



DISCUSSION ITEMS

Agenda Item # 16

AGENDA REPORT SUMMARY

Meeting Date: July 10, 2018

Subject: Los Altos Community Center Design Development Update

Prepared by: Theresa Yee, Project Manager

Reviewed by: Susanna Chan, Public Works Director

Approved by: Chris Jordan, City Manager

Attachment(s):

1. Los Altos Community Center LEED Scorecard -Preliminary
2. Solar Energy Acquisition Options -Los Altos Community Center

Initiated by:

City Council

Previous Council Consideration:

- March 13, 2018 Los Altos Community Center Schematic Design
- December 12, 2017 Los Altos Community Center Project Task Force Concluding Report
- September 26, 2017 Study Session; Directed to proceed with interior space allocation and site placement; allocating an additional \$9,700,000 to the project budget.
- August 22, 2017; Approval of Agreement to retain Noll & Tam Architects design team.
- April 25, 2017; Approved Capital Improvement Project for design and construction of a new Community Center with a project budget of \$25,000,000; directed City staff to begin selection of a qualified architect to begin design; adopted Resolution 2017-15 establishing the Los Altos Community Center Project Task Force.

Fiscal Impact:

FY 2017/2020 Council approved \$25,000,000 Capital Improvement Project fund CF-01002; Council added \$7,700,000 for enhanced features and approximately \$2,000,000 for site option 4, for a project total of \$34,700,000.

Environmental Review:

Environmental review of the Los Altos Community Center project is currently underway.

Policy Question(s) for Council Consideration:

- Are there any elements of the Los Altos Community Center Redevelopment project that the Council wants to provide direction on?



Subject: Los Altos Community Center Design Development Update

Summary:

- Council received the Los Altos Community Center Task Force Concluding report on December 12, 2017 and provided feedback on the concept design and provided direction to the design team to move forward with the Schematic Design phase.
- The Noll & Tam design team completed the Schematic Design phase, which was presented to City Council on March 13, 2018. Council directed Noll & Tam to proceed with design.

Staff Recommendation:

Receive the Los Altos Community Center Design Development Update and provide direction as needed



Subject: Los Altos Community Center Design Development Update

Purpose

Los Altos Community Center Design Development Update

Background

At the September 26, 2017 Study Session, Council committed to raising the project budget to \$34,700,000 and incorporating seven design elements into the Los Altos Community Center Redevelopment project. These elements are:

1. Increasing building quality
2. Increasing building functionality
3. Upgrading from LEED Silver equivalent to LEED Gold equivalent
4. Providing improved pedestrian connectivity
5. Increasing building square footage
6. Increasing outdoor program space
7. Refinishing existing parking lot

Following several outreach events to solicit feedback from the general public, neighborhood groups, neighboring building-user groups, focus groups, and community center users, City Staff and the design team presented a schematic design to Council, incorporating all of the seven elements as directed.

On March 13, 2018, City Council supported the schematic design of the Los Altos Community Center Redevelopment project. Council requested additional information on how the building will attain LEED Gold equivalency; provided feedback and direction for further exploration of elements within the schematic design, including photovoltaic panels on the roof of the building, location of the Whistle Stop playground, location of the bocce ball courts, the flooring to be used in the community room, and location of the basketball court; and directed Noll & Tam Architects and Planners to proceed with design.

The design team held a LEED Charette on March 22, 2018 attended by members of the Environmental Commission, City Staff, and the integrated team of engineers and designers. The Charette is an intensive workshop in which the LEED scorecard elements were reviewed for potential points and collaborative efforts. The LEED Charrette confirmed that a LEED Gold equivalency was feasible.

Discussion/Analysis

Moving into Design Development, the second of three design phases, the design continues to be refined with feedback and input.



Subject: Los Altos Community Center Design Development Update

Whistle Stop Playground, basketball court, and bocce ball court

The Whistle Stop Playground will be replaced with a “naturescape” that uses natural elements, such as logs and stumps, as play equipment. A new playground will be located next to the Kinder Prep playground and in the vicinity of the eastern half of the central outdoor courtyard. This new playground creates a central location of parents awaiting youth classes to finish while being able to keep an eye on the younger children at play. This location would allow for the flexibility of children to seamlessly use the adjacent Kinder Prep play area when it is not in session. Due to the updated safety regulations, the existing playground equipment cannot be re-used; however, the design team will endeavor to keep some element or signage of Whistle Stop.

