlets at 6'-0" minimum intervals along perimeter

LAN room directly adjacent to the space to include a switching unit for all displays and access to all connections within space.

## HELP DESK/ENTERPRISE COMMAND CENTER [CONTINUED]

### **DESCRIPTION:**

Call center and monitoring areas, War Room for incident coordination, associated Pantry and Meeting Rooms. See program

### **SECURITY REQUIREMENTS:** Controlled access required.

#### **ACOUSTICS:**

- STC 55 Demising walls
- STC 45 Corridor walls
- STC 35 Glazed corridor and divider walls

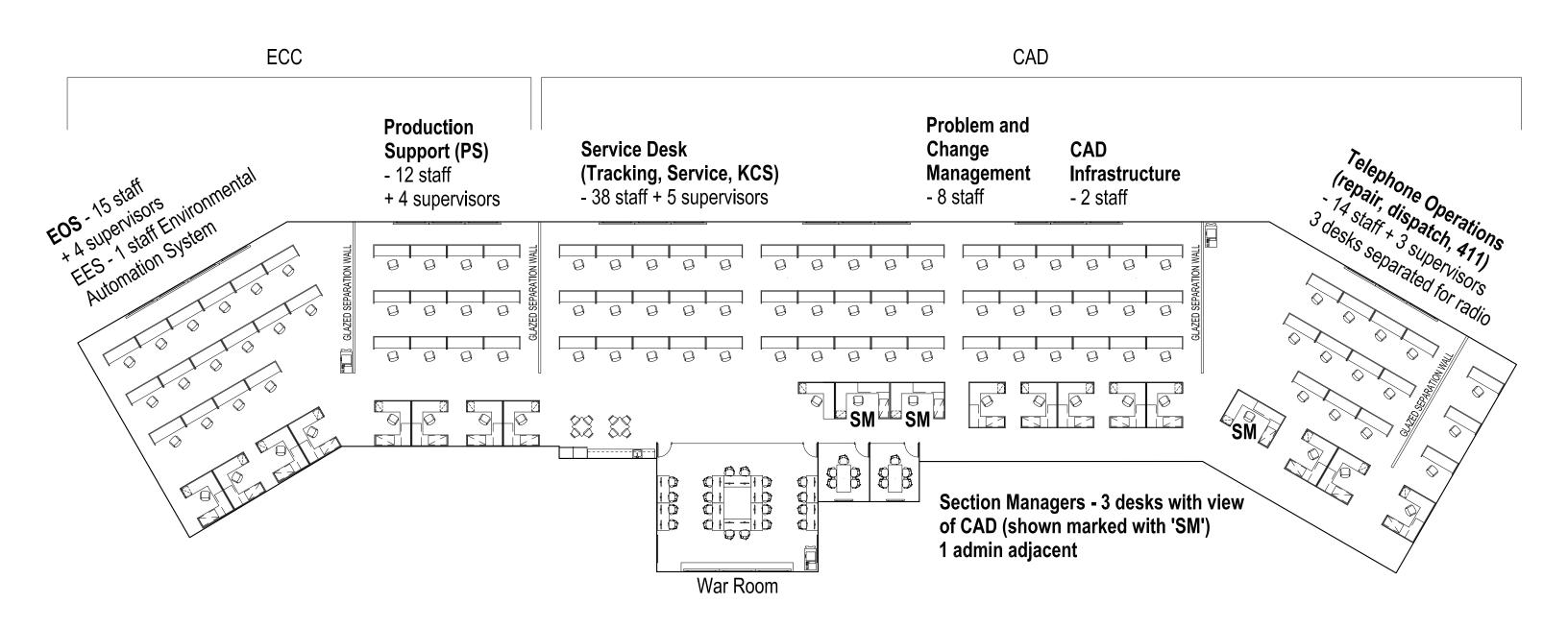
**SPECIAL REQUIREMENTS:** Room may be staffed 24/7. Room to be fully supported by back-up generator and UPS for use during emergencies.

Daylight would be desirable for the space considering the amount of staff in the zone, however, glare on displays or computer monitors must be avoided and diffuse light would be preferable to direct.

Layout given is representative of ideal arrangements of staff and not intended to be the exact configuration of the space. Sub-group adjacencies as shown are to be maintained, and divider walls shown between groups are to be glazed acoustic separations to limit noise between subgroups and are to separate staff desks only with supervisor maps behind as shown. Desks shown in layout are included in ITS headcount.

## HELP DESK/ENTERPRISE COMMAND CENTER [ 2 of 2 ]

Layout diagram coordinated with user groups.



### LAB/TESTING ROOM

### **DESCRIPTION:**

Software deployment and roll-out testing room, computer build area. Sizes as noted in program.

