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ABSTRACT

The focus of this project is to develop a design for the proposed California Indian Heritage Museum, a project of California State Parks. Analysis of the site and site background resulted in criteria used to critique the existing design proposed by the California State Parks. The final result of this project is a comprehensive design which concentrates on the rehabilitation of the site’s natural and cultural resources, while creating an interpretive program and design for the future State Park. This project aims to address issues for both the society and the natural environment, hoping to bring insight into the creation of sustainable environments and creating harmony between the natural and urban settings.
ACKNOWLEDGEMENTS

Thank you VERY much to my committee members

    Jeff Loux
    Michael Rios
    Eric Larsen

and senior project advisor Mark Francis

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Thank you also to my family and friends for all the support during this process.

And to the LDA class of 2010 for those times we spent together

late at night or early in the morning.
A successful landscape design is one that not only provides its users with a valuable experience, but is also an innovative solution for the site’s ecological, social and geographical characteristics which allows them to be in harmony with each other. It should enhance the interactions between the site and the people who use it, leaving an impression of not just a “space” but a “place.”
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INTRODUCTION

BACKGROUND OF PROJECT

Like many cities across the nation, West Sacramento and our state’s capitol Sacramento are undergoing a process of reinventing their waterfronts. West Sacramento is a fast growing city located in Yolo County, California. The city, although only 22.9 square miles, is experiencing rapid population growth. West Sacramento is currently planning major structural changes to identify and improve the city center into a lively one that can compete with the downtown of Sacramento, right across the Sacramento River. In July of 2003, a collaborative effort was made between the cities of Sacramento and West Sacramento to develop the Sacramento Riverfront Master Plan. The Sacramento and American River corridors are seen as great opportunities to provide high-quality public open spaces. The plan encompasses new developments along the river to increase public activity and opportunities, new parks and improved riparian areas that allow the public to access and utilize the riverfront. In 2007, California State Parks saw the various opportunities in the city and began to prepare a General Plan for the acquisition of a piece of property in West Sacramento that will become the home of the California Indian Heritage Center (CIHC). The new State Park and museum complex will be located in the “East Riverfront” property located along the Sacramento River. The project hopes to provide a place for people to learn about the Native American culture, while providing a permanent place for display and storage of the valuable artifacts. The project aspires to bring people to realize the importance of this piece of land and culture in the city of West Sacramento and even the state of California.
INTRODUCTION

VISION

The East Riverfront Site is a valuable piece of land with a lot of potential environmental and social benefits. At the confluence of the American and Sacramento Rivers, this special piece of land can say a lot about the city’s effort to conserve the natural environment and the prestigious Sacramento River that runs between Sacramento and West Sacramento.

This project will serve as an important landmark and add to the identity of West Sacramento. With the anticipated completion of the CIHC State Park, West Sacramento will benefit from visitors and acknowledgement.
INTRODUCTION

GOALS

To create an alternative proposal for the CIHC site that is creative and suits the need of the site and environment while meeting the requirements in the Master Agreement.

To celebrate and educate visitors about the culture and history of American Indians through interactive displays and demonstrations.

To add to the identity of the region and create a destination that serves the surrounding communities.

To conserve, restore and preserve the local ecosystems and natural resources through rehabilitation and re-vegetation of the riparian and grasslands.

To create a convenient access for the public to enjoy the waterfront with minimal environmental impact.

To maintain the compatibility between the proposed park and surrounding neighborhoods.
SITE ANALYSIS

CONTEXT

The 43 acre East Riverfront Property lies on the Eastern edge of West Sacramento’s city boundary along the Sacramento River. It is also facing the confluence of the Sacramento and American Rivers. The site is located between West Sacramento and Sacramento, but access to the site can only be made from West Sacramento.
SITE ANALYSIS

HISTORY

The vicinity of the City of West Sacramento was first inhabited by the Patwin Indians four thousand years ago, who settled along the banks of the Sacramento River, where the site of this project is also located. In the 19th century, European settlers arrived, which dramatically changed the quiet lifestyle of the Patwin Indians. Unfortunately, the European settlers brought diseases which affected the Patwin Indian population. The epidemics spread among the tribes and decreased their population from 60,000 to 20,000 in a couple of years. In the 1840’s, Jan Lows de Swart, a Flemish traveler settled in West Sacramento and established a fishery along the river. During and after the gold rush period, business development and shipping activities increased. The California Steam Navigation Company was established, as well as other fishing and farming industries. The three communities known as Bryte, Broderick, and West Sacramento were the foundation on which the current city is built.