The basketball court will be toward the north of Neutra House along the parking lot. This location would provide good line of sight from the street of children and adults at play, preventing blind or hidden spots. The size of the basketball half-court prevents locating them to the north of the building. The design team is further investigating mitigation of potential noise from the basketball courts to the neighbors.

The bocce ball courts will be to the north of the main lobby entrance adjacent to the café. This location would create a sense of vitality and movement to the lobby entrance area. The café and bocce courts would also attract youth, adults, and seniors, creating potential for inter-generational mingling.

Community Room Flooring

The design team is further investigating types of wood flooring material for the community room. It is understood that the community room should be flexible for many uses including pickleball, dancing, yoga classes, etc. The use of hard materials like ceramic tile or concrete is not under consideration as those would not allow for versatility of alternate uses.

LEED Gold Equivalency

To achieve LEED Gold certification equivalency, the community center must earn between 60 – 79 points in nine different credit categories to achieve a sustainable and efficient green building. The nine LEED credit categories are:

1. Integrative Process (max. 1 point)

A comprehensive approach to building systems and equipment. Design team members looks for synergies among systems and components for mutual advantages to help achieve high levels of building performance.

2. Location & Transportation (max. 16 points)

Thoughtful decisions about building location to encourage compact development, alternative transportation, and connection with amenities such as restaurants and parks.



Subject: Los Altos Community Center Design Development Update

3. Sustainable Site (max. 10 points)

Environment surrounding the building with emphasis on vital relationships among buildings, ecosystems, and ecosystem services.

4. Water Efficiency (max. 11 points)

Holistic water use, looking at indoor and outdoor uses, specialized uses, and metering. Efficiency first approach to water conservation.

5. Energy & Atmosphere (max. 33 points)

Views energy from a holistic perspective, addressing energy use reduction, energy-efficient design strategies, and renewable energy sources. A note that 8 points are allocated for use of photovoltaic systems.

6. Materials and Resources (max. 13 points)

Focus on minimizing the embodied energy and other impacts associated with extraction, processing, transport, maintenance, and disposal of building materials.

7. Indoor Environmental Quality (max. 16 points)

Indoor air quality and thermal, visual, and acoustic comfort that protect the health of building occupants.

8. Innovation (max. 6 points)

As sustainable design strategies are constantly evolving and improving, use of new technologies, innovative building features, and sustainable building practices and strategies receive innovation credits.

9. Regional Priority (max. 4 points)

Environmental issues particular to a locale have been identified by LEED as distinct environmental priorities. Credits are awarded to projects that address these.

The community center is able to achieve a LEED Gold certification equivalency. Please refer to Attachment 1 for credit details.

Photovoltaic (PV) Power

The current LEED scorecard for the community center has a target of 64 points which is at the Gold certification level. The community center does not require PV panels to achieve the LEED Gold certification equivalency.

If Council desires, there are options to incorporate photovoltaic panels into the community center project, some of which would not increase the project budget.



Subject: Los Altos Community Center Design Development Update

PV Requirements

Estimated Total Power Need for building:	250k to 350 k KWh
Useable roof area available:	13,300 SF
Power that 13,300 SF of roof area will generate:	Approx. 150k KWh
Percent of Total Power Need that 13,300 SF roof area will generate:	60% - 90%
Estimated cost to purchase 150 KWh PV system:	\$1,000,000

The estimated cost of \$1M will likely provide between 60% and 90% of Total Power Need and is the extent of space the roof will allow for optimal solar generation. Additional space would need to be identified and studied if more photovoltaic panels are desired.

Council could also consider that instead of full implementation of photovoltaic panels, that some portion of panels be installed to provide clean renewable energy for less than full building energy requirements. A partial PV system would also serve as a good demonstration project for conservation and good stewardship.

Note that this estimate could change as during this design development phase, wall assemblies, insulation, and glazing are still in design and therefore may change the building energy use and PV system size required.

PV Acquisition Options

1. Power Purchase Agreement (PPA)

A third party pays for installation, owns, operates, and maintains the system. The City would make an agreement to purchase energy monthly from the third party that operates this system.

