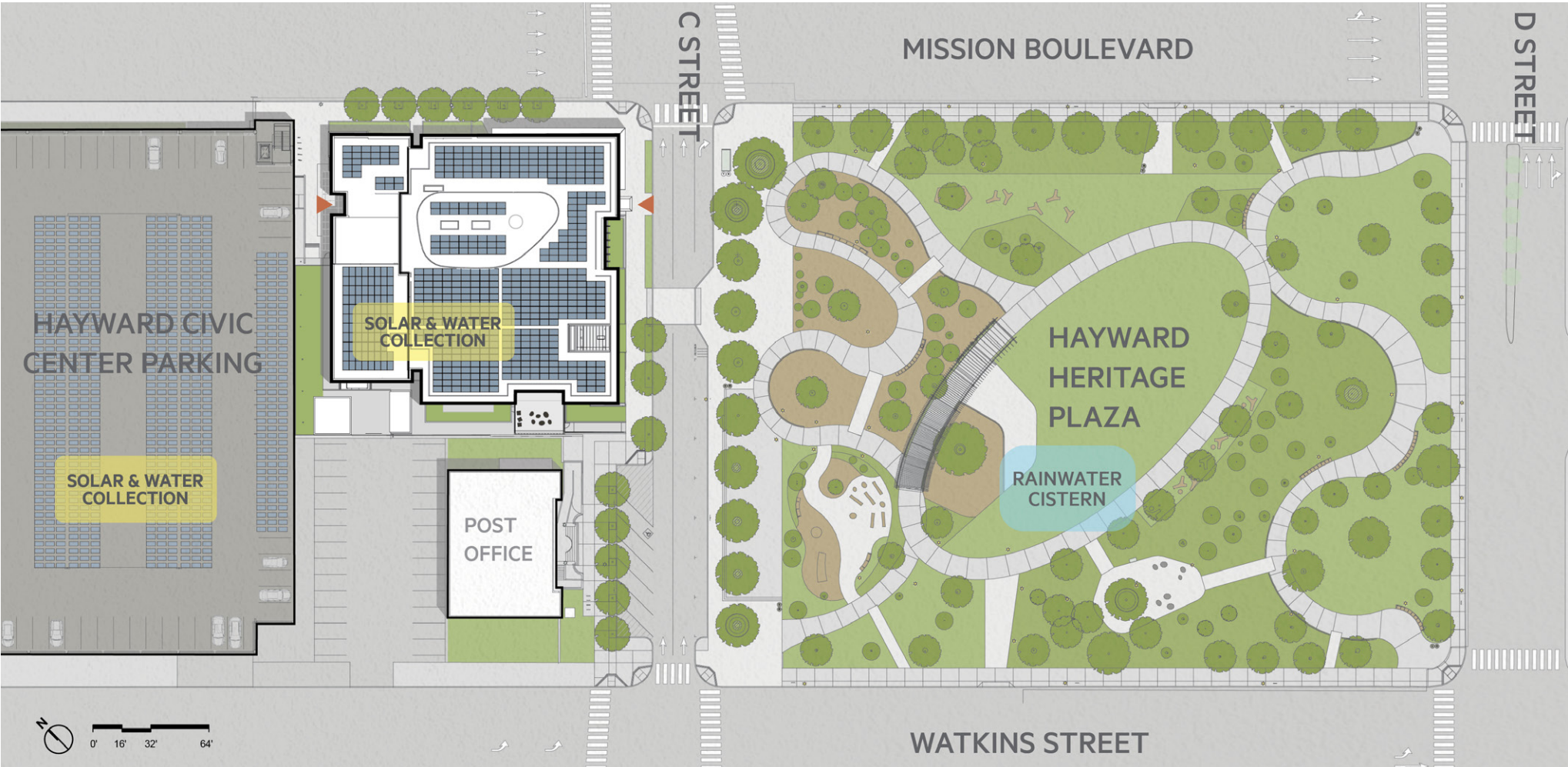
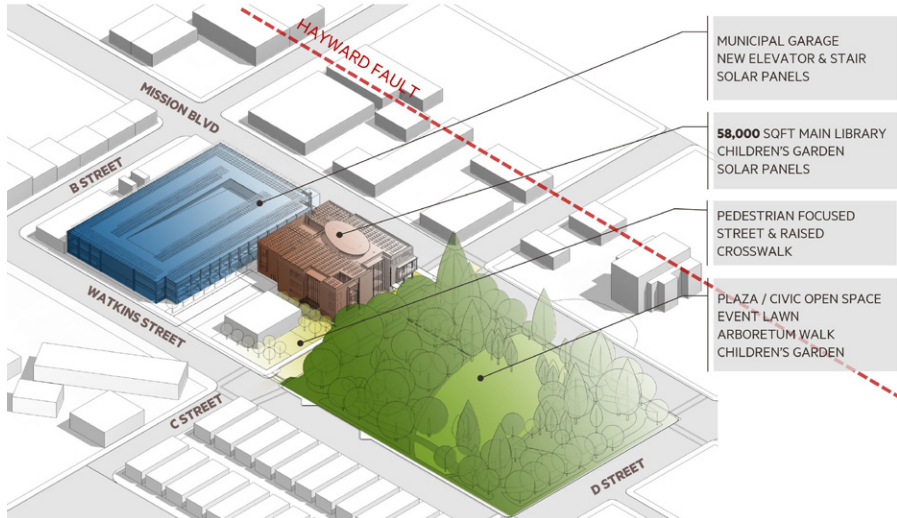


