



FORT DAVIS COMMUNITY CENTER

District of Columbia Department of General Services
& Department of Parks and Recreation

CFA - 3278 : CONCEPT LEVEL

OCTOBER 17, 2024

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Project Goals

The development of a series of design goals is an integral part of our creative process at Perkins Eastman DC. These goals were set in the during the Design Concept phase and have led to establishing design principles that set the tone for the project while providing qualitative metrics by which to make design decisions and assess outcomes.

For the Fort Davis Community Center, our design goals outline what we hope to achieve, with a focus on quality of spaces while providing connection to nature. Ultimately, these goals will support the design team's overarching principles of design in creating a high-performance 21st century recreation environment. For example, the Community Center goal of achieving net-zero accreditation will lead to a design principle of orienting the building in the east-west direction to take advantage of the natural path and benefits of the sun.

The new Fort Davis Community Center will become an essential asset to the community. It will flourish as a safe and accessible place where children, adults, and seniors will come together to live an active lifestyle supported through education and resource-building within and beyond the footprint of the building.



1

Design the Building to Support the Community



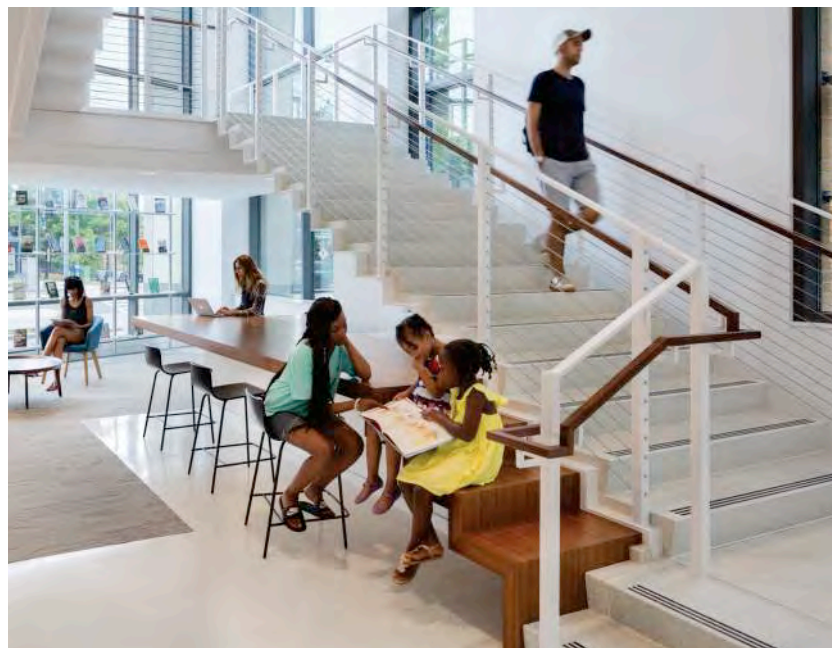
2

Design for Net Zero/High Building Efficiency



3

Enhance and Celebrate Connections to the Outdoors



4

Create Spaces to Gather and Connect



5

Embrace a Holistic Wellness

Project Scope & Overall Schedule

EXTERIOR:

- Proposed exterior improvements:
- All existing amenities are to remain, but some may be moved to accommodate new community center location and design
 - Resurface playground and replace damaged equipment
 - Provide shade to playground
 - Replace damaged fence and equipment at field, if necessary
 - Resurface existing basketball and tennis courts, provide new nets, repair fencing where necessary
 - Replace damaged equipment at spray park where necessary
 - Provide safe surface for grilling, replace damaged equipment
 - Update any damaged exterior furnishings
 - Replace exterior signage

Additional possibilities:

- Expand basketball court
- Add pickle-ball courts
- Add outdoor classroom
- Add terraced gardens
- Provide skate-able surface
- Add defined walking loop/path
- Commissioned Artwork
- Utilities

INTERIOR:

- Proposed items:
- Demo and modernization of existing Fort Davis Community Center
 - Full-size gym
 - Large multipurpose room
 - Small-medium multipurpose rooms
 - Tech lounge
 - Staff offices
 - Breakroom w/kitchenette
 - Commercial kitchen
 - Restrooms
 - Mechanical and electrical rooms
 - Storage

Additional possibilities:

- Resilient hub/back-up power
- Dance studio
- Fitness center
- Gaming room
- Senior lounge
- Incubator kitchen

BUILDING DESIGN

Concept Design / Final Report	July 30, 2024
Schematic Design	Sept 24, 2024
50% Design Development	Oct 29, 2024
Design Development	Nov 26, 2024
50% Construction Documents	February 2025
Construction Documents	Spring 2025

AGENCY APPROVALS SUBMISSIONS

CFA Concept Presentation	Oct 17, 2024
Demolition Permit	December 2024
Foundation to Grade Permit	December 2024
SWM and DC Water Reviews	December 2024
CFA Final Approvals	Spring 2025
Building Permit	March 2025

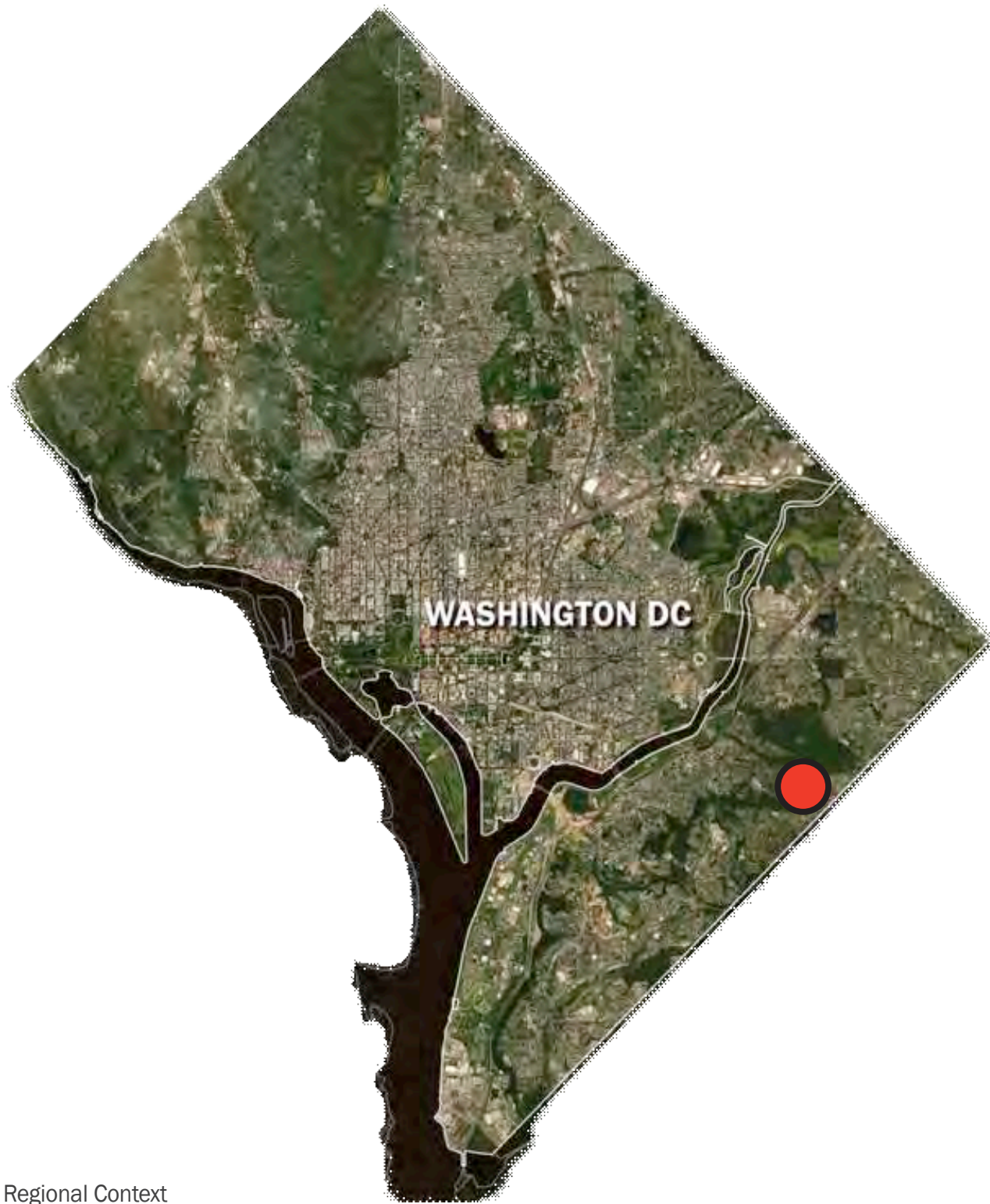
CONSTRUCTION MILESTONES

Demolition & Abatement	Summer 2025
Foundation	Fall 2025
Superstructure	Spring 2026
Permanent Power	Fall 2026
Substantial Completion	Winter 2027
Final Completion	Spring 2027

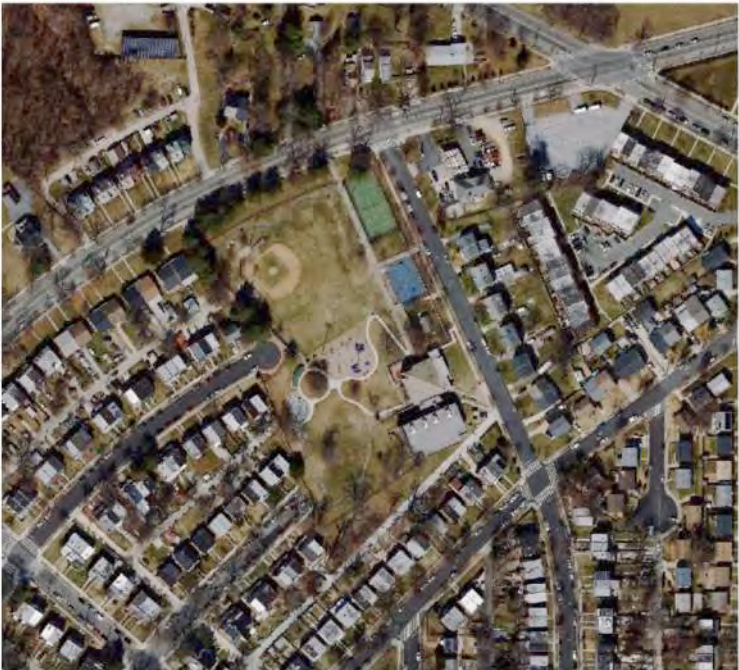


1. INTRODUCTION

Site Location



Regional Context



Site Aerial



Existing Community Center's painted retaining wall



Francis A. Gregory Library –
Opened 2012

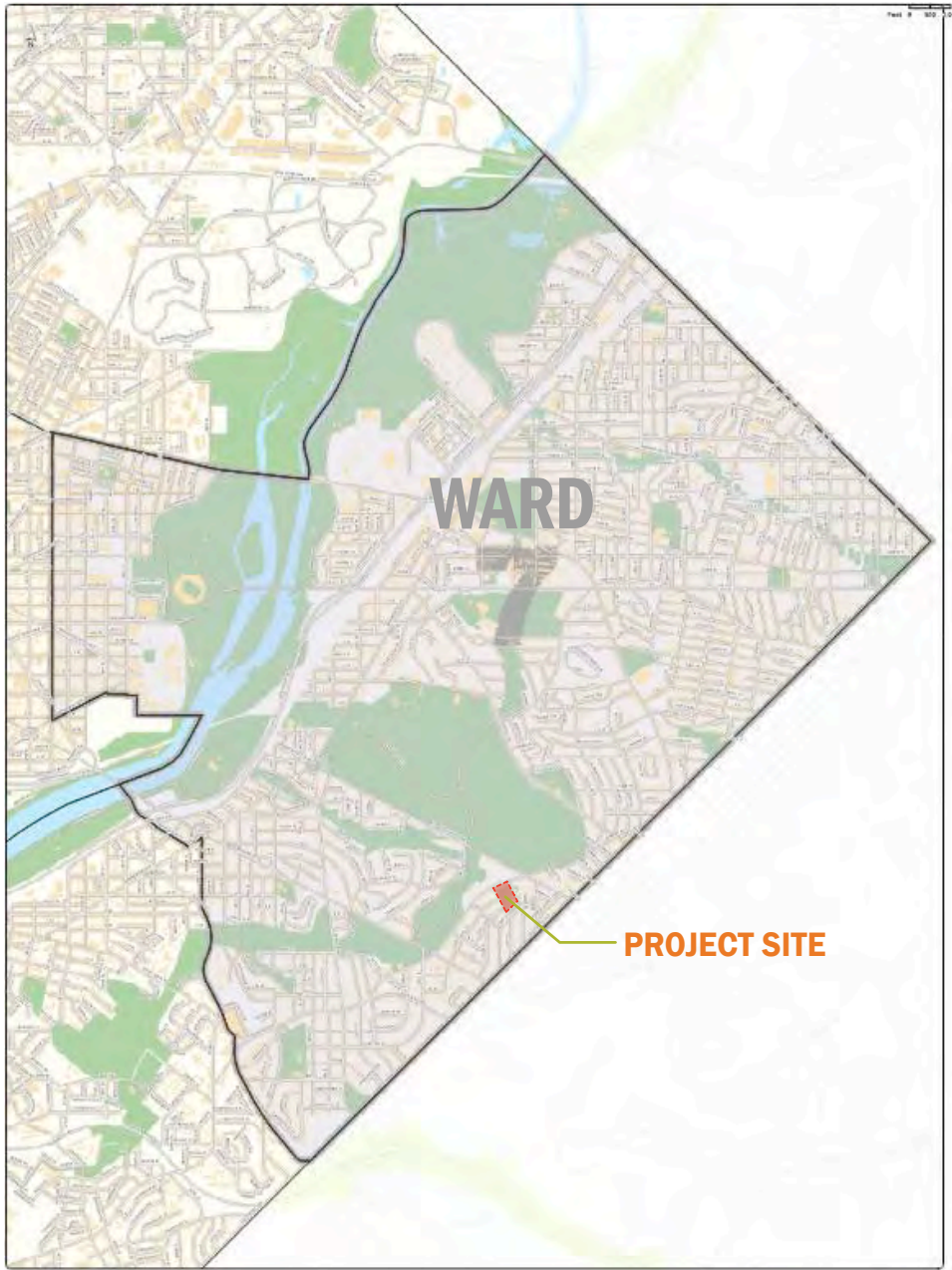


Anne Beers Elem. School –
In-boundary Elementary



Fort Dupont's Summer Theater – Annual
Outdoor Event Nearby

Fort Davis Neighborhood

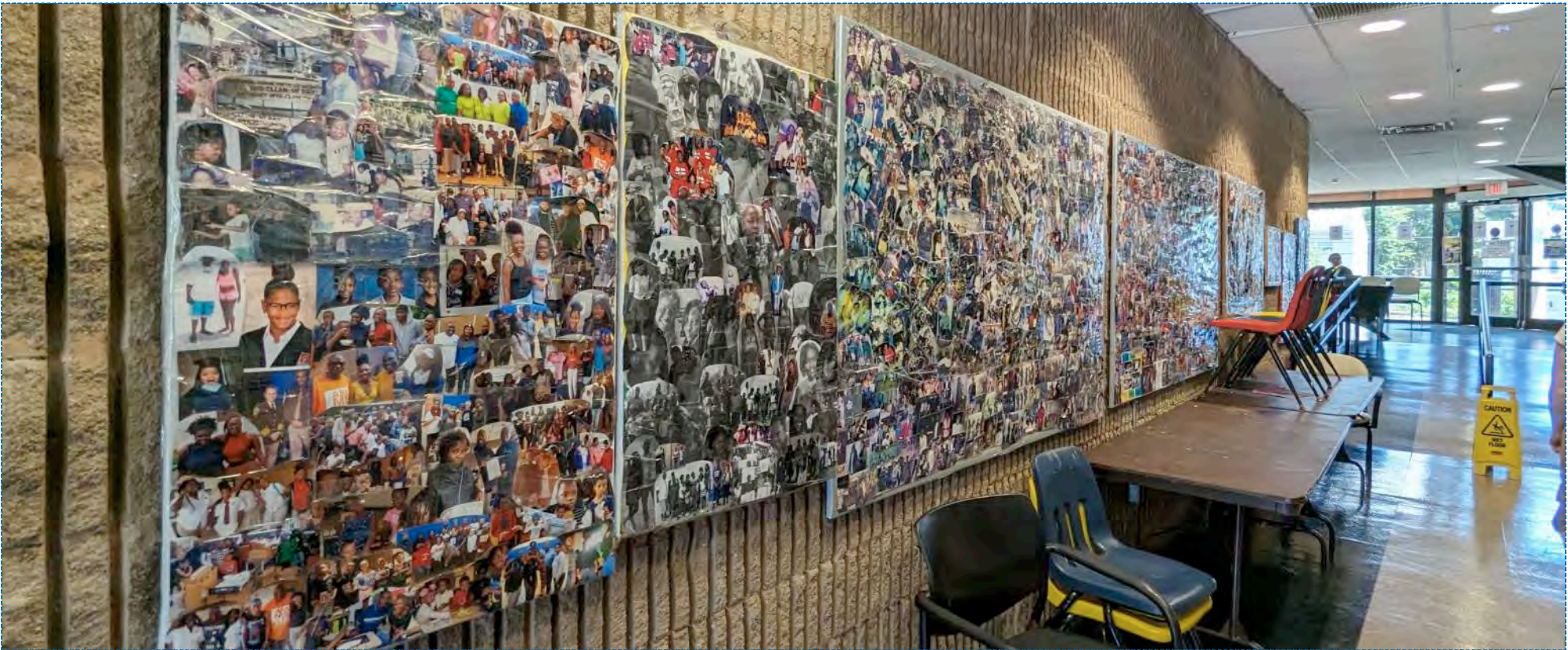


NEIGHBORHOOD HISTORY

Fort Davis is a residential neighborhood located in southeast Washington, D.C., on the border between the District of Columbia and Maryland. It is bounded by Southern Avenue, Pennsylvania Avenue SE, and Alabama Avenue SE/Bowen Road SE.

