

HOLLYWOOD, CA MOTION PICTURE MUSEUM

THE TRANSFORMATION OF DAY AND NIGHT


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BIOSYNERGIES 2012

NANCY CHENG



THESIS STATEMENT

A black silhouette of a city skyline with various building shapes of different heights and widths, spanning the width of the page above the text.

Hollywood, Ca is recognized by most as the **entertainment capitol of the world**. It represents historic landmarks such as the Chinese, Pantages, and Kodak theaters, as well as celebrity iconography like the "walk of fame." Tourists perennially visit to walk along Hollywood Blvd and observe the extravagant displays of movie premieres, the luxurious lifestyles of the rich and famous, and the overall glamour that embodies the city.

Today, when visitors make the trip to Hollywood, what do they find? **Does Hollywood still represent the luxurious lifestyle promoted by the media?** My opinion is that somewhere along the evolution of the first film studios and today, Hollywood has lost some of its glamour and appeal.

The character of Hollywood will always be a center for attraction, yet will it be **a place for people or cars?** Today, I believe that Hollywood exemplifies urban sprawl at its worst. There are few places for pedestrians outside of isolated neighborhoods, commercial centers, and Hollywood Blvd. My project focuses on the **Hollywood district, where the history is rich, "the community is making a comeback," and public transit is growing**

more efficient.

This area is currently under redevelopment; guided by the Hollywood Redevelopment Project. **The residents of Hollywood are calling for walkable streets, improved open spaces, transit-oriented mixed use, and affordable housing.** In order to accomodate growth, Hollywood must infill development to reduce the impacts of urban sprawl and preserve the distinct neighborhoods that define the community.

My thesis project showcases these sustainable development strategies at a district and building scale. The proposed development **is defined by the diurnal character of Hollywood, focusing on light as a social catalyst.** During the day, natural light is filtered by urban landscapes, activating public spaces. At night, adaptive signage transforms the same landscapes into interactive media facades, expressing the active night life of Hollywood Blvd. **The Motion Picture Museum proves that media and urban landscapes can work together to reduce energy consumption and re-connect Hollywood to quality outdoor spaces.**

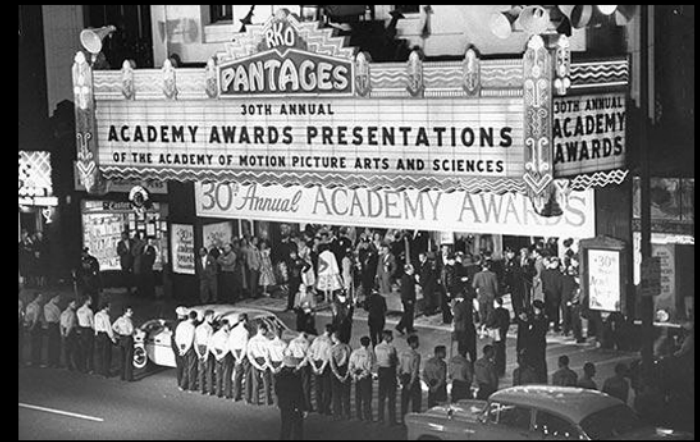
HISTORY



[HTTP://WWW.MAGALIBEVERLYHILLSREALESTATE.COM/?P=1052](http://www.magalibeverlyhillsrealestate.com/?p=1052)



[HTTP://WWW.SEEING-STAR5.COM/IMAGEPAGES/VITAGRAPHSTUDIOPHOTO.SHTML](http://www.seeing-stars.com/imagepages/vitagraphstudiophoto.shtml)



SMITHSONIAN MAGAZINE

1870

Agricultural Community

1886

-Harvey Wilcox move from Topeka, Kansas
- Hollywood named by Hobart Whitley after California Holly (native shrub).

1887

Wilcox created a grid map of the town with main street as Hollywood Blvd.

1910

-Citizens vote to be annexed into LA to secure a stable water supply
-History as a motion picture production center began slowly as most production companies were in NY and NJ due to proximity to Thomas Edison (patent holder)

1911

-First studio built in Hollywood on Sunset Blvd and Gower Ave.
-Soon Hollywood was movie capitol of the world

1922

Movie theater mogul Sid Grauman built the Egyptian Theater

1927

Sid Grauman built Chinese Theater, further establishing dominance in the industry

1929

First Academy Award

1947

KTLA began broadcasting in Hollywood, first commercial television station west of Mississippi

1956

Capitol Records establishes music recording studio

1970-1980

Many parts of Hollywood fell into despair. Many businesses closed and moved to other parts of the city

(History of Hollywood)

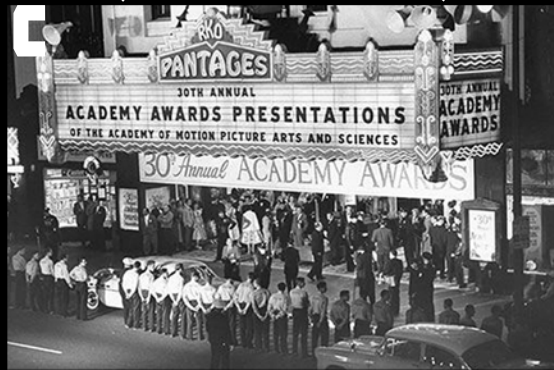
THE CITY



(Ellenberger)



(L.A. World Famous)