### #OCCUPANTS: 2-8

### **FURNITURE REQUIREMENTS:**

- 8 sit-stand workstation tables with integrated power/IT
- 12 Movable desk chairs
- Min 8 linear ft 6 shelf Tall adjustable metal shelves

#### **EQUIPMENT:**

- 2 Computers per table (By Owner)
- 1 wall full width whiteboard with marker tray
- Wall Monitor / TV refer to AV narrative
- Tackable wall surface (min 6 linear ft x 4' tall)
- Phone
- Clock
- Refer to AV Narrative for additional information

#### **FINISHES NOTES**

FLOORS: Carpet or Resilient Floor

**WALLS + WALL BASE:** Painted G.W.B with 4" base, one wall accent painted or wallpaper finish

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF)

**LIGHTING:** See Lighting Section of Narrative

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 4 Data outlets per work table
- 2 Quad power outlet per work table
- 2 Port for Data and 1 Duplex power per TV screen
- 1 outlet for wall telephone
- Housekeeping outlets at minimum 6'-0" intervals on room's perimeter

**SECURITY REQUIREMENTS:** Controlled access required to room.

#### **ACOUSTICS:**

- STC 45 Demising walls
- STC 35 Glazed corridor wall

**SPECIAL REQUIREMENTS:** Desks and work areas along perimeter with movable table work zone in center.

### ITS INNOVATION / DISPLAY SPACE

### **DESCRIPTION:**

ITS customer visit/trial zone for new computer equipment, tours and technology demonstrations (i.e., Similar in concept to the Apple genius bar). See program for size. To be located near ISD entrance lobby. Upgraded finishes to be used, feature space.

### #OCCUPANTS: 2-8

### **FURNITURE REQUIREMENTS:**

- Movable desks with integrated power and data connections sizes to be matched to size of room and user requirements.
- Millwork Reception desk and testing zone, minimum 8'-0" linear
- 8 Movable chairs
- 2 Standing height chairs for reception

### **EQUIPMENT:**

- Computers and technology (By Owner)
- 1 wall full width whiteboard with marker tray
- Monitor/smart boards, refer to AV narrative
- Phone
- Clock
- Refer to AV Narrative for additional information.
- Additional equipment requirements to be coordinated with users in one-on-one meetings, pre-award.

### **FINISHES NOTES**

FLOORS: Carpet or Resilient Floor

**WALLS + WALL BASE:** Painted G.W.B with 4" base, one wall accent painted or wallpaper finish, entry wall glazed

**CEILING:** Mix of ACT and painted Gyp Board **CEILING HEIGHT:** Varies, Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, integral or field applied head, jamb and door bottom acoustical gaskets, aluminum frame, glazed wall adjacent, with applied film distraction banding (typical application, film from 18" AFF to 78" AFF)

**LIGHTING:** See Lighting Section of Narrative

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 4 Data outlets per work table
- 2 Quad power outlet per work table
- 2 Port for Data and 1 Duplex power per TV screen
- 1 Outlet for wall telephone
- 4 Duplex housekeeping outlets

**SECURITY REQUIREMENTS:** Controlled access required to room. Locked storage required in space.

#### **ACOUSTICS:**

- STC 45 Demising walls
- STC 35 Glazed corridor wall

**SPECIAL REQUIREMENTS:** Furniture and configuration to be coordinated with user groups in one-on-one meetings, preaward.

### PROFESSIONAL STANDARDS VIDEO VIEWING STATION

#### **DESCRIPTION:**

Open office workstations, refer to program for sizes.

#### #OCCUPANTS: 1

#### **FURNITURE REQUIREMENTS:**

- 1- 8'x8' Sit-Stand Workstation with Integrated Power/IT and 'sit-stand' capability
- 1 Movable Workstation Chair
- 1 Movable Storage Pedestal

#### **EQUIPMENT:**

- Computer workstation (By Owner)
- Phone

### **FINISHES NOTES**

**FLOORS:** Varies

WALLS + WALL BASE: N/A

**CEILING:** Varies

**CEILING HEIGHT:** Varies, Min. 9'-0"

**DOORS / SCREENS:** N/A

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation

**SECURITY REQUIREMENTS:** N/A

**ACOUSTICS:** See acoustic narrative for requirements.

#### **SPECIAL REQUIREMENTS:**

N/A

### A&I LIBRARY, PLAN ARCHIVE, LOCAL PLOTTER AREA

#### **DESCRIPTION:**

Total program includes plotter room, library, sample room, archive, space planning library and space planning archive. See Program for sizes.