At the height of the Black Lives Matter protests,  
the library messaged “Unity” as a display of  
allyship for the Hayward Community



# HAYWARD LIBRARY

The Hayward Library and Community Learning Center exemplifies the City's commitment to sustainability and the broader strategy to revitalize Downtown Hayward. Designing and engineering a highly efficient building and encouraging the City and project team to think beyond LEED Certification and envision a Zero Net Energy facility. In response to Hayward's climate action plan, renewable energy, reclaimed water, and the creation of Civic green space seeks to enliven the urban core.





C Street Main Entrance



Lobby & Atrium



Service & Study



Children's Library



Tween Space



Childrens Storytelling Theater



Teen Library & Technology



Teen Library



Flexible Community Room

**“Presenting the Library and New Learning Center really made a difference. [The City] was thinking ahead, and not just trying to beautify. Literacy and academic performance had become a major milestone in the general plan. It was important that we give kids and families some support.”**

**- Fran David, Former Hayward City Manager**



Tinker & Chill





**Binary packets spell out the Bill of Rights to symbolically bridge the divide between accessible technology and intellectual freedom**



Central Stair & Adult Library



Main Reading Room



Atrium Daylighting



Audio & Video Learning

# FIRST FLOOR

ARRIVAL / FUNDAMENTALS / ROOTS



# SECOND FLOOR

INQUIRY / EXPLORATION / TECHNOLOGY



# THIRD FLOOR

FOCUS / REFLECTION / COLLECTIONS



Central to Hayward, the Zero Net Energy Library and Heritage Plaza energize a new civic experience, inspiring a more sustainable future





Rest & Recharge



Children's Garden



Arboretum & Central Glade



Library View from Heritage Plaza

Extending into the evening, the illuminated library acts as a prominent display of unity and community connection





# DESIGN FOR INTEGRATION

0 Carbon based fuels

50% reduction of energy use to achieve "ZNE"

445,837 watts of solar power generation

500,000 gallon goal to harvest and reuse rainfall

84 points LEED platinum certified

100 year building lifespan



## SPACES

- 1 READING ROOM & COLLECTIONS
- 2 COMMUNITY LEARNING CENTER
- 3 TECHNOLOGY ROOM
- 4 COMMUNITY EVENT ROOM
- 5 SENSORY GARDEN
- 6 CHILDREN'S LIBRARY
- 7 MARKETPLACE



