CAPITOL MALL
Re-creating the Heart of California

SENIOR PROJECT - SPRING 2009 - RYAN SANDWICK
University of California, Davis- Landscape Architecture
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Capitol Mall
Re-Creating the Heart of California

A Senior Project Presented to the Faculty of the Landscape Architecture Program
University of California, Davis
In Fulfillment of the Requirement for the Degree of Bachelors of Science of Landscape Architecture

ACCEPTED AND APPROVED BY:

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Committee Member, Keith Wilson

By: Ryan Sandwick June 12, 2009
Abstract

The focus of this project is to define Capitol Mall as the strong, clear entry to the city and the central feature for the City of Sacramento. There are three main aspects to be evaluated in the determination of the design:

- First, to analyze the history of the city, street layout and buildings.
- Second, to analyze the existing sense of place that the entry offers to downtown.
- Third, to look at what Capitol Mall can symbolize in the future.

The project will be done in two parts: (1) defining the site context and (2) redesigning the street for additional uses. The intent of the first part is to use research and interviews to define what makes will transform Capitol Mall into a successful public open space. The objective of the second part of the project is to use the knowledge gained in the first part to create an iconographic gateway and boulevard that not only characterizes Sacramento but the entire region and state.
Greetings

June 12th, 2009

Dear Committee Members,

I am pleased to present my senior project as required by the Department of Landscape Architecture at the UC Davis College of Agricultural and Environmental Sciences.

Capitol Mall has the potential to become a international symbol of California and an iconic example of the potential breadth of urban streetscapes. I feel it is crucial to the City of Sacramento for it to be so. From my first memories of Capitol Mall at age 7 during a vacation with my mother to present day jogging along the Mall to Tower Bridge, the realization that a place could have such an impact on someone laid the cornerstone of my interest in landscape architecture and urban design.

Nearly 20 years after my first visit to the site, I am excited to present my vision and concepts for re-designing Capitol Mall; the place which planted the seed of my future educational and professional goals will now be the final project of my undergraduate career.

Thank you,

Ryan Sandwick
Aknowledgements

The Family
I wouldnt be who I am without you. You are truly the best that anyone could have and I am beyond blessed to have each of you in my life.
MOM AND DAD: Not only would I not be here without you (literally), but I wouldnt have made it this far without you both. I cant begin to thank.

The Friends
You know who you are, and must be more than thrilled to not have to listen to me complain about school again. At least for now.

The Bosses & Coworkers
Skip Mezger, Christina Reyes and Theresa Clark: Thank you for everything, especially for taking a chance on me! You have taught me far more than landscape architecture and how to draw construction details.

The Team
Catherine Wei, Susan Collopy and Keith Wilson: Thank you for your time, effort, direction and advice! I couldnt have done this without you all.

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The Past

City of Sacramento

History of Sacramento

Located at the confluence of the Sacramento and American Rivers, the city of Sacramento was discovered by Spanish explorer Gabriel Moraga in 1779, and was named after Spanish word for Sacrament. Sacramento was initially settled by John Sutter in 1839 as New Helvetia due to its location and easy river access. Ten years later when gold was discovered 50 miles to the east in Coloma, the discovery brought instant attention and interest to the city. Seemingly overnight the city of Sacramento was established and a city layout was developed based on an alpha-numeric street grid. Bordered by Broadway to the south, Alhambra to the west, A St. to the north and Front St. along the Sacramento riverbank to the east, the original street grid composed of the current central neighborhoods of downtown and midtown. Due to the population explosion and rapid development created by the Gold Rush, the city charter was drawn in 1849. In 1850 Sacramento became the first incorporated city in the state and has been the state Capital since 1854.

