

**AGENDA DESCRIPTION:**

Consideration and possible action to approve the Ladera Linda Park and Community Center Master Plan and to move forward with the project's second phase, the development of detailed construction drawings

**RECOMMENDED COUNCIL ACTION:**

- (1) Consideration and possible action to approve the Ladera Linda Park and Community Center Master Plan
- (2) Direct Staff and Johnson Favaro to proceed with Phase 2 of the project, the development of detailed construction drawings

**FISCAL IMPACT:** Sufficient funds are currently budgeted.

<b>Amount Budgeted:</b>	\$616,509
<b>Additional Appropriation:</b>	\$0
<b>Account Number(s):</b>	334-400-8405-8004: \$300,000 (Quimby – LL Community Cntr/Design Svices)
	334-400-8405-8402: \$316,509 <sup>mn</sup> (Quimby – LL Community Cntr/Building Improvements)

**ORIGINATED BY:** Matt Waters, Senior Administrative Analyst *MP*  
**REVIEWED BY:** Cory Linder, Director of Recreation and Parks *CL*  
**APPROVED BY:** Doug Willmore, City Manager *DW*

**ATTACHED SUPPORTING DOCUMENTS:**

- A. July 10 workshop presentation (page A-1)
- B. Ladera Linda Homeowner Association survey results (page B-1)
- C. Ladera Linda Usage Analysis (page C-1)
- D. July 10, 2019 Workshop Summary (page D-1)
- E. Refined 100% Schematic Design (page E-1)
- F. August 6, 2019 Herb Stark Letter (page F-1)

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**BACKGROUND AND DISCUSSION:**

The 2015 Parks Master Plan Update recommended a separate Master Plan for Ladera Linda Park to include the demolition of existing buildings and the building of a new Community Center. While the park had served the residents of Rancho Palos Verdes since its 1983 opening, the pre-fabricated buildings and infrastructure were in poor condition, as evidenced by a score of "F" in a 2013 citywide infrastructure analysis.

At its March 20, 2018 meeting, the City Council reviewed and approved a conceptual Master Plan design for Ladera Linda Park prepared by Richard Fisher Associates after almost two years of extensive community outreach and design work. The City Council directed Staff to “proceed with developing one Request for Proposal (RFP) with two phases: Phase 1-Final Concepts Drawings and Phase 2-Detailed Construction Drawings, if the City chooses to move forward with the concept that the City has approved.” The council also gave Staff specific direction to eliminate a dry stream bed, consider reducing the size of the Discovery Room, and examine expanding the multi-purpose room. Council directed Staff to take pay particular attention to the concerns and issues affecting residents living near the park.

At Council’s direction, representatives from the Seaview, Ladera Linda, Mediterrania, and Seacliff Hills homeowners’ associations (HOAs) were part of the selection process due to their proximity to the Ladera Linda site. Staff prepared a draft RFP which was reviewed and approved by the City Attorney and the City Council RFP ad hoc subcommittee, which consisted of Councilmember Ken Dyda and current Mayor Pro Tem John Cruikshank.

The interview panel of City Staff and HOA representatives ranked the architecture/design firm of Johnson Favaro the highest of the five companies that advanced to the interview stage. Johnson Favaro was awarded a contract in the amount of \$528,460 on December 18, 2018.

Johnson Favaro has completed Phase 1 of its contract, the creation of a refined schematic design for the park and building. This phase involved extensive public outreach, including multiple meetings with representatives from four HOAs (Seaview, Ladera Linda, Mediterrania and Seacliff Hills) located near to the park, individual councilmembers, Los Serenos de Point Vicente docents, Staff, individual residents and small groups, in addition to a public workshop on July 10, 2019. While the Richard Fisher plan provided guidance, Johnson Favaro was given the freedom to modify the Fisher design based on its expertise, research and public outreach. If approved, the second phase would consist of the development of construction-ready documents that incorporate City Council revisions and directions.

Johnson Favaro began its work with numerous small exploratory meetings in February 2019, with a wide range of interested parties in order to gain a better sense of the project’s nuances and community concerns and desires. This fact-finding approach was undertaken before Johnson Favaro put pen to paper.

#### Feb. 2019 Exploratory Meetings

- All five councilmembers either individually or in groups of two
- City Manager Doug Willmore
- City Staff
- Representatives from four HOAs (Seaview, Ladera Linda, Mediterrania and Seacliff Hills)
- Ladera Linda HOA Representatives

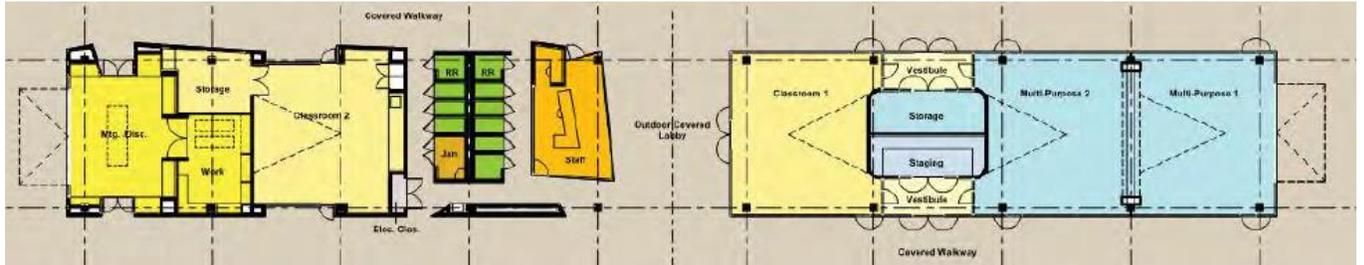
- Mediterranean Representatives
- Los Serenos De Point Vicente docents/Jay Fodor (Member of Discovery Room Sub-Committee)
- Ladera Linda residents Jessica Vlaco, Mickey Rodich and Gary Randall

Johnson Favaro then developed a refined conceptual design, which was informed by the following factors:

- Concerns and issues raised at the exploratory meetings, including right-sizing the parking, reducing hardscape, reducing the square footage and landscape concerns
- Johnson Favaro's professional expertise and its extensive studies of the site's possibilities and challenges
- General agreement on the basic components that were the core of the Fisher design: new community center (although there continues to be disagreement on the number of rooms, primarily from members of the Ladera Linda HOA), passive lawn area, basketball courts, paddle tennis courts and low-key landscaping
- No added active components such as a gym, pool or skate park
- Elimination of any single-use public rooms, e.g. the Discovery Room, in favor of rooms that could serve multiple functions
- A survey conducted and distributed by the Ladera Linda HOA in February 2019, designed to determine local resident interest in park activities and potential uses of the community center. Based on these meetings, which were highly productive, Staff developed a projected park usage chart, a survey created and distributed by the K (Attachment C).
- A Staff-developed projected schedule for future building use based on previous classes, events and programs at Ladera Linda, activities at other locations such as Hesse Park, public outreach efforts, the exploratory meetings in February, and the 2019 Ladera Linda HOA survey (Attachment B)

The conceptual design was presented in a number of meetings in June and July 2019 to essentially the same groups, individuals and council members that Johnson Favaro met with in February. There was general support for the approach taken by Johnson Favaro, particularly the reduction in building size, the realignment of active features away from the Ladera Linda (LL) HOA neighborhood, the positioning of the building away from the western bluff edge overlooking the Seaview area, and the incorporation of discovery display elements into a small meeting room that could serve additional functionality. Concerns were expressed about the usage, rental restrictions, number of rooms (some LL HOA representatives advocated for the removal of 1-2 classrooms/meeting rooms while some residents advocated for more facilities), how to manage the attractive views, and how best to secure the building and park grounds. Other meeting attendees said they had been in favor of more active recreation components that had been discussed early in the Master Plan process, but were willing to accept the current proposed plan that emphasizes current components and passive use.

Below is the building diagram presented to the community at the July 10 workshop:



The building contains the following components:

- A dividable multi-purpose room
- Two classrooms
- A meeting room, with Discovery Room displays built into the walls
- A docent work room
- Storage and staging areas
- Public restrooms
- Staff office
- An outdoor breezeway covered lobby
- Small kitchen and staging area
- Covered walkways
- Janitorial and electrical rooms
- Vestibules
- Parking

The table below shows the square footage for the current layout, Richard Fisher Associates' design and Johnson Favaro's proposed design. Hesse Park is added for comparison.

<b>Building Square Footage Comparison</b>				
	<b>Current Buildings</b>	<b>Hesse Park</b>	<b>Fisher 2018 Design</b>	<b>Johnson Favaro 2019</b>
<b>Assignable Square Footage</b>	13,500	9,880	8,900	6,175*
<b>Gross Square Footage</b>	19,000	15,000	11,700	7,037*

\*Total at Workshop was 5,980asf. 195asf Increase due to MEP requirements, wall thickness adjustments, and refinements to room spacing

The reduction in square footage in the 2019 design in comparison with the 2018 design was achieved by reducing or eliminating the following components:

- Eliminate second set of restrooms
- Eliminate lobby/gallery area

- Replace Discovery Room with smaller multi-function meeting room per Council direction
- Reduction in size of multi-purpose room

Below is the proposed Johnson Favaro park design (within the red outline) that was presented at the July 10 workshop at Ladera Linda:



The design includes the following components/features:

- 6,000-square-foot building
- Adjacent covered patio areas
- Outdoor tiered seating area for nature talks, summer camps, etc.
- 58 parking spaces in courtyard located adjacent to building and playground
- Naturalistic children's playground area
- One full basketball court and a 1/2 basketball court
- Two paddle tennis courts
- Small storage facility for public works and emergency supplies
- Walking paths
- Upper and lower lawn areas
- Utilization of existing Forrestal Drive entrance

- Low-impact, native, drought-tolerant landscaping
- 25 Preserve parking spaces located on Forrestal Drive with secure gates at start and entrance to be locked at night
- Hillside below park
- Green roof

Below, for comparison's sake, are the existing park conditions and the 2018 Richard Fisher Associates design:

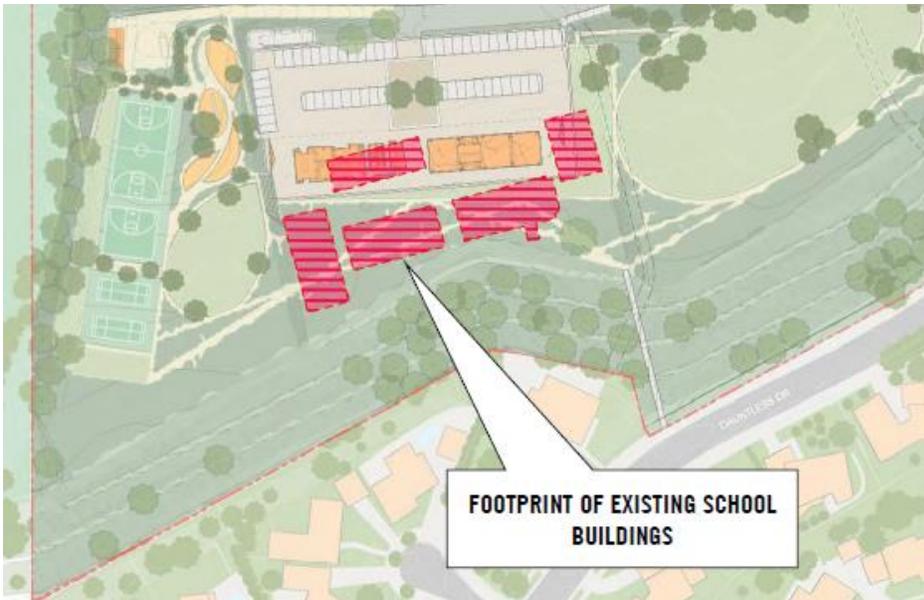


Existing Conditions



2018 Richard Fisher Associates Design

The following image shows the existing school buildings (red-striped) overlaying the proposed Johnson Favaro design:



The Johnson Favaro design has a reduced hardscape and vehicular circulation/parking footprint as demonstrated in the tables below:

<b>Hardscape Comparison (courts, driveway, parking)</b>			
	<b>Current Buildings</b>	<b>Fisher 2018</b>	<b>Johnson Favaro 2019</b>
<b>Acreage</b>	2.68 acres	3.38 acres	1.59 acres
<b>Square Footage</b>	116,900 sf	147,400 sf	69,075 sf

<b>Vehicular Circulation &amp; Parking Comparison</b>			
	<b>Current Buildings</b>	<b>Fisher 2018</b>	<b>Johnson Favaro 2019</b>
<b>Acreage</b>	1.5 acres	1.2 acres	.88 acres
<b>Square Footage</b>	65,500 sf	51,500 sf	38,374 sf

### July 10, 2019 Workshop

84 people attended a Master Plan workshop at Ladera Linda on July 10, 2019. Based on the sign-in attendance sheets, 38% of attendees were from the Ladera Linda HOA, 14% from Seaview HOA, 2% from Mediterrania, and 46% were from other parts of the City. Johnson Favaro presented its outreach efforts and proposed concept (Attachment A) which included the following:

- Site and building analysis diagrams comparing the proposed concept to the existing park and the Richard Fisher design
- Different site and building configurations
- Summary of community outreach effort
- Methodology for “right-sizing” the facility, a mock schedule prepared by Staff, and building reductions
- Review of proposed building and park plans, including configuration, placement and orientation with comparisons to both existing and Richard Fisher design
- Review of site sections and sight lines
- Review of Preserve parking options
- Concept views of the building and park
- Site model of building and park in neighborhood context to scale
- Model of proposed building to scale

Following the presentation, attendees divided into small groups to discuss the following questions among themselves before reporting back to the entire group. The questions were:

- What do you like most?
- What needs improvement?
- What would you add or subtract?

After the group presentations, individuals asked questions and made comments about the project.

Johnson Favaro prepared a summary of the workshop results (Attachment D). Below are the summary's takeaways:

1. A plurality of attendees approved the following:
  - The compact arrangement of the community center building and its low profile
  - The clean, contemporary lines of the architectural design
  - The setback of the building from the top of the slope overlooking the Seaview neighborhood, which protects the privacy of downslope neighbors
  - Location of parking between the proposed building and the hillside of the middle park tier
  - Location of park activities, such as the children's playground and sports court on the upper park tier, further away from the Ladera Linda neighborhood and set back from Seaview
  
2. A plurality of attendees were concerned about how building and park security would be addressed in the subsequent design phase.
  
3. No clear consensus and a wide range of viewpoints were expressed on a number of key questions:
  - Are the number of rooms too many, too few, or just right?
  - What is the correct amount of parking that is sufficient for the community center and park?
  - Should Preserve parking be located in the park or on Forrestal Drive?

Workshop Comment Cards

24 individuals submitted comment cards after the workshop. Many respondents wrote multiple comments on their cards, with responses ranging from the number of rooms, parking, and security, to pro/con on a dog park, overall impressions of the plan, and green roof. Below is a list of responses that received at least two comments.

<b>Workshop Comment Card Results</b>	
Liked Design/# of Rooms	8
Security Concerns	4
Too Many Rooms/Smaller in Size	11
Opposed to Forrestal Parking	4
Pro-Dog Park	2
Anti-Dog Park	3
Great Meeting and Discussion	4
Should be Neighborhood Park	4
Pro-Green Roof	2
Anti-Green Roof/Pro-Solar	2
Park Should Not Be a For-Profit Venture	2

Traffic Concerns	2
Concern About Noise/Serenity	2

### Forrestal Preserve Parking

While the Forrestal Reserve is not within the park boundaries, and is therefore not part of the Master Plan scope, the issues of providing or not providing parking, and if provided, identifying where would be the best location, has been a much-debated topic throughout the entire multi-year process. Due to its importance to the local community, Johnson Favaro included this topic in all of its meetings, including the public workshop.

#### Recommended Option: Forrestal Drive

This option involves the creation of 25 parking spaces beyond Forrestal Drive gate. An additional gate would be added at eastern end of parking spaces so cars would not be able to drive past the assigned area. This would de-couple park parking from Preserve parking which was a common concern expressed by meeting attendees. It would also direct Preserve parking away from Ladera Linda neighborhoods and establish spaces nearer to the trailhead. Expense would be minimal since the area is already paved. Concerns were expressed by some LL HOA residents that the existence of dedicated Preserve spaces would lead to increased social media awareness and a higher number of visitors. Concerns were also expressed about the possibility of vandalism and unwanted after-hour activities. Staff would recommend fencing and secure gates (blocking vehicular, pedestrian and equestrian access when closed) to address those community concerns.



*Recommended Location on Forrestal Drive*

Alternative Location: Preserve/overflow lot within park on paddle tennis level

25 spaces proposed. Temporary placement of Preserve parking was approved by City Council in 2018 as part of a comprehensive Preserve Parking and access plan. This approach would likely require the installation of switchback paths to allow for ADA access from the parking lot to the Forrestal Reserve trailheads. This approach would also decrease the amount of usable park ground in favor of paved parking.

Given the popularity of the Nature Preserve, there remains a pressing need to limit the impact on residences by identifying a front door to the Preserve located away from the Ladera Linda and Del Cerro neighborhoods.

#### August 6, 2019 Letter from LL HOA resident Herb Stark

Mr. Stark, writing on behalf of the LL HOA Board and Ladera Linda Park Committee, wrote to the City Council about the proposed Johnson Favaro design (Attachment F). His letter urged to City Council to accept the Johnson Favaro design as presented at the July 10 workshop with the following modifications and stated reasons:

- Eliminate one classroom. It is not needed for neighborhood programming and would increase construction and maintenance costs. (Eliminating this classroom would reduce the square footage by 900 sf)
- Eliminate meeting room. It is not needed for programming and would be locked most of the time, so displays would not be accessible. (Eliminating this meeting room would reduce the square footage by 625 sf)
- Enclose the lobby and restrooms to allow for complete enclosure of building perimeter
- Incorporate display cases in the lobby and docents could utilize display carts. The lobby is more accessible for artifact displays.
- Consider security shutters for all windows and doors
- No amphitheater-style steps. This discourages large groups and there would be less noise. Amphitheater-style steps would duplicate the Point Vicente Interpretive Center (PVIC).
- Limit views to the south to a maximum of 50%. This will limit the number of people in the park and prevent a Marilyn Ryan Park situation. Views will increase number of visitors along with increased traffic, noise and trash.
- 25 Preserve parking spaces should be located on the upper park terrace, not on Forrestal Drive. No parking is needed beyond the current lot in the park. It could become a Del Cerro Park or Marilyn Ryan Park type of issue. There could be problems keeping gate locked.
- No components shall be moved closer to the southern bluffs.

While all of these suggestions are available for City Council consideration, Staff and Johnson Favaro believe that their recommendations better represent the input from all the community:

- The building and number of rooms are appropriate and merited, allowing for a greater range of potential uses. Eliminating a classroom would result in modest project cost savings.
- Having display cases in the meeting room is functional and allows the docents to conduct nature tours as they have done for many years.
- The amphitheater steps are a small, functional and aesthetically-pleasing component. They are not equivalent in size or purpose to the PVIC amphitheater.
- Limiting views during open park hours is not a design best practice or in keeping with the City's celebration and embrace of its majestic views. The park would be fenced and locked at night so usage would be limited to daytime hours.
- Locating parking adjacent to trailheads and away from homes is a logical and preferable option to having Preserve parking mingled with park parking. Adding security gates and fencing will make it possible to secure both the park grounds and Preserve access. Staff is not recommending creating permanent preserve parking within a park site.
- Installing security shutters on doors and windows is a common and effective measure that has worked well at Hesse Park for over 30 years and is worth considering.
- No components are being considered for relocation closer to the southern bluffs. The Johnson Favaro design moved the playground further away from the Seaview overlook.

### **Security/Rental Restrictions/Staffing Levels**

Concerns have been raised throughout this process regarding park security, staffing levels and usage restrictions. The analyses below are consistent with ones presented at past workshops, small group meetings and the March 20, 2018 Council meeting.

### **Building and Park Security Analysis**

Neighbor concerns about security have been clearly heard. As has been noted previously, the existing park and community center layout has poor overall security due to its multiple buildings and access points, poor sightlines, numerous blind spots, and overgrown landscaping. The security plan will be more fully detailed during the construction design phase, pursuant to City Council direction.

While the security design will be formalized during the construction design phase, below is a short list of the ways security will be addressed:

- greatly-simplified single building design
- appropriately-placed security cameras
- appropriate low-level landscaping
- control of ingress and egress points
- comprehensive best practices, lighting design throughout park and building
- increased staffing presence

- ability to secure park perimeter at night through fencing and improved entrance gates
- reduction/elimination of blind spots

The refined security provisions are included in the schematic design (Attachment E).

A. Security systems (keypads, glass break sensors, security cameras, etc.) will be developed in conjunction with the City, Community Center Staff and maintenance personnel to provide staff and public access to the building during operating hours and non-operating hours. The following security provisions are recommended for the project:

1. Perimeter fencing and gates at vehicular and pedestrian access points in order to secure park property and buildings
  - Vehicular entry gates at driveways and maintenance/storage building
  - Pedestrian gates from stairs or at entries onto property
  - Pedestrian gates at playground areas
  - Maintain all existing and add new fencing where needed to create continuous park perimeter fencing at or near park property line
  - In order to restrict access from the park to the south slope abutting the Seaview neighborhood, install fencing near top of slope below sight line
2. Site and building security and safety lighting
  - Site lighting at sufficient illumination levels to support camera and security force observation
  - Site lighting at parking lot and driveway to maintain safety
  - Site lighting around play areas to discourage inappropriate users
  - Minimal motion detection site lighting around clearly outlined walkways at head height for user safety
  - Lighting at appropriate areas around the building to discourage inappropriate users
3. Site and interior and exterior building cameras and motion detectors
  - Clear sightlines at entries of buildings allow for maximum security camera coverage around building and parking lot
  - Interior building cameras to be monitored, motion detector coverage used in areas where persons may congregate or approach
  - Fixed cameras (not capable of remote movement) to be installed upon light standards, custom camera poles, building soffits and walls sufficient to view all areas of the park and park perimeter
  - Cameras are connected through security system network to a server location and recording equipment
4. Glass break sensors to provide monitoring of glazed areas where security alarm will be triggered. When glass breaks, a microphone will detect the frequency emitted, distance of frequency to be determined.

5. Door hardware and security: door sensors and security hardware will include alarms, and special door locks (combination, push button, card key access, etc.) where applicable.

**B. Additional security measures:**

1. Integral to the design are improved sight lines throughout the site due to the compact community center housed under one roof. Sightlines running north and south run through the building at large openings (breezeway), specifically sited windows and glazed doors, and floor to ceiling glazing (multipurpose rooms and classroom). Sightlines running east and west are unimpeded with low-lying landscaping and terracing providing full views over the site. From the entrance driveway and a drive aisle location within the parking area, a sheriff’s deputy can view a majority of the park site and building area without leaving vehicle.

2. Clear points of entry to the building spaces are within sightlines and within view of the monitoring staff office. In addition, guests are directed to overhang under building as first point of contact, reducing potential way finding problems.

3. Increased utilization of the park and the building, combined with enhanced staff supervision, will deter undesirable behavior in the park during operating hours.

4. Planting height, placement, density and type must be considered in order to eliminate visual obstructions to all park areas.

**Ladera Linda Proposed Staffing Hours**

Ladera Linda Park staffing hours have traditionally been limited when compared to other park sites, with Staff departing at 5 p.m. regardless of the time of year. This has limited Staff’s ability to effectively and appropriately secure the park grounds. The proposed park hours would extend Ladera Linda hours to increase Staff presence and security.

The following table shows current and proposed Ladera Linda Park hours and current hours at other City park sites.

<u>Park Site</u>	<u>Hours Mon-Fri</u>	<u>Hours Sat-Sun</u>
<u>Hesse Park</u>	<u>9 a.m.-Dusk</u>	<u>10 a.m.-Dusk</u>
<u>PVIC</u>	<u>10 a.m.-5pm</u>	<u>10 a.m.-5 p.m.</u>
<u>Ryan Park</u>	<u>9 a.m.-Dusk</u>	<u>9 a.m.-Dusk</u>
<u>Ladera Linda (current)</u>	<u>12 p.m.-5 p.m.</u>	<u>10 a.m.-5 p.m.</u>
<u>Ladera Linda (proposed)</u>	<u>8 a.m.-dusk</u>	<u>8 a.m.-dusk</u>

Ladera Linda Park is currently staffed by one part-time staff member per shift who is overseen by a full-time recreation supervisor. The new building would likely increase

staffing to two part-time staff members per shift with one full-time supervisor. This is comparable to staffing levels at Hesse Park and PVIC.

### Ladera Linda Proposed Park Usage

Concerns continue to be raised about park hours and park usage. While the park will be used more during the day, we are recommending tight restrictions on park usage and rental hours. The table below shows current Ladera Linda usage policies, proposed changes, and current policies at Hesse Park, Ryan Park and PVIC for comparison.

Rental Polices	LL Current	LL Proposed	Hesse Park Current	Ryan Park Current	PVIC Current
Rental Hours	Not specified	10 a.m.- 9 p.m.	8 a.m. - 11 p.m.	8 a.m. - 10 p.m.	Noon-Midnight (Fr-Sun) Non-profit mtgs 8 a.m. - 10 p.m. (M-Th)
Classes	Not specified	8 a.m.- 9 p.m.	8 a.m. - 11 p.m.	8 a.m. - 10 p.m.	n/a
Private Rentals after 5 p.m.	No current limits	2 x month **	No established limit	No established limit	Fri-Sun One per day max.
Amplified Music (indoor only)	10 a.m. - 10 p.m.	11 a.m.- 8 p.m.	10 a.m.- 10 p.m.	10 a.m. – 10 p.m.	5 p.m. – 10 p.m. (allowed on patio, also)
Special Events	No limit	8/year	No established limit	No established limit	No established limit

\*Restriction does not apply to non-profits, City events, or HOA rentals  
No nighttime special events would be permitted without City Council approval and community notification. Staff would coordinate with AYSO schedule to minimize impact.

### 100% Schematic Design Submittal

Subsequent to the July 10 workshop, Johnson Favaro continued its work on the Ladera Linda Community Center and Park Project 100% Schematic design, following the specifications and guidelines detailed in Phase 1 of its contract (Attachment E). The document was prepared by the following professionals:

- Architect: Johnson Favaro
- Civil Engineer: KPFF
- Structural Engineering: Englekirk
- Landscape Architect: KSA Design Studio
- MEP Engineering: Novus Design Studio

The schematic design is broken down into the following categories:

1. General project requirements
2. Civil sitework
3. Landscape
4. Structural system
5. Building enclosure
6. Interior construction and finishes
7. Mechanical (HVAC) systems
8. Electrical systems
9. Plumbing and fire protection systems
10. Technology and audiovisual systems
11. Security
12. Sustainability
13. Code analysis
14. Design standards
15. Exhibits
16. Outstanding issues

Next Steps/Cost Estimate:

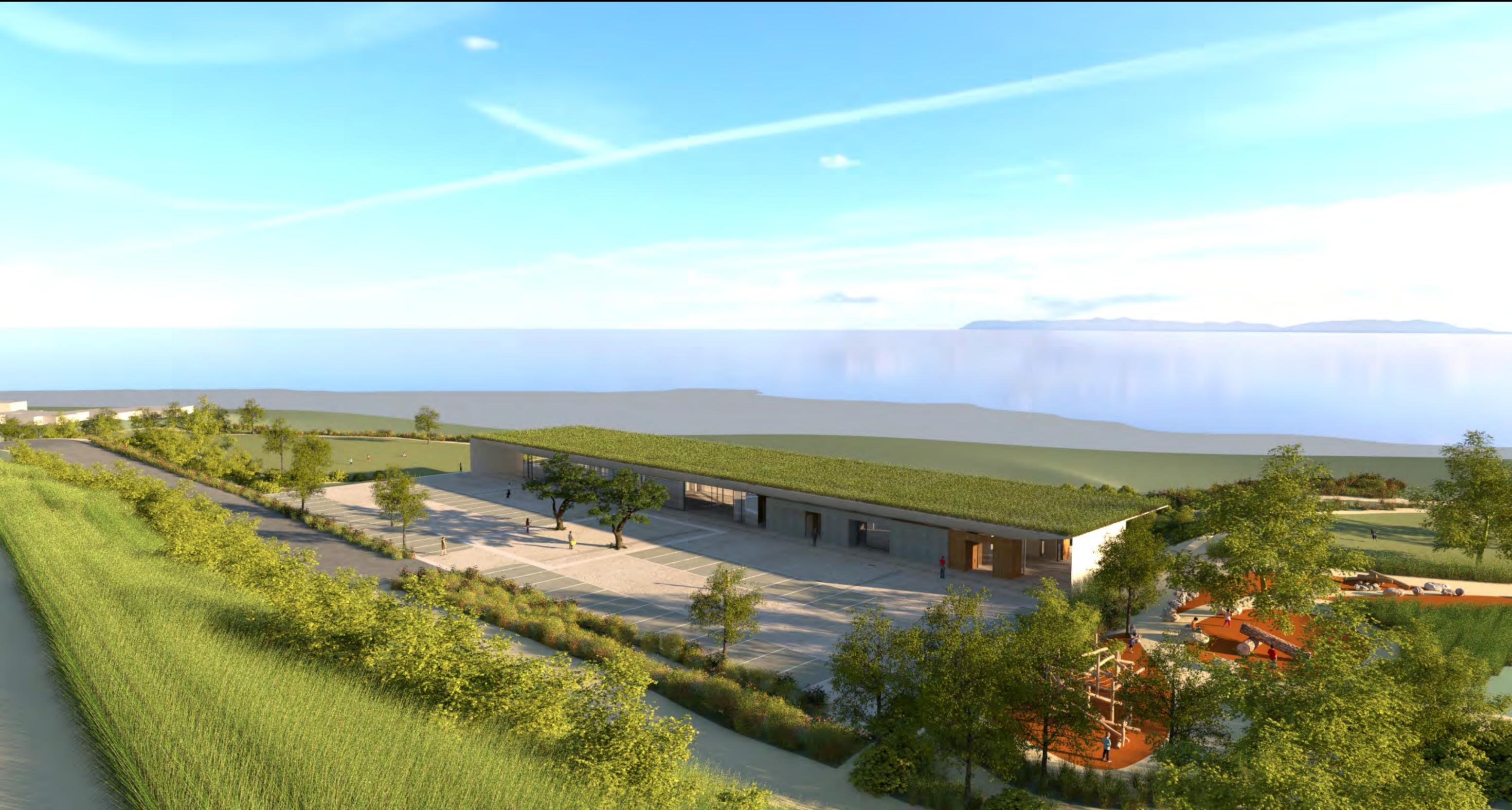
The schematic design, if approved, or approved with modifications, will be used by Staff and Johnson Favaro as the basis to proceed with Phase 2 of the project, the creation of detailed construction drawings. This phase will include the generation of detailed cost estimates and project financing alternatives. Johnson Favaro estimates that, if approved, construction could start by June 2020 with a potential construction completion date of August 2021.

**ALTERNATIVES:**

In addition to the Staff recommendation, the following alternative actions are available for the City Council's consideration:

1. Provide direction to Staff and Johnson Favaro regarding modifications to the proposed plan
2. Reject the proposed plan and provide direction to Staff

# Ladera Linda Community Park





# Ladera Linda Community Park Townhall Meeting

*July 10, 2019*

- Introduction and orientation 5 min
- Presentation 25
- Small group conversations 45
- Large group report back 30
- Final Public Comments 15
- Recapitulation and next steps 5

Total: 125 min

# Ladera Linda Community Park Townhall Meeting

*July 10, 2019*

- What do you like most?
- What needs improvement?
- What would you add or subtract?

# Ladera Linda Community Park Townhall Meeting

*July 10, 2019*

- Speak your mind
- Listen to others
- Be kind

# Site concept



LADERA LINDA COMMUNITY PARK EXISTING CONDITIONS



**UPPER GATED  
FORRESTAL DRIVE EXTENSION**

**PIRATE DRIVE**

**DAUNTLESS DRIVE**

**FORRESTAL DRIVE**

**LADERA LINDA COMMUNITY PARK EXISTING CONDITIONS**

**A-9**

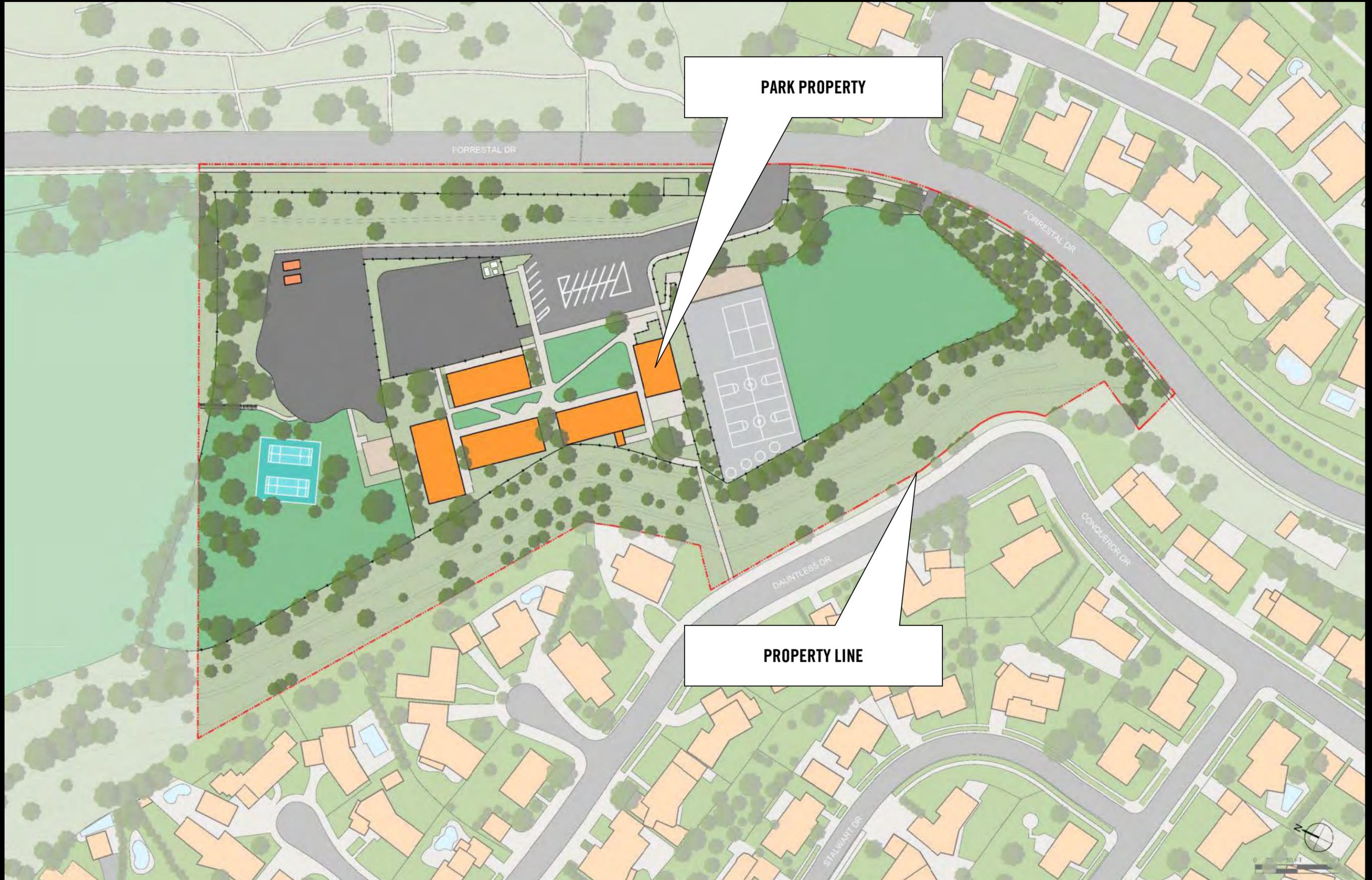


LADERA LINDA PARK EXISTING CONDITIONS

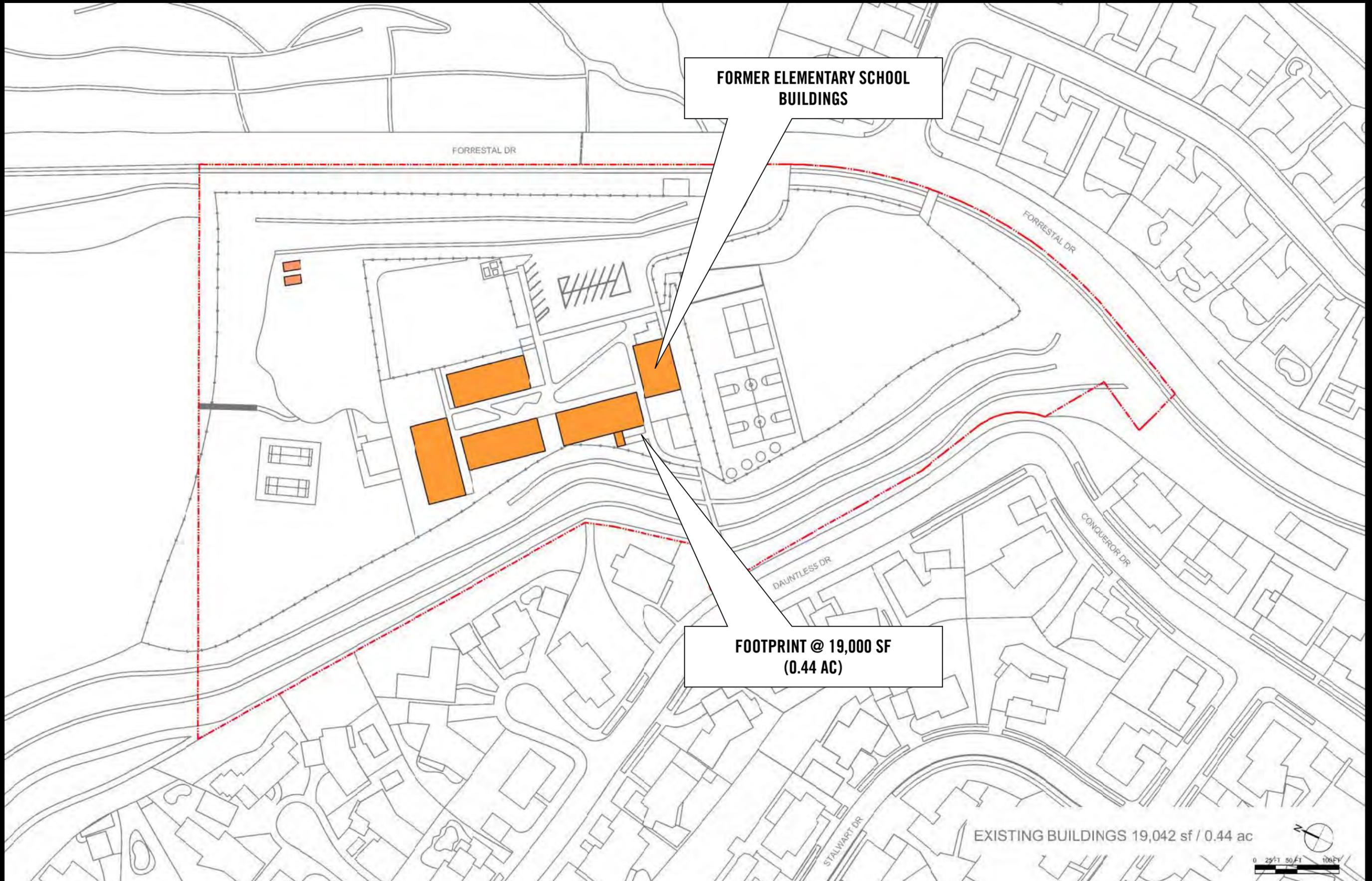
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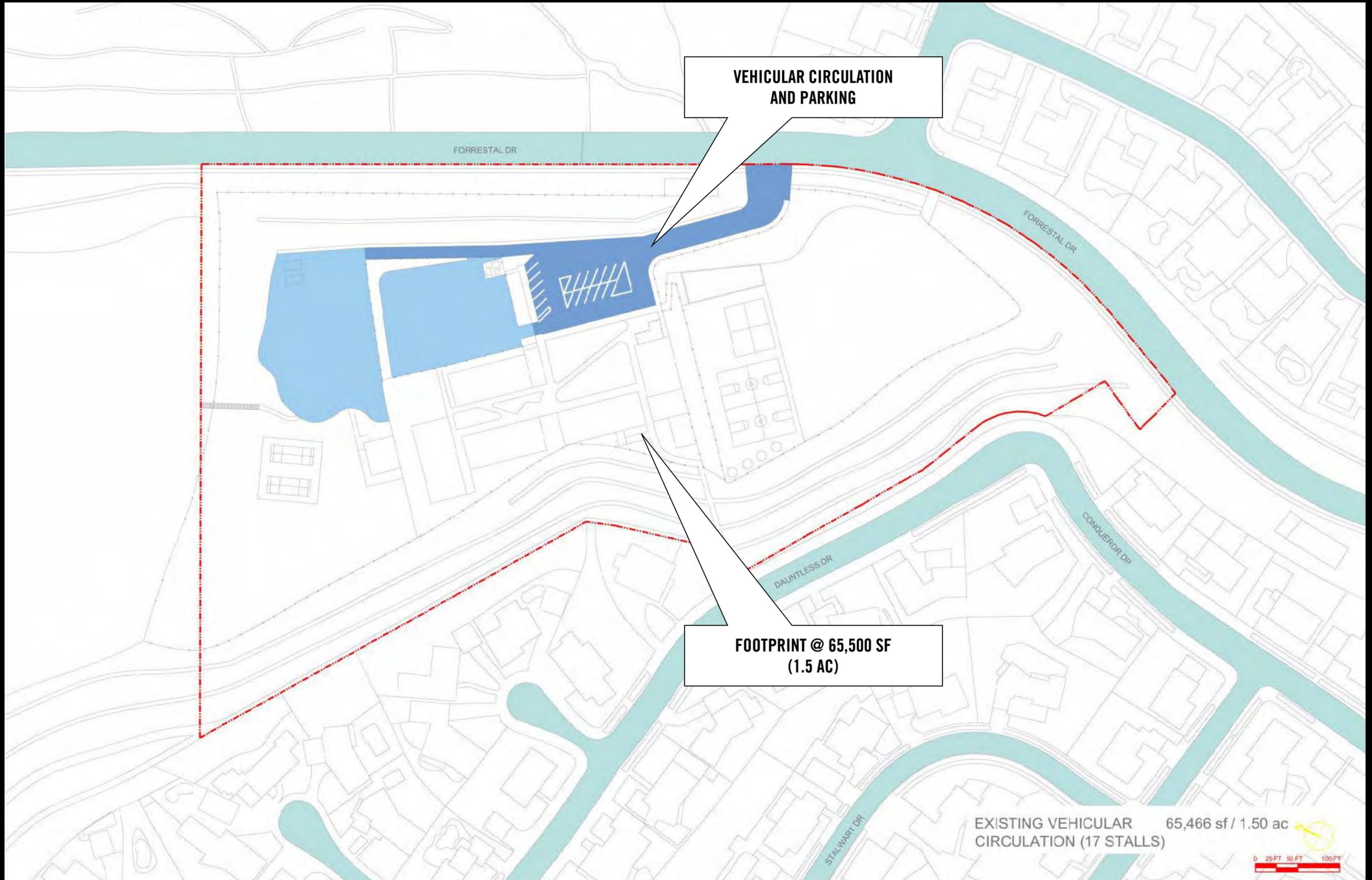
LADERA LINDA COMMUNITY PARK EXISTING CONDITIONS



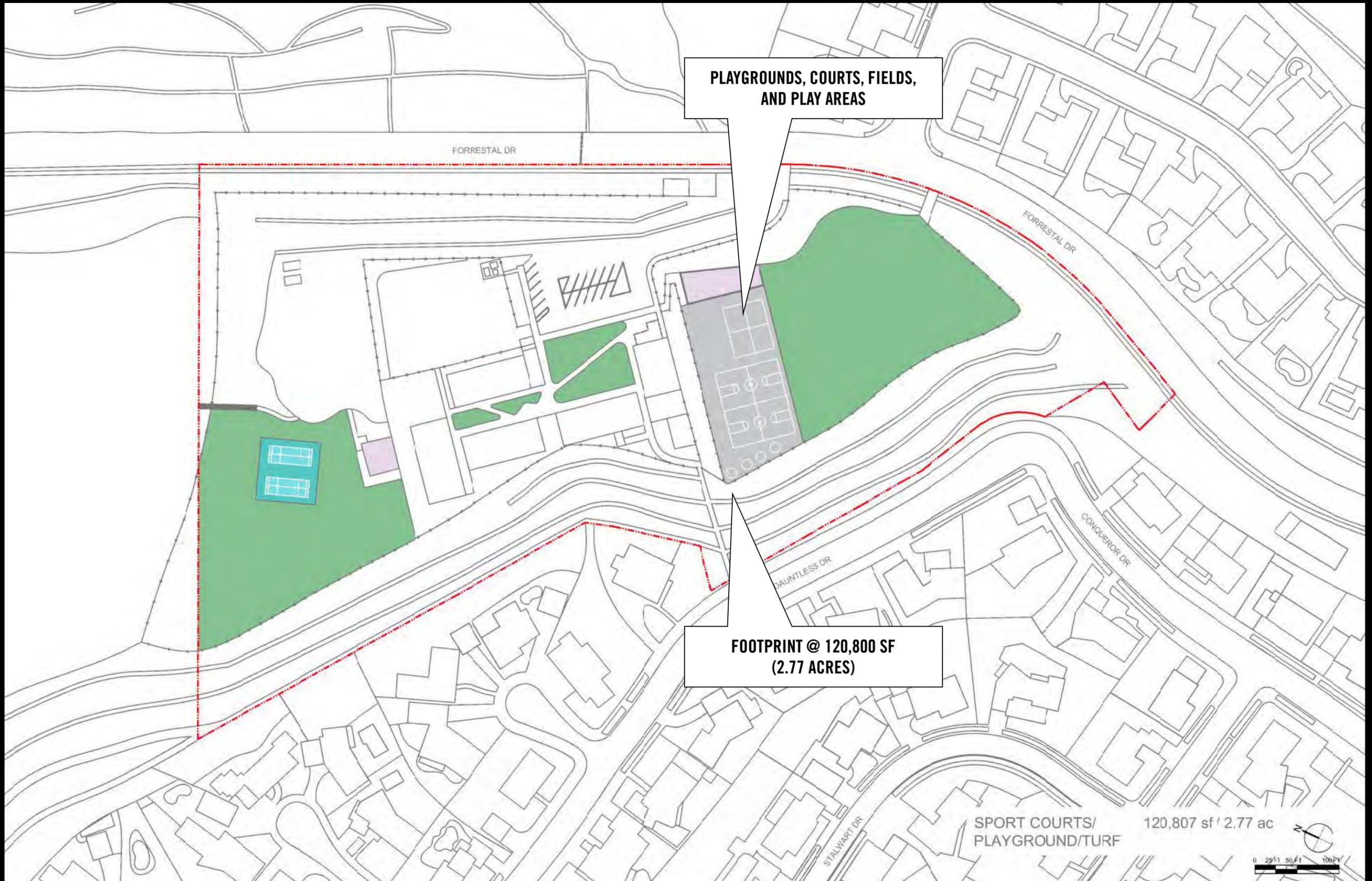
LADERA LINDA COMMUNITY PARK EXISTING CONDITIONS



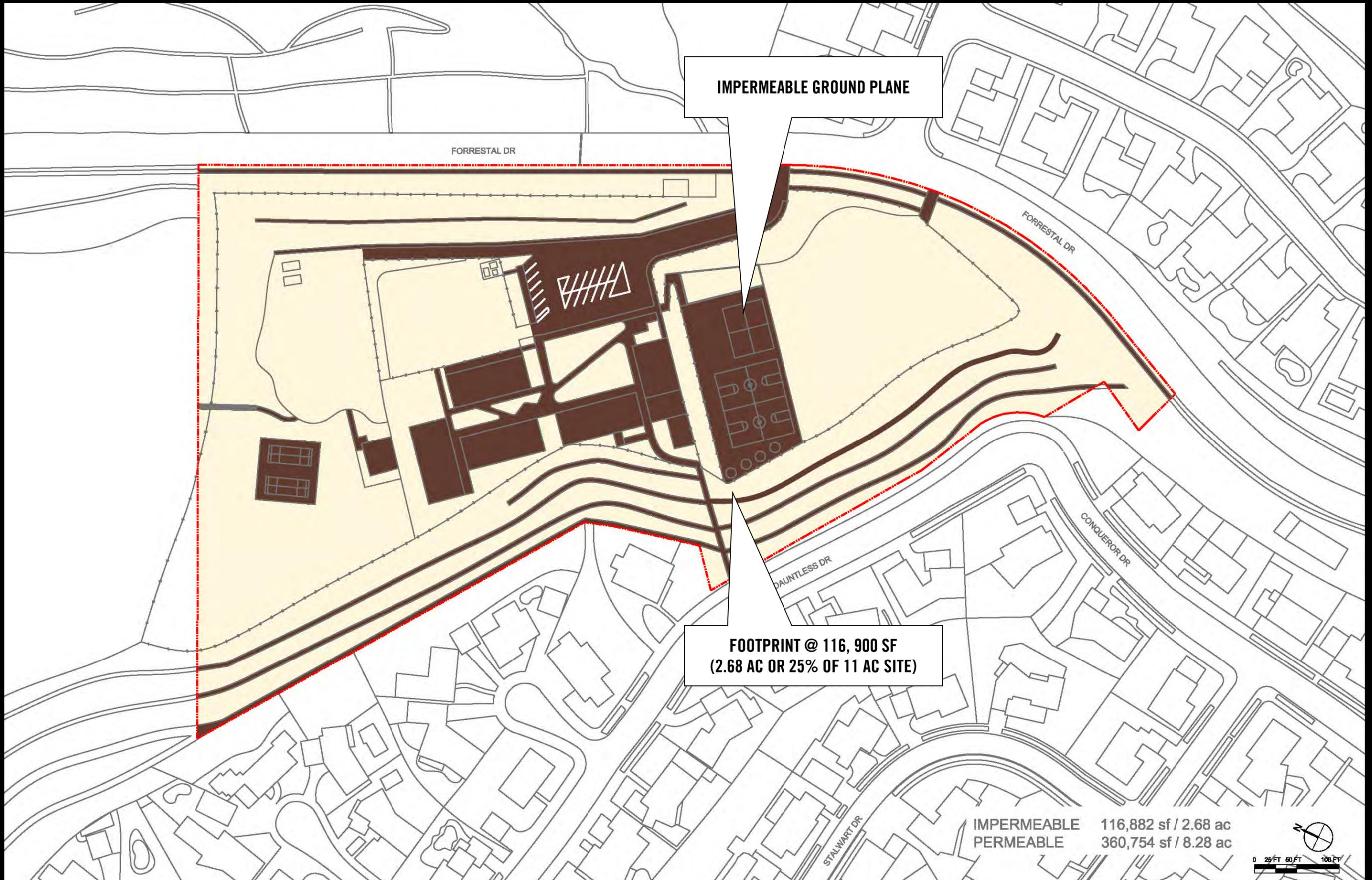
**EXISTING CONDITIONS: BUILDING FOOTPRINT @ 4% OF THE PROPERTY OR 8% OF USABLE SITE AREA**



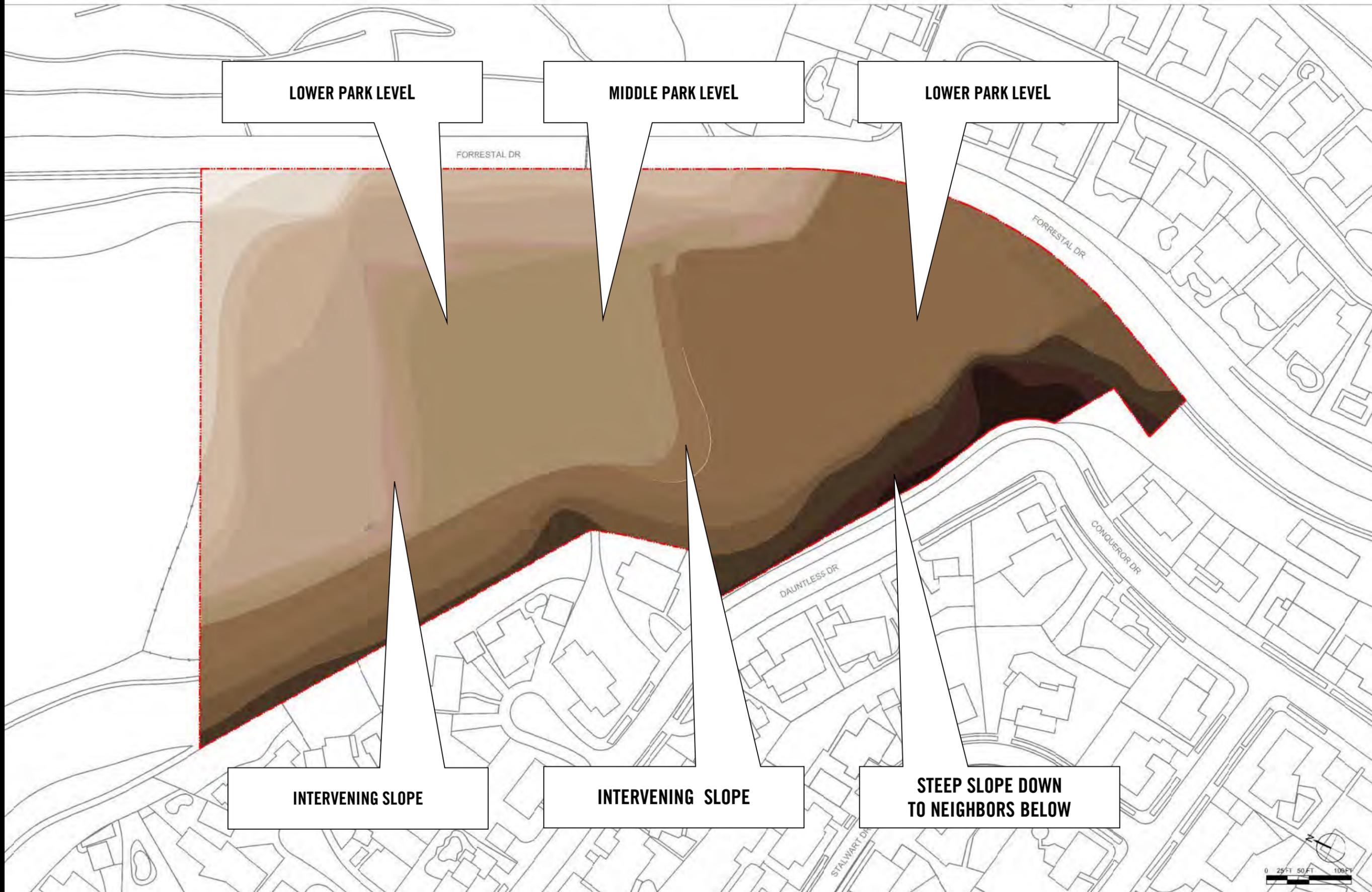
LADERA LINDA COMMUNITY PARK EXISTING CONDITIONS: VEHICULAR CIRCULATION AND PARKING @ 14% OF THE PROPERTY OR 28% OF USABLE SITE AREA



EXISTING CONDITIONS OPEN SPACE, PLAYFIELDS AND PLAYGROUNDS @ 25% OF THE PROPERTY OR 50% OF USABLE SITE AREA



EXISTING CONDITIONS: GROUND PLANE @ 25% IMPERMEABLE OR 50% OF USABLE SITE AREA



EXISTING CONDITIONS: TOPOGRAPHY



LADERA LINDA COMMUNITY PARK EXISTING CONDITIONS





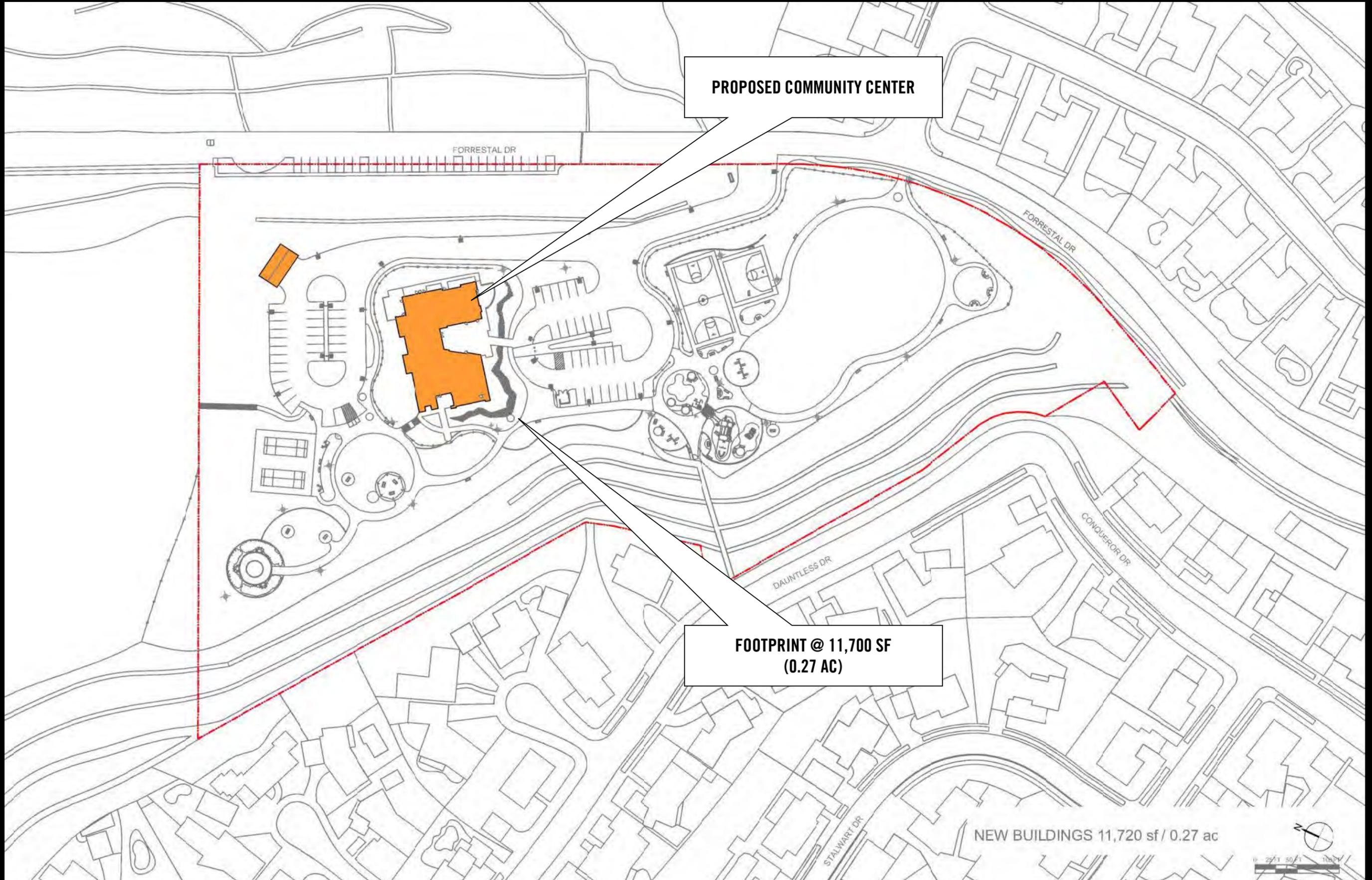


**MARCH 2018 COUNCIL APPROVED  
PARK MASTER PLAN**

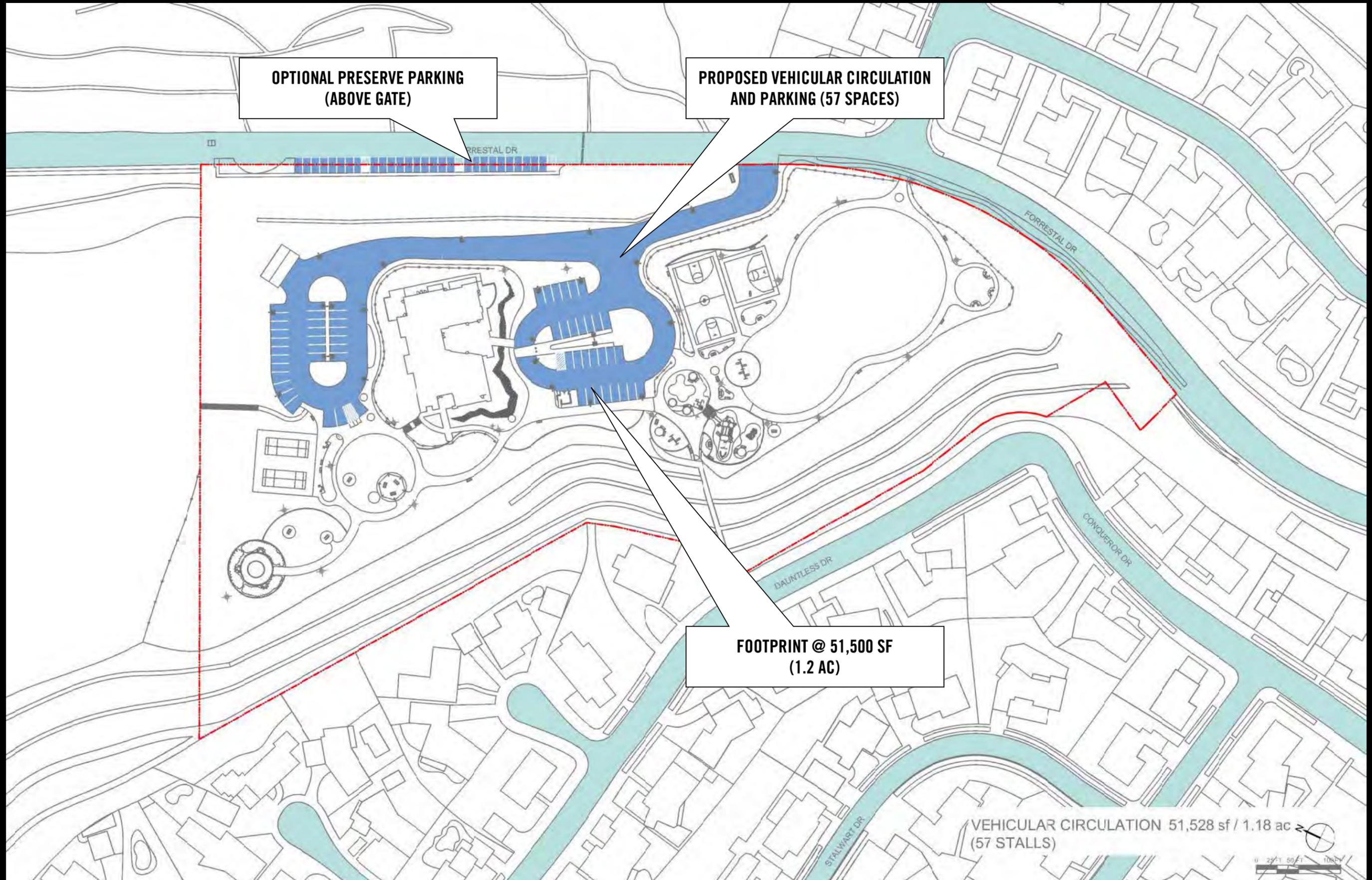
**PROPERTY LINE**

**CITY COUNCIL APPROVED MASTER PLAN**

**A-21**



CITY COUNCIL APPROVED MASTER PLAN: BUILDING FOOTPRINT @ 2 ½ % OF THE PROPERTY OR 5% OF USABLE SITE AREA



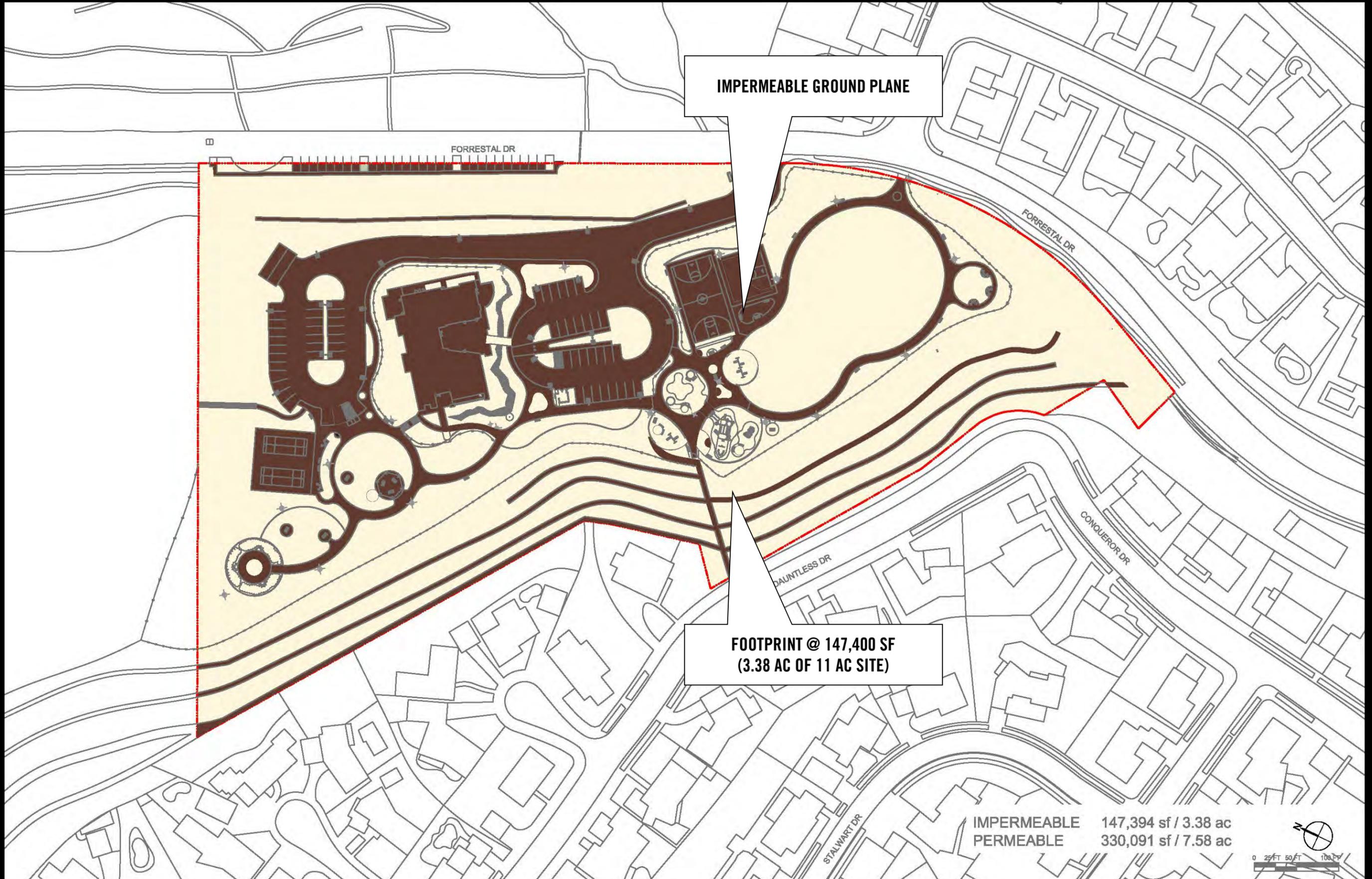
VEHICULAR CIRCULATION 51,528 sf / 1.18 ac  
(57 STALLS)

CITY COUNCIL APPROVED MASTER PLAN: VEHICULAR CIRCULATION AND PARKING @ 11% OR 22% OF USABLE SITE AREA

A-23

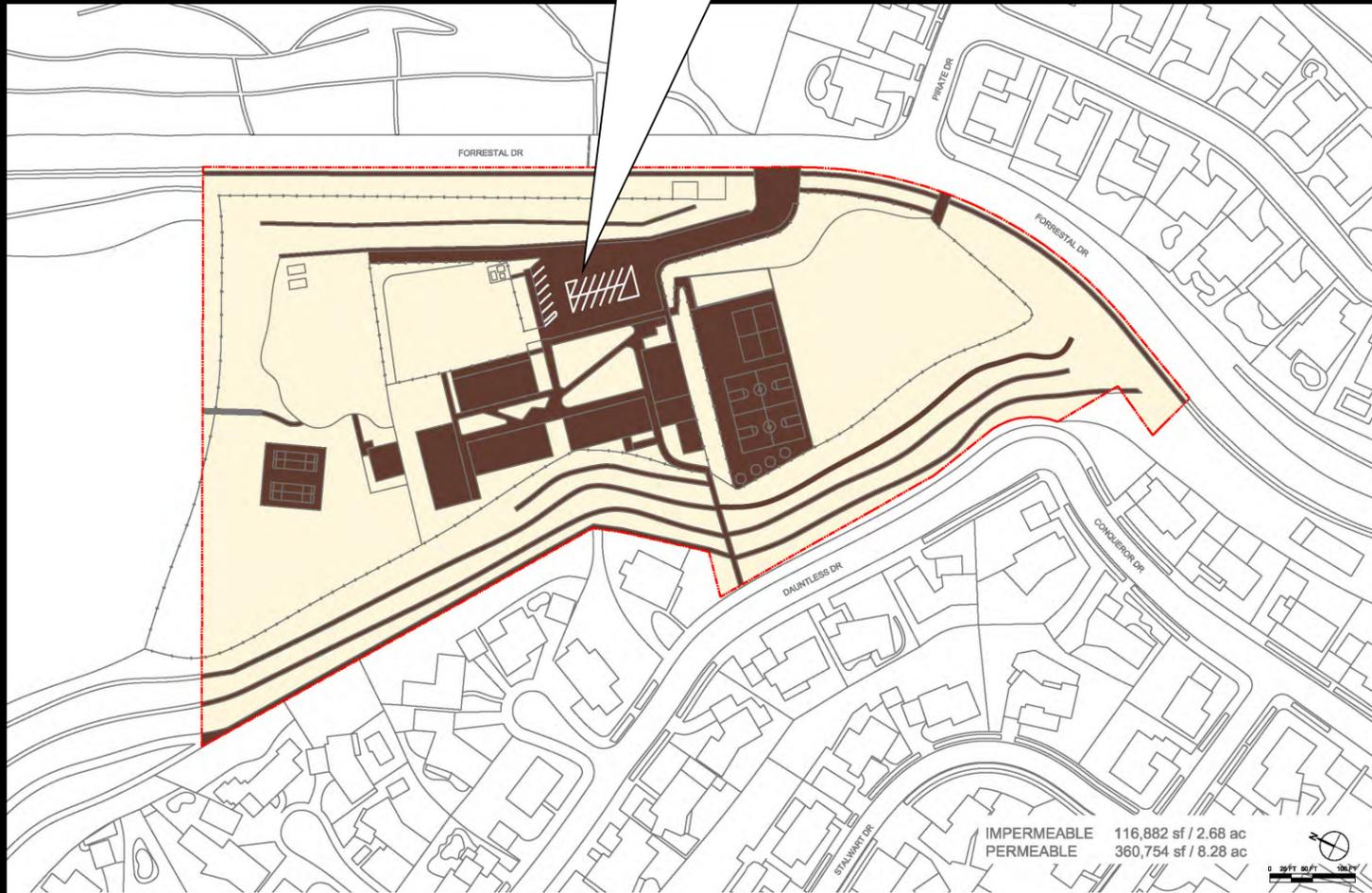


CITY COUNCIL APPROVED MASTER PLAN: OPEN SPACE, PLAYFIELDS AND PLAYGROUNDS @17% OR 34% OF USABLE SITE AREA



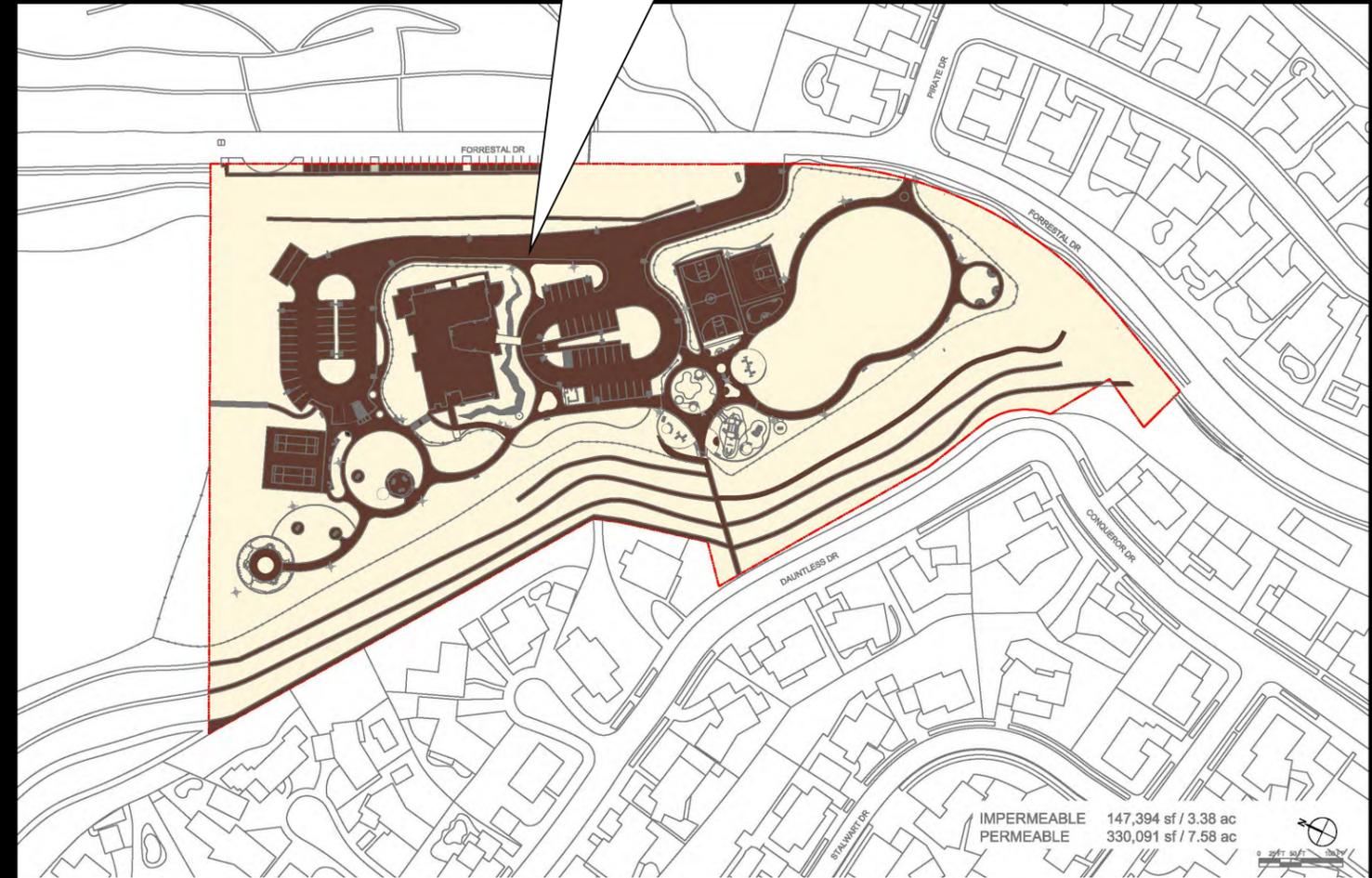
CITY COUNCIL APPROVED MASTER PLAN: GROUND PLANE @ 31% IMPERMEABLE OR 62% OF USABLE SITE AREA

**EXISTING FOOTPRINT @ 116, 900 SF  
(2.68 AC OF 11 AC SITE)**



**EXISTING CONDITIONS @ 25% IMPERMEABLE OR 50% OF USABLE SITE AREA**

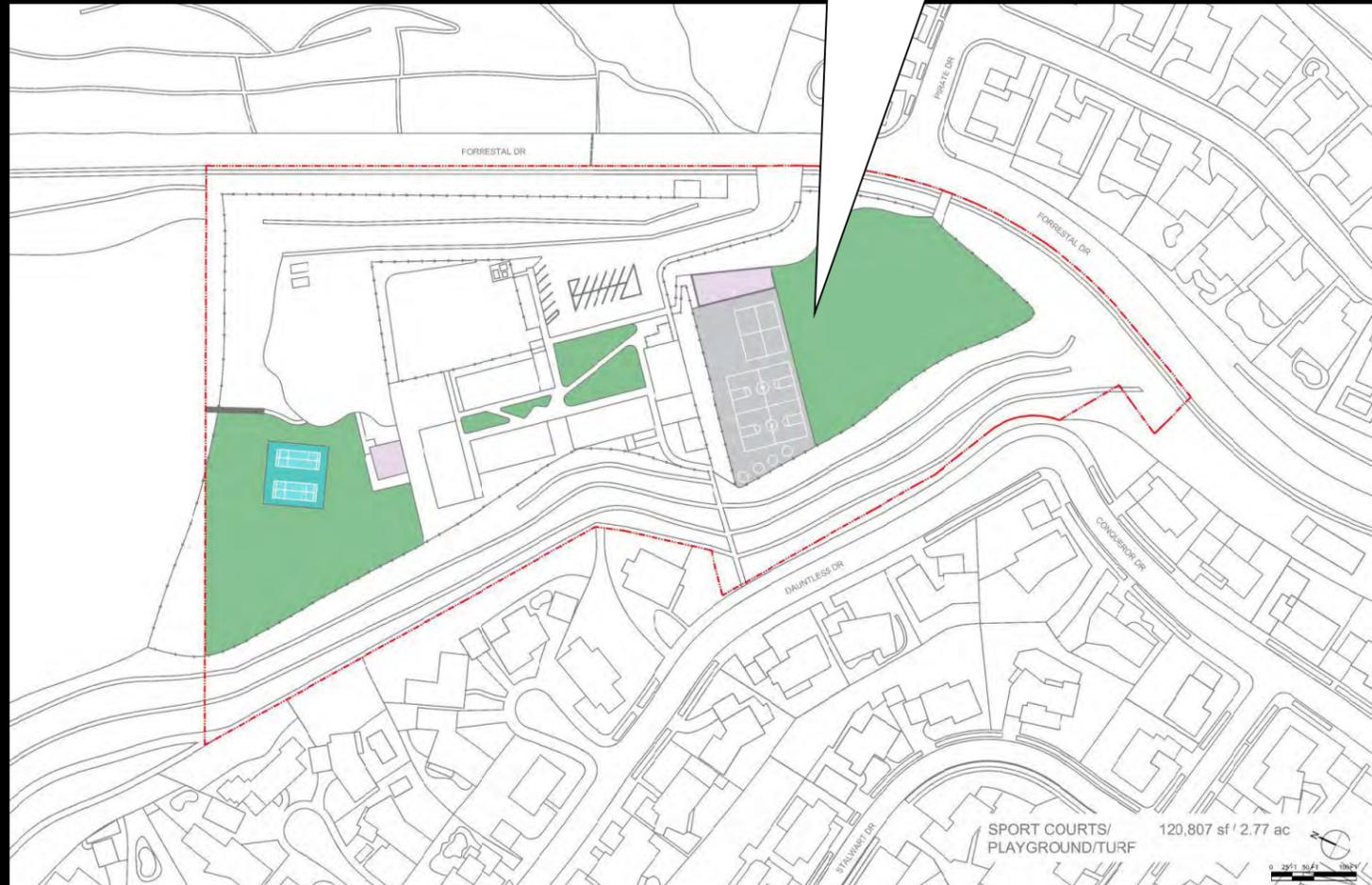
**FOOTPRINT @ 147,400 SF  
(3.38 AC OF 11 AC SITE)**



