



### **Sustainability Commission**

#### **MEETING DATE**

Monday, December 14, 2020 4:30 p.m.

#### **MEETING LOCATION**

Virtual Meeting

### Join Microsoft Teams Meeting

<u>+1 480-498-8745</u> United States, Phoenix (Toll)

Conference ID: 596 204 660#

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
<ol> <li>Public Appearances The Sustainability Commission welcomes public comment for items listed on this agenda. There is a three-minute time limit per citizen.</li> </ol>	Kendon Jung, Commission Chair (4:30 – 4:33 pm)	Information
<ol> <li>Approval of Meeting Minutes The Commission will be asked to review and approve meeting minutes from the November 16, 2020 meeting.</li> </ol>	Kendon Jung, Commission Chair (4:33 – 4:35 pm)	Action
3. Tempe Community Complex Masterplan Staff will provide updates.	Gregg Kent, Principal Civil Engineer (4:35 – 4:50 pm)	Action
<ul><li>4. Green New Deal Super Studio</li><li>ASU staff will provide updates.</li></ul>	Paul Coseo, ASU (4:50 – 5:05 pm)	Information
<ol><li>Transportation Demand Management &amp; Telework Transportation staff will provide updates.</li></ol>	Robert Yabes, Vanessa Spartan, Eric Iwersen (5:05 – 5:30 pm)	Information
<ol><li>6. MAG Bus Rapid Transit Update &amp; Streetcar Extension Study Staff will provide updates.</li></ol>	Eric Iwersen (5:30 – 5:55 pm)	Action
7. Arizonans for Community Choice Guest will provide updates.	Shelly Gordon, (5:55 – 6:10 pm)	Information
8. Climate Action Plan 2021 Update Staff will provide updates.	Braden Kay, Sustainability Director (6:10 – 6:20 pm)	Information
9. Housekeeping Items Sustainability awards submittal deadline is February 17 <sup>th</sup> Approve joint letter with TAVCO; Two meetings in January	Kendon Jung, Commission Chair (6:20 – 6:25 pm)	Action
10. Future Agenda Items  Commission may request future agenda items.	Kendon Jung, Commission Chair (6:25 – 6:30 pm)	Information

According to the Arizona Open Meeting Law, the Sustainability Commission may only discuss matters listed on the agenda. The City of Tempe endeavors to make all public meetings accessible to persons with disabilities. With 48 hours advance notice, special assistance is available at public meetings for sight and/or hearing-impaired persons. Please call 350-2775 (voice) or 350-8400 (TDD) to request an accommodation to participate in a public meeting.



SUSTAINABLITY COMMISSION DECEMBER 14, 2020





# **Project Goals**

Develop a Master Plan – A Road Map for the Future

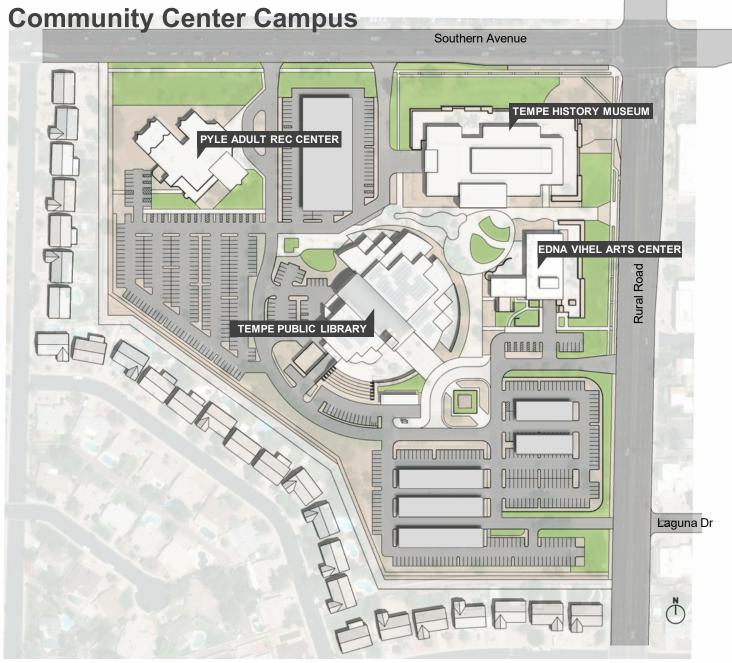
# 1. Consolidate and Locate Human Services Department