Capitol Avenue Circa 1932

M Street Circa 1908

M Street Circa 1914

M Street Circa 1940
History of Capitol Mall and Downtown Sacramento

Capitol Mall was initially designated as M Street on the historic city street grid. In 1911, the M Street bridge was built connecting the town of Washington (current day West Sacramento) to downtown Sacramento providing trolley and vehicular access to Yolo County and San Francisco. With a bridge over the Sacramento River connecting Sacramento to the western communities, M St. became one of the heaviest travelled and most important commercial corridors in the city. With the heavy traffic over the bridge, the State decided in 1933 that the bridge was incapable of accommodating that heavy traffic, especially in case of war. Adjacent to the M St. bridge, the new Tower bridge was built in 1935 with 4 lanes of traffic and a large center lane designated for trolleys. Designed in the Streamline Moderne architectural style, the lift bridge quickly became a recognizable symbol and landmark for Sacramento.

The area currently known as downtown Sacramento was originally known as the West-End. Composed of the Railyards, docks and riverfront, the West-End was home to large populations of bachelors, immigrants and other groups who were considered to be undesirable and was the Skid Row of Sacramento. The large numbers of Chinese immigrants and single males created an original Chinatown and red-light districts soon emerged throughout the area.

During the 1950’s when the Federal Government was building the national interstate system and encouraged urban redevelopment, the city of Sacramento leveled entire blocks of historic buildings in the West-End. Removal of these neighborhoods cleared out the Chinese and bachelor populations in an effort to create a financial and shopping district with large state and privately owned office buildings. During this period, the city decided to widen Capitol Avenue between the Capital Building and Tower Bridge in the Parisian style into what is now Capitol Mall. In order to widen the street into a grand boulevard each block located along the mall was leveled, which also removed 37 of the 39 Chinese restaurants in the city.

Historically, Tower Bridge and M Street (Capitol Mall) were the main western points of entry into Sacramento, but were replaced by the easy access provided by freeways in the 1960’s. When Capitol Avenue was developed into Capitol Mall it was lined with State office buildings and smaller scale nondescript private office buildings. During the late 1980’s Sacramento’s first high rises took shape at the west side of Capitol
Mall triggering a shift not only in the future economic and architectural development of the Mall, but in downtown Sacramento itself. During the last two years, two new high rises have been built on Capitol Mall and three additional are proposed, which would all be taller than any existing building in the city.

The Present

Site Analysis

Vehicular

When first settling in the Sacramento area, I would take the downtown Sacramento exit from the eastbound Capitol City Freeway when heading into the city assuming that it was the most direct and efficient method of entering the downtown and midtown neighborhoods. Often there never seemed to be much traffic or activity on the Mall which contrasted with its regal nature and central location. Becoming more familiar with the area, I began to recognize that although it was the most scenic and visually stimulating entry into the city, it often took much longer and requires knowledge of the city grid and one-way street directions for easy navigation.

Historically, Tower Bridge and Capitol Avenue were the main west entrance into the city of Sacramento and was greatly expanded in 1959 when the State of California widened Capitol Avenue into the current configuration of Capitol Mall. When the State widened Capitol Mall, it created connecting vehicular access points at the corner of 2nd street and Capitol Mall which defectively directed traffic off of the Mall and onto the adjacent one way L and N streets. Tower Bridge continued to be so until the Interstates 5, 50 and 80 were completed in the 1960's.

Beyond losing its function as the main west entry and vehicular point of entry into the City of Sacramento, traffic on Capitol Mall has decreased for many reasons including:

- When the state widened Capitol Mall, they created connecting vehicular access roads at the corner of 2nd street and Capitol Mall, at the current location of I-5, which effectively created a traffic shortcut off of the mall and onto the adjacent L and N streets.
- Interstates 5 and 80, along with Highway 50, allowed freeway access around downtown replacing Tower Bridge and Capitol Mall.
- The freeway onramps/off ramps at 10th, 15th, P, Q, J and I streets created thoroughfares through adjacent downtown neighborhoods.
- Each building located on Capitol Mall has their parking entrances on the side or rear of the buildings, de-emphasizing the building fronts on Capitol Mall.
- Capitol Mall is the only divided two way street in the central city which requires a longer time for the traffic signals to cycle through than any other street in the urban core. Additionally, the large width of the street requires a longer time for pedestrian crossings to prevent them from being stranded on the central median consequently prolonging the length for the traffic signal cycle.
- The Mall's traffic signals are timed for the north-south thoroughfares, often resulting in multiple red lights and a longer travel time than adjacent one way streets, primarily L and N Streets.
- Traffic signal system on Capitol Mall was installed nearly 40 years ago and do not feature triggers to let the signals know when a car is waiting at a red light.