**COUNCIL APPROVED MASTER PLAN @ 31% IMPERMEABLE OR 62% OF USABLE SITE AREA**

**GROUND PLANE PERMEABILITY**

**EXISTING FOOTPRINT  
@ 120,800 SF (2.77 ACRES)**



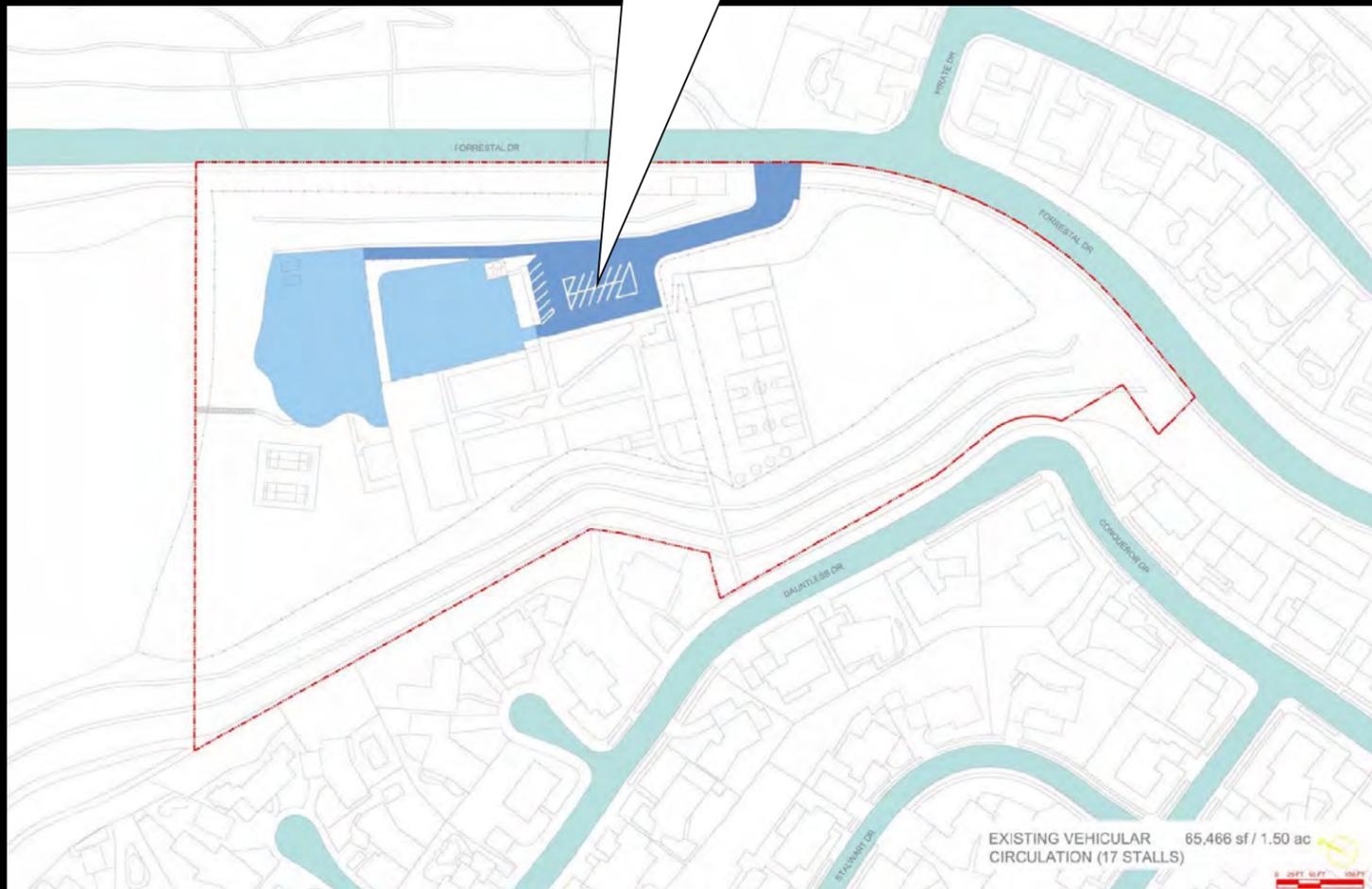
**EXISTING CONDITIONS @ 25% OR 50% OF USABLE SITE AREA**

**FOOTPRINT @ 82,100 SF  
(1.9 ACRES)**



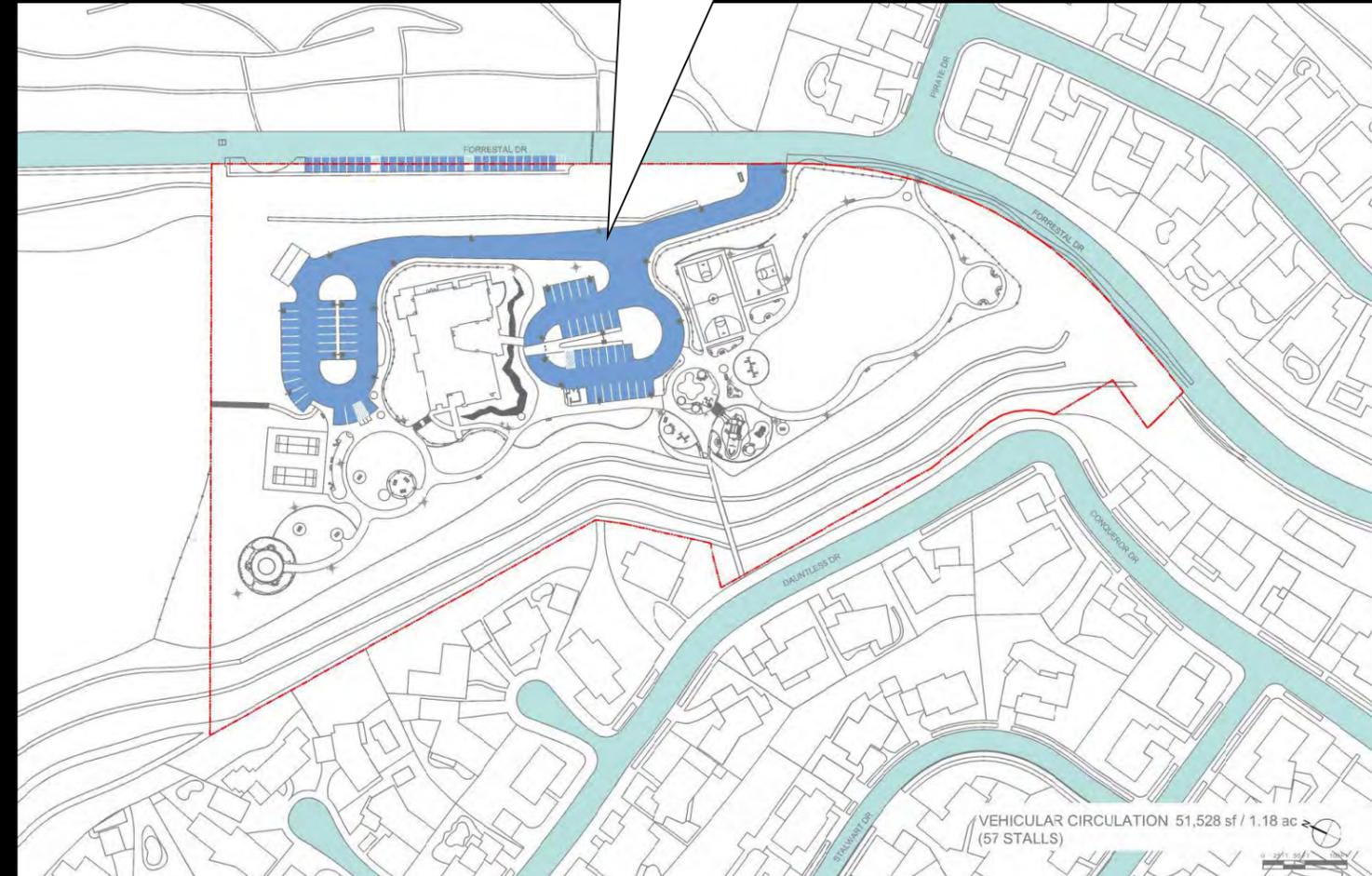
**CITY COUNCIL APPROVED MASTER PLAN @ 17% OR 34% OF USABLE SITE AREA**

**EXISTING FOOTPRINT @ 65,500 SF  
(1.5 AC)**



**EXISTING CONDITIONS @14 % OR 28 % OF USABLE SITE AREA**

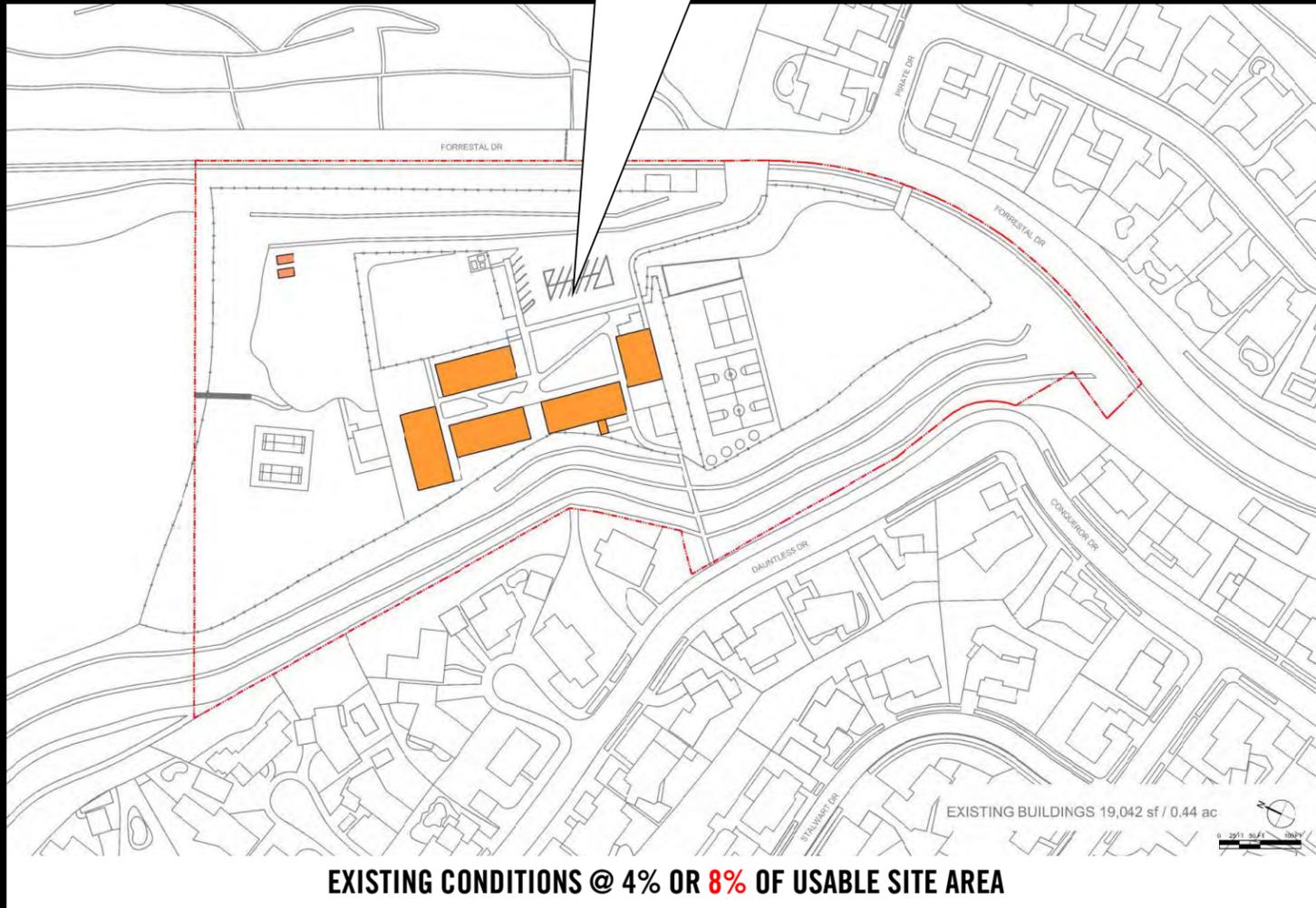
**FOOTPRINT @ 51,500 SF  
(1.2 AC)**



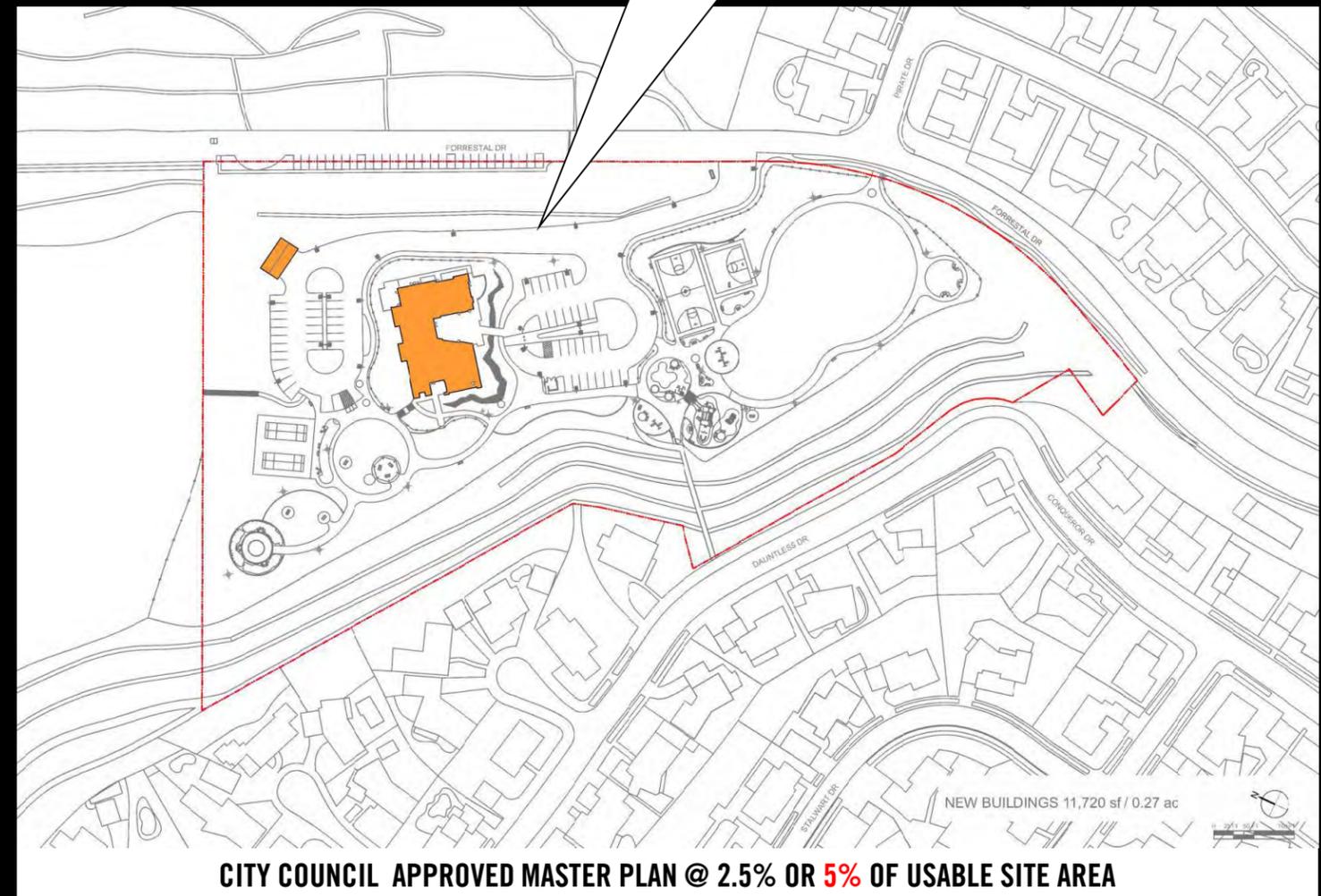
**CITY COUNCIL APPROVED MASTER PLAN @ 11% OR 22% OF USABLE SITE AREA**

**VEHICULAR CIRCULATION**

**EXISTING FOOTPRINT  
@ 19,000 SF (0.44 AC)**



**FOOTPRINT @ 11,700 SF  
(0.27 AC)**



**BUILDING FOOTPRINT**



LADERA LINDA COMMUNITY PARK EXISTING CONDITIONS



LADERA LINDA COMMUNITY PARK CITY COUNCIL APPROVED MASTER PLAN



LADERA LINDA COMMUNITY PARK OPTION A



LADERA LINDA COMMUNITY PARK CITY COUNCIL APPROVED MASTER PLAN



LADERA LINDA COMMUNITY PARK OPTION B



LADERA LINDA COMMUNITY PARK CITY COUNCIL APPROVED MASTER PLAN



LADERA LINDA COMMUNITY PARK OPTION C



LADERA LINDA COMMUNITY PARK CITY COUNCIL APPROVED MASTER PLAN



LADERA LINDA COMMUNITY PARK OPTION D



LADERA LINDA COMMUNITY PARK CITY COUNCIL APPROVED MASTER PLAN



OPTION A



OPTION C



OPTION B



OPTION D

SITE PLAN



OPTION A



OPTION B



OPTION C



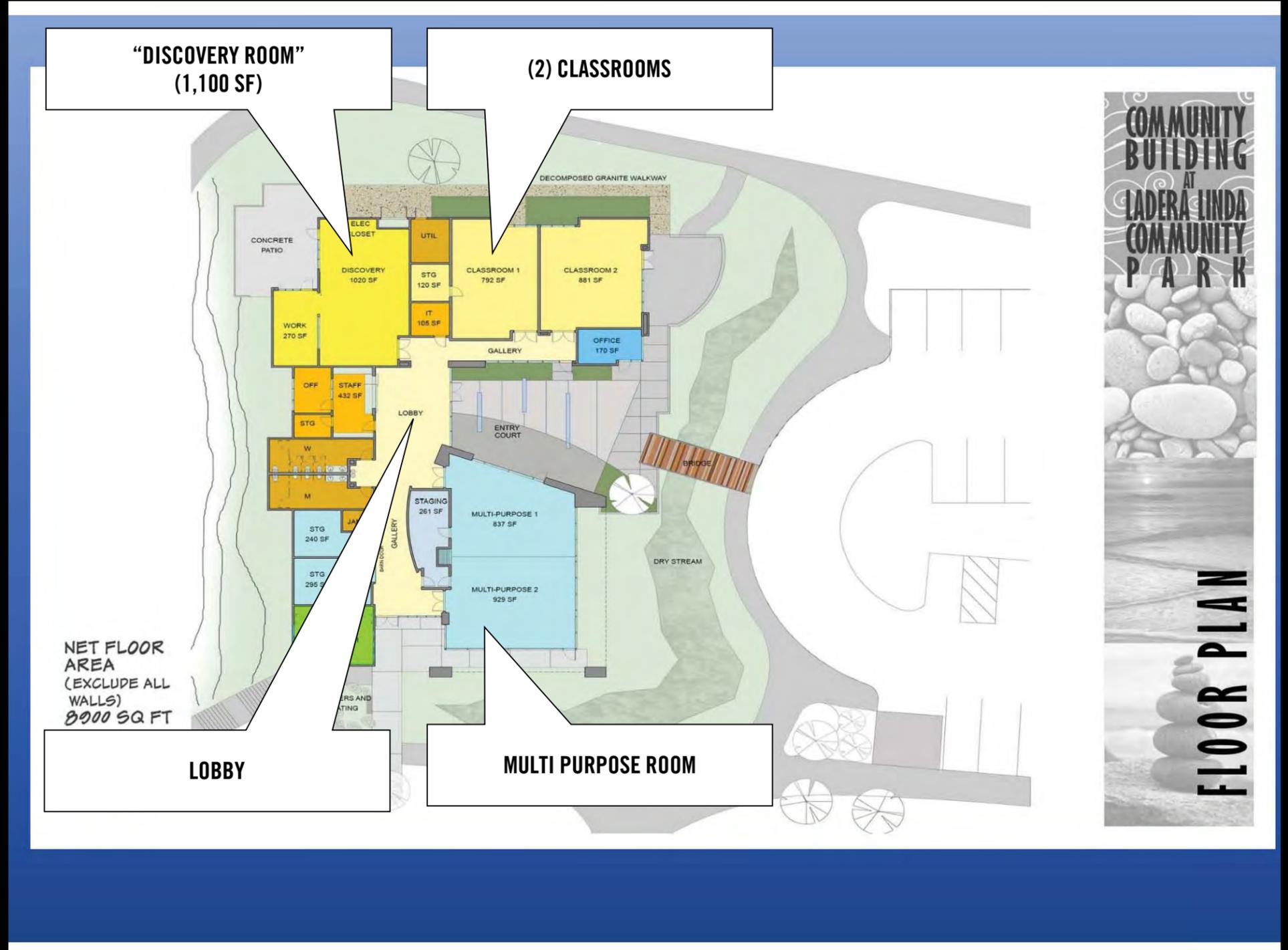
OPTION D

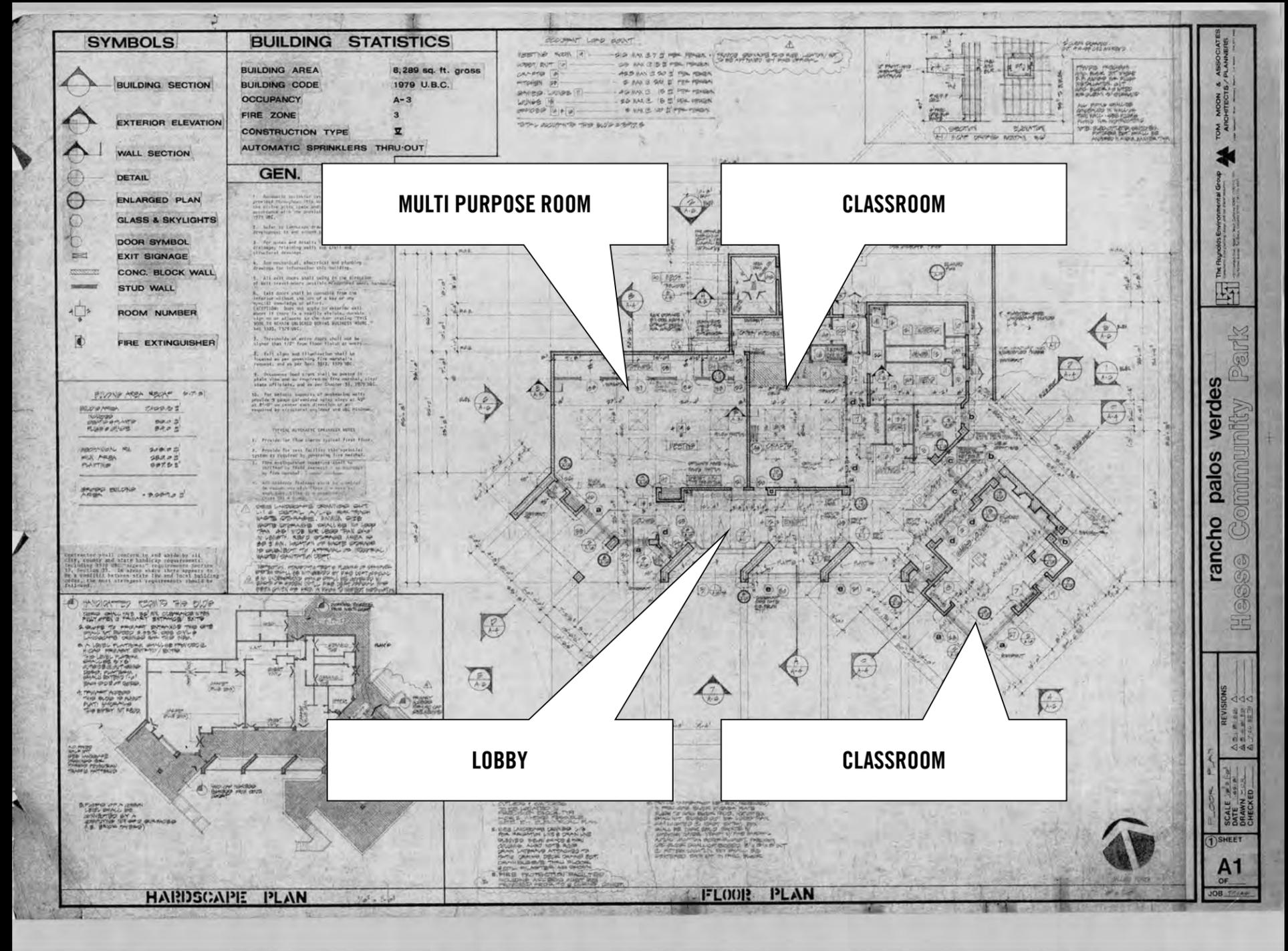
SITE PLAN



OPTION "D" SITE PLAN

# Building concept





HESSE PARK COMMUNITY CENTER

A-40

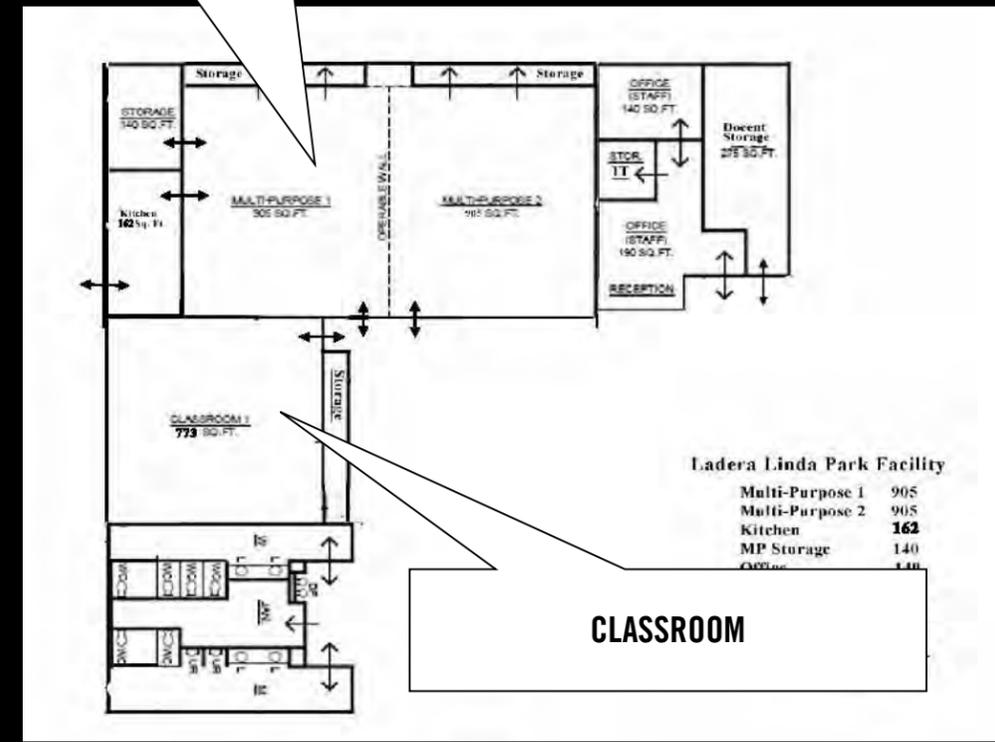
PARKING LOT

MULTI PURPOSE ROOM



COMMUNITY CENTER

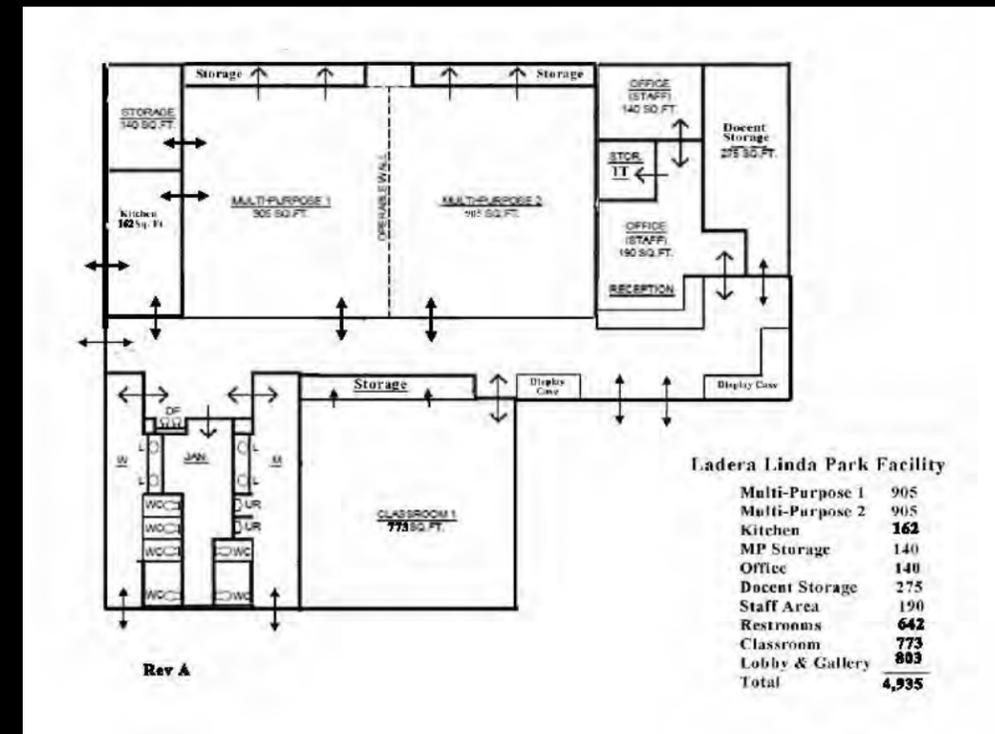
Ladera Linda Park Plan with 4,000. All active activities located in upper. Passive activities lower field. Privacy hedges along Forrestal and view hedges along ocean view side.



Ladera Linda Park Facility

Multi-Purpose 1	905
Multi-Purpose 2	905
Kitchen	162
MP Storage	140
Office	140

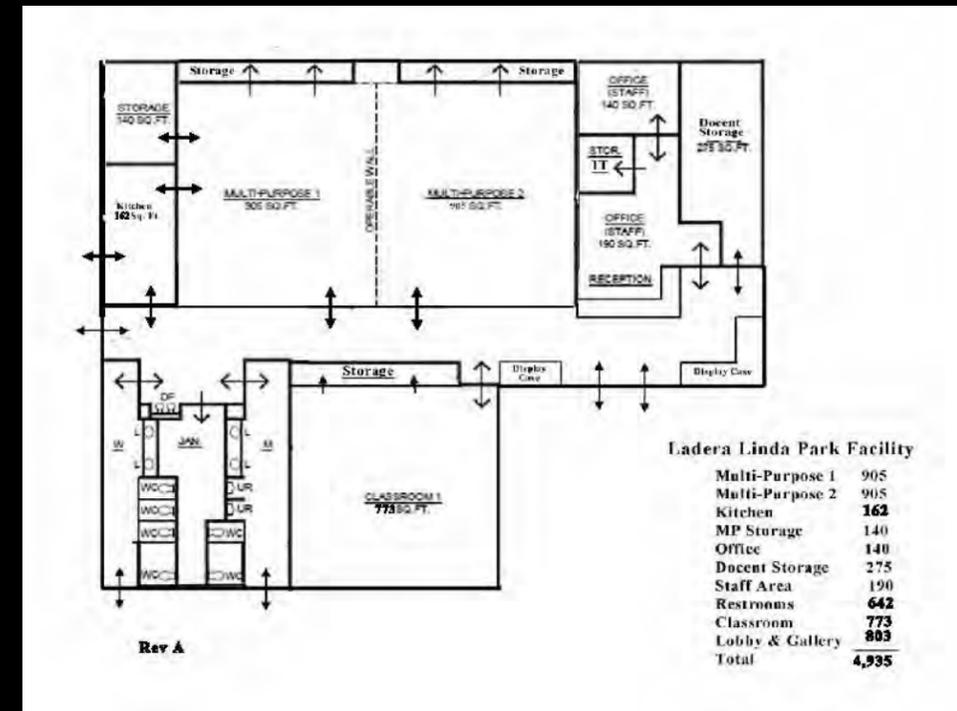
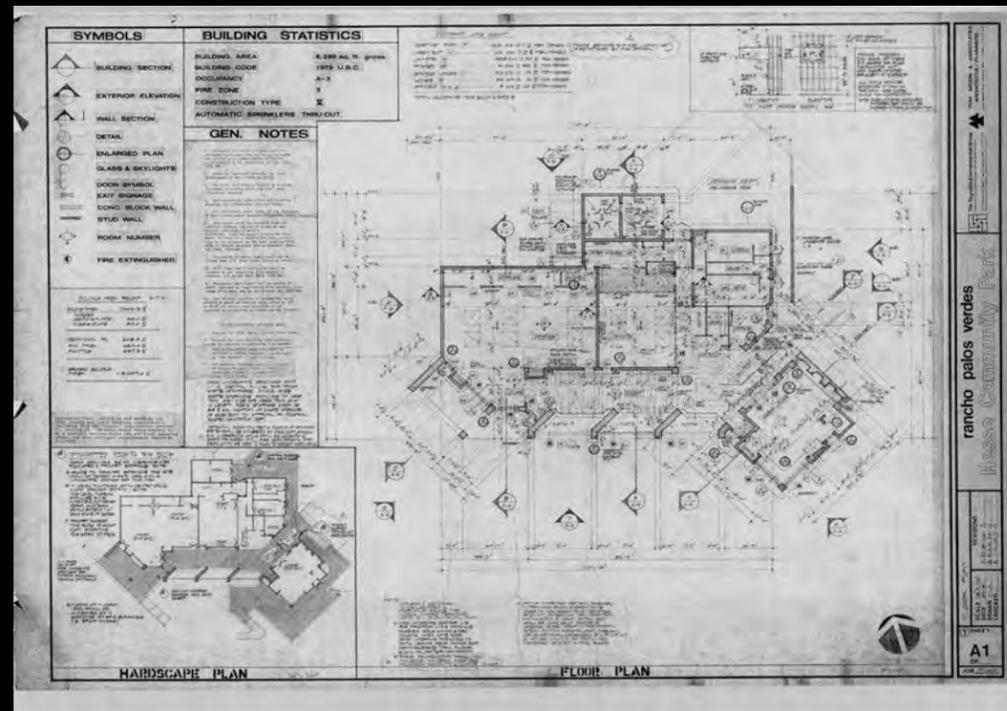
CLASSROOM



Ladera Linda Park Facility

Multi-Purpose 1	905
Multi-Purpose 2	905
Kitchen	162
MP Storage	140
Office	140
Docent Storage	275
Staff Area	190
Restrooms	642
Classroom	773
Lobby & Gallery	883
<b>Total</b>	<b>4,935</b>

Rev A



COUNCIL APPROVED MASTER PLAN



HESSE PARK



LADERA LINDA HOA

# Community outreach

*(1<sup>st</sup> round Feb 2019, 2<sup>nd</sup> round May 2019)*

- City council
- City staff
- Discovery docents
- Ladera Linda HOA
- Neighboring HOAs
- Individual neighbors and others

Attachment 1

**Ladera Linda Park Use Survey**

The City of Rancho Palos Verdes has engaged Johnson Favaro Architects (<https://www.johnsonfavaro.com>) to design the Ladera Linda Park and the Neighborhood Center. In meetings with Johnson Favaro, they have indicated that the park would be designed to meet the needs of the local community. Your HOA Board has developed the following survey to help the contractor plan the facility. Planning means they could determine room numbers, dimensions, configurations, and amenities if they knew what future use might be. The survey will also be used by Recreation & Parks to plan activities and schedules for the Center.

Please check the box indicating your interest according to age group. A family may have interests in multiple age groups. If you would like to add an activity that is not listed, please include it below under Other. We encourage input from all adult residents of Ladera Linda. We ask you to select your three highest priorities, three from the Park and three from the Center. (Maximum 6 selections per individual)

Please return promptly for planning is in progress. Ask your Board if you have any questions. Your opinion is critically important to us. Please take a minute to complete and return the survey.

Name \_\_\_\_\_ Address \_\_\_\_\_

**Opt Out**

I am not interested in participating in Activities at the Neighborhood Center \_\_\_\_  
Why? \_\_\_\_\_

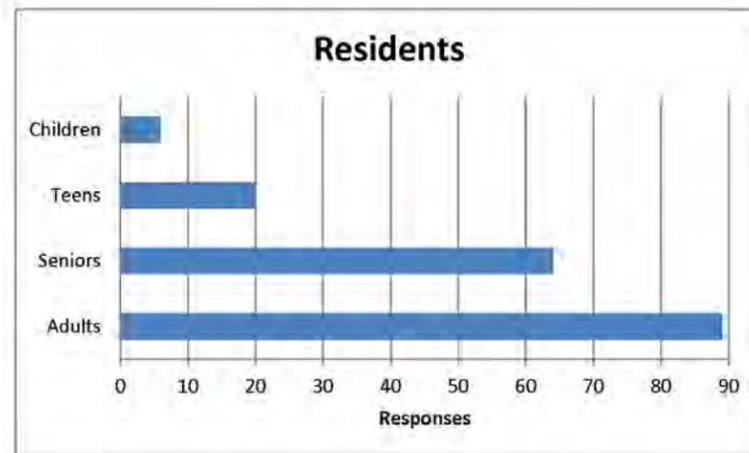
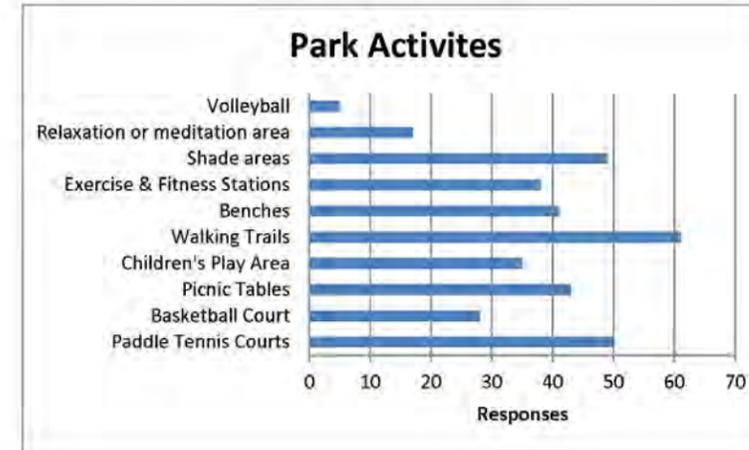
**Park Activities**

Paddle Tennis Courts \_\_\_ Basketball Court \_\_\_ Picnic Tables \_\_\_ Children's Play Area \_\_\_  
Walking Trails \_\_\_ Benches \_\_\_ Exercise and Fitness Stations \_\_\_ Shade areas \_\_\_  
Relaxation or meditation area \_\_\_ Volleyball \_\_\_ Other \_\_\_\_\_

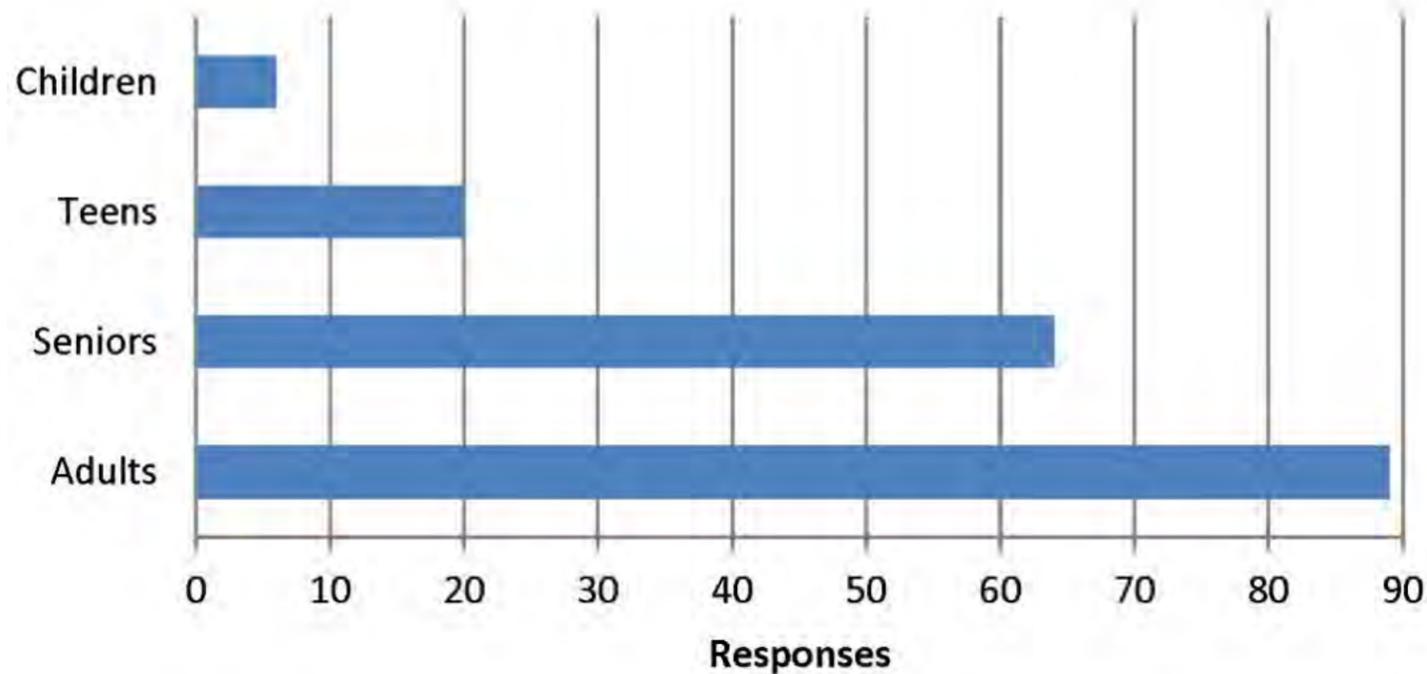
	Adults	Seniors	Teens	Children	Comments
How many residents are included in this survey	___	___	___	___	_____
<b>Neighborhood Center Activities</b>					
<b>Art</b>					
Ceramics	___	___	___	___	_____
Crafts	___	___	___	___	_____
Oil Painting	___	___	___	___	_____
Watercolors	___	___	___	___	_____
Woodwork	___	___	___	___	_____
<b>Clubs</b>					
Movies	___	___	___	___	_____
Scouts	___	___	___	___	_____
Social	___	___	___	___	_____
<b>Discussion</b>					
Books	___	___	___	___	_____
Financial advice	___	___	___	___	_____
Language skill What language? _____	___	___	___	___	_____
Mommy and me class	___	___	___	___	_____
Travel experience/planning	___	___	___	___	_____
<b>Electronics</b>					
Computer	___	___	___	___	_____
Cox internet and TV troubleshooting	___	___	___	___	_____
Cell phone learning	___	___	___	___	_____
<b>Exercise</b>					
Dance What style? _____	___	___	___	___	_____
Balance and strengthening	___	___	___	___	_____
Fitness class	___	___	___	___	_____
<b>Games</b>					
Board Games	___	___	___	___	_____
<b>Other</b> _____					

Attachment 2

**Ladera Linda Park Usage Survey Results**



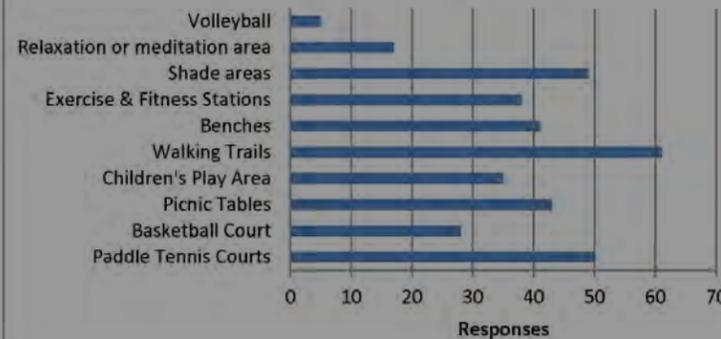
# Residents



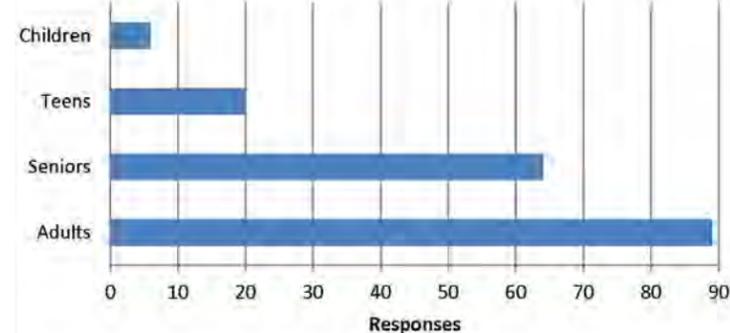
Attachment 2

## Ladera Linda Park Usage Survey Results

### Park Activities



### Residents



Clubs				
Oil Painting				
Watercolors				
Woodwork				
<b>Clubs</b>				
Movies				
Scouts				
Social				
<b>Discussion</b>				
Books				
Financial advice				
Language skill What language? _____				
Mommy and me class				
Travel experience/planning				
<b>Electronics</b>				
Computer				
Cox internet and TV troubleshooting				
Cell phone learning				
<b>Exercise</b>				
Dance What style? _____				
Balance and strengthening				
Fitness class				
<b>Games</b>				
Board Games				
<b>Other</b>				

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Name \_\_\_\_\_ Address \_\_\_\_\_

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Why? \_\_\_\_\_

**Park Activities**

Paddle Tennis Courts \_\_\_ Basketball Court \_\_\_ Picnic Tables \_\_\_ Children's Play Area \_\_\_  
Walking Trails \_\_\_ Benches \_\_\_ Exercise and Fitness Stations \_\_\_ Shade areas \_\_\_  
Relaxation or meditation area \_\_\_ Volleyball \_\_\_ Other \_\_\_\_\_

Adults Seniors Teens Children Comments

How many residents are included in this survey

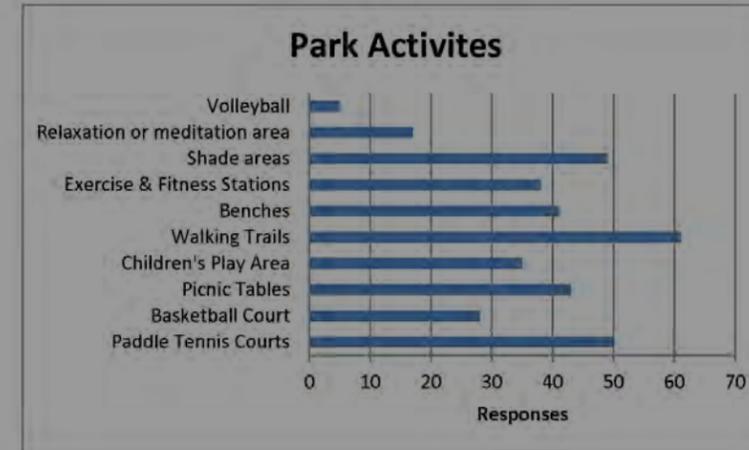
**Neighborhood Center Activities**

**Art**

- Ceramics
- Crafts
- Oil Painting
- Watercolors
- Woodwork

Attachment 2

Ladera Linda Park Usage Survey Results



**Park Activities**

Paddle Tennis Courts \_\_\_ Basketball Court \_\_\_ Picnic Tables \_\_\_ Children's Play Area \_\_\_

Walking Trails \_\_\_ Benches \_\_\_ Exercise and Fitness Stations \_\_\_ Shade areas \_\_\_

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Relaxation or meditation area \_\_\_ Volleyball \_\_\_ Other \_\_\_\_\_

Adults Seniors Teens Children Comments

How many residents are included in this survey \_\_\_\_\_

**Neighborhood Center Activities**

**Art**

- Ceramics
- Crafts
- Oil Painting
- Watercolors
- Woodwork

**Clubs**

- Movies
- Scouts
- Social

**Discussion**

- Books
- Financial advice
- Language skill What language
- Mommy and me class
- Travel experience/planning

**Electronics**

- Computer
- Cox internet and TV troubles
- Cell phone learning

**Exercise**

- Dance What style?
- Balance and strengthening
- Fitness class

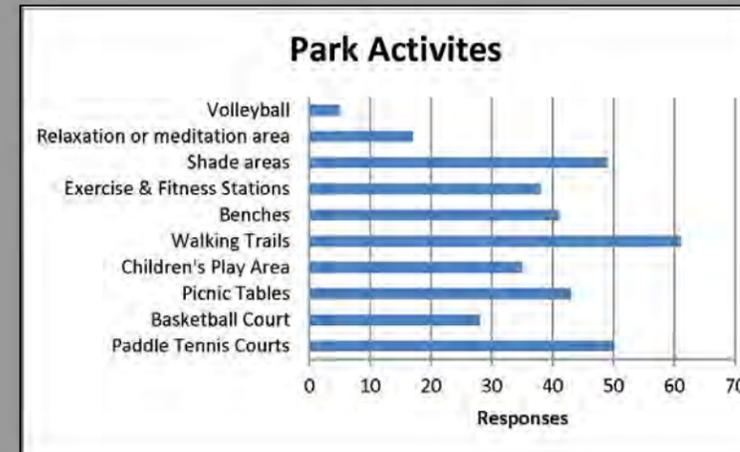
**Games**

- Board Games

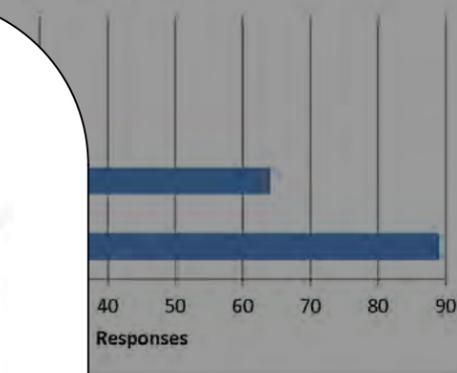
**Other**

Attachment 2

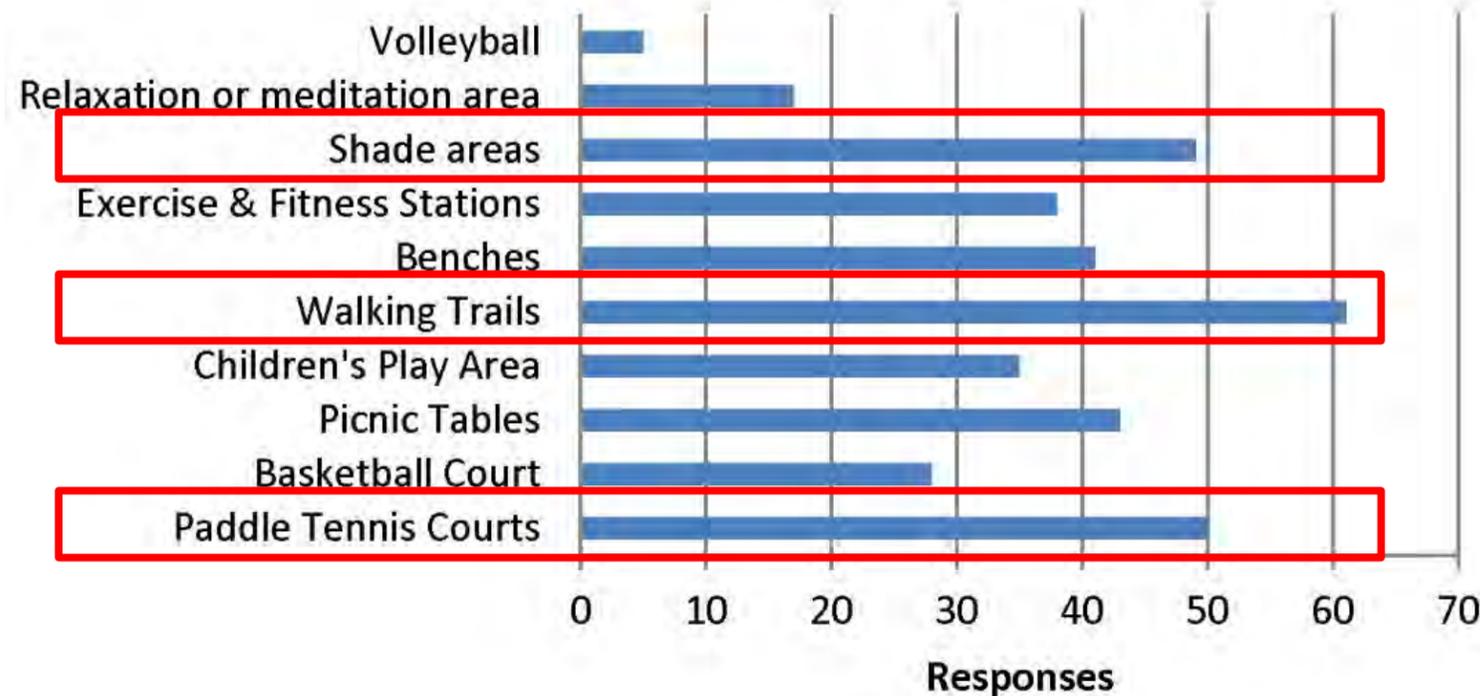
Ladera Linda Park Usage Survey Results



Residents



Park Activities



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Why? \_\_\_\_\_

**Park Activities**

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Walking Trails \_\_\_ Benches \_\_\_ Exercise and Fitness Stations \_\_\_ Shade areas \_\_\_

Relaxation or meditation area \_\_\_ Volleyball \_\_\_ Other \_\_\_\_\_

Adults Seniors Teens Children Comments

How many residents are included in this survey \_\_\_\_\_

**Neighborhood Center Activities**

**Art**

- Ceramics
- Crafts
- Oil Painting
- Watercolors
- Woodwork

**Clubs**

- Movies
- Scouts
- Social

**Discussion**

- Books
- Financial advice
- Language skill What language
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- Travel experience/planning

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- Computer
- Cox internet and TV troubles
- Cell phone learning

**Exercise**

- Dance What style?
- Balance and strengthening
- Fitness class

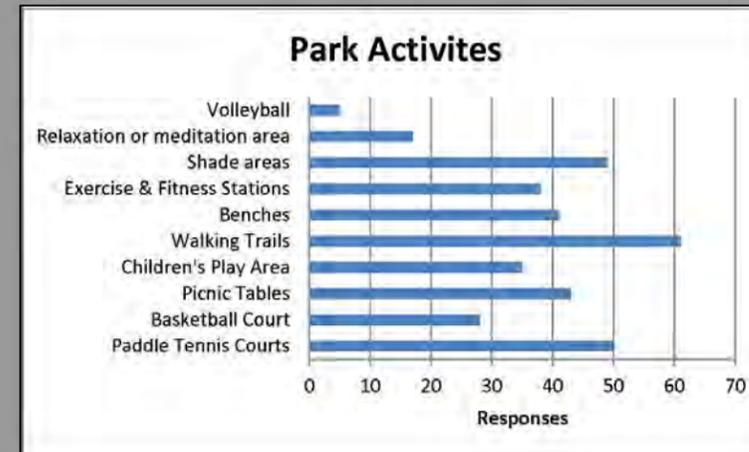
**Games**

- Board Games

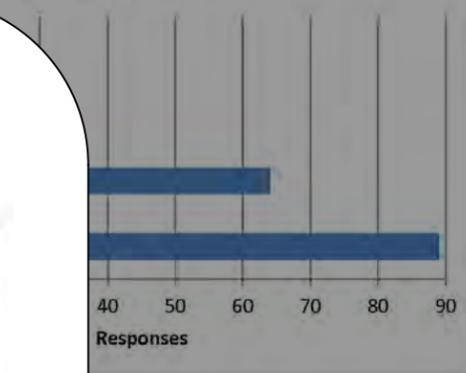
**Other**

Attachment 2

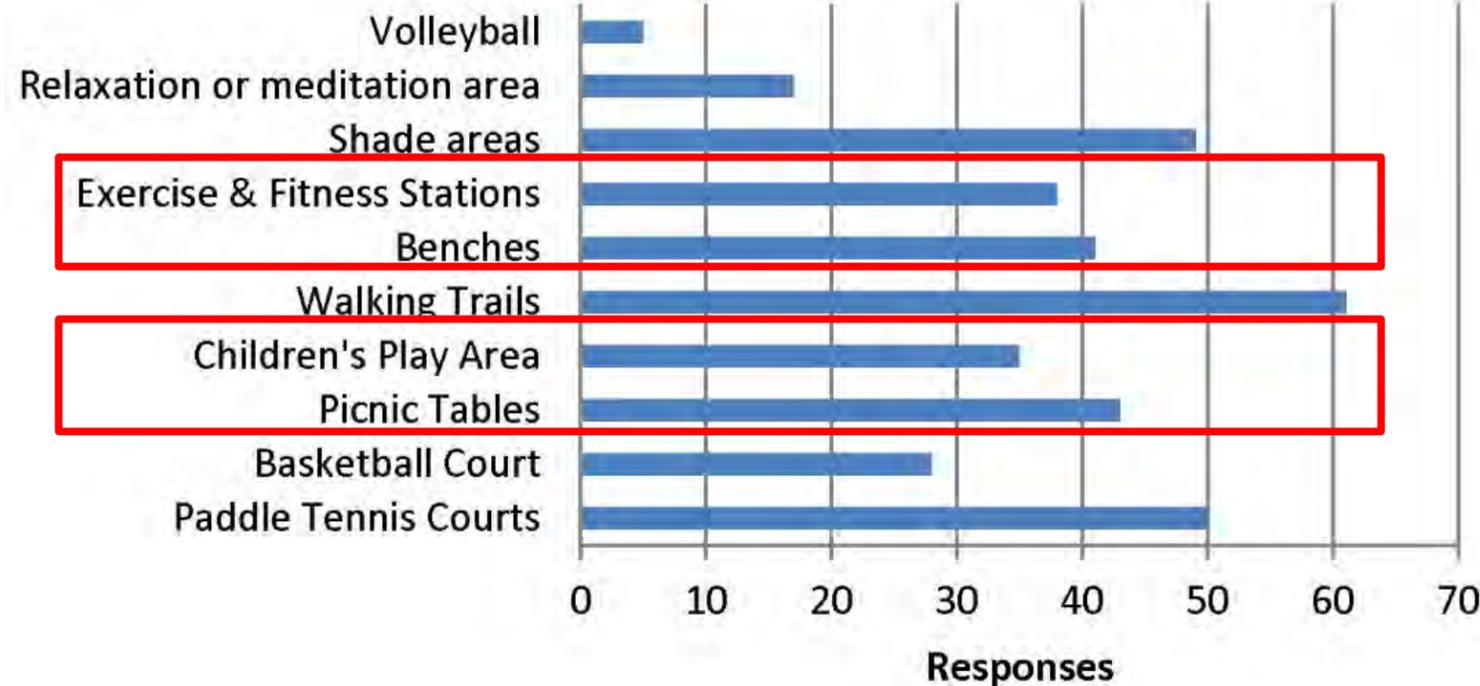
Ladera Linda Park Usage Survey Results



Residents



Park Activities



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Walking Trails \_\_\_ Benches \_\_\_ Exercise and Fitness Stations \_\_\_ Shade areas \_\_\_

Relaxation or meditation area \_\_\_ Volleyball \_\_\_ Other \_\_\_\_\_

Adults Seniors Teens

How many residents are included in this survey \_\_\_\_\_

**Neighborhood Center Activities**

**Art**

- Ceramics
- Crafts
- Oil Painting
- Watercolors
- Woodwork

**Clubs**

- Movies
- Scouts
- Social

**Discussion**

- Books
- Financial advice
- Language skill What language? \_\_\_\_\_
- Mommy and me class
- Travel experience/planning

**Electronics**

- Computer
- Cox internet and TV troubleshooting
- Cell phone learning

**Exercise**

- Dance What style? \_\_\_\_\_
- Balance and strengthening
- Fitness class

**Games**

- Board Games

**Other** \_\_\_\_\_

**Neighborhood Center Activities**

**Art**

- Ceramics
- Crafts
- Oil Painting
- Watercolors

**Woodwork**

**Clubs**

- Movies
- Scouts

**Social**

**Discussion**

- Books
- Financial advice
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- Mommy and me class
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**Electronics**

- Computer
- Cox internet and TV troubleshooting

**Cell phone learning**

**Exercise**

- Dance What style? \_\_\_\_\_
- Balance and strengthening

**Fitness class**

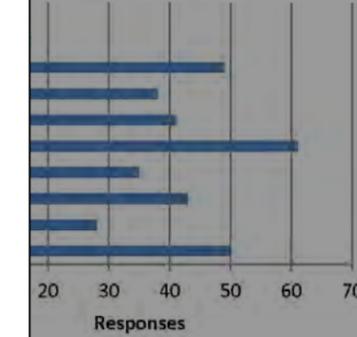
**Games**

- Board Games

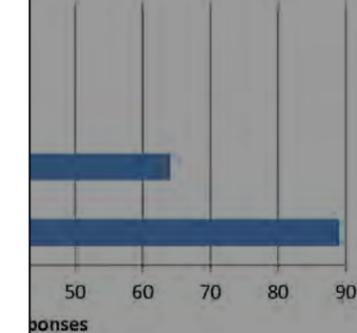
**Other** \_\_\_\_\_

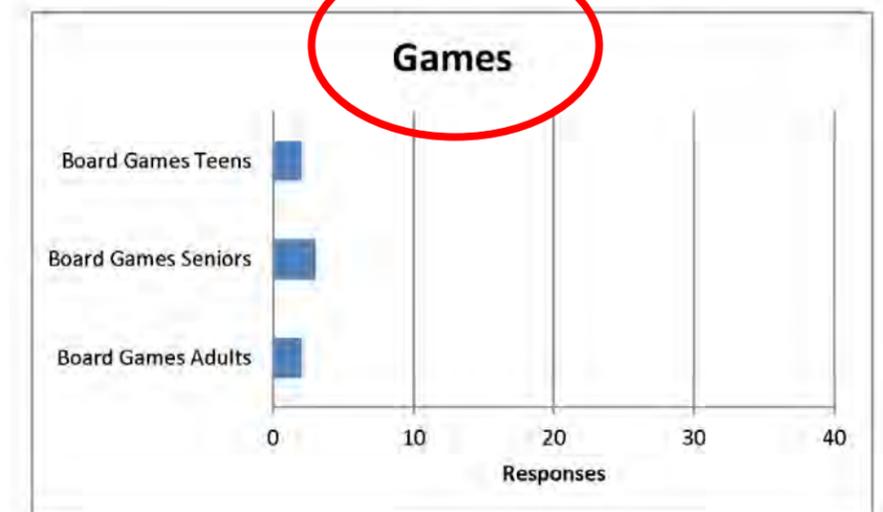
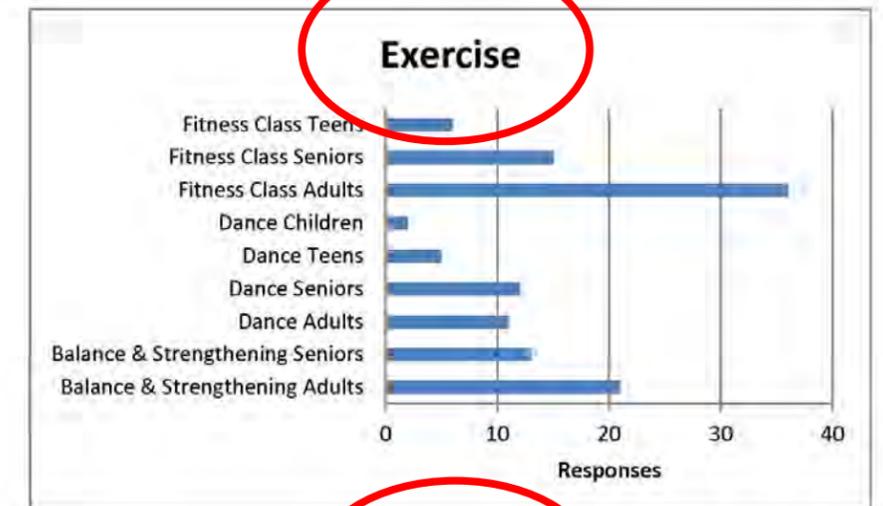
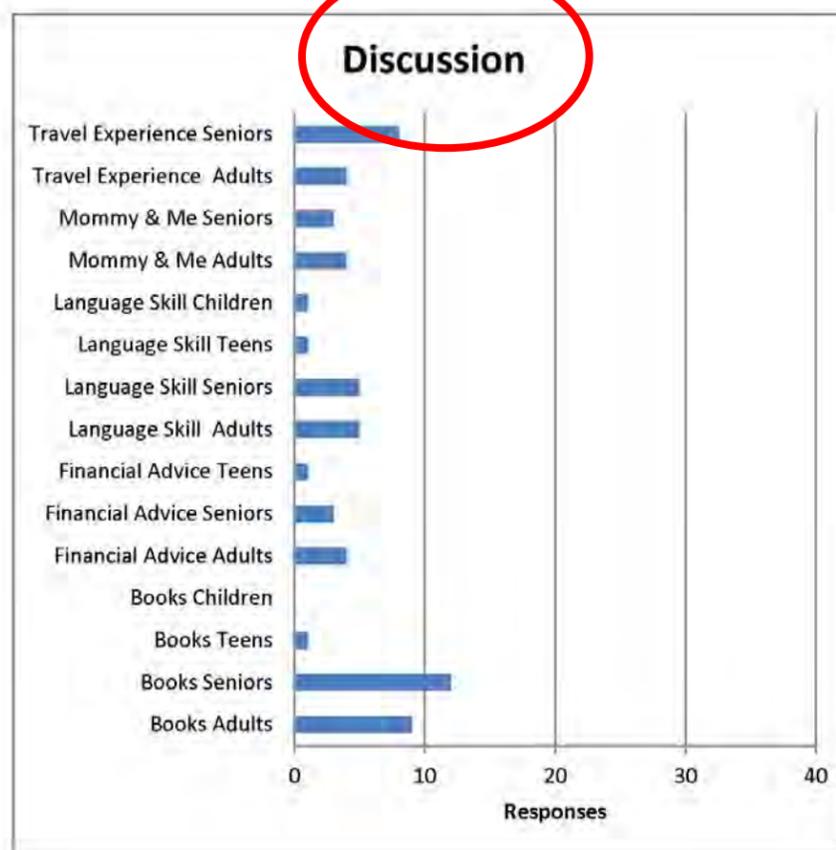
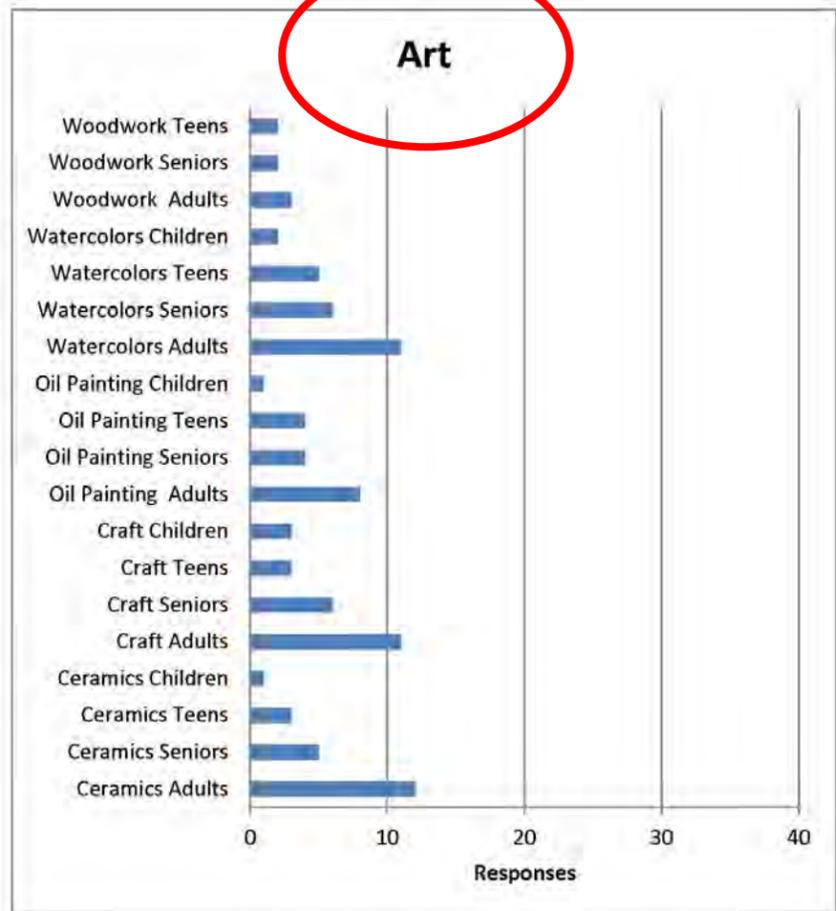
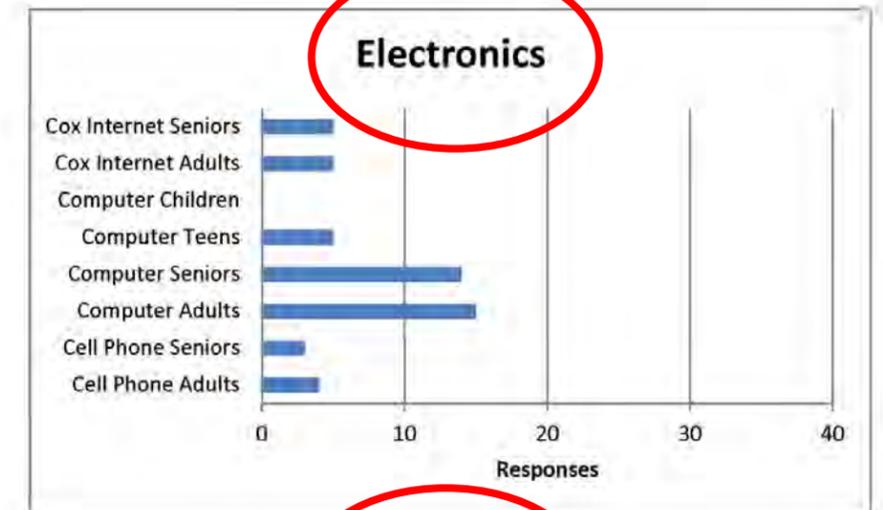
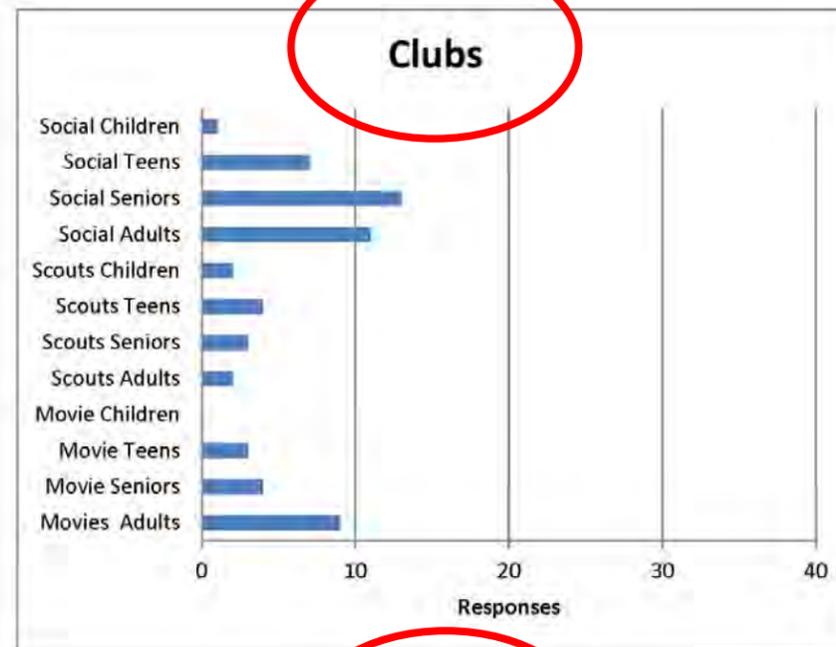
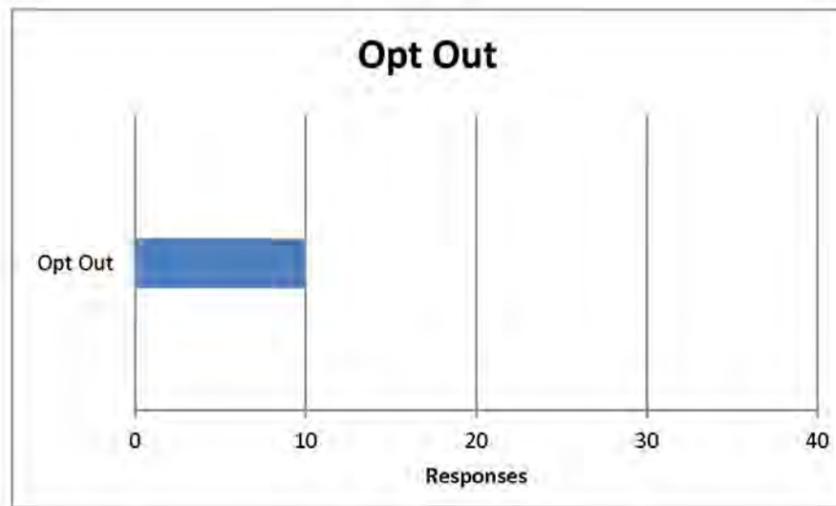
Message Survey Results

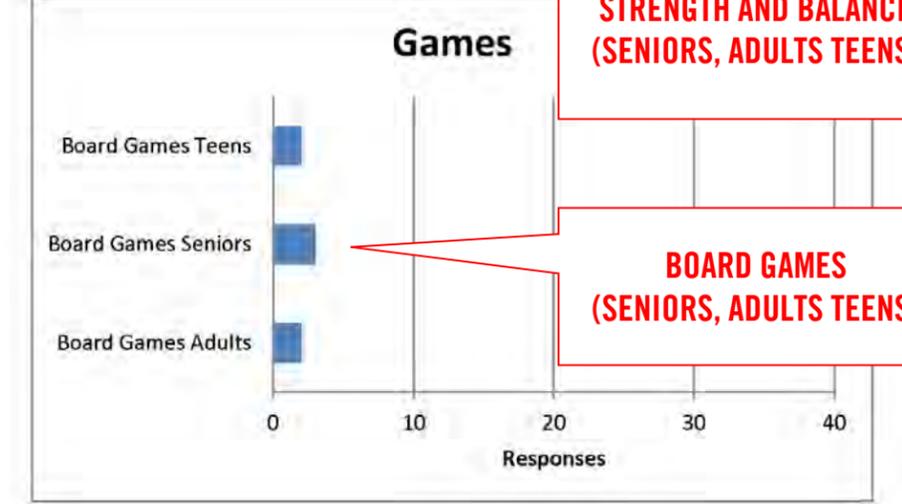
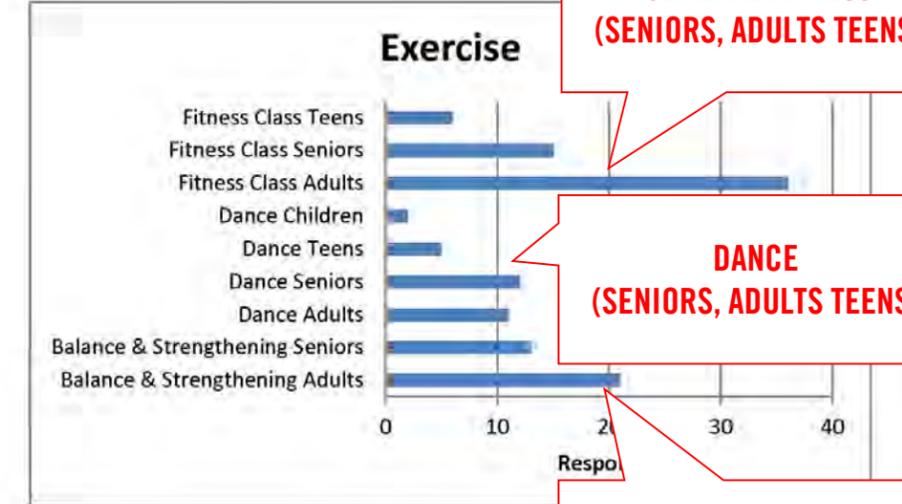
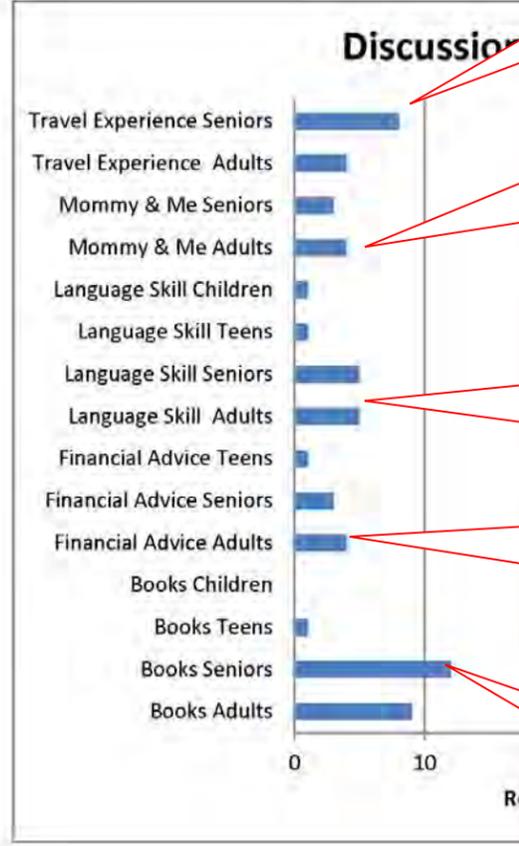
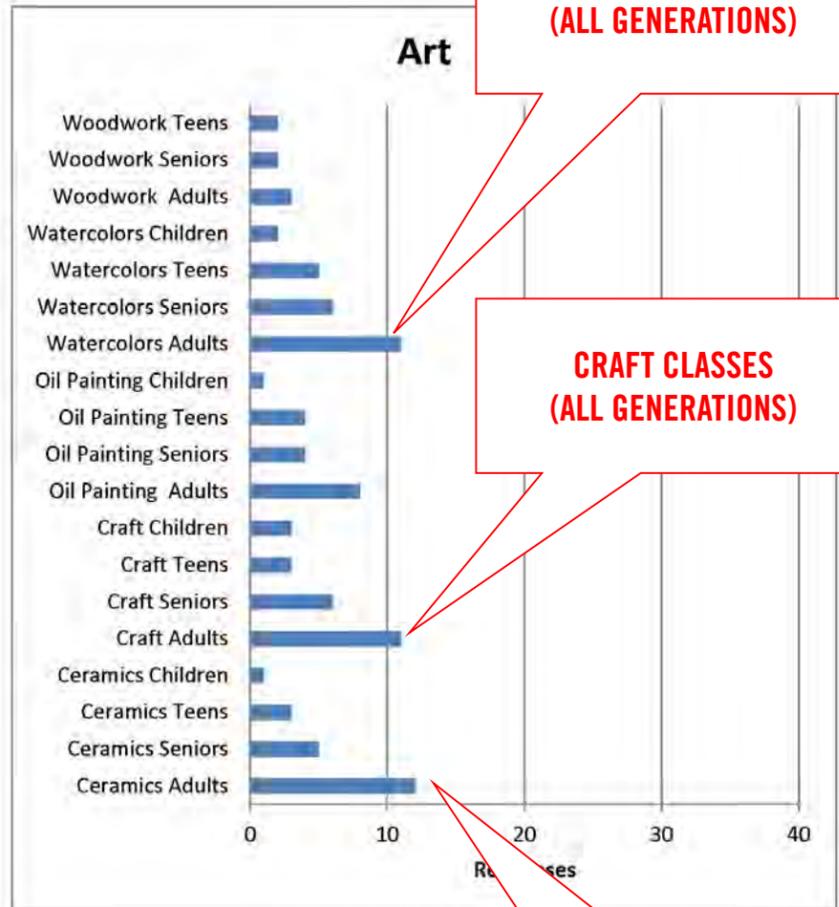
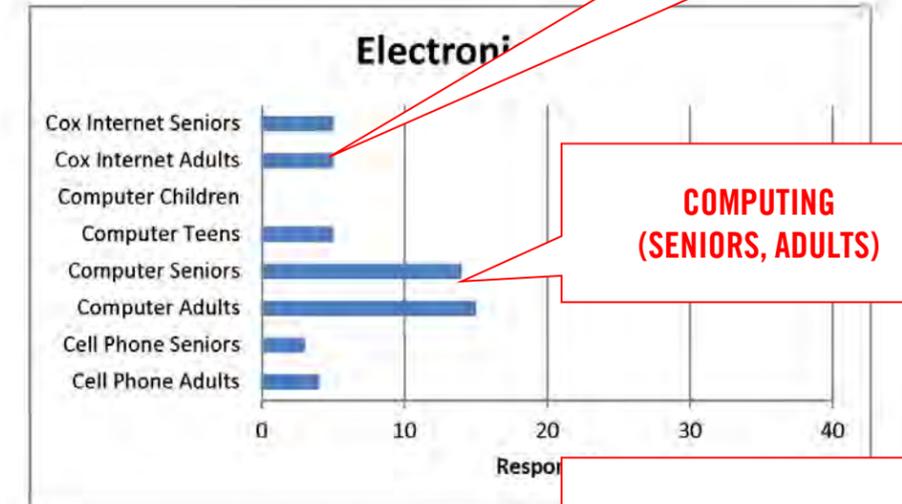
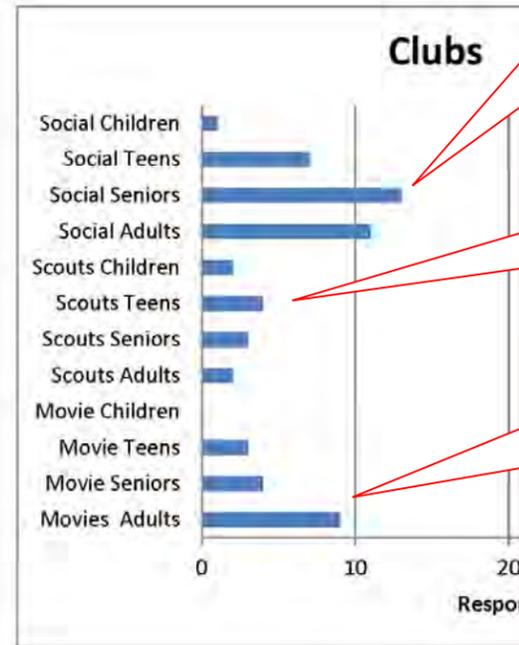
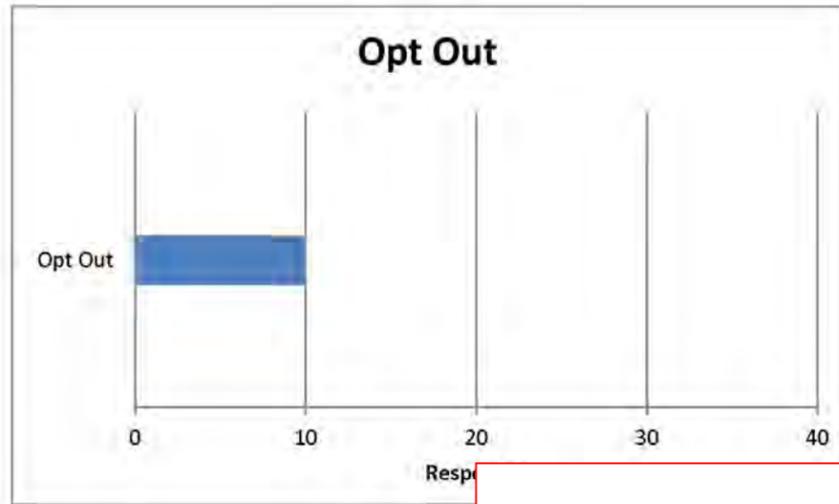
Activities



Electronics







**SOCIAL EVENTS  
(ALL GENERATIONS)**

**SCOUTS EVENTS  
(ALL GENERATIONS)**

**MOVIES  
(SENIORS, ADULTS, TEENS)**

**TRAVEL SHARE  
(SENIORS AND ADULTS)**

**MOMMY AND ME  
(PARENTS AND CHILDREN)**

**LANGUAGE SKILLS  
(SENIORS, ADULTS, TEENS)**

**PERSONAL FINANCE  
(SENIORS, ADULTS, TEENS)**

**BOOK CLUBS  
(SENIORS, ADULTS, TEENS)**

**INTERNET SEARCH  
(SENIORS, ADULTS)**

**COMPUTING  
(SENIORS, ADULTS)**

**GENERAL FITNESS  
(SENIORS, ADULTS TEENS)**

**DANCE  
(SENIORS, ADULTS TEENS)**

**STRENGTH AND BALANCE  
(SENIORS, ADULTS TEENS)**

**BOARD GAMES  
(SENIORS, ADULTS TEENS)**

**PAINTING CLASSES  
(ALL GENERATIONS)**

**CRAFT CLASSES  
(ALL GENERATIONS)**

**CERAMICS CLASSES  
(ALL GENERATIONS)**

# Ladera Linda HOA Board

1. Mentorships (seniors, middle and high school students)
2. Service clubs (Rotary, Lions, Kiwanis)
3. RPV great speakers (inspiring community members)
4. After school programs (care, study, tutoring, classes)

# Multi-generational and flexible

- Painting classes (all generations)
- Craft classes (all generations)
- Ceramics classes (seniors, adults and teens)
- Social events (all generations)
- Scouts meetings (adults, teens, children)
- Movies (seniors, adults, teens)
- Travel share (seniors, adults)
- Mommy and me (grandparents, parents and children)
- Language skills (seniors, adults, teens)
- Personal finance (seniors, adults, teens)
- Book clubs (seniors, adults, teens)
- Internet search (seniors, adults)
- Computing (seniors, adults)
- Mentoring (seniors, adults, teens)
- Service clubs (Rotary, Lions, Kiwanis)
- RPV great speakers (seniors, adults)
- After school programs (children, teens)
- Dance (ballroom etc. all generations)
- Pilates (seniors, adults)
- Yoga (seniors, adults)
- Music (seniors, adults, teens)
- HOA meetings and events
- City council meetings
- City presentations
- Local history and nature talks
- Bridge clubs
- Nature preserve orientation (discovery)

**Projected Ladera Linda Community Center Usage:**

The attached projected schedules show a typical future month of indoor activity at Ladera Linda Community Center on a weekly basis. The usage types and levels are based on the following inputs:

- previous events, classes, and programs offered at Ladera Linda: 2015-2019
- activities at other locations such as Hesse Park
- public outreach efforts
- recent meetings with local HOAs and individual residents
- recent Ladera Linda HOA Survey

The input we have received tells us that these uses reflect real demand. The level of usage would involve the building up of relationships with local non-profits, instructors and community groups. The HOAs and neighbors have expressed a need for the accommodation of adult and senior activities. Accordingly, adult/senior activities included on the schedules are:

- Daily senior exercise classes
- Book club
- Tech/Computer classes
- Social Gatherings
- Card games
- Tai Chi
- Painting Classes
- Dance Classes

The schedule also includes classes and activities geared for children, teen programming, nature-themed activities (in conjunction with organized hikes), youth dance, community/non-profit rentals, and private rentals. The schedules demonstrate that uses would be spread throughout the week. The schedule uses the following usage code:

- **Adult/Senior programming**
- **Child programming**
- **Teen programming**
- **Non-Profit/Community rentals**
- **Nature/Based**
- **Private Rental**
- **Youth Dance**

It is important to remember that the 3/20/18 City Council report on the Ladera Linda Master Plan contained the following constraints on park usage and rentals based on resident concerns about park security and usage levels:

Rental Polices	Current	Proposed
Rental Hours	Not specified to Midnight	10am-9pm
Classes	Not specified	8am-9pm
Private Rentals after 5pm	No current limits	2 x month **
Amplified Music (indoor only)	10am-10pm	11am-8m 9am-8pm classes
Special Events	No limit	8/year
Outdoor Use (drop in)	Not specified	>25 requires approval

\*Restriction does not apply to non-profits, City events, or HOA rentals

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- Book club
- Tech/Computer classes
- Social Gatherings
- Card games
- Tai Chi
- Painting Classes
- Dance Classes

The schedule programming includes dance, community events, and other activities that uses various codes:

- Adult/Senior
- Child program
- Teen program
- Non-Profit/Community
- Nature/Basic
- Private Rental
- Youth Dance

It is important to note that the Master Plan includes resident consultation.