- Increase collaboration/synergy within the department to improve services provided
- Facilitate seamless transition of clients between Human Services programs:
  - Kid Zone, Education, Housing, Care 7, Homeless Outreach, Community Supervision, Counseling

# 2. Campus Site Improvements

- Improved Pedestrian Experience
  - Shade, Connectivity, Accessibility, Safety, Visibility, Landscape Improvements, Signage, etc.
- Optimize Use and Functionality of Plazas and Campus Buildings
- Improved Traffic Flow / Access by Multiple Modes of Transportation
- Streetscape Improvements / Enhanced Visibility
- Sustainable Design and Environmental Improvements

# 3. Anticipate Future Needs



### **Existing Site**

- Zoned PCC-1 Planned Commercial Center Neighborhood
- Southwest corner of Southern Ave & Rural Rd
- Four existing buildings on campus:

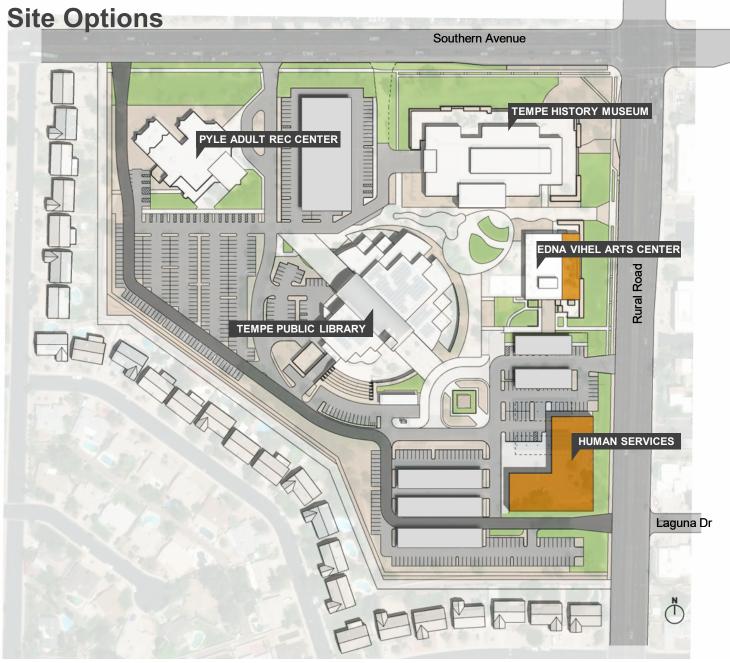
o Tempe Public Library 120,700 SF

o Tempe History Museum 36,500 SF

o Pyle Recreation Center 21,500 SF

o Edna Vihel Arts Center 14,300 SF

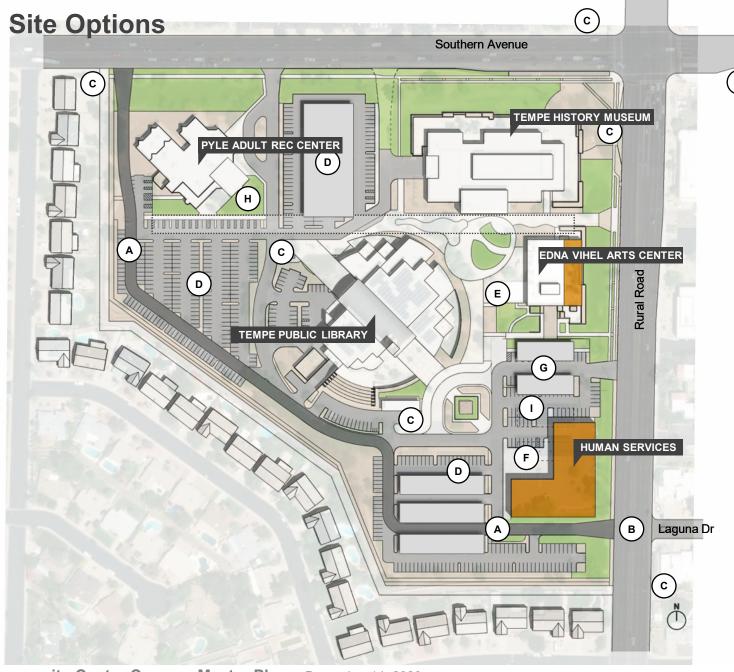
- Parking
  - o 848 Existing parking spaces
  - o 650 Parking spaces required per code



