1) Key Team Information

1) **City and site** you are submitting a project for: Los Angeles, Lincoln Heights Jail

2) **Team Name**: Nova Heights

3) **Degree** being pursued by team members (if applicable): Environmental Master's

2) Short CV of each team member

Team Member 1 is a housing policy specialist driven to decarbonize the built environment. They have expertise in government relations, project management, and strategy consulting. They previously served as a political appointee in the Biden-Harris Administration at the U.S. Department of Commerce, in the Office of Legislative and Intergovernmental Affairs. Prior to serving in the Administration, they worked for the North Carolina Democratic Party as a field organizer during the general election. In that capacity, they recruited dozens of volunteers and spoke with hundreds of voters throughout the course of the election. Before the election, they worked in strategy consulting.
They hope to leverage their federal government experience and graduate degree to work in local government in any large city in the United States, specifically around housing policy.

Team Member 2 is a rising sustainability planner with a focus in climate and community resilience. They have a diverse background in impact reporting, sustainability data analytics, corporate communications and event planning. Throughout these roles, they gained extensive experience in project management, marketing and communications and stakeholder engagement strategies. In their graduate program, team member 2 is refining their sustainability reporting, urban policy and planning and community planning skills through courses, capstone projects, and internships. Post graduation, they hope to work in either local government or within the B Corp community, enhancing sustainability reporting, business standards and climate resiliency in both the public and private sector.

Team Member 3 is an aspiring climate resilience and adaptation planner with a robust background in sustainable development, strategic planning, and community engagement. They have experience in sustainability communications and urban planning on a local government level and have helped develop multiple strategic plans in both the public and private sectors. In these roles, they spearheaded stakeholder outreach, helped drive economic development efforts, and ingrained sustainability into all initiatives.
Professionally, they hope to bring their skills, subject matter expertise, and passion to local government, where they believe real change starts.

Team Member 4 is a specialist in sustainable food systems with strong skills in GIS and spatial analysis. They have expertise in nature-based solutions with a strong passion for a

more dignifying pedestrian and cyclist environment–especially when such can enhance the community food environment. They have diverse professional experience ranging from customer service, caretaking public lands, outdoor education, and as an enlisted leader in the United States Marine Corps.

3) How the team worked together

In terms of organization, structure, and tools used, our team utilized a comprehensive project management strategy to work collaboratively throughout the planning, design, and writing process. To improve synchronicity and promote accountability, we also detailed our preferred communication styles, laying out both expectations and boundaries moving forward. To ensure organization and documentation, each weekly meeting had a note taker who recorded the minutes, summarizing key topics discussed, action items to complete, and expectations for the following week's deliverables. We encouraged open and proactive communication, creating a work culture in which team members felt comfortable asking for assistance. In this way, we made sure that no one person was over- or under-burdened. We also provided opportunities for team members to diversify their tasks. For instance, whomever was interested in stakeholder engagement had the chance to participate in meetings, and whomever was interested in rendering and mapping had the chance to hone those skills in our report.

In terms of project execution, we established early on a weekly meeting cadence to develop a cohesive project understanding, vision plan, and team rapport. The initial meeting discussions were primarily focused on researching understanding the site, its challenges and opportunity zones, and the surrounding community context. Next, we conducted a skills, expertise, and interests inventory to identify strengths and gaps among our team members skillset. We used this inventory to inform member roles. We prioritized equal and equitable distribution of responsibilities, making sure that each team member had the chance to both lead, collaborate, and learn. For example, each team member was assigned a different research section for the report: nature-based solutions, energy efficiency, sustainable transportation, and social housing.

Prior to finalizing design recommendations, we conducted virtual outreach sessions with knowledgeable community members in the private, public, and non-profit sectors. In these community engagement sessions, we learned about each community member's connection to the Lincoln Heights neighborhood, their perspective on the community's needs and challenges, and their feelings towards the Lincoln Heights Jail site and its redevelopment. We gained valuable information regarding local demographics, sentiments of the area's residents, development aspirations, and how the project can align with broader city goals. These community engagement sessions supplemented each team member's research efforts and informed recommendations for the final proposal.

Once we had completed our respective research and drafted initial recommendations, each team member was assigned a different section to proofread and provide constructive feedback accordingly. Upon finalizing our recommendations, we divided the remaining tasks among our team: the production and design of the final report, GIS mapping and analysis, and creation of site renderings. We met regularly throughout this phase to refine the proposal prior to advisor review and final submittal.

Valverde Commons

Building Community Resilience in Lincoln Heights





Prepared by the University of Colorado Boulder team for C40 Students Reinventing Cities

May 2024

INTRODUCTION

Since the City of Los Angeles (LA) decommissioned the Lincoln Heights Jail in 1965, the site has been sparsely used and has sat entirely vacant since 2014. While the site was designated a City Historic Cultural Monument in 1993 due to its distinctive architectural features, it harbors a painful history, particularly in regard to prison guard violence against LGBTQ+ inmates. This, plus the fact that the area is in the 100th percentile for its CalEnviroScreen pollution score, makes **restorative site redesign** critical.