IMPLICATIONS FOR DESIGN

The history of the land and people is important to the design of the space, as the future state park is meant to be a celebration of the Indian culture. The Indian people were very in touch with nature, making use of but not exploiting the available natural resources. This trait is also a guiding principle in the design of the site.
SITE ANALYSIS

TRANSPORTATION

The city is connected to Sacramento by the Tower bridge and the I street bridge, as well as the Capitol 50 freeway. There is also water transportation available across the river from the docks located along the river. The major arterial freeways and roads are highlighted in this diagram.

IMPLICATIONS FOR DESIGN

The convenient accessibility to the riverfront site implies that there could be a significant amount of visitors, from nearby cities across the region.
SITE ANALYSIS

LAND USE

The site is located in the Bryte and Broderick neighborhoods of West Sacramento. The surrounding land uses are mainly medium to high residential. Most developments are new or being developed. Immediately west of the site are properties zoned for mixed use development, anticipated to have commercial shops to serve the communities. Newer housing developments are also planned in the future to accommodate West Sacramento’s growing population.

To the immediate south of the property is the Broderick Boat Ramp which is used by the Broderick Boat club to enter the Sacramento River.

The site is also in close proximity to Raley Field, West Sacramento’s baseball field, and Downtown and Old Town Sacramento, which is directly across the river, accessible either by boat or driving across the I Street bridge.

IMPLICATIONS FOR DESIGN

The surrounding land use of the site suggests the types of users that would come to the site. Residential and light commercial zones around the site indicate how the site should be designed to integrate with the surrounding environment. Since most of the developments in the area consist of low-rise buildings, it would seem appropriate for the structures in the proposed park to be of similar height. Alternatively, a tall building in the area may draw attention and attract visitors.
SITE ANALYSIS

ATTRACTIONS

There are a number of museums in the Sacramento Area close to the site. Most of these are located along the East of the river, in Downtown Sacramento and Old Town Sacramento.

IMPLICATIONS FOR DESIGN

The many museums in Sacramento attract visitors to the city, showcasing the history of Sacramento. Likewise, by placing the CIHC in West Sacramento will benefit the city’s prestige by creating an identity and attraction, raising awareness of West Sacramento’s own history.

Key:

A. California Railroad Museum
B. California Military Museum
C. State Capitol Museum
D. Sacramento History Museum
E. Wells Fargo History Museum
F. Crocker Art Museum
G. California Emigrant Trail Museum
H. Old Sacramento Schoolhouse Museum
I. West Sacramento Historical Society Museum
SITE ANALYSIS

GREEN SPACE

There are several parks near the project site, the largest one being Discovery Park along the American River. Small community parks are located close to the site in West Sacramento. Currently there are no greenways, or bicycle paths that link the site to other major green spaces.

IMPLICATIONS FOR DESIGN

One way to encourage walking and cycling is by connecting green spaces with pedestrian and biker friendly greenways or paths that provide a safe travel between the parks. There is potential for the State Park site to be linked with other parks by developing a trail that runs along the Sacramento River, and a pedestrian bridge that connects West Sacramento and Sacramento.
SITE ANALYSIS

FIELD OBSERVATIONS

The existing site is uninhabited natural land covered with grasses and shrubs. A large dug out pond is in the middle of the site, separate from the river water body. To the north of the pond is a deep dry pit.

A levee separates the site with the residential area on the west of the site. The road on the levee is the main access to the site and is at a raised elevation, so that most of the site is not very visible from the other side of this levee.

There are no tall buildings in the surrounding areas visible from the site.

There are no public amenities such as restrooms, and no city facilities or electricity and lighting in the site.