Fort Davis Park abuts the western corner of the neighborhood. This park was the site of an American Civil War fort, part of the Defenses of Washington, that gives the neighborhood its name. Fort Dupont Park is adjacent to the neighborhood's northern border on Alabama Avenue SE between Massachusetts Avenue SE and Burns Street SE.

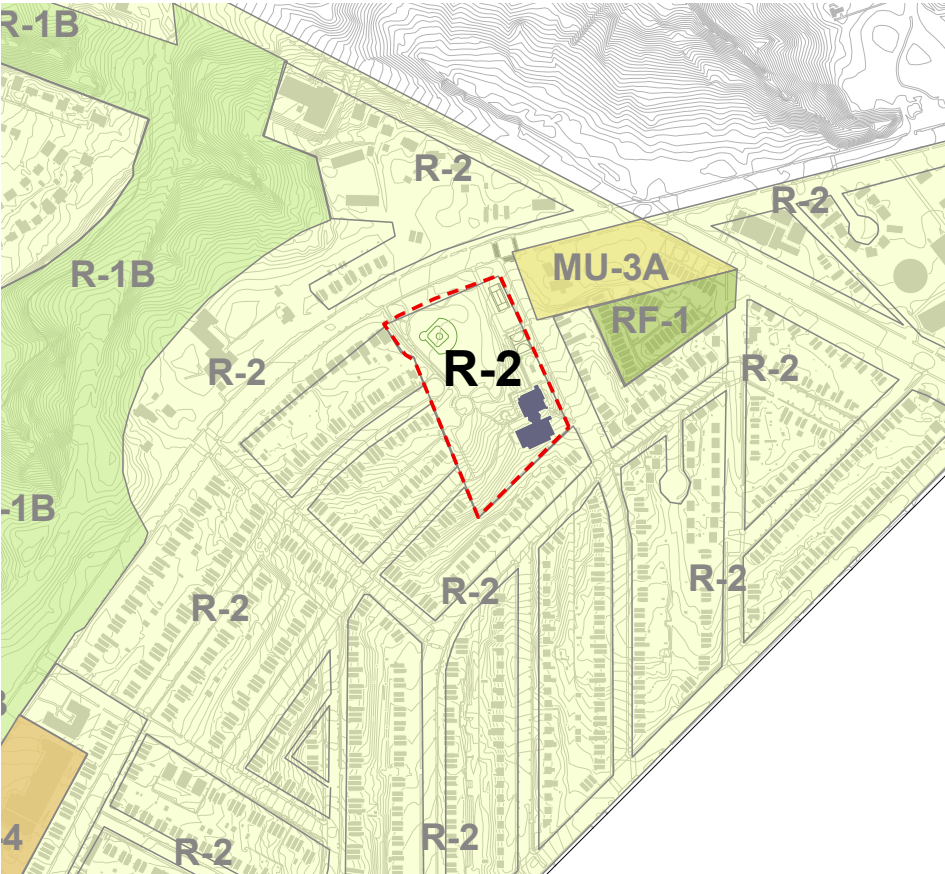
The Fort Davis neighborhood was primarily undeveloped forest until 1941. Max Sugar, a real estate developer, built the first homes in the area in late 1940. The 250 brick detached houses, originally known as "Dupont Village", were bounded by 41st Street SE, 42nd Street SE, Fort Dupont Street SE, and Southern Avenue. Sugar's development was aimed at upper-income defense workers.



Zoning

ZONING CLASSIFICATION

ADDRESS:	1400 41ST ST SE WASHINGTON DC 20020
SQUARE/LOT:	5369 0807
WARD:	Ward 7
ZONING DISTRICT:	R-2
PUDs:	None
GAR:	Exempt
FAR:	
ANC:	7B
HEIGHT:	
MECH PENTHOUSE HEIGHT:	
FRONT SETBACK:	NO LESSER OR GREATER THAN EXISTING SETBACKS ON THE SAME BLOCK
REAR YARD SETBACK:	20FT
SIDE YARD SETBACK:	08FT
COURTS:	
PARKING:	
BICYCLE PARKING:	
COUNCIL MEMBER:	Vincent Grey
ANC CHAIRPERSON:	Kelvin Earl Brown
SMD:	7B08
ANC COMMISSIONER:	Kelly Taylor



RECENT WORK ON SITE

Recently updates to Splash Pad, Playground, Security System and field lighting are understood to have taken place. The Design-Build team intents to research and investigate the conditions of the recent work.

FLOOD ZONE MAP

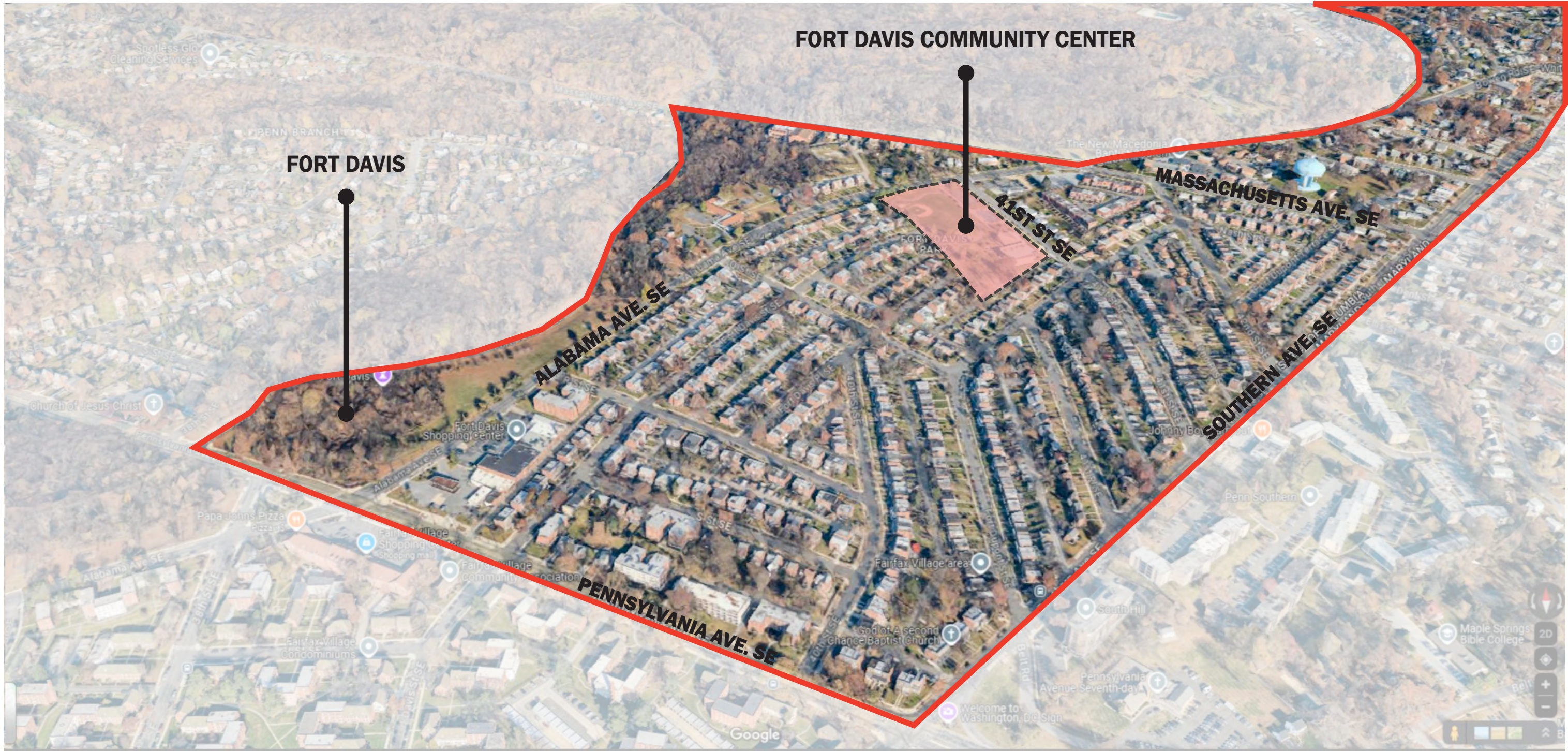


FLOOD PLAIN

The Fort Davis Community Center site falls outside of the 100-Yr and 500-Yr flood plan according to both District Department of Energy and Environment and FEMA's Floodplain maps. Pope Branch Creek to the North East, while directed away from the Community Center site toward the Anacostia River, does contain a surrounding flood plane zone.

<https://msc.fema.gov/portal/search?>

Neighborhood Context

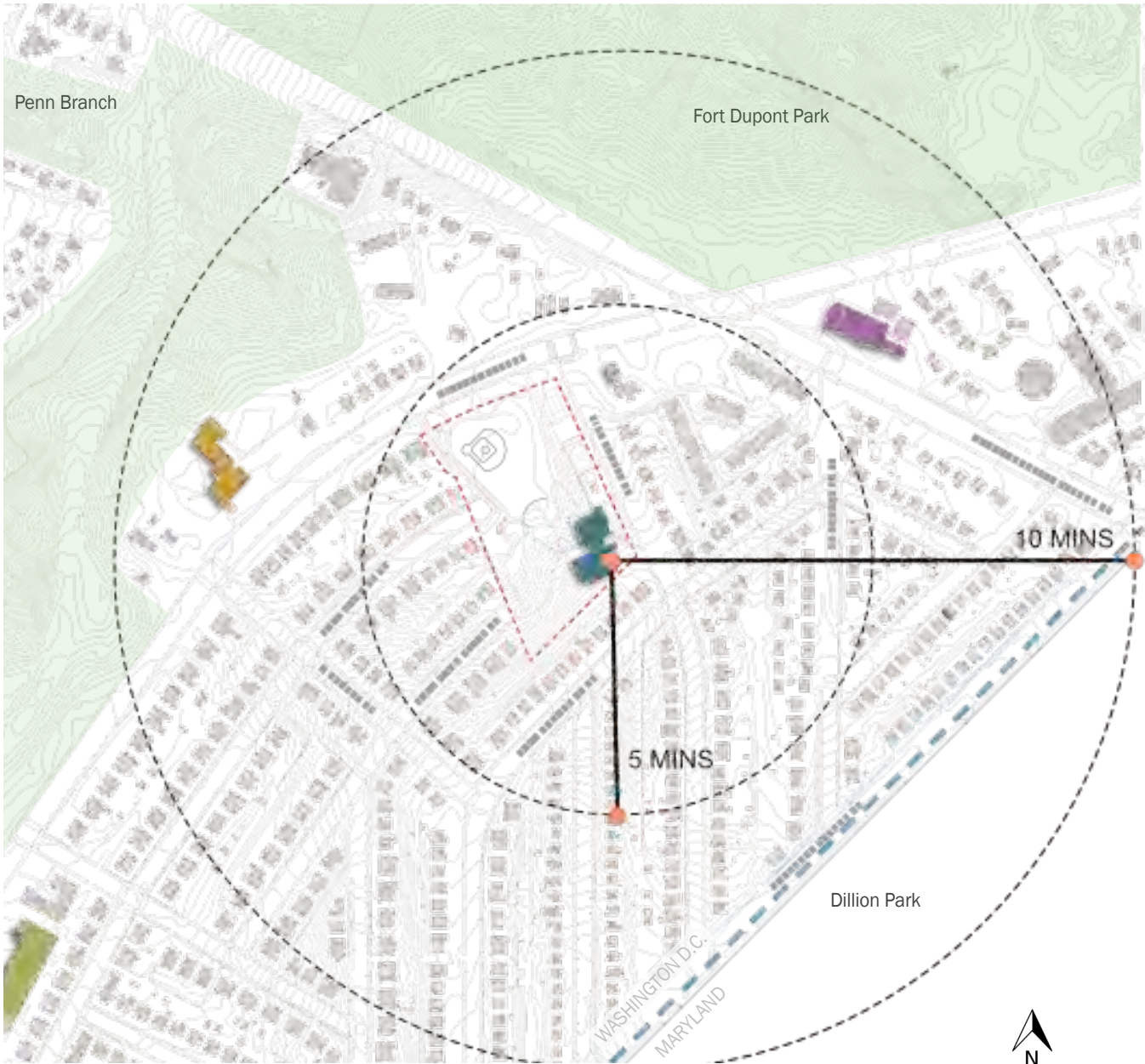


FORT DAVIS PARK NEIGHBORHOOD

Neighborhood Context



Walking Radius & Site Access

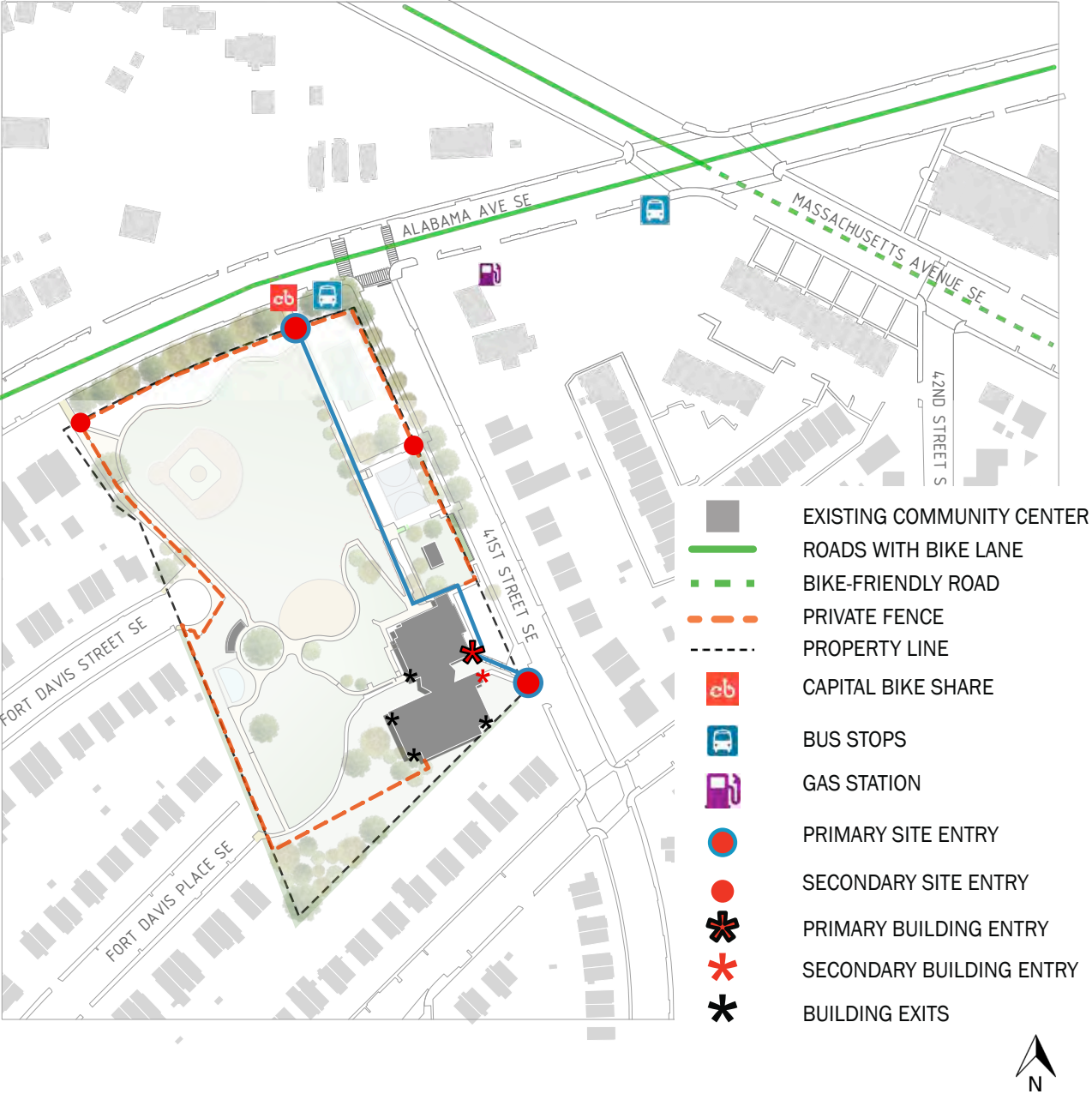


WALKING TO THE CENTER

Based on the survey information provided by DGS/DPR, most of the users of the Fort Davis Community Center come from the East, South and West, likely due to the parks and major streets to the north.