#### **# OCCUPANTS:** 4-12

#### **FURNITURE REQUIREMENTS:**

- Tables with seating for 4 movable chairs
- 8' tall Library shelving with adjustable shelving confirm depth and quantity with user requirements.
- Minimum of 16, 12-drawer flat drawing storage cabinets for minimum 30x40" drawings, confirm quantity with users in one-on-one meetings prior to award.
- Upper/Lower millwork cabinets with adjustable shelving (PLAM) and solid surface top within plotter area
- Minimum of 16, 12-drawers.

#### **EQUIPMENT:**

- 5 Network plotter/copier unit printers (By Owner)
- Phone
- Clock

#### **FINISHES NOTES**

**FLOORS:** Library: Carpet Plotter Area: Resilient Floor

WALLS + WALL BASE: Painted G.W.B with 4" base

**CEILING:** VARIES

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** N/A

**LIGHTING:** See Lighting Section of Narrative

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 1 Outlet for wall telephone
- Power/Data connections as required for owner supplied equipment
- 3 Duplex Outlets above counter height in print room millwork
- Housekeeping outlets as needed within space.

**SECURITY REQUIREMENTS:** Security to be provided for the following elements: Plotter Room, Library/Sample Room/Archive, Space Planning archive.

**ACOUSTICS:** Sound masking and sound absorptive ceiling elements above this area to limit sound transfer to adjacent focus zones.

#### **SPECIAL REQUIREMENTS:**

Plotter Area: Provide additional exhaust venting for large machines to prevent printer/toner smells from spreading to adjacent areas.

### SURPLUS VAULT ROOM

#### **DESCRIPTION:**

County-wide lost item vault staffed by purchasing and contract services within ISD. Secure vault zone to include space for staff to sort through items. See program for size

#### #OCCUPANTS: 2-4

#### **FURNITURE REQUIREMENTS:**

- 1-8'x6'x2' minimum L-shaped Reception counter
- Adjustable metal shelving within vault, minimum 50'-0" linear length of full height shelves, confirm configuration and depth with user groups.
- 1 Movable Workstation Chair

#### **EQUIPMENT:**

- 2 Computer workstations at desk (By Owner)
- Phones
- Clock

#### **FINISHES NOTES**

FLOORS: 3mm Sports Flooring or Rubber Floor

**WALLS + WALL BASE:** Full-height, fully-grouted, masonry wall with one-layer drywall cladding and 4" wall base. Vinyl wall protection to 4'-0" AFF full perimeter.

**CEILING: ACT** 

**CEILING HEIGHT:** Min. 9'-0"

**DOORS / SCREENS:** Solid-core factory finished wood veneer door, aluminum frame..

Vault Door: GSA Class 5-V or equivalent, single lock, swing door with escape device on interior face, factory finished, 41" wide min.

**LIGHTING:** See Lighting Section of Narrative.

### POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 2 Data outlets per workstation
- 1 Quad power outlet per workstation
- 1 Outlet for wall telephone in vault

#### **SECURITY REQUIREMENTS:**

- Coordinate exact security requirements with user groups in one-on-one award meetings prior to award.
- Vault door controls to be linked to workstation
- Controlled access needed to the room
- · Cameras will be required within vault and vestibule space

**ACOUSTICS:** Sound masking and sound-absorptive ceiling elements above this area to limit sound transfer to adjacent focus zones. See Acoustical Narrative for additional requirements.

#### **SPECIAL REQUIREMENTS:**

Placement of space to be located near loading dock zones for access to deliveries.

# 5.1-5.10, 5.12, 5.13

### LOADING DOCK

#### **DESCRIPTION:**

ISD, Probation, and Auditor Controller, shared loading dock receiving and warehousing/storage functions. Refer also to 5.11 associated program.

#### **# OCCUPANTS:** 2-20

#### **FURNITURE REQUIREMENTS:**

- Storage / File Rooms: shelving (if applicable)
- Cages: Adjustable industrial metal shelving within cages Chain-link storage cage walls with integrated locking and gates.
- Workstations: Typical workstation requirements (see 1.5, 1.6)

#### **EQUIPMENT:**

- Phones (confirm locations)
- Computers (By Owner)
- Other equipment (fork lift, pallet jacks, processing equipment, anti-fatigue mats, etc.) To be confirmed and requirements to be vetted by user groups in one-on-one meetings prior to award.