- Key Advantage: No capital outlay
- Key Disadvantage: Over the life cycle of the system, a PPA generates far less in savings than ownership

2. Cash Purchase

Purchase of a solar panel system outright. Cash purchases typically offers the maximum return on a solar investment.

- Key Advantage: Cost-free energy for life of system.
- Key Disadvantage: Capital outlay up front.



Subject: Los Altos Community Center Design Development Update

Other options to a cash purchase is to receive donations or financing. If the option of receiving donations is considered, a clear City Council approved policy is needed on how and what types of donations the City will accept.

3. Pre-paid Lease

In the lease model, a customer will sign a contract with an installer/developer and pay for the solar energy system over a period of time, rather than paying for the power produced.

- Key Advantage: Power could be a fixed rate, typically lower than the utility.
- Key Disadvantage: There are set monthly lease payments that increases at a set percentage each year

The best return on value is the cash purchase option if funds are available. The PPA and pre-paid lease option, while viable, may not be more advantageous than purchasing energy through Silicon Valley Clean Energy, for which Los Altos is the default electricity option.

Silicon Valley Clean Energy (SVCE) is clean energy that costs less than energy purchased from PG&E. SVCE energy is carbon free, 50% from renewable energy sources, and 50% from non-polluting hydroelectric. SVCE offers an option to upgrade for a premium to energy from 100% renewable energy sources. Renewable energy is the same

There are many more advantages and disadvantages of each PV acquisition option. Please refer to Attachment 2 for more detail.

Donation Policy Considerations

If the option of receiving donations is considered, policies and procedures should be established by City Council prior to receiving donations. The following are considerations for Council when developing the framework and process for this policy:

1. Define how donations will be spent
 - a. As a contribution to the building fund
 - b. As a contribution to certain elements.
2. Types of donations accepted.
 - a. Cash, checks, credit cards, electronic transfers, etc.
 - b. Securities
 - c. Real or personal Property
 - d. Annuities
3. Process for accepting and administering donations
 - a. Donor agreement.
 - b. Tax receipts
 - c. Who has the authority to accept donations and the amounts?



Subject: Los Altos Community Center Design Development Update

- d. Record keeping
4. Donor recognition
 - a. Minimum for naming donations
 - b. Funding levels and recognitions associated with each level
 - c. Handling anonymous donations
5. Moral clause and procedure for removing names in certain situations.

Next Steps

The next steps for the Los Altos Community Center Redevelopment project are as follows:

- Complete Streets Commission, June 27, 2018
- Planning Commission, August 2, 2018
- Council Meeting, September 11, 2018
- Completion of Construction Documents, Spring 2019
- Contractor Bidding, Spring 2019
- Groundbreaking Ceremony, Summer 2019
- Start Construction, Summer 2019
- Construction Completion, 2020

Los Altos Hillview Community Center

LEED-NC v4 Equivalency Scorecard

Date: 3/27/2018

Goal: Gold



40 24 17 31 Total Project Score

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80 or more points

Yes ?Y ?N No

1				Credit 1	Integrative Process					1
---	--	--	--	----------	----------------------------	--	--	--	--	---

6 1 1 8 Location and Transportation 16 Points Possible

1				Credit 2	Sensitive Land Protection	Previously Developed				1
1		1		Credit 3	High Priority Site	Priority Designation				2
2			3	Credit 4	Surrounding Density and Diverse Uses	Connectivity (8+)				5
			5	Credit 5	Access to Quality Transit					5
1				Credit 6	Bicycle Facilities					1
	1			Credit 7	Reduced Parking Footprint	Dense Loc.	40% Reduction			1
1				Credit 8	Green Vehicles					1

5 4 1 Sustainable Sites 10 Points Possible

Y				Prereq 1	Construction Activity Pollution Prevention					-
1				Credit 1	Site Assessment					1
	2			Credit 2	Site Development - Protect or Restore Habitat	On-site restoration				2
1				Credit 3	Open Space					1
2		1		Credit 4	Rainwater Management	95th Percentile				3
	2			Credit 5	Heat Island Reduction	Roof & Non-roof				2
1				Credit 6	Light Pollution Reduction					1