Additionally, the community predominantly walks to the center.

- THE NEW MACEDONIA BAPTIST CHURCH
- BP GAS STATION
- DUPONT PARK SEVENTH- DAY ADVENTIST SCHOOL
- FORT DAVIS SHOPPING CENTER



SITE ACCESS

The northern property line of the Fort Davis Community Center site has access to a bus stop, a bike share station, and a gas station providing multiple means of transportation to and from the neighborhood.

The original plan of the Community Center was purposefully set deeper in the hillside to leave the flatter areas of the site for parks and recreation.

VEHICULAR ACCESS

While pedestrian and transit access is convenient from the north and east sides of the site, convenient and safe, but unobtrusive, access for staff parking and services must be considered. Using the adjacent alley for secure access could be of great benefit.

Existing Site Topography, Section, & Elevations

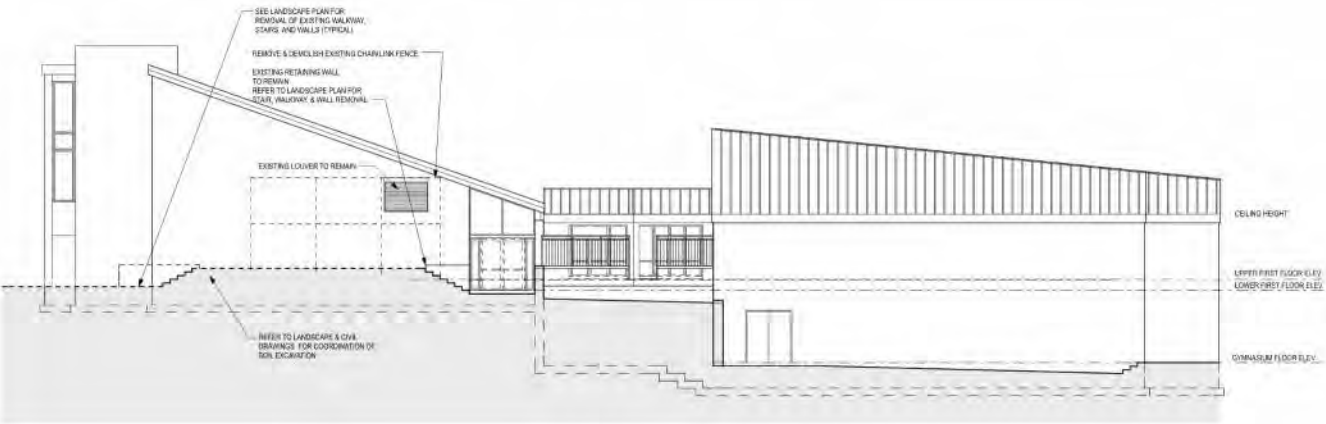
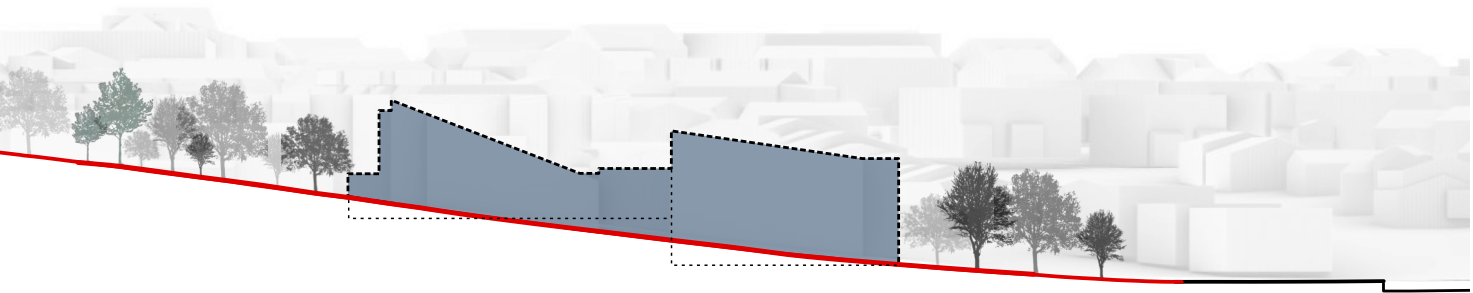
EXISTING SITE TOPOGRAPHY



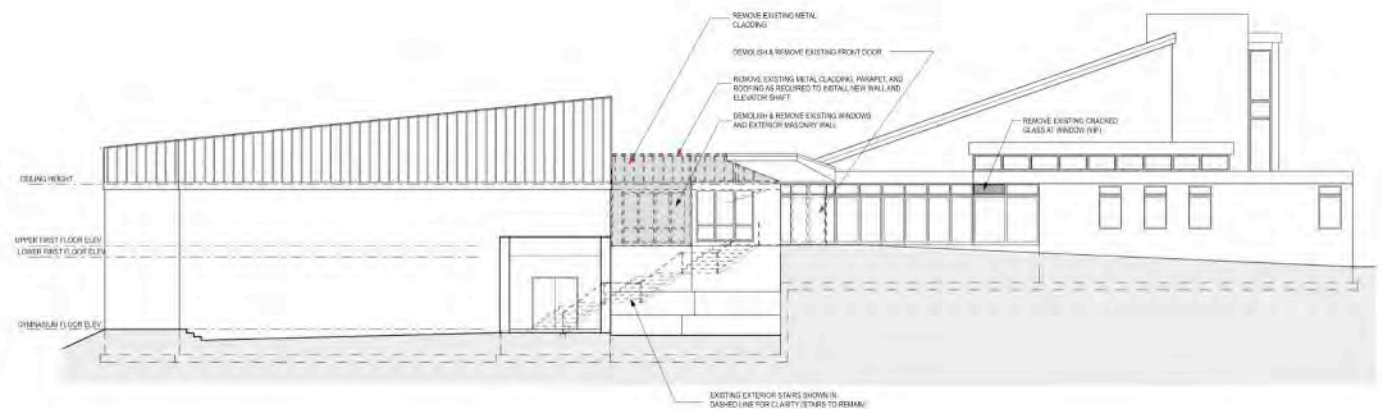
OBSERVATIONS

The site is nestled within a neighborhood of rolling hills, and the property includes significant slope. From the crest of the site adjacent to Alabama Ave to the alley along the south, the grade drops roughly 40 feet. While the grade change presents quite a challenge, the hill provides opportunities for small gathering spaces and weaving program elements through the site.

The site has an impressive abundance of mature trees and ground cover. Currently there is limited access for services and deliveries, as well as the utility connections. The site abuts an alley and an adjacent neighborhood street that could serve as access points.

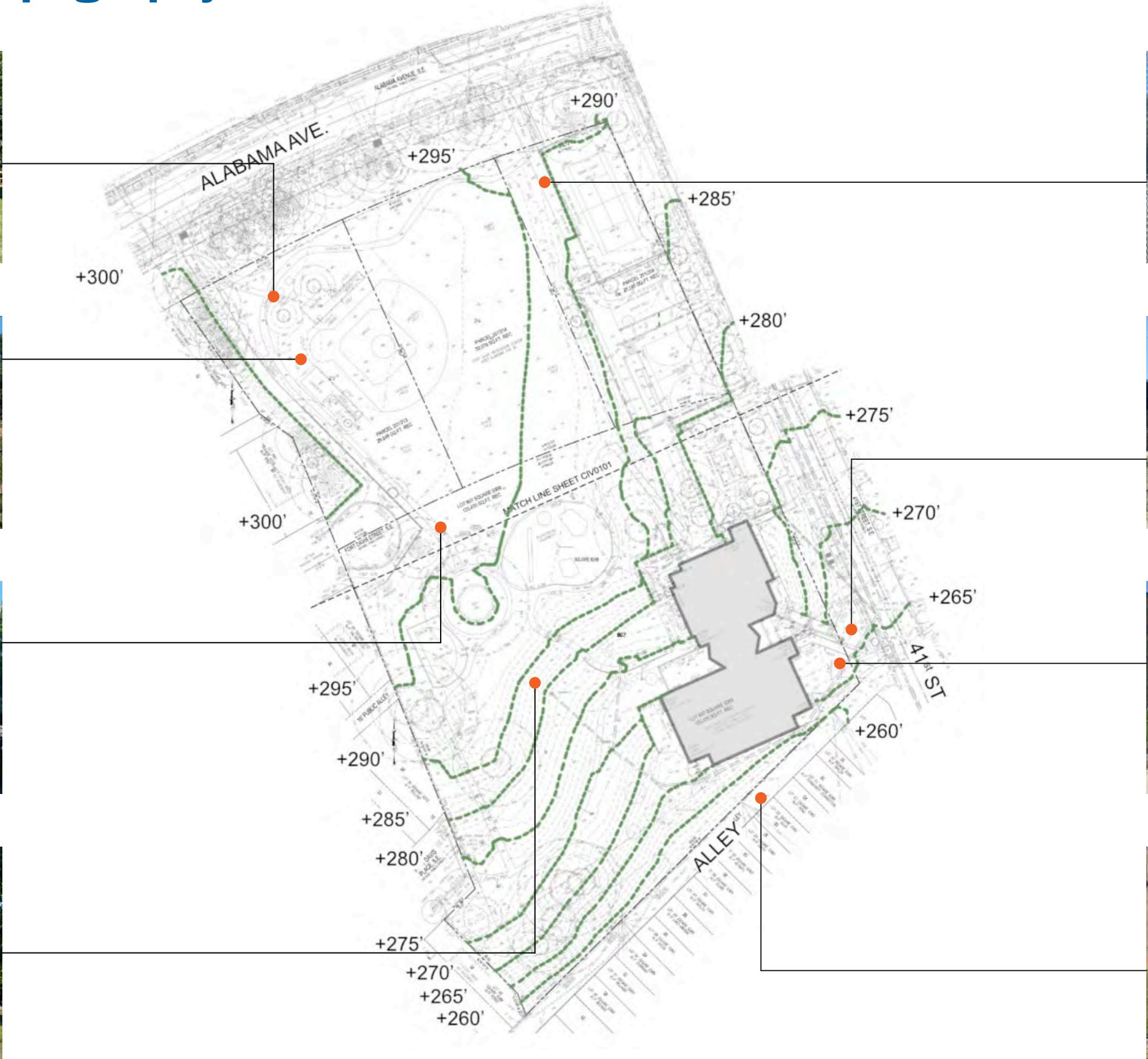


EXISTING SOUTHWEST ELEVATION



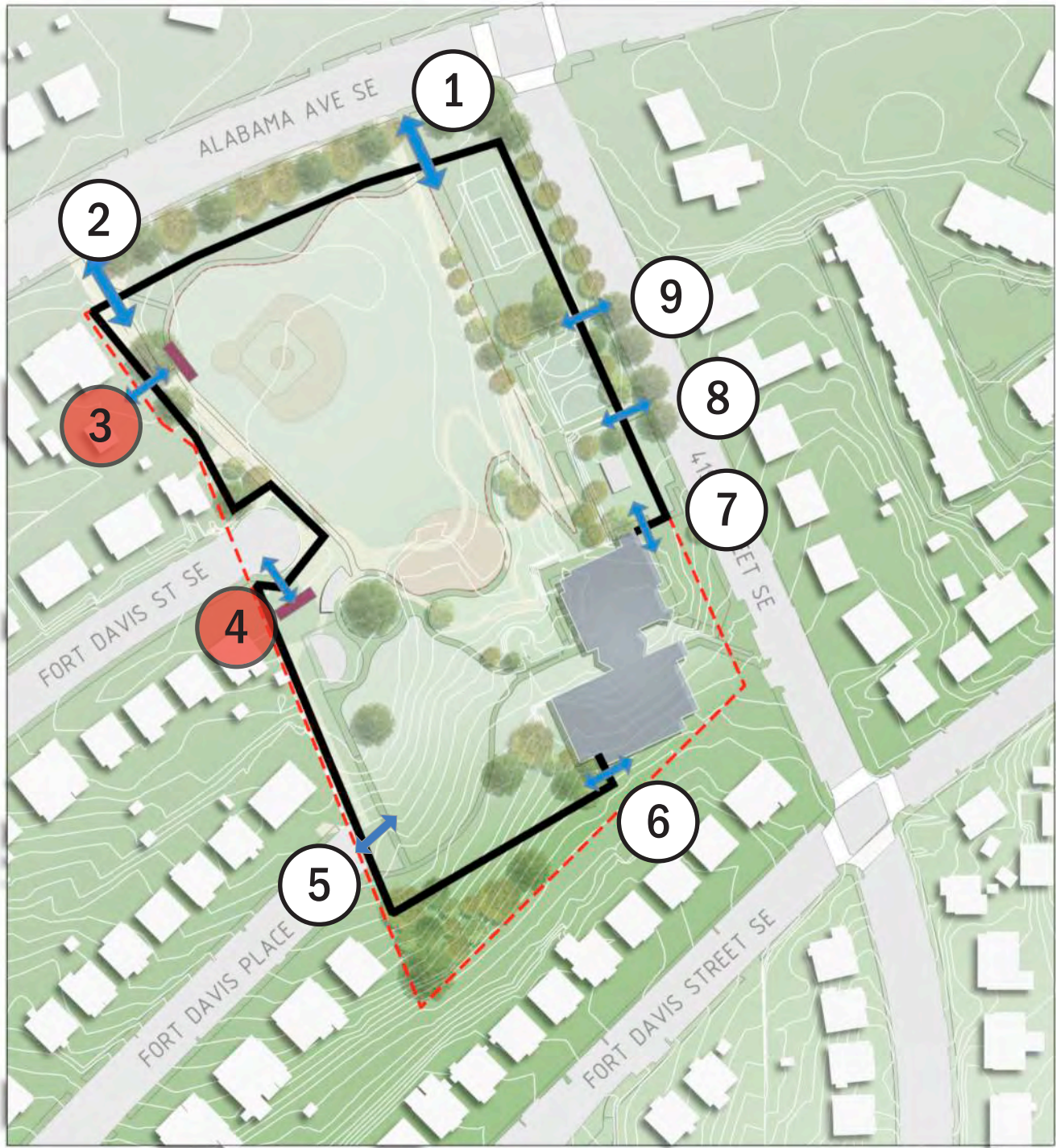
EXISTING NORTHEAST ELEVATION

Existing Site Topography



Existing Site Access

EXISTING FENCE AND GATES PLAN

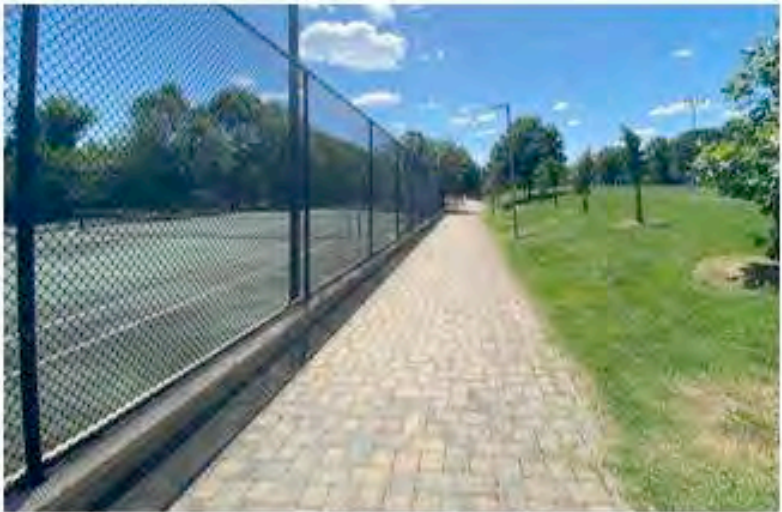


EXISTING SITE ACCESS IMAGES



- EXISTING FENCE
- ↔ EXISTING GATES
- EXISTING JERSEY BARRIERS

Existing Site Photos



1.) ALABAMA AVE. ARRIVAL [SE]