### **OPTION 1**

#### **NEW HUMAN SERVICES FACILITY**

- Two-story, 50,000 square foot building
- Southeast corner of campus
- Adjacent to Rural Road & Laguna Drive
- Parking 755 spaces



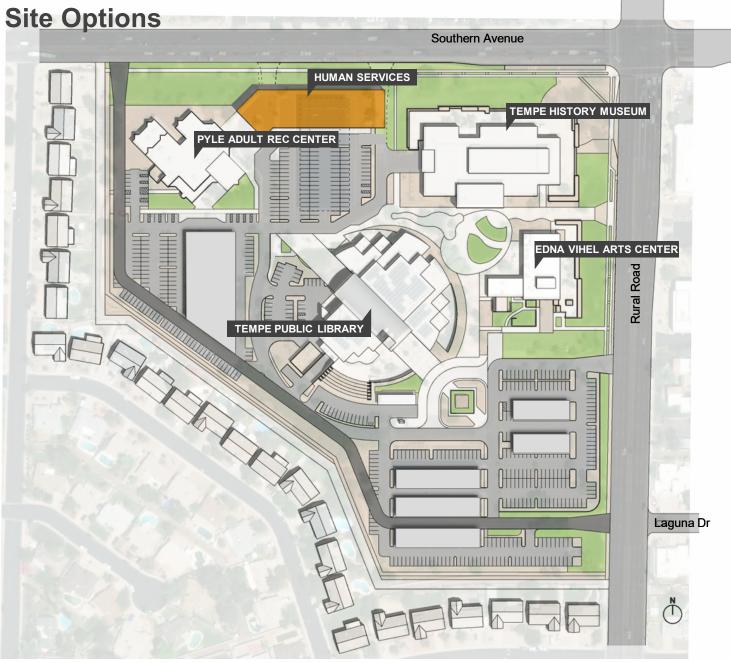
### **OPTION 1**

#### Pros:

- A.) Primary access road along perimeter of campus
  - Brings vehicles to edge of campus / better security
  - Avoids vehicle / pedestrian conflicts
- (B.) Access point at Rural Road signalized in future
- D. Maintains even distribution of parking adjacent to Human Services, Pyle Center and History Museum
- E.) Extended courtyard for larger events
- (F.) Offers privacy for Human Services clients

#### Cons:

- C.) Distance to transit stops
- (I.) Reduced parking spaces near Library and Edna Arts entrances
- (G.) Solar parking canopies relocated
- H.) Pyle Center remains isolated from Arts & Culture facilities