Informal dirt paths are apparent in the site, at higher elevations along the pond, and also towards the edge of the Sacramento River.
SITE ANALYSIS

VISUAL SETTING

Located along the Sacramento River, the site offers spectacular views of the waterfront.

2.3 Along edge of property. Raised elevation provides good view of river.

2.4 River panorama
VISUAL SETTING

Views into the large pond are also noteworthy. However, the edge of the water is steep and mostly obscured by overgrown shrubs, making it harder to get to the banks.

2.5 view of pond from edge of water

2.6 Along levee road. The raised elevation of the levee allows views towards the pond.
TOPOGRAPHY

The general topography of the site is rough and varying. The highest elevation is the Levee Road at the west side of the site’s boundary. The north of the site has flatter areas that have been previously filled for construction. The lowest elevation is the water level of the pond in the middle and the Sacramento River on the East of the site. Along the pond and the river’s edge are steep and somewhat inaccessible slopes towards the water. There is also a small dug-out pit connected to the pond.
HYDROLOGY

During heavy rainfall, the water reaches the high water mark, which fills up most of the pond, a large area south of the pond, as indicated by the orange line in the diagram. West Sacramento’s flood prevention regulates that permanent structures need to be higher than the 200-year flood elevation, which is 33.9 ft in this area, as shown in red on the diagram. In the event of a 200-year flood, all the areas to the west of the red line will be affected.
VEGETATION AND WILDLIFE

The site consists of a variety of different habitat types including riparian and grassland.

Mixed riparian woodland habitat covers roughly half of the area. The northern part of the area is fairly open, with medium sized trees that are both native and non-native. The southern part of the site is dominated by taller trees, forming a denser canopy. Animals such as hares and squirrels, and nesting bird species are associated with this habitat type.

The small dug-out pit contains a sensitive riparian scrub habitat of mixed species of trees and shrubs. The area is wet during the rainy seasons, but the water dries up during the dry seasons, as opposed to the pond, which is wet year round. This habitat is associated with burrowing small animals.
VEGETATION AND WILDLIFE

A large area of the site consists of disturbed annual grassland habitat type. It is dominated by non-native grasses and weeds. A variety of bees and butterflies are attracted by the flowers in this habitat.

Along the edge of the Sacramento River is an unvegetated sandbar. Soils are prone to erosion. There are signs of heavy erosion exposing the roots of trees along the banks.
EXISTING CIRCULATION AND ACCESS

The main access into the site is from Lighthouse Drive, up the ramp onto Levee road in the middle of the site. There are also two other informal entries, one at the north end of the site through a gate, and another at the south from 4th street close to the Broderick Boat Ramp parking lot. The site is also accessible by water transportation across the river from Sacramento. The Discovery Park boat ramp is located at the confluence of the Sacramento and American Rivers.
USES AND ACTIVITIES

Although the site has “no entry” signs at the gate, there were still a number of people using the site. There were people who were walking home through the site, and also people who are walking and jogging for exercise. Fishing and picnicking seem to be popular also, along the shores of the river. There were a number of tents set up within hidden areas of the site, showing signs of camping.
CRITIQUE

CALIFORNIA STATE PARKS AND EDAW’S DESIGN

The preliminary plan for the CIHC was developed in collaboration with EDAW and the Department of Parks and Recreation in early 2008. To this date, there are several alternative options that have also been designed, but only with small changes to this preliminary plan. This critique of the current plan is guided by the following criteria derived from the site analysis. (These criteria will also be used to evaluate the final design of this project.)

Design and Sustainability

• Is the design creative and innovative? Does it suit the theme and nature of the project?
• Are sustainable practices (waste, water, energy etc.) implemented in the proposed design and maintenance of the site?

Environmental

• Is the design sensitive to the existing ecosystems?
• Does it address different habitat types appropriately?
• Did it take into consideration the potential problems of development eg. Erosion along the river and displacement of water?
CRITIQUE

Social

• Does the design act as a practical and attractive space for users, and provide the suitable amenities and activities?
• Does it integrate well with adjacent developments that are existing/planned?
• How does it benefit West Sacramento and its communities?