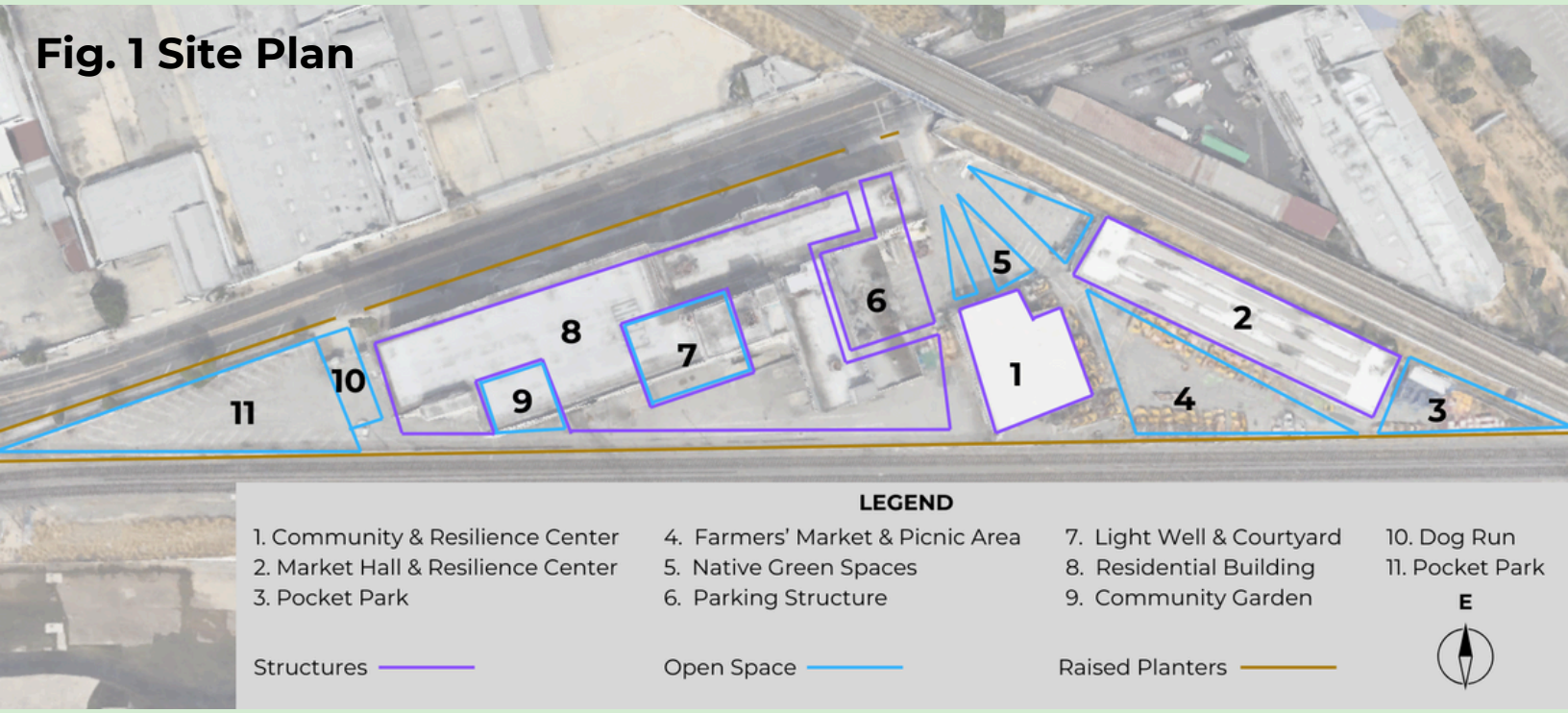
For the purpose of this project, we assume that all environmental remediation is complete. While we propose total demolition of the jail building, we want to both **preserve and atone for this site's history** in its redevelopment.

One way that we plan to do this is by **naming the complex Valverde Commons, in honor of Nancy Valverde.** Valverde, a Chicana and lesbian, was inhumanely incarcerated in the Lincoln Heights Jail for the crime of masquerading. She went on to become a LGBTQ+ activist and valued Lincoln Heights community member. We are humbled and proud to honor her memory with Valverde Commons.

With 83% of Lincoln Heights being people of color and 38% being low-income as defined by the U.S. Environmental Protection Agency, we prioritized affordable housing and accessible transit. This project is an opportunity to **pioneer social housing and become an engine for broader community development.** We blended these aspects into a **climate and socially resilient design,** weaving in **community services and economic opportunities.**

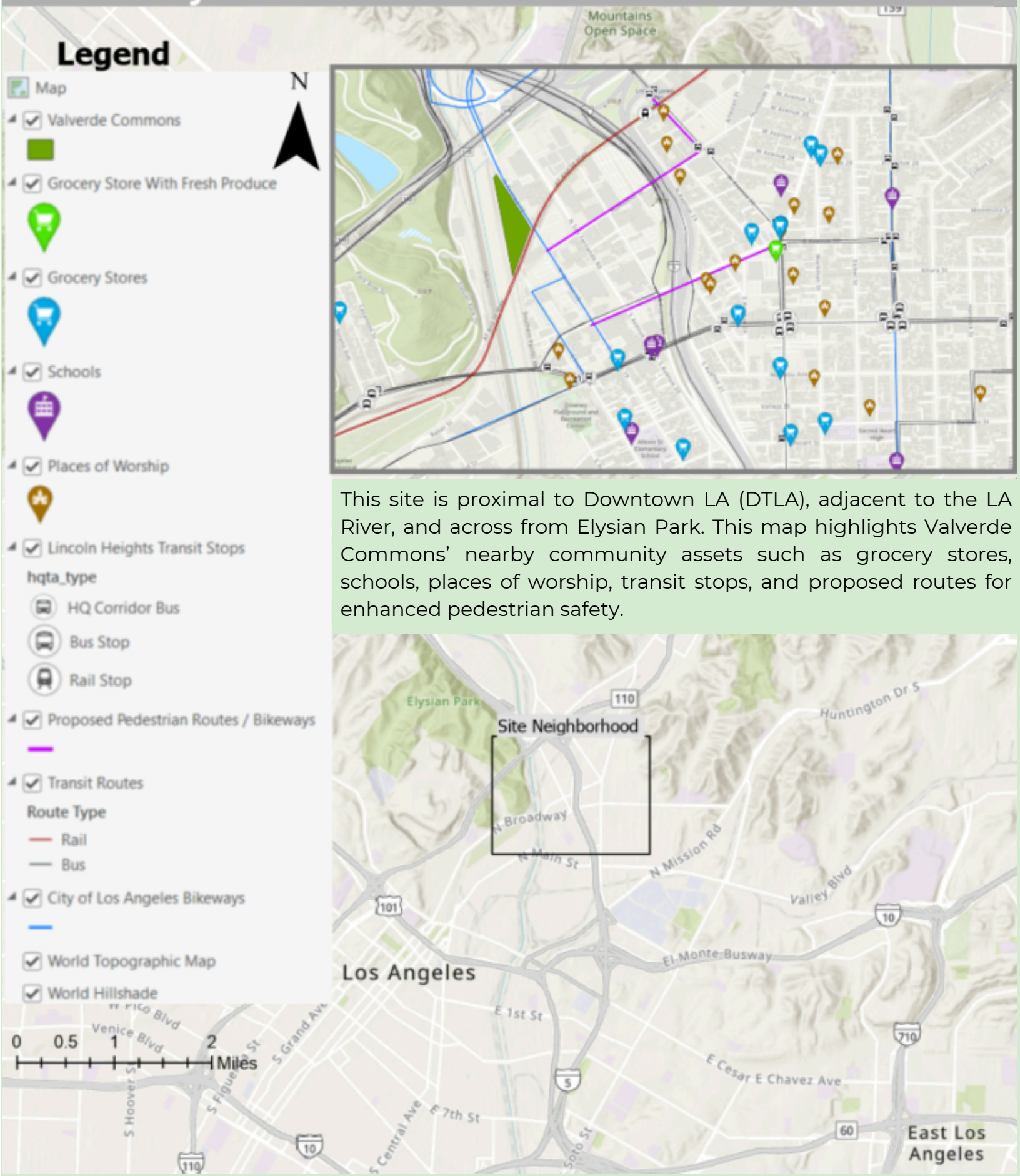
Our dream is for Lincoln Heights to stand proud and resilient for generations, and we hope that this redesigned space provides the support to do so.