### **OPTION 2**

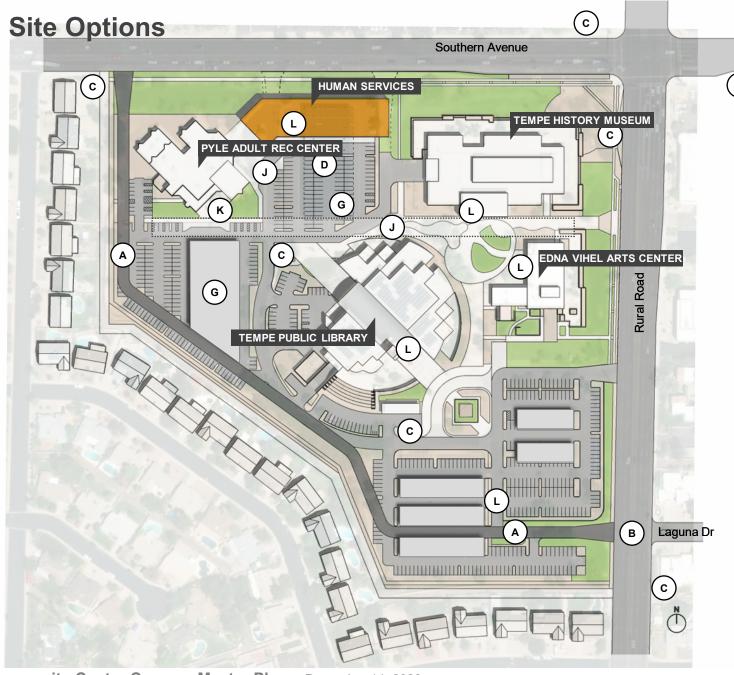
NEW HUMAN SERVICES FACILITY

Two-story, 50,000 square foot building

North edge of campus

Adjacent to Southern Avenue

• Parking - 760 spaces



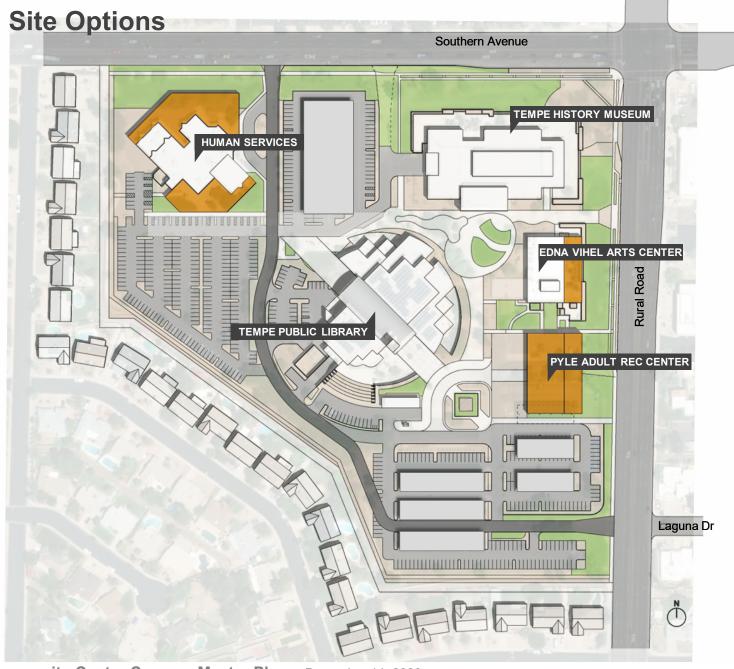
### **OPTION 2**

#### Pros:

- A.) Primary access road along perimeter of campus
  - · Brings vehicles to edge of campus / better security
  - Avoids vehicle / pedestrian conflicts
- (B.) Access point at Rural Road signalized in future
- C.) Proximity to transit stops
- (J.) Enhanced connectivity among the facilities
- (K.) New Pyle Center entry and drop off area for improved safety and better use of parking lot to the south

#### Cons:

- D. Limited parking spaces near History Museum and Human Services buildings
- G.) Large solar parking canopy relocated / event space adjacent to the courtyard is no longer available
- L. Largest parking area at southern side of campus is farthest walk from most building entrances