Consequently, traffic on Capitol Mall has decreased even though new high rise Class A office buildings to the point where the blocks between 5th and 10th have little to no traffic during the rush hour period. Traffic count maps with the City of Sacramento have not been updated in some cases since 1988 and are not reliable.
Public Transportation

Capitol Mall is a multi-modal transportation corridor featuring light rail, bus rapid transit and regular buses.

**Rail:** Sacramento’s regional transit light rail system operates two stops on Capitol Mall, at 9th and 8th Streets. The light rail system connects Capitol Mall to Folsom, South Sacramento, mid-town, downtown, Sacramento Valley Rail Station and Interstate 80 @ Watt Avenue. In the future it is proposed to have a trolley car system connecting Capitol Mall and West Sacramento.

**Bus Rapid Transit:** The bus rapid transit lines have their terminus on Capitol Mall at 7th and 8th Streets which connects to South Sacramento and Florin Mall. There are no bus systems which travel the length of the mall but several, including the YoloBus, travel over Tower Bridge and turn onto 3rd or 5th Streets.

**Pedestrian**

Pedestrian activities on Capitol Mall primarily consist of two groups: visitors and employees. Serving a workforce primarily of professional employees during business hours, Capitol Mall is underutilized during the weekend and off peak hours through the central portions between 3rd and 9th Streets. The most heavily traveled portions of Capitol Mall are at the ends, at the fountain between 9th and 10th and by Front Street in front of Tower Bridge, both of which are popular with visitors for photo opportunities.

**Employes:** During business hours, the sidewalks have large numbers of employees walking to and from their offices, and even more are crossing the Mall heading to Downtown Plaza or K Street.

**Visitors:** While speaking with out of town visitors around the Capital building and on the western end at Tower Bridge, often they do not realize that they can walk the length of Capitol Mall to connect them between the cities two largest attractions: The Capital and Old Sacramento. Currently there is poor pedestrian signage to inform visitors of existing eateries along Capitol Mall, nor are there exciting places along the length to activate the space.

**Landscape**

Summers in Sacramento often consists of multiple consecutive days with temperatures above 100 degrees, thus sidewalk and street shading are crucial for a successful outdoor space. Capitol Mall is lined with Little Leaf Lindens (Tilia Cordata) which are medium-sized deciduous trees

Capitol Mall @ 8th Street

Capitol Mall @ 5th Street looking west

Capitol Mall @ 5th Street looking north
with a thick green canopy providing adequate shade and coverage during the high summer temperatures. With weak yellow Fall coloring, the Lindens lose their leaves for 4-5 months and their dark bark and structure is unattractive during the Winter months. Additionally the Lindens were planted in the 1960’s and have a typical life span of 50-60 years, which would mean that they may start showing sign of decline in the next 10-15 years. Many of the buildings along Capitol Mall have a traditional landscape featuring lawn with flowering foundation plantings along the buildings, specifically along the blocks between 7th and 9th Streets.

**Hardscape**

The sidewalks along Capitol Mall are inconsistent in width and design and may vary by building. While most are the similar in size and layout, the sidewalks in front of the new high-rises, specifically at the western end, each have their own sidewalk style with different banding materials.