Fig. 1 Site Plan



Valverde Commons of Lincoln Heights: Community Context and Assets

Esri, NASA, NGA, USGS, FEMA, County of Los Angeles, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/ NASA, USGS, Bureau of Land Management, EPA,



This site is proximal to Downtown LA (DTLA), adjacent to the LA River, and across from Elysian Park. This map highlights Valverde Commons' nearby community assets such as grocery stores, schools, places of worship, transit stops, and proposed routes for enhanced pedestrian safety.

DESIGN

From the start, we based our design on feedback from intentional community engagement with diverse stakeholders in the area. We spoke to community leaders, elected officials, non-profits, and regional developers to best inform our thinking on how to conceptualize this space and co-create it for the future. We are grateful for the community's willingness to share insights with our team and are honored to do this work.

Our design of Valverde Commons includes:

- Social Housing
- Community Space
  - Community Resilience Center
  - Lincoln Heights Market Hall
- Open Space & Nature-Based Solutions
- Transportation



Fig. 3 Protected bike lane and painted parking garage.



Fig. 4 Entrance to Valverde Place residential building.

SOCIAL HOUSING

Overview

Valverde Place, a new construction on the site of the former jail building, will address a critical need for the City of LA and the Lincoln Heights community: **accessible and affordable housing.**



Fig. 5 #8 Valverde Place Residential Building.

We redesigned the former jail into a 6-storey apartment complex, with 80% of the total square footage dedicated to housing units.

Valverde Place will pioneer a **social housing** model that is inclusive of all community members, ranging from those using Section

8 housing vouchers to those making well over the area median income (AMI). This model will include:

- 47% market rate units
- 53% below market rate units
  - 17% at 65% AMI
  - 83% at 50% AMI

The project will create approximately 197 new housing units—including approximately **103 below market rate units**—which will contribute to LA's goal of constructing 50,000 income-restricted affordable housing units by 2035 (Fig. A2). We will skew our construction towards 3-bed units in order to provide **affordable housing options for families**, of which there is a desperate shortage in LA.

Zoning

Per the 2013 Cornfield Arroyo Seco Specific Plan, this parcel is classified under "Urban Innovation" in LA's zoning code. To optimize affordable housing unit density, we ask the City for **variance to be admitted to "Urban Village" zoning.** If this site is granted variance to leave the river buffer and be zoned as a standard "Urban Village," the building's base floor area ratio will become 3:1, and with the addition of affordable housing incentives, will reach 5:1. Our affordable unit quantity and rates enable Valverde Place to take advantage of the zoning code's **Floor Area Bonus Strategy A** to maximize floor area for this building and expand the total number of housing units. To ensure stability for renters, the developer should seek a deed restriction on this property to ensure **long-term stability** for the affordable rate units well over the 30-year threshold, regardless of whether the property changes hands.

Sustainable Building Design

This **certified LEED Platinum** building (Fig. A3) will exemplify **passive design principles to maximize natural lighting and heating.** This includes **continuous insulation, a window-to-wall ratio of no more than 40%, and low solar heat gain coefficient triple-paned windows.** The building will have a **tight thermal envelope** to prevent energy loss and there will be **horizontal shading** (Fig. 6) on the south-facing windows to maximize heating and lighting in winter months and shading and cooling in summer months. Valverde Place will function as a **virtual power plant** by **aggregating loads** such as thermostats, heat pumps, water heaters, EV charging, and batteries.



Fig. 6 Horizontal shading on south-facing windows.

Building Materials

To reduce building construction emissions, Valverde Place will prioritize **clean construction methods and materials,** which in this case may include bamboo flooring and using recycled steel for the rebar. This site will **source materials locally** in an effort to reduce Scope 3 emissions associated with transportation and construction. Additionally, while still priced at a premium, it is worth tracking innovative green cement and steel products. We suggest **green cement manufacturers** such as Brimstone and Sublime Systems and **green steel manufacturers** such as Electra and Boston Metal. While they have yet to commercialize at scale, they have

high potential to reduce embodied carbon emissions.

To be mindful of the region's poor air quality, building materials sourced for this project should have **low volatile organic compound emissions.** Finally, Valverde Place will prioritize **enhanced refrigerant management** by using environmentally friendly refrigerants that have an ozone depletion potential of zero and a global warming potential of less than 50, such as CO2, isobutane, and ammonia.

Sustainable Unit Design

The individual units will include energy-efficient appliances and lighting, including **LED lighting with daylight and occupancy sensors** and washers, dryers, dishwashers, and refrigerators **ENERGY STAR-rated** by the EPA. We will also include **smart thermostats** to manage energy efficiently throughout the building.

Principles of **trauma-informed design** will be implemented to account for the historical damage that this building has housed, including **warm-toned lighting elements** and **foregoing exposed filaments**. Additionally, we will use **cool colors** for wall finishes and decor; these are proven to promote feelings of calmness and safety.



Fig. 7 Interior unit design with abundant natural lighting and energy efficient appliances.

WaterSense-labeled faucets and aerators will be installed in each unit, which can save the average family 700 gallons of water per year. Lastly, given that Lincoln Heights is above the 90th percentile for Diesel Particulate Matter, Valverde Place will use **HEPA air filtration** that captures 99.97% of particles with a size of 0.3 microns or more.

Multiuse Spaces

Of the non-apartment unit square footage (45,824 sq ft), 14,000 sq ft will be dedicated to stairwells and elevators and 27,000 sq ft dedicated to hallways. With 4,824 sq ft remaining, Valverde Place will:

- *Support working parents* in Lincoln Heights by creating a 1,500 sq ft **childcare center**.
- *Engage the children of the community* by building two 487 sq ft **play spaces** in parts of the building closest to the 3-bedroom units.
- *Prioritize the access of healthy, locally sourced food* options for residents by opening an 850 sq ft **produce hub** that incorporates a "Too Good To Go" re-sell model from the Market Hall's surplus produce at the end of the day. The produce hub will be located inside the apartment complex and sold exclusively to residents at a 65% markdown, and will accept benefits like SNAP and WIC.
- *Invest in the physical well-being* of the residents by creating a 1,500 sq ft **gym**.

Energy Generation

Solar green roofs (Fig. 9) will cover the roof of Valverde Place, with approximately 80% of the roof surface area devoted to solar panels and 20% devoted to **urban heat island-reducing native vegetation**. To confront the California electricity duck curve (Fig. 8), solar panels will be coupled with **batteries**, which will help power the building after the sun goes down.

This combination of on-site renewable energy generation and batteries will provide a blend of clean energy options at affordable rates, with the batteries providing an insurance measure in the event of a grid outage. **Peak electric load-shifting meters** will allow residents to participate in the virtual power plant program.

Given that the county is projected to have average annual temperature increases of 3-4°F by 2050, efficient cooling is critical. The passive design creates an efficient thermal battery as a first line of defense against extreme heat.