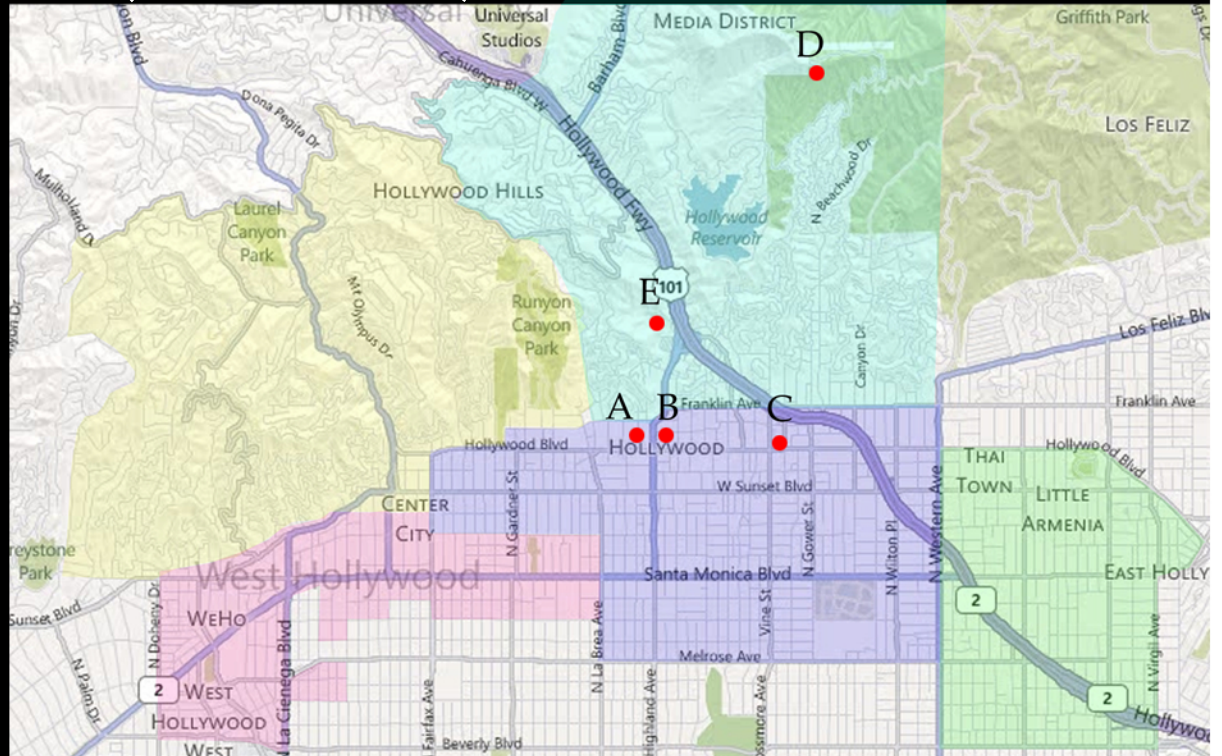
(Smithsonian Magazine)



(L. A. World Famous)



(JHI Conf.)



W. Hollywood Hollywood E. Hollywood W. Hollywood Hills Hollywood Hills

THE USERS



JOHN, AGE 23

LA visitor

Lives in Downtown Los Angeles

Attracted by entertainment and night life.

Travels by Red line metro to Hollywood Blvd.



LINDSAY, AGE 35

Hollywood Local

Lives in Hollywood Hills

Works in Glendale, CA

Travels by car and dislikes commute due to heavy traffic.



HIROKO, AGE 55

Foreign Tourist

Lives in Kyoto, Japan

Attracted by historic landmarks and celebrity iconography.

Travels by airplane to Los Angeles, stays at the W Hollywood.

THE WILDLIFE



NATIONAL PARK

Santa Monica Mountain Range

Located North of Hollywood

One of the largest Mediterranean type ecosystem preserves.

Large recreational draw for Hollywood residents.



RAPTOR

Osprey, large raptor

Hollywood local

Patrols hundreds of miles of the valley and coast, including Ballona Creek.

Top predator adapted to city utility poles, etc as nest.