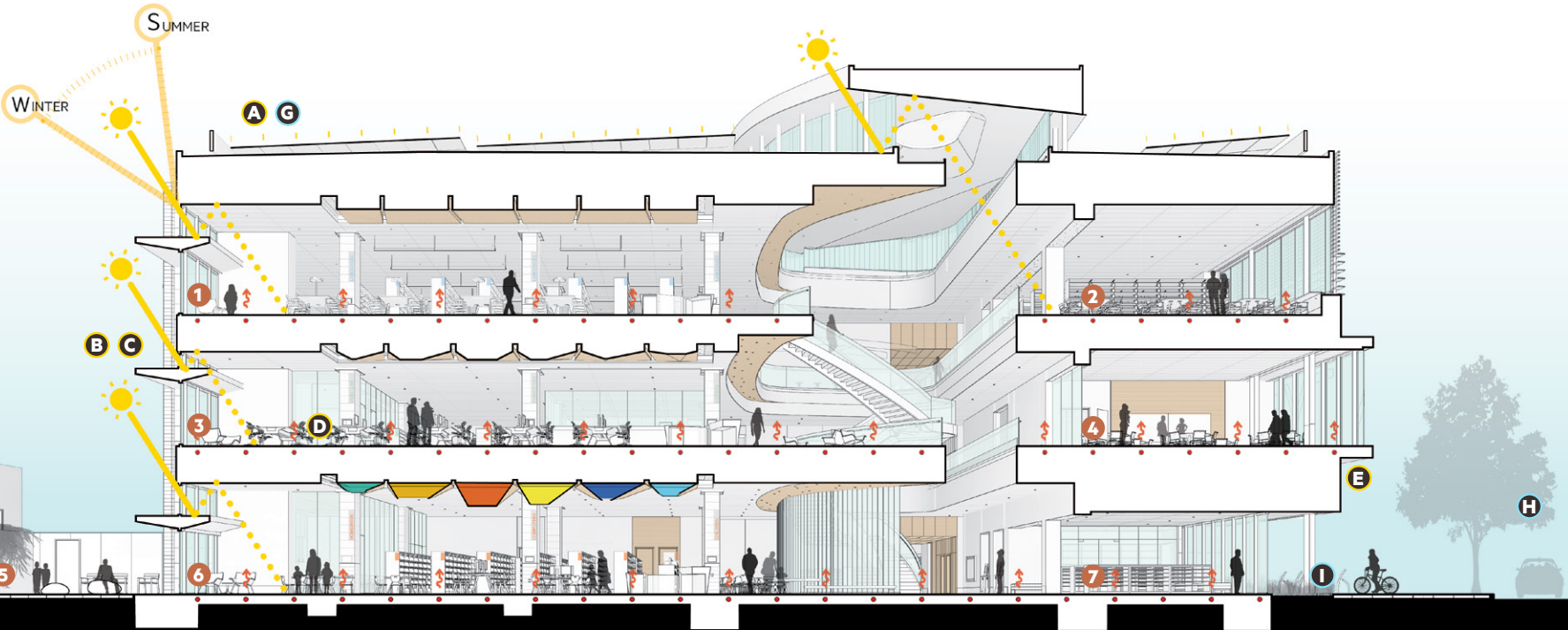
## ENERGY / COMFORT

- A PHOTOVOLTAICS
- B SOLAR SHADING
- C NATURAL DAYLIGHT + LIGHT SHELVES
- D RADIANT HEATING
- E THERMALLY EFFICIENT WINDOW TO WALL RATIO



## WATER / SITE

- G RAINWATER COLLECTION USED FOR NON POTABLE FIXTURES
- H DROUGHT RESISTANT PLANTING
- I BICYCLE PARKING



Building Section Diagram

# DESIGN FOR EQUITABLE COMMUNITIES

## Community Engagement

Local support was essential to the building's success. An extensive community process to build support for library and secure the vote on the library Bond Measure C bond began in 2012.