5 1 1 4 Water Efficiency 11 Points Possible

Y				Prereq 1	Outdoor Water Use Reduction, 30%					-
Y				Prereq 2	Indoor Water Use Reduction, 20%					-
Y				Prereq 3	Building-Level Water Metering					-
1			1	Credit 1	Outdoor Water Use Reduction, 50% - 100%	Reduced 50%				2
3	1	1	1	Credit 2	Indoor Water Use Reduction, 25% - 50%	Reduced 35%				6
			2	Credit 3	Cooling Tower Water Use	---				2
1				Credit 4	Water Metering					1

9 5 10 9 Energy & Atmosphere 33 Points Possible

Y				Prereq 1	Fundamental Commissioning and Verification					-
Y				Prereq 2	Minimum Energy Performance					-
Y				Prereq 3	Building-Level Energy Metering					-
Y				Prereq 4	Fundamental Refrigerant Management					-
3		1	2	Credit 1	Enhanced Commissioning	Enhanced Cx				6
4	4	5	5	Credit 2	Optimize Energy Performance	New Const. Reduced 12%				18
	1			Credit 3	Advanced Energy Metering					1
			2	Credit 4	Demand Response	D.R.P. Available				2
		3		Credit 5	Renewable Energy Production	1%, 5%, 10%				3
		1		Credit 6	Enhanced Refrigerant Management					1
2				Credit 7	Green Power and Carbon Offsets	100% Green Power				2

Yes ?Y ?N No

1 4 8 Materials & Resources 13 Points Possible

1	4		8	Prereq 1	Storage & Collection of Recyclables					-
Y				Prereq 2	Construction & Demolition Waste Mgmt. Planning					-
Y				Credit 1	Building Life-Cycle Impact Reduction					5
			5	Credit 2	Building Products: EPD's			Opt 1 -20 EPD's		2
	1		1	Credit 3	Building Products: Sourcing of Raw Materials			Opt 2 -Respons. Extraction		2
	1		1	Credit 4	Building Products: Material Ingredients			Opt 1 -20 Disclosures		2
1	1			Credit 5	Construction & Demolition Waste Management			Divert 75% & 4 streams		2

7 7 2 Indoor Environmental Quality 16 Points Possible

Y				Prereq 1	Minimum IAQ Performance					-
Y				Prereq 2	Environmental Tobacco Smoke (ETS) Control					-
1	1			Credit 1	Enhanced Indoor Air Quality Strategies					2
1	2			Credit 2	Low-Emitting Interiors			Four Compliant Categories		3
1				Credit 3	Construction Indoor Air Quality Management Plan					1
1	1			Credit 4	Indoor Air Quality Assessment			Flush out - Before Occ.		2
1				Credit 5	Thermal Comfort					1
1		1		Credit 6	Interior Lighting			Lighting Control		2
	2	1		Credit 7	Daylight			Measure: Illum. 75%		3
1				Credit 8	Quality Views					1
1				Credit 9	Acoustic Performance					1

6 Innovation & Design Process 6 Points Possible

1				Credit 1.1	Exemplary Performance or Innovation: TBD					1
1				Credit 1.2	Innovation: Low Mercury Lighting					1
1				Credit 1.3	Innovation: Green Building Education					1
1				Credit 1.4	Innovation: Green O+M Policies					1
1				Credit 1.5	Pilot Credit: Social Equity					1
1				Credit 2	LEED™ Accredited Professional					1

2 2 2 Regional Credits 4 Points Possible

	2	2	2							
				94022	← zip code					
					Credit 1.1	Regional Credit: Access to Quality Transit, 5 points				1
					Credit 1.2	Regional Credit: Rainwater Management, 98th Percentile				1
					Credit 1.3	Regional Credit: Outdoor Water Use Reduction, 100%				1
					Credit 1.4	Regional Credit: Indoor Water Use Reduction, 40%				1
					Credit 1.5	Regional Credit: Optimize Energy Performance, 24%				1
					Credit 1.6	Regional Credit: BPDO Sourcing of Raw Materials				1

Points allocated to PV system

SOLAR ENERGY

Acquisition Options

Hillview Community Center

Updated 06/26/18

This document is a discussion springboard for options available to obtain solar energy for the new Hillview Community Center project.