PLANT

California Sage Brush

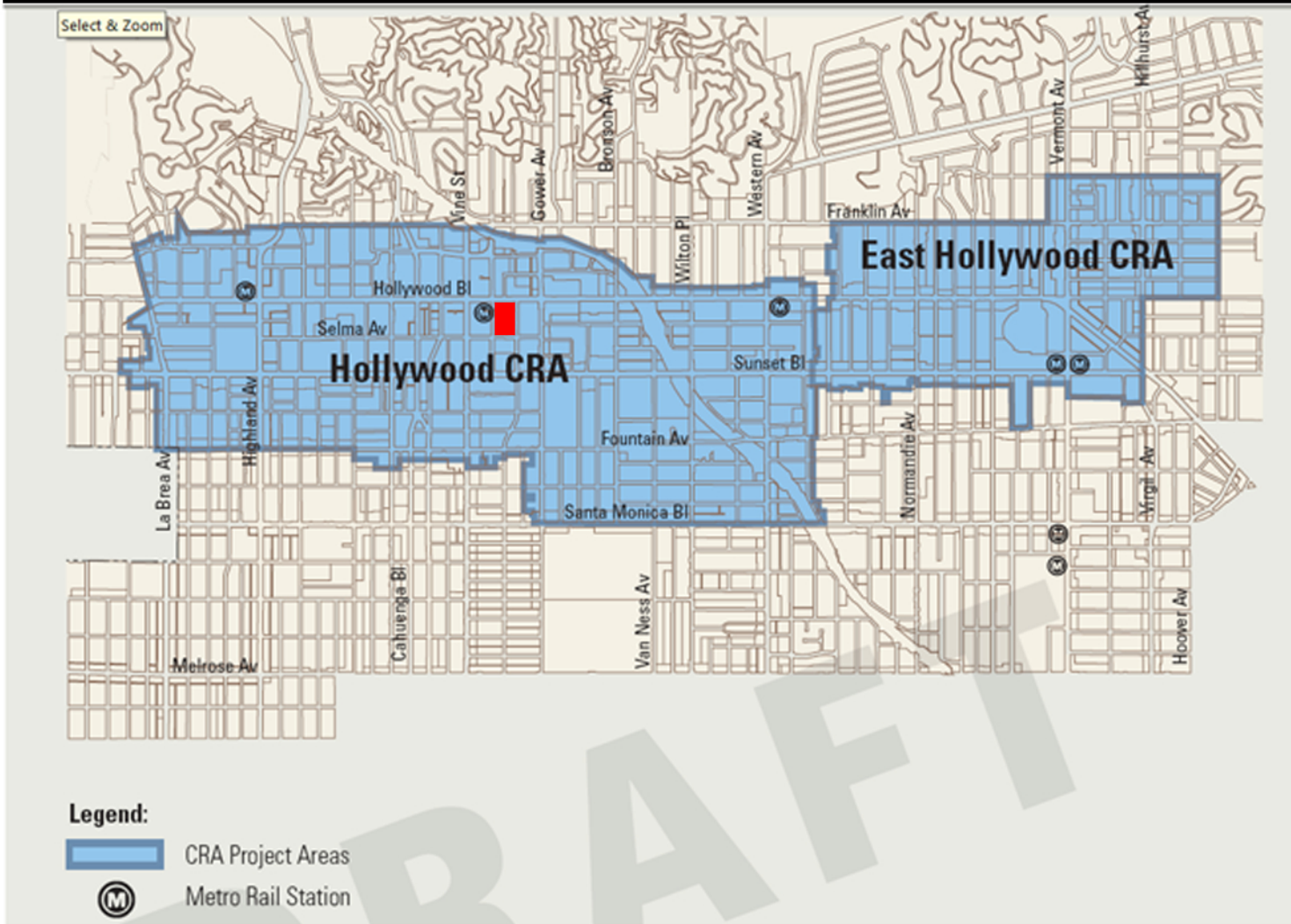
Hollywood Local

Drought-resistant native plant

Seen frequently along Hollywood hillside.

ZONING AND CODES RELEVANT TO SITE SELECTION

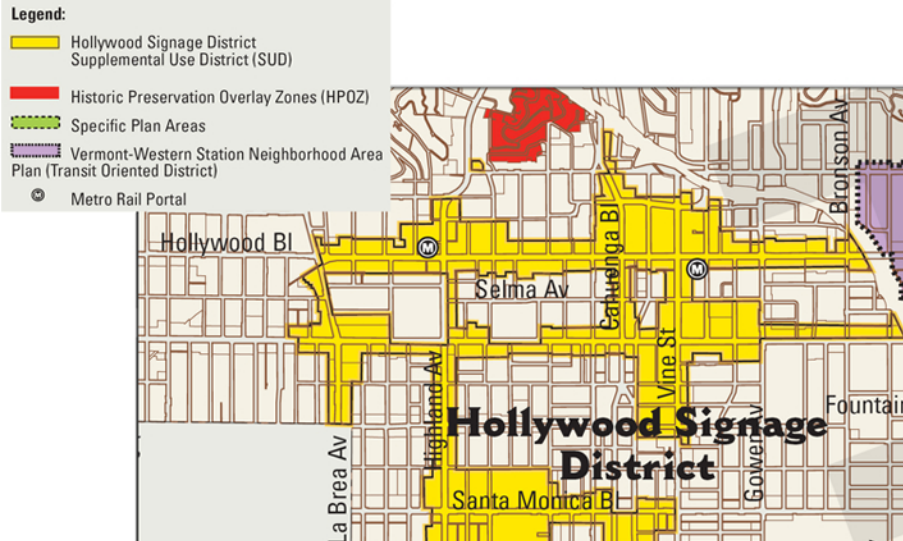
Hollywood Community Re-Development Area



The Community Redevelopment Agency is a public agency pursuant to California State Law (Code Section 33000) to attract private investment into economically depressed communities. Within the project area, the increment in tax revenues by redevelopment is used to support further investment. CRA programs foster job creation, maintain and increase the supply of housing for low-and-moderate income households, and renovate, remove or replace deteriorated structures. The Hollywood CRA alone represents the 1,107 acre Hollywood Redevelopment Project.

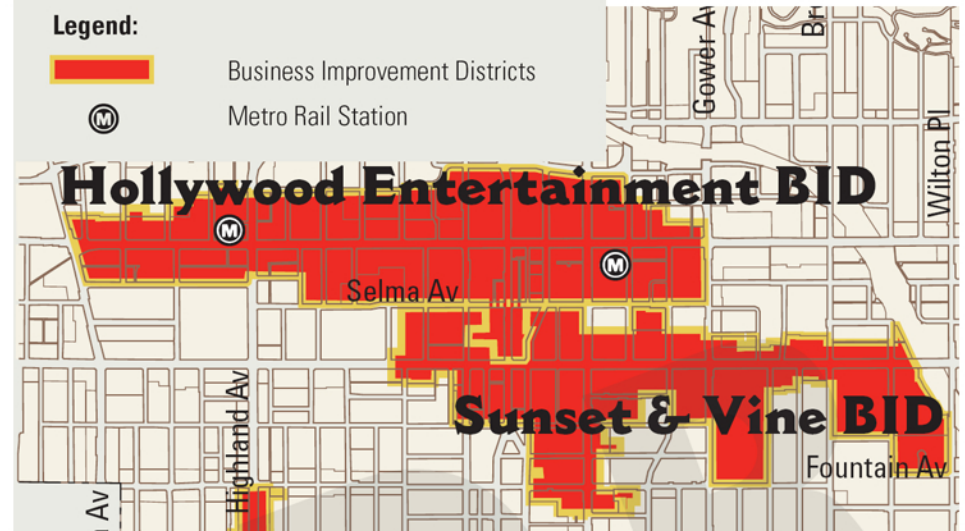
ZONING AND CODES RELEVANT TO SITE SELECTION

Site is within the Hollywood Signage District



The Hollywood Signage Supplemental Use District was established to promote signage which complements the historic architecture and signage of Hollywood Boulevard and allows new sign technologies which are well designed and carefully located.