Rental Policies	Current	Proposed
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Classes	Not specified	8am-9pm
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- Painting Classes
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- Teen programming
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- Nature/Based
- Private Rental
- Youth Dance

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Rental Polices	Current	Proposed
----------------	---------	----------

Adult/Senior programming  
 Child programming  
 Teen programming  
 Non-Profit/Community rentals  
 Nature/Based  
 Private Rental  
 Youth Dance

Week 1		Ladera Linda Draft Usage Schedule: Week 4						Key: Adult Senior Child Teen Non-Profit/Community Nature/Based Private Rental Youth Dance
Time	Room	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am-9am	MPR		Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	
	Class							
	Class							
9am-10am	MPR							
	Class		Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Kids Arts and Crafts (10-20)
	Class		Kids Arts & Crafts (10-20)	Kids Cooking Class (10-20)	Kids Arts & Crafts (10-20)	Kids Cooking Class(10-20)	Kids Arts & Crafts (10-20)	Senior Book Club (10-30)
10am-11am	MPR	Private Rental (20-50)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	
	Class		Kids Music (10-20)		Kids Music (10-20)		Kids Music (10-20)	Senior Book Club (10-30)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Kids Arts and Crafts (10-20)
11am-12pm	MPR	Private Rental (20-50)		Kids Storytime (10-20)		Kids Storytime (10-20)	Senior Movie Lunch Club (10-40)	Tai Chi (10-20)
	Class		Senior Tech/Computer (10-20)		Senior Tech/Computer (10-20)			
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
12pm-1pm	MPR	Private Rental (20-50)				Senior Lunch Social (10-30)	Senior Movie Lunch Club (10-40)	
	Class			Senior Lunch Social (10-30)				
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
1pm-2pm	MPR		Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			
	Class		Senior/Adult Art (10-20)	Ceramics (10-20)	Senior/Adult Art (10-20)	Ceramics (10-20)		
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
2pm-3pm	MPR	Senior Travel Talk (10-30)	Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			
	Class			Comm/Non Profit (10-20)		Non-profit mtg (20-40)	Senior Friday Finances (10-30)	
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
3pm-4pm	MPR	Senior Travel Talk (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class			Comm/Non Profit (10-20)	Tai Chi (10-20)	Non-profit mtg (20-40)		
	Class		After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
4pm-5pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class	Youth Martial Arts	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
	Class				Yoga (10-15)			
5pm-6pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	
	Class	Youth Martial Arts	Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)	Community Rental (20-40)	
	Class							
6pm-7pm	MPR	Community Rental (20-50)	Adult/Senior Dance (10-20)					Community/Non Profit (20-50)
	Class		Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)	Community Rental (20-40)	
	Class					Teen Program (10-20)		
7pm-8pm	MPR	Community Rental (20-50)	Adult/Senior Dance (10-20)	Senior Adult Tap (10-20)				Community/Non Profit (20-50)
	Class							
	Class							
8pm-9pm	MPR	Community Rental (20-50)						Community/Non Profit (20-50)
	Class							
	Class							
9pm-10pm	MPR							
	Class							
	Class							

Week 1		Ladera Linda Draft Usage Schedule: Week 4							Key: Adult Senior Child Teen Non-Profit/Community Nature/Based Private Rental Youth Dance									
Time	Room	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Time	Room	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
8am-9am	MPR		Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)											
	Class																	
	Class																	
9am-10am	MPR																	
	Class		Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)										Kids Arts and Crafts (10-20)
	Class		Kids Arts & Crafts (10-20)	Kids Cooking Class (10-20)	Kids Arts & Crafts (10-20)	Kids Cooking Class(10-20)	Kids Arts & Crafts (10-20)	Senior Book Club (10-30)										
10am-11am	MPR	Private Rental (20-50)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)											
	Class		Kids Music (10-20)		Kids Music (10-20)		Kids Music (10-20)	Senior Book Club (10-30)										
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Kids Arts and Crafts (10-20)										
11am-12pm	MPR	Private Rental (20-50)		Kids Storytime (10-20)		Kids Storytime (10-20)												
	Class		Senior Tech/Computer (10-20)		Senior Tech/Computer (10-20)			Senior Movie Lunch Club (10-40)										Tai Chi (10-20)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)											
12pm-1pm	MPR	Private Rental (20-50)					Senior Lunch Social (10-30)	Senior Movie Lunch Club (10-40)										
	Class			Senior Lunch Social (10-30)														
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)										
1pm-2pm	MPR		Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)													
	Class		Senior/Adult Art (10-20)	Ceramics (10-20)	Senior/Adult Art (10-20)	Ceramics (10-20)												
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)										
2pm-3pm	MPR	Senior Travel Talk (10-30)	Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)													
	Class			Comm/Non Profit (10-20)		Non-profit mtg (20-40)	Senior Friday Finances (10-30)											
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)										
3pm-4pm	MPR	Senior Travel Talk (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)										
	Class			Comm/Non Profit (10-20)	Tai Chi (10-20)	Non-profit mtg (20-40)												
	Class		After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)										
4pm-5pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)										
	Class	Youth Martial Arts	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)										Senior Adult Oil Painting (20-30)
	Class				Yoga (10-15)													
5pm-6pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)										
	Class	Youth Martial Arts	Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)	Community Rental (20-40)											
	Class																	
6pm-7pm	MPR	Community Rental (20-50)																
	Class					Adult Computer (10-20)	Community Rental (20-40)	Community/Non Profit (20-50)										
	Class						Teen Program (10-20)											
7pm-8pm	MPR	Community																
	Class							Community/Non Profit (20-50)										
	Class																	
8pm-9pm	MPR	Community																
	Class							Community/Non Profit (20-50)										
	Class																	
9pm-10pm	MPR																	
	Class																	
	Class																	

**Youth Dance (10-30)**

**Comm/Non Profit (10-20)**

**After School Program (10-20)**

**TUESDAY 3-4 PM**

Week 1		Ladera Linda Draft Usage Schedule: Week 4			Key: Adult Senior Child Teen Non-Profit/Community Nature/Based Private Rental Youth Dance			
Time	Room	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am-9am	MPR		Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	
	Class							
	Class							
9am-10am	MPR							
	Class		Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Kids Arts and Crafts (10-20)
	Class		Kids Arts & Crafts (10-20)	Kids Cooking Class (10-20)	Kids Arts & Crafts (10-20)	Kids Cooking Class(10-20)	Kids Arts & Crafts (10-20)	Senior Book Club (10-30)
10am-11am	MPR	Private Rental (20-50)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	
	Class		Kids Music (10-20)		Kids Music (10-20)		Kids Music (10-20)	Senior Book Club (10-30)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Kids Arts and Crafts (10-20)
11am-12pm	MPR	Private Rental (20-50)		Kids Storytime (10-20)		Kids Storytime (10-20)	Senior Movie Lunch Club (10-40)	Tai Chi (10-20)
	Class		Senior Tech/Computer (10-20)		Senior Tech/Computer (10-20)			
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
12pm-1pm	MPR	Private Rental (20-50)				Senior Lunch Social (10-30)	Senior Movie Lunch Club (10-40)	
	Class			Senior Lunch Social (10-30)				
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
1pm-2pm	MPR		Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			
	Class		Senior/Adult Art (10-20)	Ceramics (10-20)	Senior/Adult Art (10-20)	Ceramics (10-20)		
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
2pm-3pm	MPR	Senior Travel Talk (10-30)	Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			
	Class			Comm/Non Profit (10-20)		Non-profit mtg (20-40)	Senior Friday Finances (10-30)	
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
3pm-4pm	MPR	Senior Travel Talk (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class			Comm/Non Profit (10-20)	Tai Chi (10-20)			
	Class		After School Program (10-20)	After School Program (10-20)	After School Program (10-20)		After School Program (10-20)	
4pm-5pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)		
	Class	Youth Martial Arts	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)		
	Class				Yoga (10-11)			
5pm-6pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)		
	Class	Youth Martial Arts	Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Progr			
	Class							
6pm-7pm	MPR	Community Rental (20-50)	Adult/Senior Dance (10-20)					
	Class		Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Progr			
	Class							
7pm-8pm	MPR	Community Rental (20-50)	Adult/Senior Dance (10-20)	Senior Adult Tap (10-20)				
	Class							
	Class							
8pm-9pm	MPR	Community Rental (20-50)						
	Class							
	Class							
9pm-10pm	MPR							
	Class							
	Class							

**Adult/Senior Card Games (10-40)**

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**Senior/Adult Art (10-20)**

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**Child Day Care Class (10-20)**

**WEDNESDAY 1-2 PM**

Week 1		Ladera Linda Draft Usage Schedule: Week 4				Key: Adult Senior Child Teen Non-Profit/Community Nature/Based Private Rental Youth Dance			
Time	Room	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
8am-9am	MPR		Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)		
	Class								
					Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Kids Arts and Crafts (10-20)	
					Kids Arts & Crafts (10-20)	Kids Cooking Class(10-20)	Kids Arts & Crafts (10-20)	Senior Book Club (10-30)	
					Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)		
					Kids Music (10-20)		Kids Music (10-20)	Senior Book Club (10-30)	
					Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Kids Arts and Crafts (10-20)	
						Kids Storytime (10-20)	Senior Movie Lunch Club (10-40)	Tai Chi (10-20)	
					Senior Tech/Computer (10-20)				
					Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)		
						Senior Lunch Social (10-30)	Senior Movie Lunch Club (10-40)		
					Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)		
					Adult/Senior Card Games (10-40)				
					Senior/Adult Art (10-20)	Ceramics (10-20)			
					Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)		
2pm-3pm	MPR	Senior Travel Talk (10-30)		Adult Se	Adult/Senior Card				
	Class			Comm/Non Profit (10-20)					
	Class			Child Day	Child Day Care Class (10-20)	Child Day Ca			
3pm-4pm	MPR	Senior Travel Talk (10-30)		Youth Dan	Youth Dance (10-30)	Youth Dance			
	Class			Comm/Non Profit (10-20)	After School Program (10-20)	Tai Chi (10-20)			
	Class			After School		After School			
4pm-5pm	MPR			Youth Dance	Youth Dance (10-30)	Youth Dance			
	Class	Youth Martial Arts		After School	After School Program (10-20)	After School			
	Class					Yoga (10-15)			
5pm-6pm	MPR			Youth Dance	Youth Dance (10-30)	Youth Dance			
	Class	Youth Martial Arts		Teen Program	Senior/Adult Computer (10-20)	Teen Program			
	Class								
6pm-7pm	MPR	Community Rental (20-50)		Adult/Senior Dance (10-20)					
	Class			Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program			
	Class								
7pm-8pm	MPR	Community Rental (20-50)		Adult/Senior Dance (10-20)	Senior Adult Tap (10-20)				
	Class								
	Class								
8pm-9pm	MPR	Community Rental (20-50)						Community/Non Profit (20-50)	
	Class								
	Class								
9pm-10pm	MPR								
	Class								
	Class								

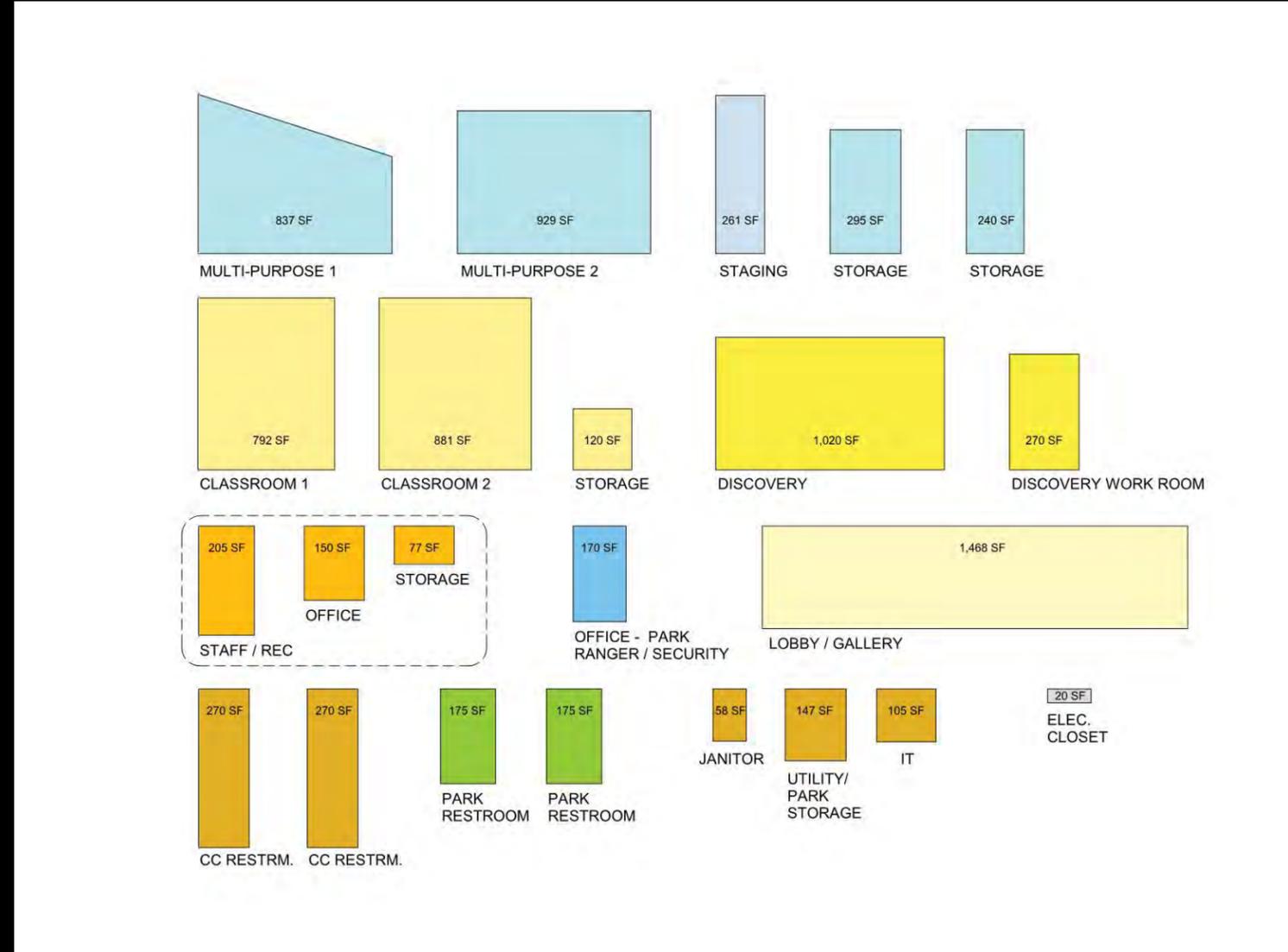
**Adult/Senior Dance (10-20)**  
**Teen Program (10-20)**  
**MONDAY 6 - 7 PM**

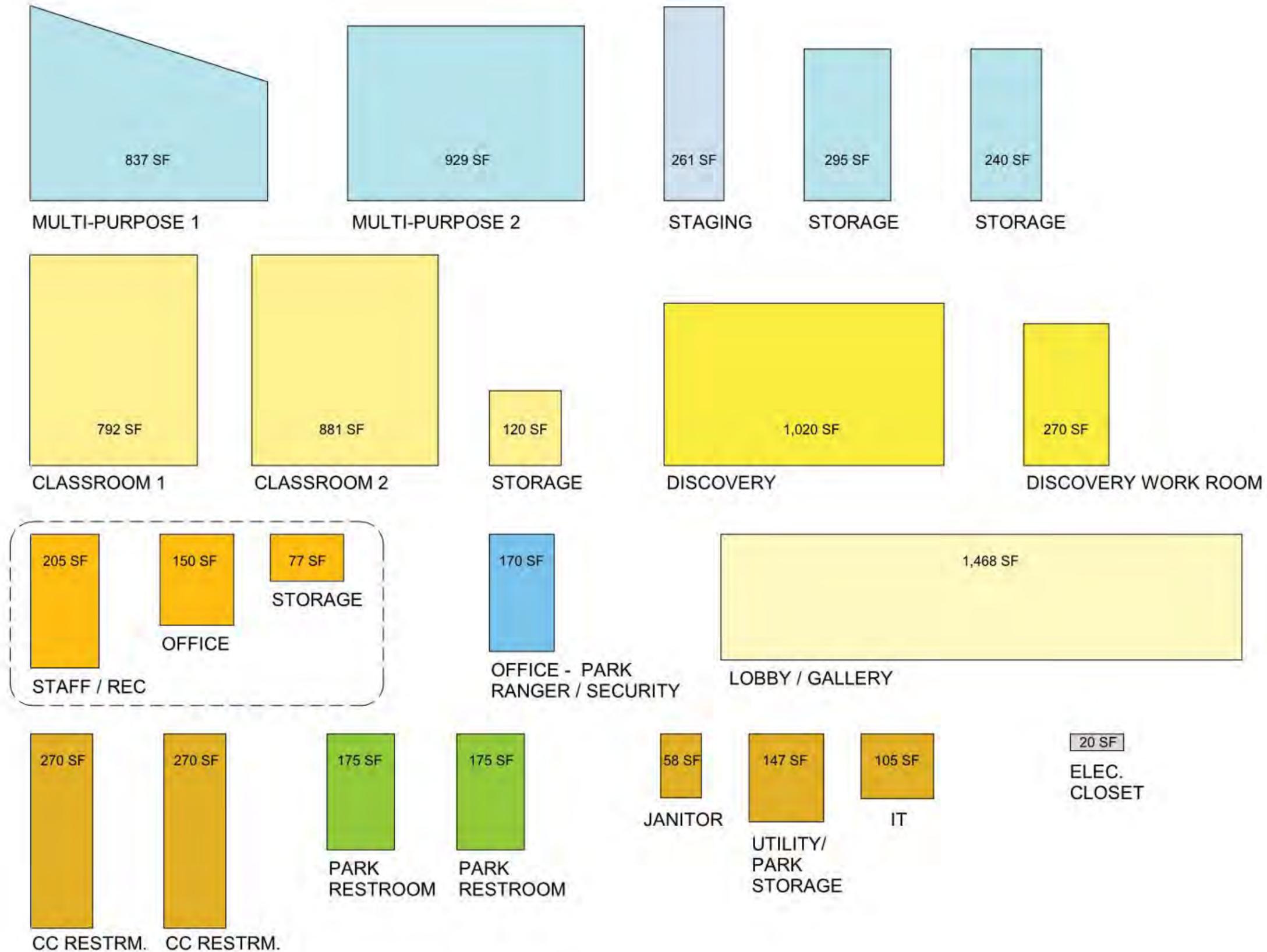
**Senior/Balance & Strength (10-20)**  
**Kids Music (10-20)**  
**Child Day Care Class (10-20)**  
**FRIDAY 10 - 11 AM**

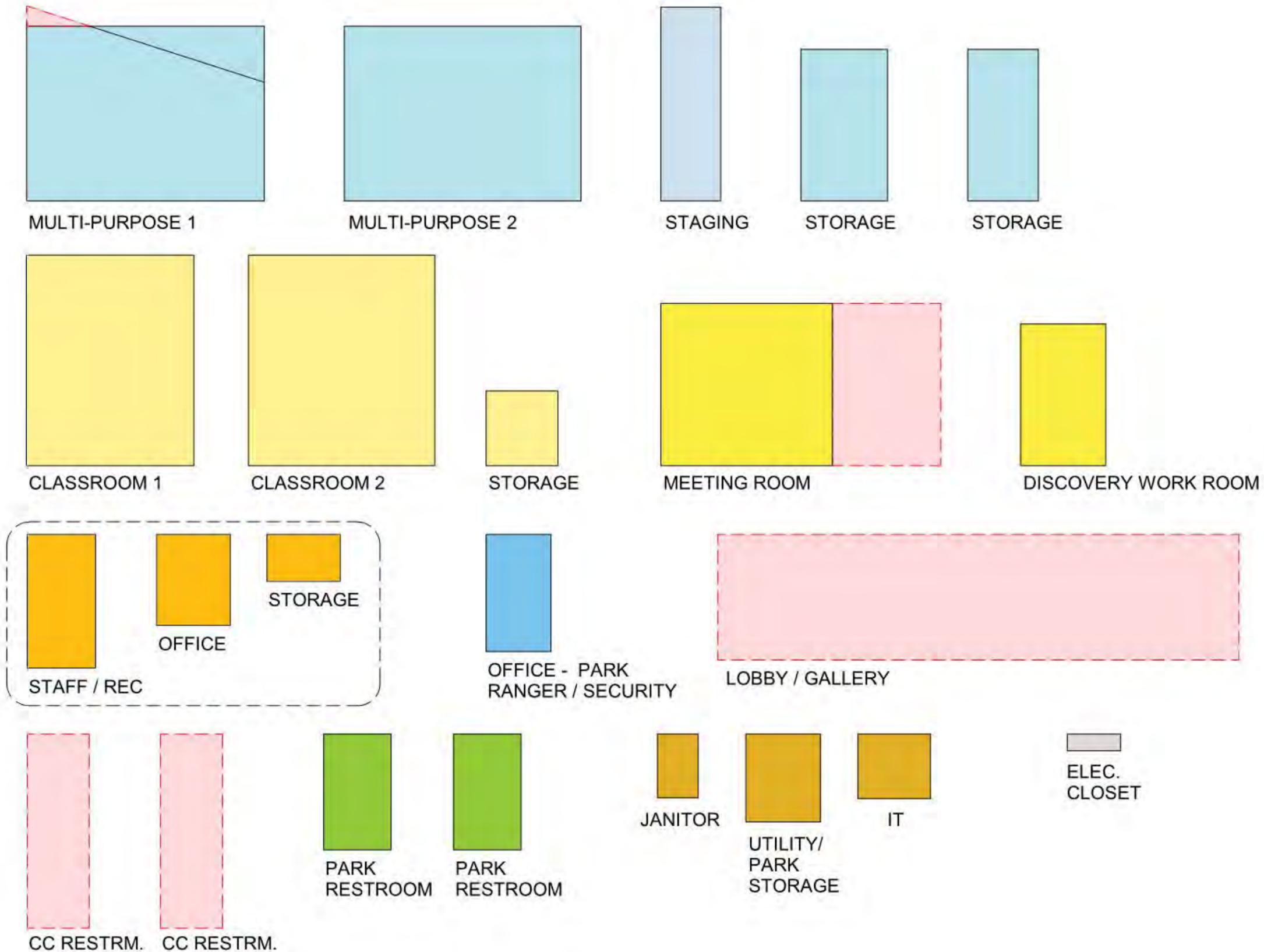




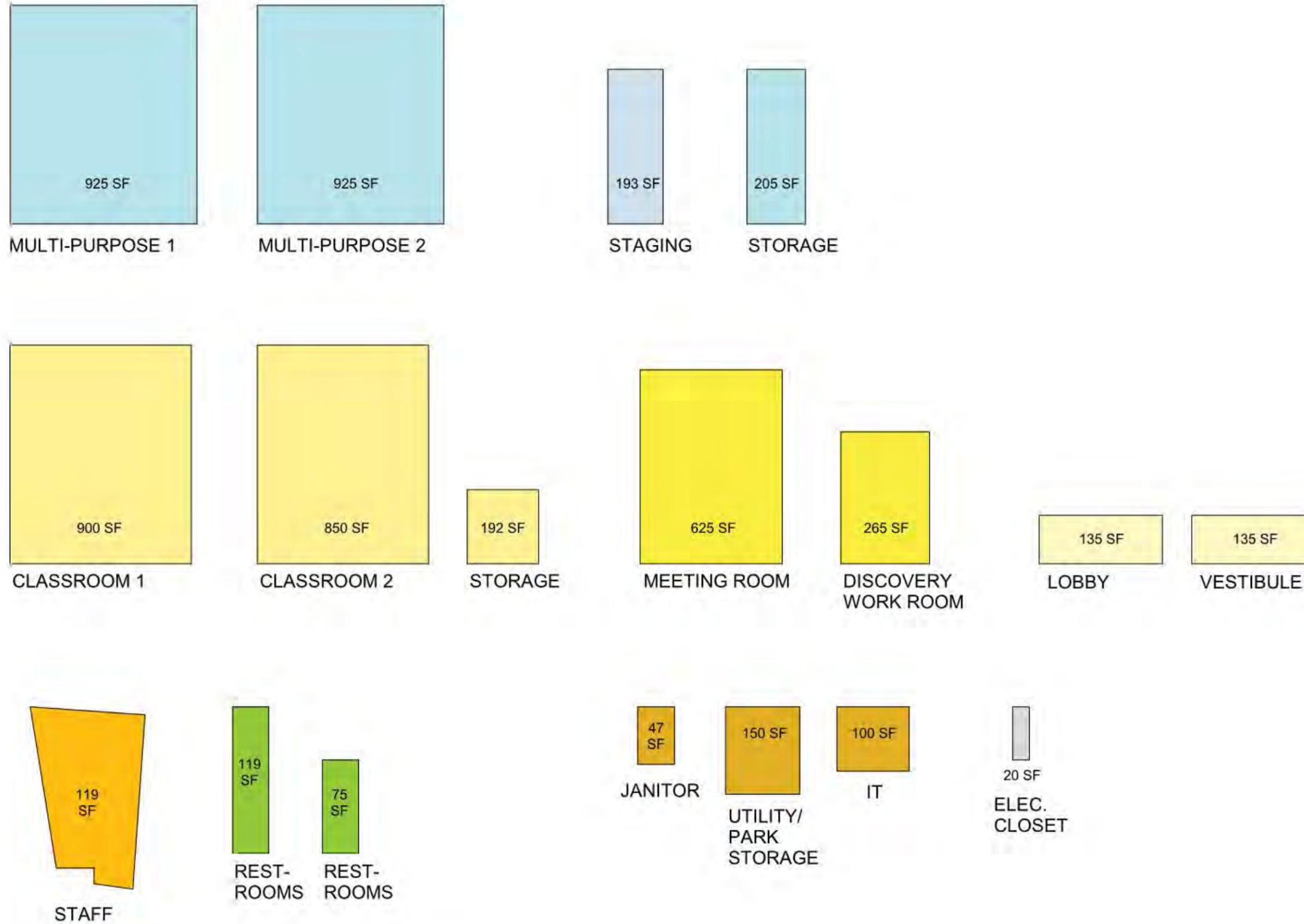
COMMUNITY BUILDING AT LADERA LINDA COMMUNITY PARK  
**FLOOR PLAN**

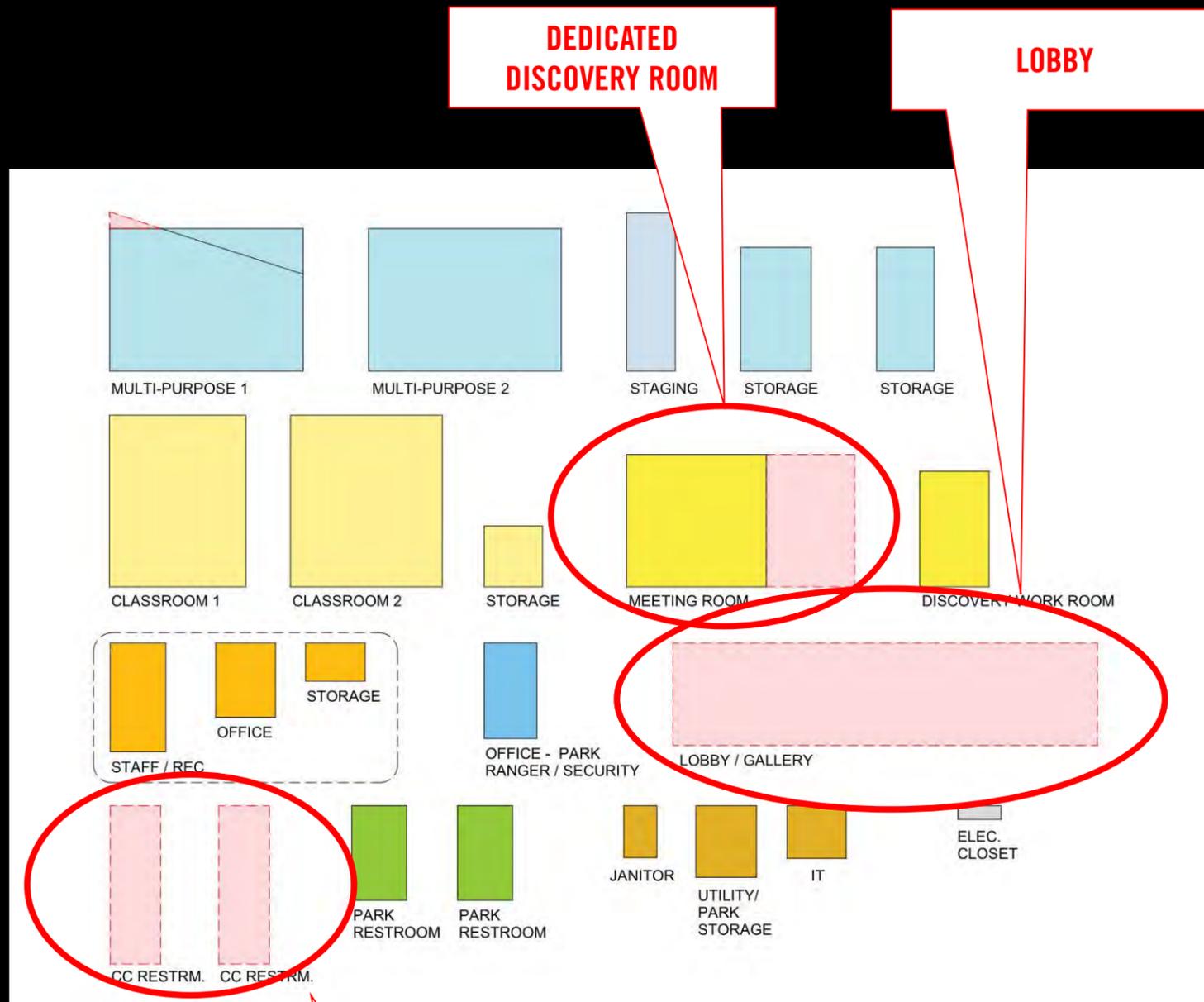




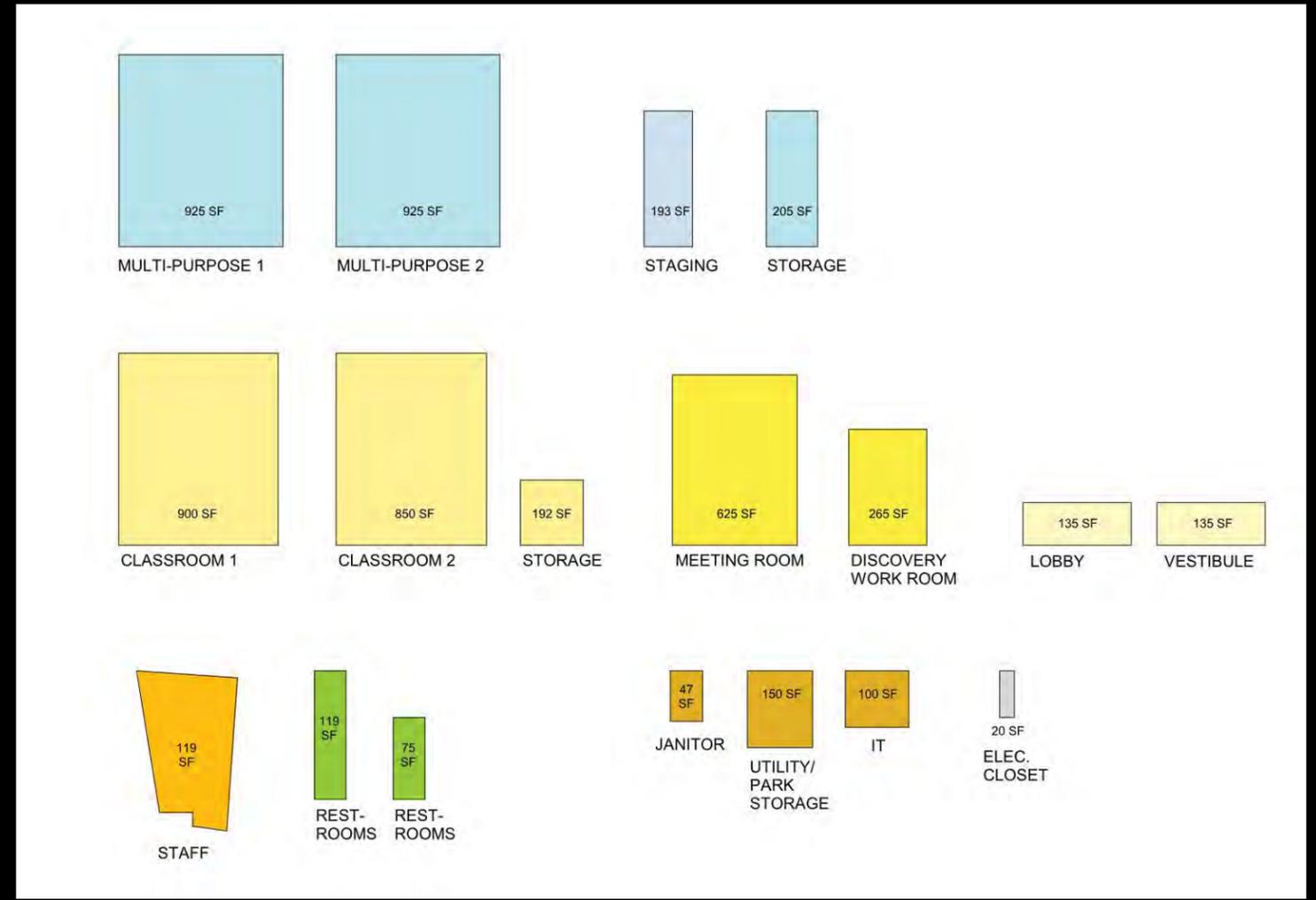


POTENTIAL PROGRAM REDUCTIONS





CITY COUNCIL APPROVED COMMUNITY CENTER BUILDING PROGRAM (8,900 ASF)



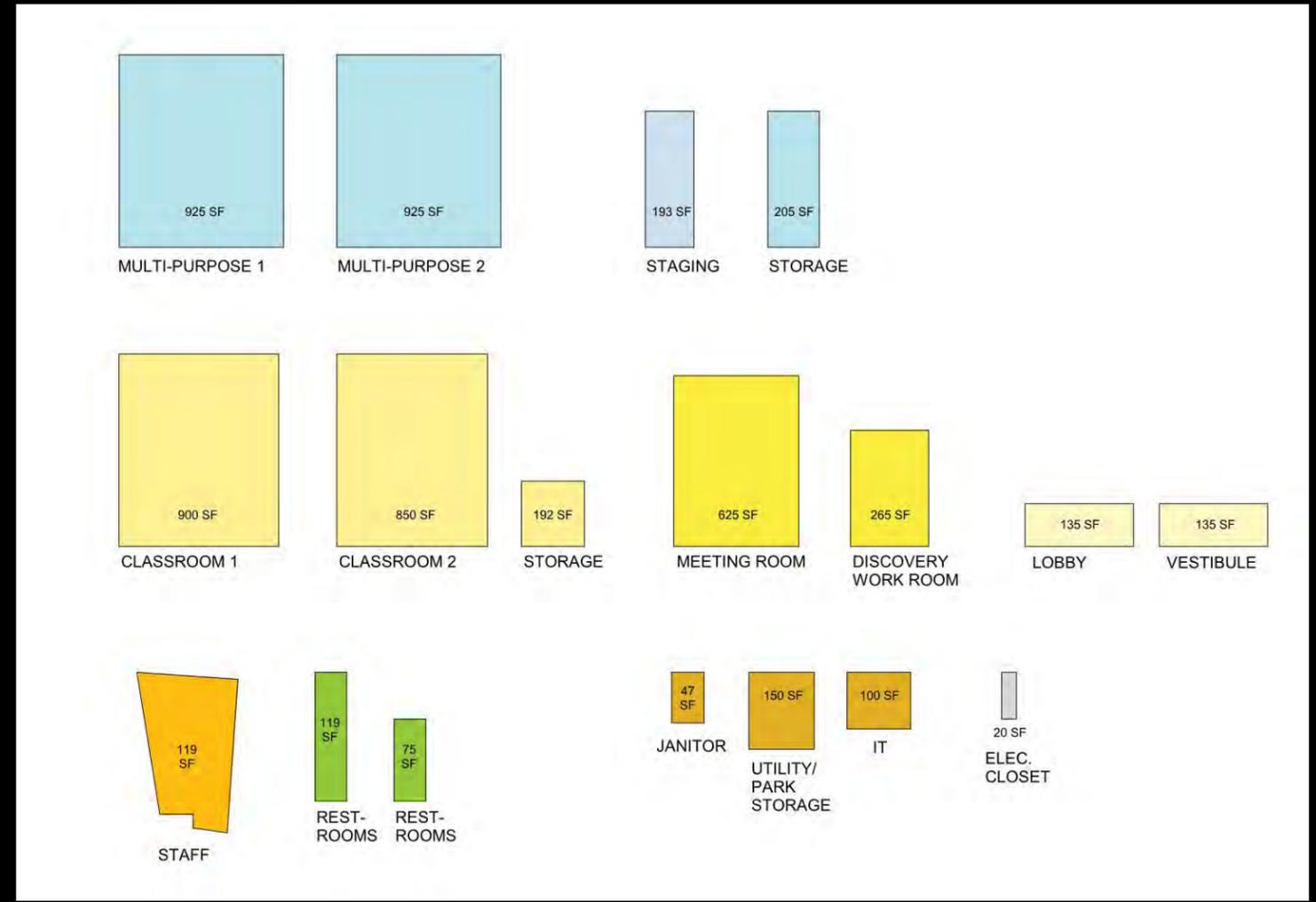
REDUCED COMMUNITY CENTER BUILDING PROGRAM (5,980 ASF)

ONE SET OF RESTROOMS



CITY COUNCIL APPROVED COMMUNITY CENTER BUILDING PROGRAM (8,900 ASF)

ONE SET OF RESTROOMS

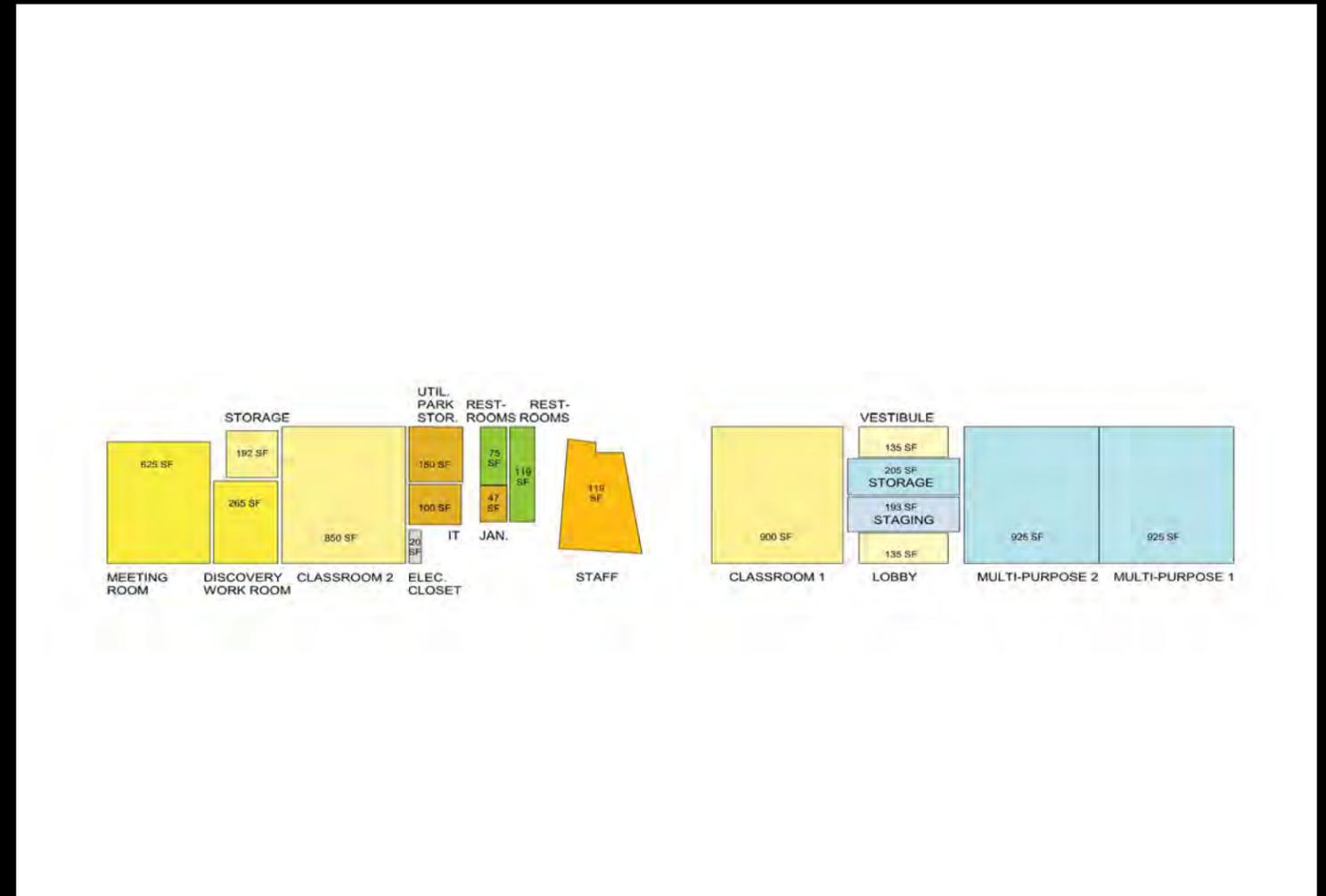


REDUCED COMMUNITY CENTER BUILDING PROGRAM (5,980 ASF)



CITY COUNCIL APPROVED COMMUNITY CENTER BUILDING PROGRAM (8,900 ASF)

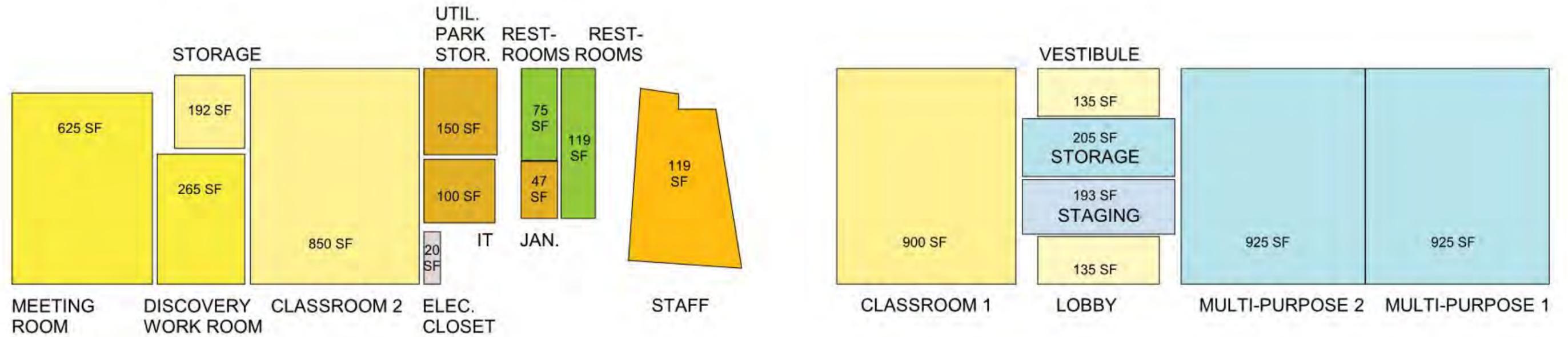
ONE SET OF RESTROOMS



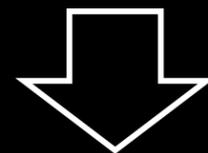
REDUCED COMMUNITY CENTER BUILDING PROGRAM (5,980 ASF)



NORTH (PRESERVE)

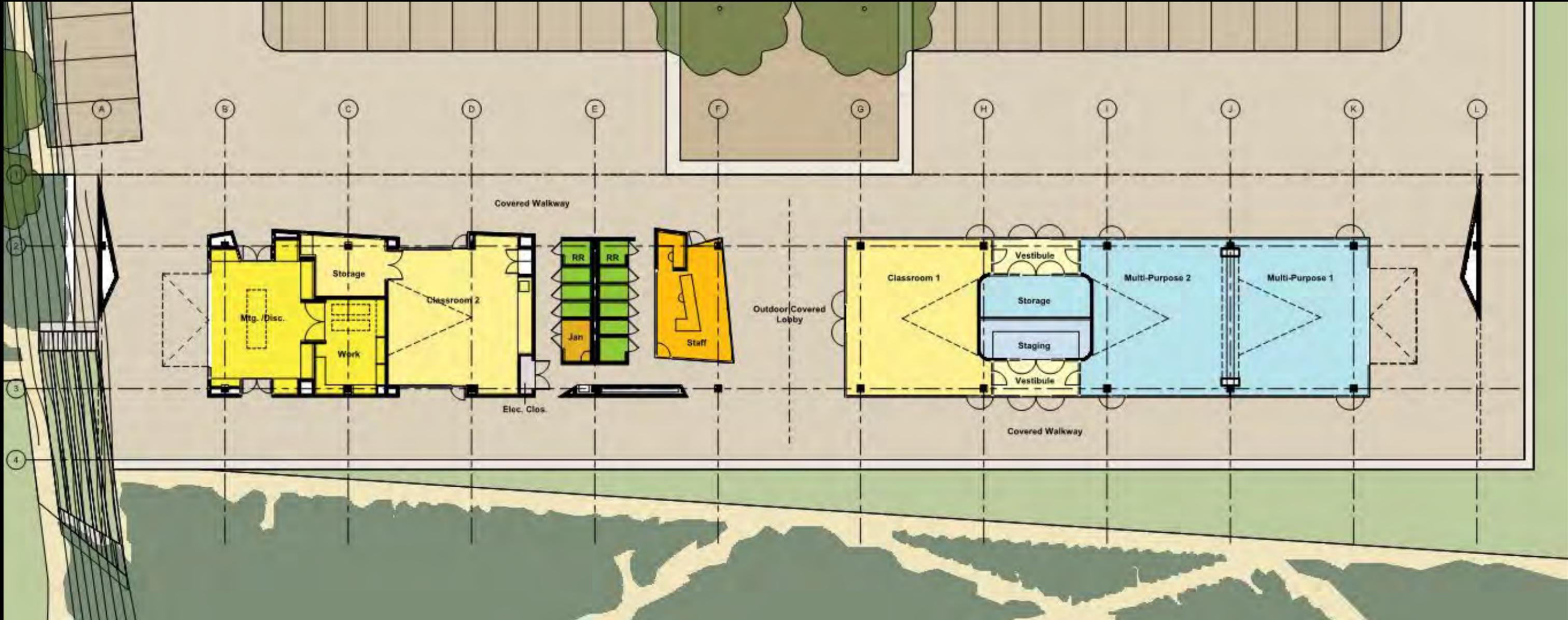


SOUTH (OCEAN)

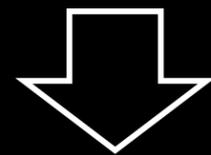


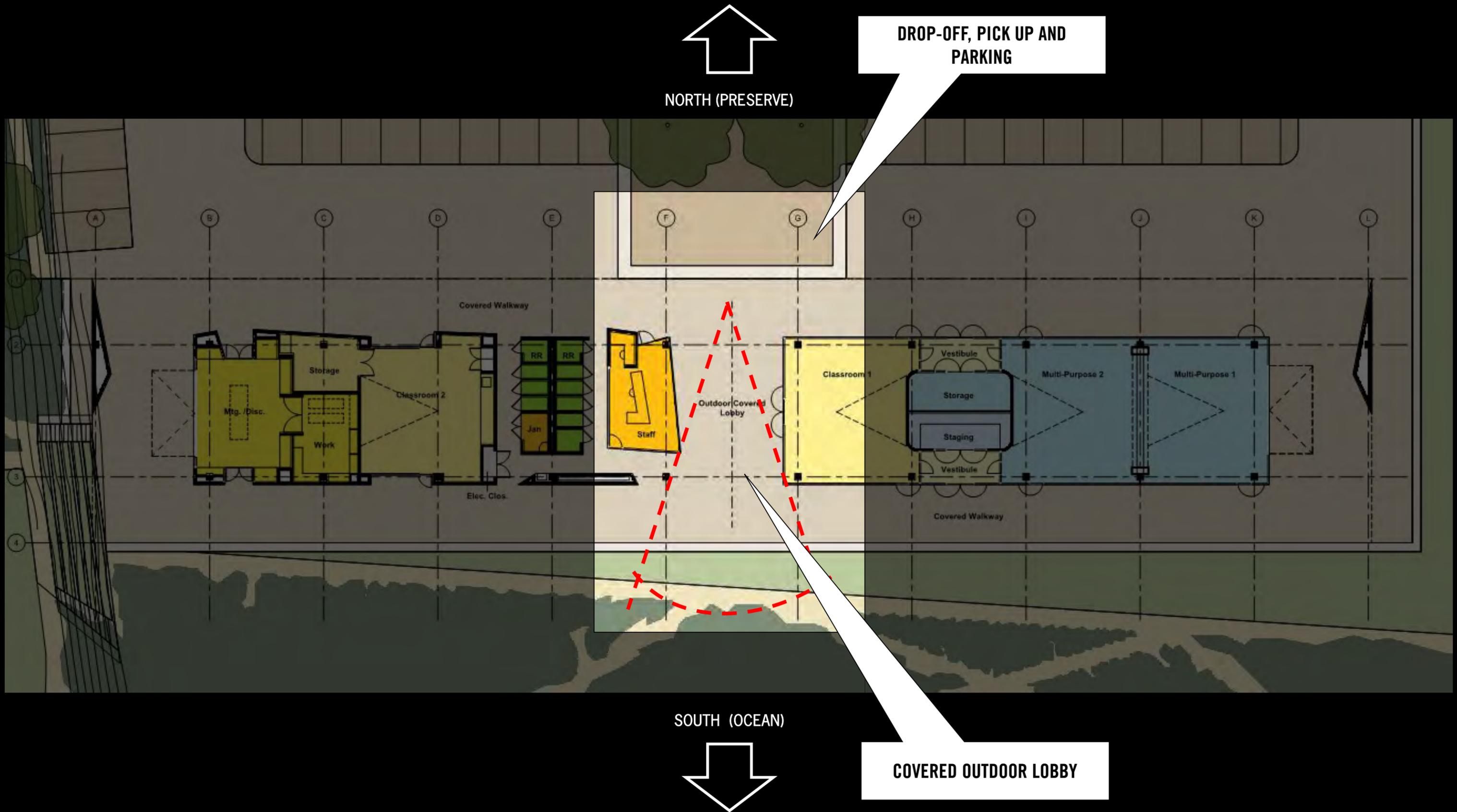


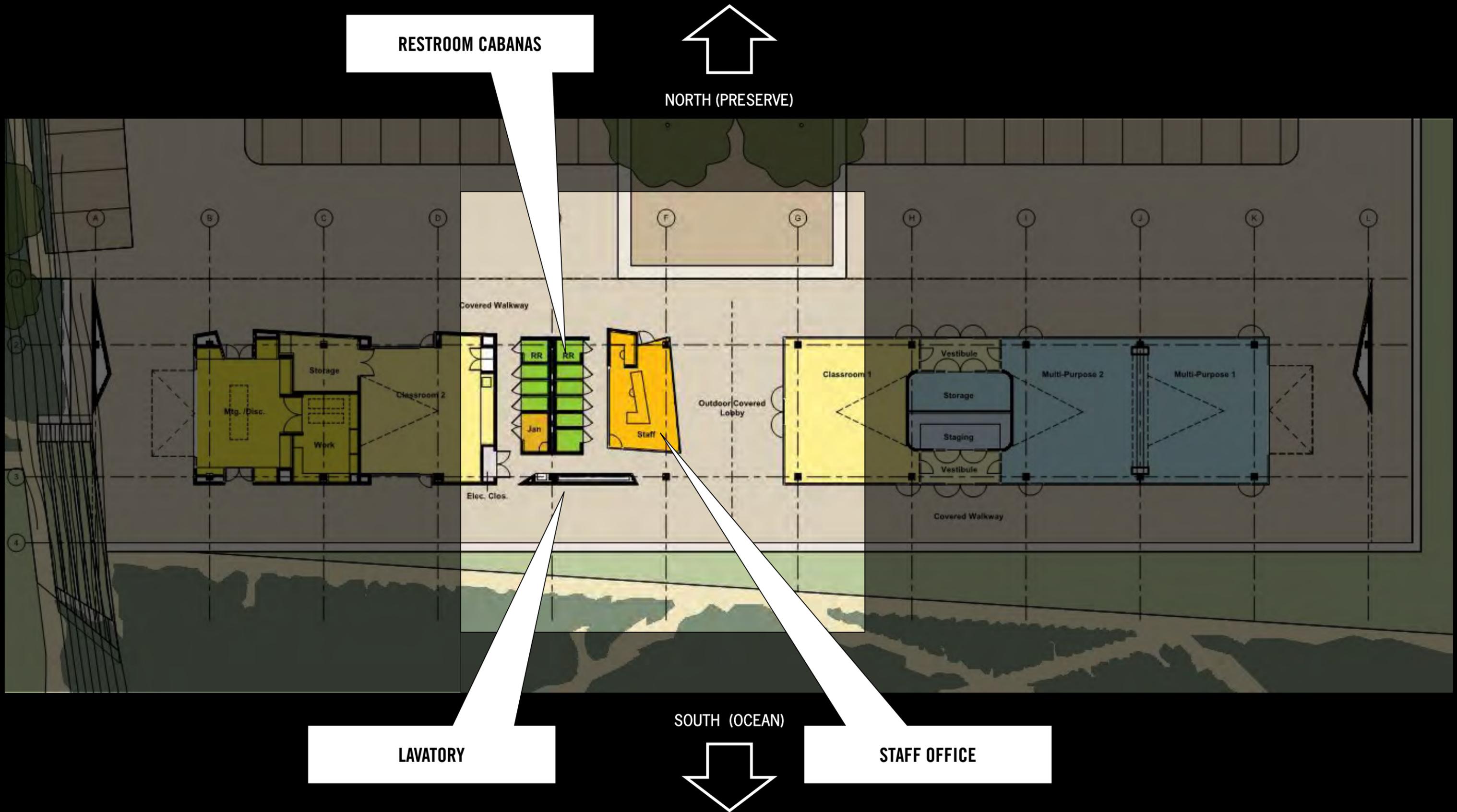
NORTH (PRESERVE)



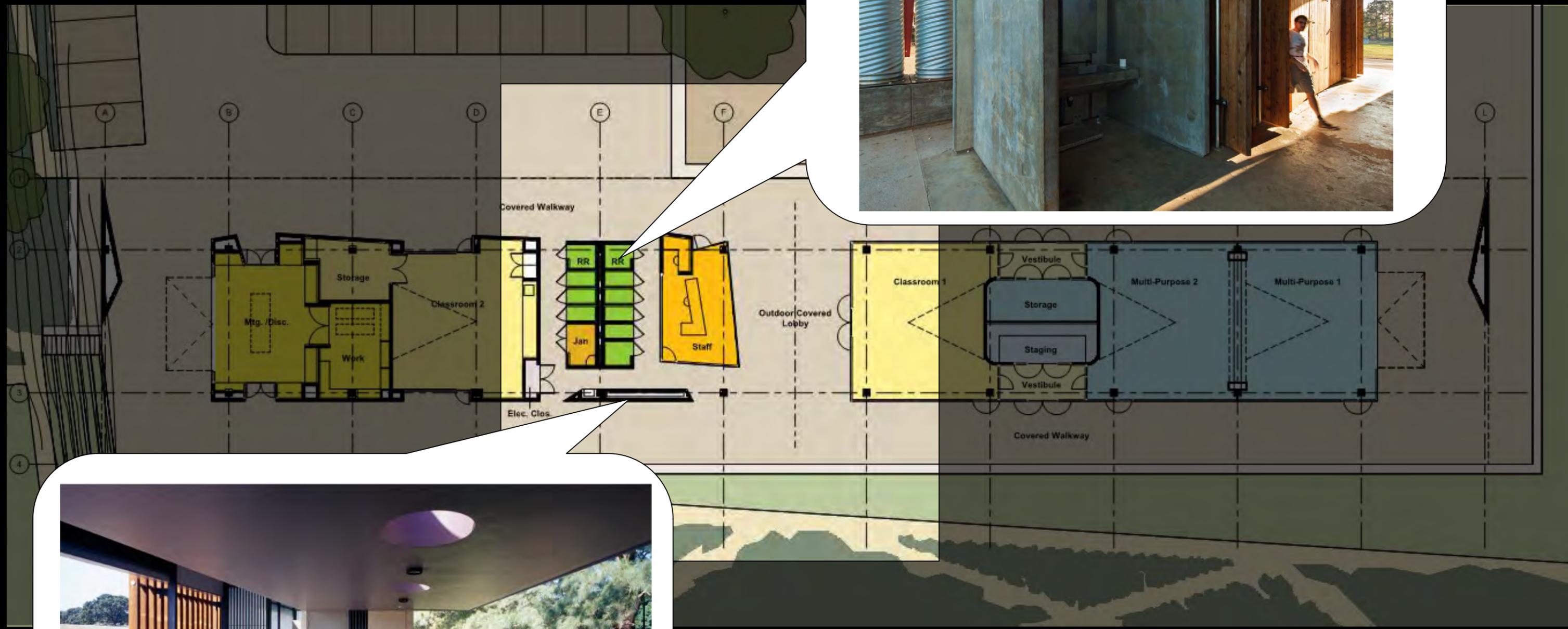
SOUTH (OCEAN)



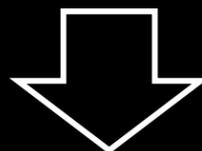


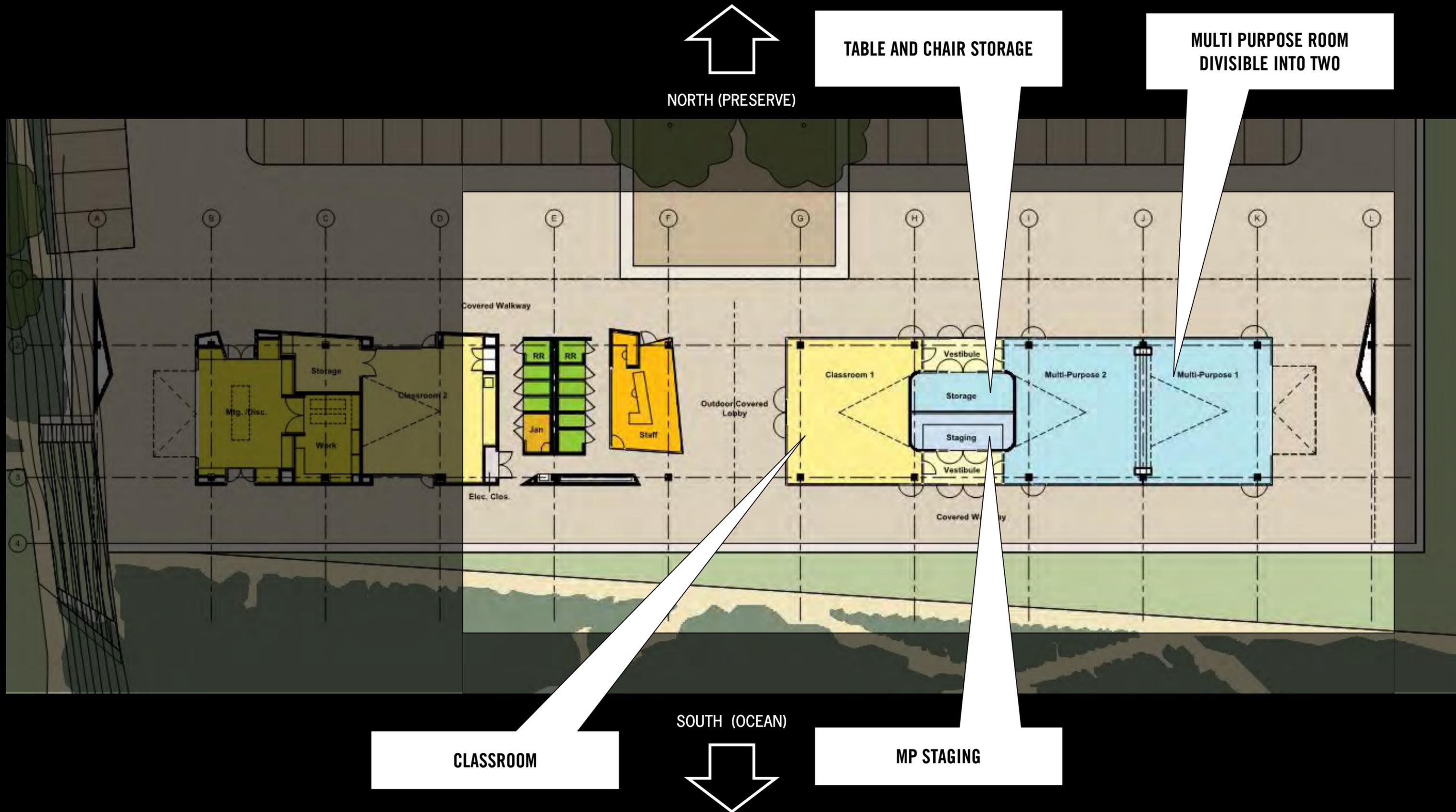


NORTH (PRE)



SOUTH (OCEAN)

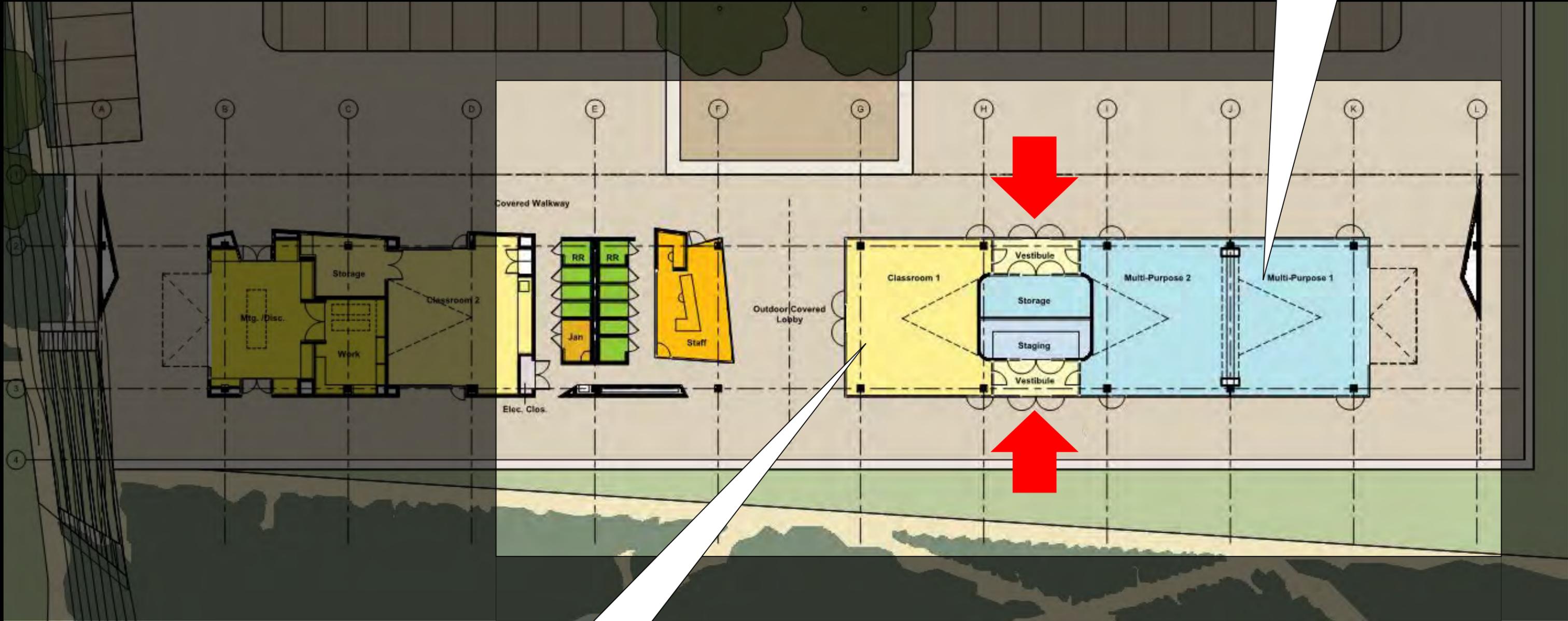






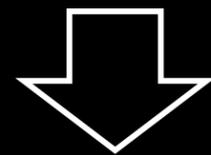
NORTH (PRESERVE)

MULTI PURPOSE ROOM  
DIVISIBLE INTO TWO



CLASSROOM

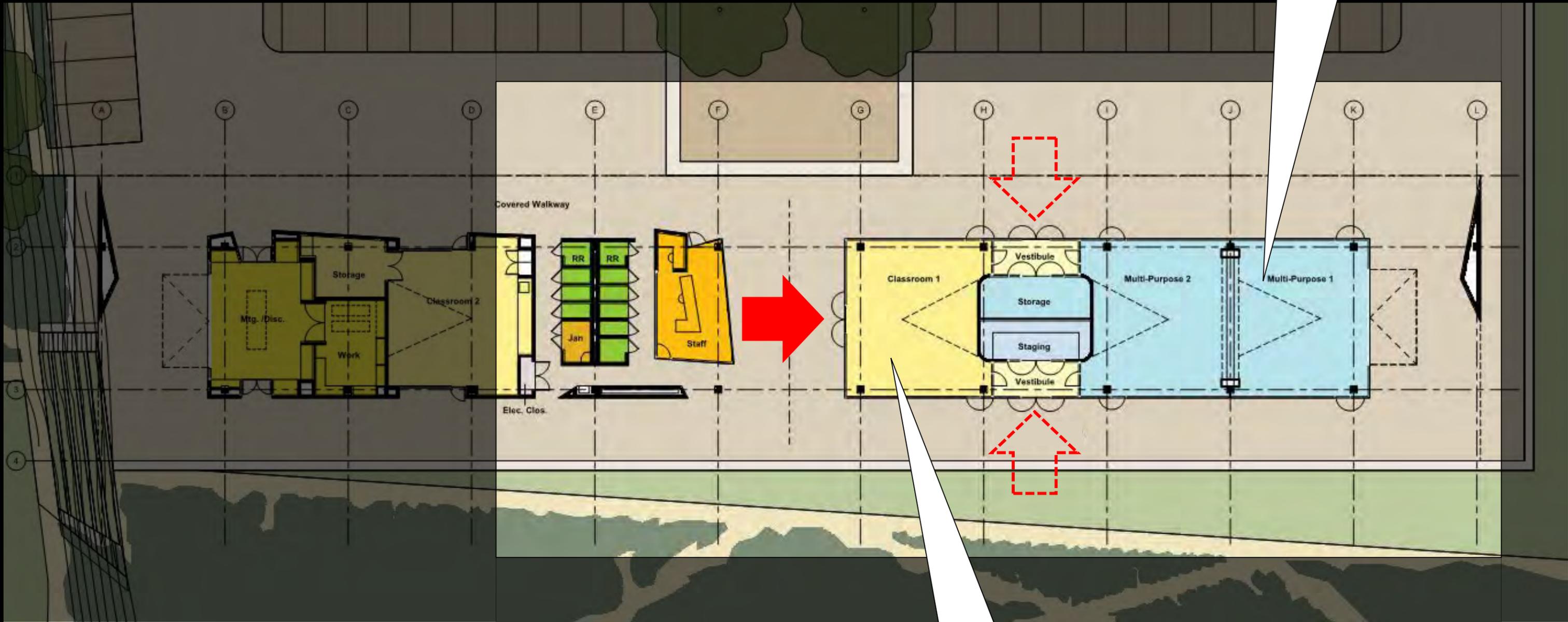
SOUTH (OCEAN)



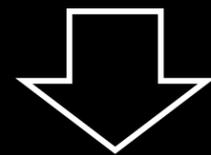


NORTH (PRESERVE)

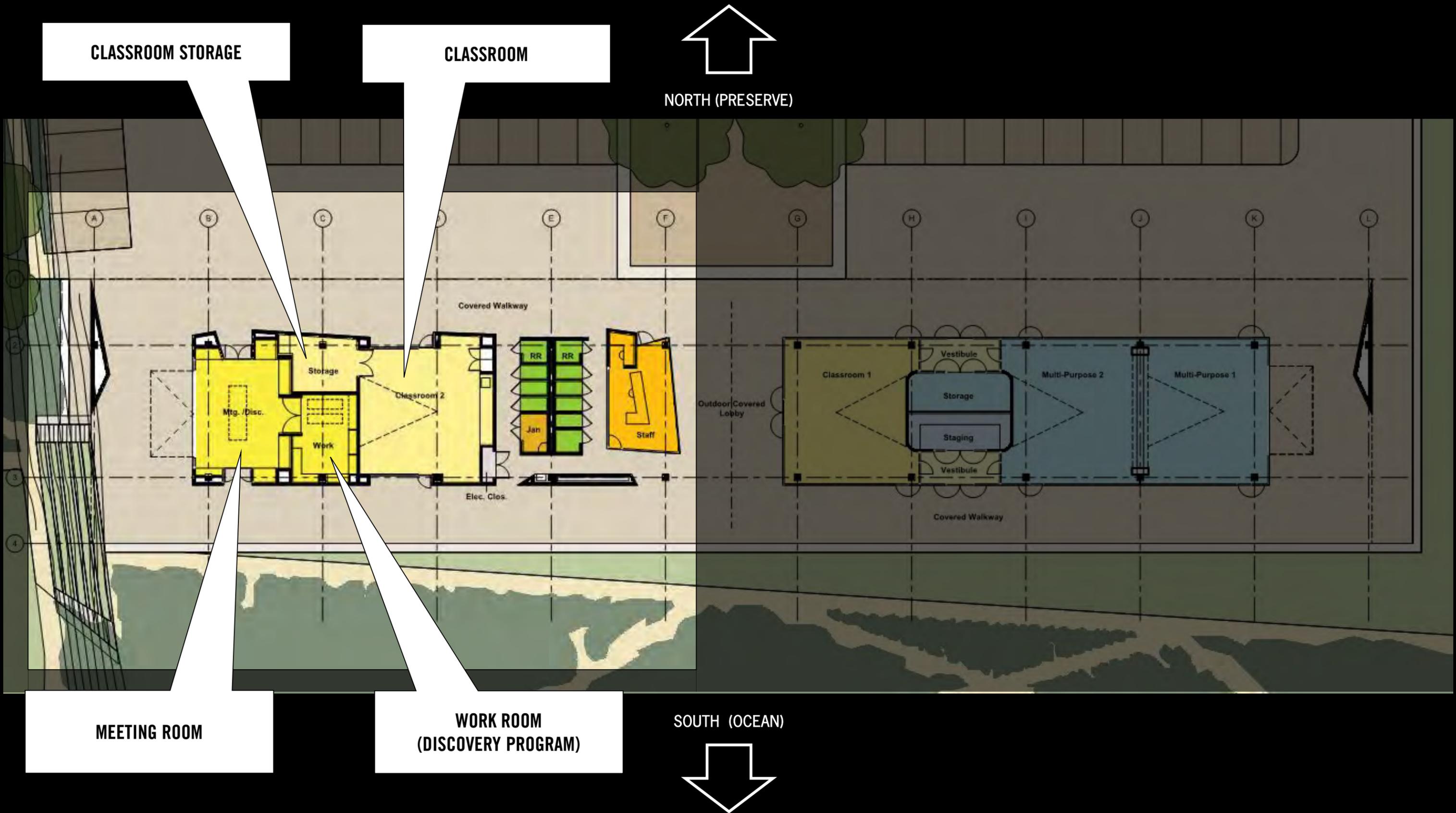
MULTI PURPOSE ROOM  
DIVISIBLE INTO TWO



SOUTH (OCEAN)