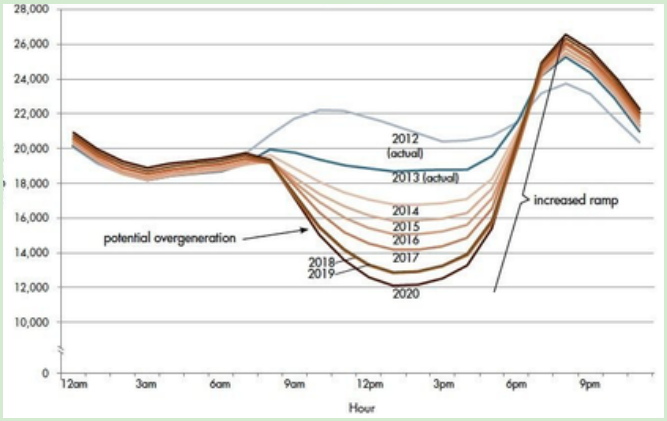


Fig. 8 Duck curve of California's shifting energy dynamics throughout the course of a day. (Source: DOE)

Additionally, the site will utilize **ground-source heat pumps** as the primary cooling source for the building. The ground provides a consistent heat sink for the hot air coming out of the building, and given that it is a below-ground heat pump, it is less vulnerable to extreme weather conditions. Finally, federal grants and tax incentives will help subsidize the upfront costs of installing ground-source heat pumps, and the energy saved from their installation will provide long-term cost savings for the building's utility bill. Geothermal also supports enhanced refrigerant management and saves water by eliminating the need for a water tower.



Fig. 9 Solar garden on Valverde Place rooftop.

COMMUNITY SPACE

Overview

To eliminate carbon emissions associated with new building construction, we will restore and retrofit Buildings 1 and 2 (#1 and #2) in lieu of demolition. These buildings will be available for community use, even before the construction of Valverde Place is complete.



Fig. 10 #1: Community Resilience Center; #2: Lincoln Heights Market Hall.

After extensive community outreach with stakeholders across the Lincoln Heights area, it is clear that there is a significant lack of community gathering spaces.

Lincoln Heights is a heavily industrialized area channelized by the LA River, which limits access to green space, community resources, and regional connectivity. Lincoln Heights and its surrounding communities have also experienced historical displacement and gentrification. Furthermore, heavily industrialized urban areas such as Lincoln Heights are disproportionately impacted by the effects of climate change such as heat waves, fire risk, and drought. For these reasons, these new spaces must be welcoming, healing, and safe for its users in terms of community connection and climate resilience.

The site redesign builds restorative justice and inclusive community spaces for the current and future generations of Lincoln Heights.

Community Resilience Center

We propose retrofitting the 7,175 sq ft building (#1) into a **Community Resilience Center**. This space will serve the community for leisurely gatherings, community meetings, events, and educational classes. The building will be **retrofitted with climate resilient and disaster preparedness resources**. The interior of the building will be updated to include:

- A **kitchenette** equipped with a small oven, microwave, and community fridge.
- 2 separate **classroom spaces.**
- A **library room** with books, desks, and a resource bank with shared tools, sports equipment, and household items.
- A **large open hall** for indoor community events (Fig. 12).

As LA experiences increasingly intense heat waves, longer droughts, and frequent wildfires, new community spaces must be equipped to withstand the impacts and serve the community. The Lincoln Heights Community Resilience Center will be retrofitted with the following:

- Solar-powered batteries (powered by Valverde Place rooftop photovoltaic system) in case of power outages.
- Phone charging banks.
- Onsite water filtration.



Fig. 11 Water filtration station in the Resilience Center.



Fig. 12 Interior with kitchenette and event space.

Lincoln Heights Market Hall

Utilizing the existing linear footprint of #2, we propose transforming the building into a Market Hall. This will provide economic opportunities for local businesses and artists and provide space for local food vendors, thus promoting healthy food access. Preference for the Market Hall vendor space will be given to businesses owned or operated by formerly incarcerated

individuals and members of the LGBTQ+ community. This enhances the site's **restorative justice** initiative and promotes **workforce development** among historically underserved groups. The open floor concept will have approximately **20 individual stalls** available for rent or lease, each totaling 500 sq ft, and an additional 3,000 sq ft for indoor dining space and utilities. Rent may be subsidized for qualifying low-income and small-scale businesses. The individual stalls located on the southwest side of the building will be equipped with rollup garage doors, providing open-air access to the outdoor patio between #1 and #2 (Fig. 13).

Lincoln Heights Market Hall will provide **workforce and economic development** for small businesses. Incentivizing diverse and local businesses in this space will create a vibrant marketplace and promote the community's **cultural placemaking**.



Fig. 13 Market Hall open to outdoor picnic space.

OPEN SPACE & NATURE-BASED SOLUTIONS

Overview

Sitting between the Market Hall and Community Resilience Center, this space (#4) will be converted into an **outdoor patio** with flexible use for **farmers' markets and food trucks.** Nestled between the Resilience Center and Farmers' Market space will be a Valverde Commons **compost drop-off site** for use by vendors, food trucks, and residents. This will promote engagement in sustainable waste management and can supply compost for on-site gardens.



Fig. 14 #11: Pocket Park & Dog Run; #9: Community Garden; #8: Valverde Place residences; #7: Light Well & Courtyard; #5: Native Green Space; #4: Farmers' Market & Picnic Area; #3: Pocket Park.

Adorned with low-water vegetation and shaded by native trees, the patio will have movable tables and chairs that can serve as extensions of the Market Hall's dining space or the Community Resilience Center's gathering space. The tables and chairs can also be moved to accommodate farmers' markets or food truck events.

Design Principles

- *Water Management:* **Permeable pavers** will cover much of the outdoor space, aiding in the filtration of pollutants and minimizing runoff.

Stormwater that does not fall on a permeable surface will be redirected into a **rain garden**. This design minimizes irrigation needs while increasing green space, reducing runoff, and filtering pollutants from stormwater.

- *Pedestrian-Centric Placemaking:* Bordering the site along N Ave 19 and the freight rail tracks, there will be **raised planters** holding native grasses, perennials, and shrubs (Fig. A4). These will both increase **pedestrian safety** and **reduce noise and dust pollution** from the road and railroad tracks.