The current design of the CIHC and State Park show many successful elements. However, there are certain issues that may not be fully addressed by the proposal. The inspiration for the layout of the site comes from traditional Indian villages. The buildings are arranged around a central courtyard and an existing large oak tree. The design is successful in connecting indoor and outdoor spaces. The plan also focuses on the conservation of the existing landscape, minimizing fill when necessary and using native species to enhance the landscape. The plan proposes using existing infrastructure for water, energy and waste treatment. Even though this is feasible, more can be done to improve sustainability; onsite waste water systems, and rainwater storage, solar energy usage are some examples.

The site analysis done by the CIHC Task Force indicates the buffer zones for the Elderberry shrub which is a habitat for the endangered longhorn beetle. The design is done so that construction avoids these plants. The plan also proposes to restore the wetlands with native plantings and reshaping the edge of the pond to maintain the health of the habitats. However, there is still potential for more to be done on the edge of the river to prevent erosion while
managing food issues. The banks of the Sacramento River are important assets to this specific site, and should be given as much attention as the other parts of the site.

Connectivity and integration to the surroundings are major criteria to a successful design. The current plan proposes strategies that would make the CIHC fit in with its environment. Massing strategies of plants are proposed to minimize the visual height of the buildings. Little is proposed to connect the State Park to existing green spaces and the neighborhoods. More can also be done to ensure that the communities around the park will have benefits besides being able to use the park. There is a potential for more educational and demonstrative programs such as land stewardship and community gardens.
**OPPORTUNITIES**

River access and activities in the water

Open spaces for games and outdoor program

Unobstructed views towards Sacramento

Habitat and vegetation restoration

**CONSTRAINTS**

Entry and levee constrains development and drastic changes to the topography

Height restriction on buildings

The floodplain is a major constraint on what can be built and on what activities can occur

Erosion in banks

Limited existing utilities

Sensitive ecosystem
DESIGN CONCEPT

My design hopes to address the problems and issues gained from the site analysis and critique of the existing design for the CIHC and State Park.

The most important elements in the design are the Museum building and the pedestrian bridge that connects the building directly across the site and then across the river to Sacramento. This connection allows the landmark to be seen as the visitor is travelling to the park from Sacramento.

Making use of the existing topography and landscape, and enhancing the existing views are also important considerations in the development of the concept. Connections within the site are established by paths that connect one vista to another, allowing the visitors to experience a journey through the history of the land and the people.

The key program and activity spaces from EDAW’s design remain similar in my proposal.
MASTER PLAN

LEGEND

1. Bus parking
2. Parking for boat ramp users
3. Museum rain garden
4. Large games demonstration area
5. Museum building
6. Entry plaza
7. Pond docks
8. Pedestrian entry bridge
9. Fountain
10. Amphitheater
11. Pond
12. Roundabout and artwork
13. Restored pond bed
14. Drive in picnic area
15. Artist village demonstration
16. Decomposed granite foot path
17. Small gathering space
18. Restored beach
19. Small celebration area
20. River docks
21. Bike and pedestrian bridge
22. Main visitor parking

5.2 Master Plan
**DESIGN**

**MASTER PLAN ELEMENTS**

**Museum Building**

The main museum building is located on the edge of the pond, raised on stilts to prevent flooding. The location of the building allows for views and access from the building to the pond, and also to be somewhat hidden and unobtrusive with the existing surroundings. It is built of natural materials in the area; the design and form reminiscent of Native American structural designs. The building should make use of sustainable practices and LEED guidelines. A rain garden collects runoff from the sloped roof and water percolates into the ground or flows into the pond. The entrance continues the natural appearance of the exterior walls.

**Entry Plaza**

The purpose of the entry plaza is to provide a transition from the urban surroundings into the wilderness of the park. The atmosphere here allows visitors to feel that they are leaving the city and entering the natural setting. The design is formal, while the plantings offer a naturalistic touch and softens the hardscape.