Site is in the Business Improvement Zone



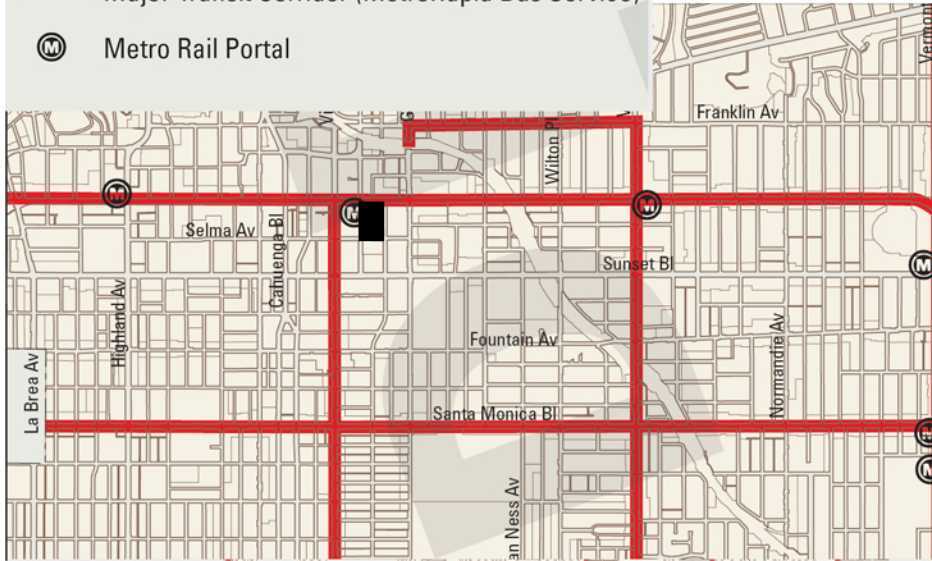
Business improvement districts are districts in which commercial property owners vote to impose a self-tax to fund improvements such as streets and sidewalk maintenance, public safety officers, park and open space maintenance, marketing and other capital improvements.

ZONING AND CODES RELEVANT TO SITE SELECTION

Site is located along major transit corridor

Legend:

- Major Transit Corridor (MetroRapid Bus Service)
- Metro Rail Portal



The map above shows that the site is well connected to major transit corridors including the metro rail portal.

FAR Requirements

Legend:

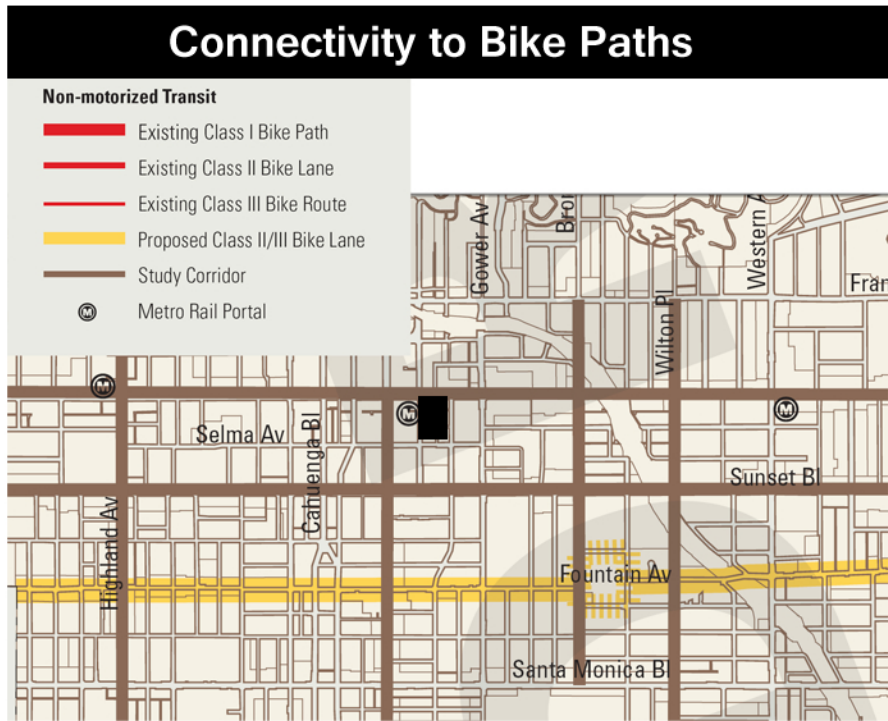
- FAR 4.5:1* for Commercial Uses or Mixed-Use, minimum FAR 1.5:1 for Commercial Uses
- FAR 4.5:1* for Commercial Uses or Mixed-Use, minimum FAR 1:1 for Commercial Uses
- FAR 3:1* for Mixed-Use
- FAR 3:1* for Residential, Commercial, or Mixed-Use

* In the Regional Center FAR 6:1 may be considered on a case by case basis.