PRE-FUNCTION/POST FUNCTION  
LOBBY



CLASSROOM STORAGE

CLASSROOM

NORTH (PRESERVE)

MEETING ROOM

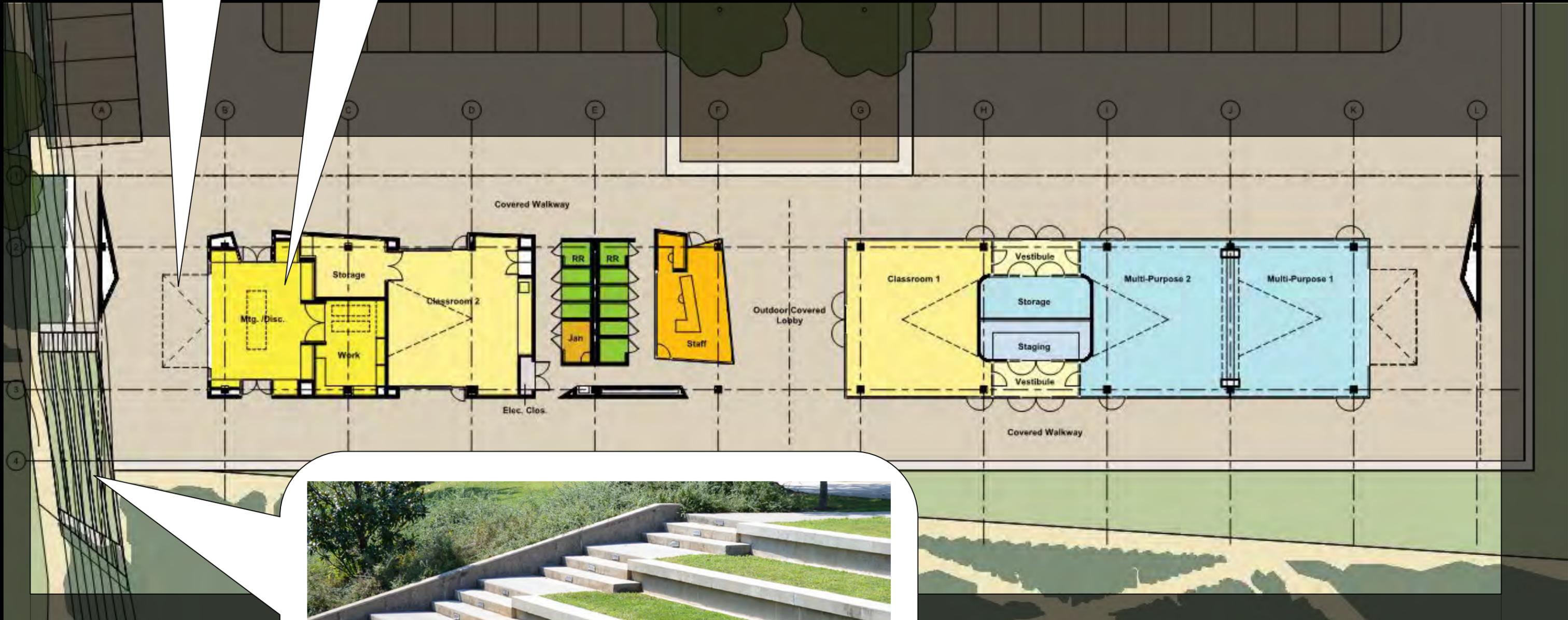
WORK ROOM  
(DISCOVERY PROGRAM)

SOUTH (OCEAN)

OVERHEAD DOOR

MEETING ROOM

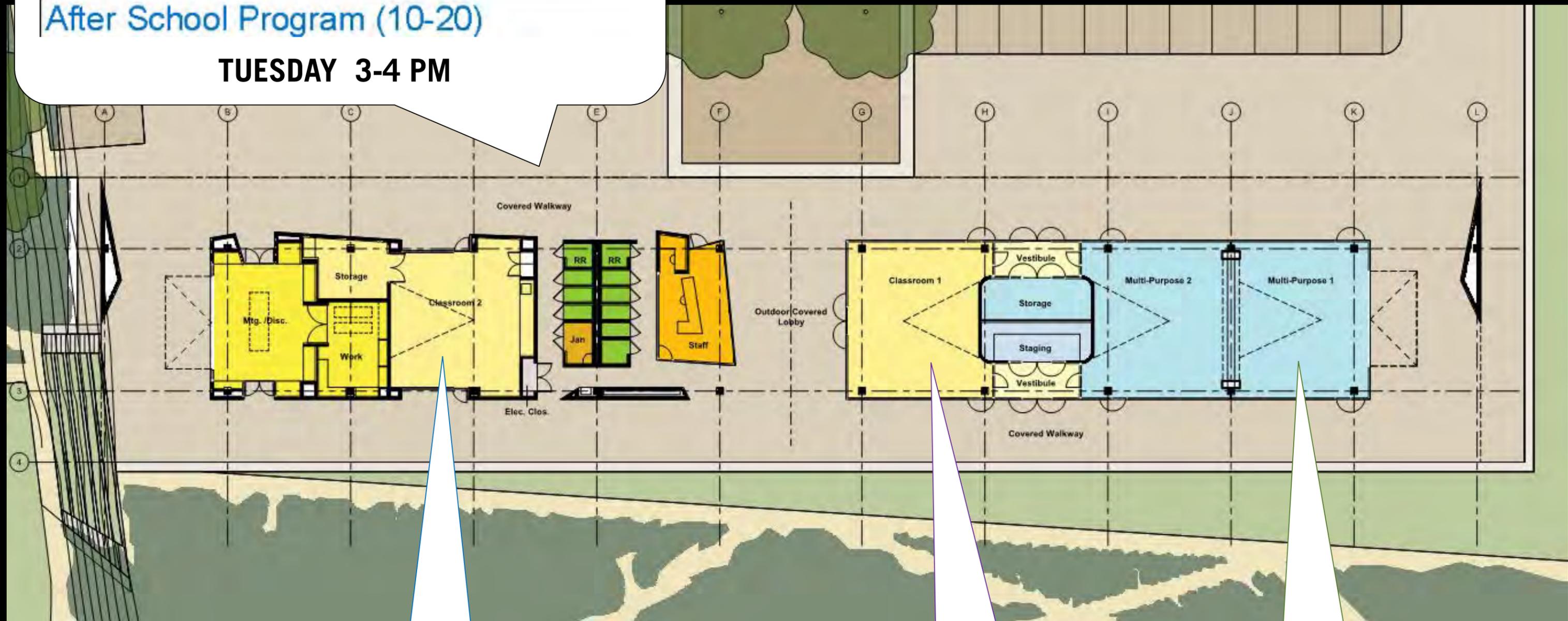
NORTH (PRESERVE)



STEPS UP TO PLAYGROUND AREA

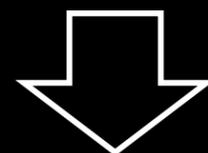
Youth Dance (10-30)  
 Comm/Non Profit (10-20)  
 After School Program (10-20)

**TUESDAY 3-4 PM**



**AFTER SCHOOL PROGRAM**

SOUTH (OCEAN)



**COMMUNITY /NON-PROFIT**

**YOUTH DANCE**

Adult/Senior Card Games (10-40)

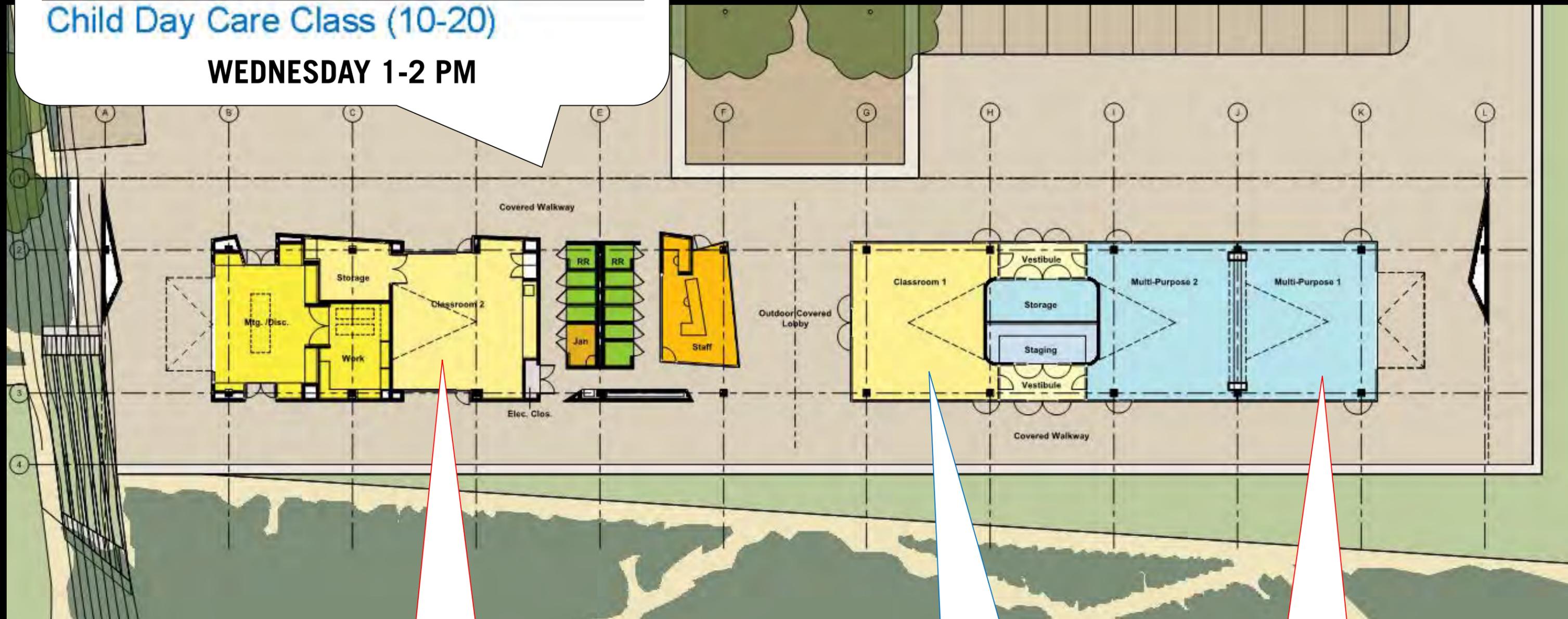
Senior/Adult Art (10-20)

Child Day Care Class (10-20)

WEDNESDAY 1-2 PM



NORTH (PRESERVE)

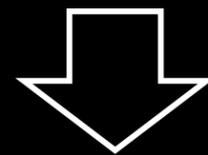


SENIOR/ADULT ART

CHILD DAY CARE CLASS

ADULT SENIOR CARD GAMES

SOUTH (OCEAN)



**Senior/Balance & Strength (10-20)**

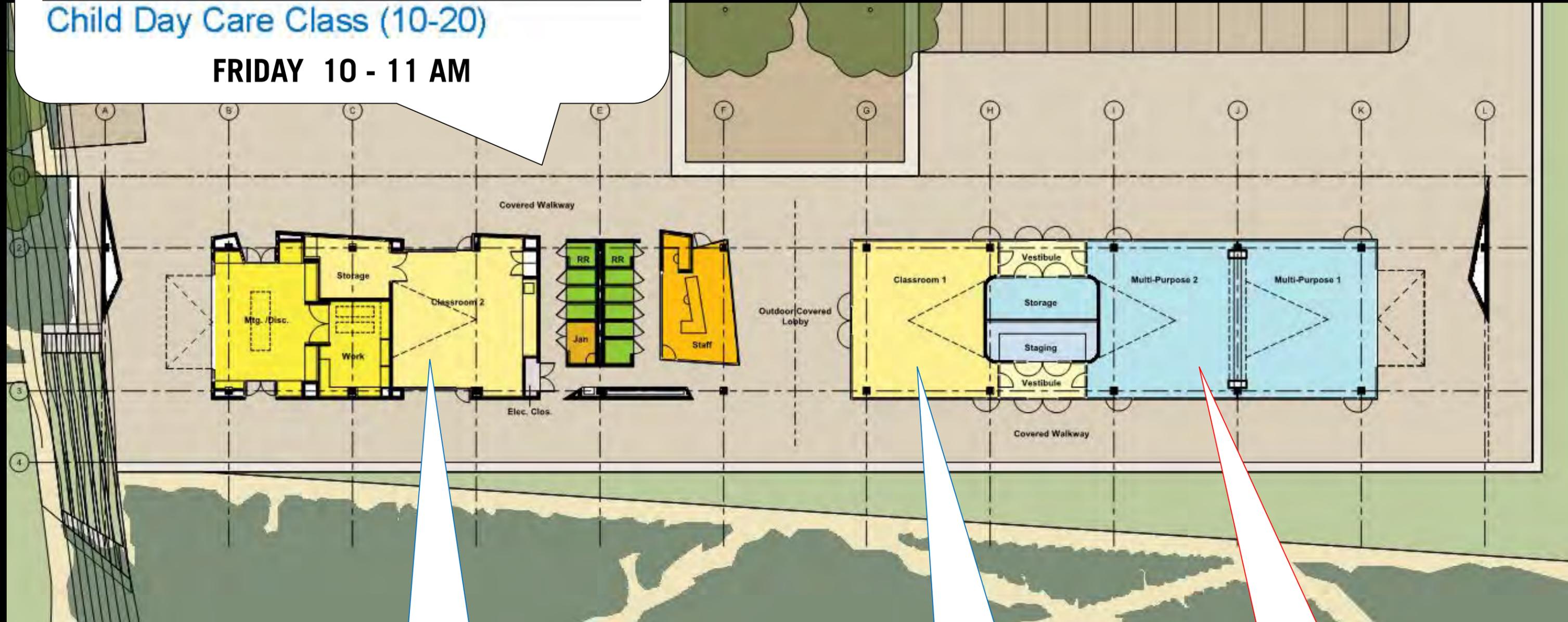
**Kids Music (10-20)**

**Child Day Care Class (10-20)**

**FRIDAY 10 - 11 AM**

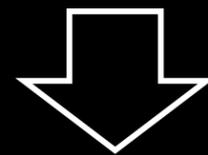


NORTH (PRESERVE)



**KIDS MUSIC**

SOUTH (OCEAN)



**CHILD DAY CARE CLASS**

**SENIOR BALANCE AND STRENGTH**

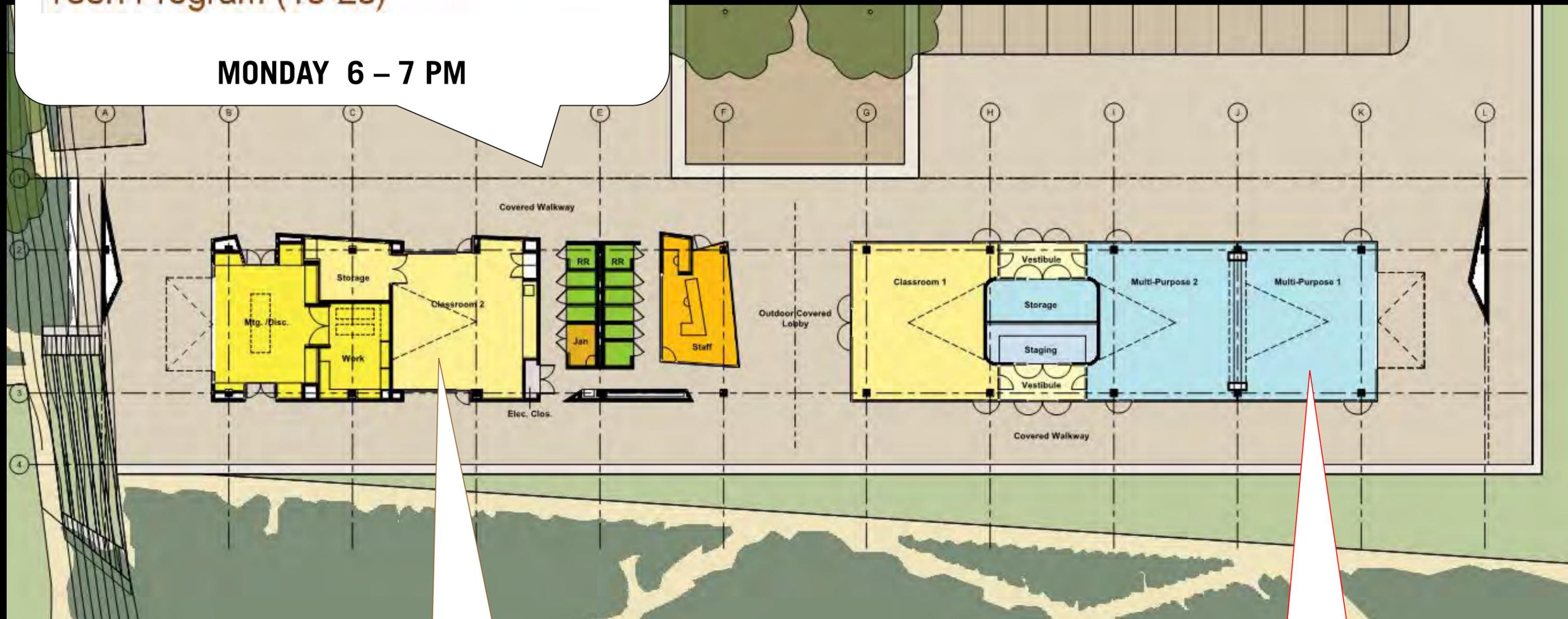
**Adult/Senior Dance (10-20)**

**Teen Program (10-20)**

**MONDAY 6 – 7 PM**

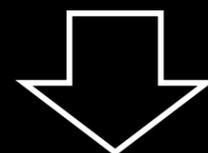


NORTH (PRESERVE)



**TEEN PROGRAM**

SOUTH (OCEAN)

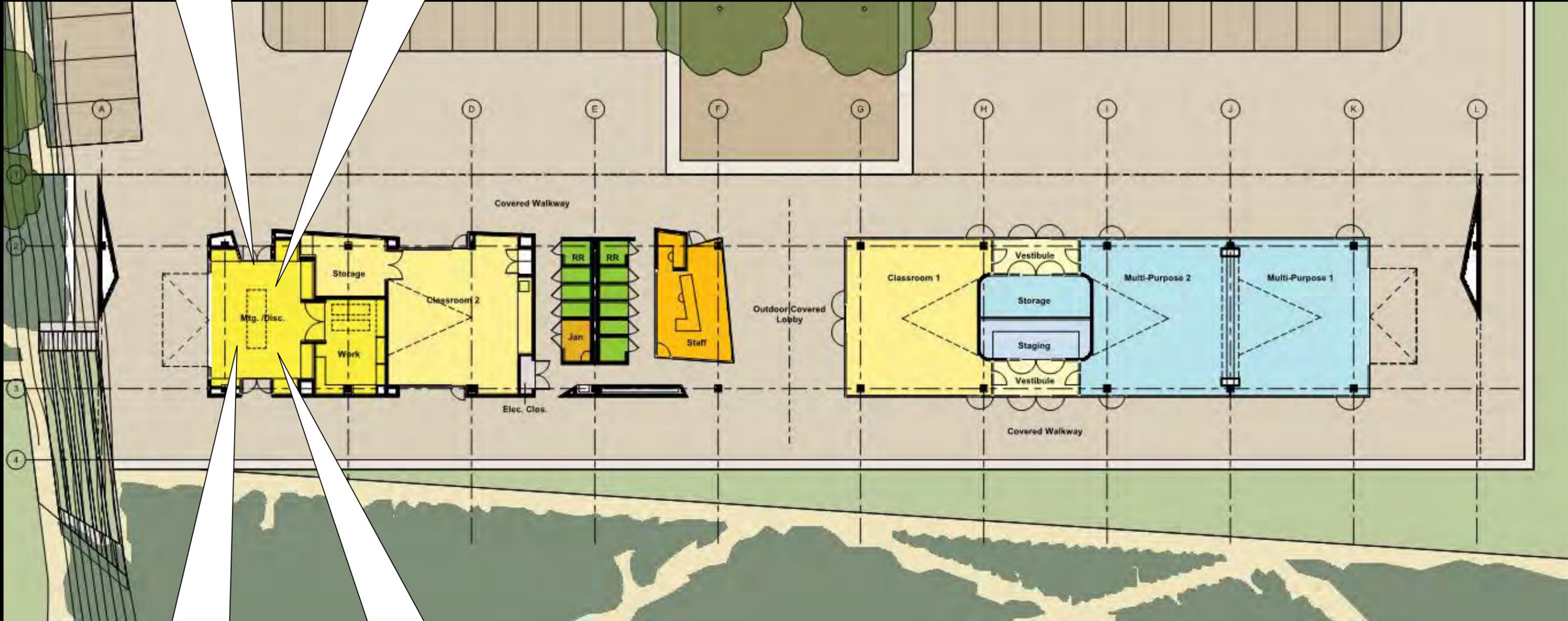


**SENIOR DANCE**

HOA BOARD MEETINGS

DISCOVERY PROGRAM

NORTH (PRESERVE)



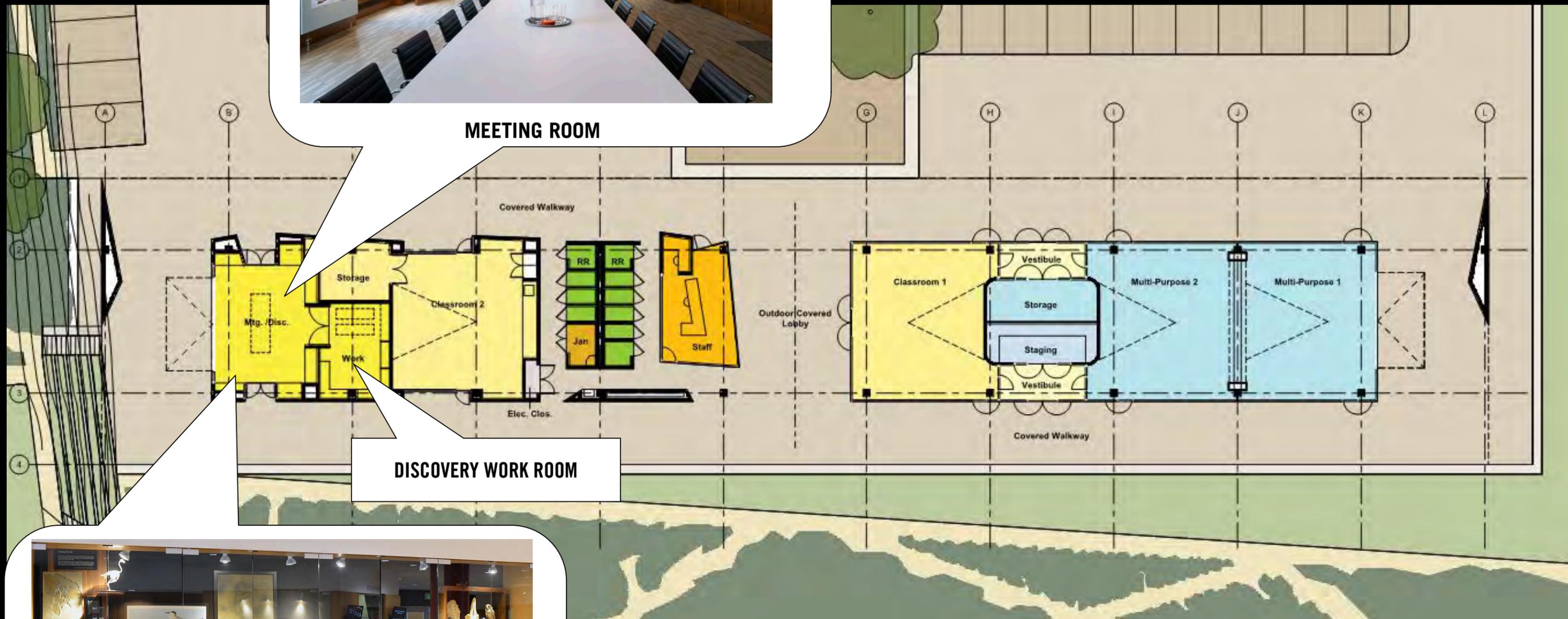
CITY MEETINGS

SMALL GROUP CLUBS AND NON PROFITS

SOUTH (OCEAN)



MEETING ROOM

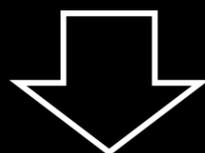


DISCOVERY WORK ROOM



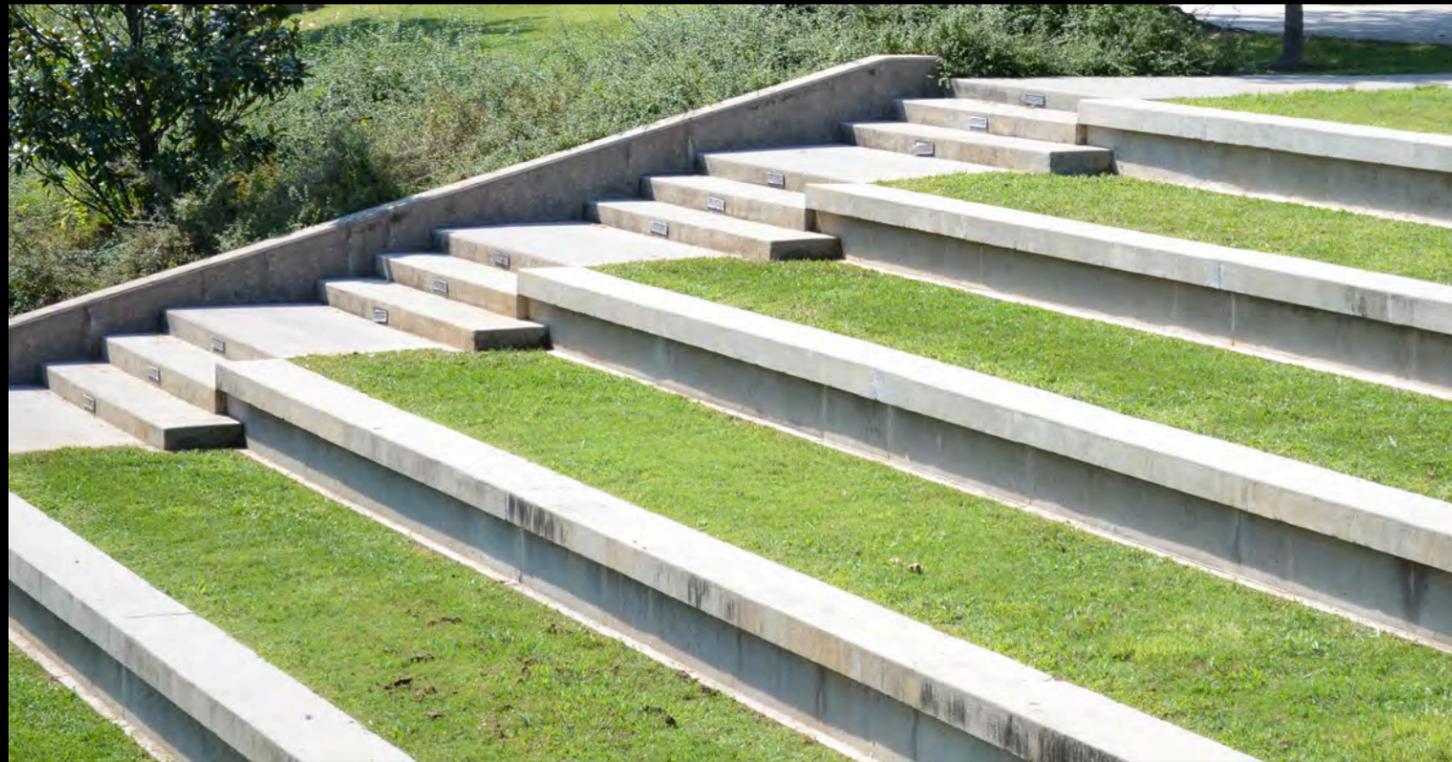
PERMANENT DISPLAYS

SOUTH (OCEAN)





**DISCOVERY ACCOMMODATIONS**



**DISCOVERY ACCOMMODATIONS**

# Park configuration



LADERA LINDA COMMUNITY PARK SCALE AND CHARACTER



OPTION "D" SITE PLAN



OPTION "D" SITE PLAN



OPTION "D" SITE PLAN



OPTION "D" SITE PLAN

**STAIRS AND TRAILS  
UP TO PRESERVE/DOWN TO PARK**

**OPTIONAL UNPAVED PARKING AT  
UPPER FORRESTAL DRIVE  
(Overflow and/or Preserve)**

**PARK SUPPORT  
AND EMERGENCY SUPPLIES  
STORAGE**

**1 ½ BASKETBALL COURTS**

**CHILDREN'S PLAYGROUND**

**EXISTING  
PADDLE TENNIS COURTS**

**UPPER LAWN AREA**



**OPTION "D" SITE PLAN**



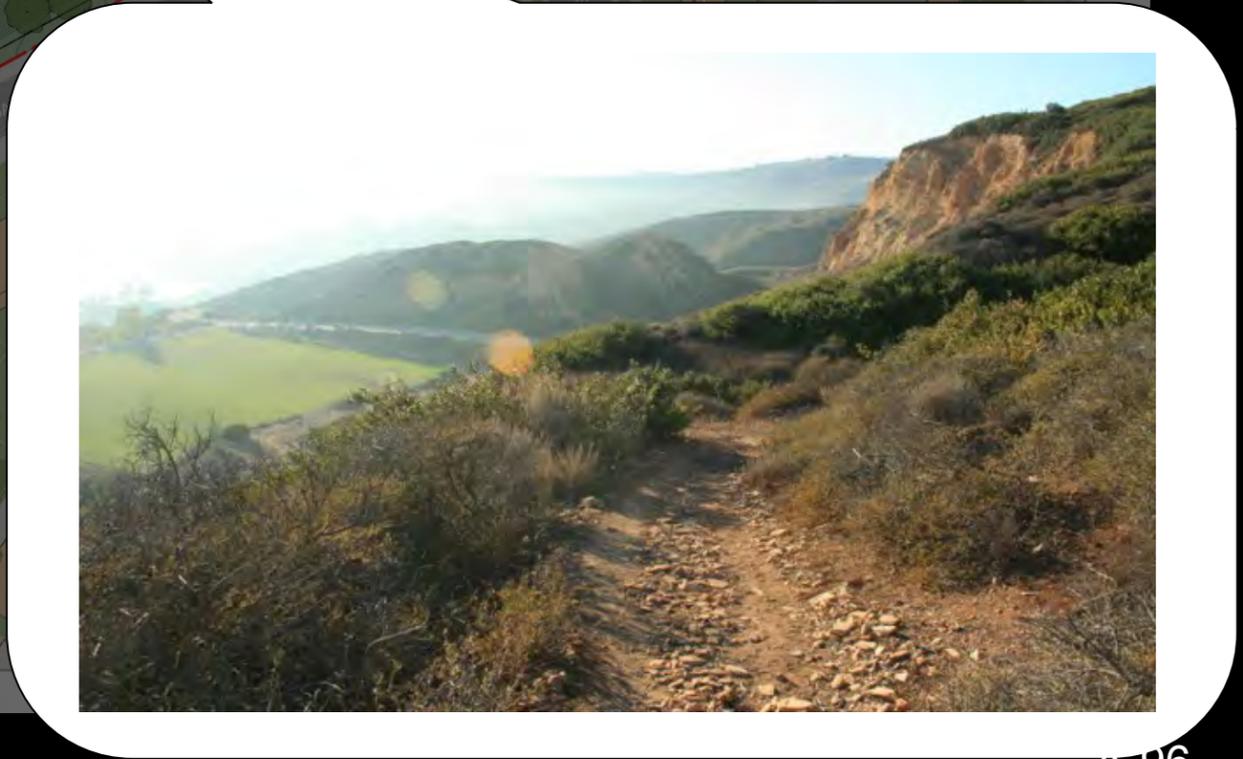
UPPER LAWN AREA

LOWER LAWN AREA

HILLSIDE BELOW PARK

PATHS AND NATIVE VEGETATION

OPTION "D" SITE PLAN

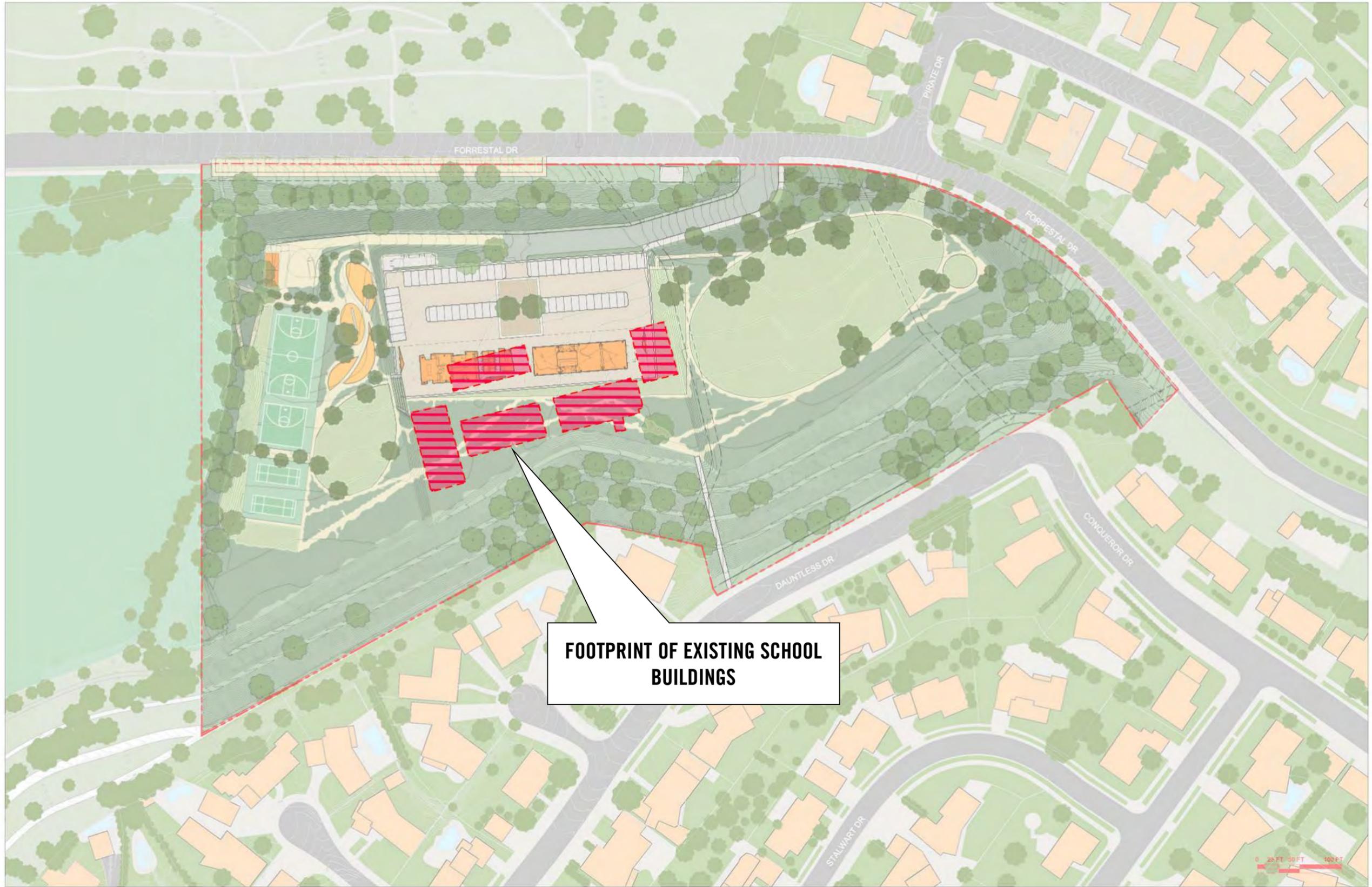


OPTION "D" SITE PLAN

A-96

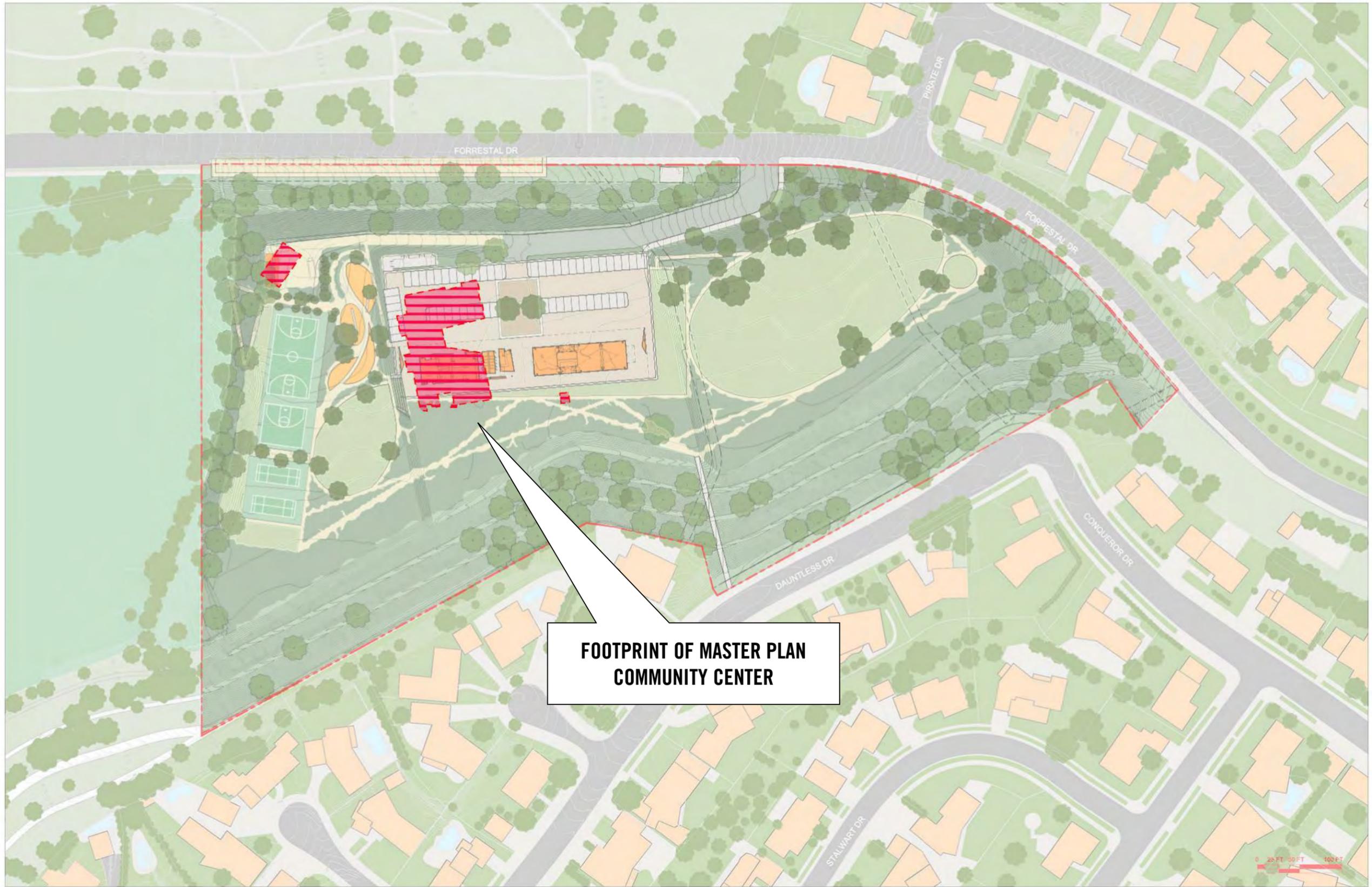


OPTION "D" SITE PLAN



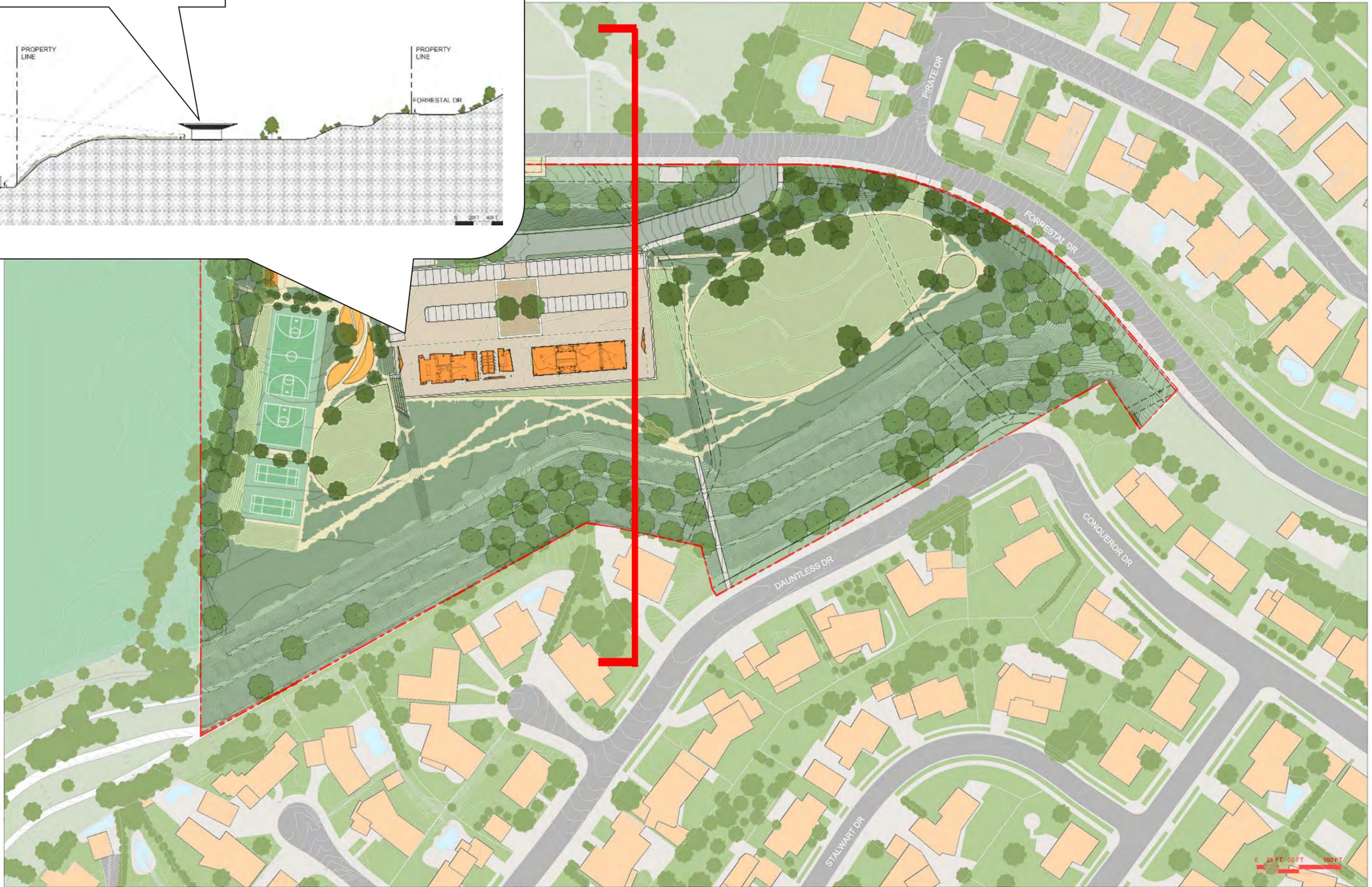
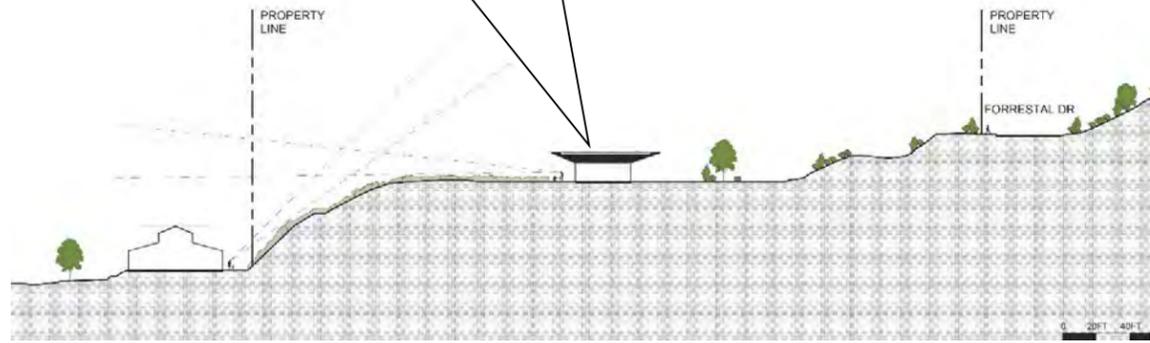
**FOOTPRINT OF EXISTING SCHOOL BUILDINGS**

**OPTION "D" SITE PLAN**

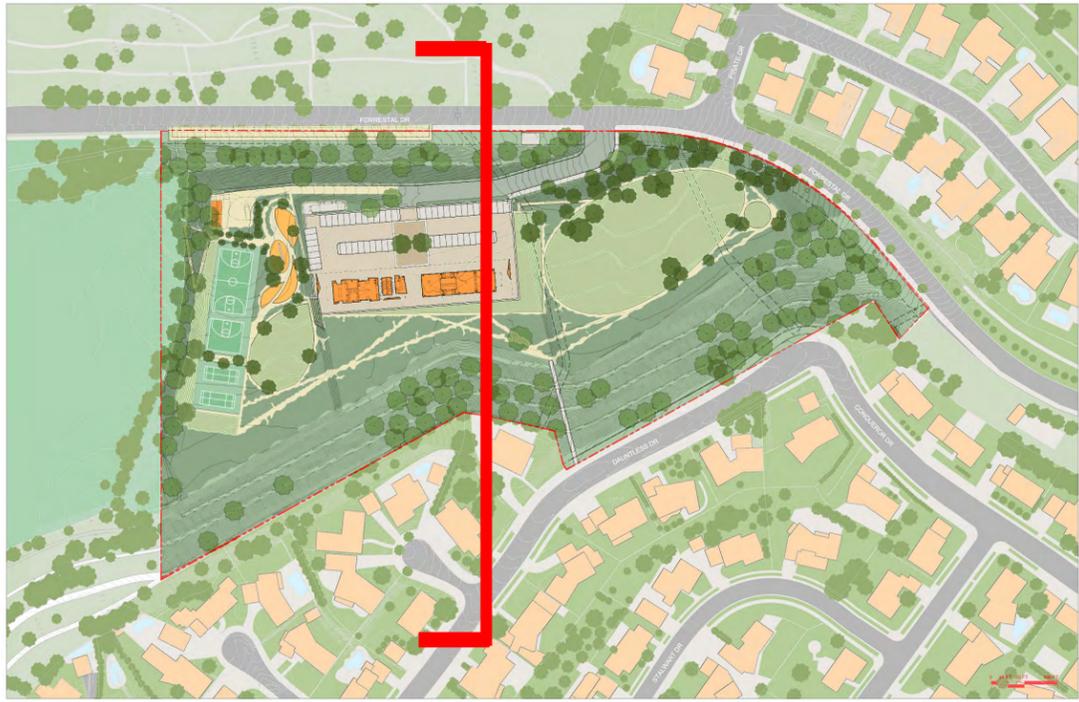


**OPTION "D" SITE PLAN**

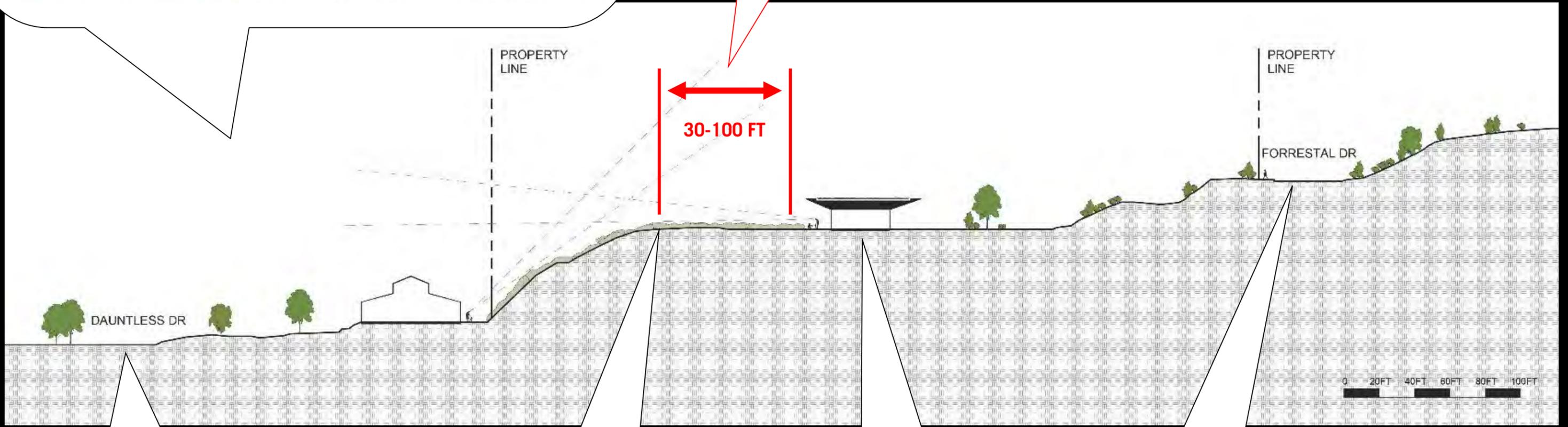
COMMUNITY CENTER



OPTION "D" SITE PLAN



**NATIVE LANDSCAPE BUFFER**



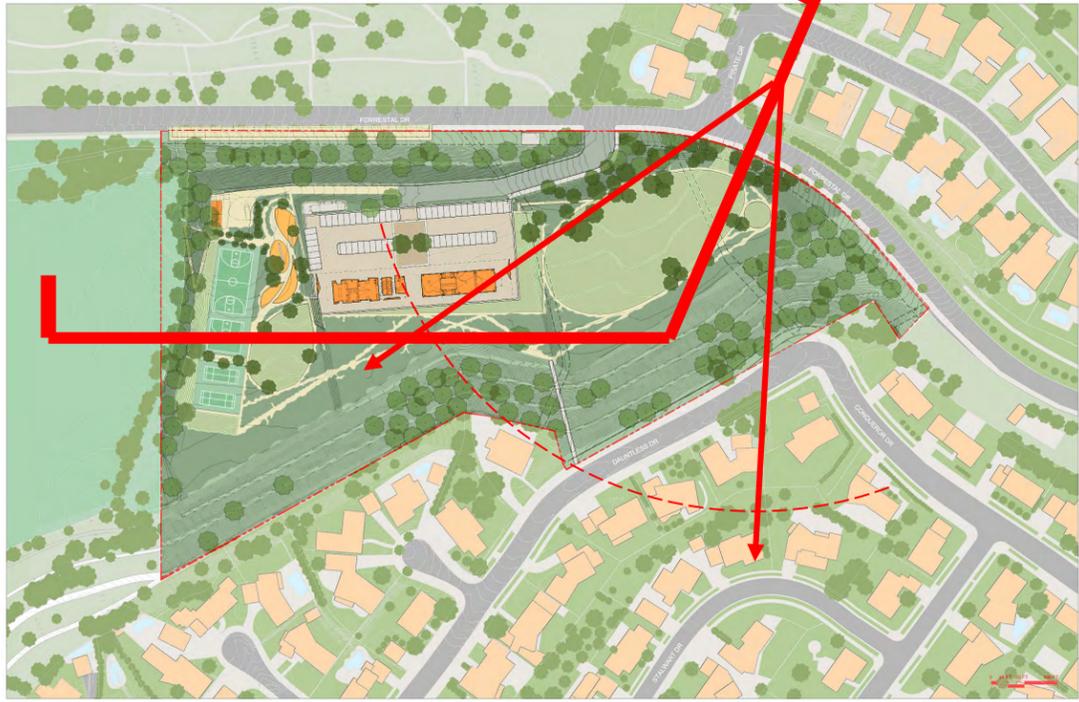
**DAUNTLESS DRIVE**

**TOP OF SLOPE**

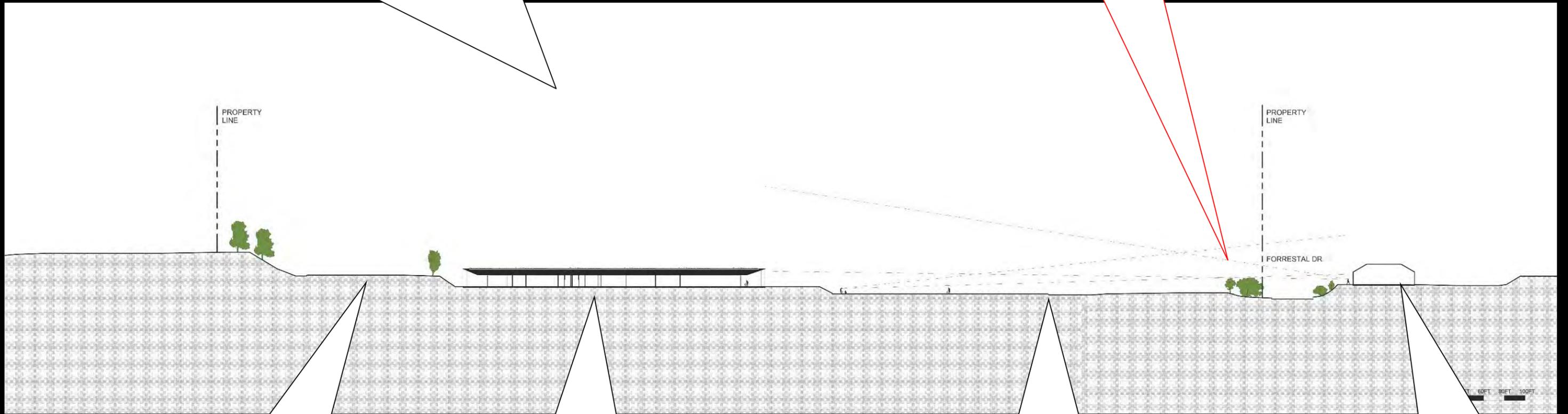
**COMMUNITY CENTER**

**UPPER FORRESTAL DRIVE**

**OPTION "D" SITE PLAN**



**LANDSCAPE BUFFER  
@ FORRESTAL DRIVE**



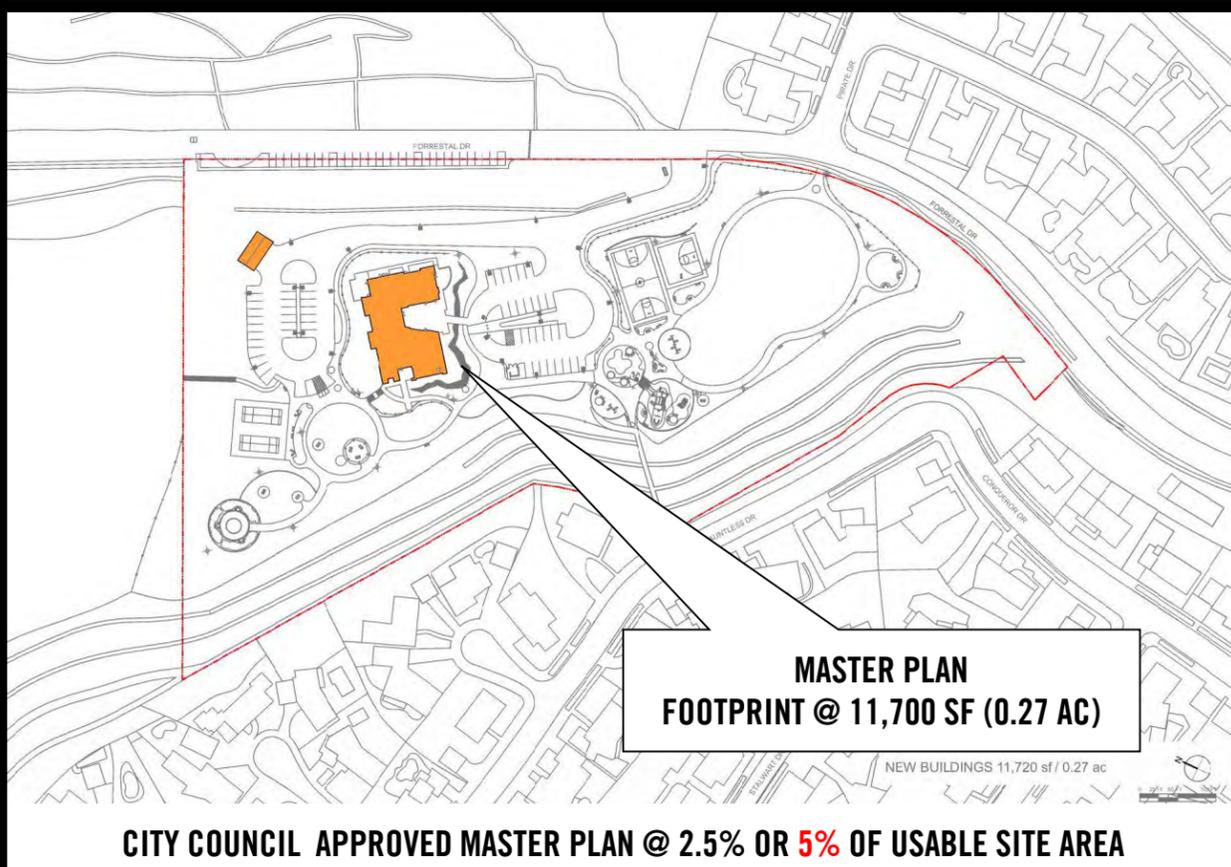
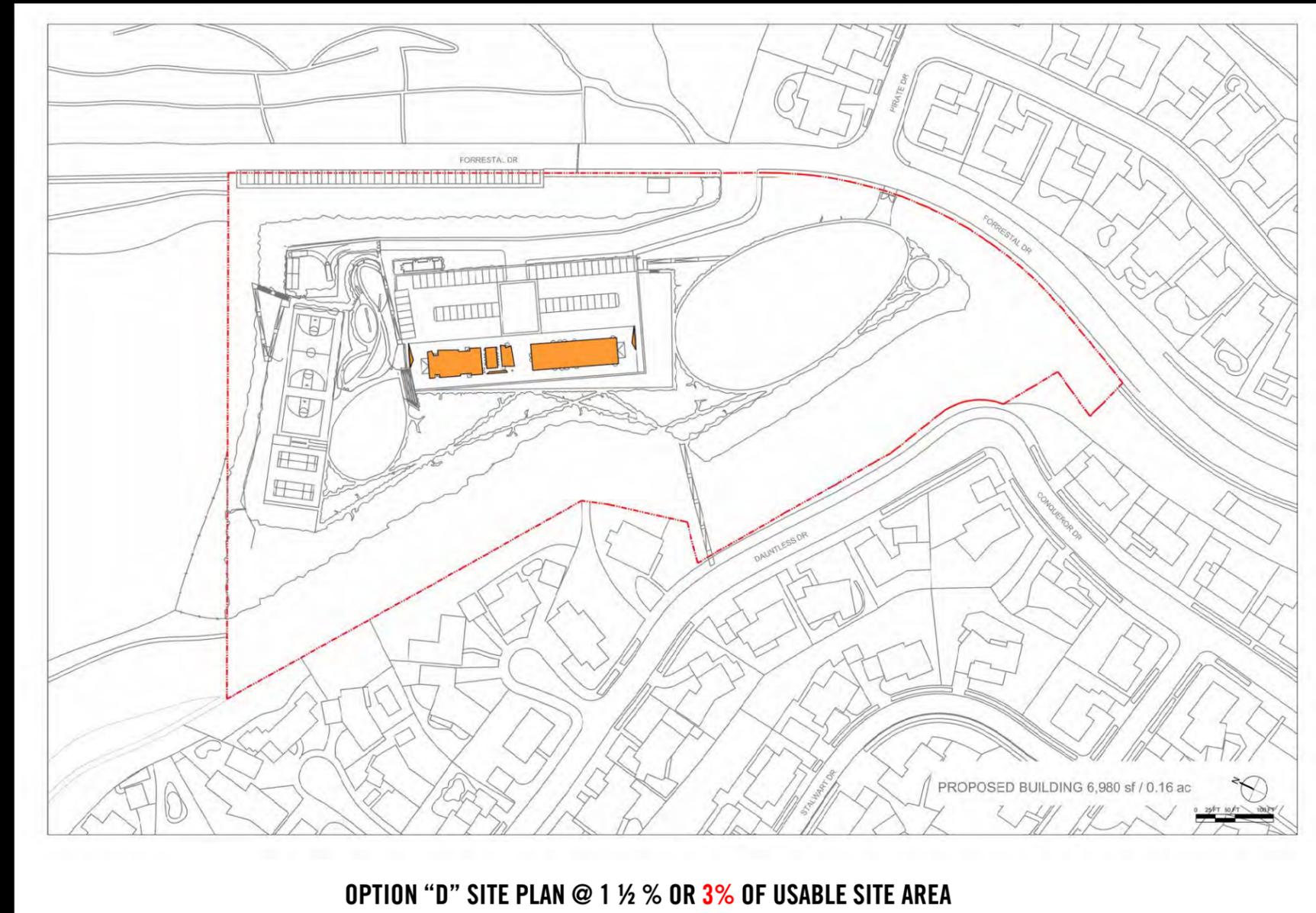
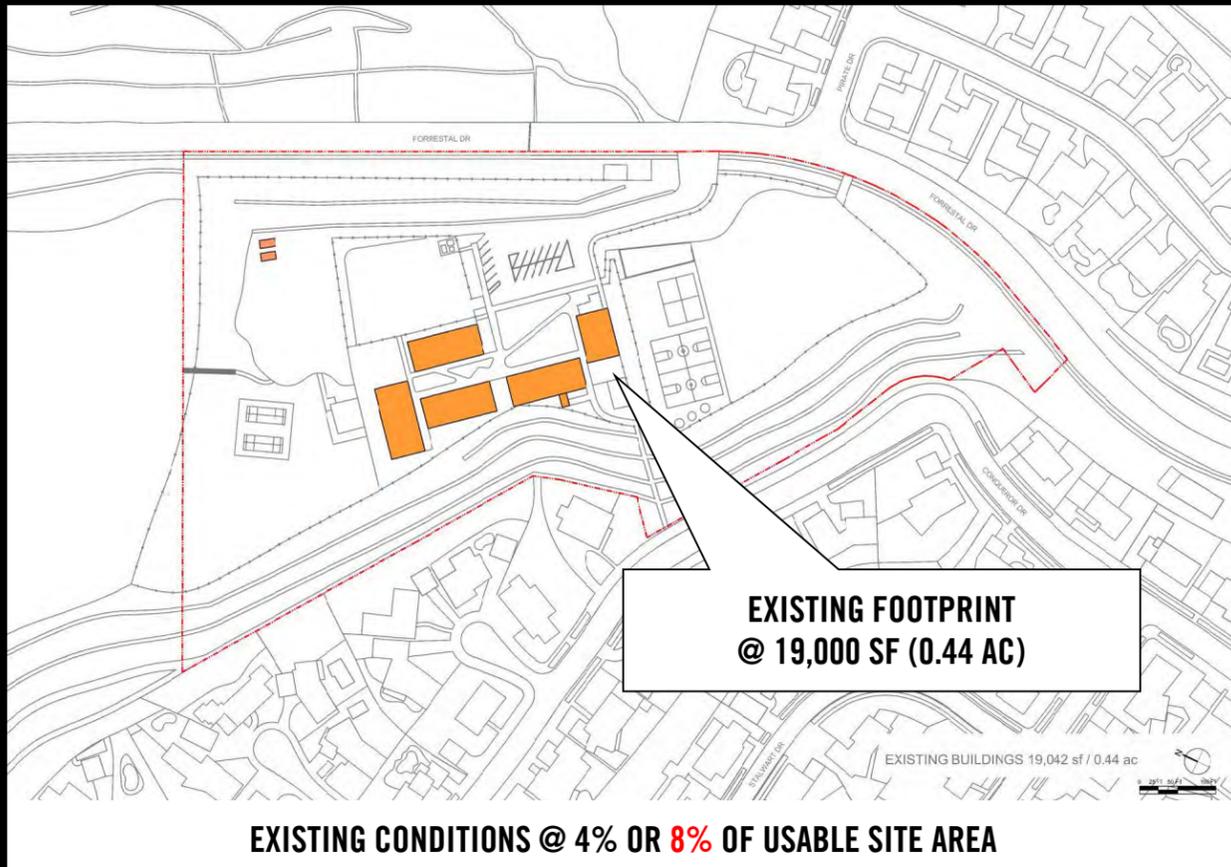
**UPPER PARK**

**COMMUNITY CENTER**

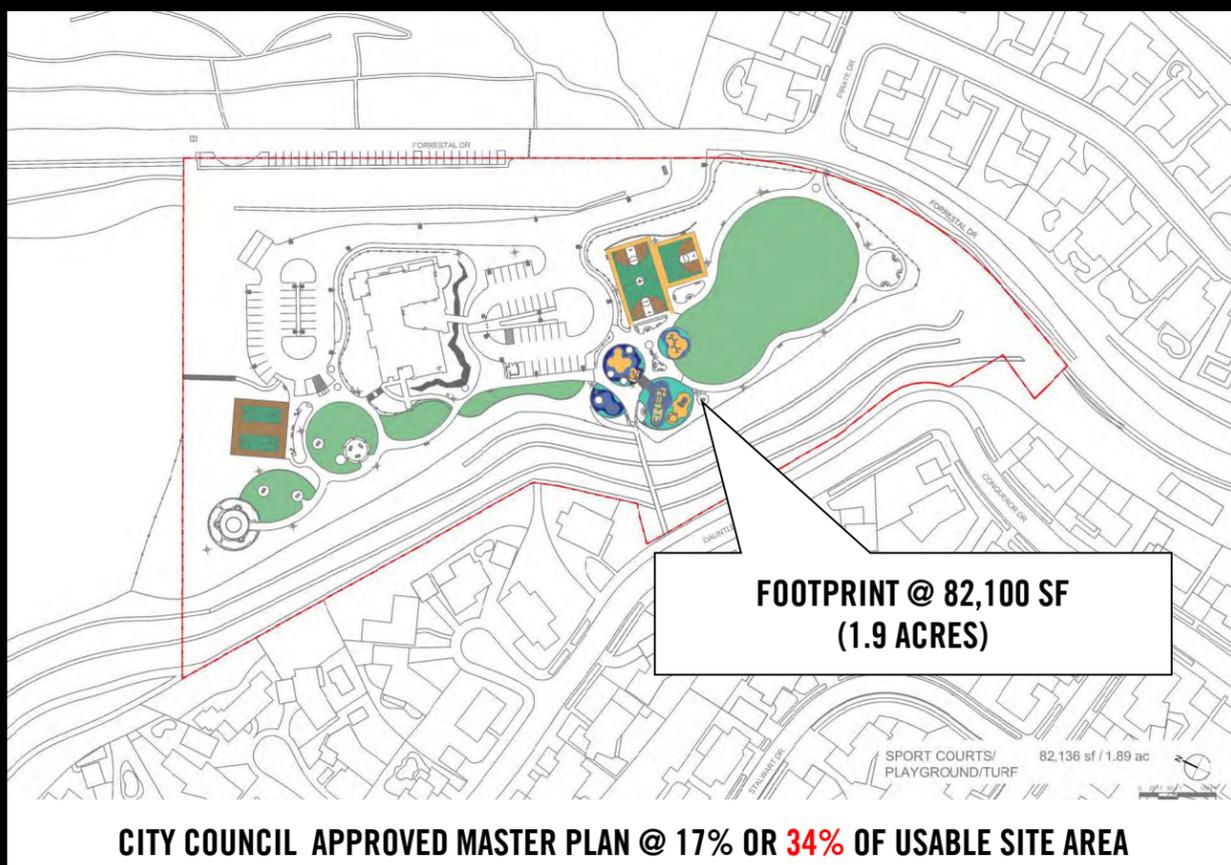
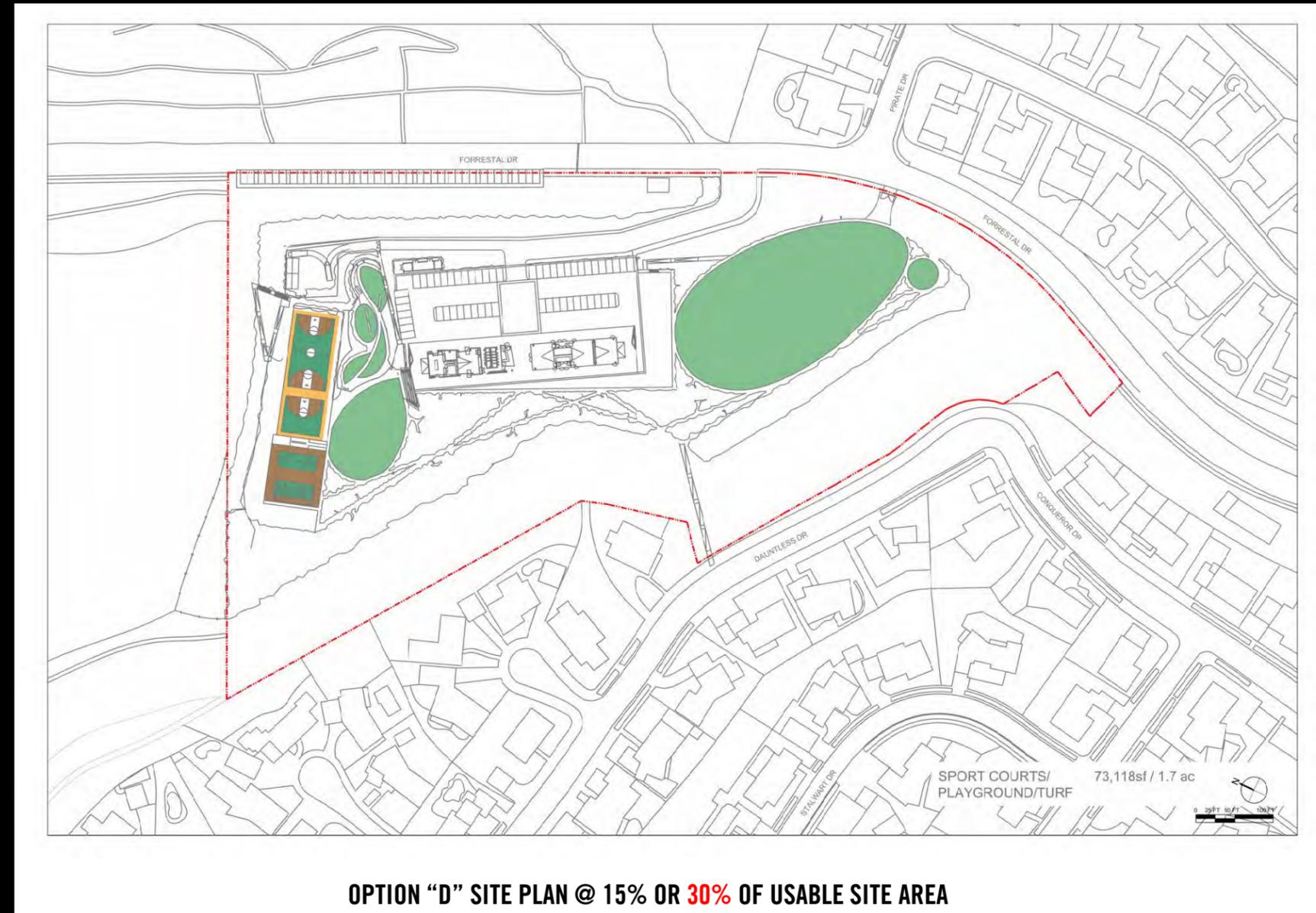
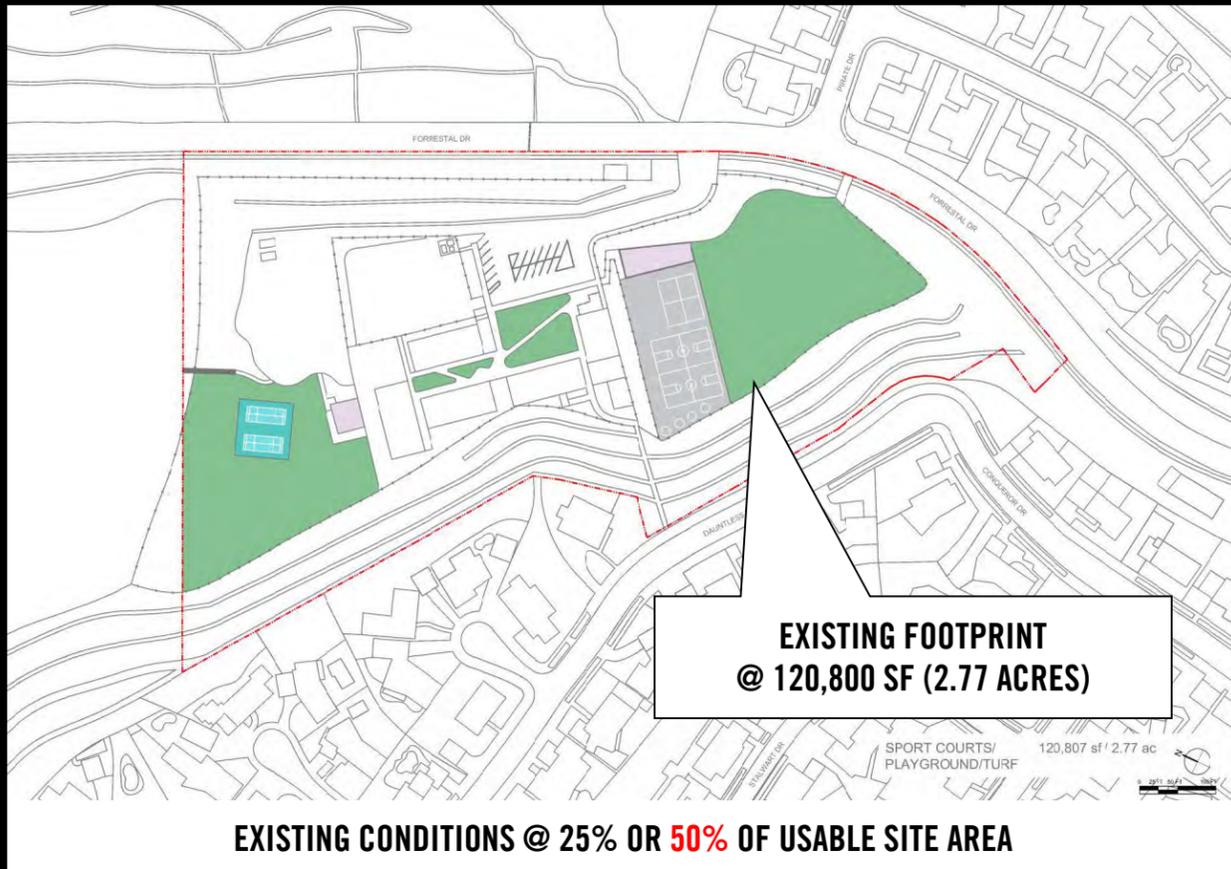
**LOWER PARK**