### **OPTION 3**

RELOCATE HUMAN SERVICES

One-story, 30,000 square foot addition to Pyle Rec Center

North edge of campus

Adjacent to Southern Avenue

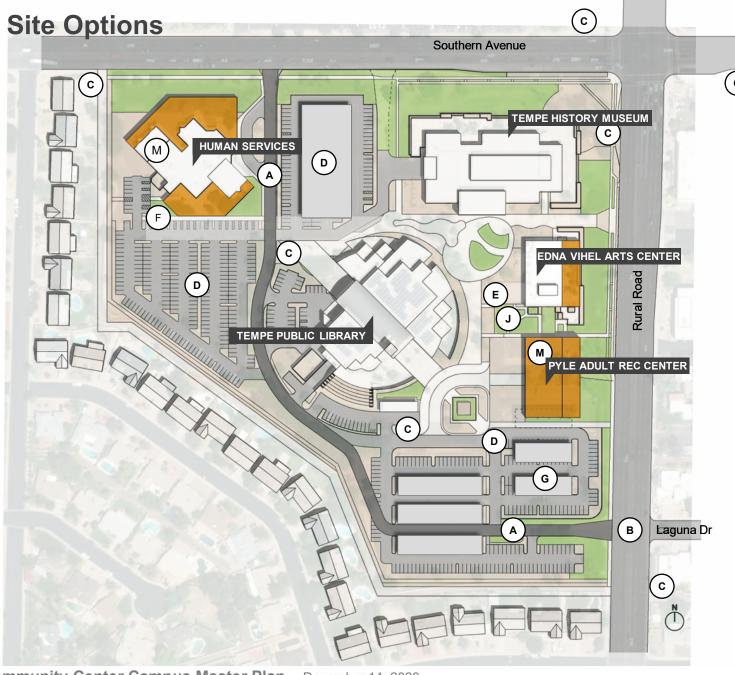
**NEW PYLE REC CENTER FACILITY** 

One-story, 24,500 square foot building

Center of campus

Adjacent to Rural Road

• Parking - 765 spaces



### **OPTION 3**

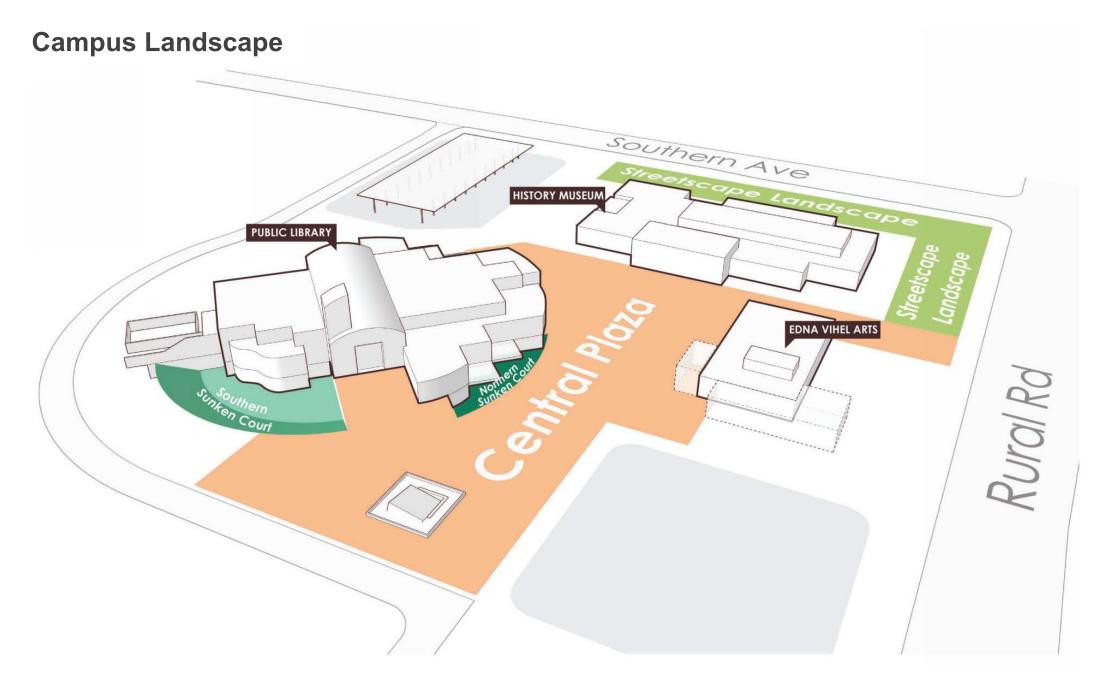
#### Pros:

- (A.) Primary access road
  - Least impact to campus
  - Limits vehicle / pedestrian conflicts
- (B.) Access point at Rural Road signalized in future
- (C.) Proximity to transit stops
- (D.) Ample parking near Human Services and History Museum buildings
- (E.) Extended courtyard for large events
- J. Increased collaboration opportunities among Arts & Culture / Parks & Recreation facilities
- (F.) Offers privacy for Human Services clients

#### Cons:

- A.) Access Road discourages connectivity between Human Services building and remainder of campus
  - Possible to incorporate perimeter access road in Option 3 as shown in previous site options
- D. Reduced number of parking spaces near Library / Edna Arts entrances
- (G.) Solar parking canopy relocated
- M.) Requires a phased approach, completion of Human Services building may be delayed





### central plaza

## design approach:

### urban forest

### **Program:**

- · Reading Rooms
- · Outdoor Classroom
- · Mental Breaks (Access to Nature)
- Outdoor Work
- · Programmable Event Space

- Shaded Corridors
- Wildlife Habitat
- Biodiversity
- Water Harvesting
- Refined and Organized
- Welcoming Lighting

