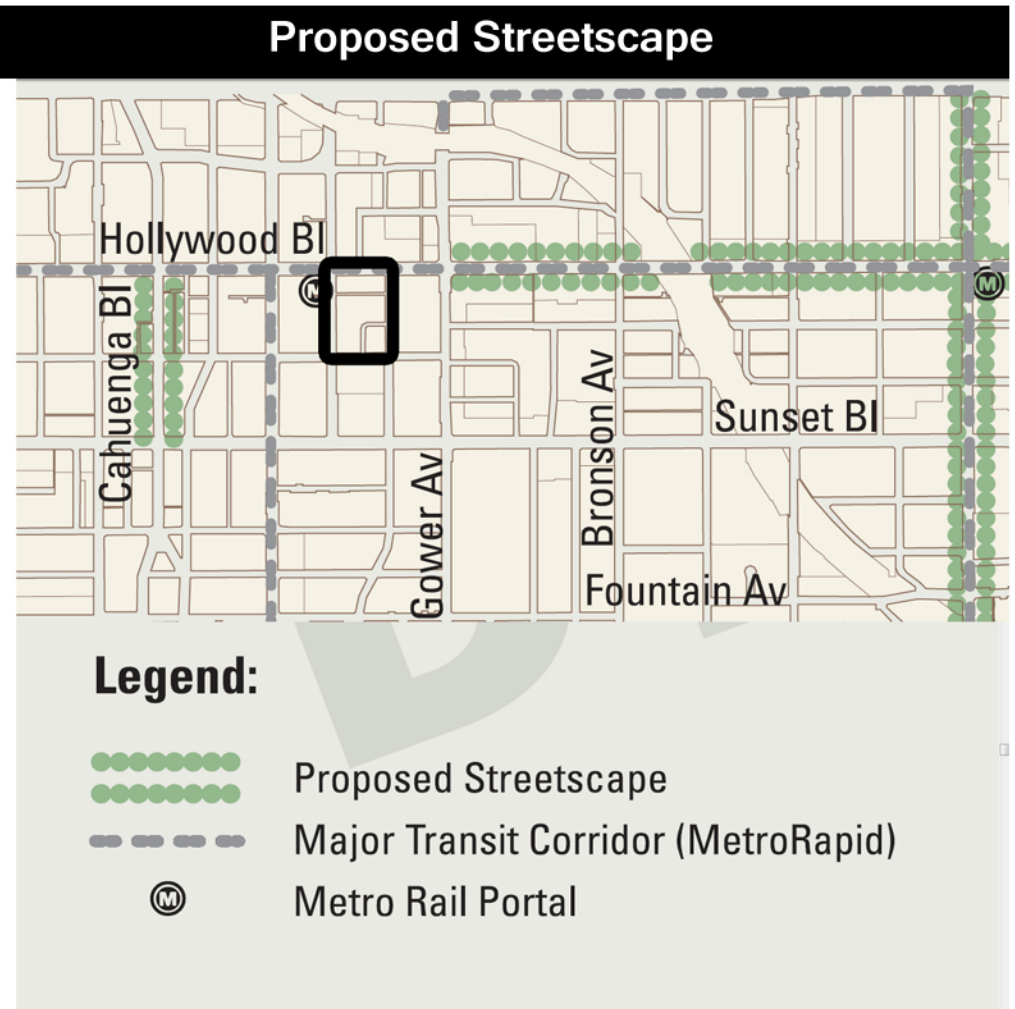


The above map shows that a portion of the site must have a minimum of a 1:1 Floor Area Ration and maximum of 5:1

ZONING AND CODES RELEVANT TO SITE SELECTION



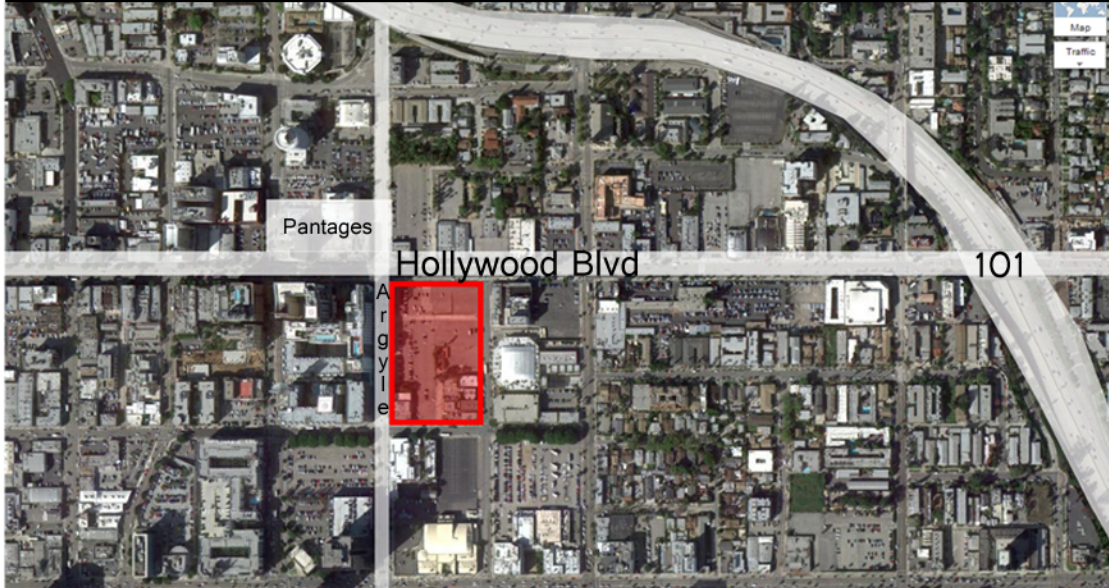
This map shows the bike paths that are closest to the site. The flexibility of the study corridors makes my site easily accessible and well connected to future pedestrian routes.



This map shows a disconnect between Cahuenga Bl and Gower Bl along Hollywood Blvd. The site location has potential to draw the tree-lined boulevard further west down Hollywood Blvd to connect Cahuenga. This would improve pedestrian activity and support the “walk of fame.”

THE SITE

6242 Hollywood Blvd



The site is located on 6242 Hollywood Blvd adjacent to the W Hollywood and Pantages theater. This city block represents the majority of open spaces in the entertainment district; massive parking lots also known as heat islands. The abundance of these large parking lots fragment the street front and reduce the walkability of the area. The result is an experience of controlled chaos. The streets are congested with vehicular traffic and there are few screens to separate pedestrians from the street.

Recent developments, like the W Hollywood, are beginning to fill in the gaps and create connectivity along Hollywood Blvd. The adjacency of the Metro Rail and bus lines make this site ideal for commuters. The concept of car-free living is still unrealized by residents because there are few developments to make it feasible.