**Parking**

Permeable pavers used in parking lots allow water to percolate into the soil. Since the site receives a significant amount of annual rainfall, this would be a suitable technique to reduce run-off.
Pedestrian Bridge

The connection between CIHC and surrounding land uses is essential to the acknowledgement of the park and West Sacramento. Currently, there is no efficient way for bikers or pedestrians to cross the river from Sacramento to West Sacramento. The pedestrian bridge that this design proposes links Sacramento’s Richards Boulevard and Discovery Park Bicycle Trail directly to the park and the museum. Visitors will be able to travel across the river on the bridge in to the site, arriving on the edge of the park and cross another small bridge that stretches across the pond directly to the main building.

Docks and Canoe Rentals

Attached to the museum building is a dock area on the pond. From the higher elevation of the museum building, visitors can go down towards the water’s edge and enjoy the scenery or rent canoes to row around the pond.

Amphitheater

Located along the pond’s edge, the semi-circular amphitheater can hold live demonstrations and cultural performances. The audience seating is on the natural slope of the banks. The stage is at a raised elevation so that it is not submerged under water during wet seasons.
Restored Beach

The current conditions of the banks of the Sacramento River need cleanup and improvements. The restored banks will have a flatter slope, with vegetation that holds the soil and prevent erosion. Terracing will allow easier access to the water’s edge and invite more people to enjoy fishing and other recreational activities. A small dock is also provided for fishing and sightseeing opportunities.

Paths

Interpretive paths connect one vista to another, and allow visitors to enjoy and learn about the history and culture of the Native Americans. Terraces cover sections of the path where there may not be enough shade from surrounding canopies.

Fields and Demonstrative Gardens

The games areas are located at existing areas of flat land. These areas will be re-vegetated and maintained with grasses. Visitors can join Native American games or take part in a demonstrative cultural dance or celebration. Butterfly gardens and small community plots provide space for nearby communities to engage in the maintenance and education of the park.
MASTER PLAN ELEMENTS CONTINUED

Seasonal Artist’s Village

The Artist’s village is reminiscent of tribal villages, with teepees arranged in a circular fashion. Visitors can view the demonstrations of tribal art and basket weaving given by the artists in residence. The idea is that the village will move according to seasons, like the traditional lifestyle of the Native American people. During the dry months, the village will be located near the south entrance of the park; it is visible, yet secluded since it is at a lower elevation than the main road. During the winter, this area is prone to flooding, and the village will move to the open areas in the north of the site to gain maximum sun exposure.
The sloped edges of the pond will be flattened and revegetated with native wetland species for bioremediation and stabilization. This will also allow people to access the water more easily. Taller shrubs along the edge of the pond will be pruned and maintained for better visibility.
6.1 Along the Museum’s deck, view towards the inside of pond and amphitheatre on the other side
6.2 View from the south to north of the pond. A low wooden walkway above the waters allow visitors to travel across the pond.

6.3 Paved bike path along the East of the park and Sacramento River
6.4 Restored, recontoured beach allowing easier access to riverside. Raised docks provide a specific place for fishing.

6.5 Artists' village with basket weaving and other demonstrations for visitors to gain hands on experience in Native American cultural arts.
CONCLUSIONS

This project aims to develop a design for the proposed California Indian Heritage Museum and State Park in West Sacramento. The analyses of the existing site characteristics resulted in criteria used for the critique of the current design for the space. Problems identified in the critique included lack of connection to the site’s surroundings and community identity, and a need for more sustainable practices within the site.

These problems are addressed in my design of the CIHC State Park. The proposed design includes a better connection to Sacramento by a pedestrian bridge leading to the site and museum building. The plan also encompasses pedestrian and bicycle trails that lead from north to south of the site, connecting to existing green spaces. People from the surrounding neighborhoods will be able to identify themselves with the community of West Sacramento through interaction and taking part in maintaining the community gardens. Restorative practices in the wetland pond and along the banks of the river enhance the natural habitat and create a welcoming and pleasant experience for visitors.

The CIHC State Park is a place to celebrate the rich history of the Native Americans as well as the growing identity of West Sacramento. This project enriches the landscape and provides a diversity of programs for education, and environmental stewardship. It will transform an unwelcoming and underutilized space into a vibrant, and natural open space for people to come and enjoy.
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