### central plaza

# design approach: artistic expression

### **Program:**

- Event Plaza
- Water Feature
- · Social Seating
- · Outdoor Games

### **Design Features:**

- · Iconic Shade
- · Art Integration
- · Pattern + Color
- · Artistic Lighting
- · Instagram Moments







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### south sunken court

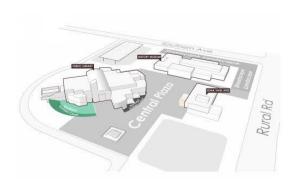
## design approach:

# tranquil garden

#### **Function:**

- · Book Reading
- · Mental Breaks (Access to Nature)
- · Outdoor Work
- Lounging
- · Storytime

- Immersive Forest
- Dense Vegetative Shade
- Integrated Art
- · Movable Seating
- Lounge Seating
- · Reading Tree

















### south sunken court

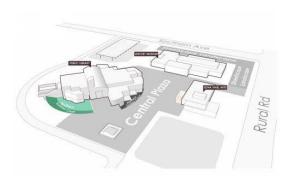
## design approach:

# explore-a-story garden

#### **Function:**

- Exploratory Play
- Nature Play
- · Storytime
- · Performance / Stage
- Destination

- Dense Shade Vegetation + Structure
- Integrated Art
- Colorful
- · Multi-Generational
- Visual Landscape



















### south sunken court concept



### northern sunken court

### design approach:

# expanded courtyard space

#### **Function:**

- · Amphitheater / Stage
- · Informal Seating
- · Outdoor Work
- Programmable Space
- · Library Spill-out Space

- · Accessible from above and below
- Dense Shade
- · Connects Program
- · Sculptural Form
- · Opens Views for Security
- · Protected Space
- Integrated Lighting















### northern sunken court

### design approach:

## **Canyon Garden**

#### **Function:**

- · Children's Garden
- · Exploratory Play
- · Indepedent Reading
- · Group Storytime
- Art Display
- · Light Display

- · Secured Entry from Above
- · Integrated Shade
- Integrated Art
- · Integrated Lighting
- · Children's Art Display
- · Integration of Nature
- · Text as Art | Shade



















### southern & rural streetscape

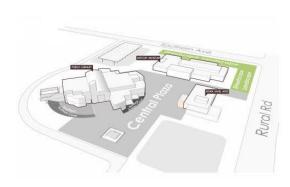
# design approach:

# botanic 'park'way

#### **Function:**

- · Mental Breaks (Access to Nature)
- · Stroll / Meander
- Fitness
- · Education Flora + Fauna

- Botanic Garden
- Biodiversity
- Shaded Pathway
- Stormwater Collection + Filtration
- Organic Forms
- · Integrated Wayfinding
- · Connects Program
- · Access to Trail Nodes













### southern & rural streetscape

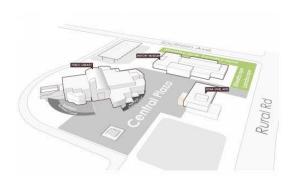
# design approach:

# park edge

#### **Function:**

- · Outdoor Work
- · Programmable Space
- · Event Extension
- · Patio | Terrace
- · Outdoor Museum

- · Visual Connection to Street
- Formalized
- Integrated Water Collection
- Access to Social Nodes

