#### **FINISHES NOTES:**

**FLOORS:** Sealed Concrete with painted markings (if applicable)

**WALLS + WALL BASE:** Painted G.W.B with 4" base. Vinyl wall protection to 4'-0" AFF full perimeter.

**CEILING:** None in cage and warehouse areas, ACT in office zones

**CEILING HEIGHT:** Double height space in cage and warehouse zones, Office areas to have typical office minimum 9'-0"

#### **DOORS / SCREENS:**

- Hollow-metal Door and Frames, painted
- Rolling metal doors, factory finished

**LIGHTING:** See Lighting Section of Narrative.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- 1 Outlet for wall telephone (1 in each space)
- Housekeeping and power outlets as required for equipment and maintenance
- Provide a minimum of 4 additional outlets needed for charging equipment, coordinate with users in one-on-one meetings prior to award.

#### **SECURITY REQUIREMENTS:**

Controlled access required. Locked cages.

Exterior loading area requires secured perimeter with card reader and gate arm at vehicular access point(s).

#### **ACOUSTICS: N/A**

#### **SPECIAL REQUIREMENTS:**

Space is shared between ISD, Probation, and Auditor Controller departments and must be fully accessible to both.

Separate loading entry and public building entry sequence.

Loading dock to be raised dock to support a minimum of one semi trailer, two straight trucks, and one 20 yard dumpster.

Provide minimum of four dock levelers.

Loading dock area to allow for turning maneuvers for 40' trailer.

Loading dock shall also provide a minimum of four (4) additional short term exterior parking spaces for Materials Management(PD.9) and Auditor-Controller.

Lockable propane storage cage to be provided at exterior of loading dock (minimum 33"x50"x78" (DxWxH)) for storage of fork lift propane tanks.

### AUDITOR CONTROLLER MAIL ROOM FUNCTION [ 1 of 3 ]

#### **DESCRIPTION:**

Auditor Controller space including Vault, Mail Room, Staff Area, and Lockbox. Refer to program for additional requirements.

#### #OCCUPANTS: 7-9

#### **FURNITURE REQUIREMENTS: (STAFF AREA)**

- 6x8' Workstations as shown in staff area with Integrated Power/IT and 'sit-stand' capability
- 7 Movable Workstation Chairs
- 3 Movable chairs for work area
- 7 Movable Storage Pedestals
- · File Cabinets as noted
- Small Kitchenette: Upper and Lower Millwork: Plastic Laminate with Solid surface countertop.
- Work Tables (Check-in Table, Work Tables in Mail Room), with integrated storage
- · Meeting Table with 5 chairs

#### **EQUIPMENT:**

- White boards, 4'-0" AFF, max 6'-0" wide with Marker Tray, 1 wall in mail room, 1 wall in staff area. Staff area to have calendar template.
- Phone or Polycom equivalent, one wall phone in each space (Vault, Mail Room, Meeting Room) and mounted outside of staff room in hallway, phones at each workstation in staff area and at the open meeting table.
- Tackable wall surface (min 6 linear ft x 4' tall, 4' AFF), 2 in mail room, 1 in staff area.
- · Clock, 1 in each space
- Computers (by owner)
- Mail sorting equipment, pallet-jacks, printers (by owner)
- Anti-fatigue mats to be provided for each work zone in Mail Room at machines
- · Kitchenette: Sink and Small Refrigerator, and space for a microwave

#### **FINISHES NOTES:**

**FLOORS:** Vault, Mail Room, Lockbox: Sealed Concrete with densifier additive and painted markings, Staff Area: Carpet.

**WALLS + WALL BASE:** Painted G.W.B with 4" base, insulated wall assembly for sound control. Vault, Mail Room and Lockbox: Plywood backed stainless steel wall protection to 48" AFF and corner guards required. Steel to return to wall behind on upper and lower edges. Sound absorptive wall panels.

**CEILING: ACT** 

**CEILING HEIGHT:** Double height space (min 12'-0") in mail room and vault. All other spaces, minimum 9'-0".

#### **DOORS / SCREENS:**

- Hollow-metal Door and Frames, painted, see acoustic requirements.
- · Rolling metal doors, factory finished.
- Glazed Interior windows to be double glazed and acoustically designed to limit sound transfer from Mail Room. Aluminum frame constructed as needed to achieve STC 45 rating for overall assembly.

#### LIGHTING:

#### **ILLUMINANCE CRITERIA:**

Vault: 20-30 fc
Mail Room: 40-50 fc
Staff Area and Meeting Room: 30 fc
Lockbox: 30 fc

**SECURITY REQUIREMENTS:** Controlled access required all doors, with double entry security lock at main entry, see notes on diagram. Alarm system to be equipped on vault, mail room, and lockbox doors.

Security Cameras needed to observe full vault area and mail room, loading dock door and vault door (both sides), lockbox room, and staff entrance (corridor side).

