

Team #2021 - 1920

The Spine

Kansas City, Missouri

Design and Development Plan

The Spine is a new development that is expanding Kansas City's downtown core while being **aware**, **ambitious**, and **accessible**. The Greater Downtown area is expected to grow by more than 9000 residents in the next 10 years. The Spine will support this increased population with the addition of 3230 residents and 1250 jobs through the project's 1380 residential units and 193,328 square feet of commercial and office space.

Aware

A linear park running through the development encourages pedestrian and cyclist movement. The development will enhance KCMO's rich history in music and culture through outdoor art installations and *busking spots*, highlighting local talent. The Spine will have ample space to host festivals, celebrating Kansas City's unique food and music scene in a beautiful outdoor environment.

The new KCMO Arts and Culture Hub will provide creative and social opportunities as the new home of the Kansas City Indian Center, and by founding the Black History Museum of Kansas City, in partnership with the Black Archives of Mid-America in Kansas City. Visual and musical artists will develop their skills at the Hallmark Coworking Center for the Visual Arts and the Charlie Parker Musical Rehearsal and Performance Space.

Ambitious

Climate change presents a global existential threat, and The Spine responds with the ambitious goal of not just reducing our environmental impact, but providing benefits as well.

The development has the ambitious goal of meeting the 2030 living building challenge by tapping into municipal district heating. This will also help us achieve LEED neighborhood development certification. The Spine Linear Park will incorporate urban agriculture and local stormwater management to both reduce the development's impact on the larger city and improve the lives of those who live, work, and play in the development. The Spine will plan for the future by incorporating modular office and residential design, allowing building owners to adjust spaces to respond to neighborhood demands in the coming decades.

Accessible

The Spine is more than a good investment - it is accessible for everyone. That's why 40% of our residential units will be affordable, with a rent to own program in partnership with Liberty Bank. The Spine will also be home to State Tech College of Missouri's new Kansas City Health Sciences campus, providing high quality education for better employability. The health sciences division will tap into Hospital Hill's existing academic medical network, training future medical workers and advancing the health sciences industry through biotech research space within the development. The walkable, transit oriented neighborhood will encourage healthy living, while reducing reliance on automobiles. Existing surface parking has been replaced with underground lots, accounting for additional demand due to increased density.

The Spine will provide a wide range of benefits for Kansas City through design that is aware, ambitious and accessible to all. It will improve the lives of those who currently call the area home, while inspiring others to grow the community.

Financial Plan

Applying creative financial strategies to create great public spaces, environmental innovations, education opportunities and affordable housing - The Spine will encourage development in downtown Kansas City. The Spine improves the financial resilience of the City by partnering with Liberty Bank, securing public subsidies for State Tech, and other institutions.

The project will be developed in two phases (1A,1B and 2) over ten years, with a total development cost of \$380 Million. The demolition costs are front-loaded within each phase. Infrastructure costs will be front-loaded in the first two years of each phase of development.

A joint venture between KansasLine Properties and the developer will contribute initial equity to Phase 1A of the development at 6.5% interest rate on a 10 year term. The partnership will invest \$45 million in private infrastructure and public spaces to connect with the surrounding communities and enhance the experience of visitors. Once the loan payment is over, the equity partners will exit.

Phase I will be completed over six years. It comprises two divisions: mixed-use and high-density development (1A) in the first three years, securing a net income of \$100 million. The remaining three years include mid rise rental apartments and affordable housing developments (1B). The Spine linear park and neighboring rental apartments will be developed in Phase 1B, securing \$52 million in net income. Phase 2 focuses on creating mixed use development and community spaces, such as the KCMO Arts and Culture Hub (Building 10). The Spine infrastructure development will cost \$13 million.

The development includes 143,000 square feet of green roofs, environmental installations and LEED certification for offices, along with market for sale residential development (condos). PACE financing (Property Assessed Clean Energy) supports the financing of energy efficient improvements in residential and commercial developments. The project aims to fulfill PACE criteria, acquiring \$160 million in financing. Under city ownership, The Spine aims to be a sustainable development by replacing Holmes Street from 9th Street to 12th Street with a linear park that includes zones to learn, play, and chill. The proposed walkable approach of the project seeks to connect the city through mass transit options including new streetcars on 9th and 12th Streets, supported through Tax Increment Financing.

The Spine includes State Tech College of Missouri's new Health Sciences Campus, providing opportunities through job creation and a daycare facility within the Academic building. The new campus is financed through a Tax Increment Financing Works program to promote government educational institutions. The Spine will include 40% affordable rental housing (202 units), enabling the Low-Income Housing Tax Credit.