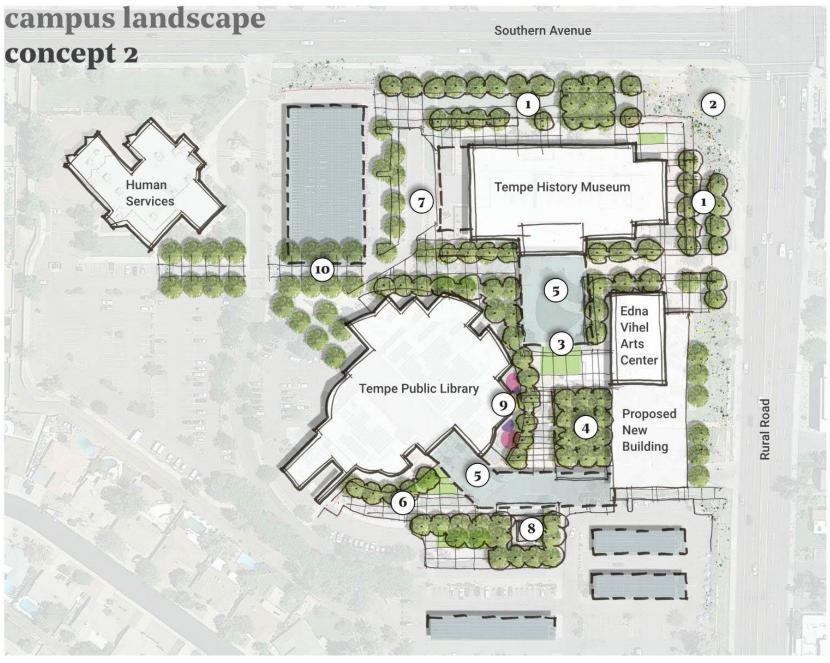
# campus landscape kit-of-parts





#### **LEGEND**

- 1. Botanic Garden Walk
- 2. Open Views to Museum
- 3. Event Green
- 4. Market Plaza
- 5. Shade Canopy (Solar)
- 6. Explor-a-story Garden
- Replace road with pedestrian access
- 8. Art Entry Plaza
- 9. Sunken Children's Garden
- 10. Pedestrian Connection to Pyle



#### **LEGEND**

- 1. Linear 'Park'way
- 2. Open Views to Museum
- 3. Event Green
- 4. Urban Forest
- 5. Shade Canopy (Solar)
- 6. Food Truck Plaza
- 7. Replace road with market / festival access
- 8. Art Entry Plaza
- 9. Sunken Children's Garden
- 10. Pedestrian Connection to Pyle

# Rough Order of Magnitude (ROM) – Edna Arts Build New vs Remodel Eyesore or Treasure?

	Demolish / New	Remodel
Assessments	Facilities Master Plan by Makers in April 2019	Library Complex – Edna Vihel Community Center Facilities Condition Assessment by fm Solutions in March 2018
Cost	\$350 per square foot	\$225 per square foot
Footprint	Smaller – potentially two stories	Larger – one story
Environmental Impact	Less sustainable	"The greenest building is one that is already built*" because of the embodied energy of materials
Carbon Footprints	Crossover may be at 37-39 years**	
Function	Built to suit	Accessibility challenges at the stage area Limited new opening on the east wall without high costs.
Construction Duration	12 – 18 months	8 – 12 months Potentially phased to be occupied during construction
Design Duration	10 – 12 months	8 – 10 months

<sup>\*</sup> Carl Elefante, Director of Sustainable Design Qunin Evans Architects



<sup>\*\*</sup> The Greenest Building: Quantifying the Environmental Value of Building Reuse by Preservation Green Lab

# **Community Engagement / Project Schedule**

PUBLIC OUTREACH
CITY STAKEHOLDERS: BOARDS & COMMISSIONS

AUGUST SEPTEMBER OCTOBER	R NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL
08/18 - ARTS & CULTURE COMMISSION #1						
	08/26-10/26 - STAFF INT	TERVIEWS / SURVEYS				
● 10/06 - VE	ETERANS COMMISSION #1					
<ul><li>10/07 - L</li></ul>	IBRARY ADVISORY BOARD #	1				
	10/08-10/21 - TEMPE FORU	M #1				
<b>1</b> 0/12	- TEMPE COMMUNITY COUN	CIL BOARD				
•	<b>10/19</b> - FOCUS GROUP #1 - C	OMMUNITY SERVICES				
•	<b>10/19</b> - FOCUS GROUP #2 - C	OMMUNITY SERVICES				
	10/20 - FAMILY JUSTICE CON	MMISSION #1				
	10/21 - PARKS & RECREATION	ON ADVISORY BOARD #	<del>!</del> 1			
	10/27 - FOCUS GROUP	#3 - HUMAN SERVICES				
	11/04 - LIBRARY A	ADVISORY BOARD #2				
	11/10 - VETER	ANS COMMISSION #2				
		11/17-11/30 - TEMPE I	FORUM #2			
	<b>11/17</b> -	PUBLIC MEETING #1				
	11/17 -	ARTS & CULTURE COM	IMISSION #2			
	11/17 -	FAMILY JUSTICE COMM	MISSION #2			
	<b>1</b> 1/18	- PARKS & RECREATION	N ADVISORY BOARD #	<sup>‡</sup> 2		
		12/18 -	SUSTAINABILITY CON	MMISSION #1		
UPCOMING				3/18 - CITY COUNCIL I		
				TBD: SPRING - TEI	MPE FORUM #3	
				TBD: SPRING - PUBL	LIC MEETING #2	