2.) COURT CORRIDOR [NW]



3.) BASEBALL VIEW [SE]



4.) HILLSIDE [W]



5.) PLAYGROUND [SE]

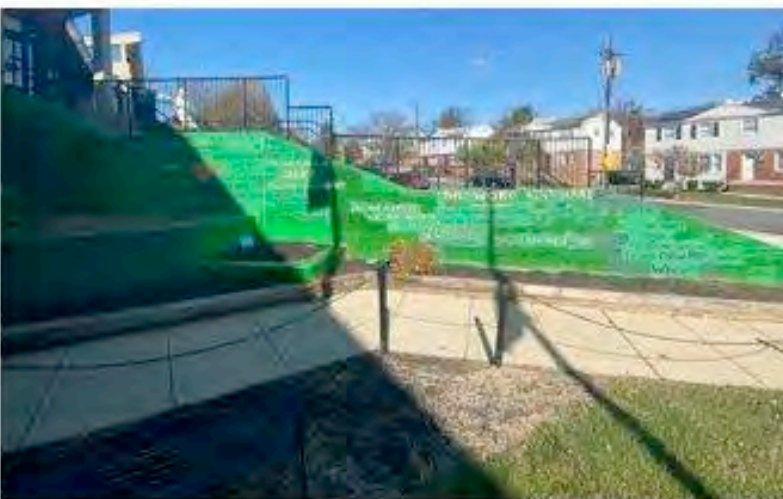


6.) 41ST STREET [NW]

Existing Building Photos



1.) 41ST ENTRY [NW]



2.) RETAINING WALL [N]



3.) GYM ENTRY [NW]



4.) GYM ALLEY ELEVATION [N]



5.) ALABAMA AVE FACE [S]



6.) PLAYGROUND TOWER [SE]



2. SITE DESIGN

Design Principles



- 1** The design supports a city front and a park front; both are important



- 2** Interior program spaces have actual and/or visual connection with exterior spaces and program areas



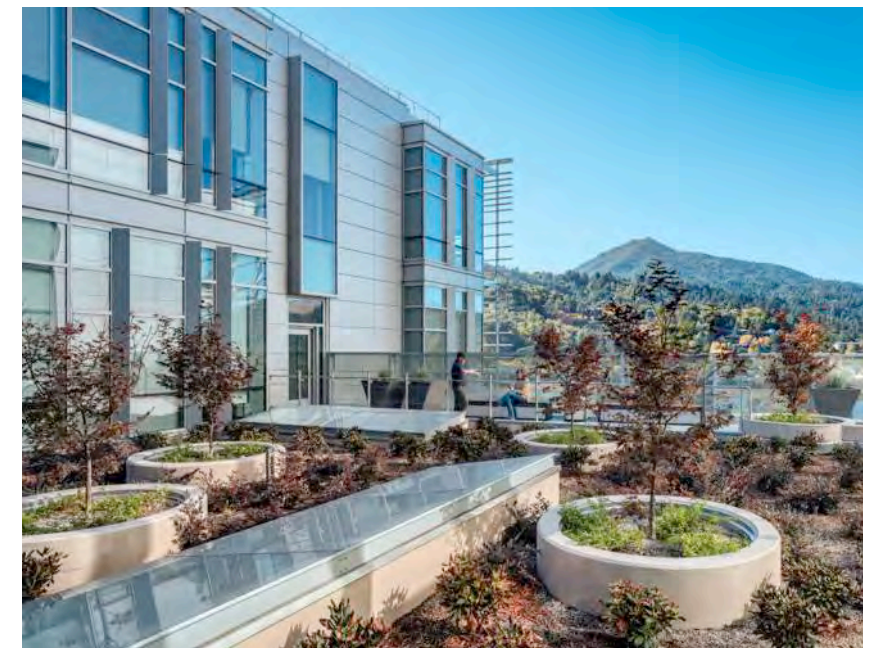
- 3** Public area of the building is welcoming and can be used for community display and/or activities



- 4** Building entry is visible, scaled to be seen as “public” and located in a safe and accessible location

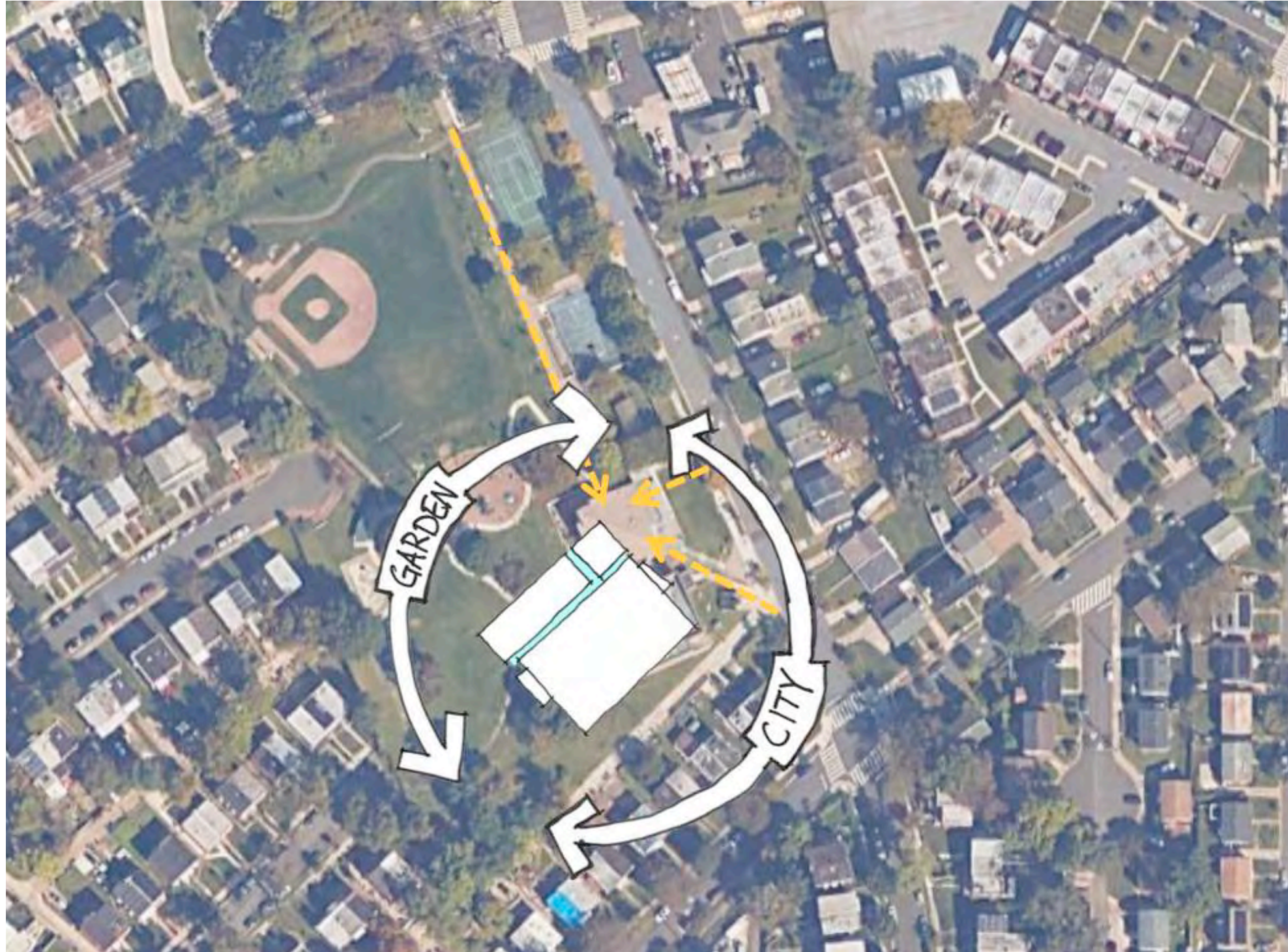


- 5** Exterior landscaping is varied, easy to maintain and organized to support “placemaking”



- 6** Building and site is organized to minimize adverse views

Site Concept - City and Garden

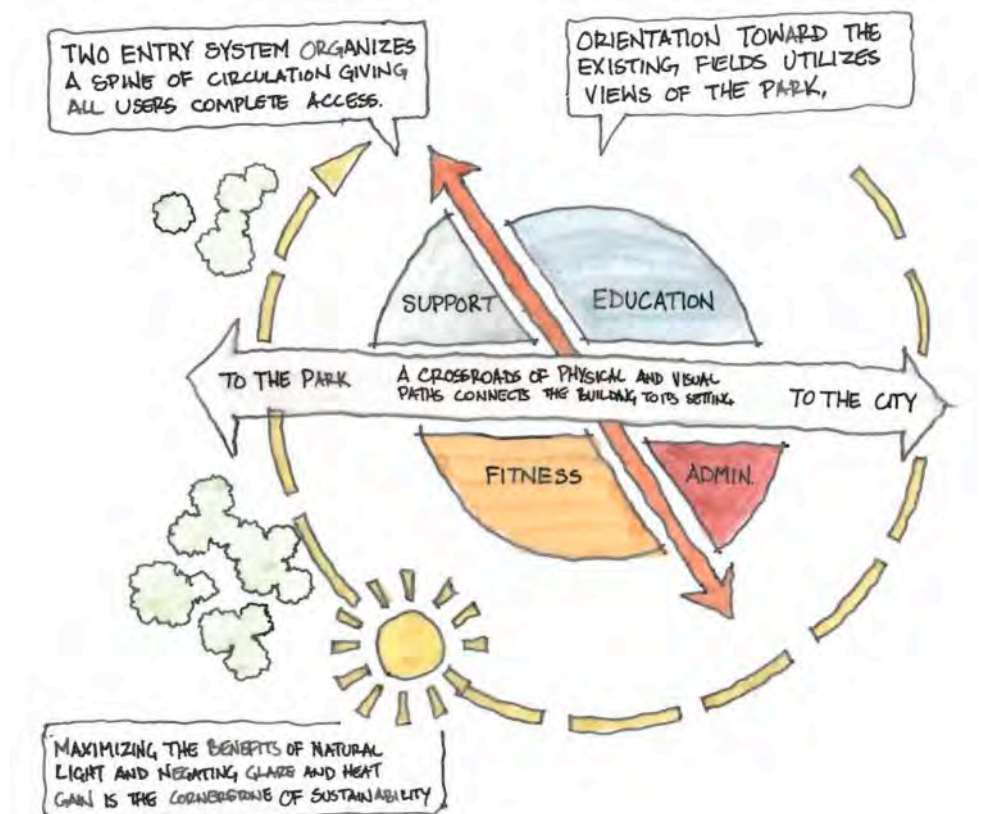


CONCEPT

After years of renovations, additions, and changes the existing building has turned it's back on the park while simultaneously poorly engaged the community and neighborhood.

The new community center seeks to address and welcome neighbors with a civic front, while in unison inviting the community into the park with visual and physical connections.

Amplified by the shaping of the landscape, locations of new entrance ramps, and glass corridors, that give clear views through the building into the hillside, the new building seeks to greet the neighborhood and celebrate the park.



Proposed Site Plan



LANDSCAPE PRECEDENT IMAGES



TERRACED LANDSCAPE WALLS AND MONUMENTAL STAIRS



PAVING WITH SITTING BOULDERS AND SPIRAL MOTIF



HILLSIDE SLIDE WITH POTENTIAL CLIMBING STUMPS AND BOULDERS

Proposed Site Access



Proposed Site Circulation



Respect Important Site Features

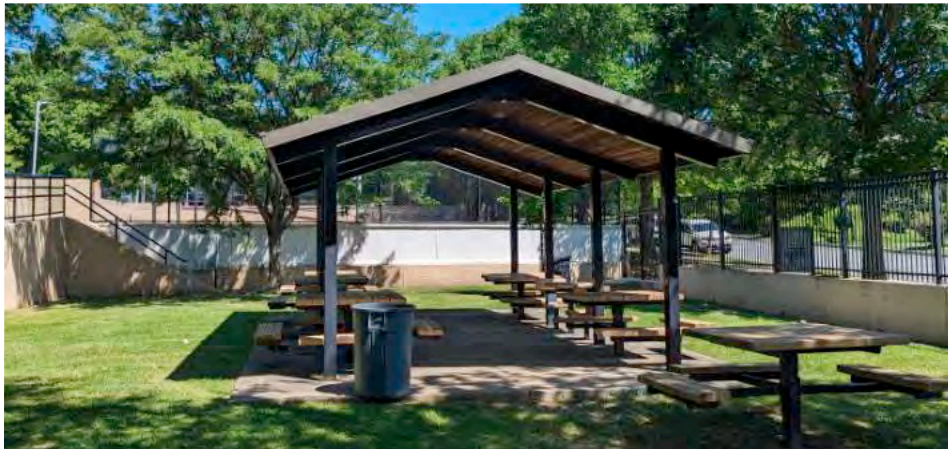


PICNIC PAVILION

The existing picnic pavilion is an important place for the Fort Davis community to gather and host family events. It is easy access from the 41st street, yet is fenced inside the facility field to provide security and privacy for the users. Proximity to the main entrance and parking are a priority for the community.

CFA STAFF COMMENT:

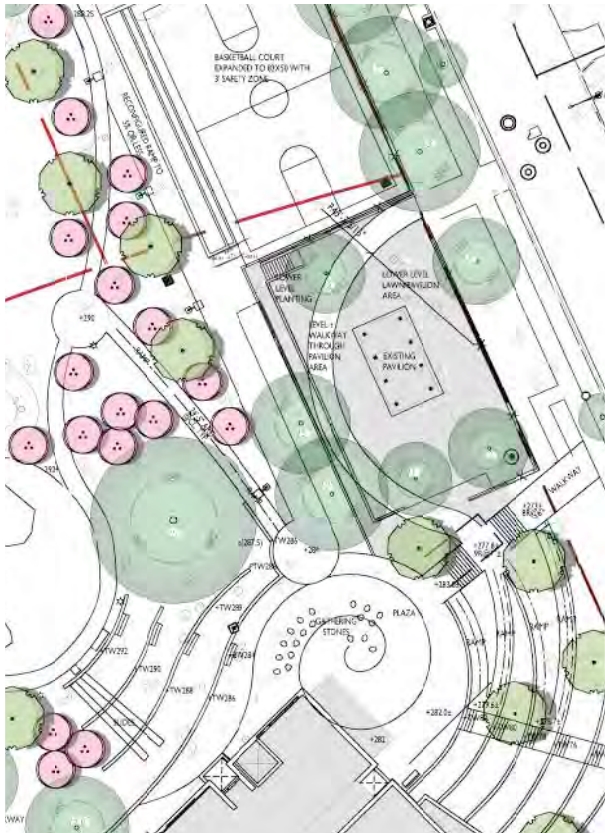
During the CFA staff review, low-slope accessibility from 41st street was discussed. The options shown require community buy-in, review and approval by additional DC Government agencies, and impact to budget before implementation.