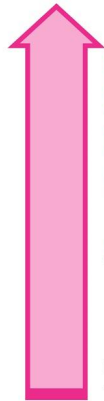
The construction is partly financed at 0% down-payment from PACE (MSED), financing at a loan-to-cost interest rate of 5% for a 10 year term. The rest of the development is financed through Liberty Bank, one of America's five largest African American owned financial institutions at a 4% interest rate on a 10 year term. The project will focus on promoting black owned businesses, reflecting the diversity of Kansas City in an equitable and inclusive approach.

By partnering with local institutions, The Spine will expand the art, health, and leisure industries of Kansas City while providing a welcoming environment to call home.

A Livable Community



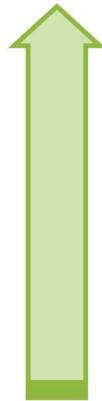
Aware, Ambitious and Accessible



CELEBRATE
UNTOLD HISTORIES
ENCOURAGE
CREATIVITY

AWARE

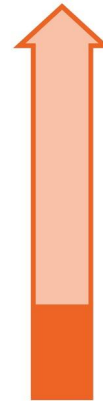
BIPOC voices are underrepresented in the arts



MANAGE
WATER
DEVELOP
SUSTAINABILITY

AMBITIOUS

Only 5.2% of Kansas City's surface is green space.