- 1** grassroots campaign
- 1,010** completed community surveys
- 125** neighborhood meetings
- 575** hand-signed letters by the Friends
- 1,416** online surveys submitted
- 1,000's** of pleasant phone calls
- 67.36%** of votes cast YES for Measure C



Children's Art Installation



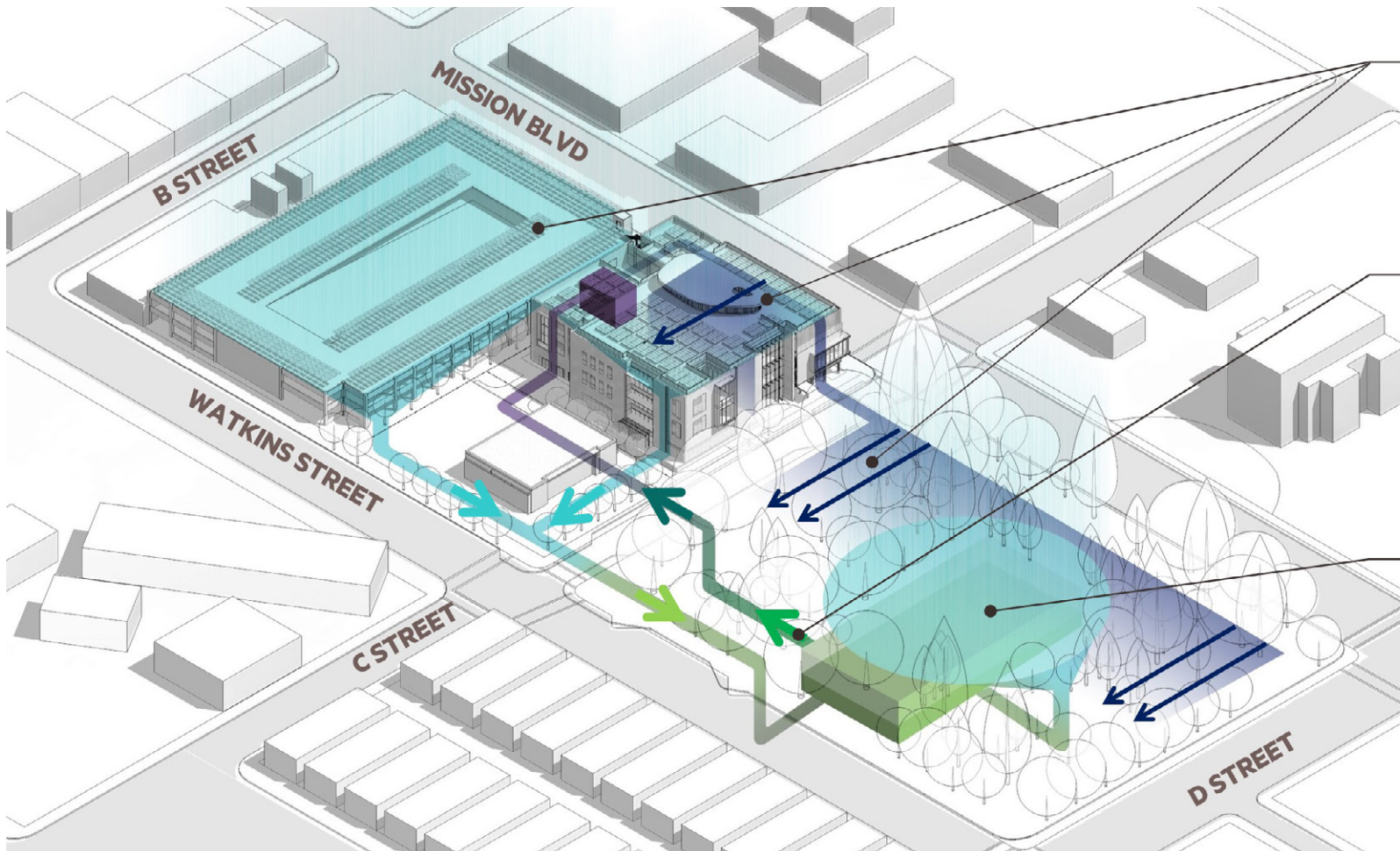
Friends of Hayward Library

Yes on Measure C

“We wanted to have a focused yet inclusive community process and use this opportunity to educate all the participants on what was possible.”