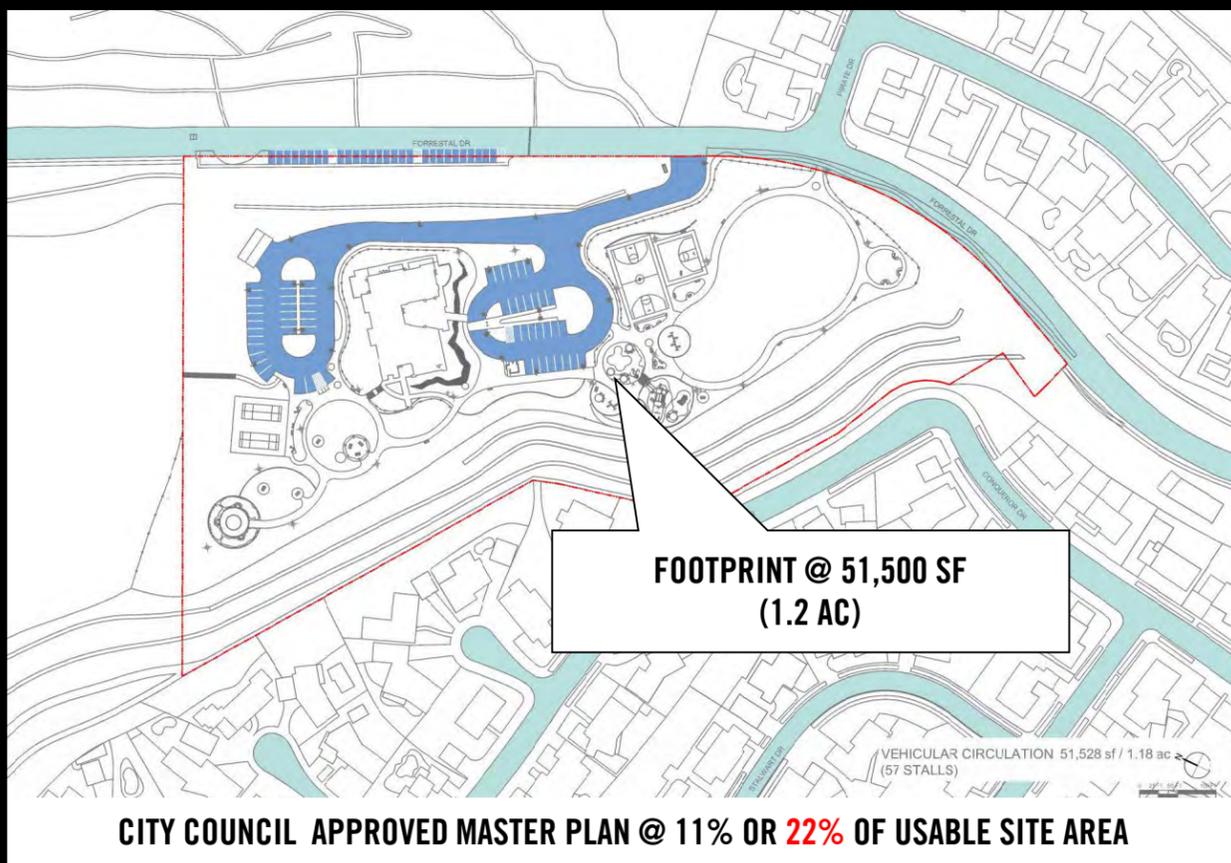
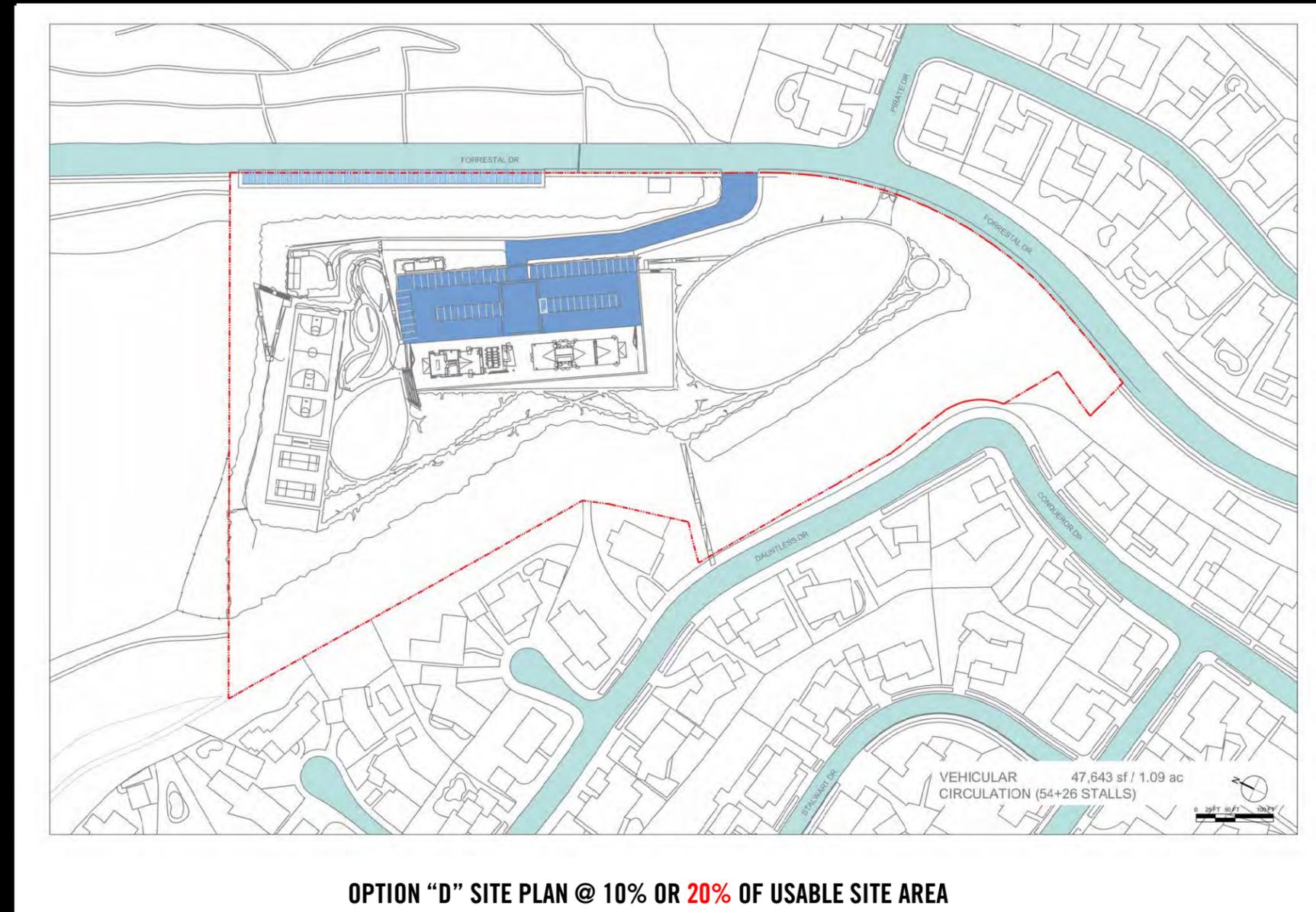
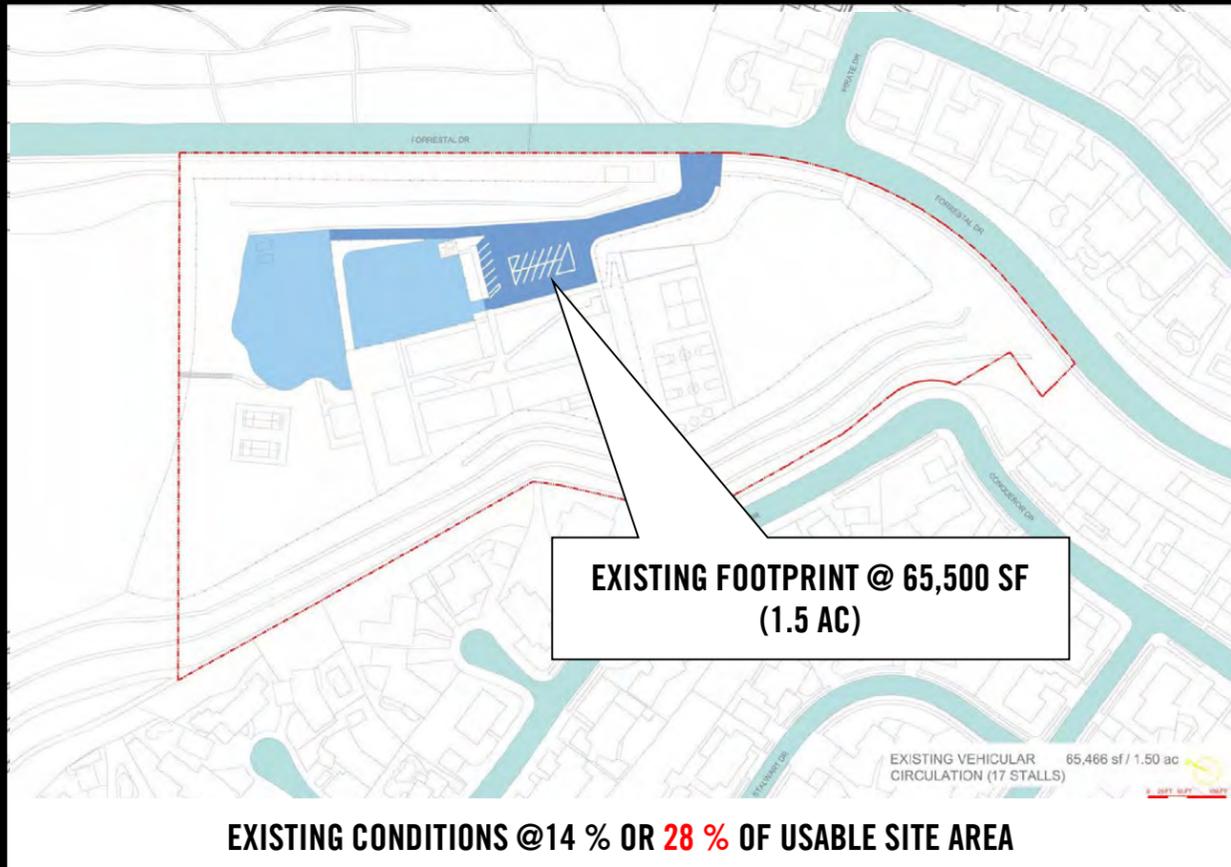
**LADERA LINDA NEIGHBORHOOD**

**OPTION "D" SITE PLAN**

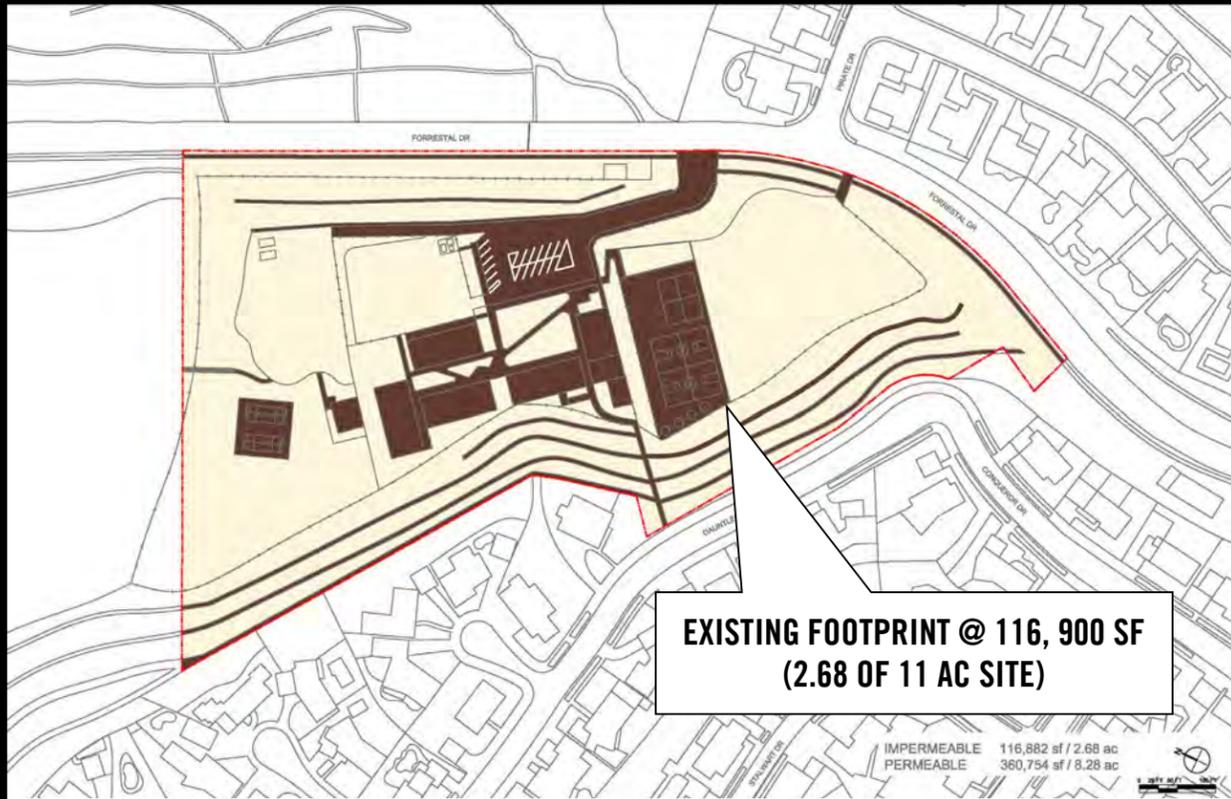


**BUILDING FOOTPRINT**

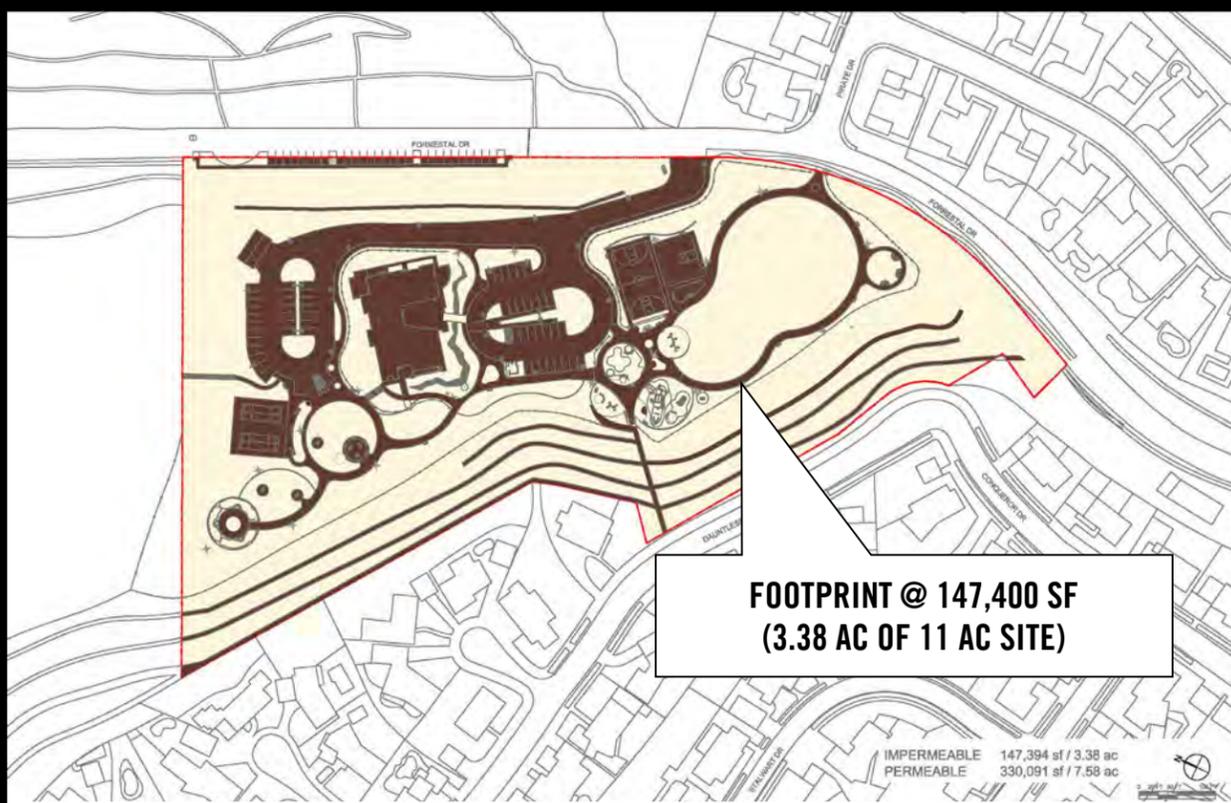




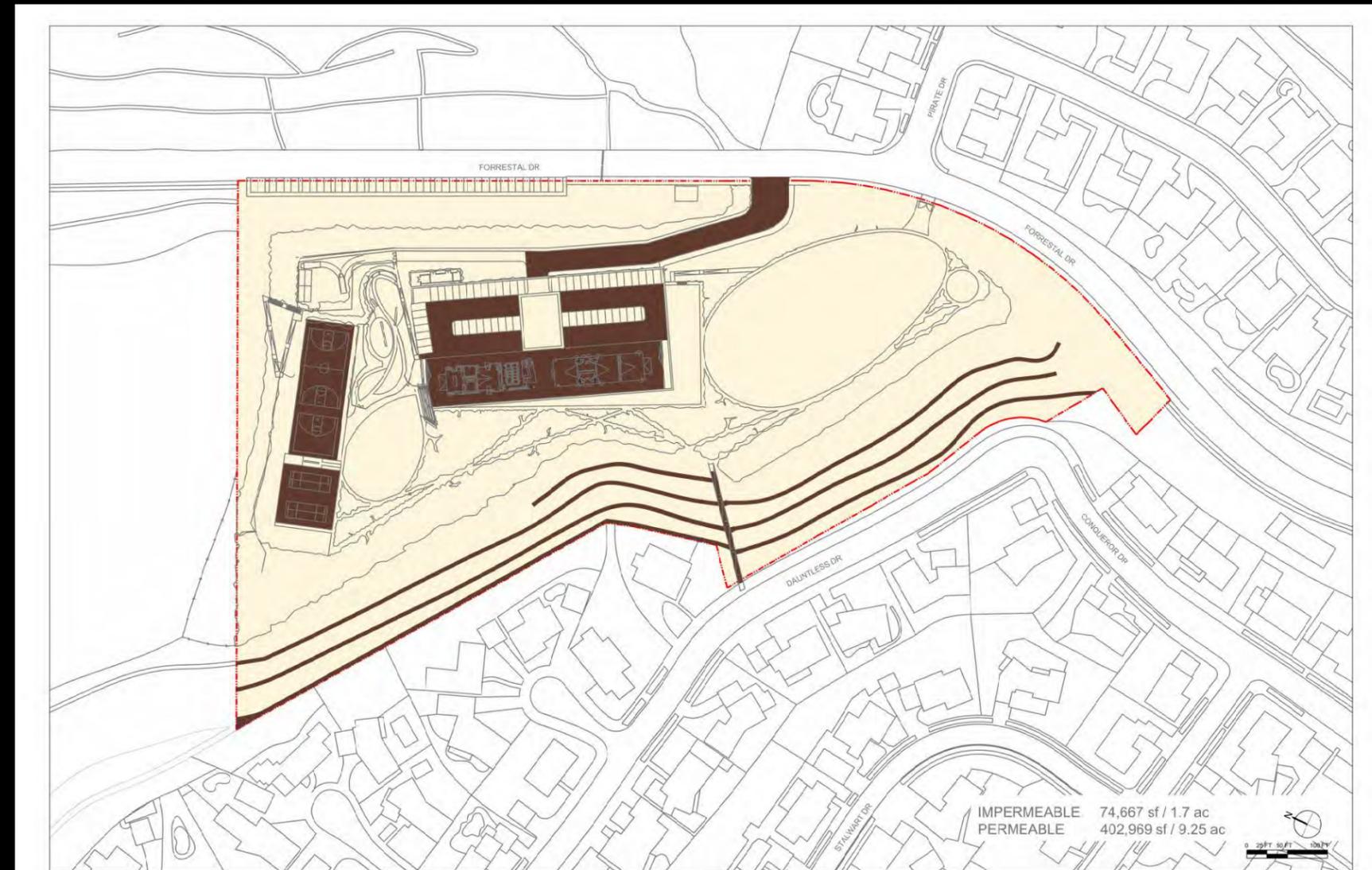
VEHICULAR CIRCULATION AND PARKING



EXISTING CONDITIONS @ 25% IMPERMEABLE OR 50% OF USABLE SITE AREA



COUNCIL APPROVED MASTER PLAN @ 31% IMPERMEABLE OR 62% OF USABLE SITE AREA



OPTION "D" SITE PLAN @ 15% OR 30% OF USABLE SITE AREA

GROUND PLANE PERMEABILITY

# Nature preserve parking



**OPTION 1: UPPER PARK**



**UPPER FORRESTAL DRIVE  
(25 Spaces)**

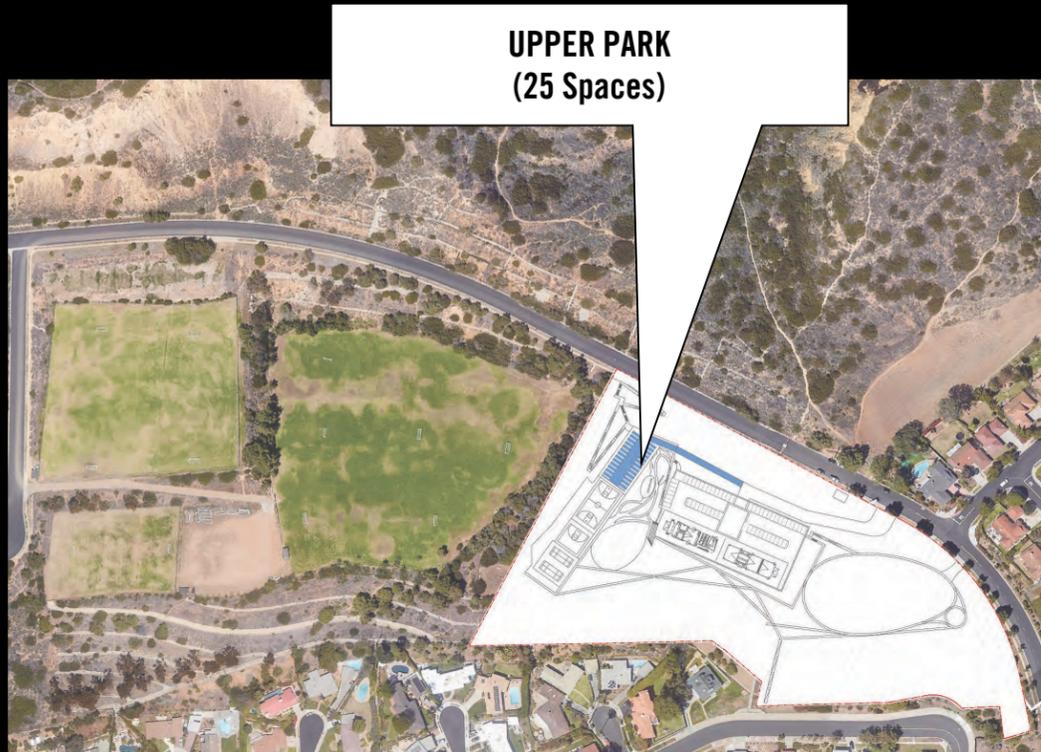
**OPTION 2: UPPER FORRESTAL DRIVE**



**NATURE PRESERVE  
(TBD No. of Spaces)**

**OPTION 3: AT SOCCER FIELDS**

**A-110**



**OPTION 3: AT SOCCER FIELDS**



**OPTION 2: UPPER FORRESTAL DRIVE**

**PRESERVE PARKING OPTIONS**

# Community center configuration







**VIEW FROM ENTRY ROAD**





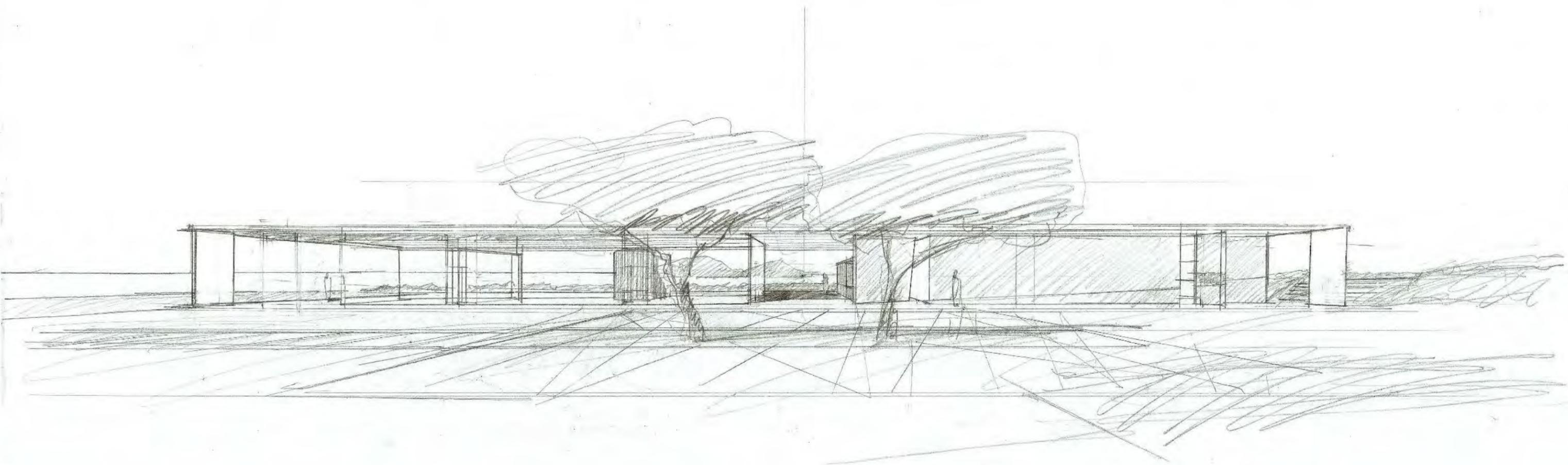
**LADERA LINDA COMMUNITY CENTER SCALE AND CHARACTER**

A-116

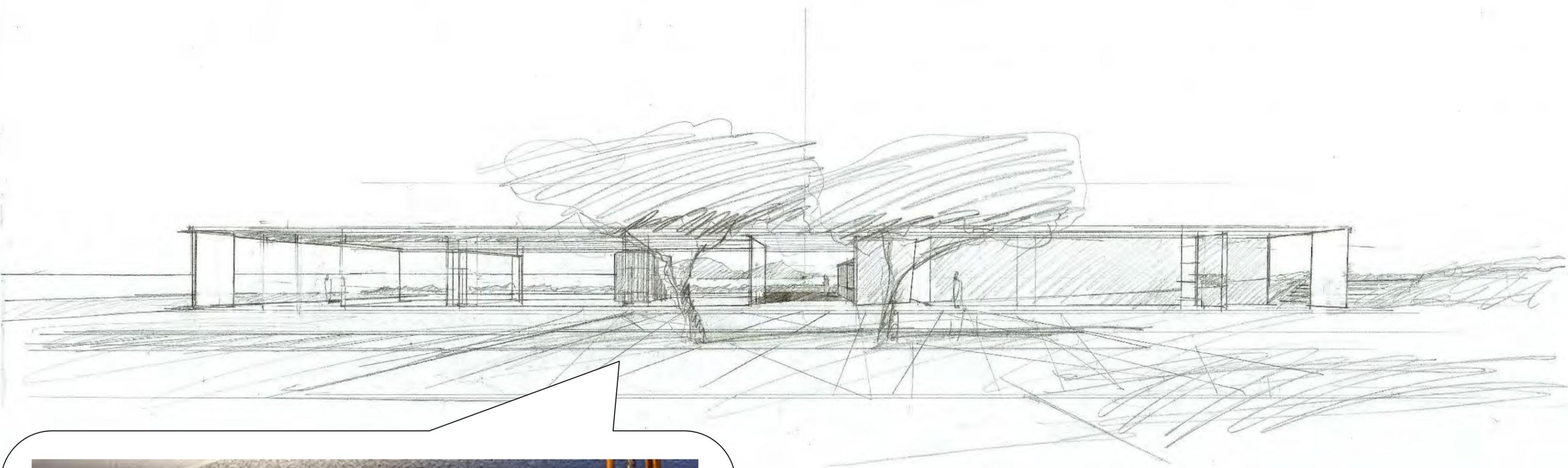


TAJ MAHAL

A-117



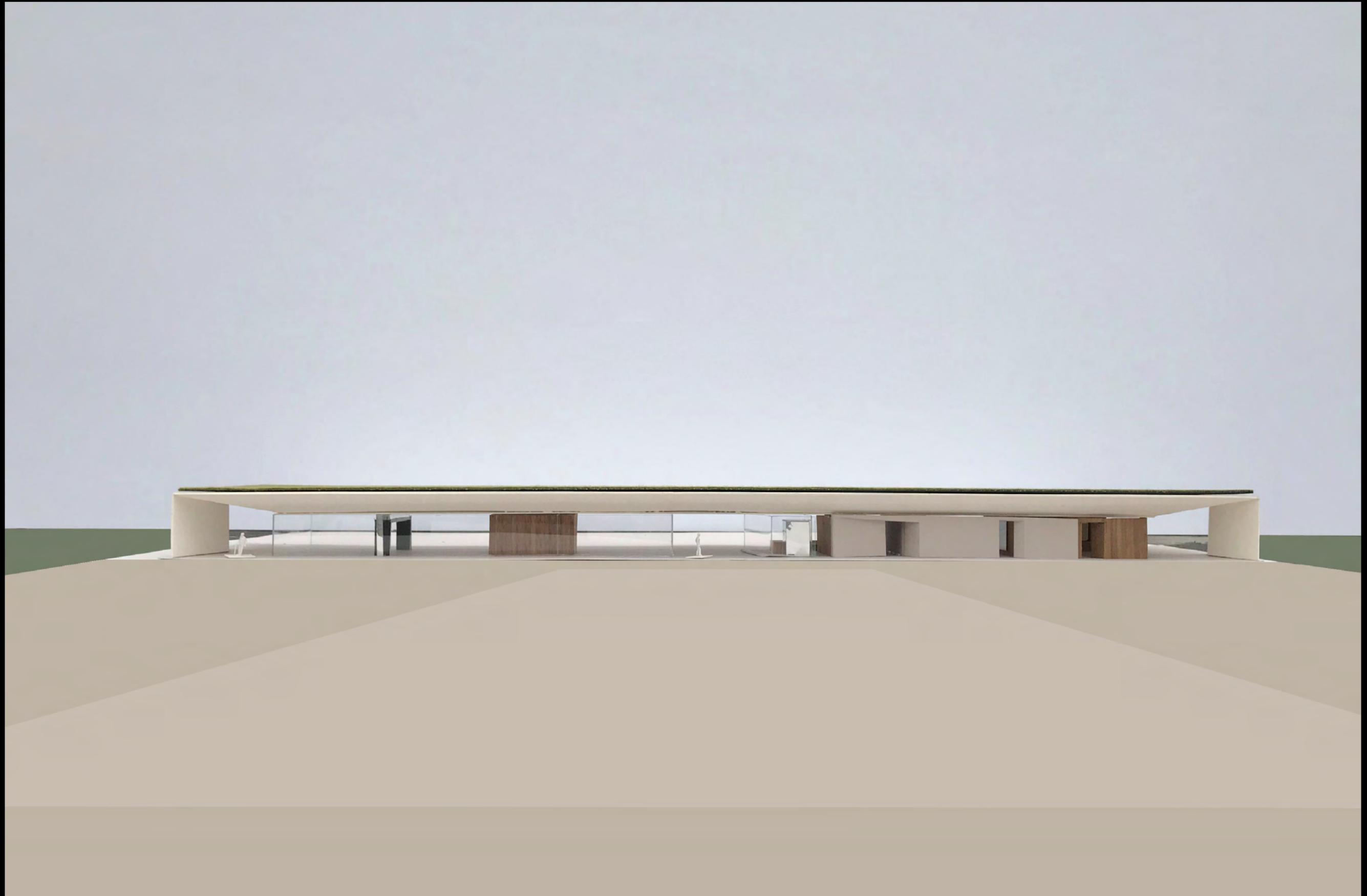
COMMUNITY CENTER LOOKING SOUTHWEST



TER LOOKING SOUTHWEST

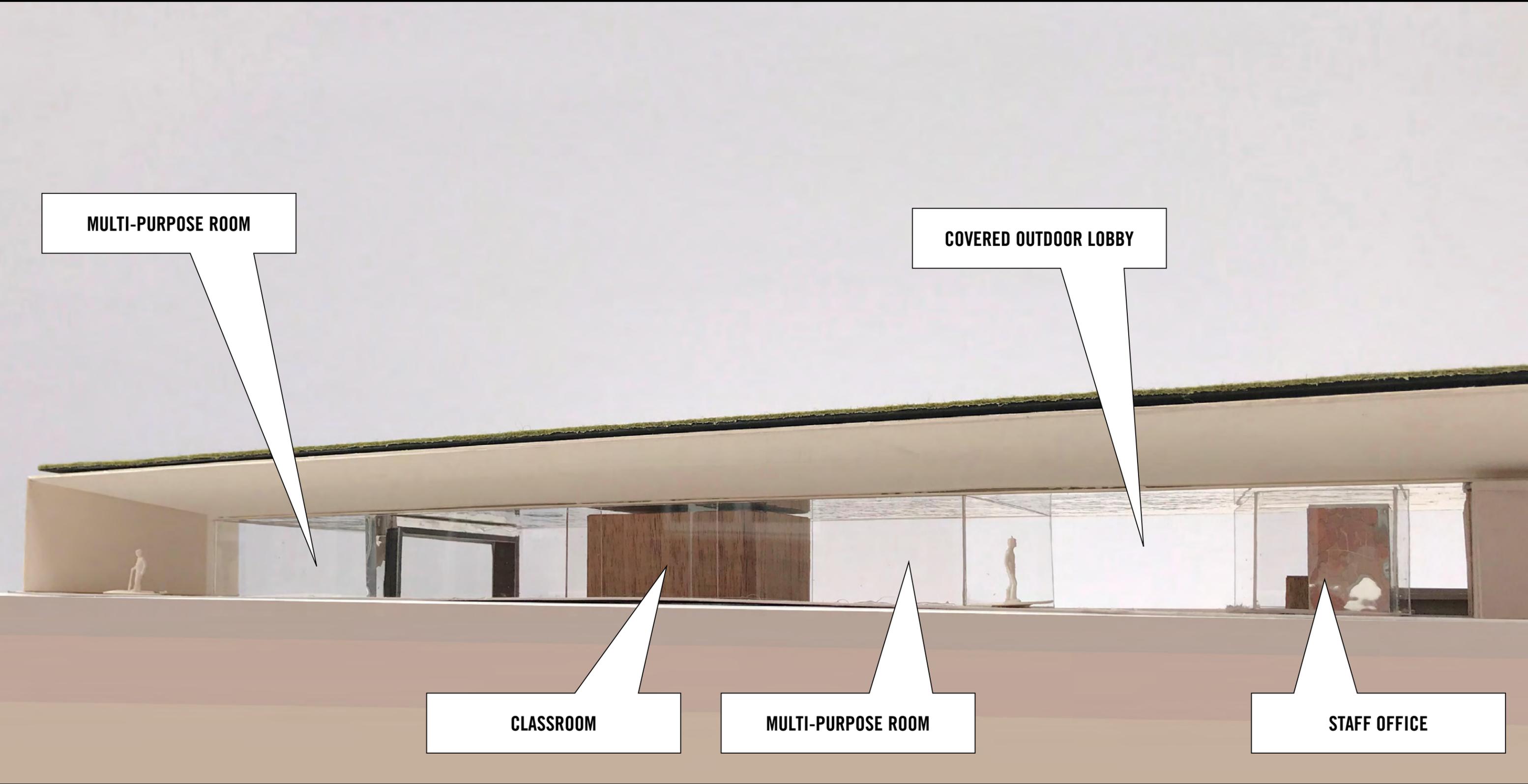
A-119

*Deference to the geography of the site, the park and its neighbors*



COMMUNITY CENTER LOOKING SOUTH

A-120



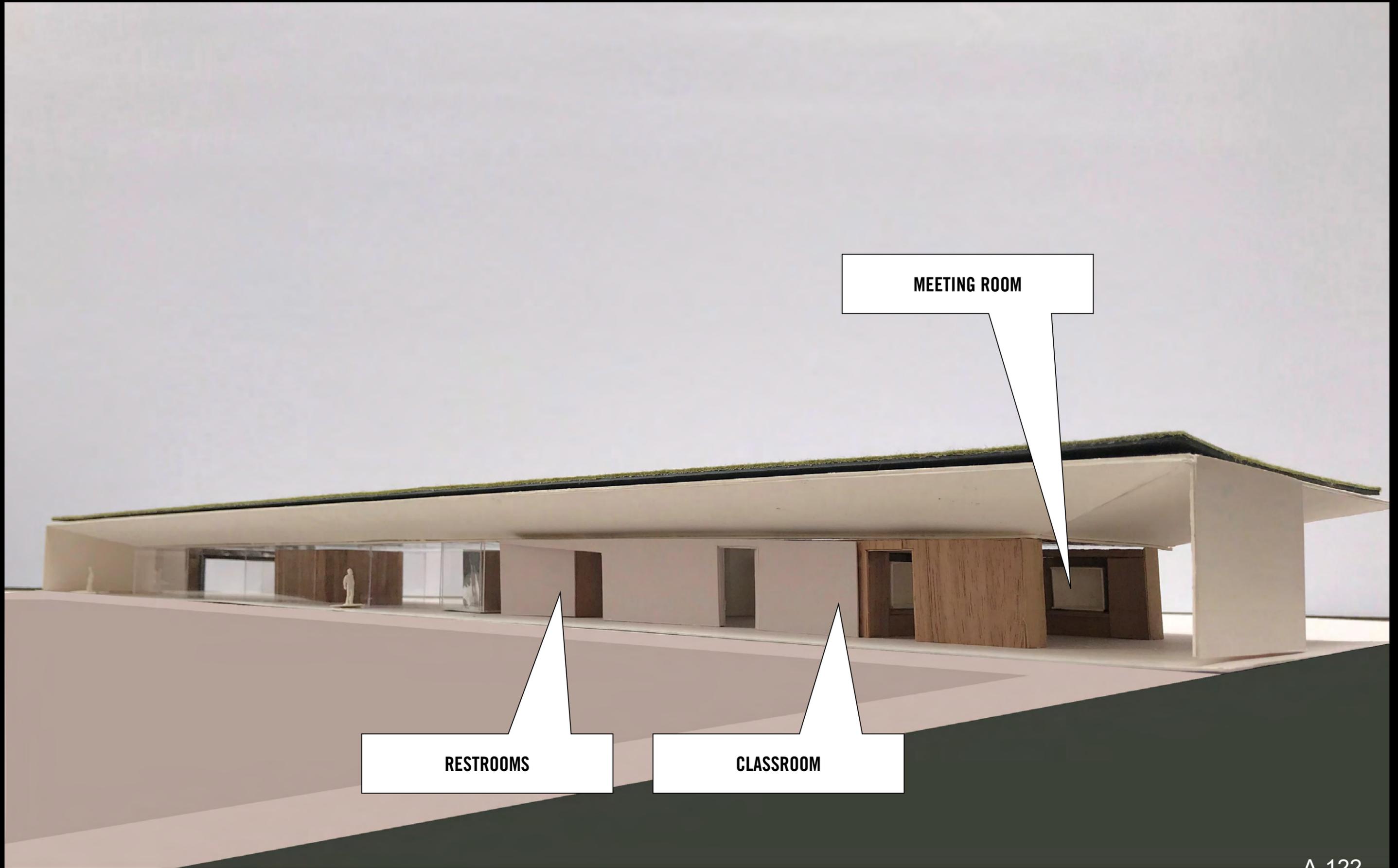
**MULTI-PURPOSE ROOM**

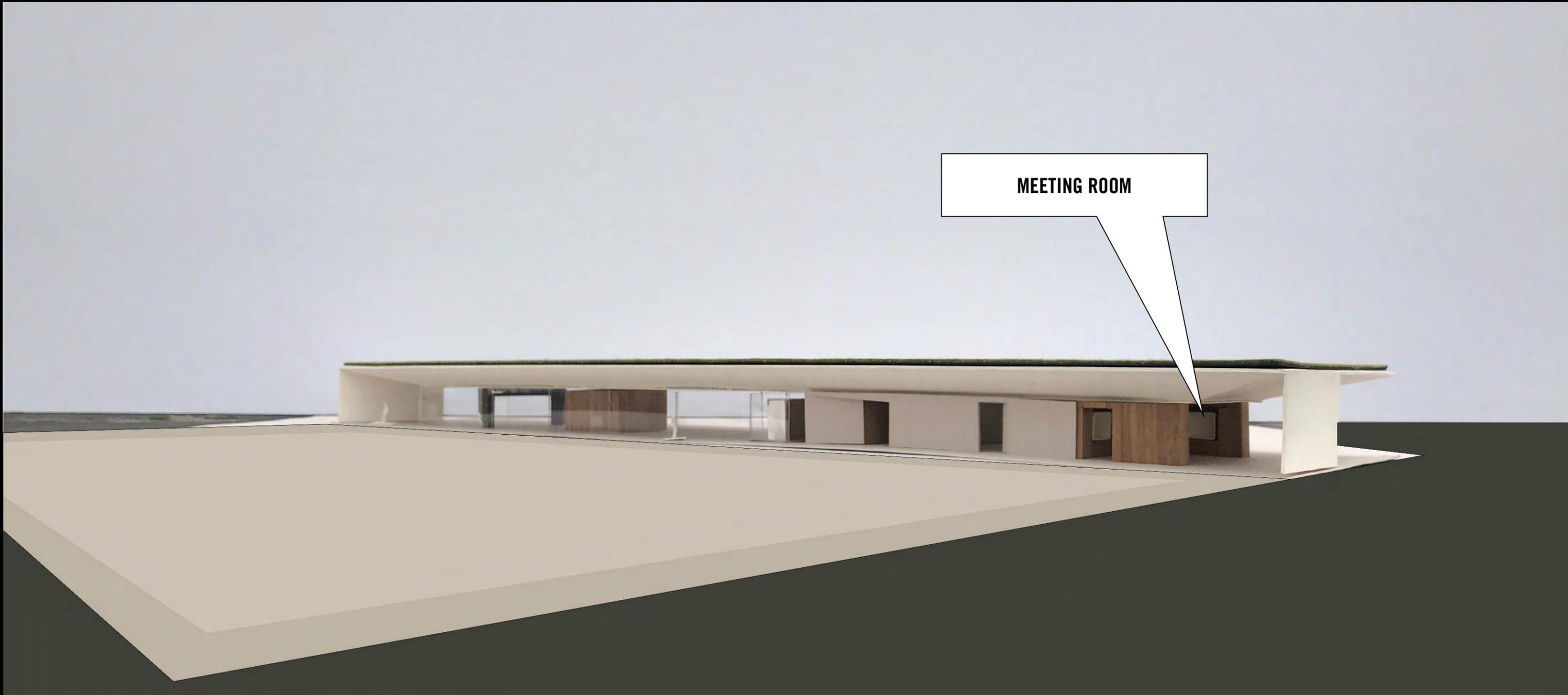
**COVERED OUTDOOR LOBBY**

**CLASSROOM**

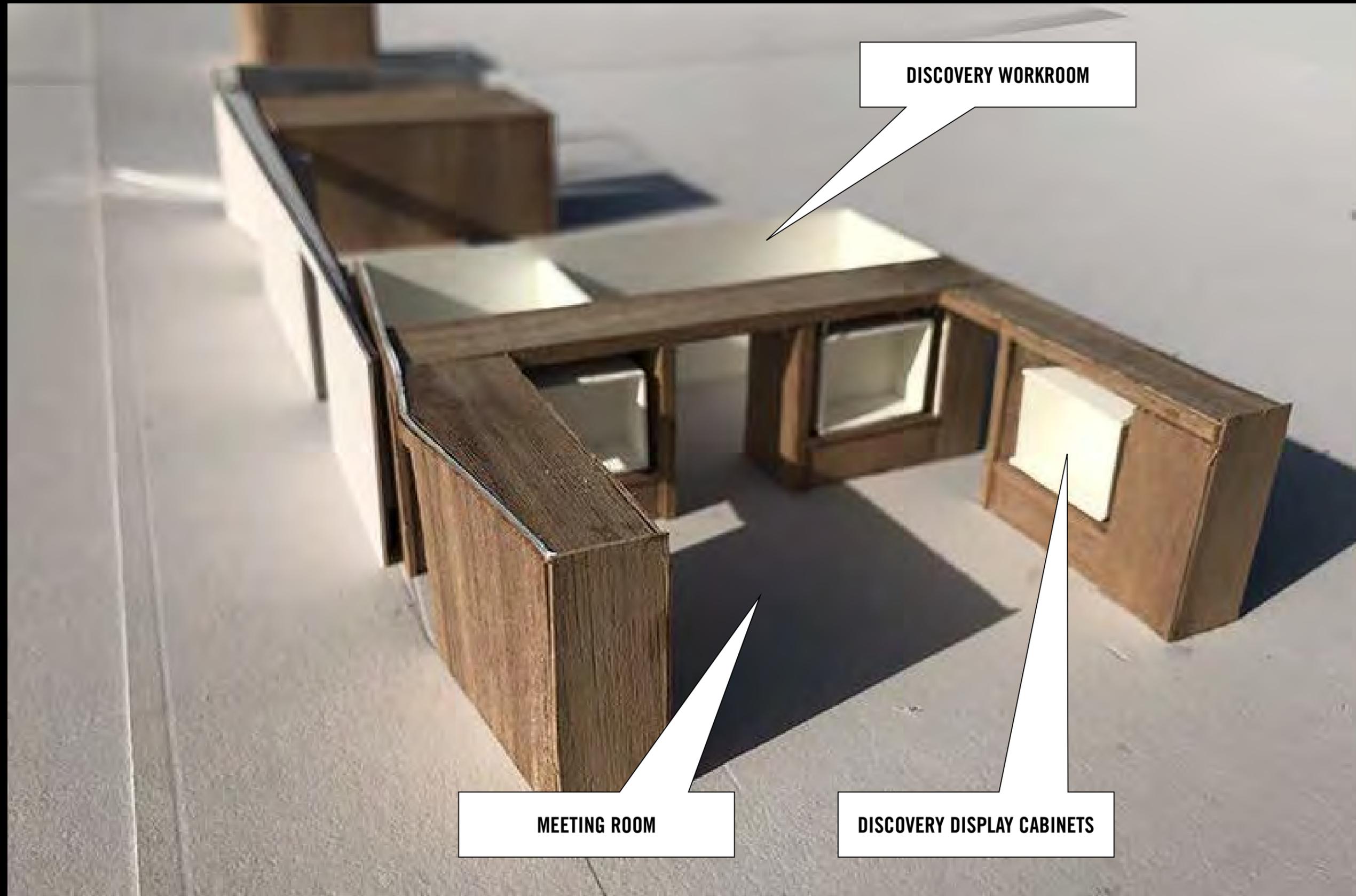
**MULTI-PURPOSE ROOM**

**STAFF OFFICE**





MEETING ROOM

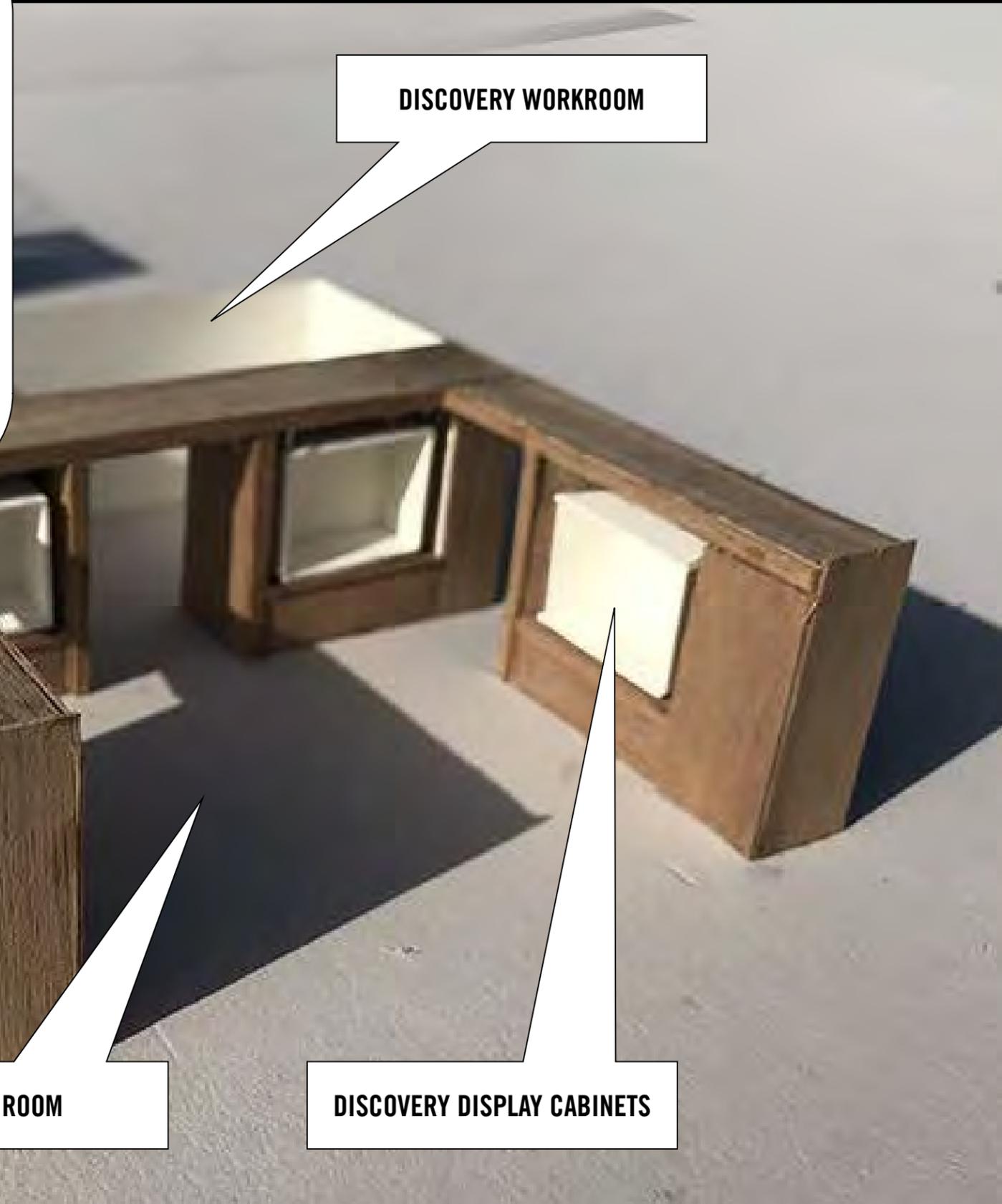
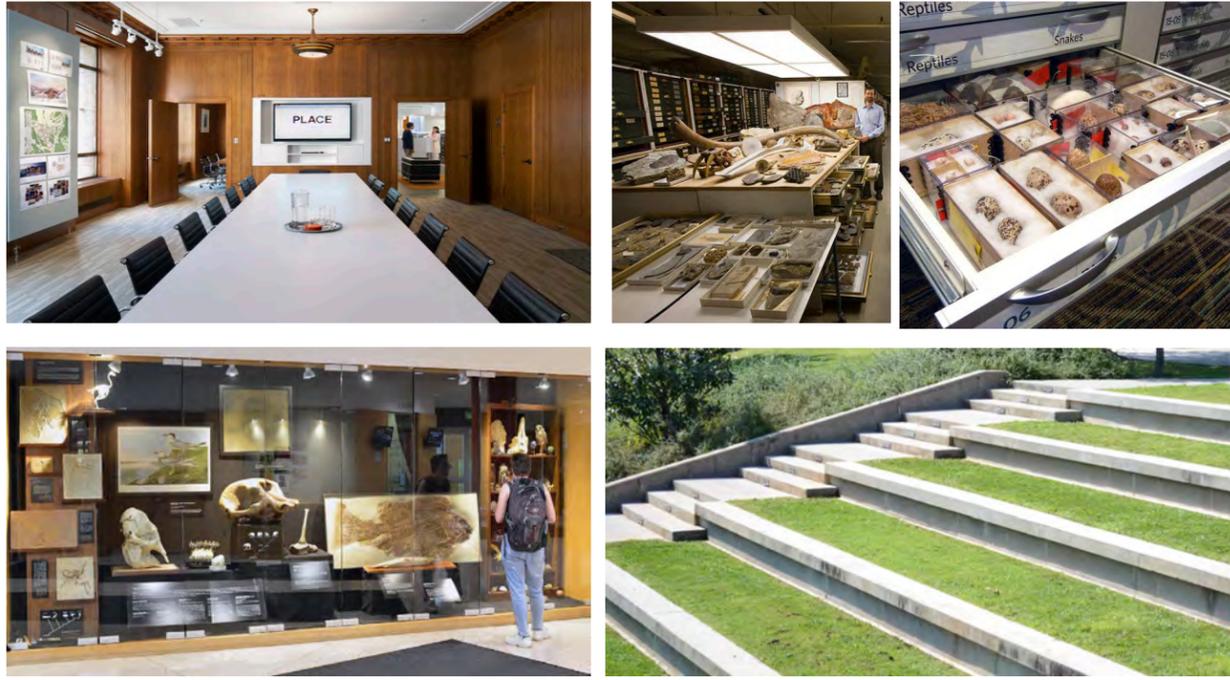


**MEETING ROOM**

**DISCOVERY DISPLAY CABINETS**

**DISCOVERY WORKROOM**

**COMMUNITY CENTER**

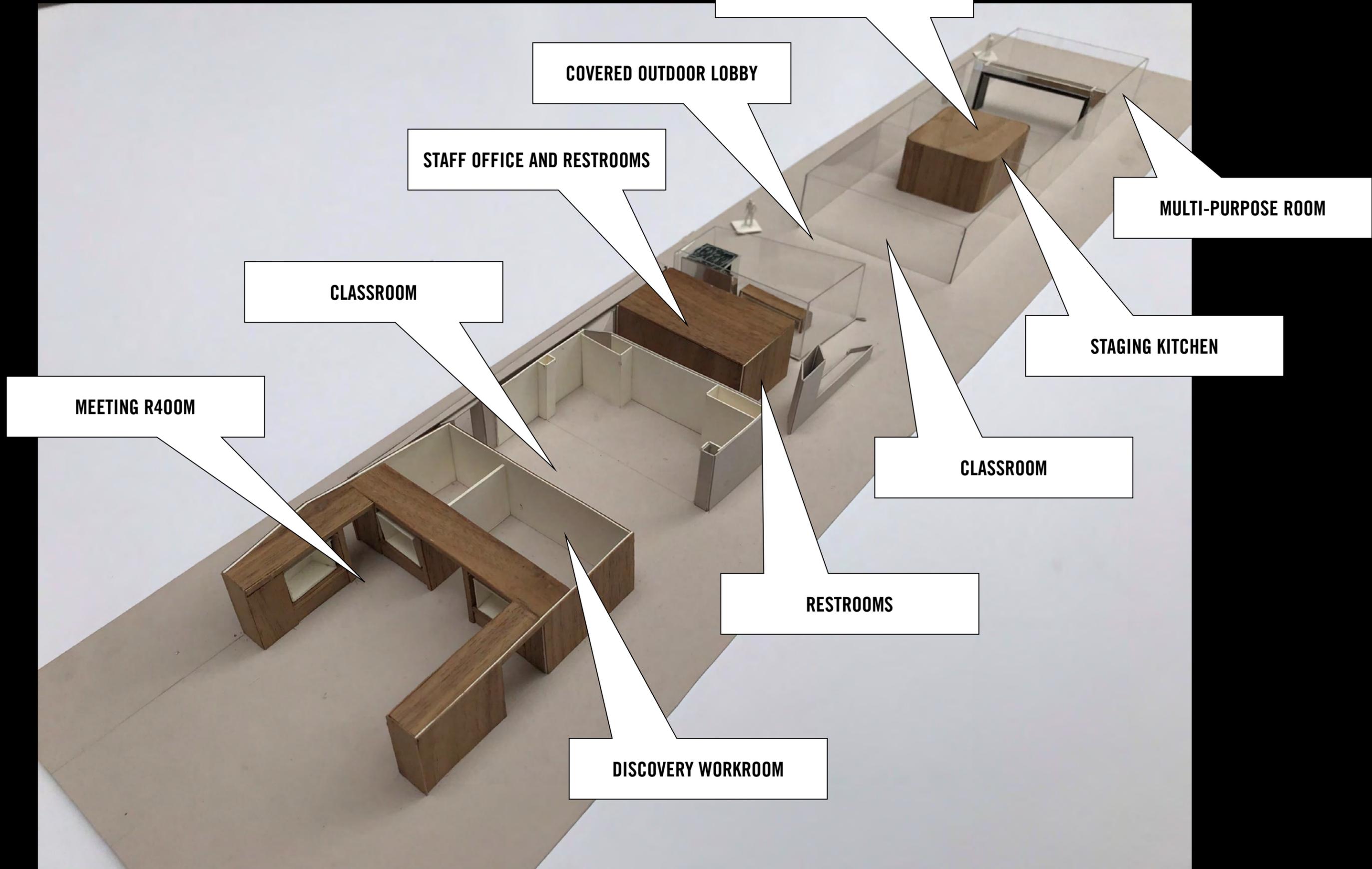


**DISCOVERY WORKROOM**

**MEETING ROOM**

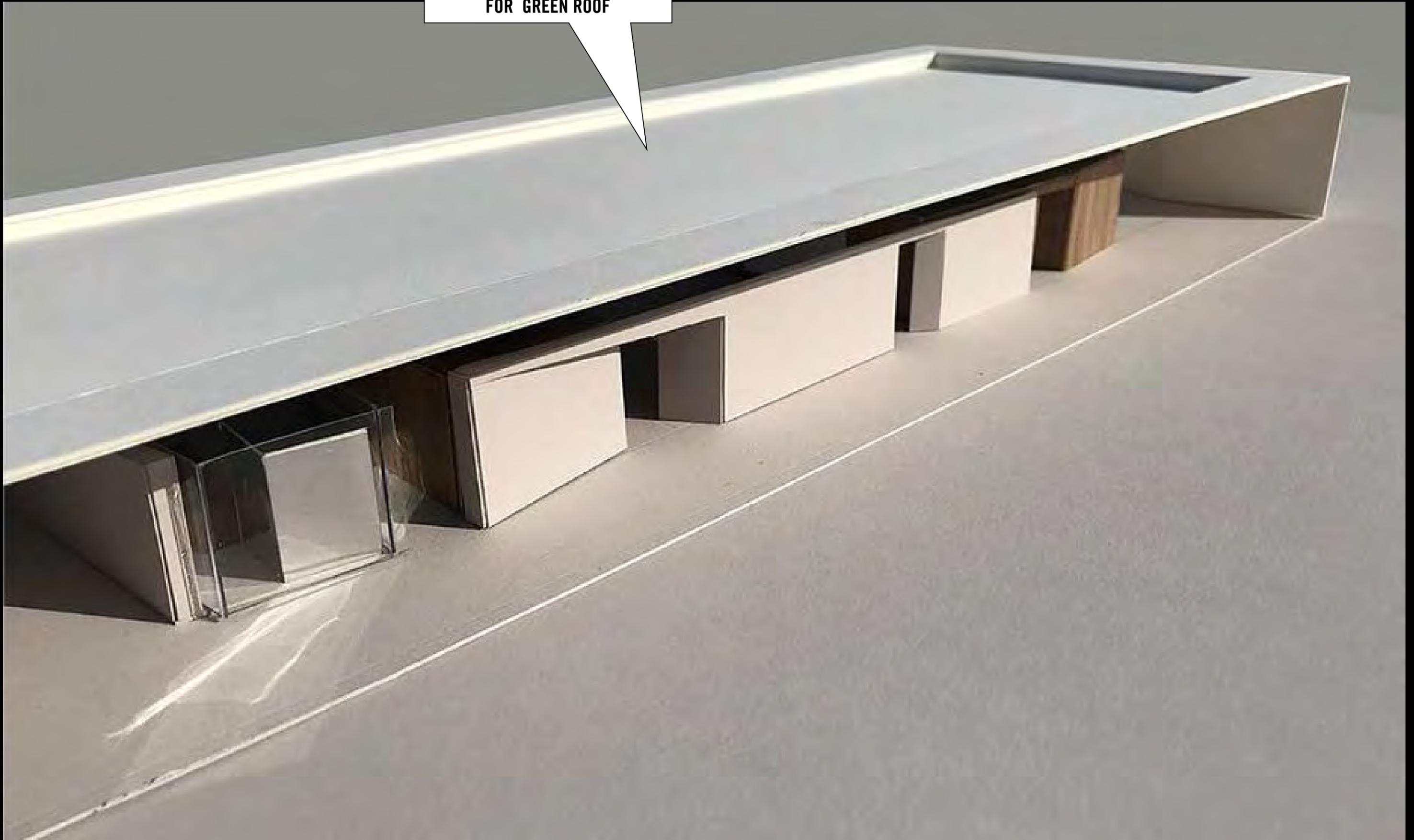
**DISCOVERY DISPLAY CABINETS**

**COMMUNITY CENTER**



COMMUNITY CENTER

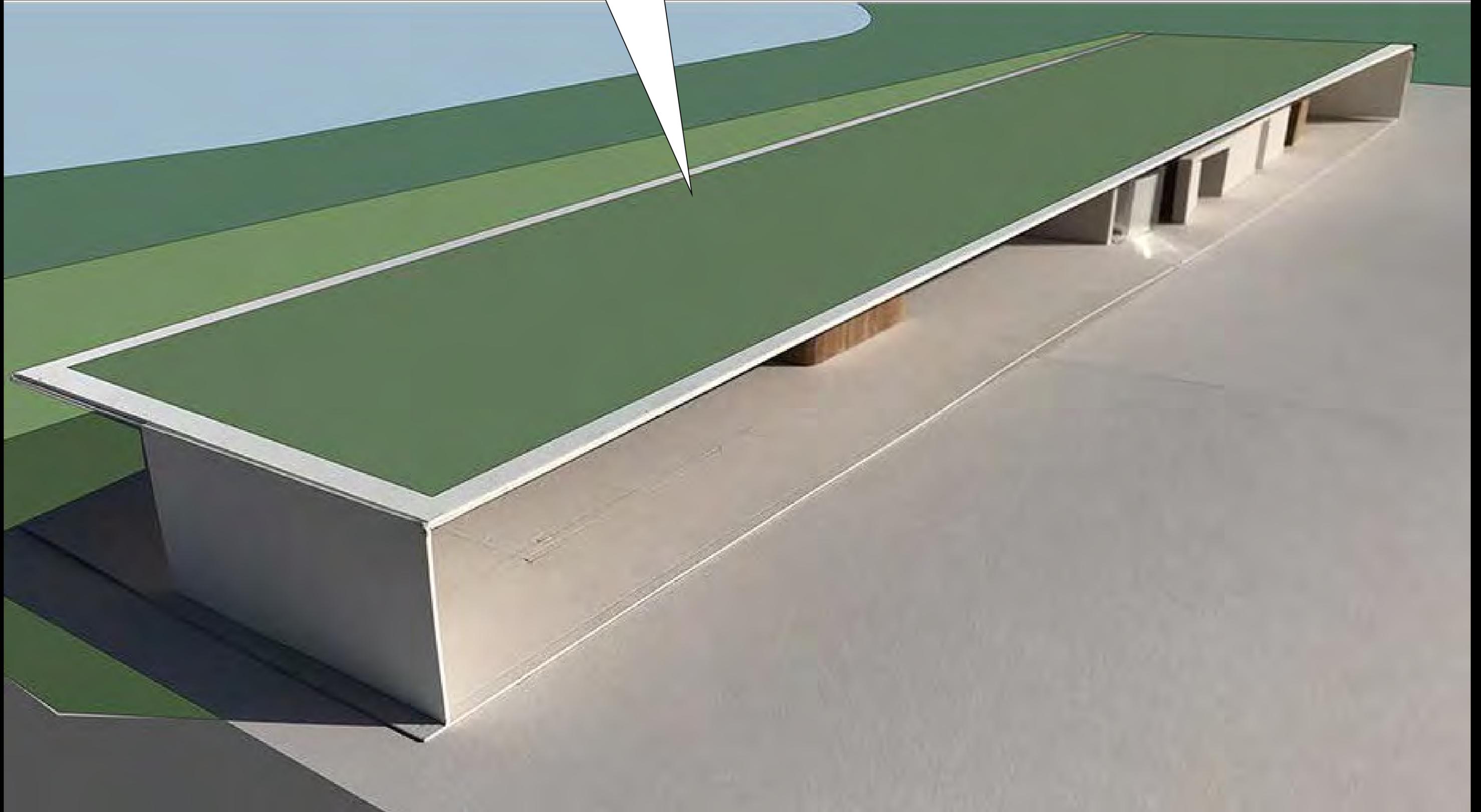
**BUILT IN DEPTH  
FOR GREEN ROOF**



**COMMUNITY CENTER FROM ABOVE LOOKING NORTH WEST**

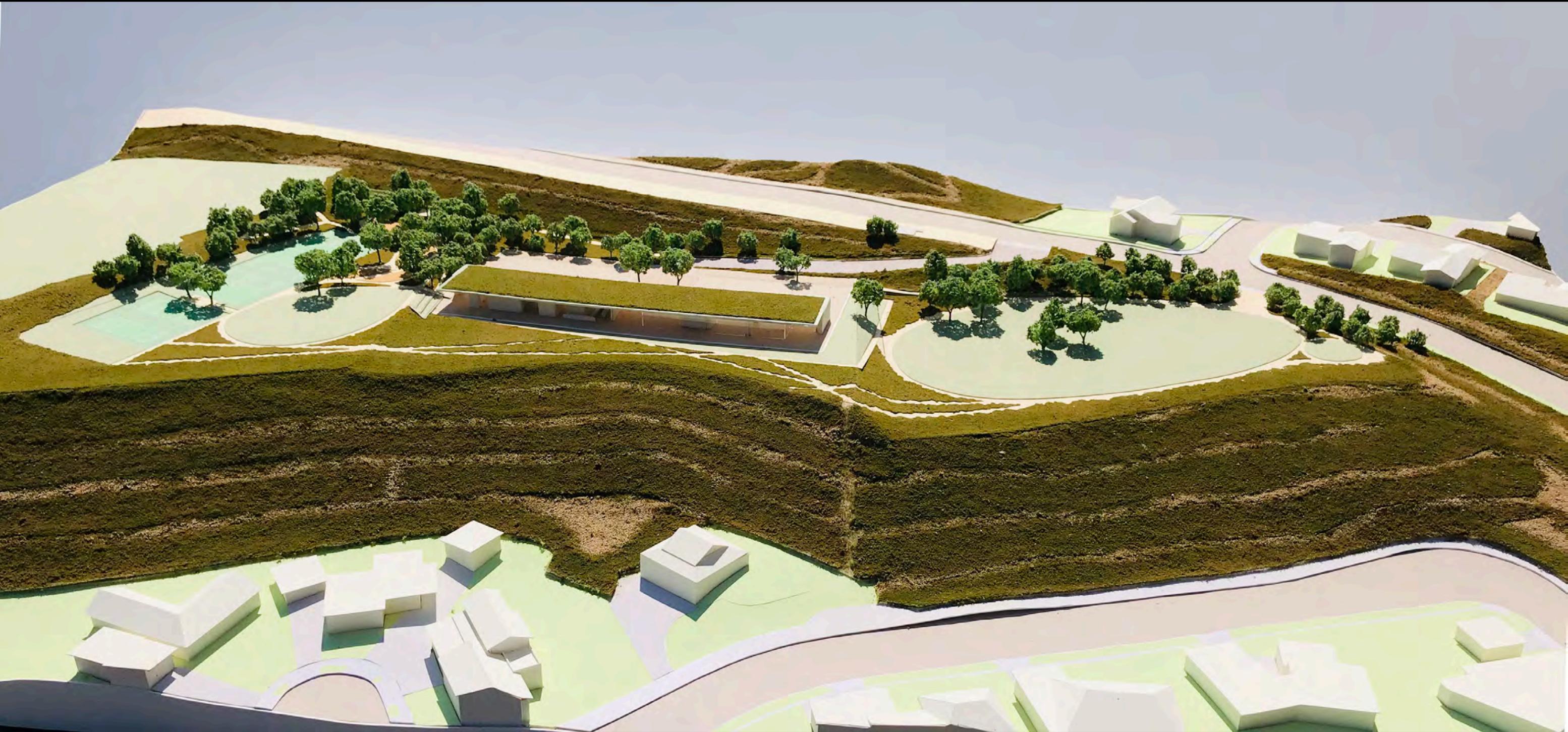
**A-127**

POSSIBLE GREEN ROOF



COMMUNITY CENTER FROM ABOVE LOOKING NORTH WEST

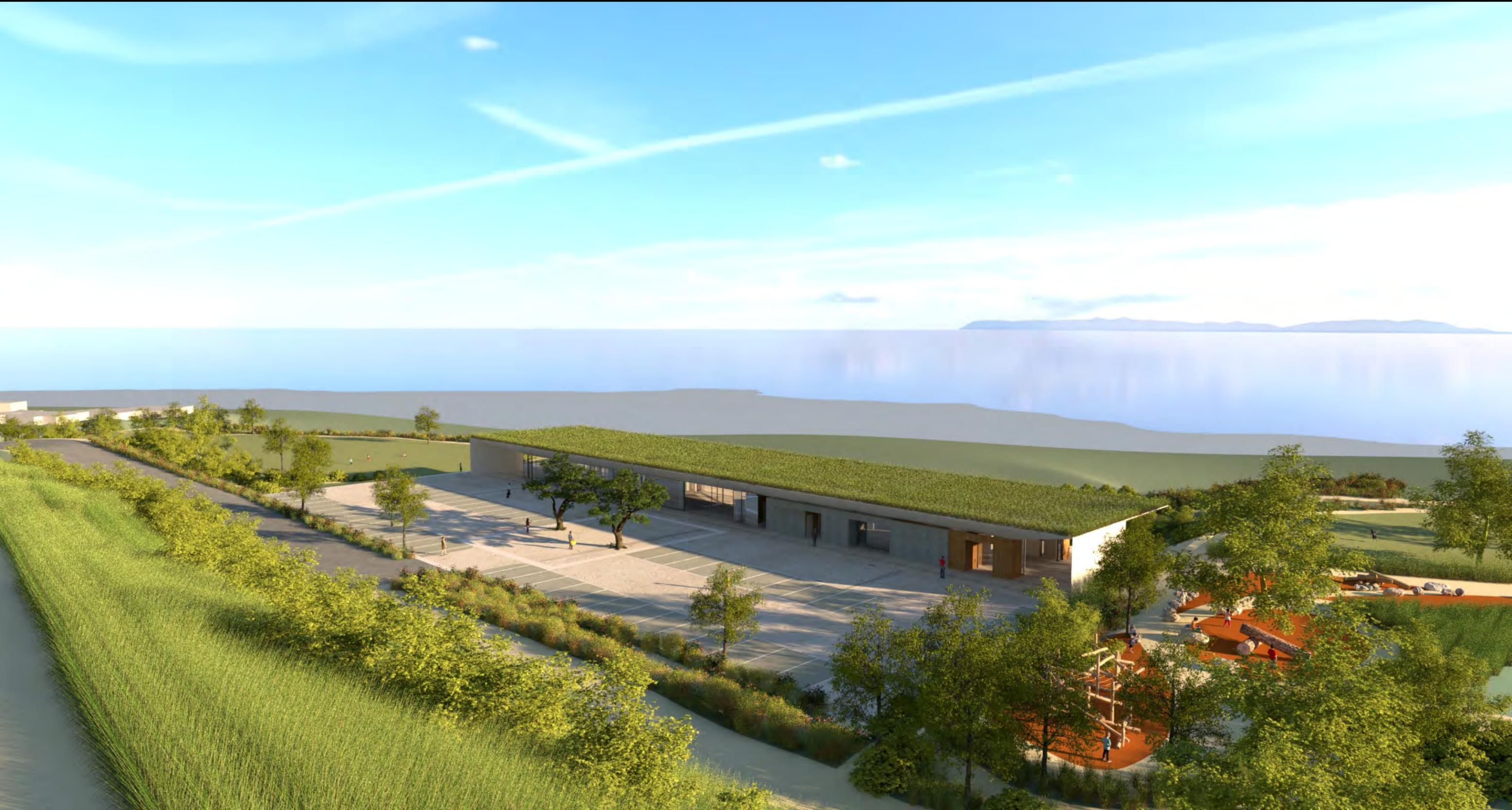
A-128



SITE MODEL



SITE MODEL



COMMUNITY CENTER LOOKING SOUTH



LADERA LINDA PARK LOOKING EAST



LADERA LINDA PARK LOOKING WEST



COMMUNITY CENTER LOOKING SOUTHWEST

A-134

# Ladera Linda Community Park Townhall Meeting Small Group Discussion

*July 10, 2019*

- Arrange yourselves at tables by color
- Identify yourselves and who you represent
- Select a moderator
- Select a speaker
- Address each question in order

# Ladera Linda Community Park Townhall Meeting

*July 10, 2019*

- What do you like most?
- What needs improvement?
- What would you add or subtract?



**Matt Waters**  
[MattW@rpvca.com](mailto:MattW@rpvca.com)  
310-544-5218

# Ladera Linda Park Master Plan

<http://www.rpvca.gov/982/Ladera-Linda-Park-Master-Plan>

## **Ladera Linda Park Homeowner Association Survey**

On February 27<sup>th</sup> the Ladera Linda Homeowner Association (HOA) Park Committee met with Johnson Favaro, the architect selected by the City to design the Ladera Linda Park and Neighborhood Park. In that discussion the firm laid out their vision for the park. Johnson Favaro would be starting from a clean slate with the following guidelines;

- Decrease the present baseline hardscape to increase the park landscape. This would mean potentially a smaller building and less parking.
- All rooms in the new facility would be multipurpose to increase the usage and designed to meet present and future needs.
- The design would be a neighborhood park focused primarily on the needs of the local residents in the four Homeowner Associations, Ladera Linda, Seaview, Seacliff and Mediterranea with priority given to Ladera Linda as the most impacted residents.

The Ladera Linda HOA committee's mission, in the design of the park, is to assure the park will not impact negatively on the quality of life of the area residents. Ladera Linda Park is unique in that access to the park is through a residential street and the only access for the residents. This limited access is also shared with the AYSO soccer fields and the nature preserve presenting a parking and traffic problem. The committee's objective is therefore to assure that the scale of the park and facility does not result in a destination venue for social media and party site thus becoming an attractive nuisance.

The Ladera Linda HOA Park Committee suggested a survey of their association of 178 residences would be made to give purpose to the design being contracted to Johnson Favaro. (Attachment 1) Other HOA's in attendance and city staff, at the meeting, asked for a copy of the survey form that they might use in some manner.

The survey form was developed to give the residents who live nearest the new facility (and those who would be most likely to utilize its amenities) an opportunity to express what they might want to use and enjoy. The form is intended to define interests in major elements of the park as well as activities that could be included in the new building.

The survey was sent to all 178 residences of the Ladera Linda HOA by e-mail or hard copy to those residences that did not respond to the e-mail or did not have a computer or valid e-mail address.

The survey results are shown (Attachment 2) along with comments. One hundred thirty four responses were received. The results validated Johnson Favaro's comment of reducing the hardscape in favor of increasing the landscape as the majority of the inputs recommended walking trails, benches and shade areas. As for outside activities, the recommendations were to retain the present activities, paddle tennis courts, children's play area and a single basketball court.

Although the inputs do not indicate any one program, there was interest for minimum of activities in the new facility for such programs as socials, fitness & balance, computer

classes, and book clubs. This would suggest that a maximum two room (one large and one small) flexible configuration would meet the needs of the local community. Those suggested activities could easily be accommodated in any of the three multi-purpose rooms where the large assembly room could be divided making up a three room configuration. The large assembly room should be sized to accommodate Homeowner Association meetings/socials and the occasional workshops. The structure would have minimum restrooms, reception space, and food prep area.

In summary the facility design is suggested to follow the following guidelines:

- Maximize landscape
- All rooms and storage will be multipurpose and used in support of the park
- Local neighborhood focused rather than a destination venue
- Prevent negative impacts on quality of life of local residents
- Avoid being a large crowd friendly location for any purpose
- Integrate the shape and appearance of the building into the topography and texture of the site.
- Limit inclusion of the Discovery Room materials to the facility entrance display cases and to only those items that are local and unique. (It should be noted that out of the 134 responses none covered retaining the Discovery Room)
- Allow for future building expansion if justified
- Consider options that will minimize the construction disruption to the neighborhood and total time the site is unavailable.

We prefer to keep it a neighborhood park that isn't intrusive to the Ladera Linda community's quality of life and the reason we moved here in the first place. **Clearly the results show a park with a building on it, not a building with a park around it.**

Respectively submitted

Ladera Linda Park Committee  
March 28, 2019

Distribution

Johnson Favaro  
Recreation and Parks Staff  
City Council Members

## Ladera Linda Park Use Survey

The City of Rancho Palos Verdes has engaged Johnson Favaro Architects (<https://www.johnsonfavaro.com>) to design the Ladera Linda Park and the Neighborhood Center. In meetings with Johnson Favaro, they have indicated that the park would be designed to meet the needs of the local community. Your HOA Board has developed the following survey to help the contractor plan the facility. Planning means they could determine room numbers, dimensions, configurations, and amenities if they knew what future use might be. The survey will also be used by Recreation & Parks to plan activities and schedules for the Center.

Please check the box indicating your interest according to age group. A family may have interests in multiple age groups. If you would like to add an activity that is not listed, please include it below under Other. We encourage input from all adult residents of Ladera Linda. We ask you to select your three highest priorities, three from the Park and three from the Center. (Maximum 6 selections per individual)

Please return promptly for planning is in progress. Ask your Board if you have any questions. Your opinion is critically important to us. Please take a minute to complete and return the survey.