Design Features

- *Community Green Space (#11 & #3):* **Native or well-naturalized plants** will help to reduce the urban heat island effect, improve air quality, and connect residents to green space. The northern green space will have a pocket park (#11) with two California Live Oaks (Quercus Agrifolia) and Bentgrass (Agrostis pallens), a lawn-replacement which requires minimal water and maintenance. The southern green space (#3) will have the same types of vegetation. Both areas will provide shade for picnic tables (Fig. 15). The farmers' market area (#4) will consist of trees and permeable pavers in order to create a welcoming and flood-resistant environment.
- *Light Well (#7):* Provides **natural light** for Valverde Place residential units and will double as an **interior courtyard** for residents. It will house grills, picnic tables, and a bike repair station. Xeriscaped areas will host small trees interspersed with Cast Iron Plant (Aspidistra elatior) and Island Alum Root (Heuchera maxima).
- *Rooftop Space (#8): Valverde Place* rooftop garden will consist of plants that can thrive in dry, rocky soils and will **attract diverse pollinators**. In addition to a shade-producing gazebo and seating areas, this rooftop will also feature educational signs about the plants and local pollinators. From the rooftop, residents can enjoy expansive vistas of Elysian Park and the surrounding cityscape.
- *Community Garden (#9):* Residents of Valverde Place will have access to a community garden in another courtyard within the complex. With raised garden beds and wide alleys, this site will be an area for residents of all ages and abilities to get their hands in the dirt and empower themselves by growing their own food. This will increase the number of **urban agriculture** sites in LA, provide **equitable access to healthy foods**, and increase **food system resilience**.



Fig. 15 Pocket park with community amenities.

TRANSPORTATION

Multipurpose Vehicle Infrastructure



Fig.16 Footprint of parking structure.

While acknowledging the need to shift away from car-centric infrastructure, we recognize that a significant number of LA residents needs cars to commute. To make the site as accessible as possible, there will be a **parking garage** constructed with **modular concrete elements**—in this case, precast concrete. The garage will have two floors below ground and one above, containing a total of 210 spaces. 160 of these will be reserved for Valverde Place residents (0.8 spots per unit) and included in the cost of rent, and 50 will be for general public use. At least 5% of these spaces will be **preferred parking fitted for EV charging** infrastructure to meet LEED certification standards.

The parking garage will also have abundant **bike storage** available to both residents and non-residents. The garage will have **façade solar** on its south-facing walls, contributing to onsite renewable energy generation. **Local artists** will be commissioned to paint murals on the north, east, and west-facing walls to **highlight the region's nature, culture, and history** (Fig. 3). The top of the garage will be a publicly accessible, **pollinator-friendly native garden** (Fig. A9).

Multimodal Transportation

Currently, the nearest bus stop is an approximate 10-minute walk away (Harbor/Freeway Station). We recommend collaborating with LA Metro to implement a **bus stop on or directly adjacent to the site.**

The nearest light rail station is about a 20-minute walk away. To make this walk safer and shorter, we recommend **adding a crosswalk at the intersection of N Ave 19 and Humboldt Street (Fig. A6).** To further address pedestrian and cyclist safety, redevelopment of this site will include a traffic study to identify additional **traffic-calming solutions** for implementation along pathways to and from community assets. This is especially important due to numerous reported pedestrian and cyclist injuries in the area.

Valverde Commons will also have a **bike share and e-scooter station** on site. The bike lane that sits adjacent to the site will be further protected from traffic by a **buffer of elevated planters** containing low-water, native vegetation. This will serve as a means of **first- and last-mile micromobility**, which will increase ease of access to nearby light rail and bus stations.

While all of these transportation measures improve site access, they also provide alternative transportation for neighborhood residents that commute to other areas of LA for work. To increase **equitable access** to these forms of transportation, qualifying residents of Valverde Place will automatically be enrolled in LA's **Low Income Fair is Easy (LIFE) Program** upon lease signing.

APPENDIX

Fig. A1: Market Rate Units & Pricing

Bedroom	Square Footage/Room	Market Rate %	Market Rate # of Units	Market Rate Price
1 Bed	600	15%	22	$ 1,777
	800	23%	24	$ 2,006
2 Bed	1050	43%	35	$ 2,544
3 Bed	1250	20%	14	$ 3,263
Total			**94**	

A comprehensive breakdown of the market rate unit count and pricing; 94 total units.

Fig. A2: Below Market Rate Units & Pricing

Bedroom	Square Footage/Room	Affordable Units %	Affordable # of Units	Affordable # of Units at 65% AMI	Price for 65% AMI Units	Affordable # of Units at 50% AMI	Price for 50% AMI Units
1 Bed	600	18%	28.33	2	$ 495	26	$ 380.66
	800	18%	21.25	2	$ 989.72	19	$ 761
2 Bed	1050	25%	23.13	4	$ 1,484.58	19	$ 1,142
3 Bed	1250	40%	31.09	9	$ 1,979.45	22	$ 1,522.65
Total			**103.80**	**17**		**86.8**	

A comprehensive breakdown of the below market rate unit count and pricing; 103 total units.

Fig. A3: LEED Scorecard

LEED v4 for BD+C: New Construction and Major Renovation
Project Checklist

Valverde Place Apartment Complex

Y	?	N			
1			Credit	Integrative Process	1

23	0	9	**Location and Transportation**		16
13		3	Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
2			Credit	High Priority Site	2
2		3	Credit	Surrounding Density and Diverse Uses	5
3		2	Credit	Access to Quality Transit	5
1			Credit	Bicycle Facilities	1
		1	Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

9	0	1	**Sustainable Sites**		10
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
2			Credit	Site Development - Protect or Restore Habitat	2
1			Credit	Open Space	1
2		1	Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

6	0	5	**Water Efficiency**		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1		1	Credit	Outdoor Water Use Reduction	2
4		2	Credit	Indoor Water Use Reduction	6
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

27	0	6	**Energy and Atmosphere**		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
6			Credit	Enhanced Commissioning	6
13		5	Credit	Optimize Energy Performance	18
1			Credit	Advanced Energy Metering	1
2			Credit	Demand Response	2
3			Credit	Renewable Energy Production	3
1			Credit	Enhanced Refrigerant Management	1

8	0	5	**Materials and Resources**		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
3		2	Credit	Building Life-Cycle Impact Reduction	5
2			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
1		1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
2			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
		2	Credit	Construction and Demolition Waste Management	2

14	0	2	**Indoor Environmental Quality**		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
2		1	Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
2			Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
2			Credit	Interior Lighting	2
3			Credit	Daylight	3
		1	Credit	Quality Views	1
1			Credit	Acoustic Performance	1

4	0	2	**Innovation**		6
3		2	Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

2	0	2	**Regional Priority**		4
1			Credit	Regional Priority: Specific Credit	1
1			Credit	Regional Priority: Specific Credit	1
		1	Credit	Regional Priority: Specific Credit	1
		1	Credit	Regional Priority: Specific Credit	1