#### **ACOUSTICS:**

- STC 50 Demising walls and separation between staff / mail room
- STC 45 Double-glazed interior windows (1/2" laminated glass, 2" airspace, 1/2" laminated glass or similar to achieve rating)
- STC 30 Doors into mail room to be fully gasketted with adjustable head, jamb, and door bottom acoustical gaskets.
- · Within Mail Room:
- 100% of ceiling to have NRC 0.80 sound absorptive ceiling material (fiberglass ACT or 2" thick K-13 acoustical spray-on insulation).
- 50% of wall area above 8'-0" to have 1-1.5" thick NRC 0.85 or higher sound absorptive wall panels on a minimum of 3 out of 4 walls.
- HVAC Background Noise:
- Mail Room and Vault: NC 40
- Staff Area: NC 35

#### **SPECIAL REQUIREMENTS:**

Room may be staffed 24/7. Room to be fully supported by emergency power for all functions (including machines, cameras, alarms, staff areas, etc.).

Small private meeting room, with whiteboard on one wall, and wall-mounted phone, to be provided nearby to A-C space for meetings with suppliers and county couriers. Any glazed walls to have privacy film installed.

Vault area: Temperature and humidity control required (68°F to 76°F). No plumbing to be installed above this zone to protect paper stock.

Mail room to be negatively pressured for exhaust, filters required for return air vents. Individual HVAC controls needed for mail room and staff area.

### AUDITOR CONTROLLER MAIL ROOM FUNCTION [ 2 of 3 ]

#### **DESCRIPTION:**

Auditor Controller space including Vault, Mail Room, Staff Area, and Lockbox. Refer to program for additional requirements.

## POWER / IT / AV (MINIMUM REQUIREMENTS BEYOND CODE GIVEN):

- Hard-line Phone connection required for mail room, coordinate location with users in one-on-one meetings prior to award.
- 1 Outlet for wall telephone (1 in each space)
- Housekeeping and power outlets as required for equipment and maintenance
- Pallet-jack charging outlets needed in Vault.
- Power and Data outlets for printers in staff area.
- 2 Data outlets per workstation
- 1 Quad power outlet per workstation

Mail room area may require additional power / IT requirements, coordinate with users, refer to diagram for equipment details in one-on-one meetings prior to award.

#### WIRING DEVICES:

- For specialty equipment including but not limited to Auditor Controller Function Room provide special receptacles to match the equipment ratings. Receptacles configurations shall match the actual equipment cord configuration.
- List of equipment in Auditor Controller Function:
- a. Baum Folder Provide 30A, 208V, 3 phase circuit and corresponding specialty receptacle or J-Box per actual equipment requirements.
- b. Heidelberg Provide 40A, 208V, 3 phase circuit and corresponding specialty receptacle or J-Box per actual equipment requirements.
- c. Pinnacle Provide 20A/3p, 208V, 3 phase circuit and corresponding specialty receptacle or J-Box per actual equipment requirements.
- d. Bell & Howell Provide 30A/2P, 208/120V, 1 phase circuit and corresponding specialty receptacle or J-Box per actual equipment requirements.
- e. Pitney Bows Connect Provide 20A/2P, 120/208V, 1
   phase circuit and corresponding specialty receptacle or J-Box
   per actual equipment requirements.

### D5030 GENERAL PURPOSE ELECTRICAL POWER D5030.10 BRANCH WIRING SYSTEM

A. Description:

 For specific purpose equipment such as equipment in the Auditor Controller Print Function provide power per actual equipment ratings and requirements.