Timing:

While solar can be obtained at any point in the lifecycle of a building, it would be prudent for this system to be designed in with the building so that roof penetrations are addressed, and the roof warranty is not voided. The Design Development phase should be completed Fall 2018, with Construction Documents phase completed Spring/Summer 2019. Construction is estimated to begin Summer 2019.

Option #1

Power Purchase Agreement (PPA)

What is it?

A third party pays for installation, owns, operates, and maintains the system. The City would make an agreement to purchase energy monthly from the third party that operates this system. A PPA locks in lower energy costs for the long term. At the end of the contract, you can purchase the system, negotiate another PPA, or have the system removed. PPA is a form of a Public Private Partnership and type of lease.

Benefits?

1. No capital outlay
2. The solar panel system is owned by a third party and therefore no maintenance costs
3. PPA's provide a fixed, predictable cost that raises at a predetermined rate
4. The cost of energy (the rate) is locked in for 20-30 years

Disadvantages?

1. If the solar isn't large enough to offset total usage, there will be two electric bills.
2. On days where the electric load exceeds solar generation, energy would have to be purchased from the local energy provider (SVCE) at market price. (presuming net consumption isn't positive)
3. The PG&E bill will always have a monthly minimum charge for delivery infrastructure.
4. Over the life cycle of the system, a PPA generates far less in savings than ownership
5. Customer doesn't receive credits for over production (in SVCE you can oversize your system by 110% and they will pay for excess power production)

Option #2

Cash Purchase

What is it?

You purchase a solar panel system outright. Cash purchases typically offers the maximum return on a solar investment.

Benefits?

1. The solar panel system is owned by City.
2. Cost-free energy for life of system (Current panels are in the 40+year and inverters 20+).
3. Far more lucrative over the life of the system.

Disadvantages?

1. Capital outlay up front
2. Maintenance and repair costs borne by the City
3. Roof leaks and damage are responsibility of the City (If done afterwards. If done while building is being constructed, solar stanchions can be built and sealed with the roofing)
4. Insurance should be purchased for the system

Supplement #2a

Public Financing

What is it?

This supplements a cash purchase option. Public entities have access to a variety of financial benefits not available to other solar users, often enabling the greatest financial returns of all. From tax breaks to government-subsidized bonds.

Financing that may be available to local agencies:

- CREB – Clean Renewable Energy Bonds
- QECB – Qualified Energy Conservation Bonds²

Benefits?

1. This option facilitates system ownership
2. Special incentives
3. Tax-exempt leases
4. Government subsidized loans

Disadvantages?

1. Participation is limited by the volume of bonds allocated.
2. The current federal administration is cutting back on these incentives. QECB was discontinued by the current federal administration on December 22, 2017 and it is unknown whether this program will resume.

Supplement #2b

Rebates

What is it?

This supplements a cash purchase option. Agencies offer rebate programs for power produced over what is used. Some have requirements as to the amount you can sell back or a cap on credits. There also may be a cap on the sizing of system capacity. For example, the system cannot be size for more than 110% of building power requirements.

Programs that may be available:

SVCE NEM – Offers up to \$5,000 credit

PG&E NEM – Check for qualifications and credit

Benefits?

1. This has the advantage of lowering your monthly bill if the qualification requirements are met.

Disadvantages?

1. This does not lower the purchase price.

Option #3

Prepaid Lease

What is it?

In the lease model, a customer will sign a contract with an installer/developer and pay for the solar energy system over a period of time, rather than paying for the power produced. Solar leases can be structured so customers pay no up-front costs, some of the system cost, or purchase the system before the end of the lease term.

Benefits?

1. Maintenance and repair costs may be borne by the third party
2. Power would be a fixed rate, typically lower than the utility (Depends on You would hold the lease, or the city)
3. System is potentially purchasable at the end of the lease.

Disadvantages?

1. There are set monthly lease payments that increases at a set percentage each year, though it is expected that this increase would be less than PG&E.
2. There will always be two electric bills, one from the energy provider (SVCE -Silicon Valley Clean Energy), and one from the third party solar provider, dependent on coverage.
3. On days where the electric load exceeds solar generation, energy would have to be purchased from the local energy provider (SVCE).
4. The PG&E bill will always have a monthly minimum charge for delivery infrastructure (included in bill).