- Sean Reinhart, Former Director of Library & Community Services





RAINWATER IS HARVESTED FROM THE LIBRARY ROOF, GARAGE, SITE & PLAZA

UPON DEMAND, CISTERN WATER IS PUMPED THROUGH 2<sup>ND</sup> STAGE FILTRATION, STERILIZED WITH UV AND STORED IN DAY TANKS AT THE LIBRARY

FILTERED AND TREATED WATER IS PUMPED INTO A 200K CISTERN LOCATED IN THE FORMER LIBRARY BASEMENT

Rainwater Catchment System

## DESIGN FOR WATER

Rainwater is harvested from the library roof, garage, site & plaza

Upon demand, cistern water is pumped through 2nd stage filtration, sterilized with UV and stored in day tanks at the library

Filtered and treated water is pumped into a 200,000 gallon cistern located in the former library basement

**200,000** Gallon  
Underground Cistern

**52%** Non Potable Water Offset

**87 pts** Rescape Certified  
Bay Area Landscape and Water Use  
Rating System



Cistern Being Installed

# DESIGN FOR ECONOMY

## The influence of civic architecture

- An investment in the civic infrastructure of Hayward
  - Built to last 100 years
  - Flagship project in the City's ZNE action plan
  - Accessible services free to all
- A downtown asset, increasing pedestrian traffic in the local business district
- A collaborative partnership with non-profit and community groups to shape needed services



Welcoming Community Space



Ribbon Cutting Ceremony



Activating a Downtown Streetscape

# DESIGN FOR ENERGY

**0** kBtu/sf-yr Predicted Net EUI

**33** kBtu/sf-yr predicted Gross EUI

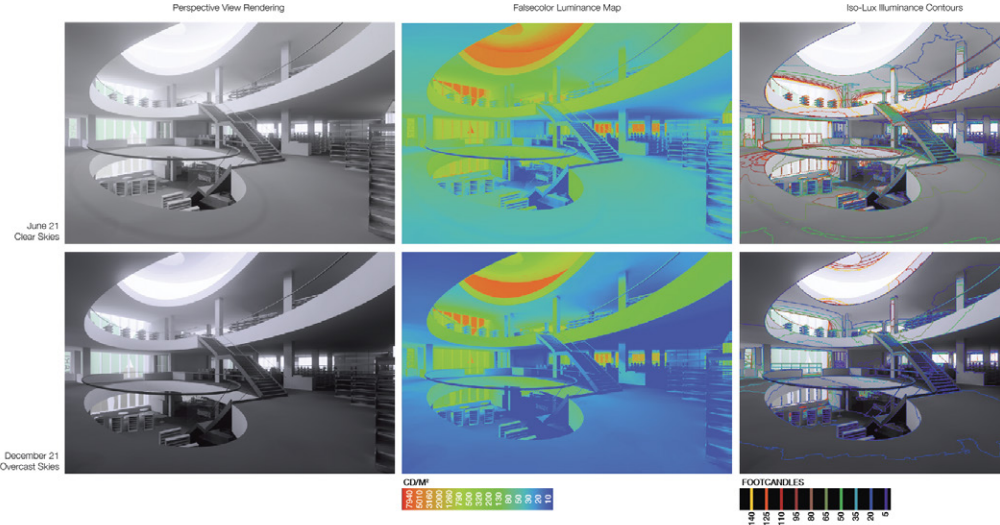
**0** carbon based fuels

**50%** reduction of energy use to achieve “ZNE”

**445,837** watts of solar power generation

**3,436,000** Pounds of CO2 Emissions Saved to Date

**3,900,000** Electric Vehicles Miles Driven on Sunshine



Luminance Modeling: Second Floor - Clerestory & Skylight



Efficient Dedicated Ventilation & Clerestory Daylighting

# DESIGN FOR WELL-BEING

## Circulation and Views

Building is heated and cooled primarily by a radiant system providing pleasant comfort. The civic plaza ellipse mimics the Library's central atrium design.