Capitol Mall @ 9th Street

Wells Fargo Building Entry Plaza

Economic Development Plaza
The Present

Central Sacramento

Proposed Adjacent Projects

The city of Sacramento has strongly embraced urban infill projects and as began to utilize them in promotion of its Central Business District. With these projects located throughout the central city, Capitol Mall finds itself as the missing link surrounded by proposed, planned, in construction and built infill projects on all sides. The following are adjacent projects to Capitol Mall by geographic region.

The South:
- Located on 3rd and O Streets, the Crocker Art Museum’s $100 million expansion will add 100,000 sq. feet of museum space within walking a two block distance of the west end of the Mall.
- The R Street corridor is a 27 block long, and 5 blocks south of Capitol Mall, former warehouse district which is being transformed into a transit-oriented arts, loft, business and restaurant corridor.
- The Docks project is bounded between Capitol Mall, Interstate 5, the Capitol City Freeway and the Sacramento River. The 43 acre site is expected to house up to 1,115 residential units and create 1,825 new jobs.

The West
- The Triangle in the City of West Sacramento is located at the terminus of Capitol Mall on the west side of Tower Bridge. Raley Field, home to the Sacramento Rivercats, is located there and the Triangle is one of the largest urban infill sites in northern California.

The North
- Located one block north of Capitol Mall, Downtown Plaza is an urban mall occupying 3 city blocks and is currently undergoing an $80 million renovation adding over 100,000 sq. feet of retail space.
- K Street Mall is pedestrian and transit focused shopping district located two blocks north of the Mall and is undergoing a $4 million streetscape renovation along the 700 block.
- The Railyards is the historic end of the Transcontinental railroad and is sandwiched between the Sacramento River, Richards Boulevard and downtown Sacramento. The 244 acre site will double the size of downtown Sacramento and has the potential to support 12,000 mixed use housing units and 19,000 jobs in addition to a strong open space network, river walk, markets and expanded museums.

Capitol Mall is located in the heart of downtown Sacramento’s business district and is the premier business address in California’s Central Valley. Additionally, it is home to three of the tallest buildings in the region and is among the most important street to Sacramento’s skyline.

In the last two years, two new high rise office buildings have been completed on Capitol Mall creating nearly a million square feet of new office space and nearly 50,000 square feet of retail and restaurant space.

Proposed West Sacramento Riverfront rendering by landscape architecture firm WRT.
The Context

The Big Picture: City of Sacramento

- The Railyards
- K Street/Downtown Plaza
- Capitol Mall
- Crocker Museum Expansion
- Washington District
- The Triangle
- R Street Corridor
- The Docks
- Pioneer Bluffs
- Miller Park/Marina

Locations:
- Midtown
- West Sacramento
- East Sacramento
- Oak Park
- Land Park
- Arden-Arcade
- South Natomas
- East Sacramento
- North Natomas
- Arden-Arcade
- South Natomas
The Context

The Big Picture: Central City

- Downtown Plaza Upgrades
- K Street
- Capitol Mall Proposed Buildings
- Existing High-Rises
- Proposed Developments
The Context

Circulation With Building Use and Height

- Mid-rise office buildings
- High-rise office buildings
- Low-rise state and federal office buildings
- Potential open space
- Future High-rise office buildings

Light Rail

Capitol Mall
The Context

Vehicular Traffic Study

The thicker the lineweight the heavier the traffic volume.
Traffic volumes are estimated through observation.
The Context

Foot Traffic Study

The thicker the lineweight the heavier the pedestrian traffic.
Traffic volumes are estimated through observation.
The Context

Site Destinations

- Restaurants/Cafes
- State Capitol and Capitol Park
- City Hall
- Downtown Plaza
- K Street Mall
- Embassy Suites Hotel
- Light Rail Stops
- Tower Bridge and Old Sacramento
- Banks
- Capitol Park
- Capitol Parkway
- Capitol Mall
The Context

Existing Buildings
The Context

Building Height Section

- 300 Capitol Mall: 18 Stories / 383,328 sq. ft.
- Wells Fargo Bldg.: 30 Stories / 504,000 sq. ft.
- Bank of the West Bldg.: 24 Stories / 433,508 sq. ft.
- US Bank Bldg.: 25 Stories / 366,000 sq. ft.
- California State Capitol Bldg.
The Context