PAVILION ACCESS ALT OPTION 2

A winding path around the pavilion that ties into the plaza is achievable with a slope of <5%. Railings and retaining walls will be required with this option which limit the use of the Pavilion's open space.

Based on community feedback and DGS survey, majority of users come from south of the site. Due to rising site topography, flat access to the site must come from the north,.



PAVILION ACCESS ALT OPTION 3

A winding path around the pavilion that ties into the planned main stair ramp entry would provide a very low slope until the connection to the proposed ramp. The arching pathway in this option will limit the use of the Pavilion's open space.

This option is the least favorable among the community.

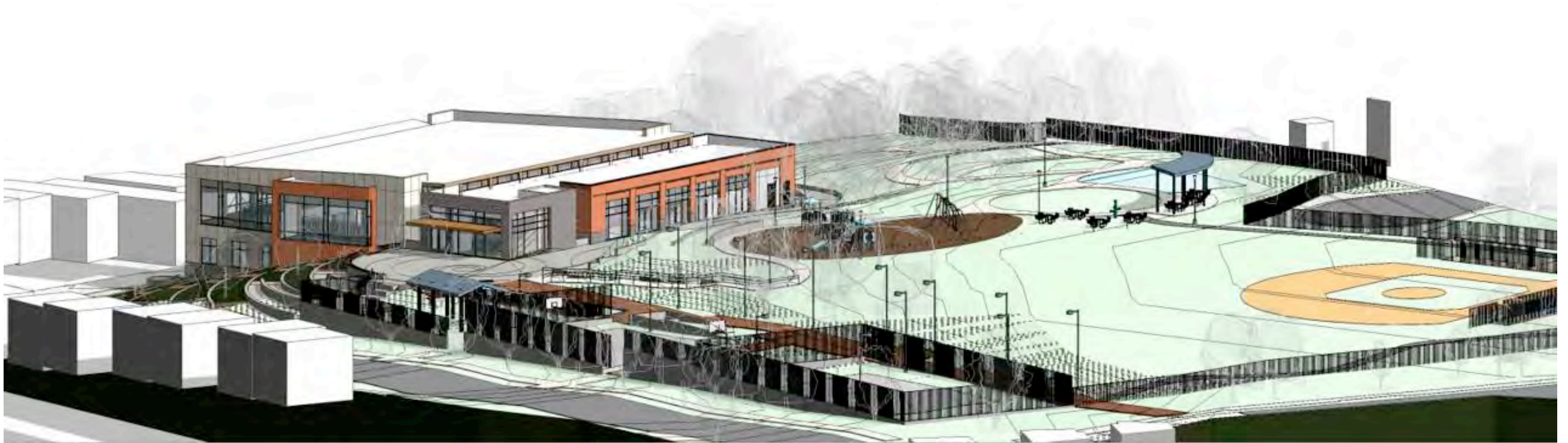


PAVILION ACCESS ALT OPTION 4

After showing the previous schemes to the Community, an alternative was discussed of providing off street parking at this location while simultaneously providing a low slope means of access.

Design Team is required to review this option with DDOT/DOB/DGS/DPR and additional agencies prior implementation due to the impact the additional site work would require (curb cuts, parking infrastructure, light fixtures, etc.)

3D Views



VIEW FROM NORTHEAST CORNER OF THE SITE

Massing



VIEW FROM NORTHEAST CORNER OF THE SITE



VIEW FROM NORTHWEST CORNER OF THE SITE



VIEW FROM SOUTHEAST CORNER OF THE SITE



VIEW FROM SOUTHWEST CORNER OF THE SITE



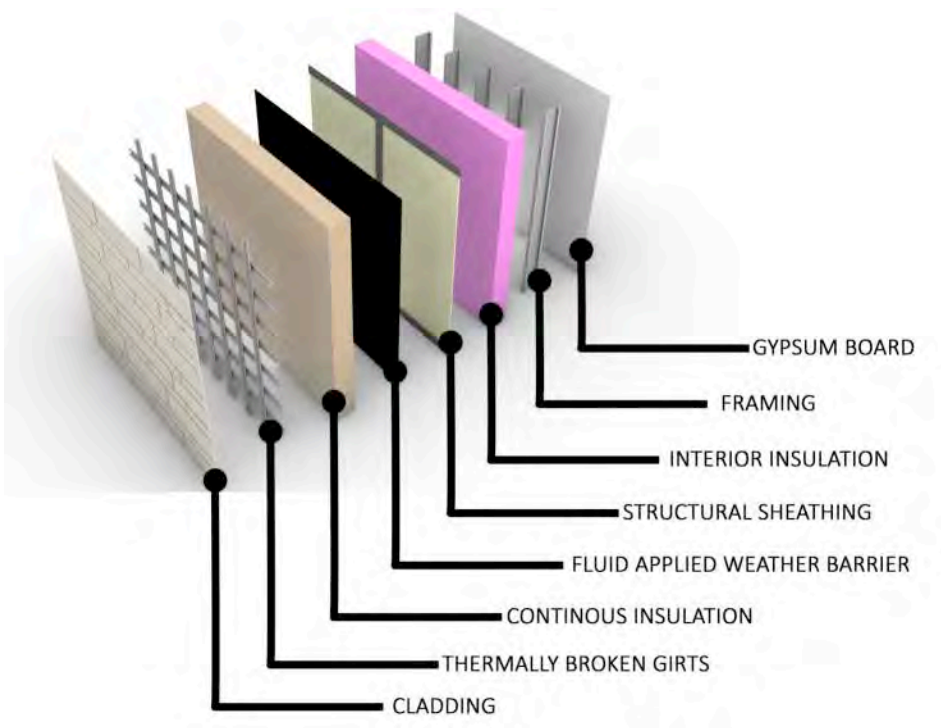
3. EXTERIOR DESIGN

Facade Design Principles

The exterior building design will utilize the overall design principles and implement them as strategies for the exterior envelope, the building facade, and connection to the urban context.

The building’s envelope must satisfy the goals of the interior learning environments, the energy performance goals of the project, and contribute in a meaningful way to both the streetscapes and the community assets in its Fort Davis’ neighborhood.

Cladding systems, such as Fiber Cement, Wood Panel Rainscreen, and veneer masonry will be used to maximize thermal continuity and waterproofing.



1

The design supports a city front and a park front; both are important

2

Interior program spaces have actual and/or visual connection with exterior spaces and program areas

3

Public area of the building is welcoming and can be used for community display and/or activities

4

Building entry is visible, scaled to be seen as “public” and located in a safe and accessible location

5

Exterior landscaping is varied, easy to maintain and organized to support “placemaking”

6

Building and site is organized to minimize adverse views (adjacent alley, etc.)



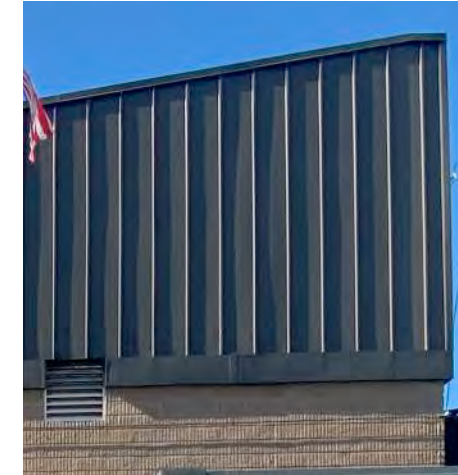
Existing Surrounding Materials



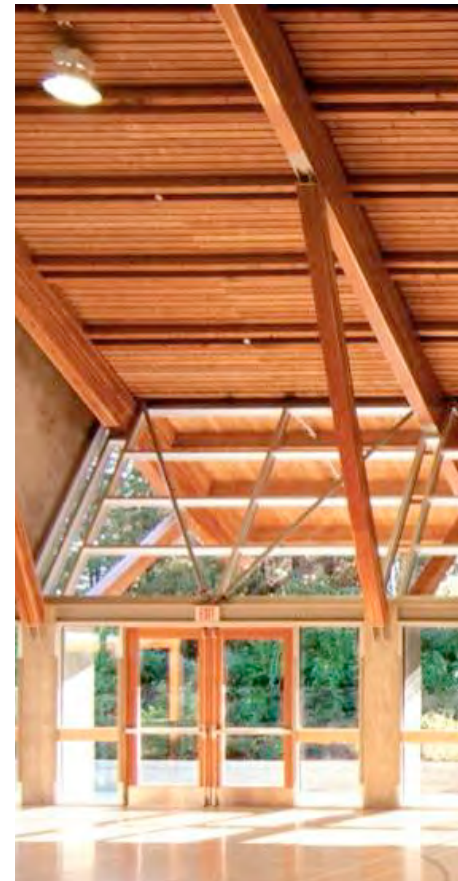
STRIATED CONCRETE BLOCK



EXPOSED WOOD



METAL PANEL



The existing Community Center building is primarily striated split concrete block, metal panel, window system with some exposed wood. The design of the new center will take these elements as inspiration in creation of the new exterior cladding systems, while simultaneously rooting the exterior materials in tactile site related elements that evoke the Fort Davis history.

Exterior Material Selections



STONE



BRICK



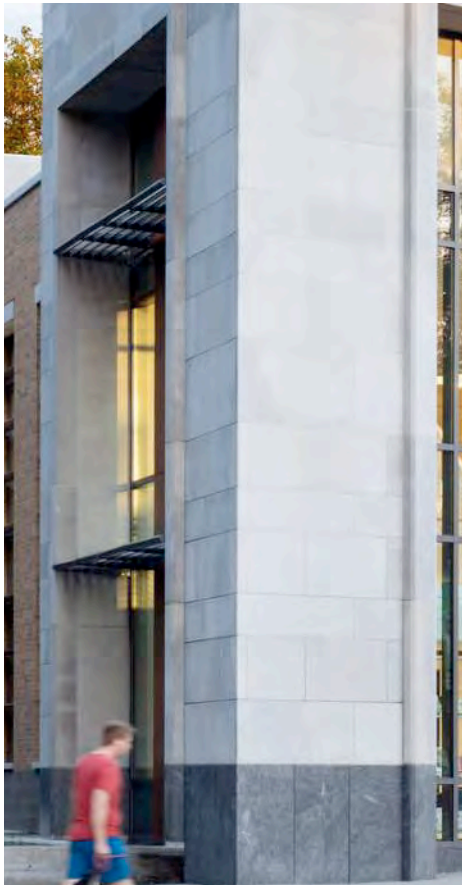
FIBER CEMENT PANEL



COMPOSITE METAL PANEL

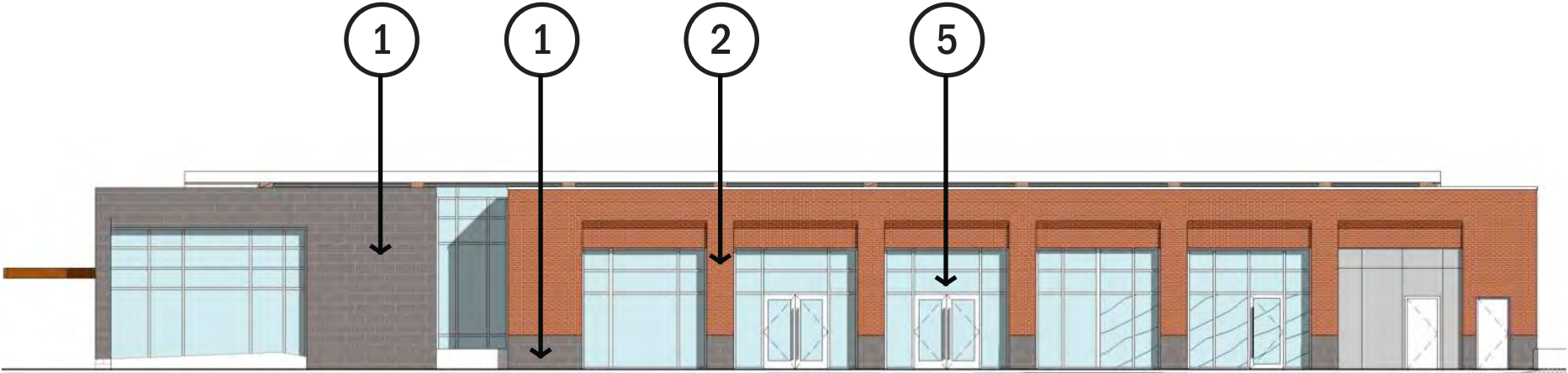


CURTAIN WALL

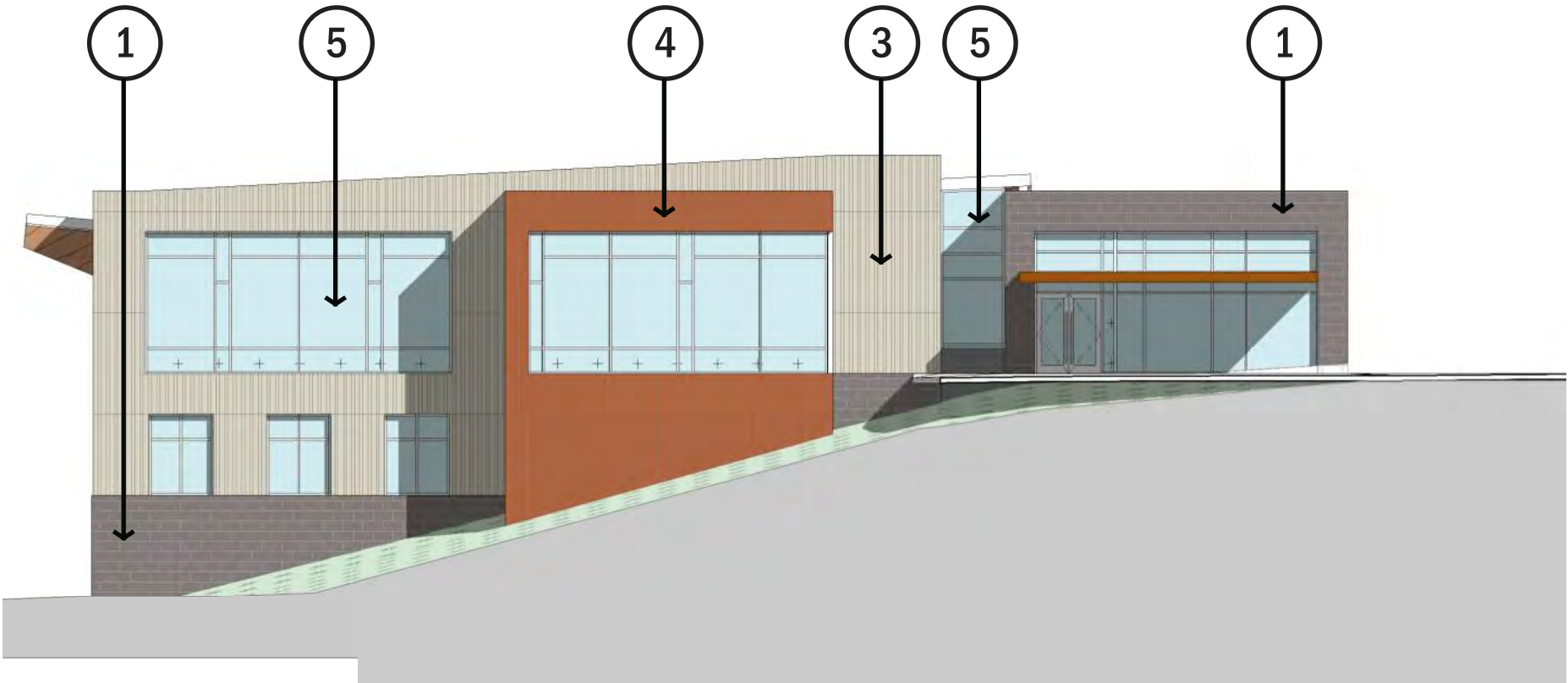


The historical fort, existing neighborhood context, original Community Center building, and the surrounding natural elements all influence the choice of materiality, color palette, and texture of the facade. The Community Center will be rooted in history with the use of local and natural materials.