94	0	32	**TOTALS**	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

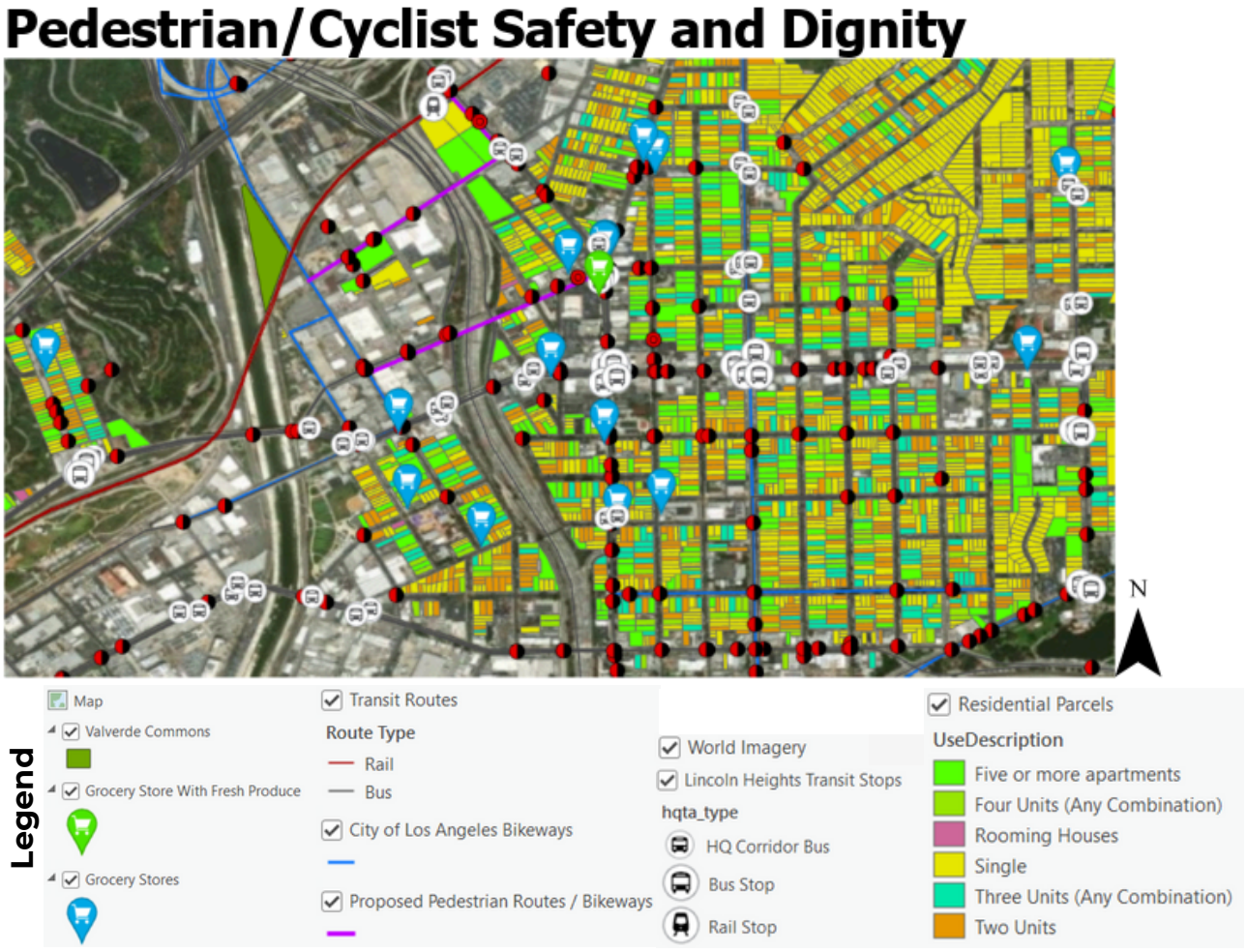
LEED scorecard for Valverde Place; LEED Platinum achieved with 94/110 possible points.

Fig. A4: Plant Schedule

Common Name	Scientific Name	Size	Soil / Water	Use	Notes
Purple Stonecrop	Sedum spathulifolium	1-8' tall x 1-3' wide	Well-drained / drought tolerant	Green roof	Hosts butterflies and moths
Gold Tooth Aloe	Aloe nobilis	6-12" tall x 12" wide	Sand or gravel / minimal	Green roof	Hummingbirds
Hasse's Dudleya	Dudleya hassei	1'x1'	Rocky / high drought tolerance	Green roof	Hummingbirds
October Daphne	Sedum sieboldii	6-12" tall x 12-15" wide	Well-drained / drought tolerant	Green roof	Long bloom, polinators galore
Blue-bald cactus	Opuntia vioacea santa-rita	4' x 4'	Well-drained / drought tolerant	Green roof	Yellow blooms with magenta fruit. Turns purple when in drought or cold
Hasse's Dudleya	Dudleya hassei	2' tall x 2-3' wide	Sand gravel / minimal	Green roof	Hummingbirds, songbirds, bees, moths, butterflies
Mountain mahogany	Cerocarpus betuloides	8-20' tall x 10-12' wide	Well-drained / minimal water once established	Planters	Songbirds, butterflies, moths
California Live Oak	Quercus agrifolia	25-50' tall x 35-45' wide	Average to well drained soil / water once per month once established	Shade Tree	Tall, long lived tree. Supports many birds, mammals, butterflies, and moths
Native Bentgrass	Agrostis pallens	3-12" tall	Average soil / half water to conventional lawn	Groundcover	Drought-tolerant lawn replacement
Island Alum Root	Heuchera maxima	1-2' tall x 2' wide	Sandy or rocky soil / well drained, max 3x waterings per month once established	Light well	Drought tolerant, attracts hummingbirds and pollinators
Cast Iron Plant	Aspidistra elatior	1-3' tall x 1-3' wide	Adaptable soil / good drainage, drought tolerant	Light well	Drought and shade tolerant