Name \_\_\_\_\_ Address \_\_\_\_\_

**Opt Out**

I am not interested in participating in Activities at the Neighborhood Center \_\_\_\_

Why? \_\_\_\_\_

**Park Activities**

Paddle Tennis Courts \_\_\_\_ Basketball Court \_\_\_\_ Picnic Tables \_\_\_\_ Children’s Play Area \_\_\_\_

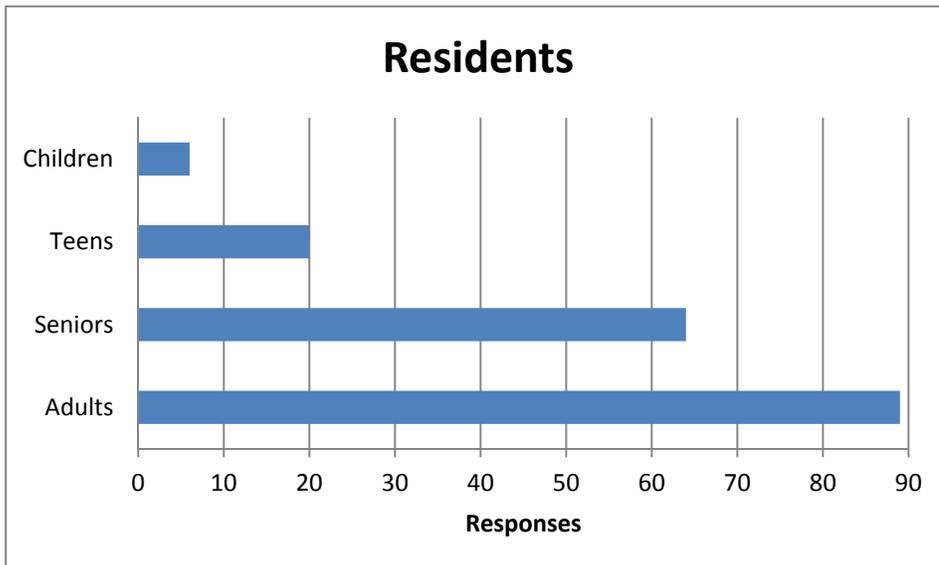
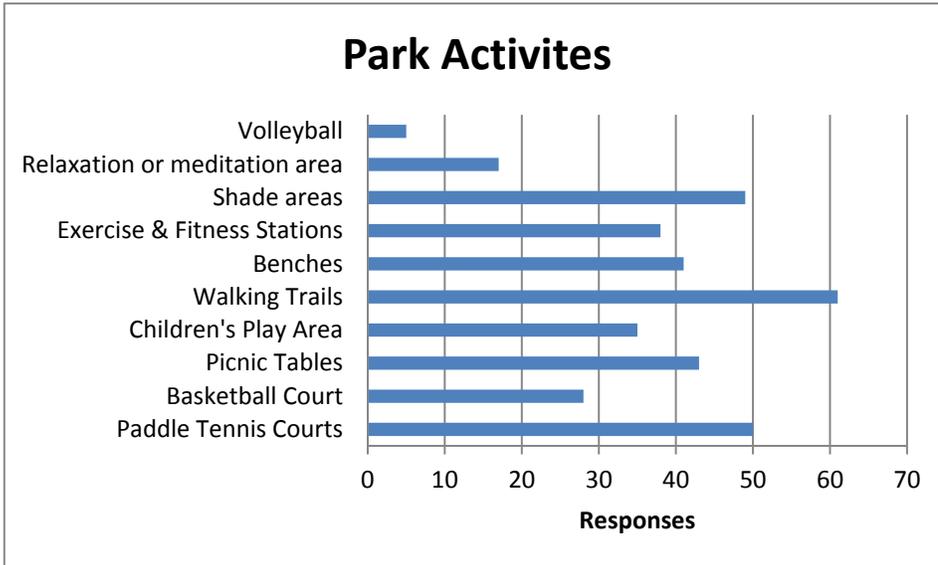
Walking Trails \_\_\_\_ Benches \_\_\_\_ Exercise and Fitness Stations \_\_\_\_ Shade areas \_\_\_\_

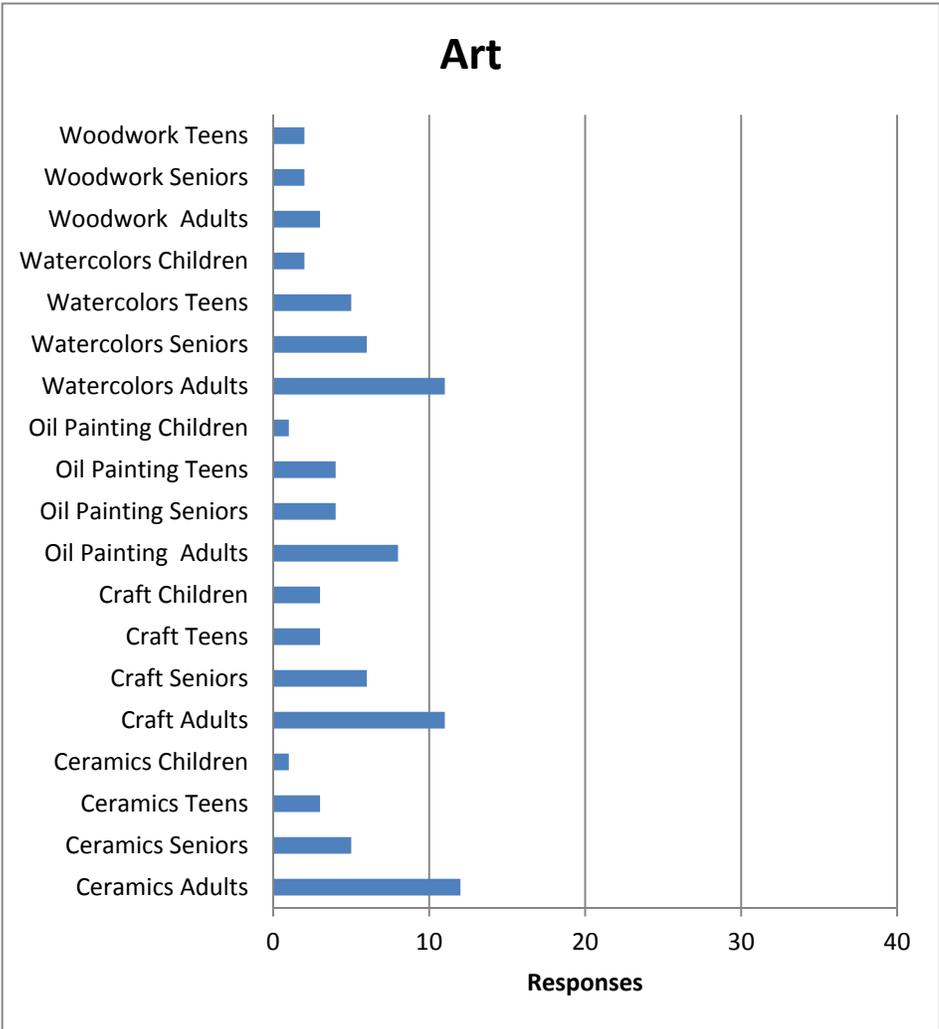
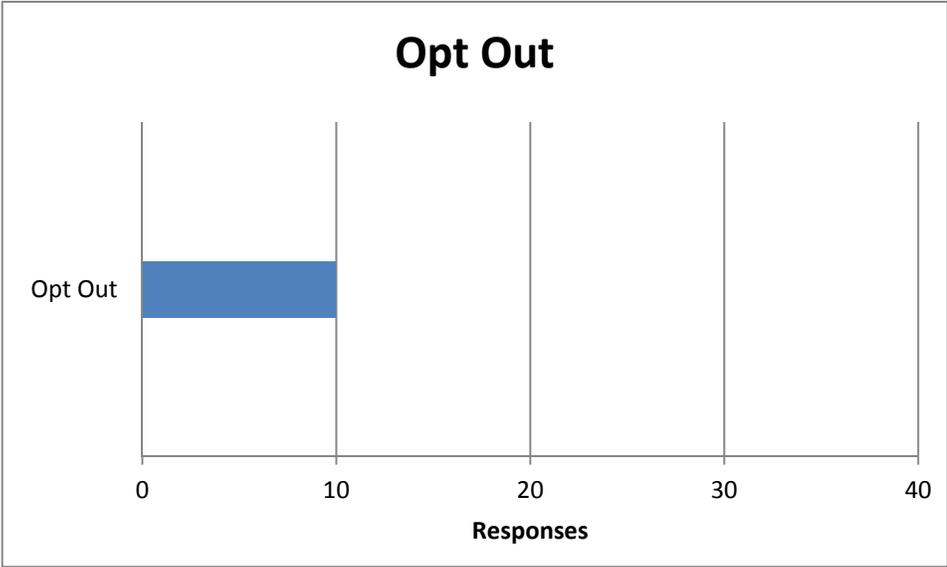
Relaxation or meditation area \_\_\_\_ Volleyball \_\_\_\_ Other \_\_\_\_\_

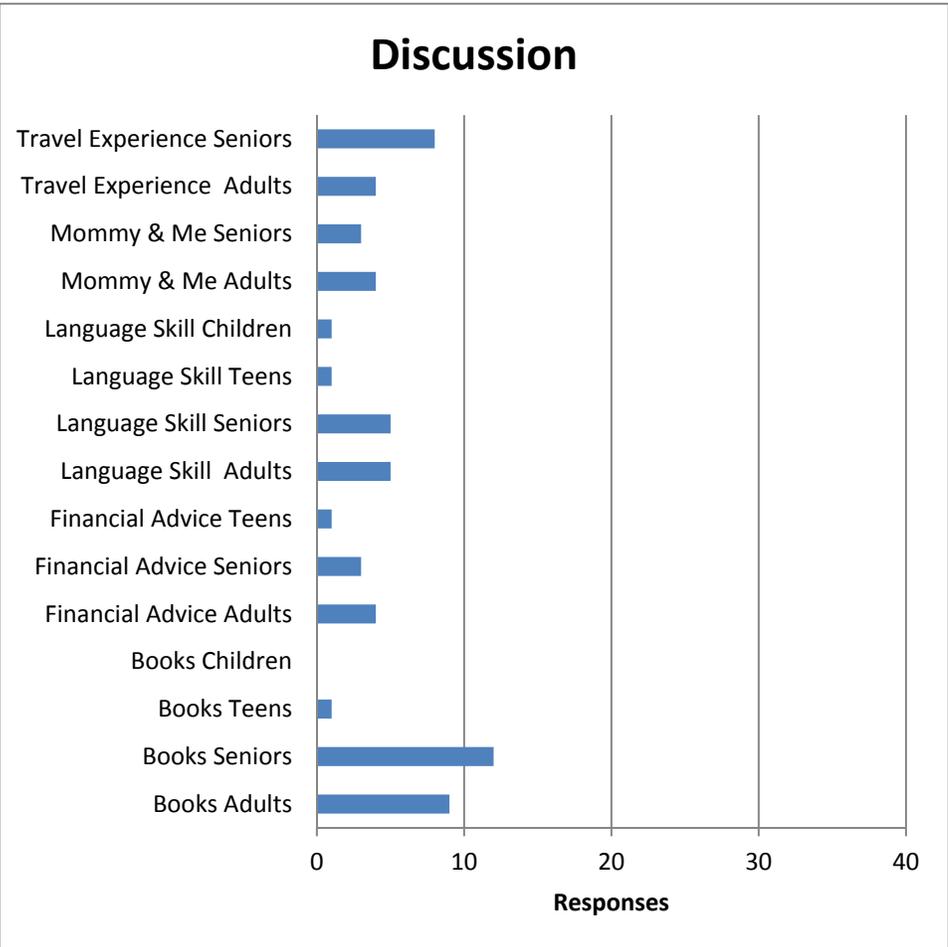
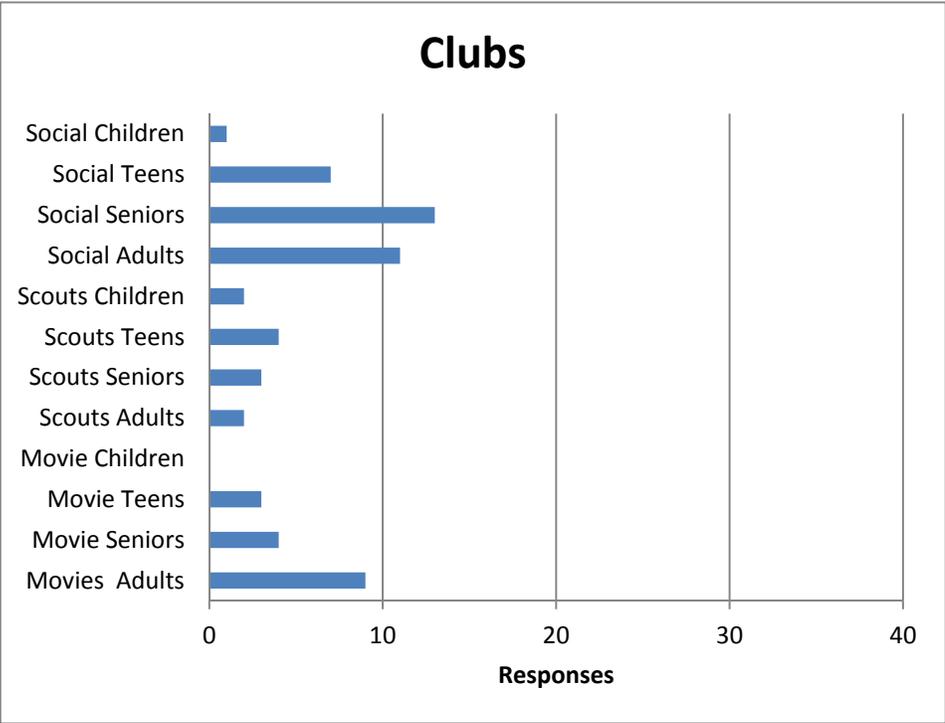
	Adults	Seniors	Teens	Children	Comments
How many residents are included in this survey	___	___	___	___	_____
<b><u>Neighborhood Center Activities</u></b>					
<b><u>Art</u></b>					
Ceramics	___	___	___	___	_____
Crafts	___	___	___	___	_____
Oil Painting	___	___	___	___	_____
Watercolors	___	___	___	___	_____
Woodwork	___	___	___	___	_____
<b><u>Clubs</u></b>					
Movies	___	___	___	___	_____
Scouts	___	___	___	___	_____
Social	___	___	___	___	_____
<b><u>Discussion</u></b>					
Books	___	___	___	___	_____
Financial advice	___	___	___	___	_____
Language skill What language? _____	___	___	___	___	_____
Mommy and me class	___	___	___	___	_____
Travel experience/planning	___	___	___	___	_____
<b><u>Electronics</u></b>					
Computer	___	___	___	___	_____
Cox internet and TV troubleshooting	___	___	___	___	_____
Cell phone learning	___	___	___	___	_____
<b><u>Exercise</u></b>					
Dance What style? _____	___	___	___	___	_____
Balance and strengthening	___	___	___	___	_____
Fitness class	___	___	___	___	_____
<b><u>Games</u></b>					
Board Games	___	___	___	___	_____

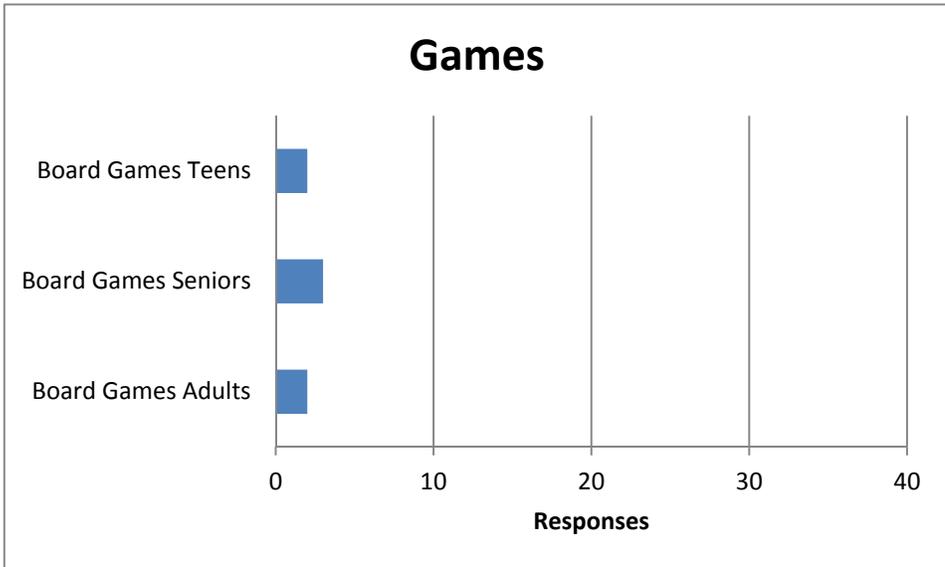
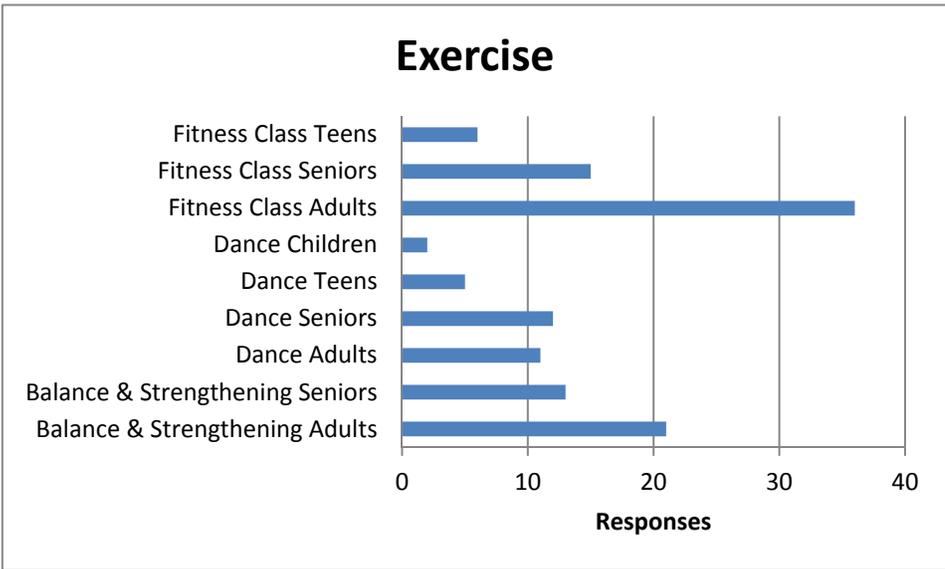
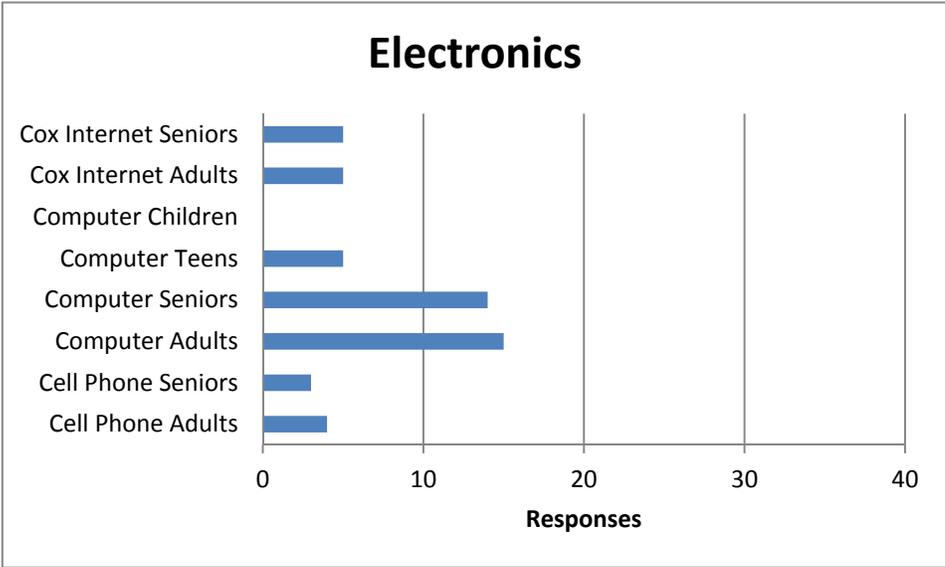
**Other** \_\_\_\_\_

# Ladera Linda Park Usage Survey Results









# Ladera Linda Park Survey Comments

Each item listed is from an individual survey.

## Board Comments

1. Mentorship sessions – seniors mentoring / tutoring our middle school high school students; our middle school and high school students teaching our seniors computer skills and how to use their mobile devices better.
2. Service club meetings – either formal (Rotary; Lions; Kiwanis) or just a home-grown Ladera Linda community service organization
3. RPV Great Speakers – start a Great Speakers Night by our own RPV folks on their life experiences / a topic of interest from their careers. We have so many talented, important and interesting people here in our community – just let them show some pictures / charts and talk / lecture -- I bet we could even sell tickets
4. After school day care – a safe learning / study place for after school which could dovetail with the mentorship idea above

## Opt Out

1. I enjoy outdoor activities in open areas, I do not plan to utilize the park facilities, nor am I interested in new facilities that would attract additional visitors from other areas. My preference would be to return the entire grounds to open space area, include it as part of preserves, and control crowds through very limited parking.
2. I don't on plan on utilizing the facilities at Ladera Linda. Open space is the best. No need for a building. Limited parking, I enjoy walking to the LL park.
3. I just want to enjoy my last few years looking at the great view.....I am 87 and done my participating already. Thanks anyway
4. I have not used the center in the past, I do not plan to in the future. I prefer to keep the area "low key" and not attract outside visitors and traffic
5. No interest. My primary activities including hiking and mountain biking in the preserves, which do not involve the park or community center.
6. Ages, late 80's and early 90's
7. No longer can get there.
8. Lived here for 54 years. Want the best for my neighborhood
9. We are in our very late eighties!
10. Have never used the community center in the past and don't plan on doing so in the future
11. Don't use any of the facilities. It should be kept to absolute minimum.

## Park Activities

1. Horse shoes, bocce
2. No weddings or musical events
3. Dog park area

4. Would like benches by the walking trails, and shade over the picnic tables near play area.
5. Water fountains with bottle fill stations and clean bathrooms
6. Birding
7. Soccer fields and tennis courts
8. Horse Trails
9. Dog Park off leash with room to run on grass not bark
10. Tennis courts & nice horizon view bench like the expansive view area on the panoramic trail

### **Residents**

1. Have adult children and young grandchildren in the south bay

### **Art**

#### Watercolors

1. For beginners

### **Clubs**

#### Movies

1. Summer Nights

#### Social

1. No weddings or other loud events in the evening

### **Discussion**

#### Mommy and Me Class

1. Grandma and me?

#### Language

1. Spanish
2. Italian, For travel
3. or American sign language, French
4. Italian
5. Spanish
6. Spanish
7. Chinese
8. Spanish

#### Travel Experience

1. Including a photography class

## **Exercise**

### Dance Style

1. Ballroom,
2. Hip Hop, Line
3. Dancing
4. Zumba
5. Other styles ok-square dance, Scottish dance, tap dance, Line dancing
6. Ballet or modern
7. Ballroom
8. Zumba
9. Any
10. Ballroom
11. Zumba
12. Zumba

### Fitness

1. Yoga TAI CHI
2. Yoga or Pilates
3. Yoga

## **Games**

1. Games for teens?

## **Other**

1. A facility available for rent for private events
2. Weddings, parties, community meeting place. Community room must be significantly larger than present multipurpose room. Must be able to serve food. Less is More!
3. Most these of this "activities" listed can be done at home. Please don't bring more traffic into the area.
4. Croquet, Bocce Ball, Shuffleboard, Corn hole, Self Defense
5. Please keep as many mature trees and general foliage as possible.
6. I worry for too much traffic, Best park best
7. Pilates, Yoga classes, Music Classes
8. Yoga
9. Would be interested in a GOOD yoga class-teacher should be certified. Would love an arts & crafts class I could do with my grandchildren. I also think a Mommy & Me class or Playgroup would be great, and room for book club meetings. I would use all the above.
10. No late receptions or events, nothing past 2100
11. HOA gatherings-- Holiday parties, Annual meetings, Speakers for neighborhood presentations -- e.g. City Council & Safety presentations

12. Please no loud social gatherings such as wedding receptions; maybe offer first aid/CPR/AED training classes
13. No weddings or other loud events in the evening; no large scale events that conflict with AYSO schedule
14. Walking / jogging track/path around perimeter of the park; guest lectures by community members (requires audio-visual capability in the center)
15. Use for local residents, not out-of-city visitors
16. Presentations on local animals, plants and insects, archeology (fossils) Marine manuals (whales, sea lions, etc.), geology and history of the peninsula
17. Tax prep classes
18. Yoga
19. I will not be participating in any activities at the Neighborhood Center building
20. Active prayer gatherings
21. Astronomy
22. We prefer to keep it a small community park that isn't intrusive to the Ladera Linda community by non-residents of this community
23. Concerned that community will change. Hoping Ladera Linda will maintain its quiet peaceful place to be in nature. Please don't turn it into a loud trash on Monday. Disturbing noisy for neighbors, bringing in unruly crowds who speed and don't respect rules or the beautiful preserve. Thank you.
24. No Activities. Not on board with turning the area into an entertainment destination.
25. Not interested in Activities
26. I am for the least development of the open space and community center
27. I am for the least development of our precious open space and community center
28. Bridge
29. Great Speakers - Wide range of topics - ie Lecture Series
30. Please include a dog park with fences so they can run off leash for a good space like the open grasses area at the front of the park now where the basketball courts & play structures are
31. Please include a dog park with fences so they can run off leash for a good space like the open grasses area at the front of the park now where the basketball courts & play structures are
32. Will not participate
33. It's important that consideration is given to not design a facility that will draw all of greater LA to the area. This includes not removing bushes/trees to create a Del-Cerro like "view" destination.
34. Traffic light at Forrestal & PVDS
35. Security cameras in neighborhood
36. Prefer not to; moved here for the beautiful canyon & to be outdoors

## Projected Ladera Linda Usage:

The attached projected schedules show a typical future month of indoor activity at Ladera Linda Community Center on a weekly basis. The usage types and levels are based on the following inputs:

- previous events, classes, and programs offered at Ladera Linda: 2015-2019
- activities at other locations such as Hesse Park
- public outreach efforts
- recent meetings with local HOAs and individual residents
- recent Ladera Linda HOA Survey

The input we have received tells us that these uses reflect real demand. The level of usage would involve the building up of relationships with local non-profits, instructors and community groups. The HOAs and neighbors have expressed a need for the accommodation of adult and senior activities. Accordingly, adult/senior activities included on the schedules are:

- Daily senior exercise classes
- Book club
- Tech/Computer classes
- Social Gatherings
- Card games
- Tai Chi
- Painting Classes
- Dance Classes

The schedule also includes classes and activities geared for children, teen programming, nature-themed activities (in conjunction with organized hikes), youth dance, community/non-profit rentals, and private rentals. The schedules demonstrate that uses would be spread throughout the week. The schedule uses the following usage code:

Adult/Senior programming

Child programming

Teen programming

Non-Profit/Community rentals

Nature/Based

Private Rental

Youth Dance

It is important to remember that the 3/20/18 City Council report on the Ladera Linda Master Plan contained the following constraints on park usage and rentals based on resident concerns about park security and usage levels:

<b>Rental Polices</b>	<b>Current</b>	<b>Proposed</b>
Rental Hours	Not specified to Midnight	10am-9pm
Classes	Not specified	8am-9pm
Private Rentals after 5pm	No current limits	2 x month **
Amplified Music (indoor only)	10am-10pm	11am-8m 9am-8pm classes
Special Events	No limit	8/year
Outdoor Use (drop in)	Not specified	>25 requires approval

\*Restriction does not apply to non-profits, City events, or HOA rentals

Week 1	Ladera Linda Draft Usage Schedule: Week 1			Key: Adult Senior Child Teen Non-Profit/Community Nature/Based Private Rental Youth Dance				
Time	Room	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am-9am	MPR		Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	
	Class							
	Class							
9am-10am	MPR							
	Class		Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Kids Arts and Crafts (10-20)
	Class		Kids Arts & Crafts (10-20)	Kids Cooking Class (10-20)	Kids Arts & Crafts (10-20)	Kids Cooking Class(10-20)	Kids Arts & Crafts (10-20)	Senior Book Club (10-30)
10am-11am	MPR	Non-profit Mtg (20-50)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	
	Class		Kids Music (10-20)		Kids Music (10-20)	Hike/Nature Talk (60-100)	Kids Music (10-20)	Senior Book Club (10-30)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Kids Arts and Crafts (10-20)
11am-12pm	MPR	Non-profit Mtg (20-50)	Non-profit Org Mtg (20-40)	Kids Storytime (10-20)		Kids Storytime (10-20)	Senior Movie Lunch Club (10-40)	Tai Chi (10-20)
	Class		Senior Tech/Computer (10-20)		Senior Tech/Computer (10-20)	Hike/Nature Talk (60-100)		
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
12pm-1pm	MPR	Kids Bday Party (10-50)	Non-profit Org Mtg (20-40)				Senior Lunch Social (10-30)	Senior Movie Lunch Club (10-40)
	Class			Senior Lunch Social (10-30)		Hike/Nature Talk (60-100)		Community/HOA Mtg (30-80)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
1pm-2pm	MPR	Kids Bday Party (10-50)	Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			Community/HOA Mtg (30-80)
	Class		Senior/Adult Art (10-20)	Ceramics (10-20)	Senior/Adult Art (10-20)	Ceramics (10-20)		
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
2pm-3pm	MPR	Kids Bday Party (10-50)	Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			
	Class	Non-profit Mtg (20-40)				Non-profit mtg (20-40)	Senior Friday Finances (10-30)	
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
3pm-4pm	MPR	Non-profit Mtg (20-40)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class			Non-profit Org Mtg (20-40)	Tai Chi (10-20)	Non-profit mtg (20-40)		
	Class		After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
4pm-5pm	MPR	Non-profit Mtg (20-40)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class		After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
	Class			Non-profit Org Mtg (20-40)	Yoga (10-15)			
5pm-6pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	
	Class		Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)	Community Rental (10-20)	
	Class							
6pm-7pm	MPR		Adult/Senior Dance (10-20)					Private Rental (30-100)
	Class		Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)	Community Rental (10-20)	
	Class						Teen Program (10-20)	
7pm-8pm	MPR		Adult/Senior Dance (10-20)	Senior Adult Tap (10-20)				Private Rental (30-100)
	Class							
	Class						Community Rental (10-20)	
8pm-9pm	MPR							Private Rental (30-100)
	Class							
	Class							
9pm-10pm	MPR							
	Class							
	Class							

Week 1		Ladera Linda Draft Usage Schedule: Week 2		Key: Adult Senior Child Teen Non-Profit/Community Nature/Based Private Rental Youth Dance				
Time	Room	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am-9am	MPR		Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	
	Class							
	Class							
9am-10am	MPR							
	Class		Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Kids Arts and Crafts (10-20)
	Class		Kids Arts & Crafts (10-20)	Kids Cooking Class (10-20)	Kids Arts & Crafts (10-20)	Kids Cooking Class(10-20)	Kids Arts & Crafts (10-20)	Senior Book Club (10-30)
10am-11am	MPR	Private Rental (20-50)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	
	Class		Kids Music (10-20)		Kids Music (10-20)		Kids Music (10-20)	Senior Book Club (10-30)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Kids Arts and Crafts (10-20)
11am-12pm	MPR	Private Rental (20-50)		Kids Storytime (10-20)		Kids Storytime (10-20)	Senior Movie Lunch Club (10-40)	Tai Chi (10-20)
	Class		Senior Tech/Computer (10-20)		Senior Tech/Computer (10-20)			
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
12pm-1pm	MPR	Private Rental (20-50)		Non-profit org (30-60)		Senior Lunch Social (10-30)	Senior Movie Lunch Club (10-40)	
	Class			Senior Lunch Social (10-30)				Community Rental (10-30)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
1pm-2pm	MPR		Adult Senior Card Games (20-40)	Non-profit org (30-60)	Adult/Senior Card Games (10-40)			
	Class		Senior/Adult Art (10-20)	Ceramics (10-20)	Senior/Adult Art (10-20)	Ceramics (10-20)		Community Rental (10-30)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
2pm-3pm	MPR	Senior Travel Talk (10-30)	Adult Senior Card Games (20-40)	Non-profit org (30-60)	Adult/Senior Card Games (10-40)			
	Class					Non-profit mtg (20-40)	Senior Friday Finances (10-30)	Community Rental (10-30)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
3pm-4pm	MPR	Senior Travel Talk (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class				Tai Chi (10-20)	Non-profit mtg (20-40)		
	Class		After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
4pm-5pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class	Youth Martial Arts	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
	Class				Yoga (10-15)			
5pm-6pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	
	Class	Youth Martial Arts	Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)	Community Rental (20-40)	
	Class							
6pm-7pm	MPR		Adult/Senior Dance (10-20)					
	Class		Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)	Community Rental (20-40)	
	Class						Teen Program (10-20)	
7pm-8pm	MPR		Adult/Senior Dance (10-20)	Senior Adult Tap (10-20)				
	Class							
	Class							
8pm-9pm	MPR							
	Class							
	Class							
9pm-10pm	MPR							
	Class							
	Class							

Week 1		Ladera Linda Draft Usage Schedule: Week 3		Key: Adult Senior Child Teen Non-Profit/Community Nature/Based Private Rental Youth Dance				
Time	Room	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am-9am	MPR		Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	
	Class							
	Class							
9am-10am	MPR							
	Class		Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Kids Arts and Crafts (10-20)
	Class		Kids Arts & Crafts (10-20)	Kids Cooking Class (10-20)	Kids Arts & Crafts (10-20)	Kids Cooking Class(10-20)	Kids Arts & Crafts (10-20)	Senior Book Club (10-30)
10am-11am	MPR	Non-profit Mtg (20-50)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	
	Class		Kids Music (10-20)	Hike/Discovery Room (60-100)	Kids Music (10-20)		Kids Music (10-20)	Senior Book Club (10-30)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Kids Arts and Crafts (10-20)
11am-12pm	MPR	Non-profit Mtg (20-50)	Non-profit Org Mtg (20-40)	Kids Storytime (10-20)		Kids Storytime (10-20)	Senior Movie Lunch Club (10-40)	Tai Chi (10-20)
	Class		Senior Tech/Computer (10-20)	Hike/Discovery Room (60-100)	Senior Tech/Computer (10-20)			
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
12pm-1pm	MPR		Non-profit Org Mtg (20-40)	Hike/Discovery Room (60-100)		Senior Lunch Social (10-30)	Senior Movie Lunch Club (10-40)	Kids Party 20-50
	Class			Senior Lunch Social (10-30)				
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
1pm-2pm	MPR		Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			Kids Party 20-50
	Class		Senior/Adult Art (10-20)	Ceramics (10-20)	Senior/Adult Art (10-20)	Ceramics (10-20)		
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
2pm-3pm	MPR		Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			Kids Party 20-50
	Class	Non-profit Mtg (20-40)	Non-profit Org Mtg (20-40)			Non-profit mtg (20-40)	Senior Friday Finances (10-30)	
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
3pm-4pm	MPR	Non-profit Mtg (20-40)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class		Non-profit Org Mtg (20-40)		Tai Chi (10-20)	Non-profit mtg (20-40)		
	Class		After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
4pm-5pm	MPR	Non-profit Mtg (20-40)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class		After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
	Class				Yoga (10-15)			
5pm-6pm	MPR	Private Rental (30-100)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	
	Class		Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)		
	Class							
6pm-7pm	MPR	Private Rental (30-100)	Adult/Senior Dance (10-20)		Community Rental (10-20)			
	Class		Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)		
	Class							
7pm-8pm	MPR	Private Rental (30-100)	Adult/Senior Dance (10-20)	Senior Adult Tap (10-20)	Community Rental (10-20)			
	Class							
	Class							
8pm-9pm	MPR	Private Rental (30-100)			Community Rental (10-20)			
	Class							
	Class							
9pm-10pm	MPR							
	Class							
	Class							

Week 1		Ladera Linda Draft Usage Schedule: Week 4		Key: Adult Senior Child Teen Non-Profit/Community Nature/Based Private Rental Youth Dance				
Time	Room	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am-9am	MPR		Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	Seniors Exercise (10-25)	
	Class							
	Class							
9am-10am	MPR							
	Class		Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Parent N Me (15-20)	Kids Arts and Crafts (10-20)
	Class		Kids Arts & Crafts (10-20)	Kids Cooking Class (10-20)	Kids Arts & Crafts (10-20)	Kids Cooking Class(10-20)	Kids Arts & Crafts (10-20)	Senior Book Club (10-30)
10am-11am	MPR	Private Rental (20-50)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	Adult Sr Fitness (10-20)	Senior/Balance & Strength (10-20)	
	Class		Kids Music (10-20)		Kids Music (10-20)		Kids Music (10-20)	Senior Book Club (10-30)
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Kids Arts and Crafts (10-20)
11am-12pm	MPR	Private Rental (20-50)		Kids Storytime (10-20)		Kids Storytime (10-20)	Senior Movie Lunch Club (10-40)	Tai Chi (10-20)
	Class		Senior Tech/Computer (10-20)		Senior Tech/Computer (10-20)			
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
12pm-1pm	MPR	Private Rental (20-50)					Senior Lunch Social (10-30)	Senior Movie Lunch Club (10-40)
	Class			Senior Lunch Social (10-30)				
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
1pm-2pm	MPR		Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			
	Class		Senior/Adult Art (10-20)	Ceramics (10-20)	Senior/Adult Art (10-20)	Ceramics (10-20)		
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
2pm-3pm	MPR	Senior Travel Talk (10-30)	Adult Senior Card Games (20-40)		Adult/Senior Card Games (10-40)			
	Class			Comm/Non Profit (10-20)		Non-profit mtg (20-40)	Senior Friday Finances (10-30)	
	Class		Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	Child Day Care Class (10-20)	
3pm-4pm	MPR	Senior Travel Talk (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class			Comm/Non Profit (10-20)	Tai Chi (10-20)	Non-profit mtg (20-40)		
	Class		After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
4pm-5pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Senior Adult Oil Painting (20-30)
	Class	Youth Martial Arts	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	After School Program (10-20)	
	Class				Yoga (10-15)			
5pm-6pm	MPR		Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	Youth Dance (10-30)	
	Class	Youth Martial Arts	Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)	Community Rental (20-40)	
	Class							
6pm-7pm	MPR	Community Rental (20-50)	Adult/Senior Dance (10-20)					Community/Non Profit (20-50)
	Class		Teen Program (10-20)	Senior/Adult Computer (10-20)	Teen Program (10-20)	Senior/Adult Computer (10-20)	Community Rental (20-40)	
	Class						Teen Program (10-20)	
7pm-8pm	MPR	Community Rental (20-50)	Adult/Senior Dance (10-20)	Senior Adult Tap (10-20)				Community/Non Profit (20-50)
	Class							
	Class							
8pm-9pm	MPR	Community Rental (20-50)						Community/Non Profit (20-50)
	Class							
	Class							
9pm-10pm	MPR							
	Class							
	Class							



## Memorandum

Project	LADERA LINDA COMMUNITY CENTER AND PARK 32201 FORRESTAL DR, PALOS VERDE CA 90275	Project No.	1803
Subject	Ladera Linda Park and Community Center Project Workshop - Summary	Date	07/19
Meeting Location	Ladera Linda Community Center	Meeting Date and Time	07/10/19, 7:00pm

### I. WORKSHOP FORMAT

- A. Introduction and Orientation: City staff introduced Johnson Favaro and briefly described the project background. (5 Minutes)
- B. Presentation: Johnson Favaro presented a summary of findings of outreach and the proposed concept for the project, including the following (25 Minutes):
1. Site and building analysis diagrams comparing the proposed concept to existing conditions and to the City Council-approved Master Plan.
  2. Site and building configuration options considered
  3. Summary of community outreach including results of Ladera Linda Park Use Survey prepared by Ladera Linda Homeowners Association
  4. Right-sizing the facility: presentation of the building program review process including a mock schedule prepared by City staff and proposed target reductions in building floor area.
  5. Review of proposed building floor plan and park site plans illustrating configuration, placement and orientation of building on the site as compared to existing and the City Council- approved Master Plan.
  6. Review of site sections illustrating sight lines and position of the building relative to neighboring residential properties
  7. Review of Preserve parking options (not in Project scope)
  8. Concept views of the building and park in context
  9. Site model of proposed building and park in neighborhood context (scale: 1" = 40')
  10. Model of proposed building (scale: 1/8" = 1'-0")
- C. Small Group Discussion (45 Minutes):
1. Meeting attendees divided into small group for discussion on three questions.
  2. Each small group elected a moderator and a speaker for the large group report-back.
  3. The three questions:
    - a) What do you like most?
    - b) What needs improvement?
    - c) What would you add or subtract?
- D. Large group report back (30 minutes)
1. Each group moderator/speaker reported to all attendees a summary of the small group conversations (See attached "Group Discuss Comments.")
- E. Final Public Comments (15 minutes)

F. Recapitulation and Next Steps (5 minutes)

II. ATTENDANCE

A. Eighty-four (84) people signed in as attendees at the workshop. See attached "Meeting Attendance List".

B. Summary of attendees as identified in the Meeting Attendance List:

1.	Ladera Linda HOA:	38%
2.	Seaview HOA:	14%
3.	Mediterrania HOA:	2%
4.	Other residents:	46%

III. SUMMARY

A. A plurality of the workshop attendees approved the following:

1. The compact arrangement and configuration of the community center building on the site and low-profile massing of the proposed building.
2. The clean, contemporary lines of the architectural design.
3. The generous setback of the building from the top of slope facing the Seaview neighborhood, protecting privacy of downslope residential neighbors.
4. The location on the site of park and community center parking situated between the new building and the hillside on the middle park tier.
5. The location of active park activities, such as the children's playground and sports courts on the upper park tier at the northern end of the park, furthest away from the Ladera Linda neighborhood and set well back from the top of slope facing the Seaview neighborhood.

B. A plurality of the workshop attendees expressed the following concern/question to be addressed in the subsequent design phase:

1. How will building and park security be addressed?

C. There was no clear consensus and a wide spectrum of opinion and very divergent views were expressed regarding the following:

1. Are the number of rooms in the proposed building too many, too few, or, just right?
2. What is the amount of parking that is sufficient for the community center and park?
3. Should Preserve parking be located in the park or on Forrestal Drive?

END

ARCHITECTURE + URBAN DESIGN

**JOHNSON  
FAVARO**



**Ladera Linda Community Center and Park Project  
For the City of Rancho Palos Verdes**

**100% SCHEMATIC DESIGN  
Basis of Design Report  
July 25, 2019**

## SCOPING PROFESSIONALS

Architect	Johnson Favaro
Civil Engineer	KPFF
Structural Engineering	Englekirk
Landscape Architect	KSA Design Studio
MEP Engineering	Novus Design Studio

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## I. GENERAL PROJECT REQUIREMENTS

### A. Site Description

1. The project consists of 7 (APN) parcels totaling approximately 11.031 acres bounded by Forrestral Drive to the north and east, Dauntless Drive and the Seaview Neighborhood Community to the south and southwest and Ladera Linda Park soccer fields to the west, located at 32201 Forrestral Drive, Rancho Palos Verdes, California, 90275. The site is currently composed of five former existing school buildings currently operating as the community center, surface parking and circulation, playground paving, equipment and paddle tennis courts, fields, landscaping and emergency preparedness storage containers. An approximate 7 acres are used for these purposes with the remainder of the area being steep unprogrammed terraced slopes. The property is owned and operated by the City of Rancho Palos Verdes.

2. All five existing community center buildings, totaling approximately 13,950 SF will be demolished at the start of the construction process, along with paved playground areas, surface parking, play equipment, fencing, select trees and landscaping, storage bins and utility points of connection.

### B. Project Description

#### 1. Construction

- a. New Community Center Building –6,980 GSF, one story above grade, with a covered outdoor overhang area of +/-10,510 SF.
- b. New Maintenance & Emergency Preparedness Storage Building – 400 GSF, one story above grade.
- c. New Utility and Trash Yard
- d. New One and a half Basketball Courts
- e. Two new Paddle Tennis Courts
- f. New 54 space parking lot
- g. New accessible ramps and stairs
- h. New Children’s Playground and Play Equipment
- i. New permeable and non-permeable pathways
- j. New Irrigated and non-irrigated landscaping
- k. New Site lighting, gates and fencing

2. Projected Start of Construction: June 22, 2020

3. Projected Completion of Construction: August 22, 2021

4. The new community center building consists of two combinable multipurpose rooms and associated support staging area and storage, two classrooms, one meeting/discovery room, community center office, restrooms and display cases. The building is considered A-3 assembly occupancy with B-Business and S-1 storage occupancies and will be constructed in accordance with Title 24 of the California Code of Regulations, known as the California Building Standards Code, 2019 edition.

5. The new maintenance building will house emergency preparedness materials and serve as maintenance storage.

6. Phasing: The project is to be constructed in one continuous phase.

7. Sustainability: The project will be designed to meet criteria of the California Green Building Code for non-residential mandatory requirements. Checklist to be provided in next design phase.

### C. Floor-to-Floor Heights

1. Community Center First Floor: Approximate 15'-7" to top of roof structure, excluding perimeter soffit.
2. Maintenance & Emergency Preparedness First Floor : Approximate 12"-0" to roof structure.

### D. Regulatory Requirements

1. Applicable Codes and Guidelines:
  - a. Title 24 of the California Code of Regulations, known as the California Building Standards Code (2019 edition).
  - b. Americans With Disabilities Act Regulations; (ADA) United States Architectural and Transportation Barriers Compliance Board
  - c. Sprinkler Systems design: Pre-Action System, NFPA 13
  - d. NFPA 10 (per BOCA 970): Portable Fire Extinguishers
  - e. City of Rancho Palos Verdes Municipal Code
2. Other references:
  - a. County of Los Angeles Storm water management standards
  - b. California Integrated Waste Management Act of 1989 (AB 939)

### E. Contract Forms (to be confirmed by City PM)

1. General Conditions: To be developed by PM and CPM.
2. Supplementary Conditions: To be developed by PM and CPM.
3. Bid Bond, Material and Performance Bond: To be developed by PM and CPM.

### F. Testing

1. Testing Agency: Independent testing agency engaged and paid for by the Owner. Bidding coordinated by City PM; technical specifications prepared by Architect.

### G. Temporary Facilities & Construction Sequencing

1. Temporary Utilities: Temporary electricity, lighting, heat, ventilation, telephone service, water and sanitary facilities to be provided by the Contractor. Responsibility of utility companies' charges to be borne by the Contractor.
2. Temporary Facilities: Tree and plant protection, shoring, temporary enclosures, guardrails, barricades, access roads, parking areas, sedimentation and erosion control, project signs, field offices and temporary fire protection shall all be provided by the Contractor.
3. The Contractor will have full control over the site where work is to occur. Construction sequencing will be coordinated at weekly meetings between the Owner, Contractor, PM. The Contractor shall notify the Owner's Representative (to be defined in the General Conditions as the CPM) a minimum 15 days in advance to access any parts of the site not within the Project Limit Lines, of each phase, necessary to maintain critical work sequencing and major material and equipment deliveries.

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## H. Field Engineering

1. Provide surveying and lay out work required for execution of the project.
2. Geotechnical test/analysis/report as provided by Owner.

## I. Demolition

1. Secure the area and provide temporary fencing around demolition area.
2. Remove and dispose of all demolition materials, except where noted to retain material for re-use by Owner.
3. Protect existing construction to remain. Damage to adjacent structures caused as the result of this work shall be repaired by Contractor at no cost to Owner. Demolition performed in excess of that required shall be repaired at no cost to the Owner.
4. Terminate and identify all utilities as required or shown on drawings prior to commencing demolition.
5. Protection:
  - a. There is to be no interference with the use of properties.
  - b. Movement, settlement or collapse of adjacent services, sidewalks, driveways and pavement is to be prevented. Liability for such movement, settlement, or collapse is to be assumed by the Contractor. Damage is to be promptly repaired at no cost to the Owner.
  - c. Fence, lighting and barricades as required by code are to be provided, erected, and maintained.
6. Existing Services:
  - a. Cap and remove all water services as indicated in the Documents. Other affected utilities shall be notified in advance for the removal of their services.
  - b. Markers to indicated location of disconnected service are to be placed. Service lines and capping locations shall be identified on Project Record Documents.
7. Maintaining Traffic:
  - a. Permits are to be obtained for closing or obstructing roadways.
  - b. Operations shall be conducted with minimum interference to public or private roadways.
8. Materials:
  - a. Except where noted otherwise, maintain possession of materials being demolished. Immediately remove from site.
  - b. Owner may perform salvage operations prior to Demolition. Contractor will coordinate schedule for Owner salvage operations in the Construction Schedule.

**9. Execution:**

- a. Work is to be sprinkled to prevent dust. Coordinate with Owner for utility locations.
- b. Burning of materials on site is not permitted.
- c. Coordinate with Owner and obtain written approval before work commences when swinging cranes may have to traverse other buildings.
- d. Buried tanks located outside building proper are to be pumped out. Tanks and service piping are to be removed from site where indicated.
- e. Contaminated, vermin infested, or dangerous materials encountered shall be removed from the site and disposed of by safe means so as not to endanger health of workers or the public.
- f. Backfill as indicated and prevent ponding on site.
- g. Demolished materials, tool and equipment are to be removed upon completion of work. Leave site in condition as indicated on drawings.
- h. Existing footings and foundation are to be removed below grade to the extent that they will not interfere with the new construction.
- i. Contractor will be responsible for all sub-surface drainage.

**J. Hazardous Materials**

1. City PM should include in the General Conditions language concerning hazardous materials abatement and instructions for the Contractor to review site conditions and dispose of all materials in a manner approved by appropriate officials. (e.g. PCB ballasts in existing lighting)
2. Hazardous material work of any kind is outside the scope of the Architect and its Consultants. The City will need to contract services with a separate entity that specializes in Hazardous Materials examination, testing and remediation recommendations.



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## 1 – PROJECT OVERVIEW

### 1.1 – DESCRIPTION

The project site is located in the city of Rancho Palos Verdes at 32201 Forrestal Drive. Located approximately 1,500 feet east of Palos Verdes Drive South, the park is bounded by Forrestal Nature Reserve to the North and residential homes to the south.

It is our understanding there are five existing classroom buildings ranging from 1,100 SF to 1,700 SF, two storage sheds approximately 100 SF each, and two existing storage bins approximately 88 SF each. It is our understanding these buildings and storage bins currently serve different purposes to the community center, such as meeting spaces, office space, and storage. It is our understanding construction may include, but not limited to: new building construction, utility upgrades, site improvements, and off-site improvements as deemed necessary.

### 1.2 – CODES AND STANDARDS

The civil engineering plans for the project will be designed in compliance with all applicable Codes and Standards (current editions). For civil/site work, the applicable standards include, but are not limited to:

1. The California Building Code
2. California Green Building Code (CalGreen)
3. Rancho Palos Verdes Municipal Code
4. The California Environmental Quality Act
5. Requirements of the Regional Water Quality Control Board
6. State/local health departments
7. Americans with Disabilities Act (ADA), Title II, ADAAG
8. State of California Fire Code, current edition
9. Standard Specifications for Public Works Construction (SSPWC)
10. National Fire Protection Association (NFPA), current edition
11. American Water Works Association (AWWA)
12. Uniform Plumbing Code, current edition
13. National Sanitation Foundation (NSF)
14. U.S. Green Building Council, LEED Certification



### 1.3 – STORM WATER POLLUTION PREVENTION/LID

The project falls within the district of Los Angeles County and would need to comply with the State of California National Pollutant Discharge Elimination System (NPDES) Permit requirements as noted in Order No 2013-0001-DWQ. When one acre or more is disturbed, a Stormwater Pollution Prevention Plan (SWPPP) is required to be filed and approved by the State of California. At this planning stage, it is anticipated that more than one acre will be disturbed, therefore a SWPPP will be required for the proposed project.

The SWPPP is a document that outlines how a construction project will minimize stormwater pollution rising from construction activities. Construction sites are a well-known source of sediment and other pollutants which can cause significant harm to rivers, lakes, coastal waters, and flood control facilities. A SWPPP describes the contractor's activity to prevent pollution for the specific project. A SWPPP document should be kept on the construction site and updated frequently to reflect changes at the site.

In addition to the state requirements, the city of Rancho Palos Verdes is part of the Palos Verdes Peninsula Watershed Management Group. A project that falls in this jurisdiction is required to follow the Enhanced Watershed Management Program (EWMP). It is our understanding the project is considered a redevelopment project and the total land disturbance will be more than 5,000 square feet. Based on EWMP Appendix 2-PLD, Low Impact Development (LID) strategies will be required for this project. It is anticipated that once a proposed site plan is developed, SUSMP and LID requirements will be addressed as needed.

Based on the EWMP guidelines, infiltration of stormwater runoff is the preferred method of action. It is anticipated infiltration will be infeasible due to the proximity to the nearby hillside. A geotechnical investigation will be needed to confirm the geological restrictions on infiltration and to confirm the ideal LID system that can be used on the project site.



## 2 – CIVIL DESIGN

### 2.1 – EROSION CONTROL

It is our understanding the Erosion Control plan for the project site will be designed to keep sediment and unfiltered storm water on site during construction. Erosion from the site will be controlled through the use of several Best Management Practices (BMPs) in accordance with the California BMP Handbook.

It is anticipated sand bags and gravel bags will be placed around the perimeter of the site to prevent unfiltered stormwater and sediment from leaving the construction site. It is anticipated fiber rolls will be used to reduce the impact of runoff on the surrounding hillsides. At the construction entrance and exit, standard stabilized driveways will be laid down to clean the tires of the vehicles exiting the site and prevent sediment from being deposited in the public right of way. For any sediment that leaves the site, the contractor will need to implement street sweeping. It is anticipated existing storm drain inlets onsite and offsite that may capture runoff from the construction site will be protected.

### 2.2 – DEMOLITION

It is our understanding all seven buildings will be demolished and the existing storage bin containers may be repurposed depending on the future programming of the community center.

The existing onsite asphalt appears to be in poor condition. We anticipate all the existing hardscape for the project will either be removed or reconstructed.

It is anticipated the wet utility main laterals for the existing buildings may be reused, depending on their existing conditions and capacity. Any utilities that may be found during demolition will be removed if no future use is expected. Utility pothole information and utility locating services are recommended prior to the design phase to identify and confirm existing utility sizes and locations.

Demolition and removal of existing site features may include, but is not limited to: concrete pavement, asphalt pavement, playground apparatuses, concrete block walls, fencing, utilities, vaults, and vegetation. A final site plan will be required to



determine the final extents of demolition. Refer to the Existing Utility Exhibit in Appendix C for existing site conditions.

## 2.3 – GRADING AND ACCESSIBILITY

Based on site visits and existing topographic survey, the project site is generally divided into three terraces. The northern terrace ranges from approximately 452 ft to 461 ft above sea level. The middle terrace ranges from approximately 446 ft to 450 ft above sea level. The southern terrace ranges from approximately 437 ft to 443 ft above sea level. The north and middle terrace, and middle and south terraces are separated by vegetated hillsides with steep 3:1 slopes.

It is anticipated the proposed project site will maintain the existing terraced site pattern. It is assumed grading efforts will be minimized to keep the amount of import and export of soil to a minimum. The north terrace will likely need the most grading to develop flat play areas. The middle terrace will likely need minor grading to ensure accessibility into the grading and to set a new pad elevation for the proposed building. Based on the existing grades, it appears an optimal pad elevation to maintain accessibility and a clear view over the hillside is approximately 447.5 ft above sea level. Based on the current siteplan, the south terrace will need little to no major earthwork or regrading. Refer to the Concept Grading Exhibit in Appendix C for preliminary proposed grading conditions.

Proposed grades will ensure pedestrian accessibility to the building while also providing an efficient drainage pattern that directs runoff to storm drain conveyance structures. Pedestrian access throughout the site and to the building will be provided by means of Americans with Disabilities Act (ADA). Per the ADA guidelines, design slopes for site accessible paths are as follows:

- Ramps: Design (to max) 8.33%
- Sloped Walkways: Design (to max) 5.0%
- Cross Slopes: Design (to max) 2.0%
- Apron Side Slopes: Design (to max) 10.0%
- Building Entry: Design (to max) 2.0%
- Landscape: Min: 2.0% — Max: 3:1

The grade change between the north terrace and soccer fields to the north is approximately 20 ft. To provide ADA accessibility, a ramp of approximately 250 ft in



length (not including landings) will be required. The grade change between the north and middle terraces is approximately 11 ft — a ramp approximately 138 ft in length (not including landings) will be required. The grade change between the middle and south terraces is approximately 4 ft — a ramp approximately 50 ft in length (not including landings) or a sloped walkway approximately 89 ft in length will be required.

A final site plan and geotechnical investigation report will be needed to provide earthwork calculations, pavement section recommendations, and final grading design for the project.

## 2.4 – STORM DRAINAGE

Based on recent site visits and the topographic survey, there are existing storm drain structures in place to capture and convey runoff off site. The east side of the project generally slopes west into the property. An existing concrete swale and series of catch basins located at the bottom of the east hillside capture and convey runoff to one of the two Rancho Palos Verdes owned storm drain line that runs east to west directly through the property. One of the city owned storm drain lines runs through the north and middle terraces, and appears to cross below one or two of the existing buildings. A third storm drain line runs through the south terrace from east to west and is owned by the LA County Flood Control District. The west side of the project site has a concrete curb and gutter to keep runoff onsite. There is a series of existing concrete swales that parallel the hillside west of the property that capture and slow hillside runoff. It appears storm water is then capture and conveyed to county storm drain line that flows down the hillside. Further utility investigation will be required to confirm the existing storm drainage system.

The north terrace generally drains from east towards a low point at the northwest corner where an existing buried catch basin is assumed to be located. It is assumed the existing buried catch basin, or other drainage structure, is meant to tie into an existing nearby catch basin or convey runoff to the concrete swales located within the hillside to west of the property. It does not appear a significant amount of offsite runoff contributes to this terrace.

The middle terrace generally drains to the west with existing catch basins located in the lawn and parking lot east of the existing buildings, as well as in the concrete gutter along the existing curb at the west edge of the project. It appears water is captured by



these inlets and conveyed to the existing county storm drain line. There does not appear to be an existing LID system in place to treat storm water runoff.

The south terrace generally drains from southeast to northwest. An existing concrete gutter located at the west side of the project appears to have the intent of conveying runoff to a catch basin located at the low point in the northwest corner, however, the concrete gutter appears to be in poor condition and unable to convey storm water. The existing catch basin appears to connect into the existing county storm drain line.

Refer to the Existing Drainage Exhibit in Appendix C for existing storm drainage conditions.

To improve drainage conditions, and comply with local and state storm water treatment requirements, post construction BMPs will be needed to treat stormwater runoff. Based on the current site plan, three impermeable fabric lined-vegetated swales are proposed to capture runoff and treat the stormwater before discharging into the county system. See LID Calculation table below for further BMP sizing information.

LID CALCULATION SUMMARY TABLE					
DRAINAGE AREA	AREA (AC)	PERCENT IMPERVIOUS	REQUIRED TREATMENT VOLUME (85TH)	PROVIDED TREATMENT VOLUME	BIOFILTRATION DIMENSIONS
1	1.24	31.0%	0.034 CFS	0.041 CFS	350 SF (3.5' W X 100' L)
2	1.29	68.0%	0.054 CFS	0.058 CFS	500 SF (5.0' W X 100' L)
3	1.15	9.0%	0.022 CFS	0.029 CFS	250 SF (2.5' W X 100' L)
UNTREATED AREA	2.57	N/A	N/A	N/A	N/A
TOTAL	6.24		0.110 CFS	0.128 CFS	

Minor changes to the drainage patterns will be required to convey runoff to the proposed vegetated swales located the west edge of each terrace.

The existing city owned storm drain line appears to run in close proximity to the northeast corner of the proposed building. It is anticipated this storm drain line will be protected in place and not be surcharged by the proposed building footings. Further confirmation with the city of Rancho Palos Verdes is required to identify potential conflicts to the existing city owned storm drain lines and easements.



Utility pothole information and utility locating services are recommended prior to the design phase to identify and confirm existing utility sizes and locations. Refer to the Proposed LID Exhibit in Appendix C for preliminary proposed storm drainage and treatment conditions.

## **2.5 – SANITARY SEWER SYSTEM**

Based on available record drawing Kistner, Wright & Wright dated 1967, shown in Appendix B, there exists a 4" vitrified clay sewer lateral located at the south side of the middle terrace that serves all the existing buildings on the property. It appears this sewer flows at 2.0% from east to west until it reaches the hillside at the west side of the property, in which it transitions to follow the slope of the hillside. It appears the 4" sewer then connects into the existing 8" vitrified clay LA County sewer main located in Dauntless Drive.

Utility pothole information and utility locating services are recommended prior to the design phase to identify and confirm existing utility sizes and locations. Refer to the Existing Utilities Exhibit in Appendix C for the approximate alignments of the existing sewer system.

It is anticipated the existing sewer lateral within the project site will be reused. Sewer demands will be needed to verify the existing sewer lateral capacity and a utility investigation will be needed to verify the condition of the existing sewer lateral.

## **2.6 – DOMESTIC AND FIRE WATER SYSTEM**

It is assumed there is an existing water line, of unknown alignment, size, and material, located in Forrestal Drive that serves the domestic water and irrigation demand of the property, as well as the fire hydrants located on the east side of Forrestal Drive. Based on available record drawing Kistner, Wright & Wright dated 1967, shown in Appendix B, there exists a water meter at the east side of the property along Forrestal Drive, serviced by Palos Verdes Water Company. It appears this water meter is a compound meter for both irrigation and domestic water use. There does not appear to be a fire protection system (i.e. fire sprinklers) in place on the existing property.

Utility pothole information and utility locating services are recommended prior to the design phase to identify and confirm existing utility sizes and locations. Refer to the Existing Utilities Exhibit in Appendix C for the approximate alignments of the existing water system.



It is our understanding the existing water system will likely need to be upgraded to account for new landscape, domestic water, and fire water demands. It is our understanding that the proposed building will likely need to be upgraded to be brought up to current fire codes. This may require an additional fire water connection, backflow prevention device, sprinklers, fire department connection, and private fire hydrant. Further coordination with the city and local fire department will be required to verify applicable code requirements and confirmation of the existing water main capacity will be required.

## **2.7 – FIRE ACCESS**

Existing fire access to the project site appears to be from the main driveway located along Forrestal Drive. It appears this main driveway provides access to the property and has a slope of approximately 13%. There also appears to be an existing driveway in new condition located at the south east corner of the south terrace.

It is anticipated fire access to the proposed project site will likely remain the same as the existing. It is anticipated all roads within the property used as fire access will be have H-20 load capacity.

## **3 – ACTIONS AND CLOSING**

### **3.1 – PRICING**

It is our understanding this report may be used the owner to develop a Rough Order of Magnitude (ROM) Cost.

### **3.2 – CLOSING**

This analysis is considered a narrative based on available preliminary site information and should be used to determine project costs and bring notice to potential design and construction challenges. As mentioned herein, additional coordination and research will be required during the next design phase of the project.



## APPENDIX A

### PHOTOS



SCALE = N.T.S.

Figure 1 - Ladera Linda Community Center and Park Site Location and Photo Key Map



Figure 2- Main Property Entrance: Forrestal Drive



Figure 3- Existing Water Meter: Forrestal Drive



Figure 4 – Existing Water Backflow Device (Middle Terrace)



Figure 5- Existing Parking Lot (Middle Terrace)



Figure 6– Existing Buildings (Middle Terrace)



Figure 7- Existing Catch Basin Serving Parking Lot Area (Middle Terrace)

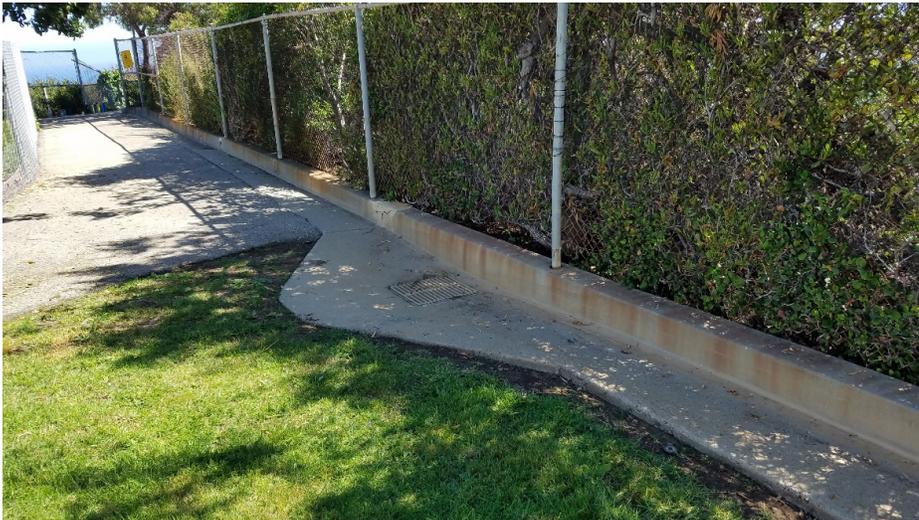


Figure 8 - Existing Catch Basin Serving Building Area (Middle Terrace)



*Figure 9 – Existing Gravel Lot (North Terrace)*



*Figure 10 – Existing Lawn Area (North Terrace)*



*Figure 11 – Existing Concrete Gutter (North Terrace)*



*Figure 12 - Existing Play Area (South Terrace)*



*Figure 13 - Existing Concrete Curb and Gutter (South Terrace)*



*Figure 14 - Existing Catch Basin (South Terrace)*



*Figure 15 - Existing LA County Storm Drain Manhole (South Terrace)*



*Figure 16 - Existing Concrete Swales (West Hillside)*



**APPENDIX B**  
**AS-BUILT DRAWINGS**





## **APPENDIX C**

**EXISTING DRAINAGE EXHIBIT**

**EXISTING UTILITIES EXHIBIT**

**CONCEPT GRADING EXHIBIT**

**PROPOSED LID EXHIBIT**









### III. LANDSCAPE

The existing site, approximately 11 acres, is generally divided into three distinct elevational levels, moving down from the Northwest to the Southeast, separated by sloped grades and bordered by steeper slopes to the north and south. The project scope of the usable land area for the new park and community center is approximately 7 acres.

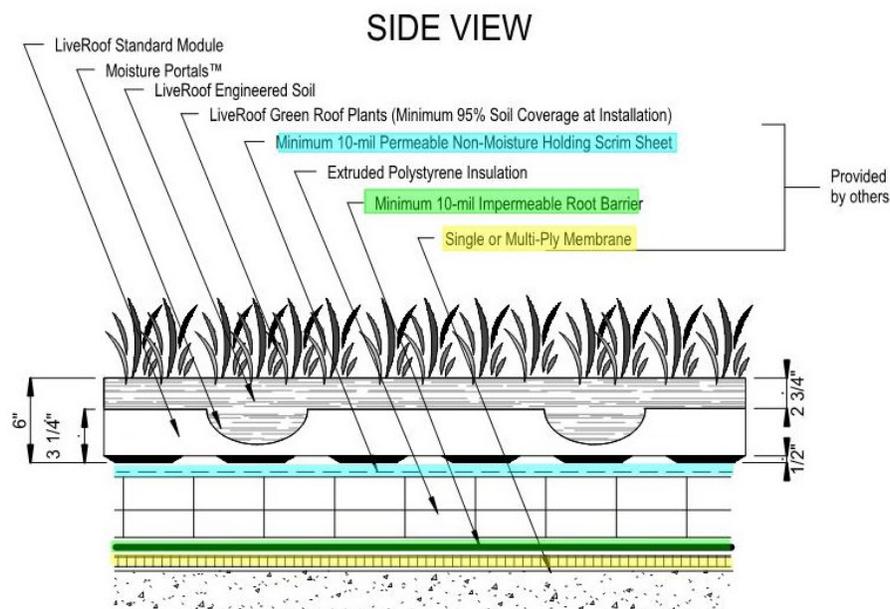
The grounds of the park will consist of the following materials:

- Irrigated Landscaped Lawn Areas (65,356 sf)
- Irrigated Drought-Tolerant Planting Bed Areas (8,743sf)
- Non-irrigated Landscaped Native Chaparral Areas (106,291sf)
- Non-irrigated Landscaped Native “High Brush” Areas (Areas at the south facing slope at south property line are not in contract) (6,532sf)
- Irrigated “Live Roof” Planting modules (12,397sf)
  
- Decomposed Granite Pathways (21,116sf)
- Paved Basketball Courts (11,088sf)
- Paved Paddle Tennis Courts (5,228sf)
- Rubberized Play Surfaces for Children’s Play Areas (3,984sf)
- ADA Accessible Concrete Ramps connecting levels (2,462sf)
- Pedestrian Concrete Paved Paths (12,922sf)
- Concrete Stairs (290sf)
  
- Vehicular Concrete Paving (19,716sf)
- Vehicular Permeable Paving Parking Stalls (9,730sf)
- Vehicular Gravel Roadway (3,868sf)
- Vehicular Asphalt (10,530sf)

Additionally, irrigated “Live Roof” or similar, planting modules are planned at the new Community Center and Maintenance & Storage buildings.

#### LiveRoof DEEP SYSTEM

Over Protected Membrane Assembly



Where applicable, new 6' high fencing to replace existing fencing. In addition, new fencing and gates (pedestrian and vehicular) to include:

- Fencing and manual vehicular access gates around perimeter of property
- Fencing down from top of slope at south end of property
- Fencing and manual vehicular gate access around maintenance and storage building
- Fencing and multiple pedestrian gate access points at specified playground designated areas

Parking area will integrate 2 EV charging stations and temporary and long-term bike storage/lock options.

The park grounds will incorporate furnishings such as:

- Naturalistic Children's Play Equipment
- Seating
- Water Stations
- Doggie Pick Up Stations
- Basketball Goals
- Paddle Tennis Nets

Naturalistic Children's Play Equipment proposed examples are shown below according to age relevant groups.

Nature-Inspired Play | Freestanding Play

Ages 2-12






**Nature-Inspired Play**

**A. Log Balance Beam**

- Maximum fall height 12" (0,30 m)
- #173596

**B. Log Steppers**

- Maximum fall height equals log height
- #173907  
8" (0,20 m) height
- #173908  
18" (0,46 m) height
- #173909  
28" (0,71 m) height

**C. Mushroom Steppers**

- Available in several heights from 8" to 30" (0,20 m to 0,76 m)
- Maximum fall height equals mushroom height
- #171568-171573

**D. Log Crawl Tunnel**

- 5' (1,52 m) long; 30" (0,76 m) diameter
- Maximum fall height 41" (1,04 m)
- #173594

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**DESIGNS 1-2**

- Maximum fall height 56" (1,42 m) with 12" (0,30 m) surfacing

**Design 1**

- Minimum area required 24' x 30' (7,32 m x 9,14 m)
- #168364

**Design 2**

- Minimum area required 24' x 39' (7,32 m x 11,89 m)
- #168365

**DESIGNS 3-9**

- Maximum fall height 74" (1,88 m) with 12" (0,30 m) surfacing

**Design 3**

- Minimum area required 33' x 38' (10,06 m x 11,58 m)
- #168366

**Design 4**

- Minimum area required 41' x 33' (12,50 m x 10,06 m)
- #168367

**Design 5**

- Minimum area required 41' x 40' (12,50 m x 12,19 m)
- #168368

**Design 6**

- Minimum area required 38' x 51' (11,58 m x 15,54 m)
- #168369

**Design 7**

- Minimum area required 43' x 49' (13,11 m x 14,94 m)
- #168370

**Design 8**

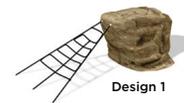
- Minimum area required 41' x 43' (12,50 m x 13,11 m)
- #168371

**Design 9**

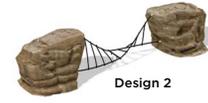
- Minimum area required 42' x 60' (12,80 m x 18,29 m)
- #169105



Ages 5-12



Design 1



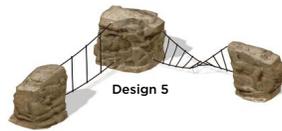
Design 2



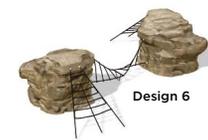
Design 3



Design 4



Design 5



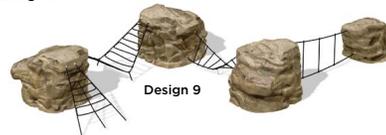
Design 6



Design 7



Design 8



Design 9

**A. Log Bench**

- Glass Fiber Reinforced Concrete
- 16" H x 72" L (0,41 m x 1,83 m)
- #173595

**B. Acorn Seat**

- Glass Fiber Reinforced Concrete
- 16-1/2" (0,42 m) high
- #186579

**C. Leaf Bike Rack**

- TenderTuff-coated steel
- #185671 (two shown)

**D. Wood-Grain Recycling Receptacle and Wood-Grain Litter Receptacle**

- 32-gallon liner
- Lids in acorn only
- #186585 Recycling
- #186584 Litter

**E. Litter Receptacle**

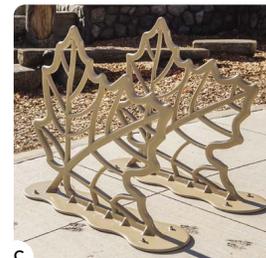
- 24-gallon liner
- Optional dome available in brown only (shown)
- Direct bury only
- #100094 Receptacle
- #100095 Optional Dome



A



B



C



D



E

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Site Furnishings | Nature-Inspired Collection

# LADERA LINDA COMMUNITY PARK

## RANCHO PALOS VERDES



SHEET INDEX	
00	COVERSHEET AND SHEET INDEX
L1	SITE PHOTOS
L2	SITE ECOLOGY AND GEOLOGY
L3	SITE ANALYSIS
L5	ENLARGE DISCOVERY AREA
L6	SECTIONS
L7	PLANT PALETTE

FACILITIES



Ⓕ⓫ TENNIS COURT    Ⓕ⓫ PLAYGROUND    Ⓕ⓫ COURTYARD LOOKING NORTH    Ⓕ⓫ PUBLIC RESTROOMS    Ⓕ⓫ PLAYGROUND    Ⓕ⓫ BASKETBALL COURT

VIEWS



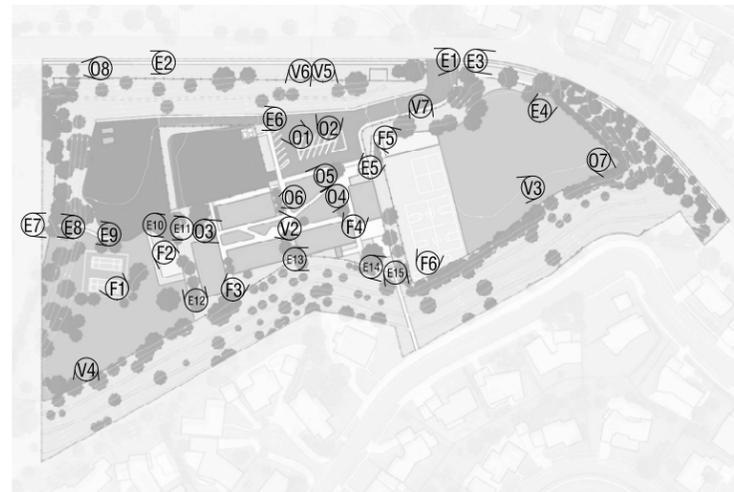
Ⓕ⓫ QUARRY    Ⓕ⓫ COURTYARD LOOKING NORTH    Ⓕ⓫ BIG LAWN LOOKING NORTH    Ⓕ⓫ SMALL LAWN LOOKING SOUTH    Ⓕ⓫ TRAIL LOOKING SOUTH    Ⓕ⓫ TRAIL LOOKING SOUTH    Ⓕ⓫ DRIVEWAY LOOKING SOUTH

OTHERS



Ⓕ⓫ PARKING LOOKING NORTH    Ⓕ⓫ PARKING LOOKING NORTH    Ⓕ⓫ MEN WITH SURF BOARD    Ⓕ⓫ COURTYARD    Ⓕ⓫ COURTYARD    Ⓕ⓫ RAVEN ON THE TREE    Ⓕ⓫ SQUIRREL ON THE FENCE    Ⓕ⓫ RABBIT IN THE BUSH

ENTRANCES AND PATHWAYS



KEYPLAN AND PHOTOS LOCATION



Ⓕ⓫ FRONT ENTRY    Ⓕ⓫ TRAIL    Ⓕ⓫ WALKWAY    Ⓕ⓫ SIDE GATE    Ⓕ⓫ WALKWAY    Ⓕ⓫ DRIVEWAY



Ⓕ⓫ STAIRS    Ⓕ⓫ STAIRS    Ⓕ⓫ STAIRS    Ⓕ⓫ STAIRS    Ⓕ⓫ STAIRS    Ⓕ⓫ WALKWAY    Ⓕ⓫ WALKWAY    Ⓕ⓫ WALKWAY    Ⓕ⓫ STAIRS

SITE PHOTOS

LADERA LINDA COMMUNITY PARK 32201 FORRESTAL DRIVE, RANCHO PALOS VERDES, CA 90275

KSA DESIGN STUDIO, INC.

07.08.2019 Sheet L1

WILDLIFE



VEGETATION



STRATIFICATION



The foundation material of the site is Mesozoic Catalina schist, overlain particularly during the Miocene epoch by Monterey Formation elements, including Altamira shale, Valmonte diatomite, and Malaga mudstone. Miocene volcanism introduced basaltic materials as well.

1920 to 1956, the site is used for quarry material, primarily basalt. Some of the basalt taken from the quarry was used in building breakwaters around Long Beach Harbor.

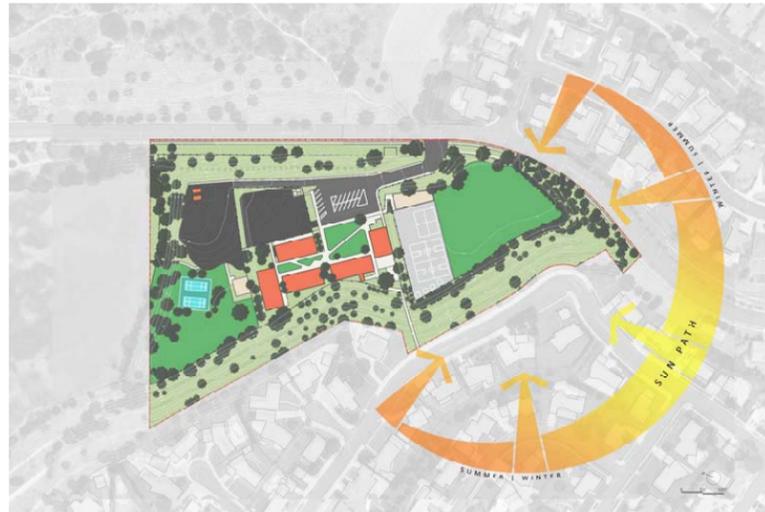
The dominant geological feature is an anticlinal fold axis running parallel to the face of the quarry.

SITE ECOLOGY AND GEOLOGY

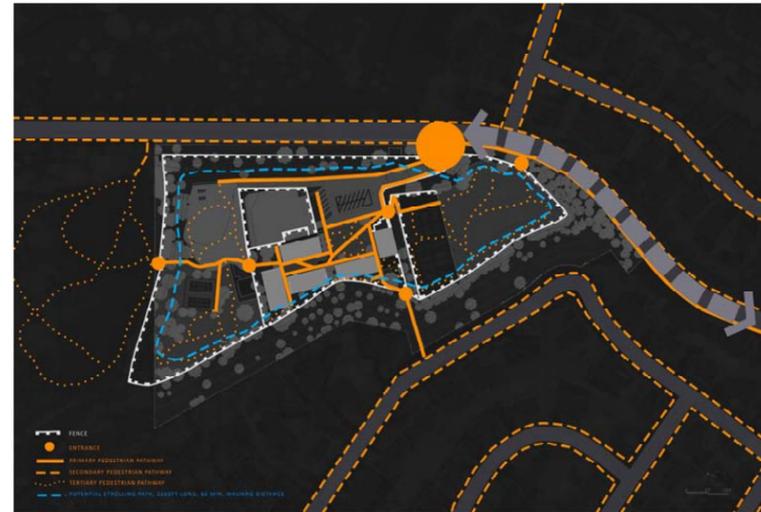
LADERA LINDA COMMUNITY PARK 32201 FORRESTAL DRIVE, RANCHO PALOS VERDES, CA 90275

KSA DESIGN STUDIO, INC.

07.08.2019 Sheet L2



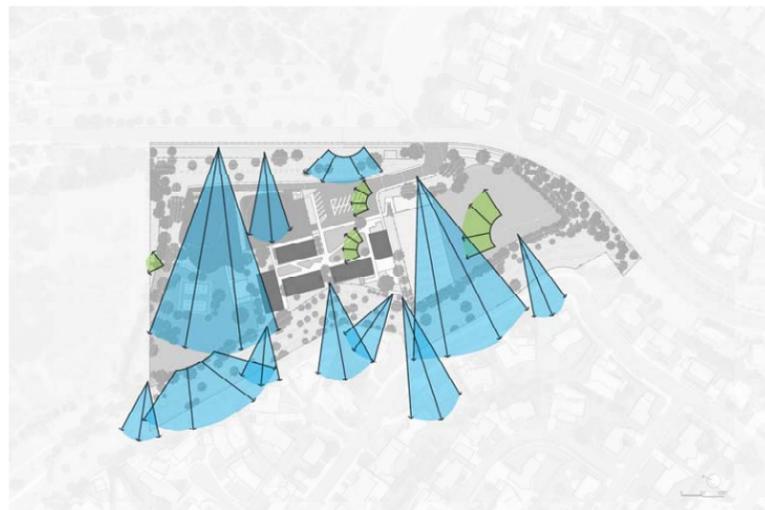
SUN ANALYSIS



CIRCULATION ANALYSIS



TOPOGRAPHY ANALYSIS



VIEW ANALYSIS



SITE USAGE ANALYSIS



SITE PRIVACY ANALYSIS

## SITE ANALYSIS

LADERA LINDA COMMUNITY PARK 32201 FORRESTAL DRIVE, RANCHO PALOS VERDES, CA 90275

KSA DESIGN STUDIO, INC.

07.08.2019 Sheet L3



INSPIRATIONAL IMAGES

DESIGN NARRATIVE

The discovery garden adjacent to the basketball court and parking lot is a space that combine rain garden, local floral garden and playground. Inspired by the neighboring Forrestal Nature Reserve and Klondike Canyon Creek, the discovery is design for kids and the community to learn about the natural ecology and geology, as well as to enjoy and relax.