Exterior Elevations



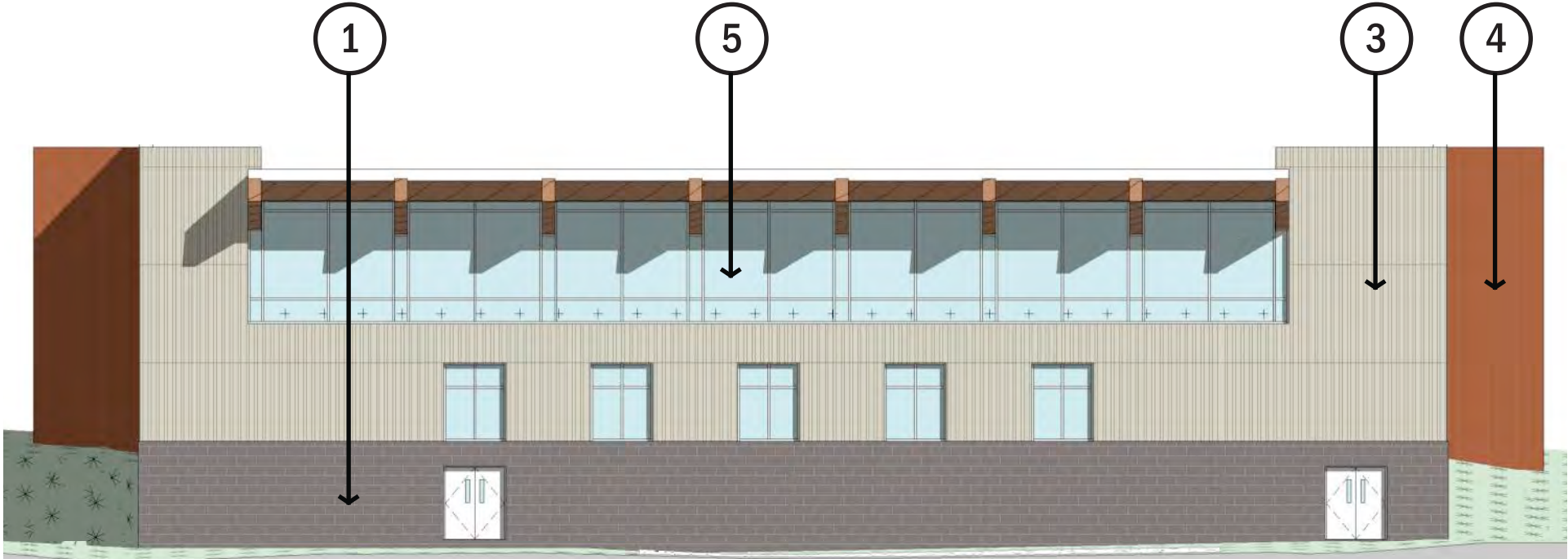
NORTH ELEVATION 1/16" = 1' - 0"



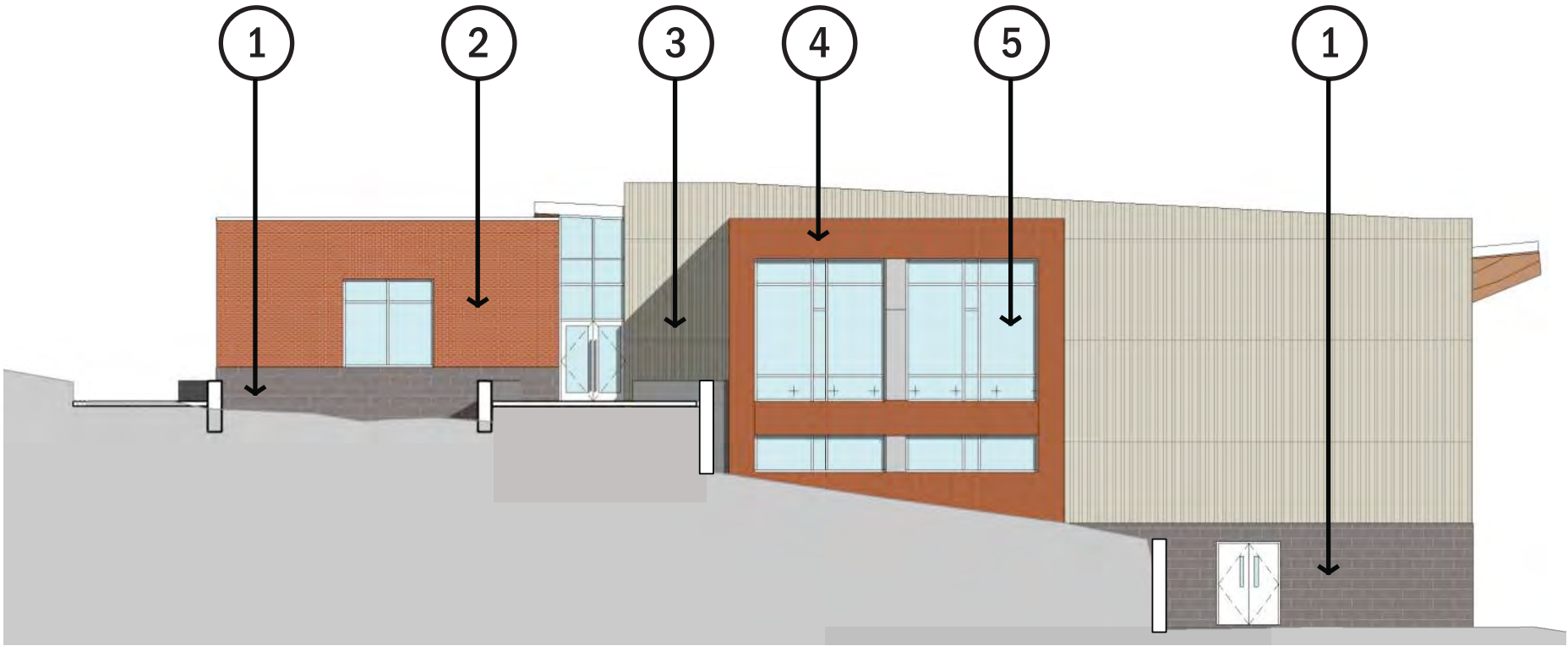
EAST ELEVATION 1/16" = 1' - 0"



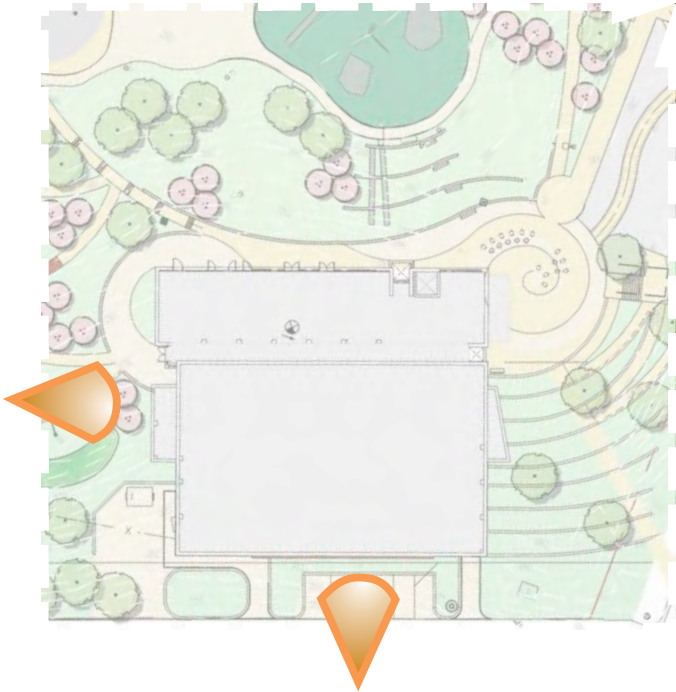
Exterior Elevations



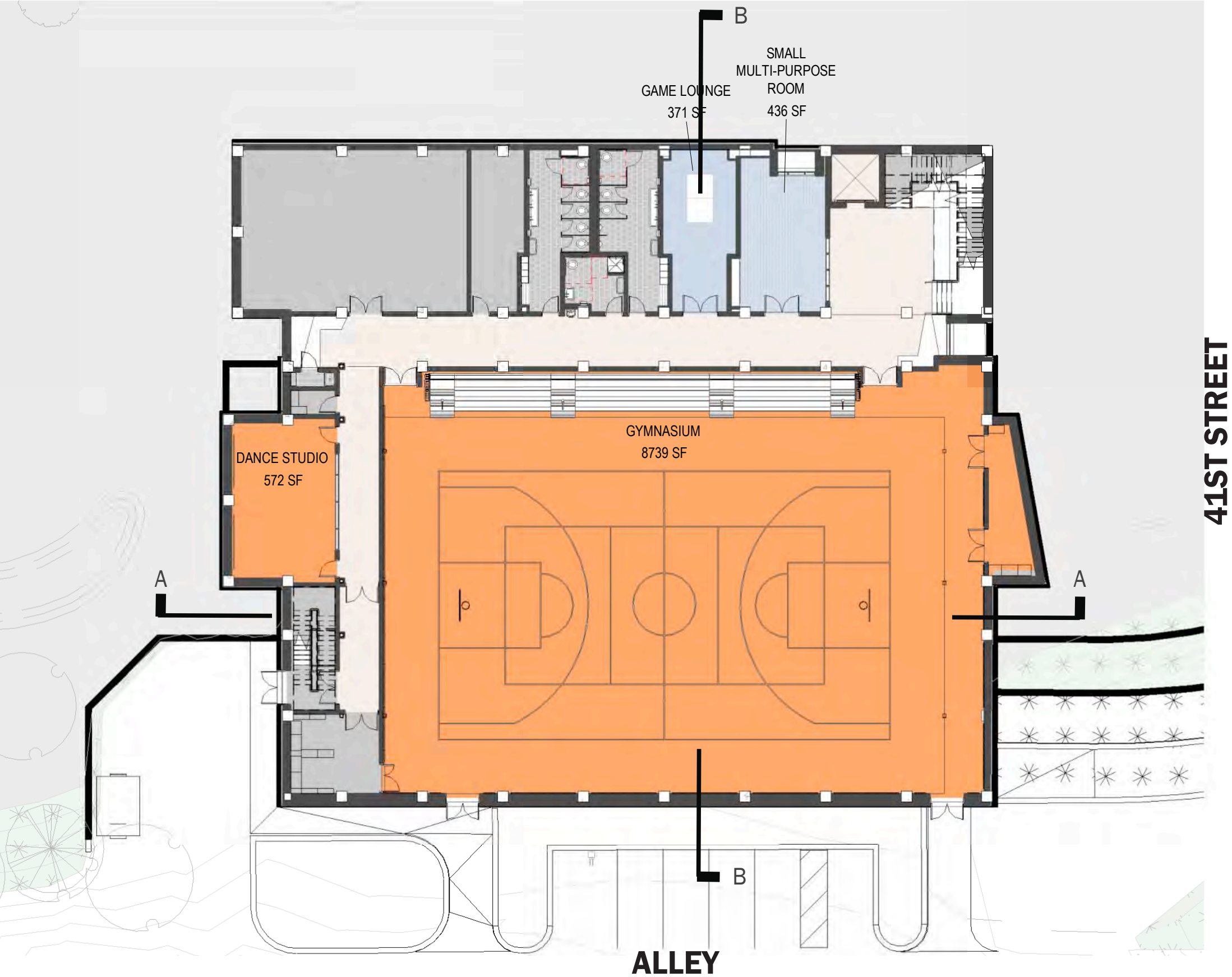
SOUTH ELEVATION 1/16" = 1' - 0"



WEST ELEVATION 1/16" = 1' - 0"



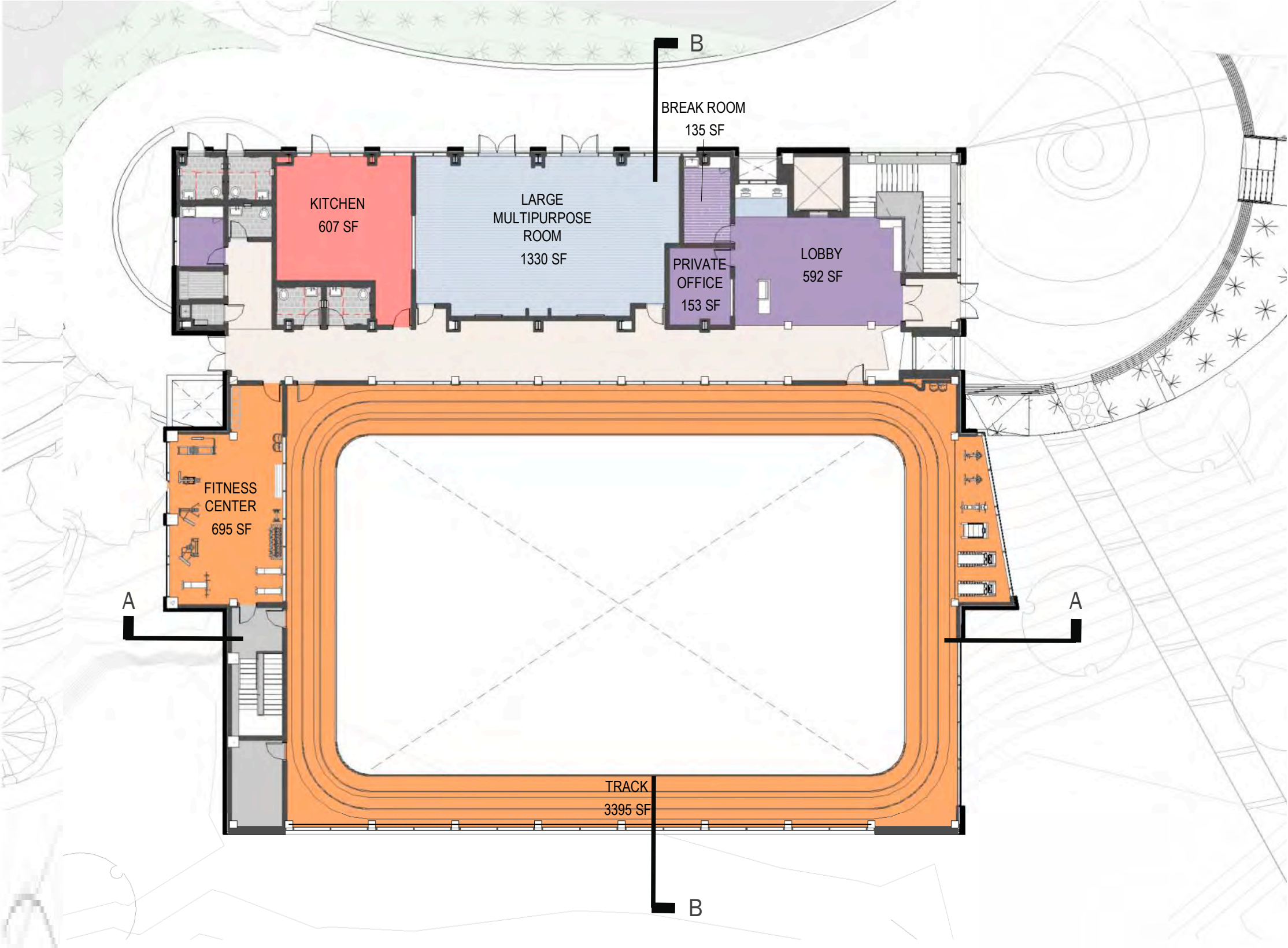
Proposed First Floor Plan



1" = 20 - 0"