#### **D5030.50 WIRING DEVICES**

E. Applicable Components - Receptacles:

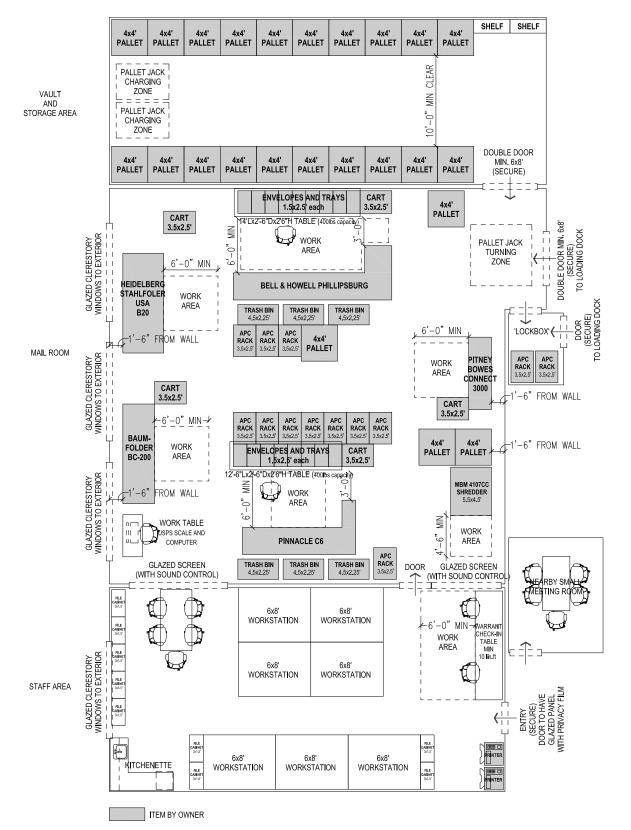
- Provide dedicated circuits for special equipment such as equipment in the Auditor Controller Mail Room and any other equipment requested by end users.
- Tamper-Resistant Convenience Receptacles, 125 V, 20 A: Comply with NEMA WD 1, NEMA WD 6 configuration 5-20R, and LII 498
- Twist-Locking Receptacles: 125 V, 20 A: Comply with NEMA WD 1, NEMA WD 6 configuration L5-20R, and UL 498.
- For specialty equipment including but not limited to equipment in the Auditor Controller Mail Room Function provide special receptacles such as 250V, 30A, 3 phase, to match equipment rating and cord type.

#### **MECHANICAL COMPRESSED AIR:**

• Provide air compressor skid with standby compressor located in mechanical room with distribution piping to auditor controller area. Distribution piping shall be sized to maintain 100 psi at farthest outlet. Terminations to be provided with pressure gage & shutoff valve.

### AUDITOR CONTROLLER MAIL ROOM FUNCTION [ 3 of 3 ]

Layout diagram coordinated with user groups. Machine specifications provided by user groups.





Machine Type:	BAUMFOLDER / BC-200) Legend Pile Feeder (Folding Machine)
WxHxD:	9'-7" x 4'-6" x 3'-5"

Model No	1020 / PILE
Serial No	LEGEND
Volts	208/240
Hz	60/3PH
Amps	23
Min. Supply Conductor AWG	10
Max. Circuit Protection Dual Element Time Delay Fuse	30
Compressed Air and Gauge	N/A
Data Network	N/A



Machine Type:	HEIDELBERG – Stahlfolder USA B20 (Folding Machine)
WxHxD:	9'-1" x 5'-8" x 4'-8"

odel No	H20AUTOA-4-P-3
rial No	120XI0004
olts	208/230
!	60/3
mps	31
in. Supply Conductor AWG	10
ax. Circuit Protection	40
mpressed Air and Gauge	N/A
ata Network	N/A



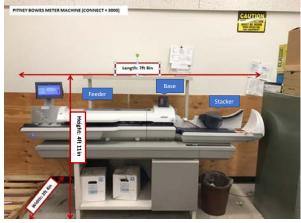
Machine Type:	PINNACLE - C6 / Inserting Machine and Cor
	441 - 11 - 11 - 11 - 11

Model No	Pinnacle – C6
Serial No	952851
Volts	208/2040
Hz	50/60
Amps	15
Compressed Air and Gauge	Required
Data Network	N/A



BELL & HOWELL Phillipsburg Inserting Machine and Conveyor Belt 17'-10" x 5'-1" x 5'-5"

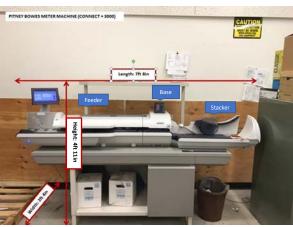
Model No	A340-C6
Serial No	30-8094
Volts	110/208
H.P.	2 1/2
Amps	7.0-19.0
Cycle	60
Compressed Air and Gauge	Required
Data Network	N/A



Model No / PCN No	MSF3
Serial No	8870
Volts	100-240
Hz	50/60
Amps	8.1 - 3.4
Compressed Air and Gauge	N/A