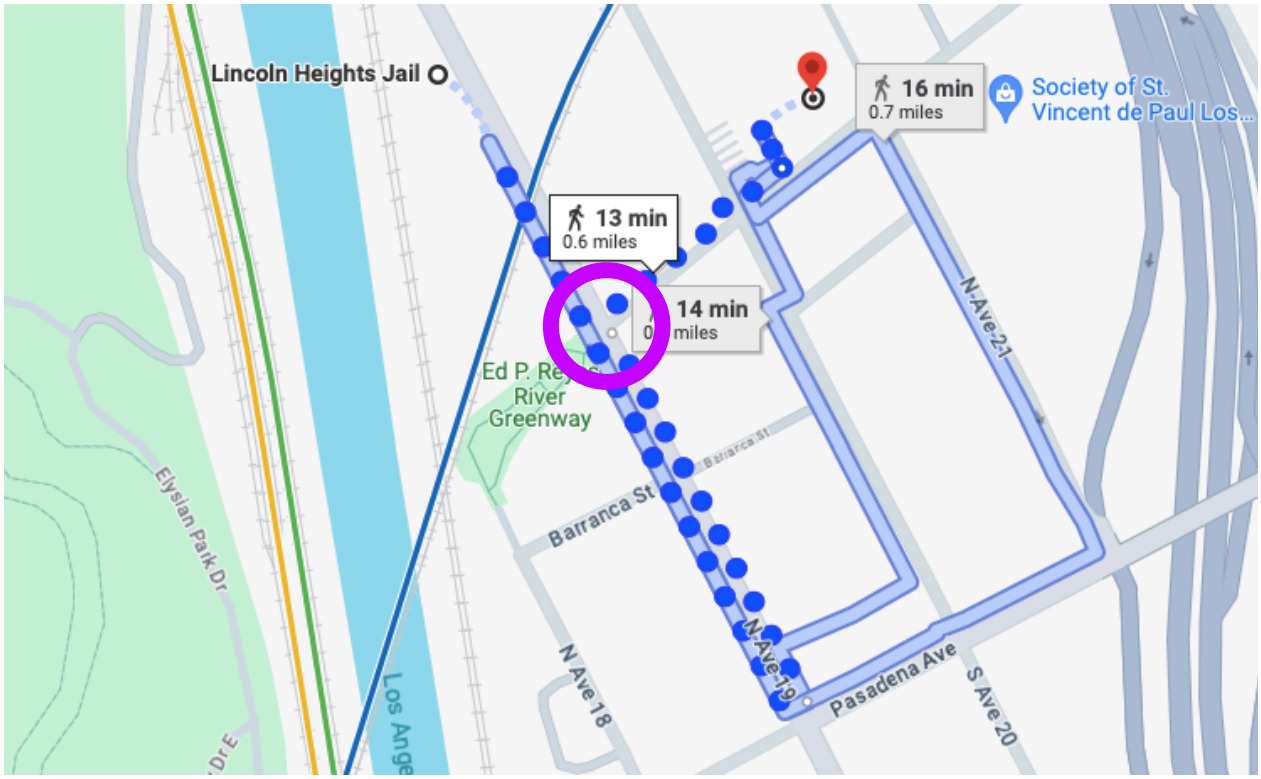
All plants chosen are either native or well-naturalized to LA. These are well-suited for existing environmental conditions and will be resilient to projected to climate change.

Fig. A5: Pedestrian and Cyclist Infrastructure



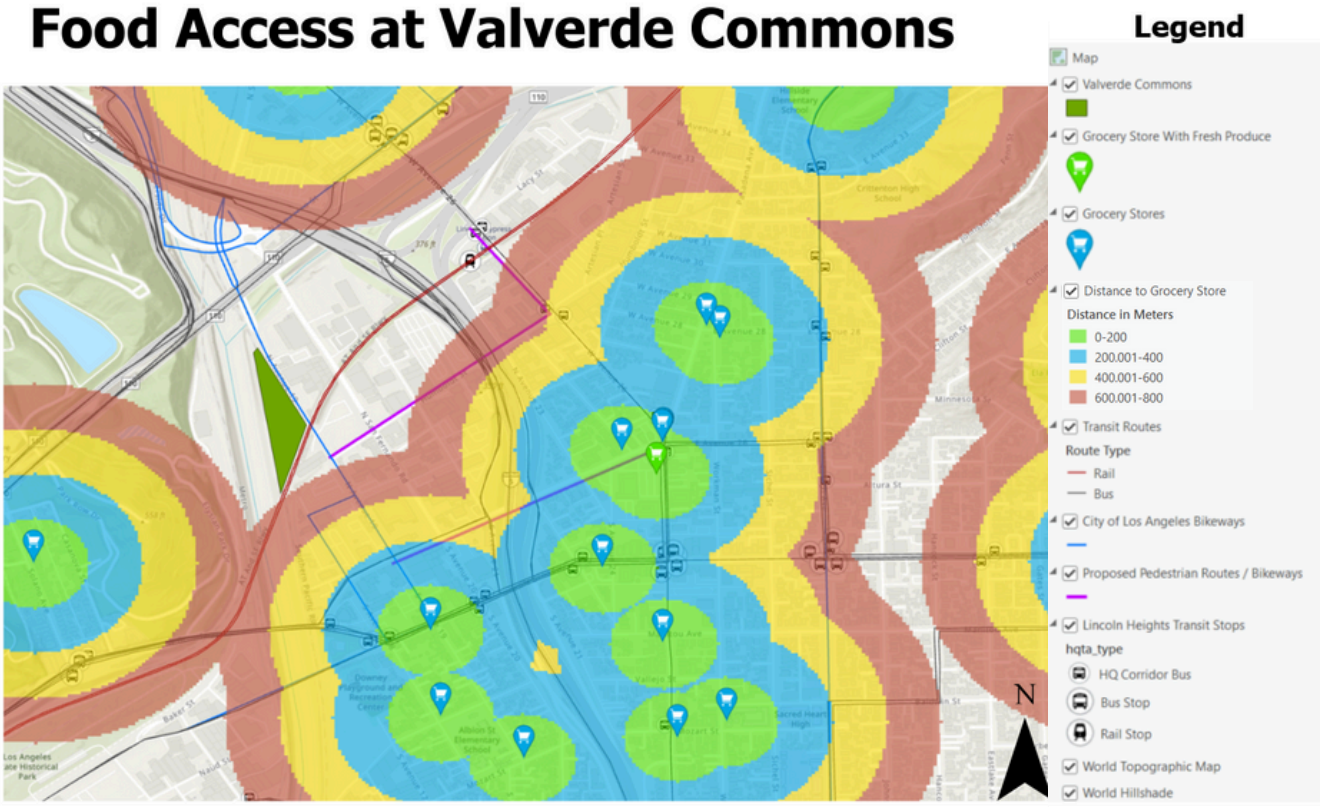
In order to reduce vehicle miles traveled and improve pedestrian and cyclist safety, we propose remodeling routes to key community resources.

Fig. A6: Recommended Crosswalk Addition



Google Maps' recommended pedestrian route from Lincoln Heights Jail site to nearest light rail stop; lack of crosswalk at N Ave 19 and Humboldt St makes the existing safe and legal walking path inefficient. Purple circle indicates recommended location for crosswalk implementation.

Fig. A7: Food Access



Rings surrounding food retailers denote gradient distances of 200 meters (approximately 1/8 mile). Distances of less than 1/2 mile from grocers have the strongest correlation with positive health outcomes.

Additional Renderings



Fig. A8 Transitional outdoor patio and Market Hall.



Fig. A9: Pollinator garden on parking garage roof.



Fig. A10: Transition between market hall and patio.



Fig. A11: Light well and interior courtyard.



Fig. A12: Raised planters holding native vegetation separating Valverde Commons from the train tracks.



Fig. A13: Bike share and e-scooter transportation options.