### **MEMORANDUM**

TO: Tempe Mayor and City Council

FROM: Tempe Aviation Commission & Tempe Sustainability Commission

DATE: December 15, 2020

SUBJECT: PHX Comprehensive Asset Management Plan & Urban Heat Effects



Dear Mayor and City Councilmembers,

The Tempe Aviation Commission (TAVCO) is concerned about the development projects proposed in the Comprehensive Asset Management Plan (CAMP) for the Phoenix Sky Harbor International Airport There is potential for increasing the urban heat island effect at the airport, which would in turn affect Tempe. TAVCO is also concerned about the plan to consolidate and expand the air cargo facilities at the airport which will increase freighter traffic over Tempe during the overnight hours. The CAMP was presented to the Mayor and Council of the City of Phoenix in June 2019 and includes several large concrete paving projects (see attached images), specifically the addition of new terminal areas, aircraft staging areas, taxiways and paved additions to road access points for a 10 to 20 years planning period.

This summer we experienced 50 days at or above 110 degrees, which broke the previous record of 33 days from 2011. The airport is already a source for accumulation of heat on summer days. Tempe is located directly east of the airport and hot air accumulated on hot days and stagnant weather conditions is transported towards Tempe during the afternoon hours with the diurnal shifts in the east and west air flow. Although an ongoing analysis of the Environmental Assessment (EA) of the CAMP is taking place, an analysis of the heat island effects of airport developments is not a required part of it. The draft EA for the CAMP is expected to be available in March or April 2021.

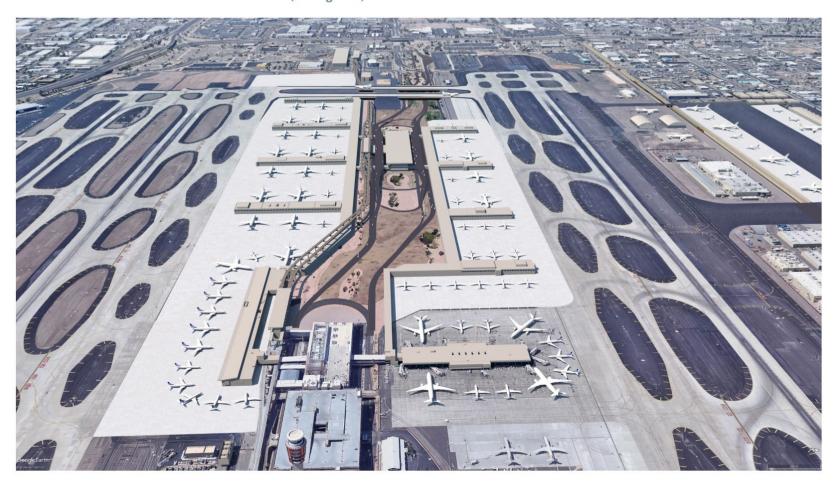
TAVCO will continue to monitor the EA process for the CAMP and work with the Sustainability Commission on this important issue. We are aware that there are a number of technical requirements for pavement material and restrictions on tall vegetation at airports – both of which are potential heat mitigation strategies - but considering the challenges both cities face with the increasing number of summer days with excessive heat, we recommend that the City of Tempe work in partnership with the City of Phoenix to influence the construction plans for developments proposed in the CAMP to include heat island mitigation.

Sincerely,	
Lane Carraway,	Kendon Jung
TAVCO Chair	Sustainability Commission Chair

Attached: Excerpts from PHX CAMP Summary

# **CAMP Project Renderings**

West Terminal with North and South Concourse Piers (looking west)



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Proposed within 10 to 15 years, additional terminal expansions, including aprons and taxiways between Terminals 3 and 4 and on both sides of Terminal 3 with improvements and new alignments of Sky Harbor Blvd.

# **CAMP Project Renderings**

North Cargo, Rail Trench, and General Aviation Layout (looking south)







# **CAMP Project Renderings**

North Cargo, Rail Trench, and General Aviation Layout (looking east)