**100%** Workstations with Views of Outdoors

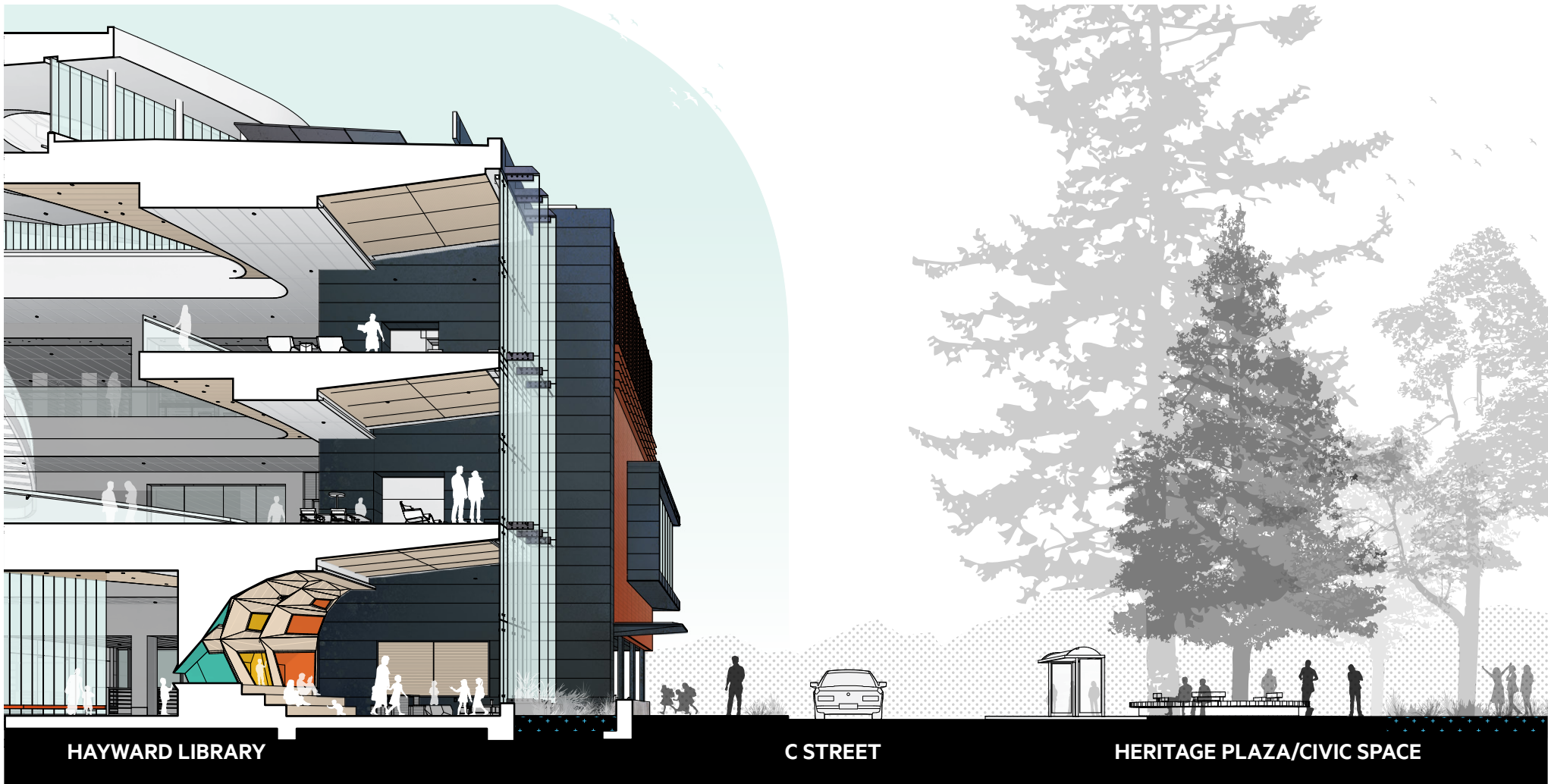
**100%** Regularly Occupied Space within  
30 feet of Operable Windows