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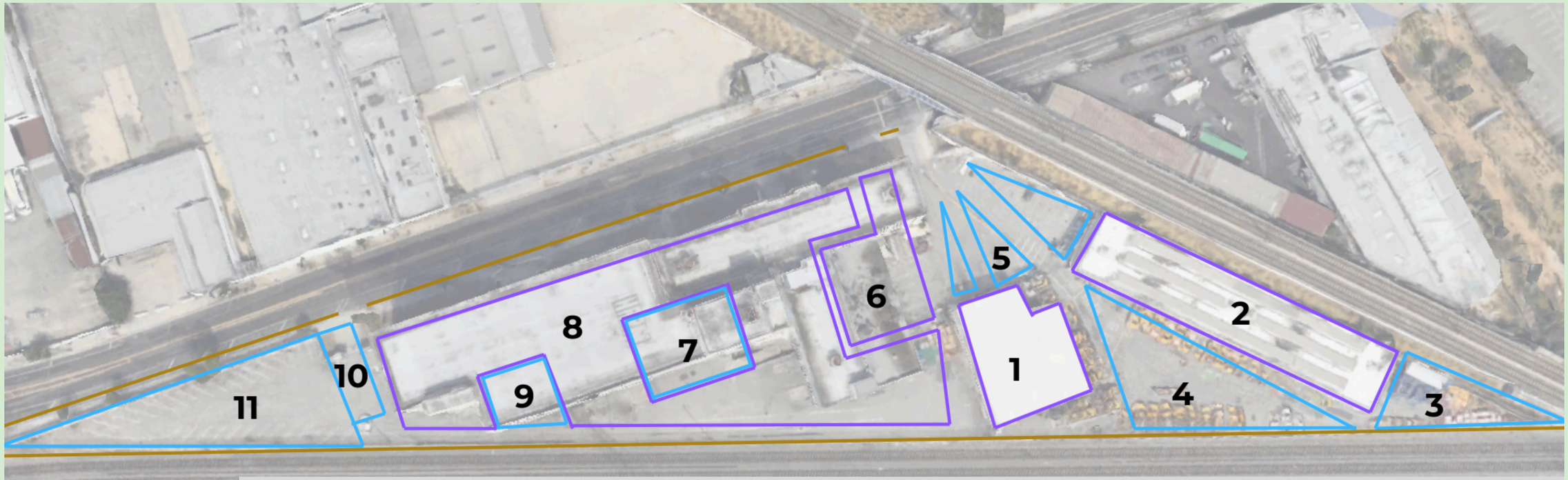
Valverde Commons

Restoring Los Angeles' Lincoln Heights



LEGEND

1. Community & Resilience Center
2. Market Hall & Resilience Center
3. Pocket Park
4. Farmers' Market & Picnic Area
5. Native Green Spaces
6. Parking Structure
7. Light Well & Courtyard
8. Residential Building
9. Community Garden
10. Dog Run
11. Pocket Park

Structures

Open Space

Raised Planters

E


VALVERDE PLACE
VALVERDE COMMONS


VALVERDE
COMMONS


VALVERDE
COMMONS

Implementation Plan

Line Item	Cost	Payment Tool	Phase	Timeline	Description
Entitlement Process	$1,000,000	Private Capital	1A	1.5 Years	Seek zoning variance, design review & approval, public funding
Community Engagement Programming	$10,000	Private capital	1B	1 Year	Volunteer pay, food, pamphlets, rental space for events
Community Resilience Center Retrofits	$350,000	EPAct 179D Tax Deduction, private capital	1C	6 months	LED lighting, sustainable appliances, rennovations to the inside of the building
Market Hall Retrofits	$750,000	EPAct 179D Tax Dedution, Commercial Lighting Incentive Program (CLIP), private capital	1C	9 months	LED lighting, sustainable appliances, rennovations to the inside of the building
Pocket Park - Infrastructure & Landscaping	$2,000,000	California Proposition 68, private capital	2A	6 months	Native plant landscaping, picnic tables
Outdoor Patio	$110,000	Private capital	2A	4 months	11,000 square feet
Bus stop installation	$30,000	Sidewalk and Transit Amenities Program (STAP), private capital	2B	1 year	Covered roof, fit to stand weather
Crosswalk installation	$2,500	California Proposition 68, Sidewalk and Transit Amenities Program (STAP)	2B	9 months	For broader community use
Valverde Place Building Construction	$95,000,000	IRA 45L New Energy Efficient Home tax credit, California Affordable Housing and Sustainable Communities (AHSC) program, Low Income Weatherization Program (LIWP), Solar on Multifamily Affordable Housing (SOMAH) program, California Building Initiative for Low-Emissions Development (BUILD), Green Retrofit and Resilience Program (GRRP), private capital	3A	3-4 years	229,000 square foot apartment complex. Includes 197 housing units, gym, produce market, daycare center, two play spaces

Implementation Plan Continued

Line Item	Cost	Payment Tool	Phase	Timeline	Description
Underground Parking	$14,000,000	Custom Performance Program (CPP), Affordable Housing and Sustainable Communities (AHSC) program, private capital	3A	1-2 years *built during Valverde place construction*	210 spots. 3 total floors - 2 floors below ground + 1 above
Sustainable in-unit appliances	$600,000	IRA 45L New Energy Efficient Home tax credit, EPAct 179D, Custom Performance Program (CPP), Affordable Housing and Sustainable Communities (AHSC) program, California Building Initiative for Low-Emissions Development (BUILD) program	3A	2 months	WaterSense faucets and aerators; ENERGY STAR-certified washers, dryers, dishwashers, and refrigerators; HEPA air filtration
Solar panels on Valverde Place + Parking Garage Façade	$3,000,000	Investment Tax Credit (ITC), California Building Initiative for Low-Emissions Development (BUILD), Green Retrofit and Resilience Program (GRRP), Custom Performance Program (CPP), private capital	4A	9 months	Comprising 80% of Valverde Place roof surface area + south façade of parking garage
Residential Batteries	$2,265,600	Private capital	4A	1 month	197 Tesla Powerwalls + installation
HVAC + ground source heat pumps	$20,850,000	IRA 45L New Energy Efficient Home tax credit, EPAct 179D tax deduction, Los Angeles Custom Performance Program, Building Initiative for Low-Emissions Development (BUILD) program, Green Retrofit and Resilience Program (GRRP)	4A	4 months	Machinery, installation, drilling/excavating
Sustainable Site Landscaping	$2,500,000	Los Angeles Landscape Incetive Program, Los Angeles County Waterworks District Cash for Grass Rebate, private capital	4B	1 year	Covered roof, fit to stand weather
Residential Garden Infrastructure	$3,000,000	Los Angeles Landscape Incetive Program, Los Angeles County Waterworks District Cash for Grass Rebate, private capital	4B	1 month	Raised beds, soil, irrigation technology

Total: $145,468,100