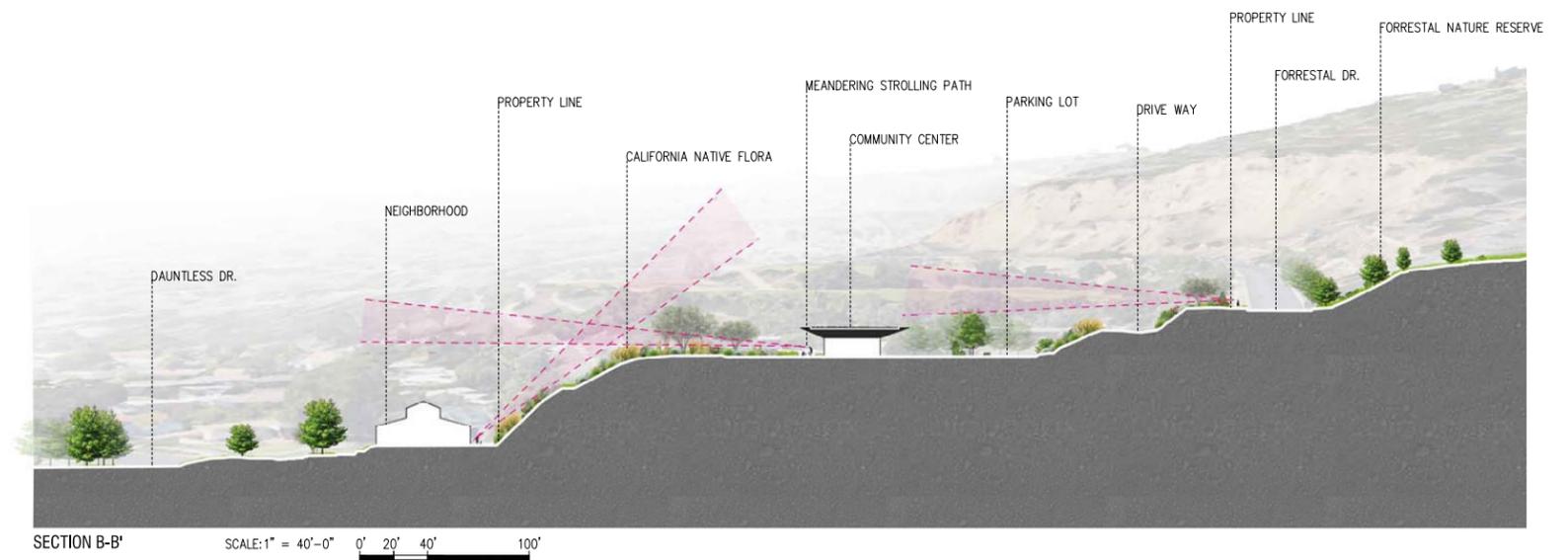
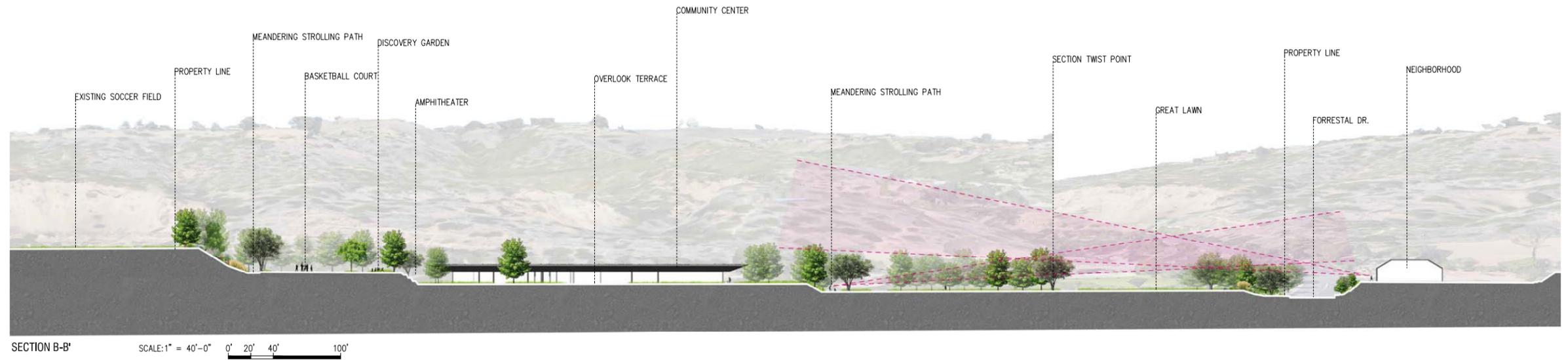
DISCOVERY AREA ENLARGED PLAN

SCALE: 1/32" = 1'-0"

KEYNOTE LEGEND:

- ① PARK ENTRY
- ② NEW ADA ENTRY RAMP
- ③ MEANDERING STROLLING PATH
- ④ MAINTENANCE SERVICE ENTRY
- ⑤ LAWN
- ⑥ PATHWAY NODE WITH SEATING AND CANOPY TREE
- ⑦ NEIGHBORHOOD POST DISASTER STORAGE AREA
- ⑧ HILLSIDE BUILT-IN BLEACHER SEATING
- ⑨ DISCOVERY GARDEN WITH:
  - PLAY EQUIPMENT
  - INDIGENOUS FLORA
  - RAIN POND
  - SHADE STRUCTURE
  - BOULDERS
  - PEDESTRIAN WOODEN BRIDGE
- ⑩ BASKETBALL COURT WITH OPEN MULTI PURPOSE AREA
- ⑪ PADDLE TENNIS COURT
- ⑫ VEGETATED GREEN ROOF
- ⑬ COASTAL BLUFFS OVERLOOK WITH BUILT-IN BENCHES
- ⑭ AMPHITHEATER WITH TERRACED BUILT-IN BENCH
- ⑮ DEMONSTRATION GARDEN FOR LOCAL FLORA
- ⑯ SMALL GROUP SEATING POD
- ⑰ PERMEABLE PARKING STALLS
- ⑱ VEGETATED SWALE
- ⑲ EXISTING STEPS / ACCESS
- ⑳ EXISTING 'PRIVACY' HEDGEROW
- ㉑ NEW STEPS

ENLARGED DISCOVERY AREA



SECTIONS

LADERA LINDA COMMUNITY PARK 32201 FORRESTAL DRIVE, RANCHO PALOS VERDES, CA 90275

KSA DESIGN STUDIO, INC.

07.08.2019 Sheet L6

GROUND COVERS



BUCHLOE DACTYLOIDES      DICHONDRA MICRATHA      PENNSETUM ORIENTALE 'KARLEY ROSE'

INSPIRATIONAL IMAGES



TREES



QUERCUS ARGIFOLIA      QUERCUS DURATA      ALNUS RUBRA      OLNEYA TESOTA

SHRUBS



CROSSOSOMA CALIFORNICUM      ENCELIA CALIFORNICA      ERIOGONUM FASCICULATUM      ERIOGONUM CINEREUM      HETEROMELES ARBUTIFOLIA  
ISOMERIS ARBOREA      LIMONIUM PEREZEI      MALOSMA LAURINA      RHUS INTEGRIFOLIA      SALVIA LEUCOPHYLLA

DESIGN NARRATIVE

Planting design is inspired by the native California chaparral landscape. Based on the existing vegetation, adds on native plants with similar color and structure to compose a harmonious and "natural looking" planting design.

PLANT PALATTE

LADERA LINDA COMMUNITY PARK 32201 FORRESTAL DRIVE, RANCHO PALOS VERDES, CA 90275

KSA DESIGN STUDIO, INC.

07.08.2019 Sheet L7

## IV. STRUCTURAL

### 1 STRUCTURAL SYSTEMS

#### 1.1 GENERAL DESIGN CRITERIA

##### 1.1.1 Codes

The schematic design phase structural design study has been developed assuming that the governing building code will be the *California Building Code*, 2016 edition. Should the project be delayed, an updated building code will come into force and may impact the design assumptions underlying the concepts presented. Other referenced design codes anticipated to impact the design are the *ACI Building Code and Commentary* (ACI 318-14), *AISC Specification for Structural Steel Buildings* (2010), *ASCE 7 Minimum Design Loads for Buildings and Other Structures* (2010), and *AISC Seismic Provisions for Structural Steel Buildings* (2010).

##### 1.1.2 Design Loads

Design load information has been developed based on a review of the Building Code and our experience with loading demands from similar types of projects. Live loads will be reduced as permitted by the Building Code as well as columns, girders and foundations supporting live loads not in excess of 100 psf.

###### Live Loads:

Roof (general) 20 psf

###### Dead Loads:

General: Estimated weight of construction material

Typical Ceiling and Finishes: 5 psf

Mechanical and plumbing allowance: 5 psf (no rooftop equipment)

Roof: 10 psf for sloping insulation on roof for drainage (no lightweight concrete)

Roof: 15 psf for photovoltaic solar array (ballasted)\*

Roof: 20 psf for green roof consisting of saturated, lightweight soil in trays and mature plant cover\*

Window Washing Equipment or Tie-offs: None

\*Either photovoltaic array allowance or the green roof allowance, but not both, will be applied

##### 1.1.3 Seismic Design

A geotechnical report has not been prepared for this project. The following seismic design parameters have been assumed or obtained from public sources for the schematic design phase:

Site Location: 33.7380° N, 118.3487° W

Site Class D (assumed)

$S_s = 1.435g$

**Ladera Linda Community Center  
Schematic Design Structural Narrative**

$$S_1 = 0.0542g$$

$$F_a = 1.0$$

$$F_v = 1.5$$

$$S_{DS} = 0.957g$$

$$S_{D1} = 0.542g$$

Occupancy Category: II (assumed that assembly occupancy is not primary occupancy)

Seismic Design Category: D

$$I_e = 1.00$$

$$\rho = 1.0$$

**1.1.4 Wind Design**

$$V_{3S} = 100 \text{ (Basic wind speed, 3 second gust)}$$

Exposure Category: C

$$I_w = 1.00$$

**1.1.5 Foundation Design**

A geotechnical report has not been prepared for this project. The following presumptive foundation design parameters have been assumed for the conceptual design phase:

Soils for bearing:	Suitability of existing site soils for bearing is not known but are assumed to be adequate
Continuous foundation bearing pressure:	1,500 PSF maximum (net), 1,995 PSF maximum for short-term loads
Column Foundation bearing pressure:	1,500 PSF maximum (net), 1,995 PSF maximum for short-term loads
Miscellaneous footing bearing pressure:	1,500 PSF
Passive earth pressure:	250 psf/ft
Friction coefficient:	0.25
Braced Retaining Wall At-Rest Pressure:	None
Cantilever Retaining Wall Active Pressure:	None
Surcharge:	None
Soil-Seismic Increment:	None

**1.2 MATERIALS FOR NEW CONSTRUCTION**

**Ladera Linda Community Center  
Schematic Design Structural Narrative****1.2.1 Concrete**

Minimum concrete strength at 28 days, unless noted otherwise.

$f'_c = 4000$ psi	Slab-on-grade
$f'_c = 4000$ psi	Spread Foundations

Concrete mix shall not exceed max water cement ratio of 0.45.

**1.2.2 Reinforcing Steel**

ASTM A615, Grade 60 unless noted otherwise

ASTM A615, Grade 75 foundation steel

ASTM A706 for welded bar

**1.2.3 Structural Steel**

ASTM A992	All wide flange shapes unless noted otherwise
ASTM A572, Gr 50	All other rolled structural steel shapes unless noted otherwise
ASTM A500, Gr C	Hollow structural sections
F1554, Grade 36	Anchor rods unless noted otherwise
F1554, Grade 55	Anchor rods (seismic)
A325	High strength bolts, except as noted otherwise
A490	High strength bolts for seismic system where specified

**1.3 STRUCTURAL SYSTEMS DISCUSSION AND OPTIONS****1.3.1 Gravity System Description**

The one-story building's roof is proposed to support a green roof. California Building Code requires an allowance for future photovoltaic arrays (PVA). The weight of the green roof will likely exceed the weight of a ballasted PVA racking system designed using wind-tunnel results.

The recommended structural framing of the roof consists of steel beams and columns supporting concrete panel sub-floor sheathing screwed into steel decking. The use of steel deck without concrete topping will reduce gravity and seismic loads, although supplemental framing will be required to support mechanical loads in excess of 75 lbs. hung from the decking.

A prominent feature of the building is the roof cantilever and tapered soffit. These extend approximately 15 ft. outward from the column line for the length of the building. It is recommended to extend the structural steel as far as practical and to frame the balance of the roof coping and soffit using 16 ga. steel studs. Although sections through this portion of the roof are under development, tapered wide-flange cantilevers extending approximately 9 ft. to 10 ft. appear feasible. HSS

**Ladera Linda Community Center  
Schematic Design Structural Narrative**

members running horizontally between the tips of the cantilevers will be required as bracing. It is recommended that the green roof not extend beyond the end of the structural steel framing.

General infill roof framing is expected to consist of W12x to W14x members, while roof girders will be on the order of W18x to W21x. Frame members, discussed below, will be deeper.

Pending receipt of the geotechnical report, it is assumed that shallow spread foundations will be used. Based on a review of site photographs, the existing site was likely created using cut and fill techniques and the presence of uncertified fill is likely over at least part of the site. For this reason, an allowance for overexcavation and recompaction should be provided, although the lack of a geotechnical report makes the extent of this site preparation work difficult to estimate.

Typical gravity column loads are estimated to be on the order of 40K dead load and 15K live load. Based on presumptive allowable soil bearing pressures, typical gravity footings are expected to be on the order of 6 ft. square by 2 ft. deep. Moment frame foundations are estimated to be on the order of 10 ft. by 6 ft. by 2.5 ft. deep. The percentage of gravity to moment frame footings is approximately 40% to 60%, respectively.

**1.3.2 Lateral System Description**

Lateral resistance to seismic and wind loads will be provided by structural steel moment frames in both the longitudinal and transverse directions. It is estimated that three to four bays of moment frames will be required in each direction. Column sizes are estimated to be nominally W12x or W14x, although the plan dimensions of the columns will typically be 2 to 3 in. larger than the nominal sizes. Frame girder sizes are expected to be nominally W18x or 21x, although the depth of the beams will typically be 2 to 3 in. larger than the nominal sizes.

**1.3.3 Structural Steel Unit Weight Allowance**

Structural steel unit weight allowance is estimated to be 15 psf. Allowances for connections and miscellaneous structural steel pieces is not included in the unit weight allowance and should be reflected in the unit cost.

**1.4 CONCLUDING REMARKS****1.4.1 Contingency**

For the purposes of developing a structural budget, the general recommendations presented on the schematic design narrative should be supplemented with an appropriate contingency to account for the structural impact of future architectural and MEP changes as design requirements are fully developed and integrated. These should be reflected in the unit prices assumed by the cost consultant.

**1.4.2 Recycled Content**

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**Ladera Linda Community Center  
Schematic Design Structural Narrative**

Recycled content for reinforcing steel is taken as 95%. It is anticipated that cast-in-place concrete will utilize cement and aggregate materials produced locally.

Fly ash may be substituted for Portland cement. The following recommendations apply to concrete mix designs available in the Riverside area and consider the quality of locally available aggregate. 15% fly ash substitution may be made without impacting strength for concrete with up to  $f'_c = 5$  ksi. At this level of substitution it improves the workability of the concrete and is less expensive than the Portland cement it replaces. Up to 25% substitution for  $f'_c$  less than or equal to 5 ksi may be used although concrete finish quality begins to degrade because it is harder to work and strength is impacted. 35% is may be used in foundations or retaining walls where there is little need to work the concrete but strength is limited to  $f'_c = 4$  ksi and is determined based on 56 days rather than the traditional 28 days. Blast furnace slag as a substitute for Portland cement is not commonly available in the Southern California region.

Based on the current design, the following fly ash substitutions are recommended:

Foundations and below-grade retaining walls (3 ksi to 4 ksi concrete): maximum 35% substitution.

Recycled content for structural steel shall be based on steel produced from electric arc furnaces (EAF). The steel recycled content value is based on the post-consumer percentage (56.6%) plus one-half of the post-industrial percentage (32.6%). Thus, EAF recycled content value is taken as 74.9%.

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## V. BUILDING ENCLOSURE

### A. Exterior Wall Systems

1. Glazing Systems
  - a. Exterior High Performing Solarban 60(2) Starphire + Starphire Insulated Glazing Units. Laminated, Tempered, Steel U-Channel, Glass Fin Supports
  - b. Exterior High Performing Solarban 60(2) Starphire + Starphire Insulated Glazing Units. Laminated, Tempered, Steel U-Channel for Display Windows.
2. Wall Systems
  - a. Plaster, Smooth Finish
  - b. Tile, Wood Grain and Board-Formed Styles
  - c. Alucobond, Metal Finish, Dry Sealed
  - d. Continuous Insulation as required for Title 24 compliance
3. Exterior wall covering required to be noncombustible, ignition-resistant material with assemblies meeting SFM Std. 12-7A-1.

### B. Exterior Doors

1. Exterior Swinging Doors
  - a. All glass entrance doors, finish to match surrounding windows, where occurs.
  - b. Exterior solid restroom doors will comply with one of the following: a) exterior surface or cladding shall be of noncombustible or ignition-resistant material, b) solid core wood, 1-3/8 inch thick minimum, c) have a min. 20 minute fire resistant rating, d) Meet SFM Std. 12-7A-1.
  - c. Exterior restroom door hardware will be heavy duty levers and closers with privacy latch.
  - d. All building entrances will be weather sealed and equipped with heavy duty overhead surface mounted or floor mounted closers and panic exit devices.
  - e. Hardware finish shall be exterior grade brushed stainless steel finish trim.
  - f. Glazing, where indicated, will be laminated glass units. Safety glass as required.
  - g. Doors shall be provided with the following hardware: Hinges, Closers, Flush bolts at pairs of doors (inactive leaf), Weatherproof strikes, Overhead stays, ADA compliant mortise locksets, keyed to master system, thresholds where indicated.
  - h. Security devices to be located at door heads as required
2. Sliding Doors
  - a. Sliding Doors (Both Multipurpose Rooms, Discovery/Meeting Room) large glazing units with extruded aluminum frame – Vitrocsa, or similar.
  - b. Hardware will be composed of manufacturer frames, controls, hydraulic lifting mechanisms, mortise and latch sets. Bi-Fold Doors and Sliding Doors are not a means of egress and do not require Panic Hardware.
  - c. Security devices to be located at door heads as required.
3. Overhead Coiling Doors
  - a. Motorized, insulated overhead coiling door at Maintenance Bldg.
  - b. Door Hardware to be keyed cylinder

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### C. Roofing

1. Vegetative roof module “Deep” system, Live Roof or similar.
  - a. 3-1/4 inch trays with 6 inch soil depth.
  - b. Weight: 40-50lbs/SF for system with gravel surrounds at perimeters and drains.
2. Tapered polyisocyanurate insulation over roof decks.
3. Waterproofing System: (Cold) Fluid Applied waterproofing. Hydrotech, GacoFlex LM60 or similar.
4. Roofing required to be fire retardant Class “A”
5. 30 inch x 96 inch thermally broken roof access hatch
6. Tie offs at roof set at intervals for roof access.

### D. Fascias, Coping, & Gravel Stops

1. At roof: fascias, coping to be Alucobond dry seal.

### E. Flashing:

1. Stainless steel and PVC clad metal.

### F. Waterproofing -

1. Exterior walls – Spray on waterproofing and air barrier, Prosoco Spray Wrap MVP and R-Guard or similar
2. Slab on Grade - Aussie Skin 550 by AVM or similar.

### H. Firestopping

1. Provide firestopping at penetrations through roof construction, walls, partitions, openings.

### I. Louvers and grating:

1. Louvers shall be coated stainless steel in coordinated locations by Architect/Engineer.
2. Provide 1/2” x 1/2” non-corrosive wire intercrimp birdscreens secured within extruded aluminum frames secured to louvers. Paint screen to match louver frames.
3. Provide aluminum faced insulated blank off panels painted to match louver frames, as required.
4. Louvers to be rainstop and sight-proof type with secondary weatherstop and minimum 50% free area.
5. Detailed to resist building ignition from the intrusion of burning embers and flames through openings.

## VI. INTERIOR CONSTRUCTION & FINISHES

Interior construction and finishes will be based on specific programs to be confirmed with the City.

### A. Typical Construction & Finishes

1. Walls and partitions
  - a. Interior Partition Types: Steel stud framed, in various sizes and configurations to provide required fire resistance and acoustic performance ratings.
  - b. Glass partitions to be safety glass, single glazed within U-channel.
2. Doors and Frames: (see Building Enclosure for exterior doors)
  - a. Typical: Solid Core wood doors (paint grade) in hollow metal frames (paint grade finish, fully welded, not knock-down)
  - b. Hardware: to be determined/confirmed: medium duty mortise lock and latch sets where required, closers will be medium duty, surface mounted type. Exit devices (panic bars) as required.
  - c. Glazed doors to be safety glass, single glazed. Closers and latches, ADA compliance and panic hardware where required.
  - d. Special doors: Skyfold door between multipurpose room 1 & 2.
3. Ceiling Types
  - a. 24 inch x 60 inch Acoustic Panel Ceiling, Armstrong Tech zone ceiling.
  - b. Gypsum Board ceilings and soffits.
4. Flooring:
  - a. Sealed Concrete with saw cut joints, topcast acid etch finish in Classroom 2, MPR, Classroom 2 and office perimeters.
  - b. Carpet Tile Plank System areas in MPR Rooms, Meeting/Discovery Room, office
  - c. Luxury Vinyl Tile Flooring in Classroom 1.
  - d. Ceramic Tile: Toilet Rooms. 1 inch x 1 inch porcelain tiles.
  - e. Concrete, sealed with saw cut Joints.
5. Equipment
  - a. Audiovisual and end-user equipment as indicated in Technology Narrative.
  - b. Assistive listening devices in all assembly areas as indicated in Technology Narrative.
  - c. Alternating tread device for roof access.
  - d. Refrigerator and ice maker in the Kitchenette.



*Example: Interior Exhibit*



Example: Exhibit Drawers



Example: Workroom Storage

6. Millwork (full scope to be developed with City during Design Development)
  - a. Discovery Room Exhibit Cases and drawers and Work Room full height storage. See examples below.
  - b. Three additional outward-facing exhibit cases
  - c. Lower casework and upper open shelving at Kitchenette.
  - d. Reception Desk, work station with upper casework at Office.
  - e. Lower and upper casework and counters at Classroom 2.

7. Window Treatment:

- a. Automatic, exterior roll-down shades, typical at all exterior window wall locations.
- b. Door mounted pull shades at rooms with AV equipment.

8. Column Treatment:

- a. Interior columns to be wrapped in drywall with paint finish or aluminium with mirrored finish.

B. Finish Schedule: To be developed/confirmed with City during Design Development.

1. Multi-purpose Rooms

- a. Walls: Gypsum Board with Z-Clip P-Lam Finish Panels or Alucobond Mirror Finish
- b. Divider Wall: Skyfold Classic Series with Acoustical Wall Panels and Alucobond mirror finish
- c. Floors: Carpet and Sealed topcast concrete
- d. Ceilings: Acoustic Tile and Mirror finish ceiling panels
- e. Systems: Fire Sprinkler and Alarm
- f. Millwork: One total outward facing Exhibit Case
- g. Equipment/Furnishings: Equipment such as assistive listening device per Technology Section and (156) Chairs with Storage Racks, (18) 60 inch diameter Circular Tables with Storage Racks, (12) 72x30 inch rectangular tables and storage racks

2. (Active) Classroom 1

- a. Walls: Gypsum Board with Z-Clip P-Lam Finish Panels or Alucobond Mirror Finish
- b. Glass Mirror wall for Dance
- c. Floors: Luxury Vinyl Tile and Sealed topcast concrete
- d. Ceilings: Acoustic Tile and Mirror finish ceiling panels
- e. Systems: Fire Sprinkler and Alarm
- f. Millwork: N/A
- g. Equipment/Furnishings: Equipment such as assistive listening device per Technology Section and (24) Chairs with Storage Rack, (6) 72x30 inch rectangular tables and rack

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3. Kitchenette
    - a. Walls: Semi-Gloss Painted Gypsum Board
    - b. Floors: Sealed topcast concrete
    - c. Ceilings: Painted Gypsum Board
    - d. Systems: Fire Sprinkler and Alarm
    - e. Millwork: Lower Casework with Sink and Upper Open Shelving
    - f. Equipment/Furnishings: (1) Reach in Refrigerator, (1) Ice Maker, (1) Microwave, NIC and (2) Hot/Cold Holding Carts, NIC
  
  4. Office
    - a. Walls: Painted Gypsum Board and Z-Clip Alucobond Mirror Finish
    - b. Floors: Sealed topcast concrete and Carpet
    - c. Ceilings: Acoustic Tile and Painted Gypsum Board
    - d. Systems: Fire Sprinkler and Alarm
    - e. Millwork: Reception Desk, Upper and Lower Casework Counters
    - f. Equipment/Furnishings: (2) Task Chairs
  
  5. (Art/Craft) Classroom 2
    - a. Walls: Gypsum Board, Painted
    - b. Floors: Sealed topcast concrete
    - c. Ceilings: Acoustic Tile and Painted Gypsum Board
    - d. Systems: Fire Sprinkler and Alarm
    - e. Millwork: Lower and Upper Casework with Sink
    - f. Equipment/Furnishings: Equipment such as assistive listening device per Technology Section and (24)Chairs with Storage Rack, (6) 72x30 inch rectangular tables and storage rack
  
  6. Meeting/Discovery Room
    - a. Walls: Gypsum Board, Painted and with z-clip P-Lam Finish Panels
    - b. Floors: Sealed topcast concrete
    - c. Ceilings: Acoustic Tile and Painted Gypsum Board
    - d. Systems: Fire Sprinkler and Alarm
    - e. Millwork: Exhibit Cases and Drawers
    - f. Equipment/Furnishings: Equipment such as assistive listening device per Technology Section and Furniture TBD
  
  7. Workroom
    - a. Walls: Gypsum Board, Painted
    - b. Floors: Sealed topcast concrete
    - c. Ceilings: Acoustic Tile and Painted Gypsum Board
    - d. Systems: Fire Sprinkler and Alarm
    - e. Millwork: Exhibit Cases and Drawers
    - f. Equipment/Furnishings: Equipment per Technology Section and Furniture TBD
  
  8. Restrooms
    - a. Walls: Tile, 1 inch x 1 inch
    - b. Floors: Tile, 1 inch x 1 inch
    - c. Ceilings: Painted Gypsum Board
    - d. Equipment/Furnishings: Plumbing Fixtures, Mirrors as indicated, ADA grab bars as required.

## MECHANICAL (HVAC) SYSTEMS

The first priority of the design team will be to provide a HVAC system that meets or exceeds the requirements of the building users. The HVAC system is a key part of providing a comfortable space for building occupants. The design shall utilize the most appropriate technologies to reduce energy. The aim is to design an innovative and efficient system that is cost effective and easy to maintain.

### A. Codes and Standards

The HVAC systems shall be designed in accordance with:

- 2016 Title 24 California Code of Regulations
  - o Part 2 California Building Code
  - o Part 3 California Electrical Code
  - o Part 4 California Mechanical Code
  - o Part 5 California Plumbing Code
  - o Part 6 California Energy Code
  - o Part 9 California Fire Code
  - o Part 11 California Green Building Standards Code
  - o Part 11 California Green Building Standards Code Supplement
- ASHRAE Standard 55-2013, Thermal Environmental Conditions
- ASHRAE Standard 62.1-2016, Ventilation for Acceptable Indoor Air Quality
- ASHRAE Standard 90.1-2016, Energy Standard for Buildings
- SMACNA
- NFPA

### B. Recommended Building Assembly Thermal Performance

Recommended building assembly thermal performance values are based on an understanding of high performance building assemblies suited for the climate at the project site.

Assembly Element		ASHRAE 2007	Title 24 Code	Suggested Performance
Wall – Steel Framed	U-value	0.077	0.098	
	R-value	R-13+R-5 *C.I.	R-15 + R-6 *C.I.	R-20
Roof – Insulation above deck	U-value	0.039	0.075	0.033
	R-value	R-25 *C.I.	R-19	R-30
Roof - Low Sloped	Aged Solar Reflectance		0.63	0.63
	Thermal Emittance		0.75	0.75
Glazing assembly	U-value		0.3	0.3
	SHGC		0.25	0.25
Glazing Curtain Wall or Storefront	U-value	0.5	0.41	0.41
	SHGC	0.25	0.26	0.26
Skylight - Glass Curb Mounted	U-value	0.55	0.58	0.41
	SHGC	0.35	0.25	0.26

Notes: \*C.I. = continuous insulation

## C. HVAC System Description

### Variable Refrigerant Flow (VRF) System

Heating and cooling will be delivered to spaces via a variable refrigerant flow (VRF) fan coil system using refrigerant as a heat transfer medium. The VRF fan coil system allows for zone control, efficient heat transfer, and relative ease of installation and first costs.

A VRF system uses indoor fan coil units at the zone level to condition the building space for inhabitants, and connects to fewer outdoor condensing units. Energy recovery boxes matched to each heat pump direct refrigerant between fan coils and the heat pumps. With the ability to provide simultaneous heating and cooling at different zones via the energy recovery boxes, the system can take advantage of waste heat and heat recovery should various spaces have different and conditioning needs. Efficiency can be gained through the use of this heat recovery strategy. A VRF system with heat recovery will operate in partial-load for the majority of the year. The unique heat-recovery capabilities of the recommended system allow for the removal of heat from a space that requires cooling, and transfer the same heat to another space that requires heating, without the direct use of the compressor to heat and cool.

#### VRF Condensers

VRF Condensers are to be located at the utility yard away from the building. A dedicated refrigerant pipe trench shall be used to feed refrigerant pipes between the utility yard and the building.

#### Distribution Option 1: VRF Ducted Fan Coils (FCU)

- VRF Fan coil unit located above ceiling and outside each thermal zone
- Ducted supply and return air distribution to each zone
- Linear diffuser supply and return
- Ducted outside air from intake louver
- Distributed refrigerant piping loop to all fan coil units
- Energy recovery boxes
- Wall mounted thermostat inside each room to control fan coil unit
- Proprietary VRF control system

#### Distribution Option 2: VRF Duct less Fan Coils (FCU)

- Cassette style VRF Fan coil units inside each thermal zone and recessed into ceiling.
- Ducted outside air from intake louver
- Distributed refrigerant piping loop to all fan coil units
- Energy recovery boxes
- Wall mounted thermostat inside each room to control fan coil unit
- Proprietary VRF system control system

#### VRF Control System

VRF control system shall be provided with BACNET gateway to communicate with the central building DDC control system. Each VRF zone shall be provided with a VRF programmable thermostat.

#### VRF Manufacturer's

- LG
- Daikin
- Samsung
- Mitsubishi

**Toilet Exhaust**

Each individual restroom stall and janitor closet will have a ceiling exhaust register and connected to an inline exhaust fan.

**Utility Room Cooling**

A VRF fan coil unit will provide cooling to the information technology room. A high wall mounted cassette style fan coil unit will be located inside the room with wall mounted thermostat controller.

**System Startup, Testing, Adjusting and Balancing**

The work includes system start-up, test, adjust, and balance (TAB) of HVAC air and water distribution systems including equipment, ducts, and piping. Include sound testing and vibration recordings for HVAC Equipment. TAB work shall be completed by a AABC, NEBB or TABB certified technician. Start-up and testing procedures shall be in accordance with AABC, SMACNA and the manufacturer's requirements.

## APPENDIX A

### HVAC EQUIPMENT SPECIFICATION OPTION 1: DUCTED FAN COIL UNITS

**Job Name/Location:**

**Tag No.:**

**Date:**

For:  File  Resubmit  
 Approval  Other

**PO No.:**

**Architect:**

**GC:**

**Engr:**

**Mech:**

**Rep:**

(Company)

(Project Manager)

**ARUM288BTE5**

Multi V™ 5 with LGRED° 208-230V ODU

24 Ton Dual Frame Heat Pump and Heat Recovery

(a) ARUM096BTE5

(b) ARUM192BTE5



**Performance:**

Cooling Mode:

Nominal Capacity (Btu/h)	288,000
Power Input <sup>1</sup> (kW)	18.94

Heating Mode:

Nominal Capacity (Btu/h)	324,000
Power Input <sup>1</sup> (kW)	22.20

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

**Electrical:**

	(a) ARUM096BTE5	(b) ARUM192BTE5
Frame		
Power Supply (V/Hz/Ø) <sup>1</sup>	208-230/60/3	208-230/60/3
MOP (A)	40	80
MCA (A)	28.5	57.9
Rated Amps (A)	24.4	52.1
Compressor A (A)	16.4	23.3
Compressor B (B)	-	20.8
Fan (A)	8.0	8.0

**Piping:<sup>2</sup>**

	(a) ARUM096BTE5	(b) ARUM192BTE5
Frame		
Refrigerant Charge (lbs.)	23.2	30.9
Liquid (in., O.D.)	3/8 Braze	5/8 Braze
High Pressure Vapor (Heat Recovery only; in, O.D.)	3/4 Braze	1-1/8 Braze
Low Pressure Vapor (in., O.D.)	7/8 Braze	1-1/8 Braze

**Standard Features:**

- Advanced Smart Load Control
- Intelligent Heating
- HiPOR (High Pressure Oil Return)
- Smart Oil Control
- Night Quiet Operation
- Fault Detection and Diagnosis
- Active Refrigerant Control
- Variable Heat Path Exchanger
- Subcooling and Vapor Injection Control
- Liquid Cooled Inverter Controller
- Advanced Comfort Cooling

**Required Accessories:**

- ARCNB21 (Frame Connector Y-branch, 3 pipe heat recovery)
- ARCNN21 (Frame Connector Y-branch, 2 pipe heat pump)

**Optional Accessories:**

- Air Guide - ZAGDKA52A (2 required)
- Hail Guard Kit - ZHGDKA52A (2 required)
- Low Ambient Baffle Kit - ZLABKA52A (2), Control Kit - PRVC2 (1 per system)
- Base Pan Heater - ZPLT1A52A

\*\*Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

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**Operating Range:**

Cooling (°F DB)**	5 - 122
Heating (°F WB)	-22 - 61
Synchronous	
Cooling Based (°F DB)	14 - 81
Heating Based (°F WB)	14 - 61

**Unit Data:**

Refrigerant Type	R410A
Refrigerant Control	EEV
Max. Number of Indoor Units <sup>3</sup>	45
Sound Pressure <sup>4</sup> dB(A)	63.0
Weight	
Frame	(a) ARUM096BTE5 (b) ARUM192BTE5
Net (lbs.)	507 659
Shipping (lbs.)	534 688
Communication Cable (No x AWG) <sup>5</sup>	2 x 18
Heat Exchanger Coating	Black Coated Fin™

**Compressor:**

Type	HSS DC Scroll
Quantity	3
Oil / Type	PVE / FVC68D

**Fan:**

Type	Propeller
Quantity (a) + (b)	4
Motor Drive	Brushless Digitally Controlled Direct
Air Flow Rate (a) + (b) (CFM)	22,600

**Notes:**

1. Power wiring cable size must comply with the applicable local and national codes. Cables terminate at each frame.
2. For main pipe segment size, refer to the LATS Multi V tree diagram.
3. The combination ratio must be between 50-130%.
4. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745 for the combination of outdoor units.
5. Communication cable between ODU and IDUs must be 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
6. Acceptable operating voltage: 187 - 253V
7. The order of these units on the submittal (i.e., a+b) does not represent the installation order. Highest capacity unit is used as the Master, followed by the smaller size as Slave 1.
8. Low ambient performance with LGRED° heat technology is included in Multi V 5 units produced after February 2019.



SB\_MultiV\_5\_ODU\_ARUM288BTE5\_2019\_01\_10\_085602  
Page 1 of 2

Job Name/Location: \_\_\_\_\_

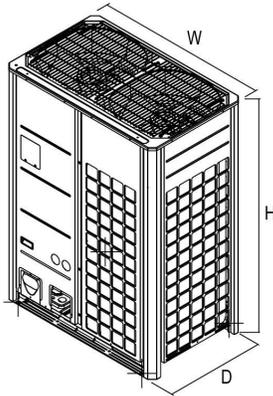
**ARUM288BTE5**

Multi V™ 5 with LGRED® 208-230V ODU  
24 Ton Dual Frame Heat Pump and Heat Recovery

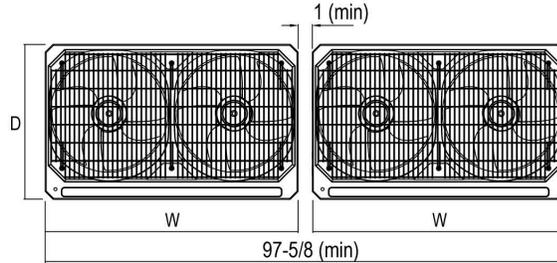
(a) ARUM096BTE5  
(b) ARUM192BTE5



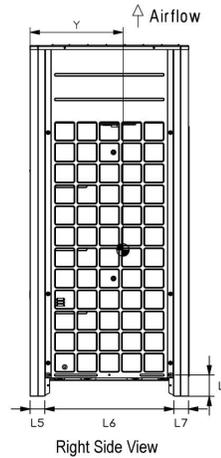
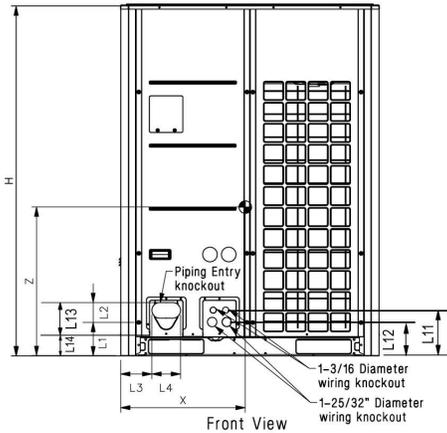
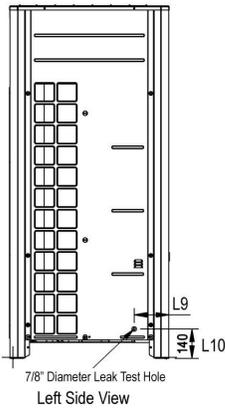
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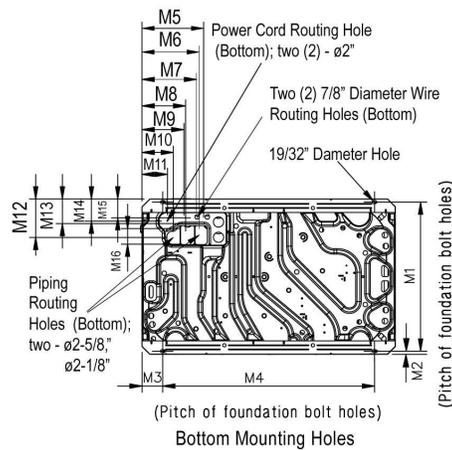
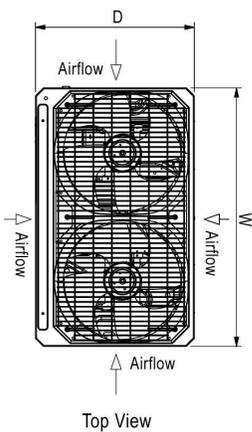
Typical Dual Frame Configuration



**Note:** Please refer to multi-frame placement information and piping rules in the Multi V 5 Engineering Manual and the Multi V 5 Installation Manual. Minimum spacing between frames is 1 inch.



W	48-13/16"
H	66-17/32"
D	29-29/32"
L1	6-5/16"
L2	3-3/4"
L3	5-29/32"
L4	5-13/32"
L5	2-25/32"
L6	24-9/32"
L7	2-25/32"
L8	4-1/32"
L9	6-1/2"
L10	5-9/16"
L11	8-5/8"
L12	6-7/16"
L13	9-15/16"
L14	3-5/8"



M1	28-25/32"
M2	5/8"
M3	3-15/16"
M4	40-15/16"
M5	11-15/16"
M6	11-1/16"
M7	10-1/2"
M8	8-7/16"
M9	8-1/8"
M10	6-1/16"
M11	4-15/16"
M12	7-1/2"
M13	4-13/16"
M14	4-5/16"
M15	3-5/8"
M16	3"

Center of Gravity

X	23-7/32"
Y	15-5/8"
Z	25-9/16"

All dimensions have a tolerance of ± 0.25 in.  
[Unit: inch]



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SB\_MultiV\_5\_ODU\_ARUM288BTE5\_2019\_01\_10\_085602  
Page 2 of 2

Job Name/Location:

Tag #:

Date: \_\_\_\_\_ For:  File  Resubmit  
 PO No.: \_\_\_\_\_  Approval  Other \_\_\_\_\_  
 Architect: \_\_\_\_\_ GC: \_\_\_\_\_  
 Engr: \_\_\_\_\_ Mech: \_\_\_\_\_  
 Rep: \_\_\_\_\_  
(Company) (Project Manager)



**ARNU543M3A4**  
 Multi V™ High Static Ducted  
 54,000 Btu/h Indoor Unit



**Performance:**

Total Cooling Capacity (Btu/h)	54,000
Heating Capacity (Btu/h)	61,400
Max Power Input <sup>1</sup> (W)	650
L/M/H Power Input at Factory Default (W)	172 / 215 / 260

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org).

**Electrical:**

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps (A)	2.5

**Piping:**

Refrigerant:

Liquid Line (in, OD)	3/8 Flare
Vapor Line (in, OD)	5/8 Flare

**Condensate:**

Condensate Pump Drain <sup>2</sup> (in, ID)	1 Plain
Gravity Drain Plugged (in, OD)	1 MPT

**Controls Features:**

- Auto changeover (Heat Recovery only)
- Auto operation
- Auto restart
- Dual thermistor control
- Wi-Fi compatible
- Dual setpoint control
- Multiple aux heater applications
- Filter life display
- External on/off control
- Auto fan
- Leak detection
- Weekly schedule
- Fan speed control
- Group control
- Hot start
- Self diagnostics
- Timer (on/off)
- Child lock

**Optional Accessories:**

- Wireless Remote Controller<sup>3</sup> - PQWRHQ0FDB
- Premium Controller - PREMTA000
- MultiSITE CRC1 Controller - PREMTBVC0
- MultiSITE CRC1+ Controller - PREMTBVC1
- Simple Controller - PREMTCC00U
- Wi-Fi Module - PWFMD200
- Simple Dry Contact (1 contact, 24 VAC external power) - PDRYCB100
- Dry Contact for Economizer - PDRYCB400
- Dry Contact for Third Party Thermostat - PDRYCB300
- Aux Heater Kit - PRARH1
- Remote Temperature Button Sensor - ZRTBS01
- High Efficiency Filter Box - ZFBXM301A

**Entering Mixed Air:**

Cooling Max <sup>4</sup> (°F WB)	76
Heating Min (°F DB)	59

**Unit Data:**

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure <sup>5</sup> dB(A) (H/M/L)	44/43/42
Filter Type	Washable
MERV	N/A
Filter Quantity	1
Filter Dimensions <sup>6</sup> (in)	13-1/4 x 23-15/16 x 3/16
Net Unit Weight (lbs)	96.1
Shipping Weight (lbs)	110.0

**Fan:**

Type	Sirocco
Fan Quantity	2
Motor/Drive	Brushless Digitally Controlled/Direct
Motor Quantity	1
Standard Mode Airflow Rate H/M/L (CFM)	1720 / 1558 / 1424
Standard Mode External Static Pressure (ESP) <sup>7</sup> (in wg)	0.19
High Mode Airflow Rate H/M/L (CFM)	1744 / 1614 / 1482
High Mode External Static Pressure (ESP) <sup>7</sup> (in wg)	0.23
Airflow Range (CFM)	522 - 2,076
Minimum ESP (in wg) <sup>8</sup>	0.16
Maximum ESP (in wg) <sup>8</sup>	0.79

**Notes:**

1. Maximum power input is rated at maximum setting value.
2. Maximum lift is 27 in from bottom of unit. Check valve not included (field supplied).
3. Requires an LG wall controller because ducted units do not have infrared receiver.
4. See Engineering Manual for sensible and latent capacities.
5. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
6. Actual filter sizes may vary.
7. At factory fan speed setting.
8. Maximum static pressure may result in reduced airflow (CFM).
9. All Communication cable between Master outdoor units to indoor units / heat recovery units to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Master outdoor unit chassis only. Do not ground the outdoor unit to indoor units / heat recovery units communication cable at any other point. Wiring must comply with all applicable local and national codes.
10. Power wiring cable size must comply with the applicable local and national code.
11. This unit comes with a dry nitrogen charge.
12. All capacities are net with a combination ratio between 95 – 105%.
13. Must follow installation instructions in the applicable LG installation manual.



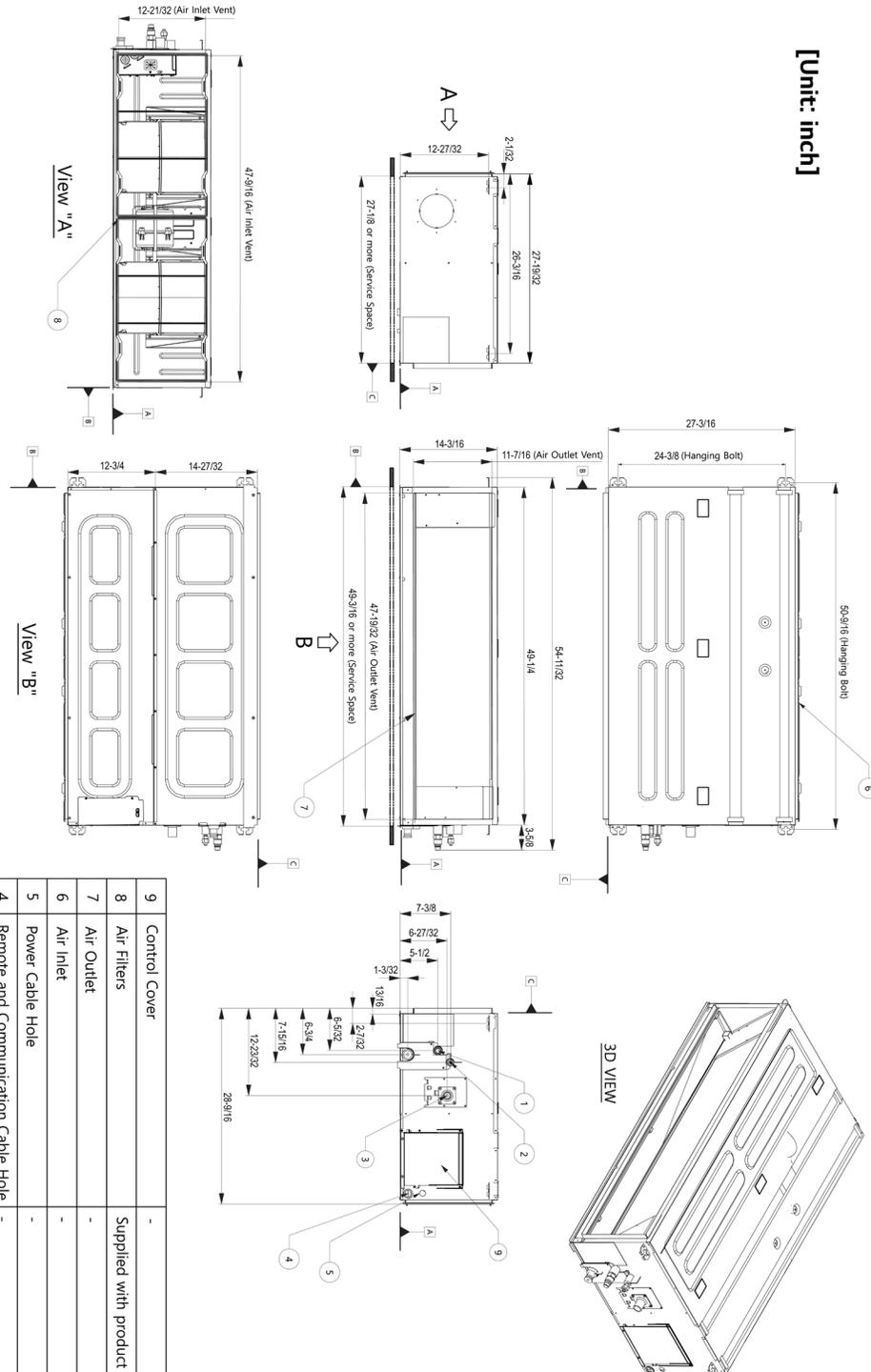
For continual product development, LG reserves the right to change specifications without notice.

Job Name/Location:

**ARNU543M3A4**  
Multi V™ High Static Ducted  
54,000 Btu/h Indoor Unit



Tag #: \_\_\_\_\_  
Date: \_\_\_\_\_  
PO No.: \_\_\_\_\_



[Unit: inch]

No.	Part Name	Description
9	Control Cover	-
8	Air Filters	Supplied with product
7	Air Outlet	-
6	Air Inlet	-
5	Power Cable Hole	-
4	Remote and Communication Cable Hole	-
3	Drain pipe connection	-
2	Liquid pipe connection	-
1	Gas pipe connection	-

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 SB\_MultiV\_HighStaticDucted\_ARNU543M3A4\_2019\_05\_10\_132133 Page 2 of 2

# CUSTOM FLOW

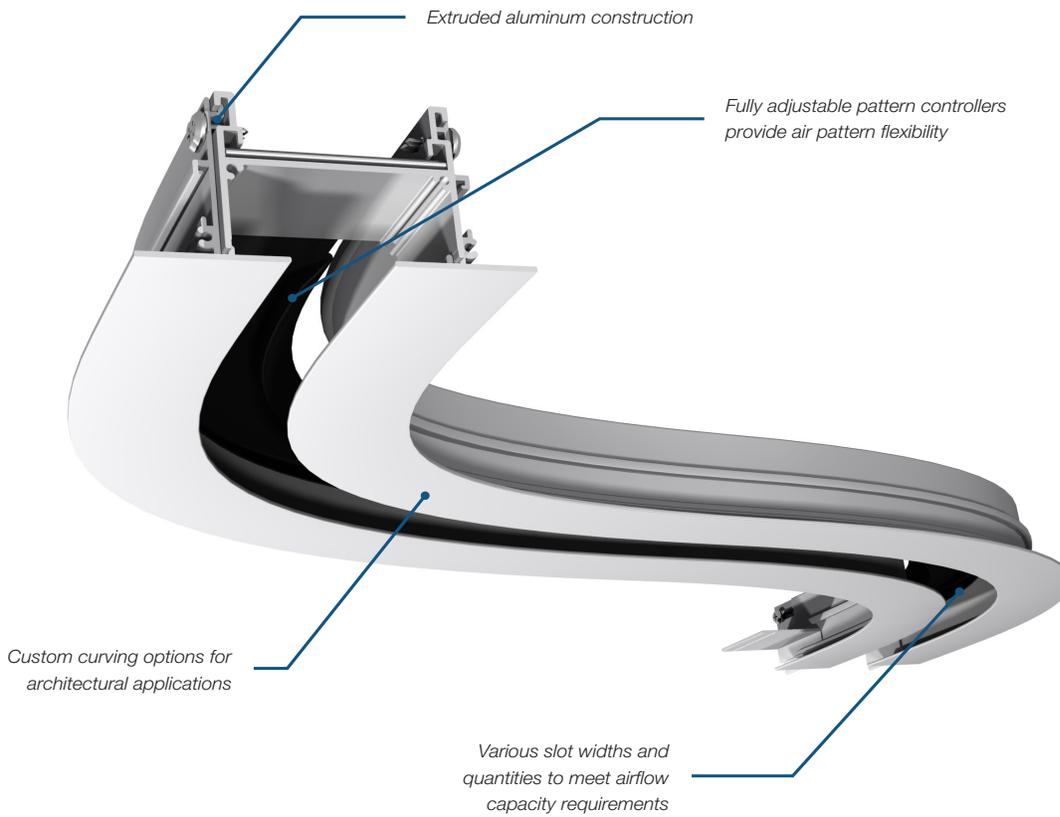
## ARCHITECTURAL SLOT DIFFUSER



**PRICE** | DIFFUSERS

## **CUSTOM FLOW** Architectural Slot Diffuser

Custom Flow (CF) slot diffusers are uniquely designed for curving and long continuous installations. The CF offers a large range of airflow flexibility with one or two slot arrangements, various slot widths, and vertical or horizontal pattern adjustment.



## CUSTOM FLOW

### Architectural Slot Diffuser

## DESIGN FLEXIBILITY

Custom Flow diffusers feature extruded aluminum construction and are ideal for highly architectural applications. The CF is available with countless design options to provide ultimate flexibility, including:

- + Adjusta Slot (horizontal air pattern) and Jet Slot (vertical air pattern) pattern controller configurations to maximize air pattern performance.
- + Five slot widths for low, medium, and high capacity requirements.
- + Multiple frame styles including: exposed mounting, mud-in concealed frame, tegular and Techzone.
- + Discrete and continuous sections. Continuous installations are supplied with alignment strips for high quality architectural installations.
- + Flexible position for supply plenums, allowing active and return sections along the same diffuser. This is popular for continuous slot, perimeter applications.
- + Flat-faced, convex and concave curving sections that easily integrate with straight sections.
- + Flat, inside and outside mitered corners.
- + Assemblies can be easily trimmed to length on-site to meet exact room dimensions.
- + Multiple finish options, including anodized and wood-grain.



For more information visit [www.priceindustries.com](http://www.priceindustries.com)

## TYPICAL APPLICATIONS

Custom Flow linear diffusers are specifically designed for the most demanding architectural and performance applications. As a premium linear slot diffuser, Custom Flow is manufactured using extruded aluminum ensuring a crisp, clean appearance. Custom Flow is ideal for long, continuous runs and often used for perimeter heating and cooling.

## CONSTRUCTION

- + Pattern Controller Style
  - Adjusta Slot
  - Jet Slot
  - Return
- + Slot Widths
  - 1 in.
  - 1 ½ in.
  - 2 in.
  - 2 ½ in.
  - 3 in.
- + Slot quantity
  - 1 or 2

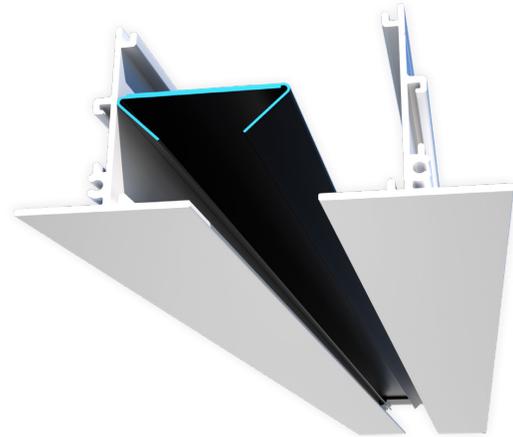
## CUSTOM FLOW Architectural Slot Diffuser

### PATTERN CONTROLLER STYLE

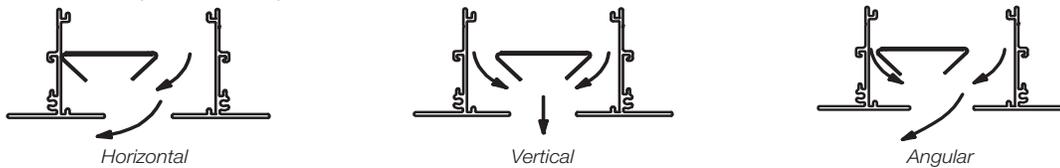
Custom Flow diffusers offer superior performance and function, featuring dual layered pattern controllers for full airflow adjustment, dampening and blank-off capabilities. The pattern controllers are provided in section lengths up to 24 in.; this feature provides multiple pattern and airflow possibilities along the length of a continuous diffuser. Pattern controller styles may be selected for optimal horizontal (Adjusta Slot) or vertical (Jet Slot) airflow performance.

#### Adjusta-slot (AS)

- + Adjusta-slot pattern controllers are designed for ceiling installations and produce a strong, horizontal air pattern over a wide range of airflows.
- + Adjusta-slot units are particularly well suited for open office perimeter zones, main floor entrance foyers and lobbies, elevator lobbies, conference rooms, mall atriums and theatres. Continuous installations are typically located at the perimeter of a zone in which a large air volume must be introduced.



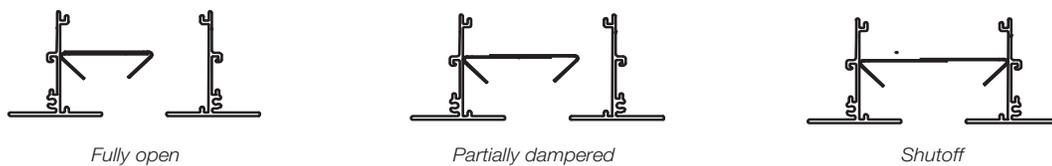
#### One slot air pattern adjustment



#### Two slot air pattern adjustment (may differ for each slot)



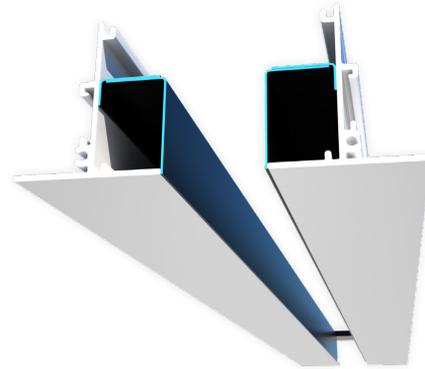
#### Volume adjustments



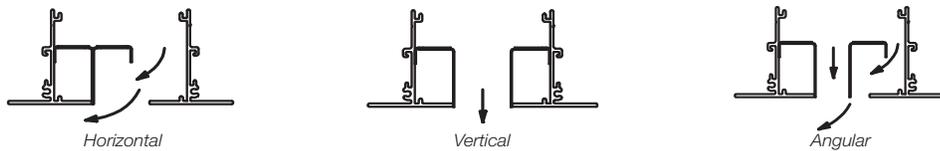
## CUSTOM FLOW Architectural Slot Diffuser

### Jet-slot (JS)

- + Jet-slot pattern controllers are designed to provide a strong vertical air pattern perpendicular to the diffuser face.
- + Jet-slot diffusers are ideal for projecting conditioned air down a high perimeter window where it is necessary for airflow to reach the floor to prevent stagnant zones, as well as interior zones with unusually high ceilings, such as auditoriums, entrance foyers, mall atriums, convention centers and theaters.



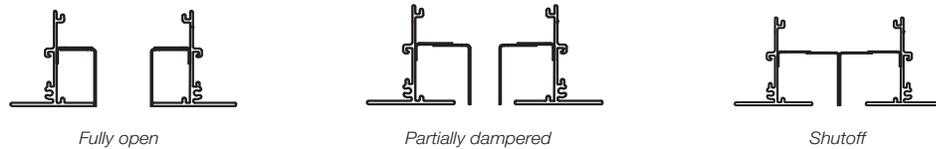
### One slot air pattern adjustment



### Two slot air pattern adjustment (may differ for each slot)

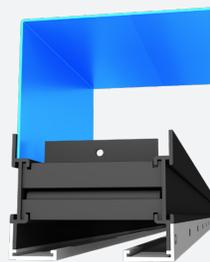


### Volume adjustments



## OPTIONAL ACCESSORIES

- + Custom Flow Architectural Slot Diffusers are available with an assortment of accessories including:
  - Return Air Sight Baffle
  - Metal Blank-Offs



Sight Baffle



Blank-Off

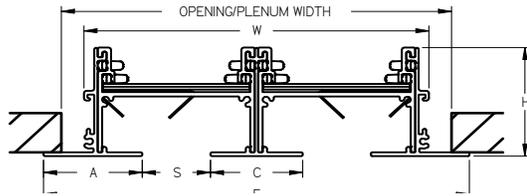
For more information visit [www.priceindustries.com](http://www.priceindustries.com)

# CUSTOM FLOW

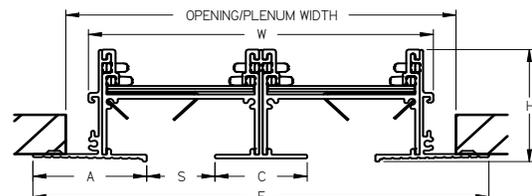
## Architectural Slot Diffuser

### CONFIGURATION OPTIONS

#### Frame Style

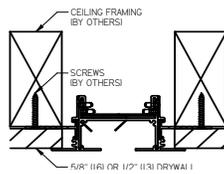


EF - EXPOSED FRAME

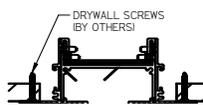


CMF - CONCEALED MOUNTING FRAME

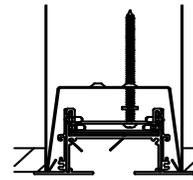
#### Mounting



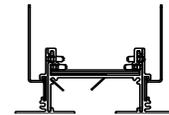
MP-DR - REVERSIBLE DRYWALL MOUNTING CLIP (SM ONLY)



A - COUNTERSUNK HOLES (CMF ONLY)

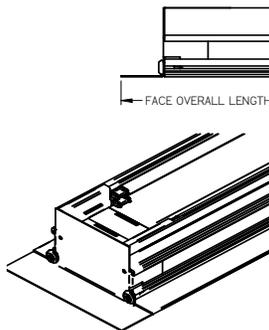


C - CONCEALED MOUNTING BRACKET (SM ONLY)

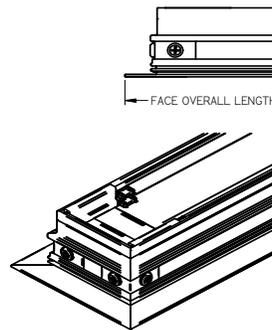


HB - HANGER BRACKETS (LI ONLY)

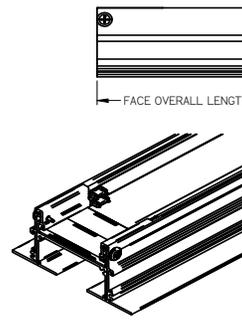
#### End Conditions



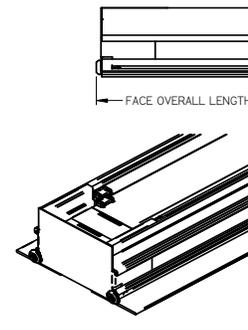
W - FLANGED END (EF ONLY)



X - MITRED END



Y - OPEN END



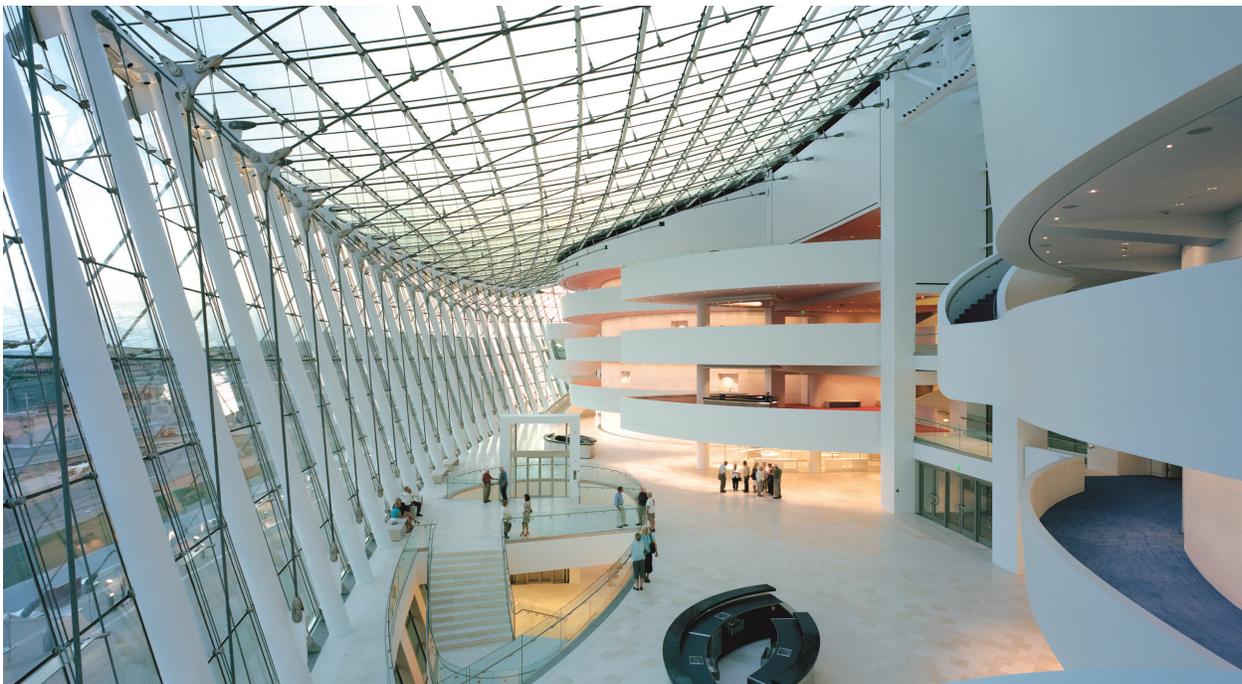
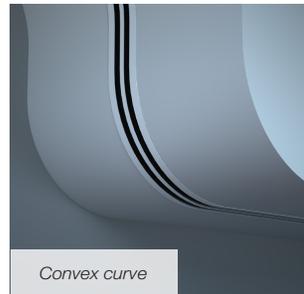
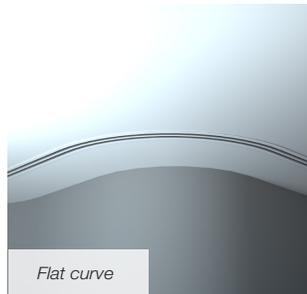
Z - FLUSH END

## CUSTOM FLOW

### Architectural Slot Diffuser

## CURVED LINEAR SLOT DIFFUSER (CFC)

- + Curved Custom Flow diffusers are available in flat-in-plane, concave or convex curves for supply or return applications making them ideal for highly architectural projects.
- + With fully adjustable pattern controllers, airflow adjustment remains flexible, even after curving.
- + Factory built plenums are an available option, built to suit the curvature of the diffuser, minimizing complications due to custom field fabrication and mounting.



For more information visit [www.priceindustries.com](http://www.priceindustries.com)

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## CUSTOM FLOW Architectural Slot Diffuser

### CUSTOM FLOW PLENUMS (CFP)

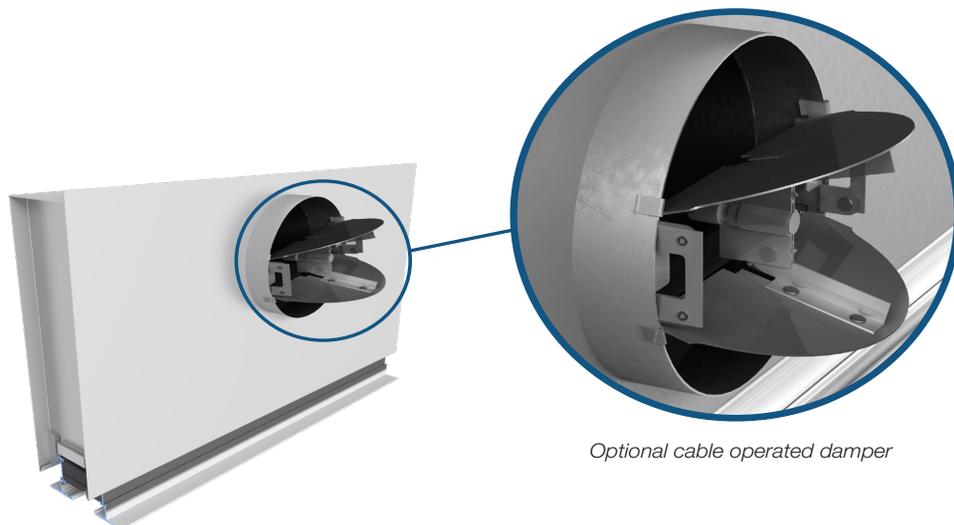
- + Price offers factory built and tested plenum assemblies in various sizes and configurations. To ensure on-site performance matches published performance data, factory built plenums are necessary.
- + Optional fiberglass or fiber free foam plenum insulation is available.

*Curved plenum*



### CONSTRUCTION

- + Style
  - Straight
  - Curved
- + Length
  - 24 in.
  - 36 in.
  - 48 in.
  - 60 in.
- + Mounting Type
  - Surface mount
  - T-bar lay-in
- + Insulation
  - Fiberglass
  - Fiber free foam
- + Options
  - Cable operated damper (VCR8EC)



*Optional cable operated damper*

## CUSTOM FLOW

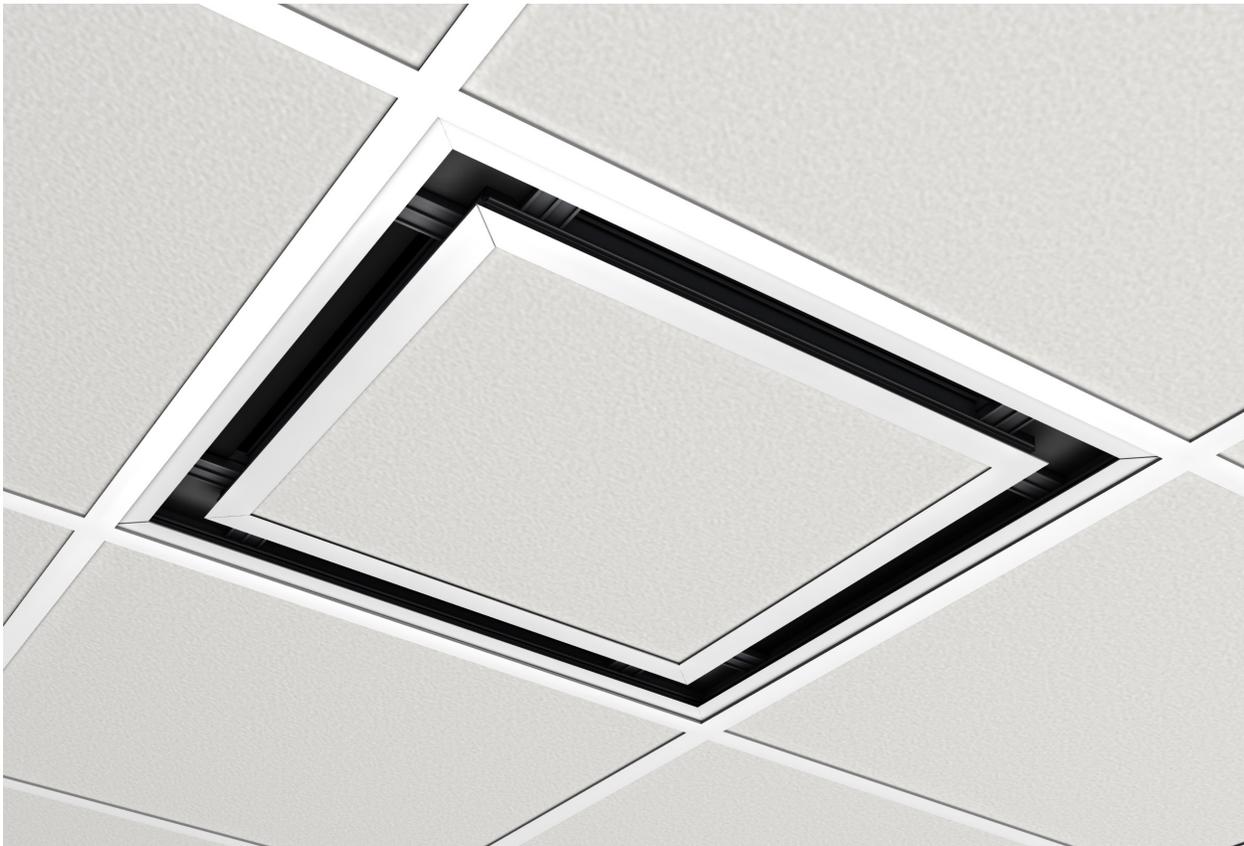
### Architectural Slot Diffuser

## MODULAR CUSTOM FLOW DIFFUSER (ASM)

- + Adjusta-slot Modular 4-sided single slot diffuser provides a unique architectural look and allows a matching ceiling tile to be used on the interior of the diffuser for visual consistency within the space.
- + ASM diffusers are designed for most Lay-in suspension systems with a nominal module size of 24 in. x 24 in. and a 1 in. slot.
- + Each slot can be field adjusted from the face of the diffuser to provide horizontal or vertical air patterns.

### CONSTRUCTION

- + Application
  - Supply
  - Return
- + Size
  - 24 in. x 24 in.
- + Mounting
  - T-bar
  - Bolt slot
- + Options
  - Insulated plenum



For more information visit [www.priceindustries.com](http://www.priceindustries.com)

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## **APPENDIX B**

### **HVAC EQUIPMENT SPECIFICATION OPTION 2: CASSETTE FAN COIL UNITS**

**Job Name/Location:**

**Tag No.:**

**Date:**

For:  File  Resubmit  
 Approval  Other

**PO No.:**

**Architect:**

**GC:**

**Engr:**

**Mech:**

**Rep:**

(Company)

(Project Manager)

**ARUM288BTE5**

Multi V™ 5 with LGRED® 208-230V ODU

24 Ton Dual Frame Heat Pump and Heat Recovery

(a) ARUM096BTE5

(b) ARUM192BTE5



**Performance:**

Cooling Mode:

Nominal Capacity (Btu/h)	288,000
Power Input <sup>1</sup> (kW)	18.94

Heating Mode:

Nominal Capacity (Btu/h)	324,000
Power Input <sup>1</sup> (kW)	22.20

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at www.ahridirectory.org.

**Electrical:**

Frame	(a) ARUM096BTE5	(b) ARUM192BTE5
Power Supply (V/Hz/Ø) <sup>2</sup>	208-230/60/3	208-230/60/3
MOP (A)	40	80
MCA (A)	28.5	57.9
Rated Amps (A)	24.4	52.1
Compressor A (A)	16.4	23.3
Compressor B (A)	-	20.8
Fan (A)	8.0	8.0

**Piping:<sup>2</sup>**

Frame	(a) ARUM096BTE5	(b) ARUM192BTE5
Refrigerant Charge (lbs.)	23.2	30.9
Liquid (in., O.D.)	3/8 Braze	5/8 Braze
High Pressure Vapor (Heat Recovery only; in, O.D.)	3/4 Braze	1-1/8 Braze
Low Pressure Vapor (in., O.D.)	7/8 Braze	1-1/8 Braze

**Standard Features:**

- Advanced Smart Load Control
- Intelligent Heating
- HiPOR (High Pressure Oil Return)
- Smart Oil Control
- Night Quiet Operation
- Fault Detection and Diagnosis
- Active Refrigerant Control
- Variable Heat Path Exchanger
- Subcooling and Vapor Injection Control
- Liquid Cooled Inverter Controller
- Advanced Comfort Cooling

**Required Accessories:**

- ARCNB21 (Frame Connector Y-branch, 3 pipe heat recovery)
- ARCNN21 (Frame Connector Y-branch, 2 pipe heat pump)

**Optional Accessories:**

- Air Guide - ZAGDKA52A (2 required)
- Hail Guard Kit - ZHGDKA52A (2 required)
- Low Ambient Baffle Kit - ZLABKA52A (2), Control Kit - PRVC2 (1 per system)
- Base Pan Heater - ZPLT1A52A

**\*\*Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.**

For continual product development, LG reserves the right to change specifications without notice.

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**Operating Range:**

Cooling (°F DB)**	5 - 122
Heating (°F WB)	-22 - 61
Synchronous	
Cooling Based (°F DB)	14 - 81
Heating Based (°F WB)	14 - 61

**Unit Data:**

Refrigerant Type	R410A
Refrigerant Control	EEV
Max. Number of Indoor Units <sup>3</sup>	45
Sound Pressure <sup>4</sup> dB(A)	63.0
Weight	
Frame	(a) ARUM096BTE5 (b) ARUM192BTE5
Net (lbs.)	507 659
Shipping (lbs.)	534 688
Communication Cable (No x AWG) <sup>5</sup>	2 x 18
Heat Exchanger Coating	Black Coated Fin™

**Compressor:**

Type	HSS DC Scroll
Quantity	3
Oil / Type	PVE / FVC68D

**Fan:**

Type	Propeller
Quantity (a) + (b)	4
Motor Drive	Brushless Digitally Controlled Direct
Air Flow Rate (a) + (b) (CFM)	22,600

**Notes:**

- Power wiring cable size must comply with the applicable local and national codes. Cables terminate at each frame.
- For main pipe segment size, refer to the LATS Multi V tree diagram.
- The combination ratio must be between 50-130%.
- Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745 for the combination of outdoor units.
- Communication cable between ODU and IDUs must be 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
- Acceptable operating voltage: 187 - 253V
- The order of these units on the submittal (i.e., a+b) does not represent the installation order. Highest capacity unit is used as the Master, followed by the smaller size as Slave 1.
- Low ambient performance with LGRED® heat technology is included in Multi V 5 units produced after February 2019.



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Job Name/Location: \_\_\_\_\_

**ARUM288BTE5**

Multi V™ 5 with LGRED® 208-230V ODU

24 Ton Dual Frame Heat Pump and Heat Recovery

(a) ARUM096BTE5

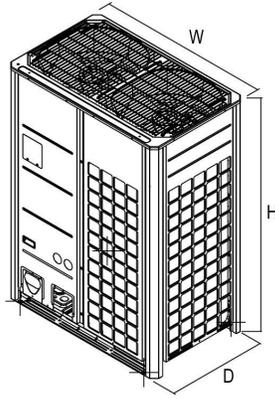
(b) ARUM192BTE5



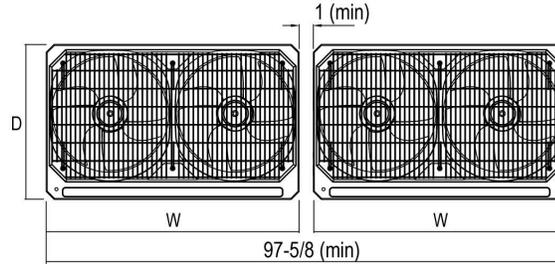
Tag No.: \_\_\_\_\_

Date: \_\_\_\_\_

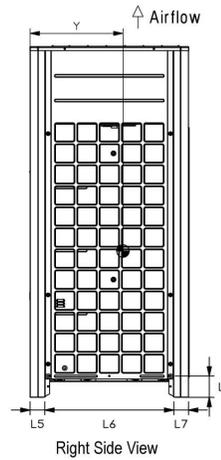
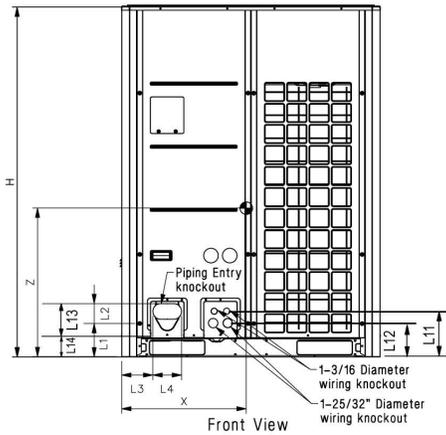
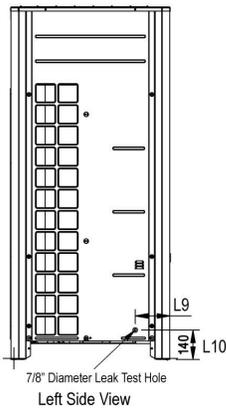
PO No.: \_\_\_\_\_



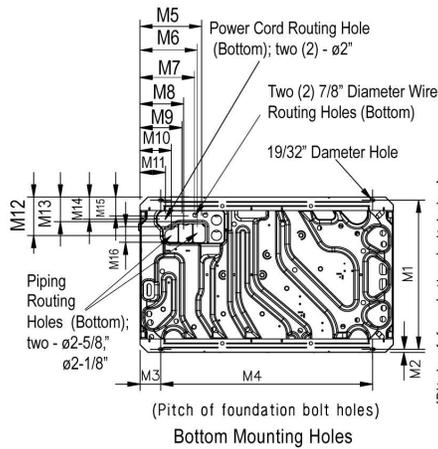
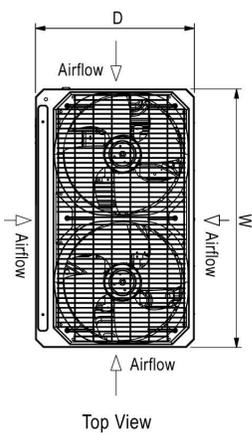
Typical Dual Frame Configuration



**Note:** Please refer to multi-frame placement information and piping rules in the Multi V 5 Engineering Manual and the Multi V 5 Installation Manual. Minimum spacing between frames is 1 inch.