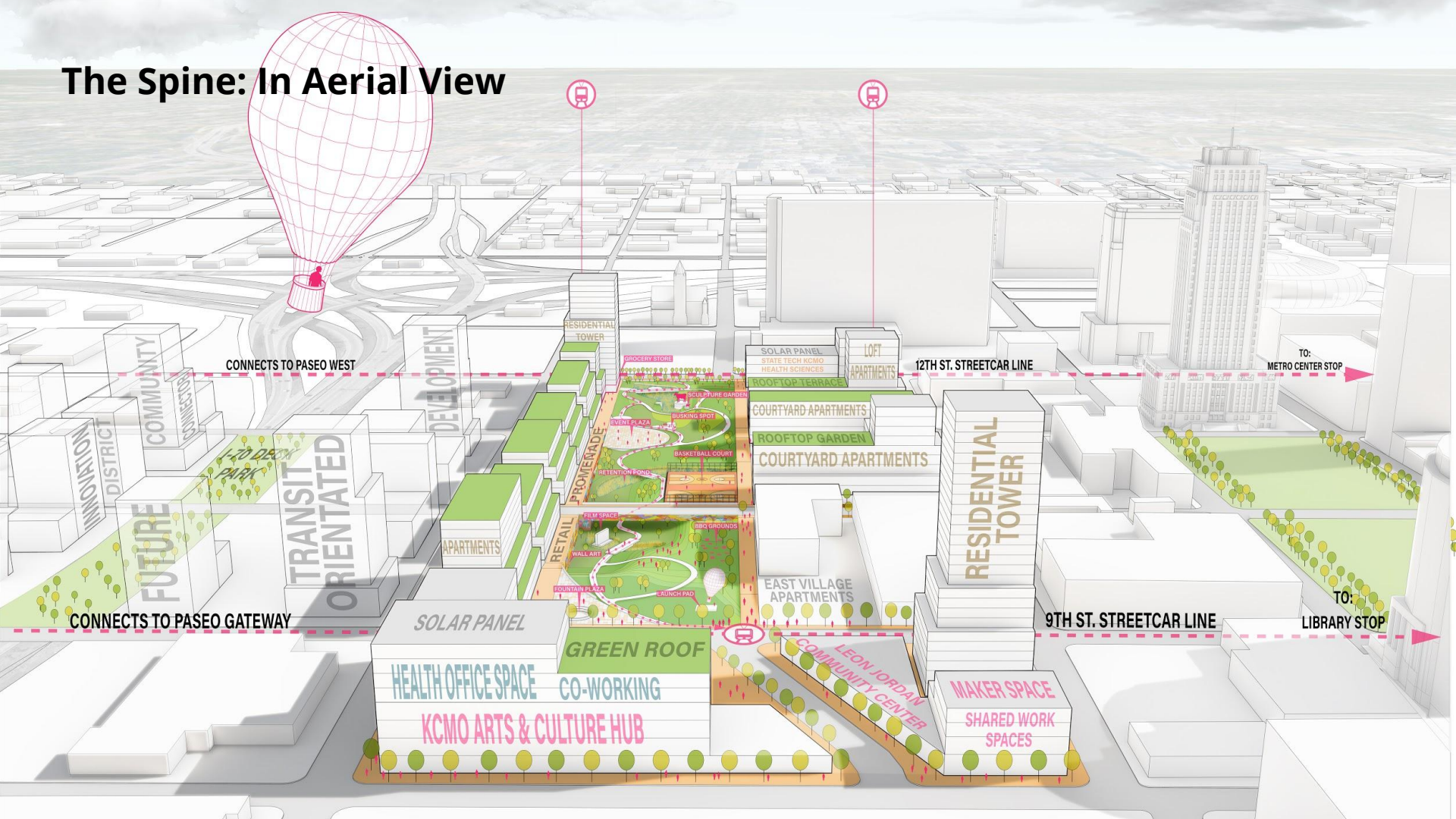


MAKE
LIVING
LEARNING
EARNING

ACCESSIBLE

Under 20% of BIPOC people have a post-secondary education

The Spine: In Aerial View



CONNECTS TO PASEO WEST

12TH ST. STREETCAR LINE

TO: METRO CENTER STOP

CONNECTS TO PASEO GATEWAY

9TH ST. STREETCAR LINE

TO: LIBRARY STOP

TRANSIT ORIENTATED

RESIDENTIAL TOWER

SOLAR PANEL
HEALTH OFFICE SPACE
CO-WORKING
KCMO ARTS & CULTURE HUB

GREEN ROOF
EAST VILLAGE APARTMENTS
LEON JORDAN COMMUNITY CENTER
MAKER SPACE
SHARED WORK SPACES

RESIDENTIAL TOWER

SOLAR PANEL
STATE TECH KCMO
HEALTH SCIENCES

LOFT APARTMENTS

ROOFTOP TERRACE
COURTYARD APARTMENTS
ROOFTOP GARDEN
COURTYARD APARTMENTS

APARTMENTS

GREEN ROOF

CO-WORKING

KCMO ARTS & CULTURE HUB

EAST VILLAGE APARTMENTS

LEON JORDAN COMMUNITY CENTER

MAKER SPACE
SHARED WORK SPACES

GROCERY STORE

SCULPTURE GARDEN

BIKING SPOT

BIKING SPOT

BASKETBALL COURT

RETENTION POND

FILM SPACE

WALL ART

SOLAR PANEL PLAZA

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BIPO GROUND

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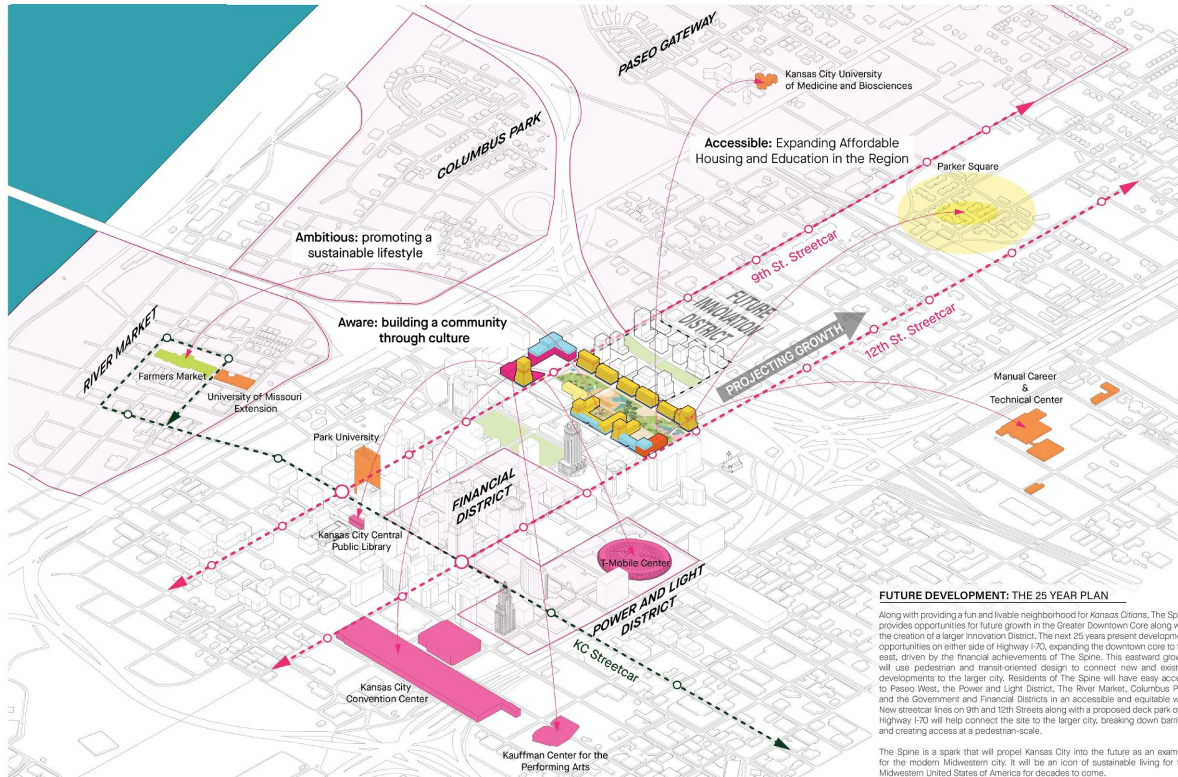
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Connecting to the City