Opportunities

- Transit Plaza/Adaptive Re-use of ex. buildings
- Potential 6th Street garden walk/corridor
- Potential green open space
- Incorporate ex. retail and plaza/courtyards
- Potential adaptive reuse existing state buildings
- Potential future high density residential towers
- Potential high rise mixed use
- Potential Crocker Museum sculputural garden
- Existing two way street intersection/roundabout
THE FUTURE CAPITOL MALL EXPERIENCE

Street Design

Fifty years ago Capitol Mall was developed as the main entrance into Sacramento and was designed to be the grand boulevard of the city. While much has changed on and around the Mall, the design never came close to achieving its original design intent of serving pedestrians and vehicles equally. As new buildings and development re-invent the way the Mall is used, it is important for the future Capitol Mall design to respond to current planning principles as an equally balanced vehicular, transit and pedestrian corridor.

Creating breathtaking views of the Capital and Tower Bridge, Capitol Mall is an average of 135’ wide from sidewalk to sidewalk and includes a 35-40’ wide lawn median running the central length the Mall between 3rd and 9th streets. With the set width of the Mall verified from AutoCad and Sketch-Up base files, I created a list of elements I wanted to incorporate into a new design. These included:

- Replace the central lawn median with a narrower and low growing landscape plantings.
- Include bike lanes in each direction.
- Increase width and continuity in sidewalk design and layout.
- Incorporate special paving patterns to engage tourists. Possibilities include California Hall of Fame, counties of California, history or special facts about the state.
- Add benches and human scale street lights with signage potential along sidewalk.
- Remove existing street trees and replace with two rows of a new species of tree.
- Create evenly spaced visual interests along the central median.
- Widen the bridge over Interstate 5 to equal the width of the rest of Capitol Mall to improve the pedestrian experience and create signage/visual ques for traffic on the interstate.
- Improve the street intersections along

Existing

Proposed
Capitol Mall to help cross traffic identify that it is a ‘special place’.

- Design streetscape for potential adaptive reuse of existing State and Federal office buildings.
- Improve connectivity and relationship with adjacent buildings and city blocks.
- Include water features as key design elements.
- Introduce roundabouts at the intersection with the two-way streets.

With a limited available width to accommodate these features, I aimed to incorporate all of these elements utilizing the most efficient use of spaces while preserving a significant view corridor through the center of the Mall. Decreasing the width of the central median allows for the addition of bike lanes and streetscape and sidewalk widths. In order to achieve this, I decreased the size of the central lawn median to a 12’ landscaped median which centered the traffic lanes in 15’ from their existing location. On the outside edges of the traffic lanes, 6’ wide bike lanes

- 12’ wide central landscaped median with gold/orange colored flower carpet roses to enhance the Golden State motto persona.
- Two 12’ wide traffic lanes moved 15’ towards the centerline of Capitol Mall.
- 6’ wide bike lanes
- 4’ wide decomposed granite running path
- 7’-6” tree planting strip
- 12’ wide sidewalk with interpretive paving design.
- Second 7’-6” wide tree planting strip as buffer between streetscape and existing private landscape and plazas.
The Future

Aerial Comparison

Existing

Proposed
The Future

Site Sections

Typical Street Section

Sidewalk and Tree Allee

Landscaped Median

Bike & Traffic Lanes

Bike & Traffic Lanes

Sidewalk and Tree Allee

Section @ 9th Street Plaza
The Future

Site Close-Ups: 9th Street Plaza
The Future

Site Close-Ups: Streetscapes
The Future

Site Close-Ups: 4th Street Roundabout Fountains
The Future

Site Close-Ups: 6th Street
Roundabout Fountains
The Future

Site Close-Ups and Birds
Eye Views
Thank You! (applause)