W	48-13/16"
H	66-17/32"
D	29-29/32"
L1	6-5/16"
L2	3-3/4"
L3	5-29/32"
L4	5-13/32"
L5	2-25/32"
L6	24-9/32"
L7	2-25/32"
L8	4-1/32"
L9	6-1/2"
L10	5-9/16"
L11	8-5/8"
L12	6-7/16"
L13	9-15/16"
L14	3-5/8"



M1	28-25/32"
M2	5/8"
M3	3-15/16"
M4	40-15/16"
M5	11-15/16"
M6	11-1/16"
M7	10-1/2"
M8	8-7/16"
M9	8-1/8"
M10	6-1/16"
M11	4-15/16"
M12	7-1/2"
M13	4-13/16"
M14	4-5/16"
M15	3-5/8"
M16	3"

Center of Gravity

X	23-7/32"
Y	15-5/8"
Z	25-9/16"

All dimensions have a tolerance of ± 0.25 in. [Unit: inch]



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# 1-WAY CASSETTE & 2-WAY CASSETTE



ARNU \*\*\*TUD4  
ARNU \*\*\*TTD4



ARNU\*\*\*TSA4

Specifications	Unit	073TU	093TU	123TU	183TT	243TT	183TS	243TS
Chassis		TU	TU	TU	TT	TT	TS	TS
Capacity	Cooling	Btu/h 7,500	9,600	12,300	19,100	24,200	19,100	24,200
	Heating	Btu/h 8,500	10,900	13,600	21,500	24,200	21,500	27,300
Power Input	Cooling	Watts 40	40	40	70	70	19	31
	Heating	Watts 40	40	40	70	70	19	31
Power Supply	V / Hz / ø	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1
Dimensions (W x H x D)	Body	inches 33-7/8 x 17-3/4 x 6-11/16	33-7/8 x 17-3/4 x 6-11/16	33-7/8 x 17-3/4 x 6-11/16	46-1/2 x 17-3/4 x 6-7/8	46-1/2 x 17-3/4 x 6-7/8	32-11/16 x 23-5/8 x 8-7/8	32-11/16 x 23-5/8 x 8-7/8
	Grille	inches 43-5/16 x 19-3/4 x 1-3/8	43-5/16 x 19-3/4 x 1-3/8	43-5/16 x 19-3/4 x 1-3/8	55-15/16 x 19-3/4 x 1-3/8	55-15/16 x 19-3/4 x 1-3/8	43-5/16 x 27-3/16 x 1-1/8	43-5/16 x 27-3/16 x 1-1/8
Unit Weight	Net	lbs 33	33	33	42	42	39.9	39.9
	Shipping	lbs 40	40	40	13	13	10.3	10.3
Grille Weight	Net	lbs 10	10	10	13	13	10.3	10.3
	Shipping	lbs 10	10	10	20	20	14.3	14.3
Sound Pressure (H / M / L)	dBA	32 / 29 / 25	35 / 34 / 32	38 / 35 / 32	40 / 37 / 35	43 / 40 / 36	35 / 33 / 31	48 / 45 / 40
Air Flow Rate, Standard Mode (H/M/L)	CFM	290 / 258 / 226	325 / 304 / 290	353 / 325 / 290	470 / 427 / 385	515 / 470 / 406	417 / 381 / 348	512 / 438 / 364
Grille		PT-UUC1	PT-UUC1	PT-UUC1	PT-UTC	PT-UTC	PT-USC	PT-USC

## Accessories

Description	Model
Grille for 1-Way Cassette, TU Chassis	PT-UUC1
Grille for 1-Way Cassette, TT Chassis	PT-UTC
Grille for 2-Way Cassette, TS Chassis	PT-USC
Plasma Kit for 1-Way Cassette, TU Chassis	PTPKUO
Plasma Kit for 1-Way Cassette, TT Chassis	PTPKTO
Auxiliary Heat Kit	PRARH1
Wi-Fi Module	PWFMD200

Note:  
 1. Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org)  
 2. Max. power input is rated at maximum setting value.  
 3. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.  
 4. Due to our commitment to continued innovation some specifications may be changed without notification.

## 4-WAY CASSETTE (2x2)



ARNU\*\*\*\*\*D4

Specifications	Unit	053TR	073TR	093TR	123TR	153TQ	183TQ	
Chassis		TR	TR	TR	TR	TQ	TQ	
Capacity	Cooling	Btu/h	5,500	7,500	9,600	12,300	15,400	19,100
	Heating	Btu/h	6,100	8,500	10,900	13,600	17,100	21,500
Power Input	Cooling	Watts	30	30	30	30	30	30
	Heating	Watts	30	30	30	30	30	30
Power Supply	V/Hz/ø	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	
Dimensions (W x H x D)	Body	inches	22-7/16 x 22-7/16 x 8-7/16	22-7/16 x 22-7/16 x 8-7/16	22-7/16 x 22-7/16 x 8-7/16	22-7/16 x 22-7/16 x 8-7/16	22-7/16 x 22-7/16 x 10-3/32	22-7/16 x 22-7/16 x 10-3/32
	Grille	inches	27-9/16 x 27-9/16 x 7/8	27-9/16 x 27-9/16 x 7/8				
Unit Weight	Net	lbs	29	29	32	32	35	35
	Shipping	lbs	34	34	38	38	40	40
Grille Weight	Net	lbs	7	7	7	7	7	7
	Shipping	lbs	11	11	11	11	11	11
Sound Pressure (H / M / L)	dBA	29 / 27 / 26	29 / 27 / 26	30 / 29 / 27	32 / 30 / 27	36 / 34 / 32	37 / 35 / 34	
Air Flow Rate, Standard Mode (H / M / L)	CFM	265 / 247 / 212	265 / 247 / 212	283 / 265 / 251	307 / 283 / 247	388 / 353 / 328	396 / 388 / 353	
Grille		PT-UQC	PT-UQC	PT-UQC	PT-UQC	PT-UQC	PT-UQC	

## Accessories

Description	Model
Grille	PT-UQC
Ventilation Kit	PTVK430
Grille (True 2 x2)	PT-QCHWO
Cassette Cover	PTDCQ
Plasma Kit	PTPKQO
Auxiliary Heat Kit	PRARH1
Wi-Fi Module	PWFMD200

Note:

1. Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org)
2. Max. power input is rated at maximum setting value.
3. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
4. Due to our commitment to continued innovation, some specifications may be changed without notification.

INDOOR UNITS

## 4-WAY CASSETTE (3x3)



ARNU\*\*\*\*\*4

Specifications	Unit	073TNA	093TNA	123TNA	153TNA	183TNA
Chassis		TN	TN	TN	TN	TN
Capacity	Cooling	Btu/h 7,500	9,600	12,300	15,400	19,100
	Heating	Btu/h 8,500	10,900	13,600	17,100	21,500
Power Input	Cooling	Watts 144	144	144	144	144
	Heating	Watts 144	144	144	144	144
Power Supply	V/Hz/ø	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1
Dimensions (W x H x D)	Body	inches 33-1/16 x 33-1/16 x 9-11/16	33-1/16 x 33-1/16 x 9-11/16			
	Grille	inches 37-3/8 x 37-3/8 x 1-7/16	37-3/8 x 37-3/8 x 1-7/16			
Unit Weight	Net	lbs 53.6	53.6	53.6	53.6	53.6
	Shipping	lbs 66.1	66.1	66.1	66.1	66.1
Grille Weight	Net	lbs 13	13	13	13	13
	Shipping	lbs 20	20	20	20	20
Sound Pressure (H / M / L)	dBa	29 / 26 / 24	29 / 26 / 24	31 / 29 / 26	32 / 29 / 26	34 / 30 / 26
Air Flow Rate, Standard Mode (H / M / L)	CFM	459 / 424 / 388	477 / 424 / 388	494 / 459 / 424	530 / 459 / 424	565 / 530 / 424
Grille		PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1

Specifications	Unit	243TNA	283TMA	363TMA	423TMC	483TMC
Chassis		TN	TM	TM	TM	TM
Capacity	Cooling	Btu/h 24,200	28,000	36,200	42,000	48,100
	Heating	Btu/h 27,300	31,500	40,600	43,800	51,200
Power Input	Cooling	Watts 144	144	144	144	144
	Heating	Watts 144	144	144	144	144
Power Supply	V/Hz/ø	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1	208-230 / 60 / 1
Dimensions (W x H x D)	Body	inches 33-1/16 x 33-1/16 x 9-11/16	33-1/16 x 33-1/16 x 11-5/16			
	Grille	inches 37-3/8 x 37-3/8 x 1-7/16	37-3/8 x 37-3/8 x 1-7/16			
Unit Weight	Net	lbs 53.6	58.4	58.4	59	59
	Shipping	lbs 66.1	70.5	70.5	69	69
Grille Weight	Net	lbs 13	13	13	13	13
	Shipping	lbs 20	20	20	20	20
Sound Pressure (H / M / L)	dBa	40 / 38 / 35	41 / 39 / 35	44 / 41 / 37	45 / 41 / 38	46 / 42 / 40
Air Flow Rate, Standard Mode (H / M / L)	CFM	742 / 671 / 600	812 / 741 / 635	918 / 812 / 706	1,059 / 918 / 812	1,130 / 953 / 883
Grille		PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1	P-UMC1

## Accessories

Description	Model
Grille	PT-UMC1
Auto Elevation Grille	PTEGMO
Ventilation Kit	PTVK410 and PTVK420 or PTVK430
Grille, Black (3x3)	PT-UMC1B
Cassette Cover	PTDCM
Plasma Kit	PTPKMO
Auxiliary Heat Kit	PRARH1
Wi-Fi Module	PWFMD200

Note:  
 1. Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at [www.ahridirectory.org](http://www.ahridirectory.org)  
 2. Max. power input is rated at maximum setting value.  
 3. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.  
 4. Due to our commitment to continued innovation, some specifications may be changed without notification.



# SAMSUNG

## LIGHT COMMERCIAL PRODUCT CATALOG

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# STANDARD FEATURES

APPLIES TO ALL LIGHT COMMERCIAL MODELS



## 7-Day Programming\*

Set the desired operation mode, temperature and fan speed to operate based on weekly schedules.



## Auto Restart

When the system turns back on, after being turned off or after a power failure, all previous settings, including temperature, will be retained.



## Compatible with DVM S Central Controls

No additional interface modules/adapters are required when connecting to Samsung NASA DVM S central controllers.



## Energy Efficiency

All Samsung systems feature a high energy efficient Digital Inverter compressor. The system maintains the desired temperature without frequently shutting the compressor off and on, greatly reducing power consumption.



## Fast Cooling and Heating

When you turn the system on, it will use the compressor's maximum capacity to quickly reach the desired temperature. (Excludes -40° Low Ambient Cooling)



## FMC (Flat Micro-Channel Condenser Coil)

The Samsung outdoor unit's FMC (Flat Micro-Channel Condenser Coil) feature achieves higher efficiency compared to conventional fin and tube type. (Excludes Slim Duct and 12K High Wall)



## Lightweight

The reduced weight of the Samsung indoor units makes it easier to handle during installation and maintenance. (Excludes Multi-Position Air Handler and -40° Low Ambient Cooling)

\*With optional MWR-WE13N Premium Wired Controller on Wi-Fi adapter.

1

# STANDARD FEATURES

APPLIES TO ALL LIGHT COMMERCIAL MODELS



## Optional Wi-Fi Control Capabilities

Control and monitoring of the system can be done from anywhere with an internet connection.



## Pre Filter

Samsung systems are equipped with a Pre Filter that traps dust particles, which helps keep the room clean and fresh. (Excludes Multi-Position Air Handler)



## Quiet Mode

Select the quiet mode to lower the fan noise level. (Excludes Multi-Position Air Handler)



## Twin Rotary BLDC Compressor

Samsung outdoor units utilize twin rotary BLDC compressors with highly stable moving parts, resulting in reduced torque variation as compared to a conventional single BLDC compressor. (Excludes 9K and 12K Slim Duct, and 12K High Wall)



## Various Pipe Installation Options

The condensing unit provides four different ways to connect the piping. This feature provides great flexibility during installation, and gives a clean and organized look after the job is complete. (Excludes Slim Duct, 18K Multi-Position Air Handler, 12K and 18K High Wall, and -40° Low Ambient Cooling)



Globally Recognized. Industry Respected.

The AHRI Certified® mark indicates Samsung's participation in the AHRI Certification program. For verification of individual certified products, go to [www.ahridirectory.org](http://www.ahridirectory.org).



Intertek

# 360 CASSETTE

AVAILABLE CAPACITIES (Btu/h) - 18,000 | 24,000 | 30,000 | 36,000 | 42,000 | 48,000



Open-type panel



Ceiling-type panel



## Model Features

### Circular Design

The innovative circular design blends harmoniously into any type of interior design.

### Bladeless

Using internal booster fans, the direction of the airflow can be controlled without blades by creating low pressure areas near the air outlet.

### Surround Airflow

360 degree airflow ensures optimal airflow to reduce hot and cold spots in a room.

### Various Style Options

Offered in both black and white for open-type (circle) and ceiling-type (square) fascia panel options.

## Standard Features\*\*

7-Day Programming<sup>1</sup>

Auto Restart

Compatible with DVM S Central Controls

Energy Efficient

Fast Cooling and Heating

FMC (Flat Micro-Channel  
Condenser Coil)

Lightweight

Optional Wi-Fi Control Capabilities

Pre Filter

Quiet Mode

Twin Rotary BLDC Compressor

Various Pipe Installation Options

AHRI Certified

ETL Listed

## Convenience Features:

- Ceiling Dust Prevention
- Easy Leveling
- Innovative Turbo Fan
- Drain Water Overflow Protection
- Electro-static, Washable, Pleated Filter
- Away Mode<sup>1</sup>
- High Lift Drain Pump

## Optional Controllers<sup>2</sup>

MWR-SH00N

MWR-SH10N

MWR-WE13N

AR-KH00U



### WARRANTY

10 YEAR COMPRESSOR | 10 YEAR PARTS | 1 YEAR LIMITED LABOR

*Product registration required.*

*Conditions apply.*



<sup>1</sup>Requires MIM-H03UN Wi-Fi adapter (sold separately)

<sup>2</sup>See standard feature details on pages 1-2

<sup>3</sup>Requires accessory controls (sold separately)

<sup>2</sup>The 360 Cassette does not include any controllers as standard. Controllers must be purchased separately; See controller details on page 40

# WIND-FREE™+ 4-WAY CASSETTE

AVAILABLE CAPACITIES (Btu/h) STANDARD: 18,000 | 24,000  
30,000 | 36,000 | 42,000 | 48,000; MAX HEAT™: 30,000 | 36,000



Available in **MAX HEAT™**

The Wind-Free™ 4-Way Cassette is equipped with all the features and benefits of the Wind-Free™ 4-Way Cassette, along with the ability to provide 100% heating capacity at 5°F and high heating output at -13°F. The integral base pan heater helps prevent ice buildup during defrost cycles. These added features allow the Wind-Free™ 4-Way Cassette Max Heat™ to perform in a myriad of applications from warm to cold climates everywhere.

- High Heating Operation
- Designed for Cold Climates
- Energy Efficient
- Wi-Fi Compatible
- Quiet Operation
- 10 Year Warranty

## Model Features

### Innovative Turbo Fan

The Turbo Fan with wide blades provides uniform distribution of cooling and heating from four separate outlets so the entire room cools down or warms up quickly.

### Individual Blade Control

By using the remote controller, the opening angles of the four louver blades can be individually set at the same or different angles (within a 32°–65° range) for ultimate unit control.

### Wind-Free™\* Cooling Technology

Wind-Free™\* Cooling Mode maintains the desired temperature and eliminates direct airflow by delivering air through micro holes on the unit's fascia panel when the louvers are closed, producing a dispersed and gentle flow of air defined as "still air." Wind-Free™\* fascia panels include a humidity sensor to prevent condensation by restricting Wind-Free™ operation in high humidity conditions. Wind-Free™ operation is available in cooling mode only.

## Standard Features<sup>1</sup>

7-Day Programming<sup>2</sup>  
Auto Restart  
Compatible with DVM S Central Controls  
Energy Efficient  
Fast Cooling and Heating

FMC (Flat Micro-Channel  
Condenser Coil)  
Lightweight  
Optional Wi-Fi Control Capabilities  
Pre Filter

Quiet Mode  
Twin Rotary BLDC Compressor  
Various Pipe Installation Options  
AHRI Certified  
ETL Listed

## Convenience Features:

- Ceiling Dust Prevention
- Easy Leveling
- Easy Blade Cleaning
- Quiet Operation
- Drain Water Overflow Protection
- Away Mode<sup>2</sup>
- High Lift Drain Pump

## Optional Controllers<sup>3</sup>

MWR-SH00N  
MWR-SH10N  
MWR-WE13N  
AR-EH03E



### WARRANTY

10 YEAR COMPRESSOR | 10 YEAR PARTS | 1 YEAR LIMITED LABOR

*Product registration required.  
Conditions apply.*

<sup>1</sup>Requires MIM-H03UN Wi-Fi adapter (sold separately)

<sup>2</sup>See standard feature details on pages 1-2

<sup>3</sup>Requires accessory controls (sold separately)

<sup>4</sup>The Wind-Free™ 4-Way Cassette system does not include any controllers as standard. Controllers must be purchased separately; See controller details on page 40

Select Models are ENERGY STAR® Labeled.

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your contractor for details or visit [www.energystar.gov](http://www.energystar.gov).

<sup>5</sup>The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE 55-2013 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

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## ELECTRICAL SYSTEMS

### A. Electrical Codes and Standards

#### 1. Codes

- 2016 California Building Code (CBC)
- 2016 California Electrical Code (CEC)
- 2016 California Mechanical Code (CMC)
- 2016 California Plumbing Code (CPC)
- 2016 California Energy Code
- 2016 California Fire Code (CFC)
- 2016 California Green Code (CGC)
- 2016 California Referenced Standards Code
- 2016 NFPA 13 Standards for Fire Sprinkler Systems
- 2016 NFPA 20 Standard for the Installation of Stationary Fire Pumps
- 2016 NFPA 72 National Fire Alarm Code
- 2016 NFPA 110 Standards for Emergency and Standby Power Systems
- ADA Standards for Accessible Design- Code of Regulations (Including Amendments)
- State of California Title 24 Energy Code Title 24
- State of California Public Utilities Commission CPUC
- Occupational Safety and Health Administration OSHA

#### 2. Standards

- American National Standards Institute ANSI
- American Society for Testing and Materials ASTM
- Association of Edison Illuminating Companies AEIC
- Certified Ballast Manufacturers CBM
- Electrical Testing Laboratories ETL
- Electronic Industries Association EIA
- IES DG-29-11
- Illuminating Engineering Society of North America IESNA
- Institute of Electrical and Electronics Engineers IEEE
- Insulated Power Cable Engineers Association IPCEA
- National Electrical Manufacturers Association NEMA
- International Electrical Testing Association NETA
- National Fire Protection Association NFPA
- Underwriters' Laboratories UL

### B. Building Power Distribution

- 120/208V, 3 phase, 4 wire panel boards shall be provided in storage rooms.
- Branch circuiting shall be routed in the ceiling cavity in order to reach the panelboards.

### C. Equipment Sizing Criteria

<b>Branch Circuit Load Calculations</b>	
Lighting	100% of actual installed wattage
Receptacle	180 VA per outlet
Special Outlets	Actual installed wattage of equipment
<b>Demand Factors</b>	
Lighting	125% of total wattage
Receptacles, Convenience Outlets	100% of first 10 kVA plus 50% of all over 10 KVA
Motors	125% of wattage of largest motor plus 100% of wattage of all other motors
Fixed Equipment	100% of total wattage

- Maximum voltage drop in each power feeder shall be no more than 2%, and the total drop including feeders and branch circuits shall be no more than 5% overall.

### D. Spare Capacity, Equipment and Feeder Size

20% spare capacity will be provided for future growth for distribution boards and panel boards.

### E. Electrical Distribution

#### 1. Main Switchboard

The Building will be served by a NEMA 3R 600A, 120/208V, 3P, 4W Switchboard located in the utility yard on the site.

Using conductors in conduit, two 250A branch panels will be located in the building. The conduits serving these panels will be routed underground.

A dedicated branch circuit panel serving the mechanical loads will be placed in the Mechanical yard.

A dedicated branch circuit panel serving site loads will be placed in the electrical yard.

The low voltage switchboards will be completely assembled, free standing, with copper bus bars, full neutral bus, and separate copper ground bus. Protective devices will be provided with approved barrier between sections and extended load terminals. Protective devices will be single and multiple-pole circuit breakers. All devices will be fully rated for available fault plus 10%. Series rated devices and equipment are not acceptable for use on this project.

Proposed Manufacturers: Cutler Hammer, General Electric, Siemens, or equal.

#### 2. Utility Transformer

We anticipate a pad mounted SCE transformer will provide the new electrical service for the project. This transformer is planned to be located in the utility yard adjacent to the Main Switchboard.

### 3. Panelboards

Individual panelboards shall have door-in-door construction and copper bussing, unless otherwise noted in single line diagram.

Proposed Manufacturers: Cutler Hammer, General Electric, Siemens, or equal.

## F. Conduit and Wiring

Conductors shall be installed in metallic conduit above ground and in schedule 40PVC underground, and comply with the following additional requirements:

- For PVC conduit installed manufactured rigid steel conduit elbows for stub-ups at poles and equipment and at building entrances through the floor
- Use rigid steel conduit at all exterior locations and where conduit may be exposed and subjected to damage or water intrusion.
- EMT is allowed for all interior concealed applications. Exposed EMT may be used in the following areas:
  - o In mechanical, electrical and elevator machine rooms where not subject to physical damage.
  - o Above 8 feet in boiler rooms or similar spaces.
  - o Above 8 feet in spaces other than offices, classrooms, libraries and similar spaces with District approval.
- Use a maximum of 72 inches of flexible steel conduit for recessed and semi-recessed luminaires, equipment subject to vibration, noise transmission or movement.
- Metal Clad (MC) cable system in not acceptable.
- Use liquid-tight flexible steel conduit for final connections to motors, devices that require adjustment of locations, or equipment that require frequent interchange. Maximum length of 72 inches. Liquid-tight flexile steel conduit may not be used in place of thermal, expansion, or expansion/deflection fittings.
- Underground conduits shall be installed at the top of ducts banks at least 24 inches below finished grade in areas not subjected to deliberate traffic, and at least 30 inches below finished grade in deliberate traffic paths for vehicles. Minimum space between ducts: 3 inches between ductus and exterior envelope wall, 3 inches between ducts for like services, and 12 inches between power and signal ducts.
- The minimum underground conduit size shall be 1 inches.
- PVC conduits, fittings, and outlet boxes shall be used in highly corrosive environments.

## G. Grounding

Code compliant methodology shall be used.

#### 1. Equipment Grounding System

UFER ground shall be the primary grounding electrode for new buildings and ground rod(s) installed in ground test wells shall be the primary grounding electrode for existing buildings that do not have a UFER system.

All metallic objects that enclose electrical conductors or that might be energized by electrical currents including all metal equipment parts such as enclosures, raceways, building metal structure and equipment grounding conductors must be effectively bonded.

All earth grounding electrodes must be solidly joined together into a continuous electrically conductive system connected to the main grounding electrode system. Individual building grounding systems must be interconnected to the campus grounding system.

The neutral conductor of the main service and the secondary of all grounding transformers shall be bonded to the building ground system. The grounding of the neutral conductors will only be done once per voltage level to avoid creating grounding loops.

A separate green insulated wire will be run in each feeder conduit and each branch circuit conduit.

### H. Receptacles

Provide general purpose receptacles for all occupied spaces, equipment rooms and within 25' of all equipment.

Weatherproof, in-use type outlet boxes shall be used at all exterior locations.

Provide dedicated and special configuration receptacles for all office copy equipment and appliances.

### I. Emergency and Egress Lighting

Emergency power will be provided for all code required equipment. A central lighting inverter shall be included to provide power to egress and emergency lights when utility power is lost. Egress and Emergency lighting shall be controlled via UL924 relays.

Whenever possible local emergency fixtures with on board battery backups should be considered for egress lighting.

The fire alarm system will have dedicated emergency battery backup for 24 hours in supervisory mode, followed by 5 minutes at full alarm.

### J. Lighting

Lighting fixtures shall be LED type with 90+ CRI.

### K. Lighting Controls

A distributed microprocessor based lighting control system will be provided to automatically control the entire building lighting systems. The system shall be scalable and provide local as well as central control of the lighting systems.

The lighting control head end shall have capability of control and monitoring of any space in a cluster by area or zone and set schedules/presets.

Each fixture or group of fixtures will be controlled by individually addressable controller and communicate its status (occupancy, daylight) to a gateway. Provide a lighting control system that can respond to available daylight by switching or dimming electric light to save energy.

The lighting controls systems allow for automatic daylight harvesting which shall reduce electric lighting consumption by continuously dimming. The daylight harvesting system will utilize wireless photocells which will sense daylight levels in the space and will dim the lights to a low level or 5% light output. Below minimum light level, fixture power will be disconnected.

Enclosed stairs shall include occupancy sensor controls to reduce the lighting within the stair (by a minimum of 50%) when it is not occupied.

Occupancy sensor time delays shall be set at a minimum of 30 minutes.

Back of house rooms such as storage rooms, janitorial rooms, equipment rooms, locker rooms, etc shall be controlled by local occupancy sensors.

Exterior lighting fixtures shall be turned on by a photocell placed at an appropriate location on the exterior of the building. Light fixtures which are designated as essential for security shall be turned off by a photocell as well. Light fixtures which are designated as ornamental shall be turned off by the time clock function of the lighting control panel. Exterior motion sensors will increase lighting levels when people are present and reduce to minimum 50% lighting levels when areas are vacant.

#### **L. Photovoltaic System**

Only provisions per Title 24 solar-ready requirements. Design shall provide adequate space for PV inverter in electrical room layout. Provisions for power conduits from roof-mounted PV arrays to locations of future PV inverter will be provided.

#### **M. Electrical System Studies**

##### **1. Coordination study**

The coordination study is an integral part of the building operation. It greatly reduced faulty circuit breaker tripping and thus enhancing user experience and minimizing maintenance calls. Coordination study will be performed by the contractor using actual equipment curves. Study electrical distribution system from normal and alternative power sources throughout electrical distribution system for project. Study all cases of system-switching configurations and alternate operations that could result in maximum fault conditions.

Coordination study shall be conducted using CAPTOR software from SKM Systems Analysis Inc.

##### **2. Short circuit study**

The short circuit study shall include three-phase analysis including rigorous load flow and voltage drop calculations, impact motor starting, traditional fault analysis, demand and design load analysis, feeder, raceway and transformer sizing, and panel, and switchboard schedule specification. Initial study will be provided on construction documents using generic equipment and assumed utility fault levels. Final coordination study shall be performed by contractor using actual equipment, feeder types and lengths.

Short circuit study shall be conducted using DAPPER software from SKM Systems Analysis Inc.

#### **N. Electrical Systems Commissioning**

The electrical systems listed below will undergo commissioning by an independent third party commissioning agent (extent and details of commissioned systems to be reviewed with commissioning agent):

- Lighting controls including any daylight harvesting, interior and exterior lighting controls
- Emergency systems including inverters and UPS systems.
- Overcurrent-protection device coordinate settings and verification

Note that fire alarm system will be tested by the State Fire Marshall. 100% of all installed devices involved in the fire alarm system shall be tested.

## **O. Fire Alarm Systems**

Extend the automatic, addressable fire alarm system.

System shall include full smoke/heat coverage for the building, as well as strobe, horn, and horn/strobe coverage in all areas as required. A remote annunciator with a full graphical layout of the entire building shall be provided at main entrance to building. Addressable monitor and relay modules shall be used to interface with required items, such as fire sprinkler valves and air handling units requiring automated shutdown. Performance of the horns and strobes shall be per acceptance of the AHJ.

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## PLUMBING SYSTEMS AND FIRE PROTECTION SYSTEMS

### PLUMBING SYSTEMS

#### A. Code and Standards

The latest editions of the codes and standards are intended as guidelines for design. The codes and standards are not limited to the lists below.

##### 1. 2016 Codes

- California Building Code
- California Mechanical Code
- National Electrical Code
- California Plumbing Code
- California Fire Code
- California Administrative Code
  - Title 8           General Industry Safety Order
  - Title 17          Public Health
  - Title 22          Social Security
  - Title 24          Building Efficiency Standards

##### 2. Standards

- ANSI            American National Standards Institute
- UL              Underwriters Laboratories
- ASME           American Society of Mechanical Engineers
- ASHRAE         American Society of Heating Refrigerating and Air Conditioning Engineers
- ARI             American Refrigeration Institute
- ASTM           American Society for Testing and Materials
- FM              Factory Mutual
- NFPA            National Fire Protection Association

#### B. Design Criteria

The design of the plumbing systems shall allow for future expansion of plumbing fixtures and equipment and create flexible piping services that shall be easily adapted to changing research requirements.

General building areas where required shall be provided with the following piped services: domestic cold and hot water and sanitary waste and vent piping.

Plumbing fixtures will be water saving fixtures as follows:

- Water closets will be wall-mounted, 1.28 gallon per flush type bowl and hardwired flush valve.
- Urinals will be wall-mounted, 0.125 gallon per flush type.
- Lavatories will be under counter mounted, with 0.5 gallons per minute @60 psi hardwired sensor, ADA-metered, self-closing faucets.
- Sinks will be under counter with 1.5 gallons per minute to maximized water savings. Faucet will be manual levered faucets that meets ADA requirement.

- Hose bibs will have loose key and vacuum breaker in recessed boxes. Hose bibs on roof will be pipe mount and exposed type.

The plumbing fixtures shall consist of vitreous china fixtures. The toilets shall be wall mounted fixtures. The lavatories shall be under counter mounted. The sinks will be under counter-mounted. All fixtures shall be commercial grade.

Fixtures designated for use by the physically impaired shall be provided as indicated on floor plan and meet the requirements of the American with Disabilities Act.

The plumbing fixtures shall have standard waste and vent systems for all toilets, lavatories, and sinks.

### **C. Water Systems**

Metered domestic water service to the building shall be extended from the on-site water main. The domestic water service shall be separate from the fire water service. Water shall be distributed through mains, risers and branches to plumbing fixtures and equipment.

Inside a building, the domestic water service shall be provided with a strainer and pressure reducing valve (PRV) assembly.

Building shall utilize a pressure reducing valve (PRV) assembly to limit water pressure inside the building to 50 psi and maintain 30 psi at furthest outlet. Internal distribution shall consist of a piping system, which shall supply domestic cold water to all necessary plumbing fixtures, water heaters and all mechanical make up water needs.

A point-of-use tankless water heater will be provided for hot water. Lavatories will have one unit serving the gang fixture with an approved ASSE 1070 mixing valve to each lavatory. A 10-gallon electric water heater will be provided to serve the mop sink. This unit will be suspended at the ceiling of the janitor closet.

The minimum residual pressure at the most remote water closet shall be 30 psi.

Water velocity shall not exceed 6 ft / sec for cold and 5 ft / sec for hot water to minimize sound transmission in acoustically sensitive areas.

System will be designed to prevent water hammer conditions by providing shock arrestors for batteries of flush valve fixtures, and for quick closing valves.

Groups of fixtures shall be provided with isolation valves and heavy duty angle stops for ease of maintenance. Each plumbing fixture shall also be provided with isolation valves. Valves shall be in recessed boxes with locking covers.

Minimum pipe size shall be 1/2 inch for one plumbing fixture with a maximum flow of 0.5 gpm and 3/4 inch for one plumbing fixture with flow above 0.5 gpm.

Domestic water piping shall be Copper tube, Type L, with wrought copper fittings and brazed or soldered joints.

#### **D. Sanitary Waste and Vent System**

Sanitary waste and vent system shall be designed to provide connection to each plumbing fixture. Plumbing fixtures shall be drained by gravity through waste and vents stacks and connect to site sewer system five feet outside the building.

The system will be designed with consideration for future addition of 10 percent of the designed loads.

All horizontal sanitary waste piping will be sloped at 1/4 inch per foot.

Waste piping from plumbing fixtures whose rim levels are lower than the street main sewer upstream manhole elevation will be connected together and provided with a back sewer valve prior to connecting to the building waste main piping.

Sanitary waste and vent piping will be cast iron soil pipe with hub and spigot joints and fittings for below grade piping. Above grade piping will be cast iron soil pipe with no hub fittings and heavy duty pipe couplings.

#### **E. Roof and Storm Drainage System**

The roof drainage system shall be designed with connections to the on-site storm drainage system.

Where roof drains are provided, overflow drains shall be installed with flow line located two inches above low point of the roof and shall be drained independently by gravity through inside leaders, house storm drains and discharge through face of building. In lieu of overflow drains, overflow scuppers may be provided in parapet walls integral with the general building construction.

The storm system shall be designed for a 2 inches per hour rainfall rate, based on a storm of 60 minutes duration and 100 year return period (CPC 2019, Appendix D).

Storm water drainage piping will be cast iron soil pipe with hub and spigot joints and fittings for below grade piping. Above grade piping will be cast iron soil pipe with no hub fittings and heavy duty pipe couplings.

#### **F. Drains and Wastes**

Floor drains shall be provided in each gang restroom. A floor drain shall also be provided in each mechanical room.

Trap primers shall be provided to maintain the trap seal in floor drains and sink p-traps. It shall be located in walls behind access panels.

All trap primers shall be provided with an air gap. Electronic trap primers shall be utilized in rooms which do not have quick closing valves/fixtures installed.

Floor sinks shall be provided at each ice machine. Floor sinks shall be provided to collect equipment indirect drains and condensate drains.

## G. Additional Issues

All piping components subject to sweating or heat loss shall be insulated with appropriate thickness of insulation and fire-retardant jacket.

Underground pipe protection shall be provided.

Piping design for back-to-back toilets shall require extra piping to provide separate isolation valves for each toilet room. Maintenance work in one toilet shall not require the other toilet to be unusable.

A condensate drain collection system will be provided. This piping system collects condensate drain from building fan/AC coil units, then filtered until it reaches a level of quality consistent with its intended reuse. The piping network distributes it to sources not used for human consumption in a safe and distinctive manner.

## FIRE PROTECTION SYSTEM

### A. Design Criteria

A complete hydraulically designed fire sprinkler system for the building shall be provided. The system shall be designed in conformance with the Uniform Building Codes and NFPA 13.

The Offices and assembly areas shall be Light Hazard.

Flow data at 80% of available pressure shall be used for the basis of bid documents. The final design of the suppression system shall include the underground piping and the riser piping based on new flow readings witnessed and approved by the State Fire Marshal.

Mains to individual sprinkler systems shall be provided with monitored control valves and water flow switches as well as a system drain/test connection. All control valves and water flow switches shall be annunciated at the safety control panel.

All isolating and sectionalizing valves on the fire protection system shall be provided with tamper switches that shall be annunciated at the life safety control panel.

The system shall have a central control panel with digital read-out and an emergency power source. The system should be installed so that it may be connected to an automation system. A remote graphic or digital annunciation panel should be located at the firefighter's entrance. The location of the panel shall be reviewed and coordinated with the State Fire Marshal.

The system components shall include the following:

- A reduced principle zone assembly backflow preventer with a listed indicating OS&Y gate valves check valve and fire department pumper connection shall be provided outside the building.
- Valve and water-flow switch monitoring.
- Audible sprinkler flow alarms on the exterior and interior of the building. The fire protection system shall be monitored by the central fire alarm system in the building.

- Hand-held fire extinguishers shall also be provided to comply with NFPA 10.

Piping shall be concealed above ceilings and within walls except for non-public equipment rooms without ceilings.

Sprinkler heads shall be spaced for symmetry with ceiling features. This shall require additional heads that shall be provided in base bid. Basis of head location shall be:

- Equal distance between lights.
- Equal distance between lights and wall.
- Equal distance between lights and air inlets and outlets.
- Equal distance between wall, lights, and air inlets and outlets.
- Locate in center of ceiling tiles.

Provide coverage for rooms, void spaces, overhangs and as required by code.

Fire Protection System piping material will be black steel schedule 40, ASTM A53, seamless.

**APPENDIX C**  
**PLUMBING EQUIPMENT SPECIFICATION**

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**ELECTRIC TANKLESS WATER HEATER - POINT OF USE**

**WH-1 & 4 INSTANT-TEMP® - LOW FLOW**

**APPLICATION:** commercial, industrial, residential, multiple lavatories, public lavatories, kitchen/bar sink

**PRODUCT FEATURES**

- Uses a digital microprocessor for temperature control
- Ultra quick response times for temperature variations - 120 times per second. Microprocessor use is the most energy efficient means of heating water
- Unlimited hot water
- Ideal for sensor /hands-free faucets with the 104°F factory preset setting; no mixing valve needed
- Saves water and energy - 99% energy efficient
- Works on low flow
- Rugged steel housing
- Space saving compact size: 7-5/16" (H) x 10-3/4" x 2-3/4"
- Meets applicable building codes including ADA, UL, IAPMO, UPC, and CSA.
- Environmentally friendly
- Made in the U.S.A.
- Field Adjustable

Chronomite Instant-Temp® - Low Flow models are manufactured to provide reliable point-of-use hot water. There is no pressure and temperature relief valve needed (unless required by code), saving time and money on installation.

**Housing** is fabricated from rugged steel.

**Element assembly** is fabricated from Celcon/Ryton plastic.

**Heating coils** are nichrome.

**Flow control and compression fittings** are supplied with each unit.



Member of U.S Green Building Council



Water Conserving Product



Made in the USA

**For the model being selected, please place the corresponding amps and volts values in the Guide Specifications to the right.**



Instant-Temp® - Low Flow

**GUIDE SPECIFICATION**

Tankless Water Heater shall be a Chronomite Laboratories Model

E - \_\_\_\_\_ L / \_\_\_\_\_  
x 100 WATTS VOLTS OPTIONS

with \_\_\_\_\_ Amps and \_\_\_\_\_ Volts

to heat to a preset temperature of:

- 104°F (Standard sensor faucet hand washing setting)
- 110°F (Standard hand washing setting) (Meets ADA)
- Other temperature settings available upon request (specify below)
- 120°F (Meets health code)

Unit shall be provided with Celcon waterways, and Nichrome heating coils. Temperature controlled by microprocessor.

**OPTIONS**

- Factory Preset (F)
- Remote Accessory (R)
- Satin Stainless Steel Housing (SS)
- High Polish Stainless Steel Housing (SSP)
- Low Flow/ Low Pressure (LLP)
- De-ionized (DI)
- Multiple Lav applications (FLLP)
- Pressure & Temp Relief Valve Assembly (TP)

MODEL	AMPS	VOLTS	WATTS	ACTIVATION	TEMP RISE @	TEMP RISE @	TEMP RISE @
				GPM	0.75 GPM	1.00 GPM	1.25 GPM
E-46L / 208	22	208	4600	0.35	4.2	3.1	2.5
E-46L / 240	19	240	4600	0.35	4.2	3.1	2.5
E-46L / 277	17	277	4600	0.35	4.2	3.1	2.5
E-60L / 208	29	208	6000	0.35	5.5	4.1	3.3
E-60L / 240	25	240	6000	0.35	5.5	4.1	3.3
E-60L / 277	22	277	6000	0.35	5.5	4.1	3.3
E-70L / 208	34	208	7000	0.35	6.4	4.8	3.8
E-70L / 240	29	240	7000	0.35	6.4	4.8	3.8
E-70L / 277	25	277	7000	0.35	6.4	4.8	3.8
E-80L / 208	38	208	8000	0.35	7.3	5.5	4.4
E-80L / 240	33	240	8000	0.35	7.3	5.5	4.4
E-80L / 277	29	277	8000	0.35	7.3	5.5	4.4
E-90L / 240	38	240	9000	0.35	8.2	6.1	4.9
E-90L / 277	32	277	9000	0.35	8.2	6.1	4.9

Complies with Standards for:



CALGreen

**CHRONOMITE LABORATORIES, INC.**  
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IT-LF 09/06/18

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**CHRONOMITE** Since 1966  
Electric Tankless Water Heaters

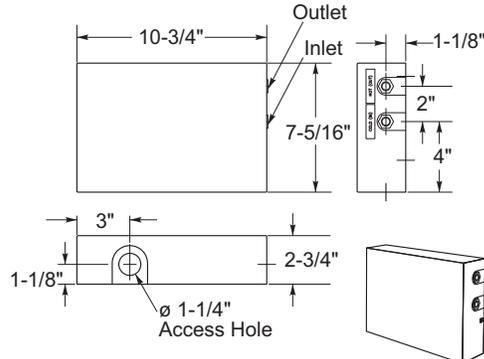
**ELECTRIC TANKLESS WATER HEATER - POINT OF USE**

# INSTANT-TEMP® - LOW FLOW

## TECHNICAL DIMENSIONS

### INSTANT-TEMP - LOW FLOW

Dimensions:	7-5/16" (H) x 10-3/4" x 2-3/4"
Weight:	8 lbs.
Materials:	Rugged steel housing Celcon/Ryton plastic element assembly with nichrome coils
Housing Color:	White
Minimum Operating Flow Rate:	0.35 GPM
Minimum Operating Pressure:	45 PSI
Maximum Operating Pressure:	80 PSI
Maximum Pressure:	150 PSI
Maximum Operating Temperature:	160°F
Listing:	UL, IAPMO, UPC, ADA, CSA



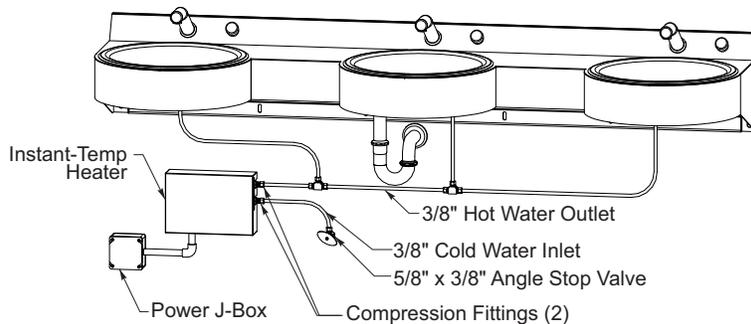
### GENERAL NOTES:

- The microprocessor adjusts the heater's power for variations in flow rates, inlet water temperature and pressure to assure the selected factory pre set water temperature. \*\*
- 240V models when operated at 220V will have approximately a 15% wattage decrease.
- Instant-Temp is ideal for sensor/hands-free faucets with the 104°F factory preset setting temperature ; no mixing valve needed
- Factory setting of 110°F or above require cold water mixing at the hand wash faucet.
- Microprocessor limits temperature increase according to the pre-selected temperature

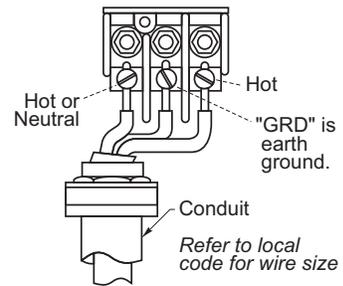
## INSTALLATION DIAGRAM

Note: Heater to be installed below the level of all hot water outlets serviced by the heater

Shown installed in a Multi-Lavatory Installation



## WIRING CONNECTION



**ATTENTION:**  
Unit must be hard wired.  
NOTE: Heaters are single phase.  
All tests are measured at the output of the heater.

Chronomite Laboratories assumes no responsibility for use of void or suspended data. © Copyright Chronomite Laboratories, Inc. Member of Morris Group International, City of Industry, CA Please visit [www.chronomite.com](http://www.chronomite.com) for most current specifications.

**SELECTION SUMMARY & APPROVAL FOR MANUFACTURING**

Company \_\_\_\_\_

Model Number & Options \_\_\_\_\_ Quantity \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Signature (Approval for Manufacturing) \_\_\_\_\_ Date \_\_\_\_\_

**CHRONOMITE LABORATORIES, INC.**  
PH. 800-447-4962  
626-937-4270  
FAX 626-937-4279  
[www.chronomite.com](http://www.chronomite.com)

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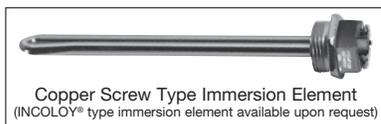


WH-2

## ElectriFLEX LD™ (Light Duty) Commercial Utility Electric Water Heater



Photo is of  
LE112T3-1



### Bradford White ElectriFLEX LD™ Utility Electric Models Feature:

- **Fully Automatic Thermostat Controls**—Fast acting surface-mount thermostat with high limit energy cut-off (manual reset) for safety.
- **Direct Heat Transfer With a Single Immersed Element**—Transfers heat directly and efficiently to the water. Screw-in style element.
- **Vitraglas® Lining**—An exclusively engineered enamel formula that provides superior tank protection from the highly corrosive effects of hot water. This formula (Vitraglas®) is fused to the steel surface by firing at a temperature of over 1600°F (871°C).
- **Insulation System**—1" (25mm) Non-CFC foam insulation covers the sides and top of the tank, reducing heat loss. This results in less energy consumption, improved efficiencies, and jacket rigidity.
- **Water Connections**—3/4" (19mm) NPT factory-installed true dielectric fittings extend water heater life and simplify water line connections. Located on the side for easier installation (Fittings packaged separately inside carton).
- **Protective Magnesium Anode Rod**—Provides added protection against corrosion for long trouble-free service.
- **Steel Tank**—Heavy gauge steel automatically formed, rolled, and welded.
- **Voltages Available**—120V, 208V, 240V, 277V, 380V, 415V, 480V.
- **Single Phase Operation Only.**
- **Field Conversion Kits**—Change voltage, and kW in the field (see options on following page).
- **T&P Relief Valve**—Installed.



### 3 or 5-Year Limited Tank Warranties / 1-Year Limited Warranty on Component Parts.

For more information on warranty, please visit [www.bradfordwhite.com](http://www.bradfordwhite.com)

For products installed in USA, Canada, and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,682,666; 7,634,976; 5,660,165; 5,954,492; 6,056,542; 6,935,280; 5,372,185; 5,485,879; 5,574,822; 7,971,560; 7,992,526; 6,684,821; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,596,952; 6,142,216; 7,699,026; 5,341,770; 7,337,517; 7,665,211; 7,665,210; 7,063,132; 7,063,133; 7,559,293; 7,900,589; 5,943,984; 8,082,888; 5,988,117; 7,621,238; 7,650,859; 5,761,379; 7,409,925; 5,277,171; 8,146,772; 7,458,341; 2,262,174. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 2,314,845; 2,504,824; 2,108,186; 2,143,031; 2,409,271; 2,548,958; 2,112,515; 2,476,685; 2,239,007; 2,092,105; 2,107,012. Vitraglas® is a registered trademark of Bradford White® Corporation.

1412-A-0419

## ElectriFLEX LD™ (Light Duty) Commercial Utility Electric Water Heater

### ElectriFLEX LD™ Utility Electric Models

C.E.C. Listed

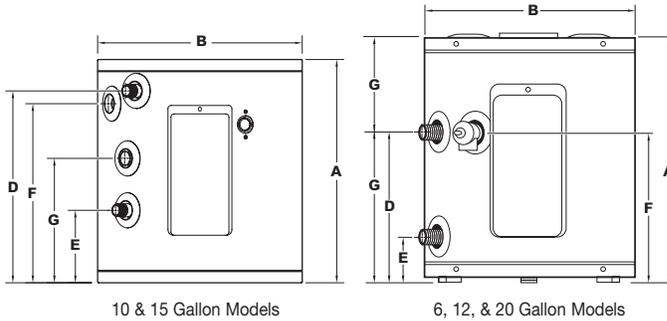
Model Number	Nominal Gal. Capacity		Recovery at 100°F Rise*		A Floor to Top of Heater in.	B Jacket Dia. in.	D Floor to C/L of Hot Water Conn. in.	E Floor to C/L of Cold Water Conn. in.	F Floor to T&P Conn. in.	G Floor to Anode Rod in.	Water Conn. NPT in.	Approx. Shipping Weight lbs.
	U.S. Gal.	Imp. Gal.	U.S. GPH	Imp. GPH								
LE16U3-1†	6	5	6	5	16 1/2	14	10 1/8	3 1/8	10 1/8	16 1/2	3/4	33
LE110U3-1	10	8	6	5	17 1/2	16	15	5 11/16	14	9 11/16	3/4	48
LE112T3-1†	12	10	6	5	27 3/4	14	21 1/8	3	21 1/8	27 3/4	3/4	48
LE115U3-1	15	13	6	5	20 1/4	18	17 3/4	6 1/8	16 3/4	10 1/8	3/4	55
LE120U3-1	19	16	6	5	24 3/4	18	18 1/2	3	18 1/2	18 1/2	3/4	59

Model Number	Nominal Liter Capacity	Recovery 56°C Rise*		A Floor to Top of Heater mm.	B Jacket Dia. mm.	D Floor to C/L of Hot Water Conn. mm.	E Floor to C/L of Cold Water mm.	F Floor to T&P Conn. mm.	G Floor to Anode Rod mm.	Water Conn. NPT mm.	Approx. Shipping Weight kg.
		Liters/Hour									
LE16U3-1†	23	23		419	356	257	79	257	419	19	15
LE110U3-1	38	23		445	406	381	144	355	246	19	22
LE112T3-1†	45	23		705	356	537	76	537	705	19	22
LE115U3-1	57	23		514	457	451	156	425	257	19	25
LE120U3-1	72	23		629	457	470	76	470	470	19	27

Specify wattage and voltage when ordering. Use chart below for maximum wattages at certain voltages.

† Maximum wattage at any voltage is 3000W. For 5 year models, change suffix "3" to "5".

Single element only. \*Based on 1500W operation. NSF Kits available when ordering.



Wattage	Recovery ▲ GPH Temperature Rise °F					Wattage	Recovery ▲ LPH Temperature Rise °C				
	60	80	90	100	120		34	45	50	56	67
1500W	10	8	7	6	5	1500W	38	30	26	23	19
2000W	14	10	9	8	7	2000W	53	38	34	30	26
2500W	17	13	11	10	9	2500W	64	49	42	38	34
3000W	21	15	14	12	10	3000W	79	57	53	45	38
3500W	24	18	16	14	12	3500W	91	68	61	53	45
4000W	28	21	18	16	14	4000W	106	79	68	61	53
4500W	31	23	21	19	15	4500W	117	87	79	72	57
5000W	34	26	23	21	17	5000W	129	98	87	79	64
5500W	38	29	25	23	19	5500W	144	110	95	87	72
6000W	41	31	28	25	21	6000W	155	117	106	95	79

#### Voltage and Wattage Conversion Kits

Single Element Wattage	Voltage						
	120V	208V	240V	277V	380V	415V	480V
1500W	415-46409-01	415-46409-05	415-46409-13	415-46409-16	415-46409-24	415-46409-41	415-46409-32
2000W	415-46409-02*	415-46409-06	415-46409-05	415-46409-17	415-46409-43	415-46409-24	415-46409-33
2500W	415-46409-03*	415-46409-06	415-46409-06	415-46409-18	415-46409-25	415-46409-43	415-46409-34
3000W	415-46409-04*	415-46409-08	415-46409-14	415-46409-19	415-46409-26	415-46409-25	415-46409-35
3500W	N/A	415-46409-09	415-46409-07	N/A	415-46409-27	415-46409-26	N/A
4000W	N/A	415-46409-10	415-46409-08	415-46409-20	415-46409-29	415-46409-27	415-46409-36
4500W	N/A	415-46409-11	415-46409-09	415-46409-21	415-46409-30	415-46409-28	415-46409-37
5000W	N/A	415-46409-12	415-46409-15	415-46409-22	415-46409-31	415-46409-29	415-46409-38
5500W	N/A	415-46409-46*	415-46409-10	415-46409-40**	415-46409-44	415-46409-30	415-46409-42**
6000W	N/A	415-46409-47*	415-46409-48*	415-46409-23	415-46409-45	415-46409-31	415-46409-39

Wattage Limitations	Voltage						
	120V	208V	240V	277V	380V	415V	480V
1500W	yes	yes	yes	yes	yes	yes	yes
2000W	yes	yes	yes	yes	yes	yes	yes
2500W	yes	yes	yes	yes	yes	yes	yes
3000W	yes	yes	yes	yes	yes	yes	yes
3500W	no	yes	yes	no	yes	yes	no
4000W	no	yes	yes	yes	yes	yes	yes
4500W	no	yes	yes	yes	yes	yes	yes
5000W	no	yes	yes	yes	yes	yes	yes
5500W	no	yes	yes	no	yes	yes	yes
6000W	no	yes	yes	yes	yes	yes	yes

Note: Above chart can be used to determine maximum wattage at certain voltages. \*\*INCOLOY® element only. \* 415-46409-02, -03, -04, -46, -47, & -48 contain only one element. These kits cannot be wired as simultaneous. These are non-simultaneous kits only. Except where noted above, each kit will include two replacement elements, two gaskets, a rating plate overlay and one set of instructions. For water heaters with only one element, please retain the extra element and gasket as a service part.

#### General:

All models are exempt from NAECA requirements and ASHRAE Standard 90.1b. All models ETL listed. These heaters are wired Single Phase, 120V with one 1500W element, unless otherwise specified. All water and electrical connections are 3/4" (19mm) NPT. All models certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). Applicable models CSA verified for energy performance in accordance with C191.1-M90.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

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Technical Support 800-334-3393 ■ Email [techserv@bradfordwhite.com](mailto:techserv@bradfordwhite.com)

Warranty 800-531-2111 ■ Email [warranty@bradfordwhite.com](mailto:warranty@bradfordwhite.com)

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**ELECTRIC TANKLESS WATER HEATER - LARGE CAPACITY**

**R SERIES MightyMite® - LOW ACTIVATION**

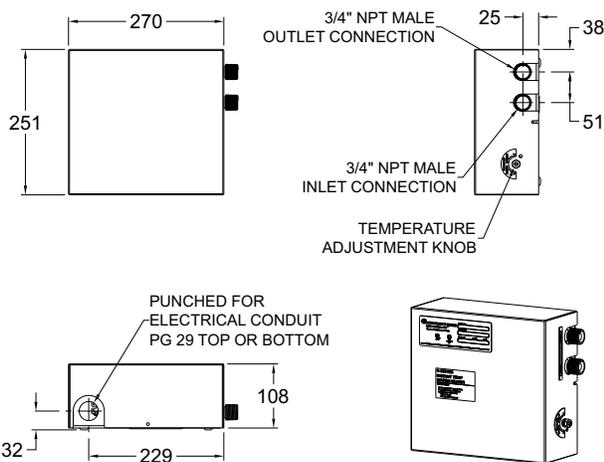
**R SERIES MIGHTY-MITE® - LOW ACTIVATION METRIC CHART**

MODEL	AMPS/PHASE	1 Ø VOLTAGE	WATTS	ACTIVATION LPM	TEMP RISE @ 6.00 LPM	TEMP RISE @ 10.00 LPM	TEMP RISE @ 12.00 LPM
R-48L/208	48	208	10000	1.3	24	14	12
R-48L/240	48	240	11500	1.3	28	17	14
R-58L/208	58	208	12050	1.3	29	17	14
R-63L/208	63	208	13100	1.3	31	19	16
R-48L/277	48	277	13300	1.3	32	19	16
R-58L/240	58	240	13900	1.3	33	20	17
R-68L/208	68	208	14150	1.3	34	20	17
R-63L/240	63	240	15100	1.3	36	22	18
R-75L/208	75	208	15600	1.3	37	22	19
R-58L/277	58	277	16050	1.3	38	23	19
R-68L/240	68	240	16300	1.3	39	23	20
R-63L/277	63	277	17450	1.3	42	25	21
R-75L/240	75	240	18000	1.3	43	26	22
R-68L/277	68	277	18850	1.3	45	27	23
R-75L/277	75	277	20750	1.3	50	30	25

**TECHNICAL DIMENSIONS**

**R SERIES MIGHTY-MITE® - LOW ACTIVATION**

Dimensions:	251 x 270 x 108mm
Weight:	4.5 Kg
Materials:	Rugged steel housing Celcon plastic element assembly with nichrome coils
Housing Color:	White
Minimum Operating Flow Rate:	1.3 LPM
Minimum Operating Pressure:	172 kPa
Maximum Operating Pressure:	552 kPa
Maximum Pressure:	1034 kPa
Maximum Water Temperature:	71°C
Maximum Ambient Operating Temperature:	60°C
Listing:	ETL



**GENERAL NOTES:**

- The microprocessor adjusts the heater's power for variations in flow rates, inlet water temperature and pressure to assure the selected water temperature.
- 240V models when operated at 220V will have approximately a 15% wattage decrease.

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SELECTION SUMMARY & APPROVAL FOR MANUFACTURING	Company _____	
	Model Number & Options _____	Quantity _____
	Contact _____	Title _____
	Signature (Approval for Manufacturing) _____	Date _____
	<p><b>CHRONOMITE LABORATORIES, INC.</b> PH. 800-447-4962 626-937-4270 FAX 626-937-4279 <a href="http://www.chronomite.com">www.chronomite.com</a></p>	

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**CHRONOMITE** Since 1966  
Electric Tankless Water Heaters

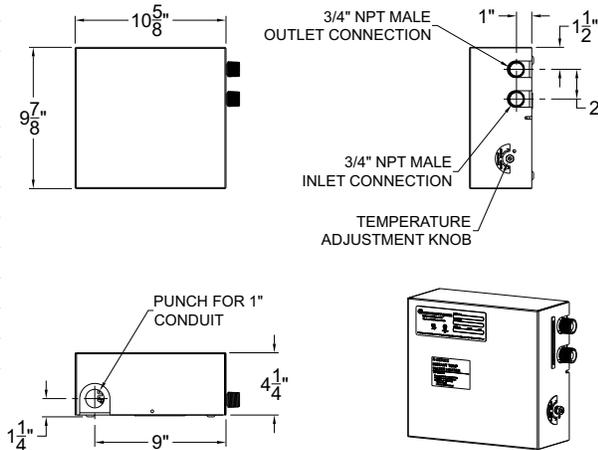
**ELECTRIC TANKLESS WATER HEATER - LARGE CAPACITY**

# R SERIES **MightyMite**® - LOW ACTIVATION

## TECHNICAL DIMENSIONS

### R SERIES MIGHTY-MITE® - LOW ACTIVATION

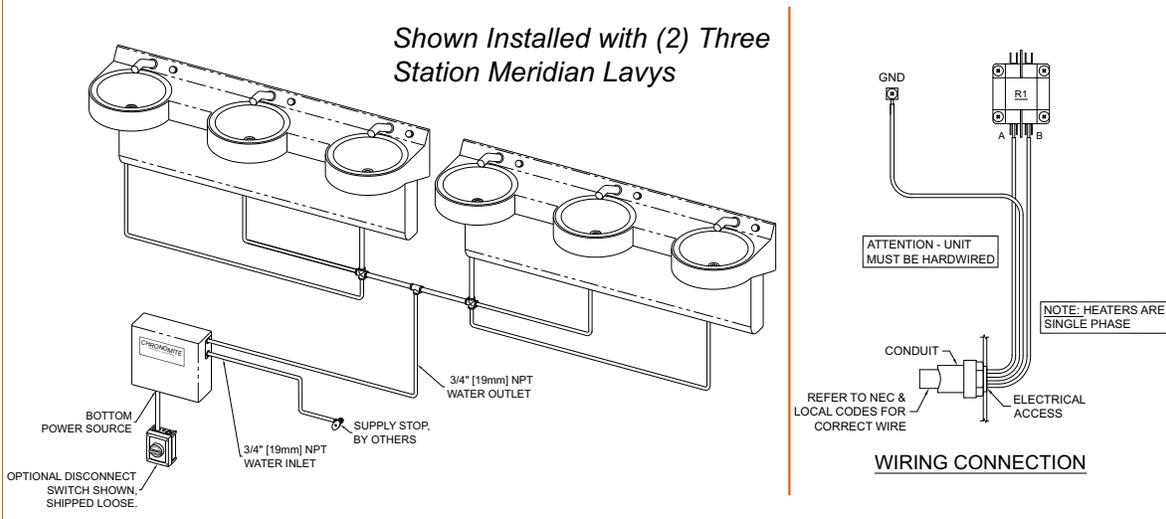
Dimensions:	9-7/8" (H) x 10-5/8" x 4-1/4"
Weight:	10 lbs.
Materials:	Rugged steel housing Celcon plastic element assembly with nichrome coils
Housing Color:	White
Minimum Operating Flow Rate:	0.35 GPM
Minimum Operating Pressure:	25 PSI
Maximum Operating Pressure:	80 PSI
Maximum Pressure:	150 PSI
Maximum Water Temperature:	160°F
Maximum Ambient Operating Temperature:	140°F
Listing:	UL, IAPMO, UPC, ETL



### GENERAL NOTES:

- The microprocessor adjusts the heater's power for variations in flow rates, inlet water temperature and pressure to assure the selected factory pre set water temperature.
- 240V models when operated at 220V will have approximately a 15% wattage decrease.

## INSTALLATION DIAGRAM



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**SELECTION SUMMARY & APPROVAL FOR MANUFACTURING**

Company \_\_\_\_\_

Model Number & Options \_\_\_\_\_ Quantity \_\_\_\_\_

Contact \_\_\_\_\_ Title \_\_\_\_\_

Signature (Approval for Manufacturing) \_\_\_\_\_ Date \_\_\_\_\_

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## X. TECHNOLOGY AND AUDIOVISUAL SYSTEMS

Scope below outlines a performance criteria through a design build vendor.

The rooms of the Community Center are to be designed to be flexible for a variety of activities in the multi-purpose rooms, classrooms, and the discovery/meeting room.

### Technology Overview

In new facilities, communication and information technology touch almost every building system: from computers and AV systems to lighting, power and HVAC systems. The information presented here describes the technology systems required to support the new community center. The technology scope and basic capabilities described are initial assumptions and will be verified with The City during the design process.

Technology shall include the following primary elements:

#### Building Technology & Infrastructure

- Communications Cabling Distribution Pathways
- Communication Equipment Rooms
- Structured Cabling for Voice and Data
- Broadband Video/Television Distribution Cabling
- ADA Support Systems (e.g. Assistive Listening Systems)

#### Building FF&E Technology Systems

- Audiovisual Presentation & Collaboration Systems
- Voice Reinforcement
- Digital Signage
- Audio/Video Capture & Production

#### City-provided FF&E Technology Systems

- Data Networking Electronics (i.e. wired & wireless)
- Telephone & Telecommunications Equipment
- Computers & Peripherals
- Television Distribution Electronics (e.g. CATV, SATV)

### IT Planning & Structured Cable Design

The building communications infrastructure supports the distribution of electronic voice and data signals throughout the buildings, and it enables connection of the buildings to telecommunications services (e.g. data network, Internet, telephone, broadcast television, etc.). Building communications infrastructure also provides appropriate facilities for housing and servicing the communications systems that will be essential to the activities taking place within the building. The project's communications infrastructure shall be designed in compliance with current telecommunications industry standards as defined by industry professional organizations, including the American National Standards Institute (ANSI), the Telecommunications Industry Association (TIA), the Electronics Industry Association (EIA), and Building Industry Consulting Services International (BICSI).

Facility planning and infrastructure design support will include pathways for incoming telecom services and configuration of telecom equipment rooms. The project's structured cabling system is expected to include a mix of wired and wireless data connectivity points and telephone cabling infrastructure, including optical fiber and copper backbone and station cabling (i.e., Cat6), equipment racks, cable management, patch panels, patch cords and modular voice and data jacks. Structured cabling is also expected to include backbone and horizontal cabling for broadband television distribution.

### Intermediate Distribution Frame (IDF) Room

IDF room to be sized according to specifications. Rooms to be accessible from a corridor and not through other occupied spaces. IDF should not have a false ceiling and should be open to the structure above. Ceiling adjacent to the IDF should be accessible. Floors shall be sealed concrete. IDF room not located in place where there may be subject to water infiltration, steam infiltration, humidity or other corrosive atmospheric or adverse environmental conditions. IDF door shall be lockable 36" x 80" minimum and swing out from the room. A double door with width of 6'0" is recommended. The door should also have the same fire rating as the walls in the room. All walls should be covered with 3/4" fire retardant plywood from 6" AFF to 8'6" AFF. The room should not contain exterior windows. IDF room must have dedicated HVAC equipment, refer mechanical basis of design. Fire alarm should be installed in the IDF according to national and local codes. Mount portable fire extinguishers in the IDF as close to the entrance as possible. A minimum of two dedicated non switched 3-wire 120VAC/20A duplex electrical outlet on separate branch circuits is required for each rack and cabinet.

### AV infrastructure

The following areas shall be designed with infrastructure to support AV technologies appropriate for the specific area's intended use:

- Classrooms
- Office
- Discovery /Meeting Room
- Workroom
- Multipurpose Rooms

AV infrastructure will support electronic presentation, conferencing and electronic information display (i.e., digital signage). Infrastructure considerations include defining power/grounding requirements, special lighting needs, equipment heat loads, space planning for AV equipment integration and conduit requirements.

### AV Systems

AV in the classrooms, meeting/discovery room and multipurpose room is restricted to motorized projection screen, in-ceiling speakers, video projector, computer presentation, voice amplification, assistive listening systems (per ADA requirements) and controls for audio and video. Office, workroom and meeting/discovery room will have web-based conferencing capabilities. We do not anticipate AV systems in the storage, workroom and kitchnette spaces.

### Assistive Listening Systems (ALS)

Supplemental sound reinforcement will be provided for the hearing impaired in compliance with the requirements of the Americans with Disabilities Act. Where provided, ALS will incorporate sound from voice reinforcement and media program audio reproduction systems. A combination of fixed and portable equipment will be used.

### Summary

Most of the electronic equipment that enables the technology capabilities described within this report will be identified as part of the project's Furniture, Fixtures & Equipment (FF&E) scope. Equipment fitting within this classification includes all of the active electronic components of the AV and IT systems. (e.g. monitors and projectors, sound systems, low voltage controls, switches, routers, servers, access points etc.) Security systems are typically part of the base build scope.

---

## XI. SECURITY

A. Security systems (Keypads, Glass Break Sensors, Security Cameras, etc.) will be developed in conjunction with the City Community Center Staff and Maintenance personnel to provide staff and public access to the building during operating hours and non-operating hours. The following are the security provisions that are recommended for the project.

1. Perimeter Fencing and Gates at Vehicular and Pedestrian Access Points in order to secure park property and buildings
  - Vehicular entry gates at driveways and maintenance/storage building
  - Pedestrian gates from stairs or at entries onto property
  - Pedestrian gates at playground areas
  - Maintain all existing and add new fencing where needed to create continuous park perimeter fencing at or near park property line
  - In order to restrict access from the park to the south slope abutting the Seaview neighborhood, install fencing near top of slope below sight line.
2. Site and Building Security and Safety Lighting
  - Site lighting at sufficient illumination levels to support camera and security force observation
  - Site lighting at parking lot and driveway to maintain safety
  - Site lighting around play areas to discourage inappropriate users
  - Minimal motion detection site lighting around clearly outlined walkways at head height for user safety.
  - Lighting at appropriate areas around the building to discourage inappropriate users
3. Site and Interior and Exterior Building Cameras and Motion Detectors
  - Clear sight lines at entries of buildings allow for maximum security camera coverage around building and parking lot.
  - Interior building cameras to be monitored, motion detector coverage used in areas where persons may congregate or approach.
  - Fixed cameras (not capable of remote movement) to be installed upon light standards, custom camera poles, building soffits and walls sufficient to view all areas of the park and park perimeter.
  - Cameras are connected through security system network to a server location and recording equipment (30 days of recording for archive video)
4. Glass Breaks sensors to provide monitoring of glazed areas where security alarm will be triggered. When glass breaks, a microphone will detect the frequency emitted, distance of frequency to be determined.
5. Door hardware and security: Door sensors and security hardware will include alarms, and special door locks (combination, push button, card key access, etc.) where applicable.

### B. Additional security measures

1. Integral to the design are improved sight lines throughout the site due to the compact community center housed under one roof. Sight lines running north and south run through the building at large openings (breezeway), specifically sited windows and glazed doors, and floor to ceiling glazing (multipurpose rooms and classroom). Sight lines running east and west are unimpeded with low lying landscaping and terracing providing full views over the site. From the entrance driveway and a drive aisle location within the parking area a sheriff can view a majority of the park site and building area without leaving the vehicle.
2. Clear points of entry to the building spaces are within sight lines and within view of the monitoring staff office. In addition, guests are directed to overhang under building as first point of

contact, reducing potential way finding problems.

3. Increased utilization of the park and the building, combined with enhanced staff supervision will deter un-desirable behavior in the park during operating hours.

4. Planting height, placement, density and type must be considered in order to eliminate visual obstructions to all park areas.

## **XII. SUSTAINABILITY**

The Project at a minimum shall meet sustainability requirements per the City of Rancho Palos Verdes' Standards which indicate compliance with the California Green Building Standards Code within which the minimum sustainability measures for the nonresidential mandatory measures are met.

For background on the program, the following is included as extracted from the California Green Building Standards Code:

*The purpose of this code is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories:*

*Planning and design.*

*Energy efficiency.*

*Water efficiency and conservation.*

*Material conservation and resource efficiency.*

*Environmental quality.*

**XIII. CODE ANALYSIS****A. Building Information:****1 Occupancy Classes:**

- a. A-3 Assembly spaces (Public Meeting Rooms)
- b. B Offices, workrooms, conference rooms with <50 occupants
- c. S-1 Non hazardous storage

**2. Construction Type II-B****B. Life safety:**

- 1. See Breakdown on Drawings G0.02, G0.1.11, G1.12, G1.13, G1.21
- 2. Egress and number of exits: (CBC, Chapter 10) The design provides 2 means of egress in each case where required by these conditions.
- 3. Because the building is sprinklered, the distance from any portion of the building to an exit must be less than 250 feet. The current design satisfies this requirement.

**C. Relevant sections of the California Building Code and requirements relating to this project:****Section 303.1 Assembly Group A Occupancy**

Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption or awaiting transportation or motion picture and television production studio sound stages, approved production facilities and production locations.

**Section 304.1 Group B Occupancies**

Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts.

**Section 311.1 Group S Occupancies**

Storage Group S occupancy includes, among others, the use of a building or structure, or a portion thereof, for storage that is not classified as a hazardous occupancy.

**TABLE 504.3 Basic Allowable Building Heights and Basic Allowable Floor Area for Buildings one-story in height.**

75' for A, E occupancy, Type II-B for sprinklered (without area increase) Project complies.

**Section 504.4 Allowable number of stories above grade plane:**

3 stories: For A-3 occupancy classification, sprinklered (without area increase) for Type II-B

Type of Construction	II-B
Maximum Height	75 FT
Number of Stories	3
Maximum Area	38,000SF

**TABLE 601 Types of Construction Fire Resistive Requirements**

Type of Construction	II-B
Bearing Walls - Exterior	0

---

Bearing Walls – Interior	0
Non-bearing Walls – Ext	Table 602
Structural Frame	0
Shaft Enclosures	0
Floors and Floor/Ceilings	0
Roofs and Floor/Ceilings	0
Ext Doors and Window	603.2.2
Stairway Construction	602.4

#### Section 701A

Applies to building materials, systems and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area as defined in Section 702A. Minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.

#### Section 903 Automatic Sprinkler Systems to meet NFPA 13

##### Section 903.2.1.3 To comply

#### Table 1004.1 Maximum Floor Area Allowances per Occupant

The building official shall assign a use category as set forth in Table 1004.1.2 to all portions of the building.

#### Section 1004.1 Design Occupant Load

In determining means of egress requirements, the number of occupants for whom means of egress facilities shall be provided shall be determined in accordance with this section. Where occupants from accessory areas egress through a primary space, the calculated occupant load for the primary space shall include the total occupant load of the primary space plus the number of occupants egressing through it from the accessory area.

**Exception:** Where approved by the building official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design occupant load.

#### Section 1028.2 Minimum aisle width.

The minimum width or required capacity of the exit discharge shall be not less than the minimum width or required capacity of the exits being served.

#### Section 11B-206 Building Accessibility

#### Section 11B-219 Assistive-listening systems in assembly areas.

Assembly areas, conference and meeting rooms shall provide assistive-listening systems for persons with hearing impairments as provided in this section.

#### **XIV. DESIGN STANDARDS**

The following Standards were received during Schematic Design:

A. Rancho Palos Verdes Municipal Code - Zoning for Institutional

B. Very High Fire Hazard Zone - Refer to City of Los Angeles Fire Department City of Rancho Palos Verdes Fire Hazard Map.

**XV EXHIBITS**

- A (4) Digital renders of the site
- B Images of physical site model



View from Forrestal Dr looking south



View from north terrace looking east



View from south terrace looking west



View from parking area looking south west through community center



Above: aerial view of physical site model looking north  
Below: aerial view of physical site model looking southerly



**XVI. OUTSTANDING ISSUES**

A. Following are a list of outstanding issues to be addressed in the Design Development phase:

1. City-provided Geotechnical Report to be received and reviewed
2. City-provided updated Survey Information to be received and reviewed. Confirmation of additional storm drain line at north end of site.
3. City-provided sub-surface utilities information and/or survey
4. Signage and Building Graphics
5. AV/IT Infrastructure and Cabling Needs and Requirements
6. Discovery Exhibit Requirements and Displays
7. Confirmation of Furniture Layouts and Items
8. Confirmation of extent of green building requirements
9. Water pressure/fire flow test on site - to be verified with Los Angeles County Fire Department

August 6, 2019

Dear City Council,

The Ladera Linda Home Owners Association wishes to go on record as strongly urging the Rancho Palos Verdes City Council to accept the Johnson Favaro design for the Ladera Linda Neighborhood Park, as presented at the July 10 Workshop, subject to incorporation of the following key modifications as part of a motion to proceed:

**“The Neighborhood Park building design shall eliminate one classroom and the meeting room, and shall enclose the lobby and the restrooms. It shall incorporate display cases in the lobby. As a security measure, strong consideration should be given to provide security shutters for all windows and glass doors.”** A conceptual drawing incorporating these changes is shown below.

**“The Neighborhood Park shall not contain features, like the amphitheater/steps area shown in the proposal, that encourage larger organized group outdoor activities.”**

**“The Neighborhood Park shall provide for limited views to the south, with expansive views not consuming more than 50% of the southern park bluff.”**

**“The Neighborhood Park shall contain a designated preserve parking area on the upper terrace (approx. 25 spaces, not on Forrestal Drive). If needed to accomplish this, ½ basketball court should be removed, but in no case should basketball or tennis courts be moved closer to the southern bluff.”**

### **Ladera Linda Park Rationale for Changes**

At the July 10<sup>th</sup> workshop, concerns were raised about the number of rooms (too many), preserve parking location, level of security, and the potential creation of an attractive nuisance. The above motions address these issues, supported as follows:

#### **Park Building**

- 1) One less classroom
  - a) Appropriate size for neighborhood programming desires
  - b) Reduces building size and saves money (both construction costs and ongoing maintenance costs)
- 2) Meeting room removed / lobby enclosed with display cases
  - a) Meeting room scheduling / programming not demonstrated - therefore will likely remain locked the majority of the time and thus, the purpose of the display cases is lost.
  - b) Meeting room would not be used by other organizations at night because of rental costs
  - c) Lobby open at all times staff is present - allows visitors to actually see the most important/interesting artifacts in display cases any time they come

- 3) Work room opens to outside and to classroom
  - a) Allows carts to be rolled to either location
  - b) Flexible to meet needs and weather conditions
- 4) Entire perimeter of structure enclosed
  - a) Allows use of security shutters
- 5) The restrooms are of conventional design to offer greater comfort, security, and efficiency.

#### **Amphitheater/Steps Removed**

- 1) Discourages larger organized group outdoor activities (such as weddings)
- 2) Less noise to neighborhood
- 3) Not needed – would duplicate PVIC

#### **Park Viewing Areas**

- 1) Limited ocean viewing areas will limit the number of people in the park and prevent the Marilyn Ryan Park issues
- 2) The unintended impact, traffic, noise and trash with a large numbers of visitors

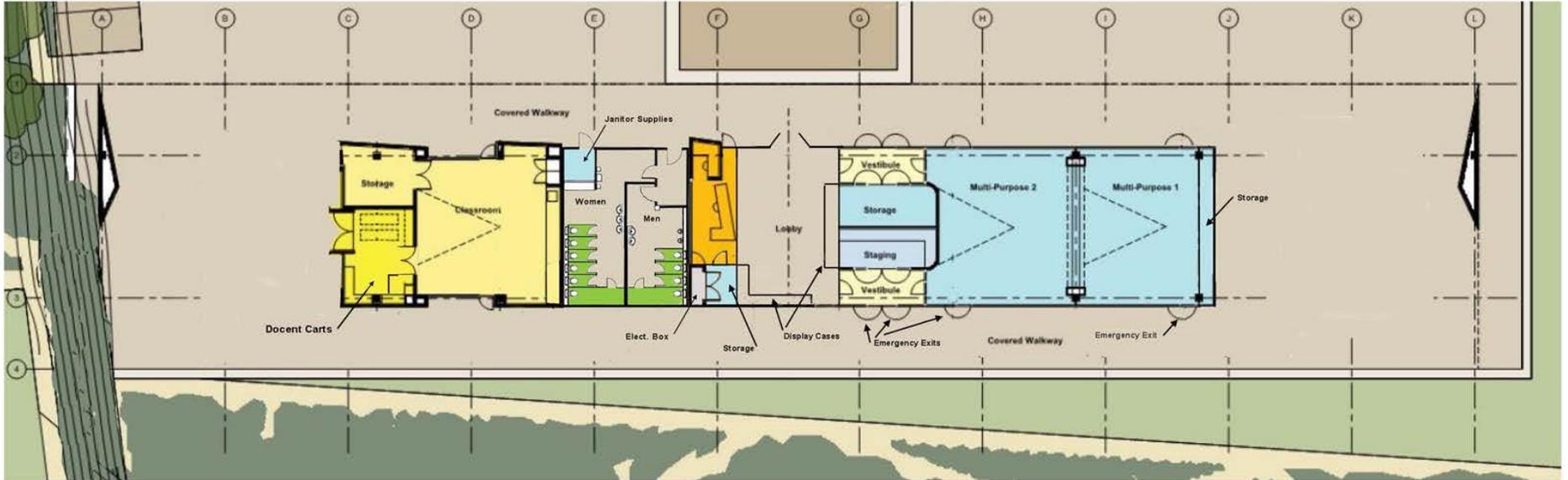
#### **Preserve Parking**

- 1) Little demonstrated need beyond what currently exists at the Ladera Linda property
- 2) Forrestal Parking opens area to becoming a potential Del Cerro neighborhood or Marilyn Ryan Park problem - potential sunset party site
- 3) Forrestal parking gate control significant issue because of multiple users (already issues with just one gate)

Respectfully submitted,

Ladera Linda Homeowners Board  
Ladera Linda Park Committee

**Ladera Linda HOA Park Building Design (206 ft long)**



**Johnson Favaro Park Building Design (275 ft long) as presented at the July 10, 2019 meeting**