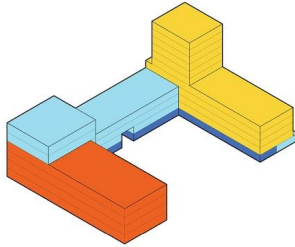


The Spine Linear Park, Looking North



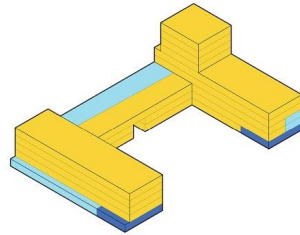
Phase 1: Development Plan

PHASE I: ESTABLISHING THE SPINE



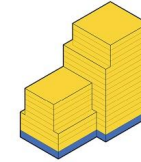
01 HEALTH TECHNOLOGY BUILDING

Residential	<div style="width: 30%;"></div>	104,564 sqf
Retail	<div style="width: 5%;"></div>	23,954 sqf
Bio-Tech Office	<div style="width: 25%;"></div>	71,791 sqf
Health School	<div style="width: 40%;"></div>	150,177 sqf



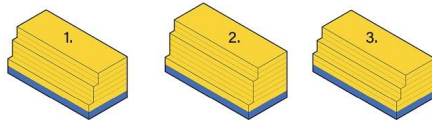
02 GOLDEN FIELD APARTMENTS

Residential	<div style="width: 80%;"></div>	200,765 sqf
Retail	<div style="width: 5%;"></div>	14,822 sqf
Office	<div style="width: 15%;"></div>	81,535 sqf



03 CHARLOTTE ST. TOWER

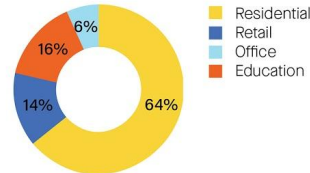
Residential	<div style="width: 70%;"></div>	185,000 sqf
Retail	<div style="width: 5%;"></div>	6604 sqf
Organic Grocery	<div style="width: 25%;"></div>	10,000 sqf



04 LIBERTY APARTMENTS

Residential	<div style="width: 85%;"></div>	198,607 sqf
Retail	<div style="width: 15%;"></div>	43,089 sqf