Any landscaped areas in Hollywood are walled off within private residences or sparingly distributed across the urban plan. However, the community demands more civic outdoor space; places to pause in the midst of their busy lives. This site presents a great opportunity for residents to access landscape through a civic outdoor space. Also, this would connect the adjacent landmarks to a larger urban center instead of isolating them with seas of parking.

Therefore, I look to apply sustainability lessons learned from Portland Pilot EcoDistricts to the city of Hollywood. The principles I plan to implement from these precedents are car-free living (reducing vehicle miles traveled), district resources (solar, water collection, etc.), and transit oriented mixed-use.

SITE PHOTOS



SITE CONTEXT



HOLLYWOOD SIGNAGE



TRACES

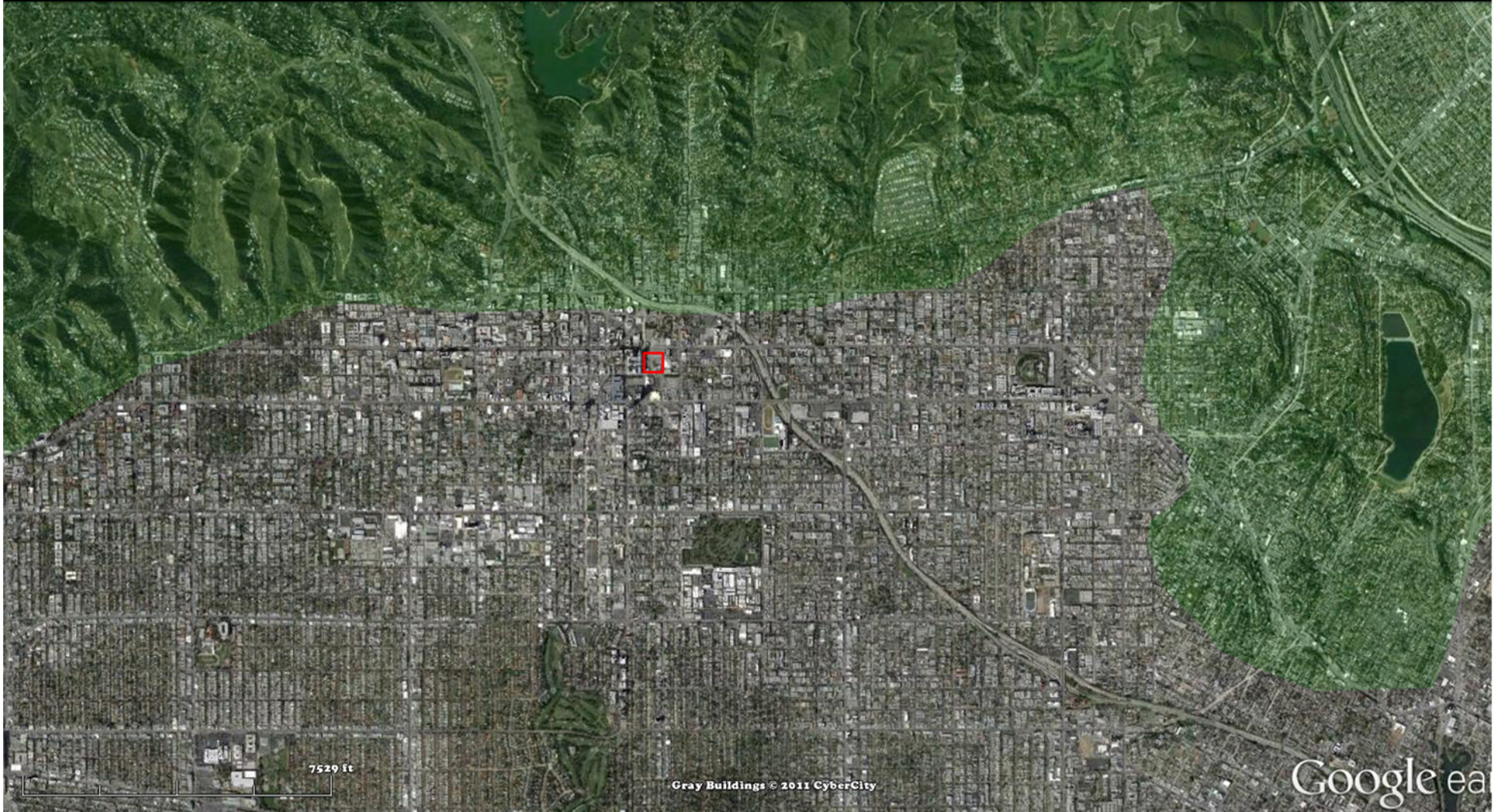


SITE ANALYSIS

Site




Natural Context



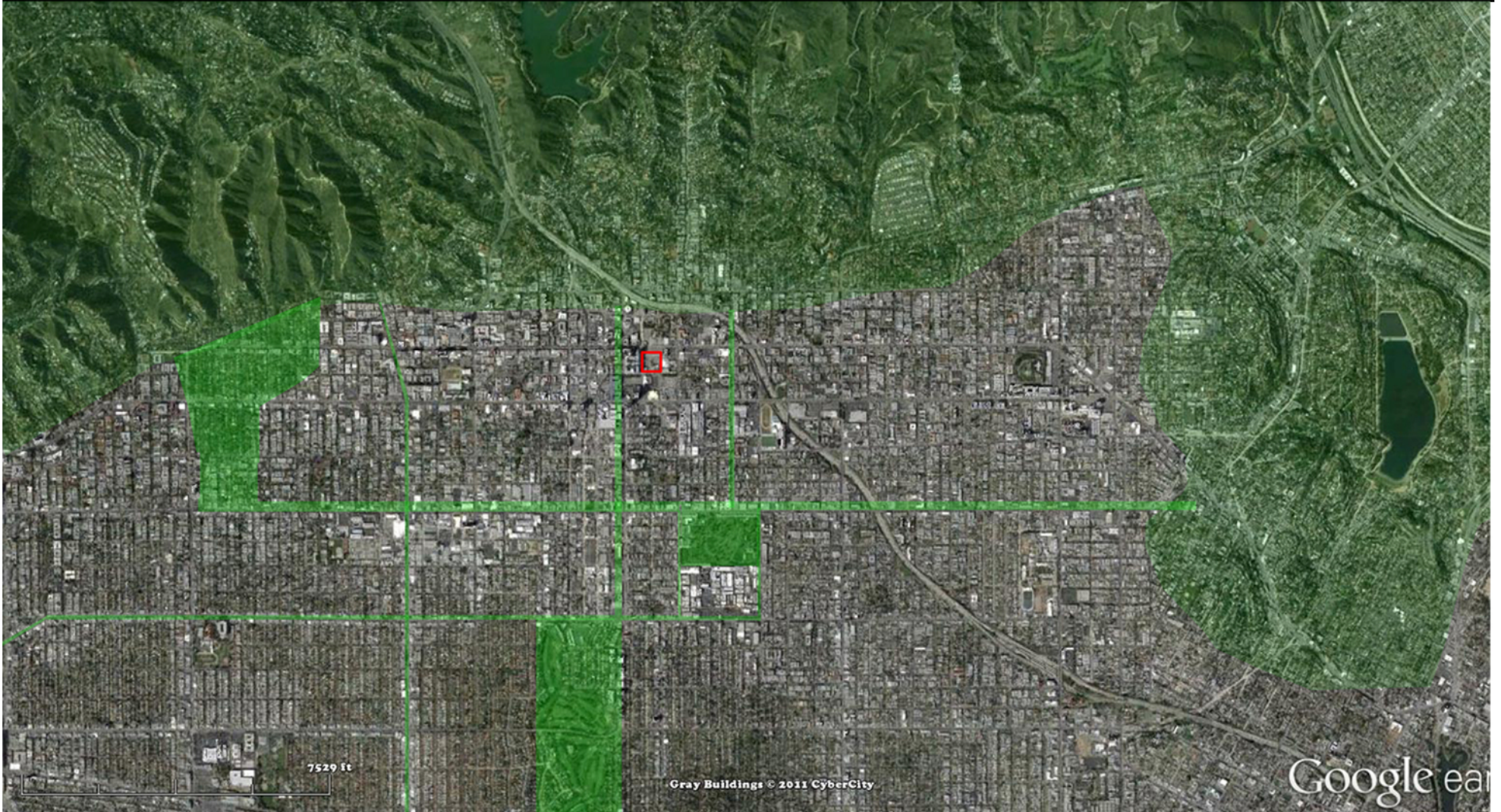
This map represents the natural context and its relation to site. It is very evident from the aerial photograph that the flatlands are highly developed and from a strong barrier between nature and the city. There are large urban parks scattered throughout the city; however,

the issue is that there are no wildlife corridors or walkable connections between the urban parks and the larger nature preserves. Therefore, wildlife is cutoff from the city and there is no larger matrix to tie the two park systems together.