Heritage Plaza Arboretum & Central Elipse



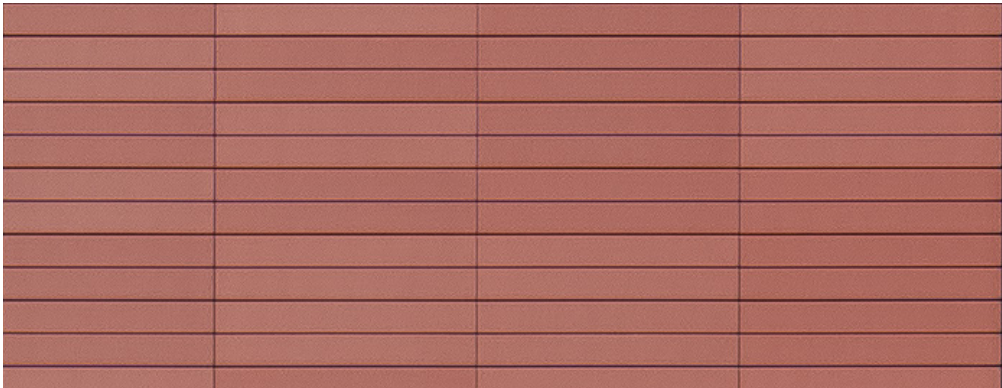
Radiant Heated/Cooled Floors & Infloor Electrical/Data Services



# DESIGN FOR RESOURCES

## Modern Traditional Materials

To reflect the history of brick use in downtown Hayward the library project utilizes a panelized terra cotta siding system as the primary exterior enclosure. It was selected as a simple finish to maintain and last the lifetime of the building. As a modular product it was delivered to the site in panels sized to be installed by two people, minimizing field labor and field cuts, reducing construction waste significantly.



Modular Terra Cotta Siding System

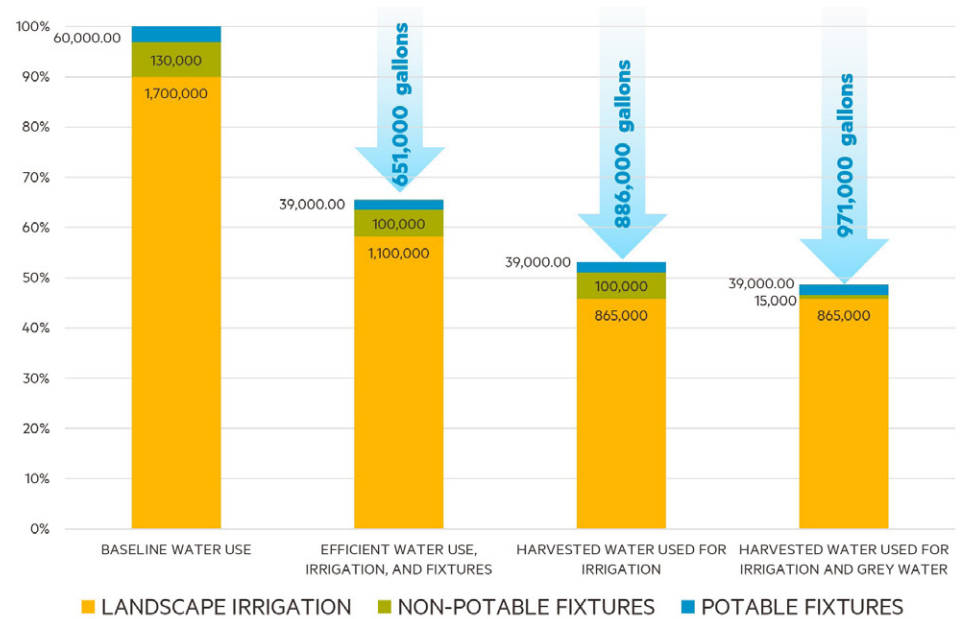




Robust Structure For High Seismic Area



Hayward Known for our Faults



## DESIGN FOR CHANGE

### Evolving Library Services & Water Resources

By moving the structure of the building to the exterior, open floor plates allow for evolution of the library spaces over time. Water use reduction & the cistern respond to California’s cyclical drought conditions.

# DESIGN FOR DISCOVERY

The project has been presented at many conferences, and in most cases, City of Hayward staff participated in the presentation along with the design team.

- Library Journal Design Institute
- Greenerbuilder Conference
- Stopwaste Conference
- Meeting of the Minds
- California Library Association Conference
- Public Library Association Conference



Lining up for the First Day



Hayward's Newest Library Card Holders



Hosting the Library Journal Design Institute

## Hayward Library & Community Learning Center

Noll & Tam Architects

City of Hayward, Hayward, California

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