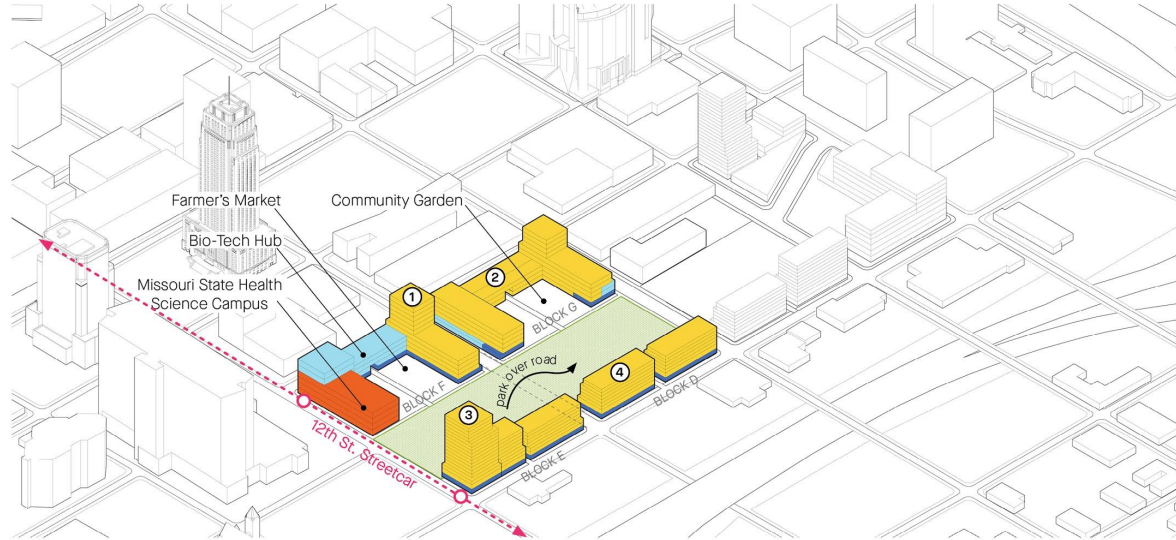
PROGRAM DISTRIBUTION CHART



PHASE I: BY THE NUMBERS

Time frame:	6 years
Market Rate Units:	857 units
Affordable Units:	202 units
Units per acre:	97 units/acre
Parking Spaces:	2401 spots
EV Charging Stations:	120 spots
Estimated Population:	2480 residents
(2.35 persons/dwelling unit)	

Phase 1: Development Plan



PHASE I: THE BIG PICTURE

Cost	Amount	Funding	Amount
Hard Cost	\$180,891,283	Equity	\$53,160,507
Soft Cost	\$45,222,821	PACE Financing	\$96,435,722
Infrastructure	\$24,562,620	Liberty Bank Loan	\$78,354,024
		LIHTC Equity	\$0
		TIF Works	\$3,699,090
		TIF Financing	\$6,565,128
Total:	\$250,676,724	Total:	\$238,214,471

DISTINCT FEATURES

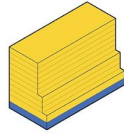
Aware: 12th St streetcar access, sculpture garden, busking zones

Ambitious: water retention ponds, PVC panels, green roofs, community garden, farmer's market, District Energy System provided by the KC Veolia Plant, basement parking with 5% of stalls with EV stations

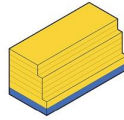
Accessible: Missouri State Health Sciences KC Campus, Bio-Tech Hub, 40% affordable housing

Phase 2: Development Plan

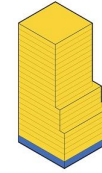
PHASE II: PROJECTING GROWTH



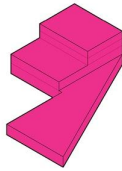
06 FREEDOM APARTMENT
 Residential 131,454 sqf
 Retail 14,171 sqf
part of Phase 1b



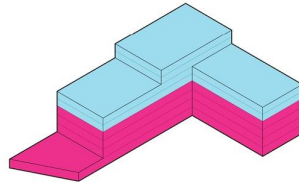
07 MAPLEVIEW RESIDENCE
 Residential 112,915 sqf
 Retail 13,786 sqf
part of Phase 1b



08 CHERRY ST. TOWER
 Residential 171,362 sqf
 Organic Grocery 5000 sqf



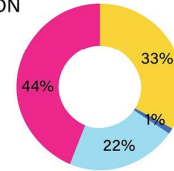
09 LEON M. JORDAN COMMUNITY CENTER
 Cultural 54,897 sqf



10 KCMO ARTS AND CULTURE HUB
 Cultural 172,229 sqf
 Office 112,827 sqf

PROGRAM DISTRIBUTION CHART

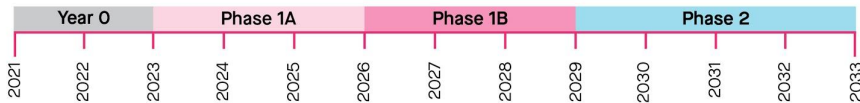
- Residential
- Retail
- Office
- Community