Proposed Second Floor Plan



41ST STREET

DEPARTMENT

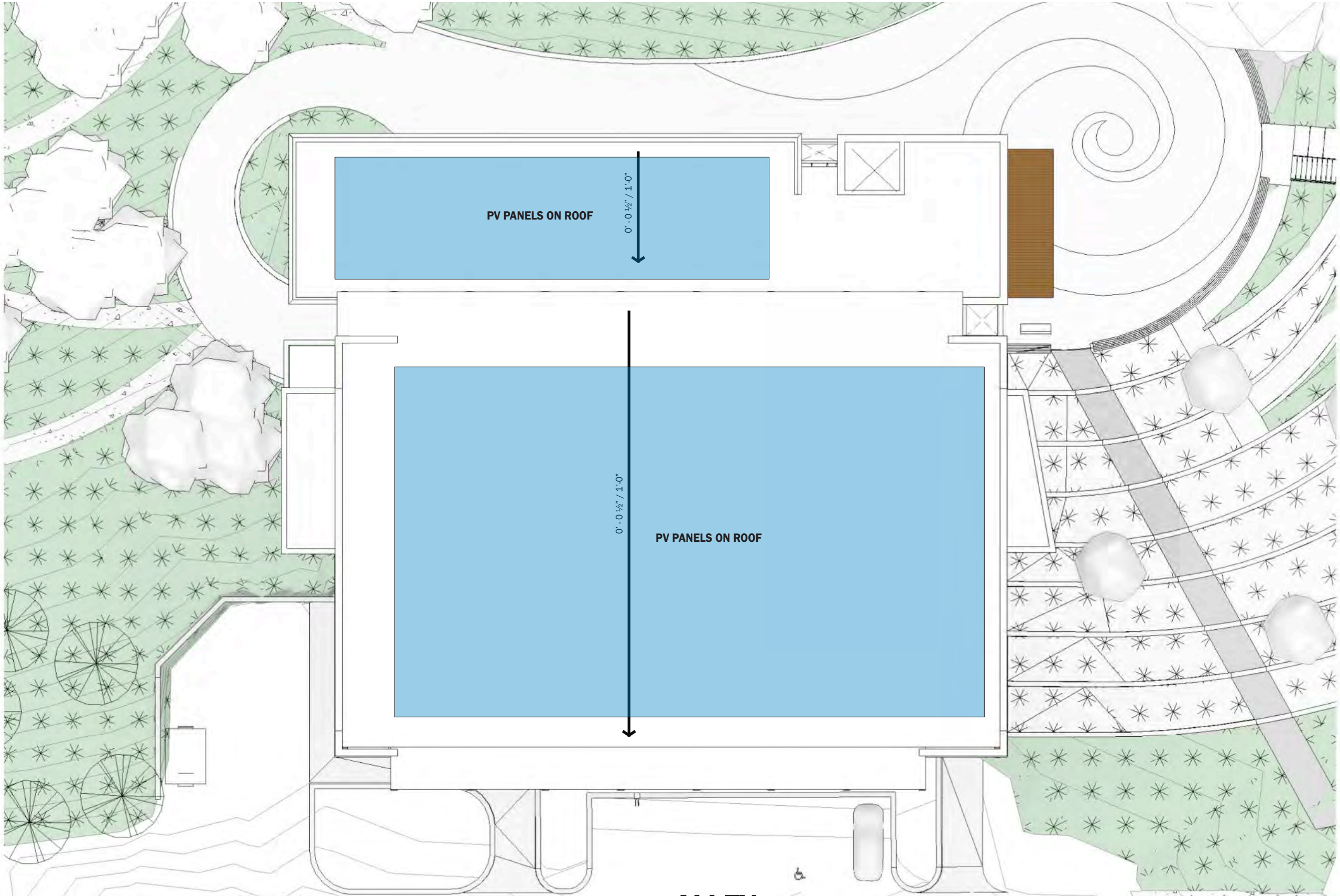
- Admin
- Building Services
- Circulation
- Fitness
- Kitchen
- Learning

1" = 20'-0"



ALLEY

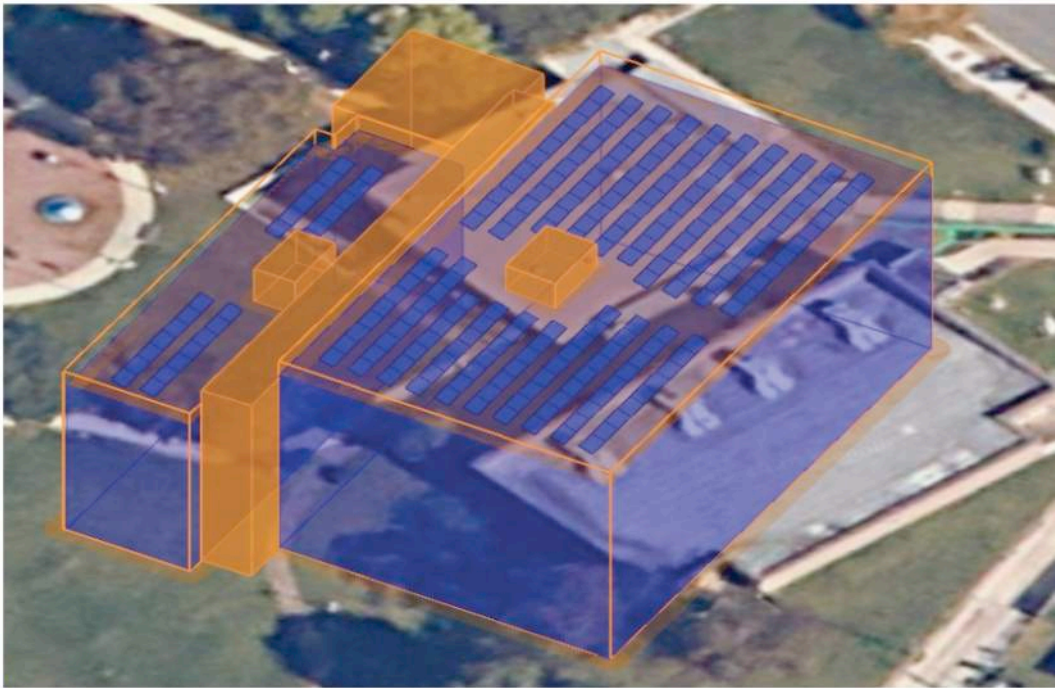
Proposed Roof Plan



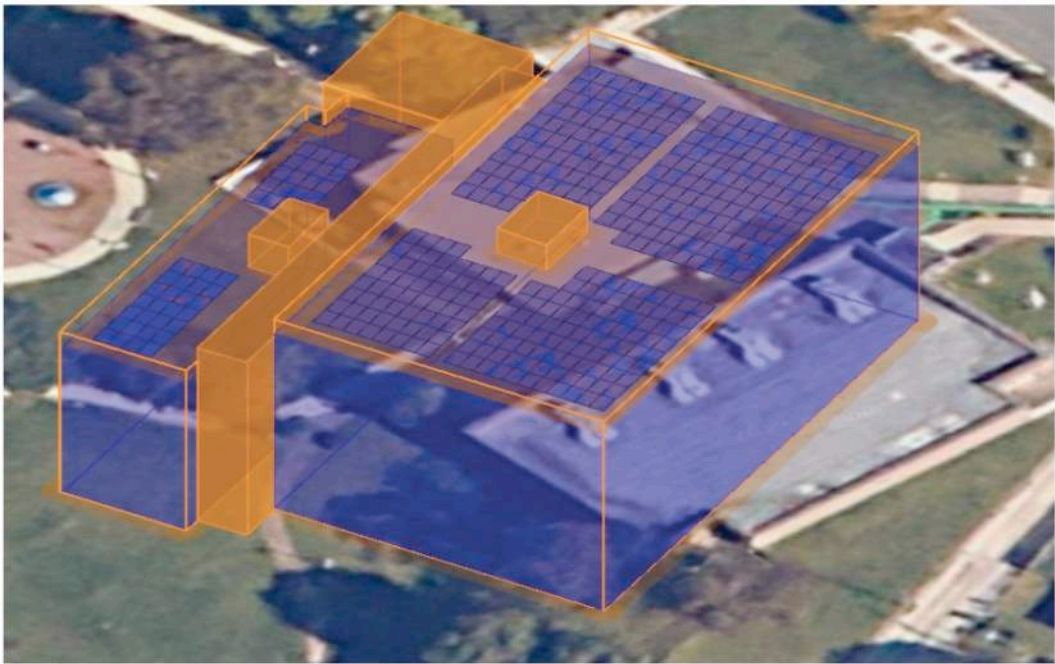
1" = 20 - 0"



Roof Mounted Solar Design



SOLAR SCHEME #1

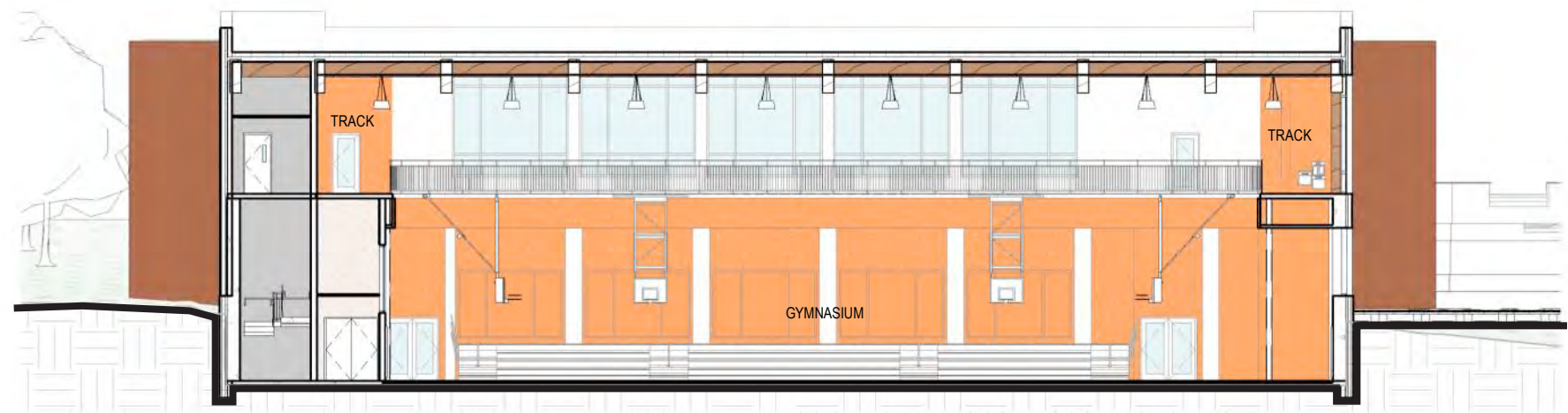


SOLAR SCHEME #2

Solar Photovoltaics:
Concept designs have been evaluated for potential PV panel installation and renewable energy generation. The proposed design has potential to offset 100% of energy use through rooftop mounted solar. More information is needed on the rooftop design including any green roof, amenity space, penthouse, and rooftop mechanical equipment to more accurately estimate renewable energy generation potential. DGS will be responsible for installing photovoltaic systems following the substantial completion of the building.

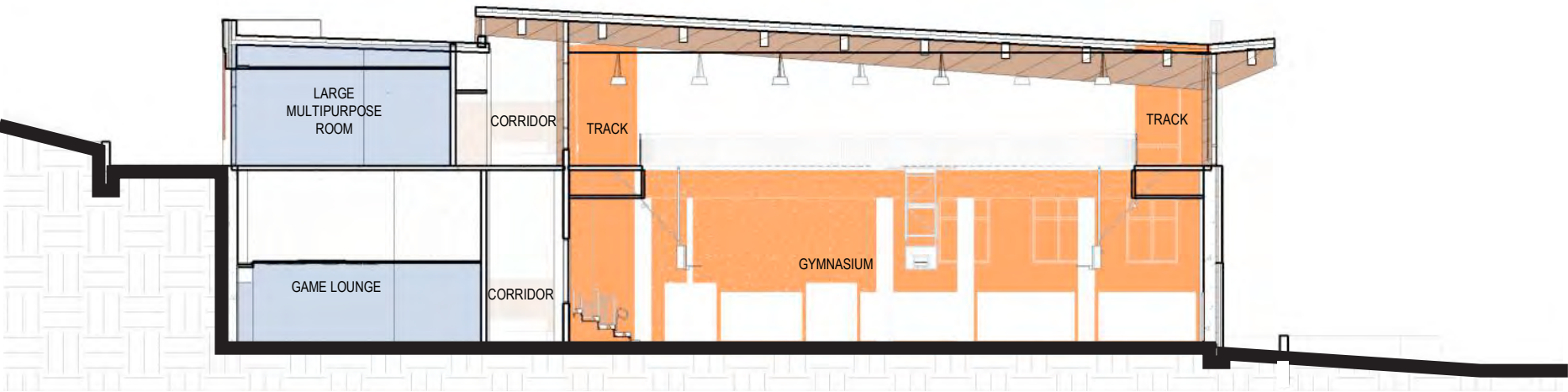
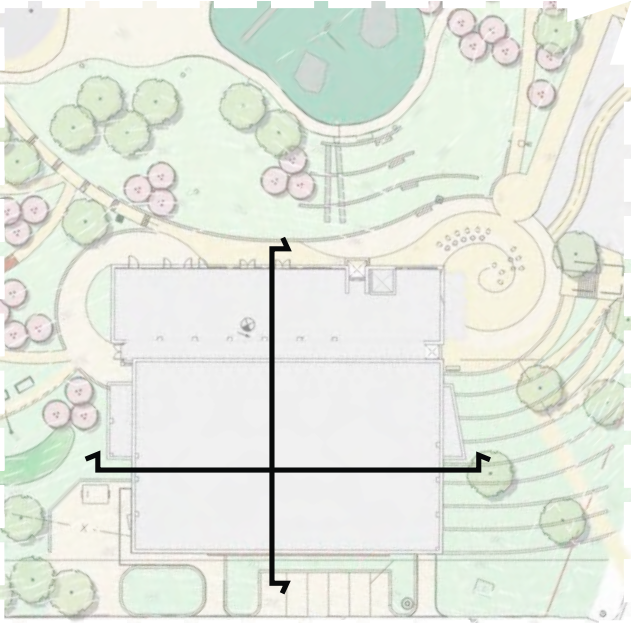
Design Scheme	Description	Design Capacity (kW)	Annual Energy		Current Design Offset (%/yr)
			(kBtu/sf-yr)	(MWh)	
1	Traditional horizontal-oriented modules; 15° tilt, <u>3.5'</u> row spacing	77.1	13.2	110.3	57%
2	Flush-mounted; no row spacing	146.2	23.2	193.6	100%
Design assumes the following: <ul style="list-style-type: none">• Sunpower SPR-X22-360-COM (or similar)• SolarEdge SE** Inverter (sized at ≥1.15 DC/AC)• SolarEdge P8** Optimization (1 per module)• 4' setback					

Building Sections



41ST ST

BUILDING SECTION A 1" = 20 - 0"



ALLEY

BUILDING SECTION B 1" = 20 - 0"

Exterior Renderings



Proposed entrance design for the new community center facility



Proposed main entrance design



Proposed entrance design for the new community center facility



Proposed rear entrance

Create an Accessible & Welcoming Entry Plaza



EXISTING PROMENADE



PROPOSED PROMENADE



Site Relationships

CFA STAFF COMMENT

During the previous CFA staff meeting, a question was raised regarding the height of the new community center as compared to its surrounding residential buildings.

As discussed, while the community is used to a tall blank gym wall towering over the alley way and the neighboring backyards, the design team has an obligation to address the relationship purposefully.

After the CFA Staff review the design team updated the alley facade by lowering the roof, removing the parapet, and breaking up the massing with a purposeful rhythm.