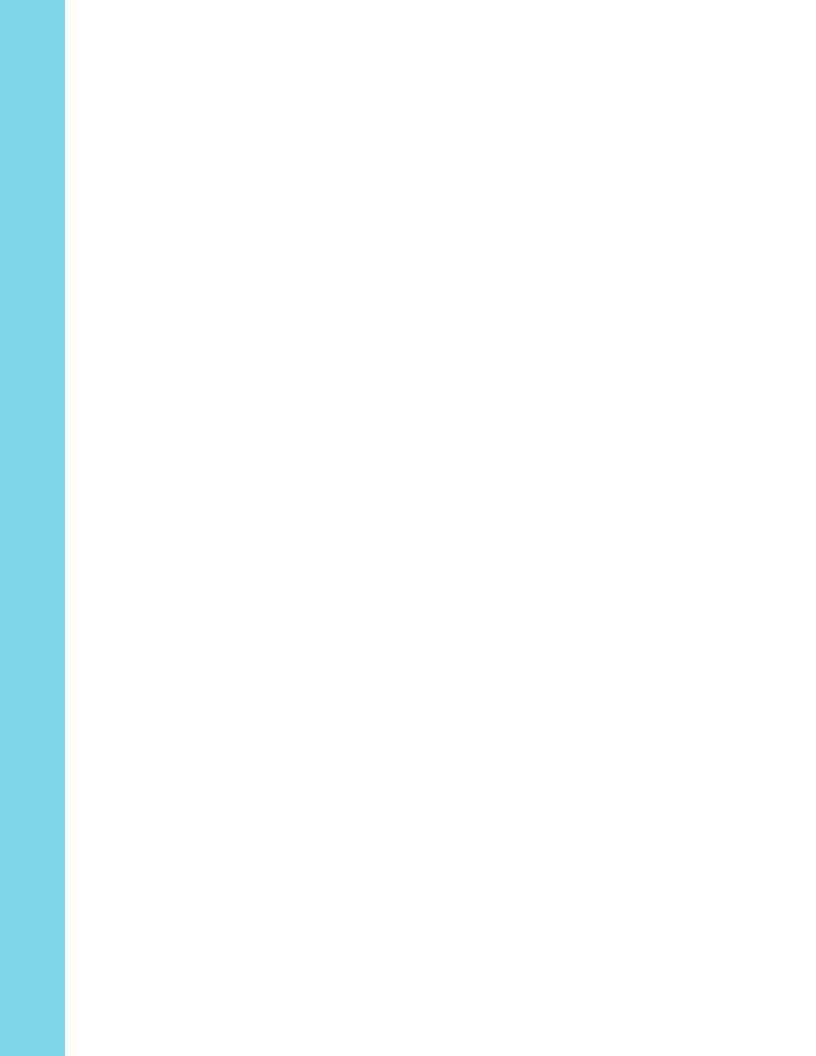
BASE	
Model No / PCN No	MPR1
Serial No	21272
Data Network	Data Cable

STACKER		
Model No / PCN No	MSPS	
Serial No	10592	



APC Rack Item Type: WxHxD: 4'-0" x 5'-10" x 2'-6"

Model No	n/a
Serial No	n/a





**ACRONYM / ABBREVIATION SUMMARY** 

# **Acronym / Abbreviation Summary**

AABC - Associated Air Balance Council

AB109 - Assembly Bill 109 (PD)

A-C – Auditor Controller

AC - Alternating Current

AC - Air Conditioning

ACAM - Access Control and Alarm Monitoring

ACI - American Concrete Institute

ACT – Acoustical Ceiling Tile

AFS – Administration & Finance Services (ISD)

ADA - Americans with Disabilities Act

AHJ – Authority Having Jurisdiction

A&I – Alterations & Improvements (ISD)

AISC - American Institute of Steel Construction

ANSI – American National Standards Institute

APWA - American Public Works Association

AQMD – Air Quality Management District

ASHRAE – American Society of Heating Refrigeration and Air Conditioning Engineers

ASTM - American Society for Testing and Materials

AV - Audio Visual

BACnet – Building Automation Control Network

BAS - Building Automation System

BEAS – Building Environmental Automation System (ISD)

BMS - Building Management System

BTU - British Thermal Unit

BYOD - Bring Your Own Device

CA - California

CA - Compressed Air

CAB – Customer Applications Branch (ISD)

CAD - Computer Aided Drafting

CAD - Customer Assistance Division

CAL OSHA – California Occupational Safety and Health Administration

CBC - California Building Code

CCTP - Camp Community Transition Program (PD)

CCTV - Closed Circuit Television

CEC - California Electrical Code

CEO - Chief Executive Office

CFC - California Fire Code

CFD - Computational Fluid Dynamic(s)

CFM – Cubic Feet per Minute

CIO – Chief Information Officer

CIR - Credit Interpretation Ruling

CMC - California Mechanical Code

CMPT – Centralized Master Training Program (PD)

CMU – Concrete Masonry Unit

COTS - Commercial off-the-shelf

CPC - California Plumbing Code

CPTED – Crime Prevention Through Environmental

Design

CRI – Color Rendering Index

CSB – Computing Services Branch (ISD)

CSD – Custodial Services Division (ISD)