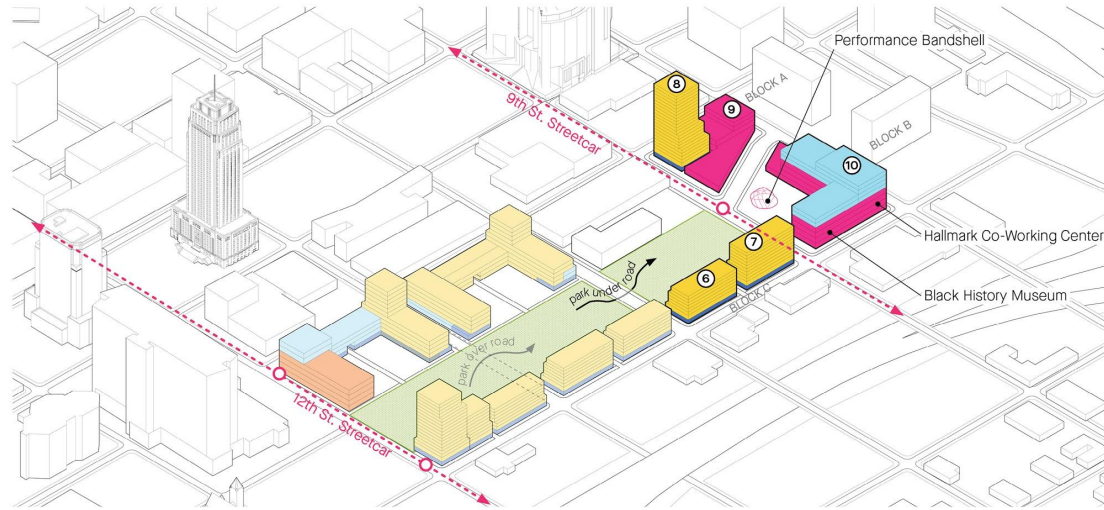
PHASE 2: BY THE NUMBERS

Time frame: 4 years
 Market Rate Units: 236 units
 Affordable Units: None
 Units per acre: 66 units/acre
 Parking Spaces: 1103 spots
 EV Charging Stations: 55 spots
 Estimated Population: 550 residents
 (2.35 persons/dwelling unit)

DEVELOPMENT TIMELINE: 10 YEARS



Phase 2: Development Plan



PHASE II: THE BIG PICTURE

Cost	Amount	Funding	Amount
Hard Cost	\$87,039,956	Equity	\$0
Soft Cost	\$21,759,989	PACE Financing	\$64,290,481
Infrastructure	\$3,209,917	Liberty Bank Loan	\$52,236,016
		LIHTC Equity	\$592,158
		TIF Works	\$2,466,060
		TIF Financing	\$43,767,522
Total:	\$112,009,862	Total:	\$163,352,237

DISTINCT FEATURES

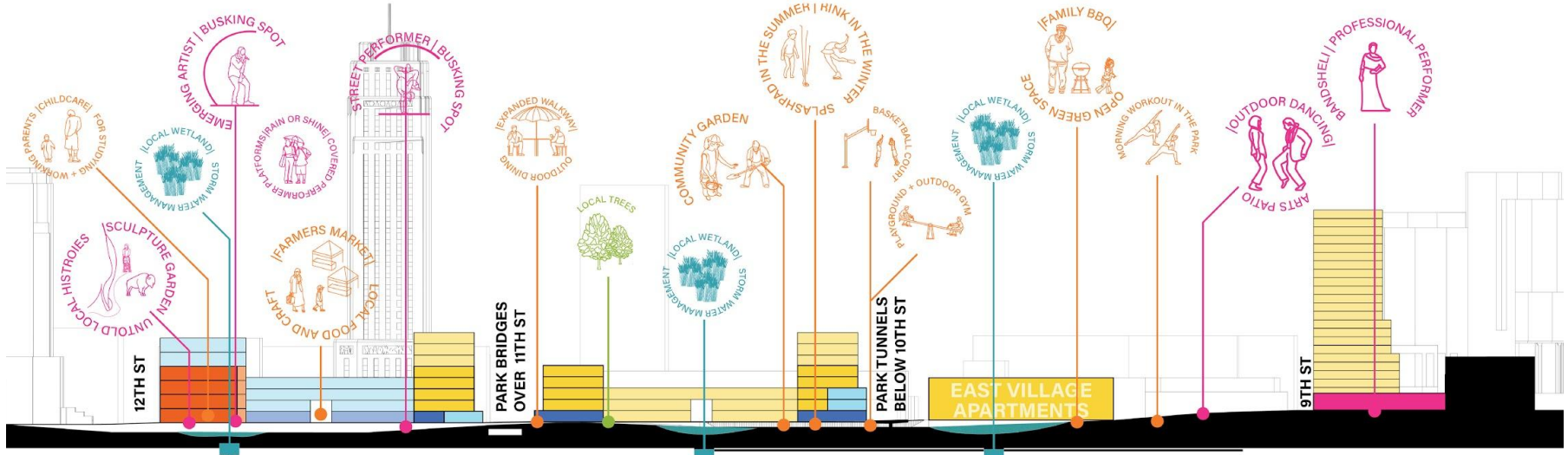
Aware: KCMO Arts and Culture hub which will provide the following amenities:

1. Black History Museum of Kansas City
2. Charlie Parker Rehearsal and Performance Space
3. Hallmark Co-Working Center for Visual Arts
4. Kansas City Indian Center
5. Outdoor performance bandshell

Ambitious: removal of Holmes St. from 12th to 9th St. to promote a pedestrian and cyclist friendly green corridor, water retention ponds, PVC panels, green roofs, basement parking with 5% of stalls with EV stations, District Energy System provided by the KC Veolia Plant