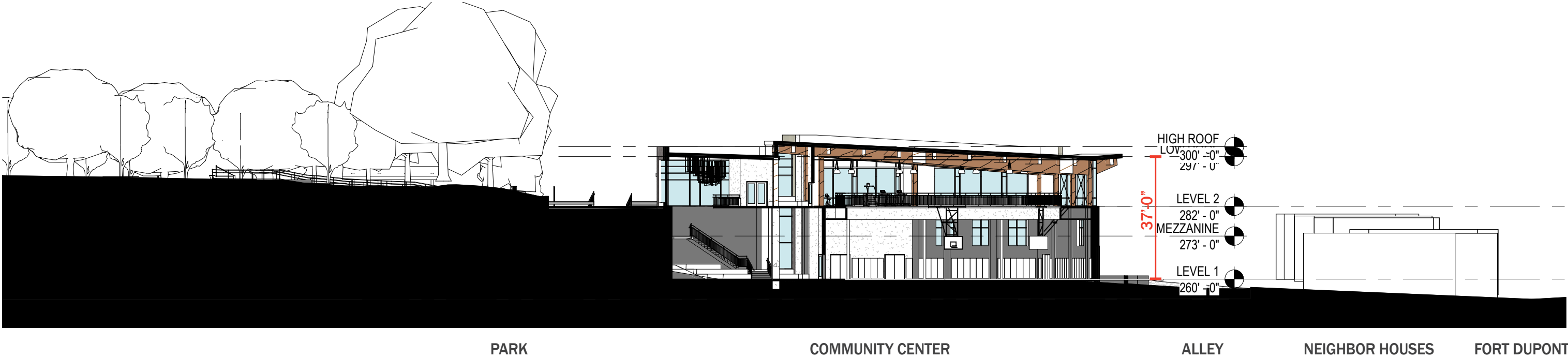
When presented to the community,



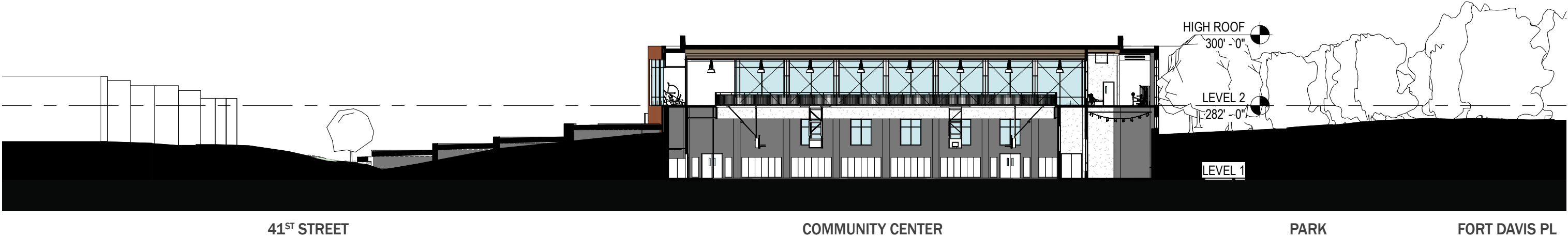
View from 41st Street into the Alley



Site Sections



SITE SECTION NORTH-SOUTH 1" = 30 - 0"



SITE SECTION EAST-WEST 1" = 30 - 0"



4. INTERIOR DESIGN

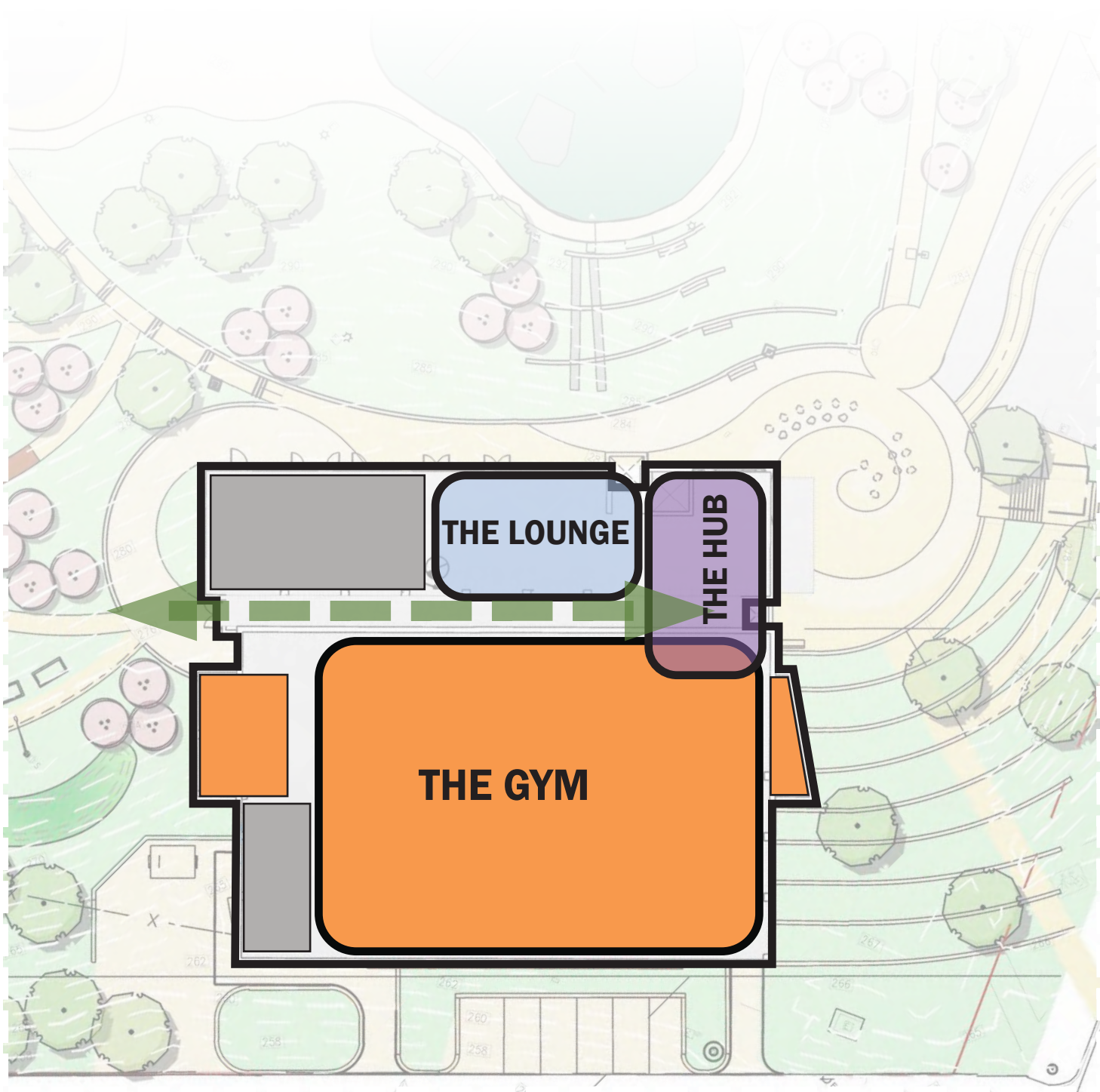
Design Principles

The development of the interior design draws from the design principles established in the concept phase. In this chapter, the team presents explorations around a few of these principles in what we feel will be some of the signature spaces within the new design of the community center.

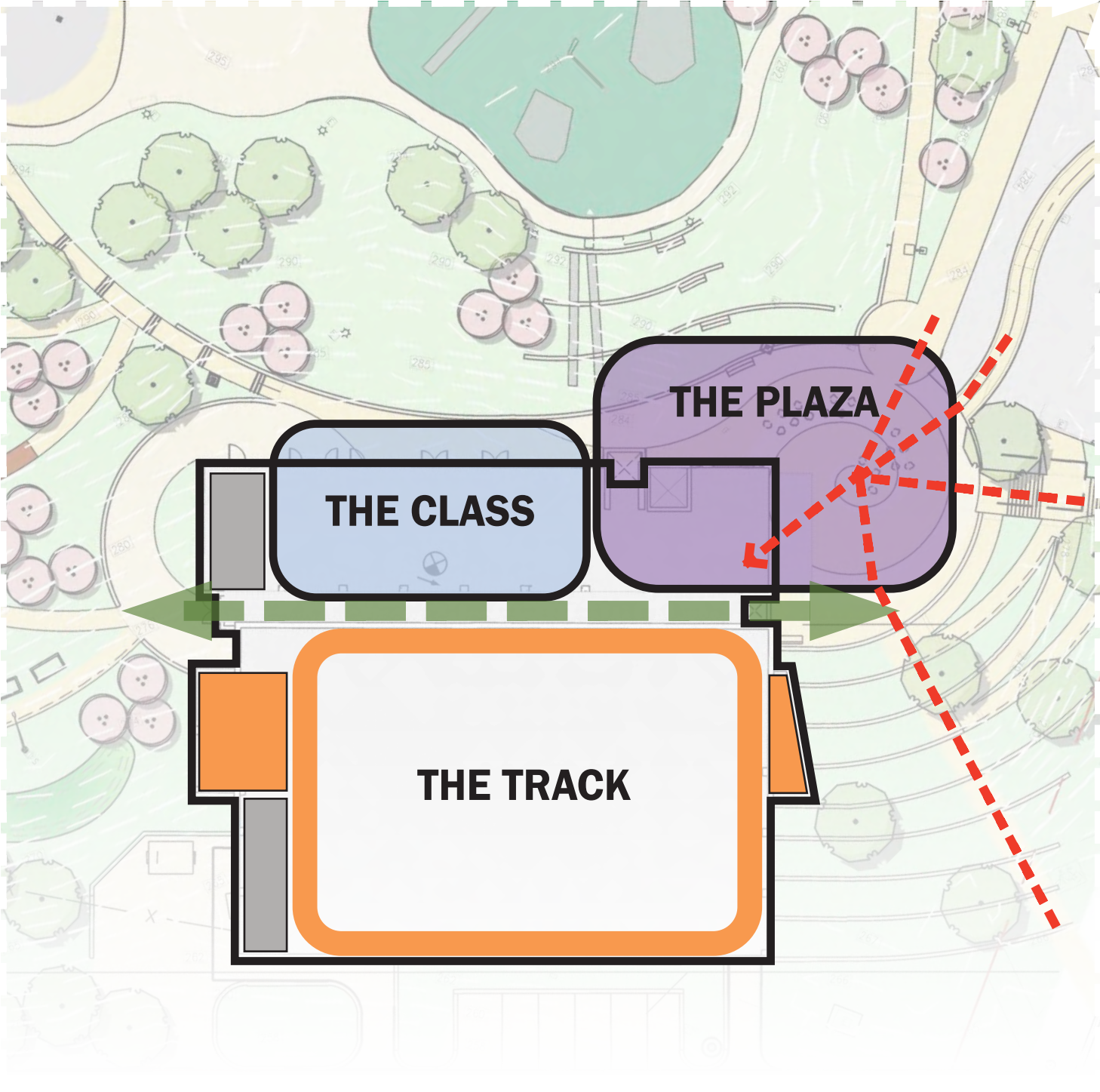


- 1** To design multi-functional spaces that expand the possibilities for community use and engagement
- 2** To visually and/or physically connect the interiors with exterior elements and views
- 3** To integrate efficient and effective environmental systems, control acoustics, and maximize daylight
- 4** To create a layout that avoids sprawl, but instead encourages connections that feel seamless
- 5** To create space and opportunity to showcase public and community artwork
- 6** To activate secondary areas throughout the building to serve as “hubs” that encourage positive interactions

Program Diagram



FIRST FLOOR PLAN (LOWER LEVEL)

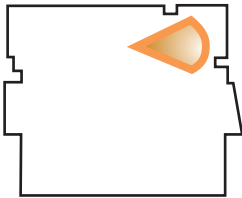


SECOND FLOOR PLAN (HIGHER LEVEL)

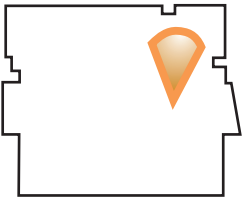
Interior Renderings



View from the 2nd Floor Lobby Entry



View from the 2nd Floor Lobby, looking into the elevator



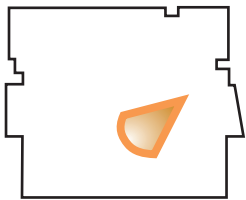
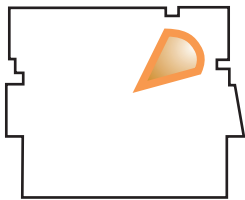
Interior Renderings



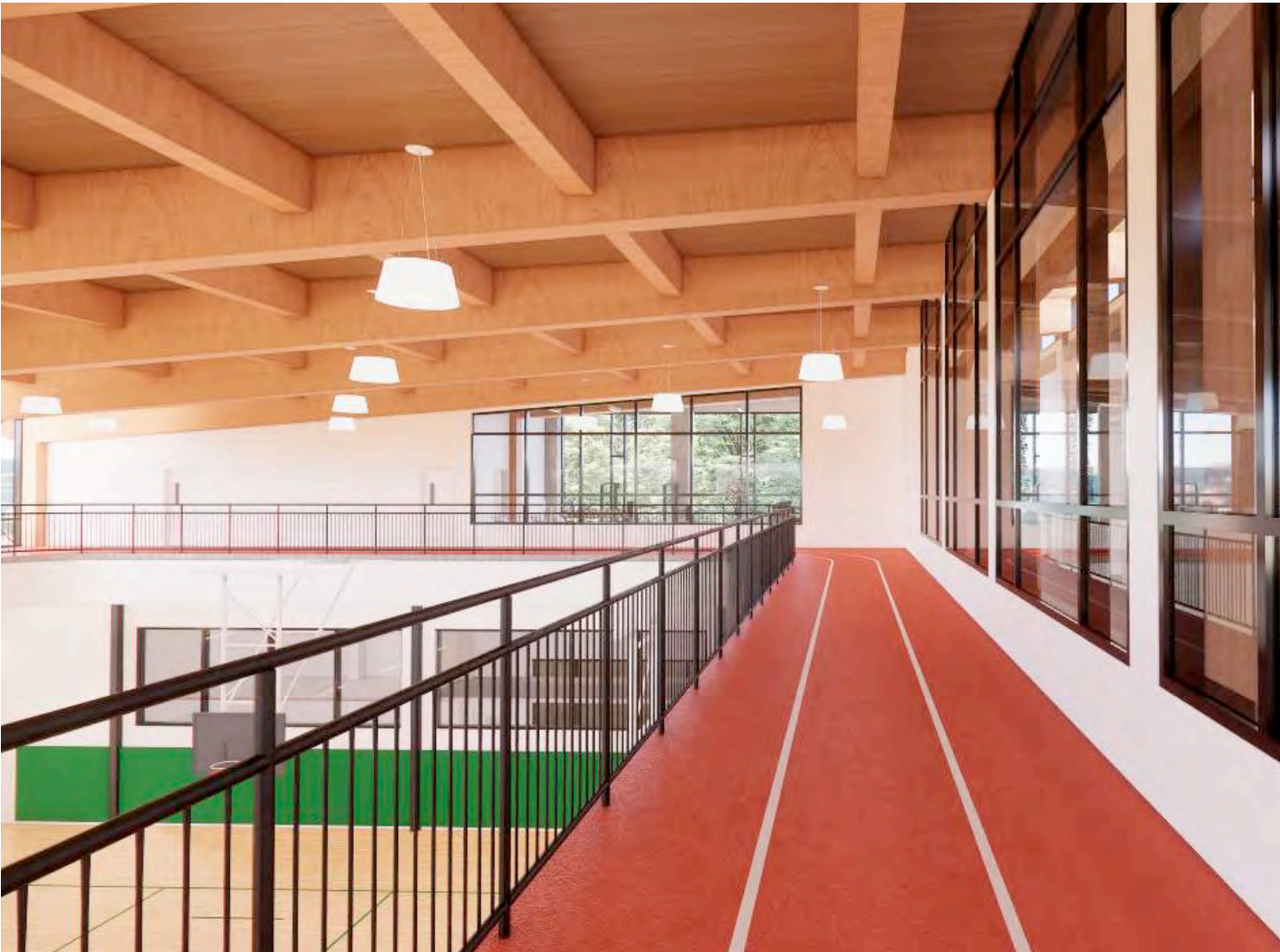
View of First Floor Lightwell & a “Hub”



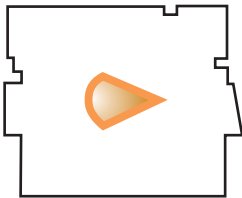
View of the Gymnasium



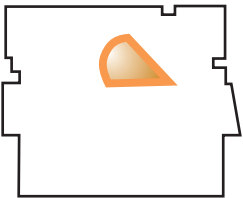
Interior Renderings



View of the Track, looking into the Fitness Center



View from the 2nd Floor Corridor



DISCUSSION