CWIRS – Countywide Integrated Radio System

CWMDM – Countywide Master Data Management (ISD)	FP – Fire Protection
DAS – Distributed Antenna System	FPM – Feet per Minute
DC – Direct Current	FT – Foot, Feet
DCW – Domestic Cold Water	GA – Gauge
DDC – Direct Digital Controls	GC – Gas Chromatography
DHW – Domestic Hot Water	GIS – Geographic Information Systems
DOC – Disaster Operations Center (ISD)	GFI – Ground Fault Interrupt
DOJ – Department of Justice (PD)	GSA – General Services Administration (Federal
DPW – Department of Public Works	Government)
DSB – Detention Services Bureau (PD)	GSF – Gross Square Footage
ECM – Enterprise Content Management (ECM)	H2 – Hydrogen
EEMIS – Enterprise Energy Management Information	He – Helium
System (ISD)I	HR – Human Resources
EEO – Equal Employment Opportunity	HVAC – Heating Ventilation and Air Conditioning
EES – Energy and Environmental Service (ISD)	ICT - Information and Communications Technology
EID – Environmental Initiatives Division (ISD)	ICW – Industrial Cold Water
EIR – Environmental Impact Report	IDC – Intake Detention Control (PD)
EMD – Energy Management Division (ISD)I	IDD – Internet Development Division (ISD)
EMT – Electrical Metallic Tubing	IDF – Intermediate Distribution Frame
EOS – Enterprise Operations Section (ISD)	IEEE – Institute of Electrical and Electronic Engineers
EVCS – Electrical Vehicle Charging Station	IESNA – Illumination Engineering Society of North
FA – Fire Alarm	America
FC – Foot candle(s)	IFC – International Fire Code
FDC – Fire Department Connection	IHW – Industrial Hot Water
FGI – Facility Guidelines Institute	IP – Internet Protocol
FM – Factory Mutual	IPC – International Plumbing Code
FOC F (11) O (1) (C) ((CD)	IPCEA – Insulated Power Cable Engineers Association

FOS – Facilities Operation Service (ISD)

IPTV – Internet Protocol Television	N2 – Nitrogen Gas
ISO – International Organization for Standardization	NC – Noise Criteria
ISD – Internal Services Department	NEC – National Electrical Code
IT – Information Technology	NESC – National Electrical Safety Code
ITSS – Information Technology Shared Services	NEMA – National Electrical Manufacturer's Association
JOC – Job Order Contract	NFPA – National Fire Protection Association
KV - Kilovolt	NRC – Noise Reduction Coefficient
KW - Kilowatt	NSF – Net Square Footage
KWH – Kilowatt Hour(s)	OSHA - Occupational Safety and Health Administration
LABC – Los Angeles County Building Code	PAUR – Prospective Authorization and Utilization (PD)
LACFCD – Los Angeles County Flood Control District	PC – Personal Computer
LACSD – Los Angeles County Sanitation District	PCS – Purchasing & Contract Services (ISD)
LAMC – Los Angeles County Mechanical Code	PD – Probation Department
LAN – Local Area Network	PLAD – Planning and Administration (ISD)
LARICS – Los Angeles Regional Interoperability Radio	PPE – Personal Protective Equipment
System	PSF – Pounds per Square Foot
LASD – Los Angeles County Sheriff's Department	PSI – Pounds Per Square Inch
LC-MS – Liquid Chromatography Mass Spectrometry	PUC - Power Utilities Commission
LED – Light Emitting Diode	PV – Photovoltaic (System)
LEED – Leadership in Energy and Environmental Design	RDS – Room Data Sheets
LV – Laboratory Vacuum	RLASC – Rancho Los Amigos South Campus
M - Medium	RO – Reverse Osmosis
MEP – Mechanical Electrical Plumbing	RTSB – Residential Treatment Services Bureau (PD)
M&O – Maintenance & Operations	S - Small
MPOE – Main Point of Entry	SCAQMD – South Coast Air Quality Management
MTO – Made to order	District
MWD – Metropolitan Water District	SEFA – Scientific Equipment and Furniture Association

SEOR – Structural Engineer of Record

SF – Square Feet

SMACNA – Sheet Metal and Air Conditioning National Association

SSB – Shared Services Branch (ISD)

STC – Sound Transmissions Class

UBC – Uniform Building Code

UHP-A – Ultra High Purity Air

UHP-N2 – Ultra High Purity Nitrogen Gas

UL – Underwriter's Laboratory

UPC – Uniform Plumbing Code

UPS – Uninterruptable Power System

USF – Usable Square Footage

USPS - United States Postal Service

VAV – Variable Air Volume

VoIP - Voice over Internet Protocol

VSD – Variable Speed Drive

VSS – Video Surveillance System

VTC - Video Teleconferencing

WAN – Wide Area Network

XL – Extra Large

XXL – Extra Extra Large