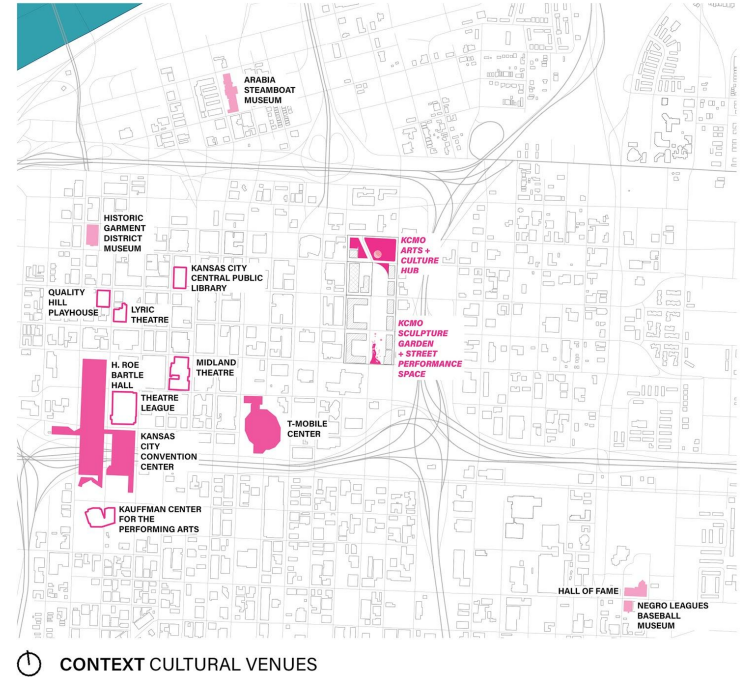
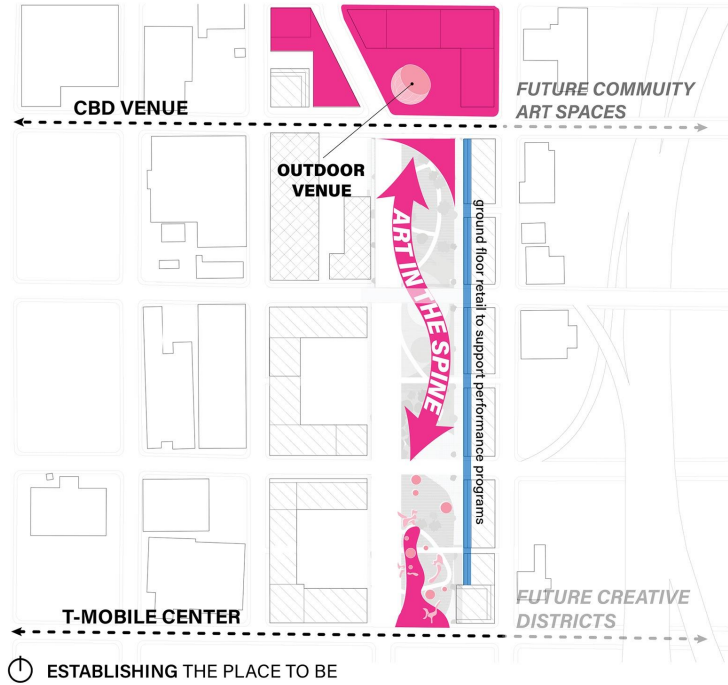
Accessible: 40% affordable housing, Community Center, maker space, community services programs

The Spine: A Lively Neighborhood

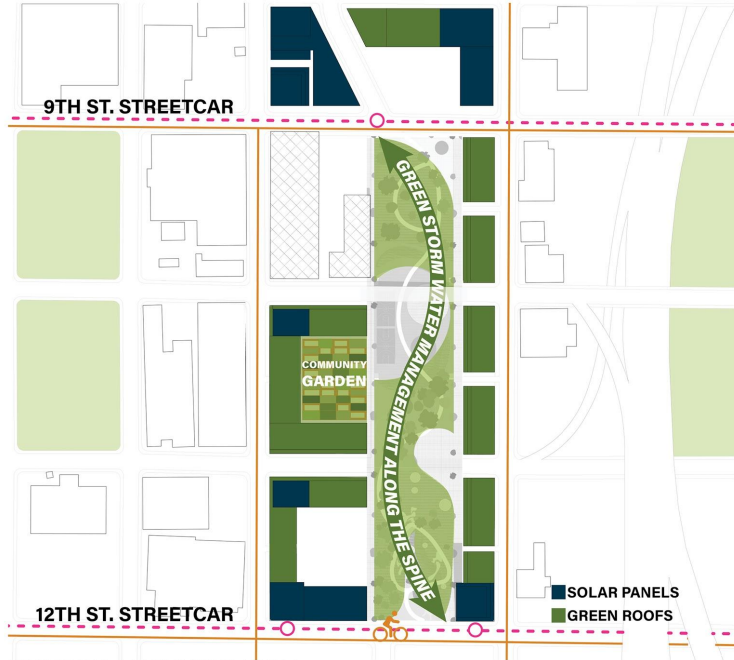


MORNING				JOGGING	BASKETBALL	TAG ON THE PLAYGROUND	PILATES IN THE PARK			
AFTERNOON	LEARN KCMO HISTORY AT THE SCULPTURE GARDEN	LOCAL ROCKER	COV-ERED BUSK-ING	PRIVATE PICNIC	SPLASH PAD		POST LUNCH HOT AIR BALLOON RIDE	LUNCH		CO-WORKING
EVENING				ROMANTIC STROLL	BASKETBALL		CASUAL CATCH BEFORE DINNER	DINNER	OUTDOOR SHOW!	
NIGHT		EVENING FOLKLORE	PLAT-FORM				STAR GAZING	DRINKS		REHEARSAL PERFORMANCE

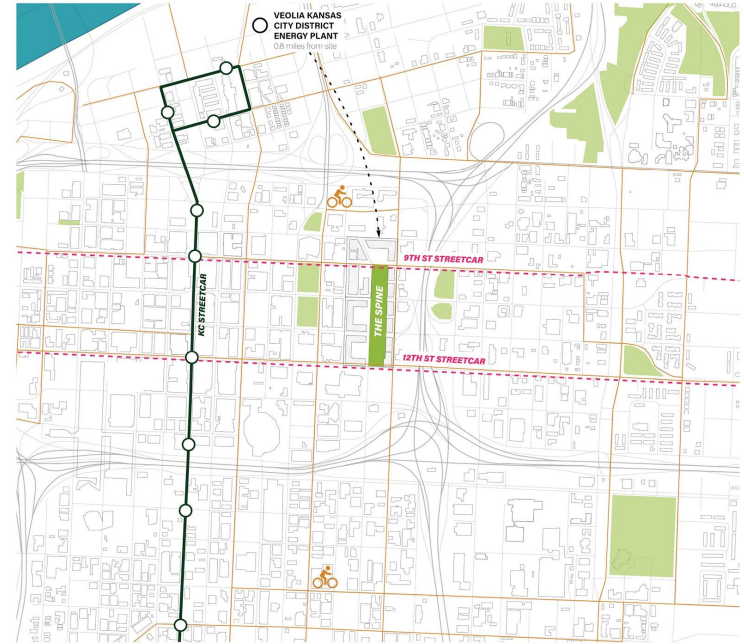
Aware: Creating Culture



Ambitious: Green Living



PROVIDING A SUSTAINABLE LIFE

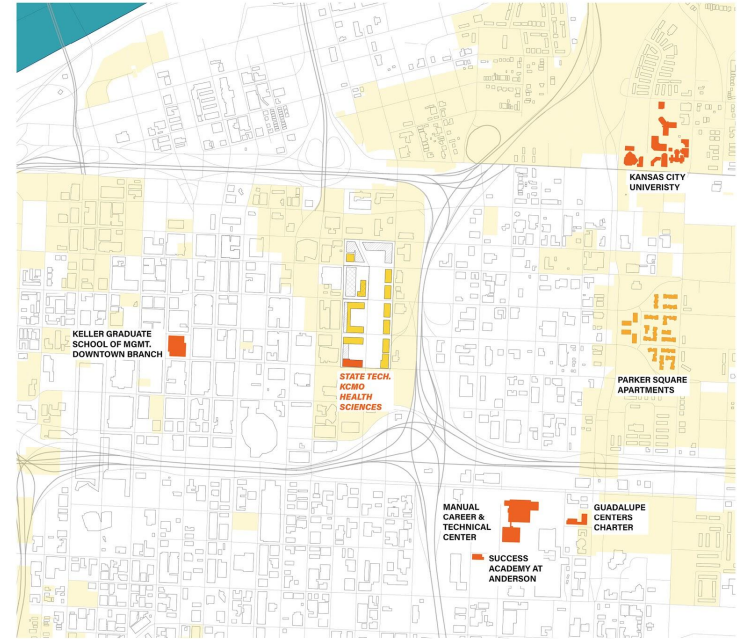


CONTEXT SUSTAINABLE INFRASTRUCTURE

Accessible: Social Equity



HOUSING AND EDUCATION FOR ALL



CONTEXT EDUCATION AND HOUSING

Welcome Home