SITE ANALYSIS

Site 

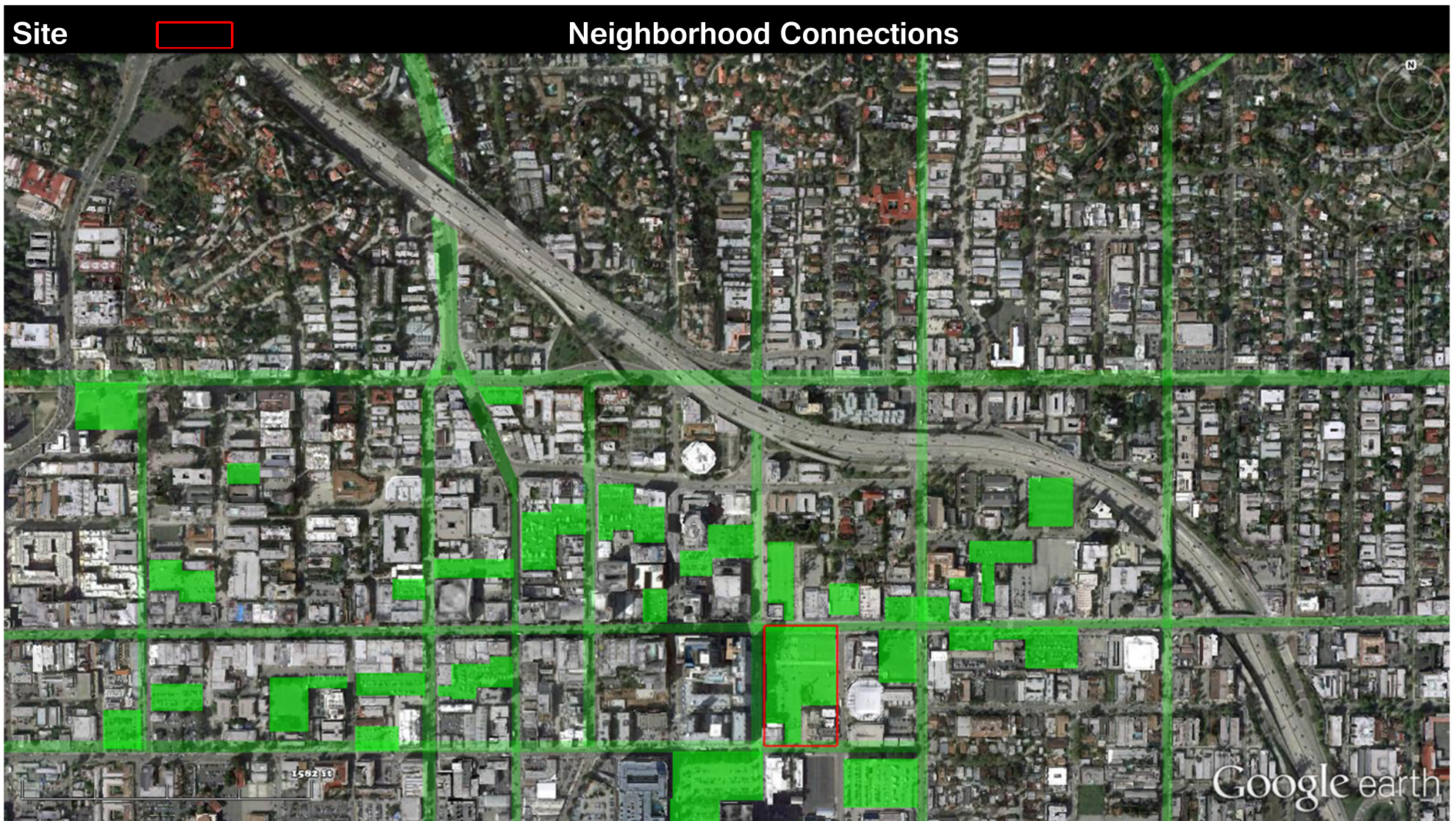
Possible Park Connections



Above, I have mapped out a possible park matrix. It would connect the larger nature preserves to the urban park system through wildlife corridors and green boulevards. This would create a higher pedestrian priority, allowing residents the ability to walk or bike from

park to park without issues of heavy vehicular congestion. Due to the public transportation connections, the highlighted site could become a starting point for residents and visitors to access nature in the city.

SITE ANALYSIS

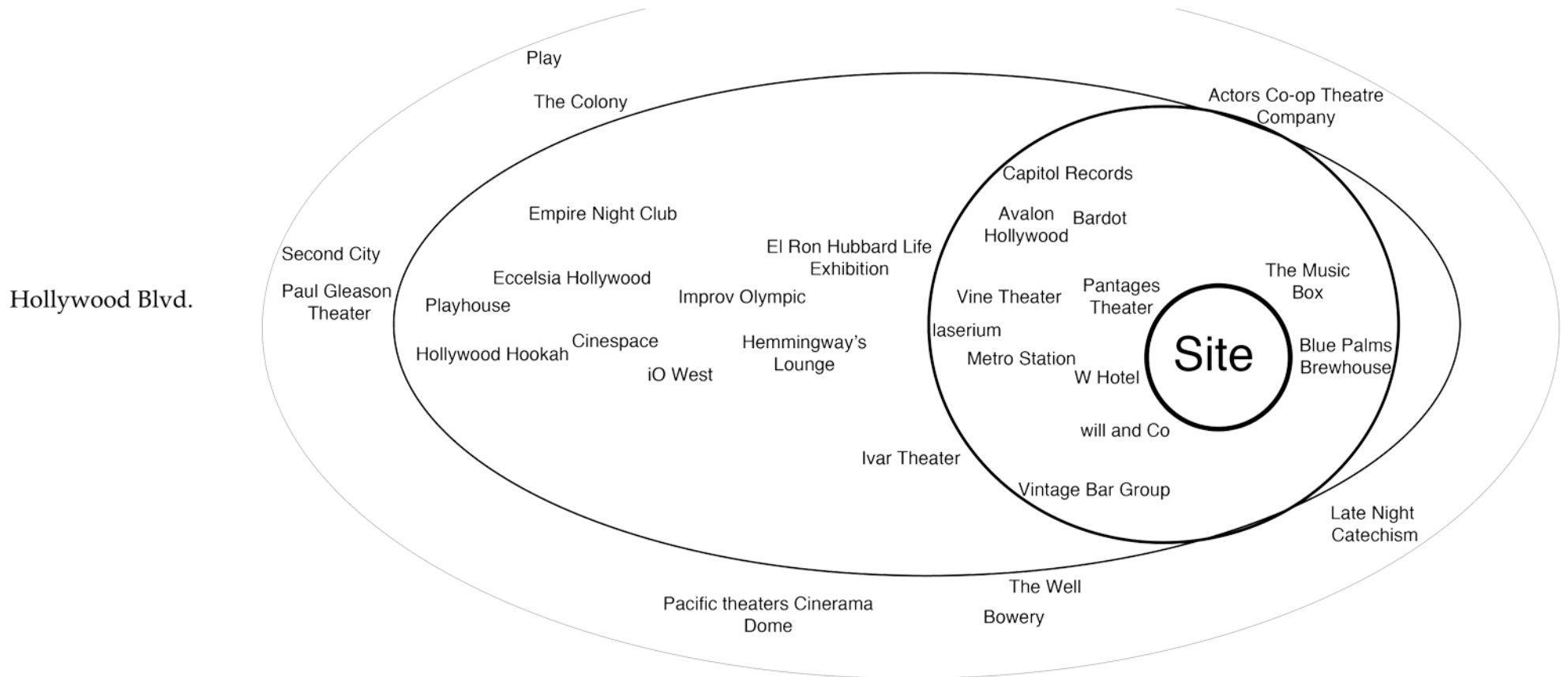


Above, I have mapped out possible neighborhood connections. Highlighted in green are existing open parking lots which would be desirable locations for infill development. If these highlighted areas were regulated by a master plan, then residents could demand more quality open spaces. If future developments incorporated large

greenspaces with dense development, then a green necklace would form to create strong neighborhood connections. Residents would also be connected to major amenities such as Hollywood blvd. This would encourage walking and the pedestrian right of way. Also, access to open space makes this a desirable location for residents.

SITE ANALYSIS

Hollywood Blvd Ammenities



The diagram above shows the location of major nightlife amenities in relation to site. It is clear that the amenities are weighted to the west. This makes the site a proper place for development, in order, to create continuity along Hollywood blvd. This further develops the walkable connections and capitalizes on the already established

“walk of fame” along Hollywood Blvd. It also demonstrates the density of the entertainment industry in this region of Hollywood; this encourages future development that reflects this entertainment context.

SITE ANALYSIS

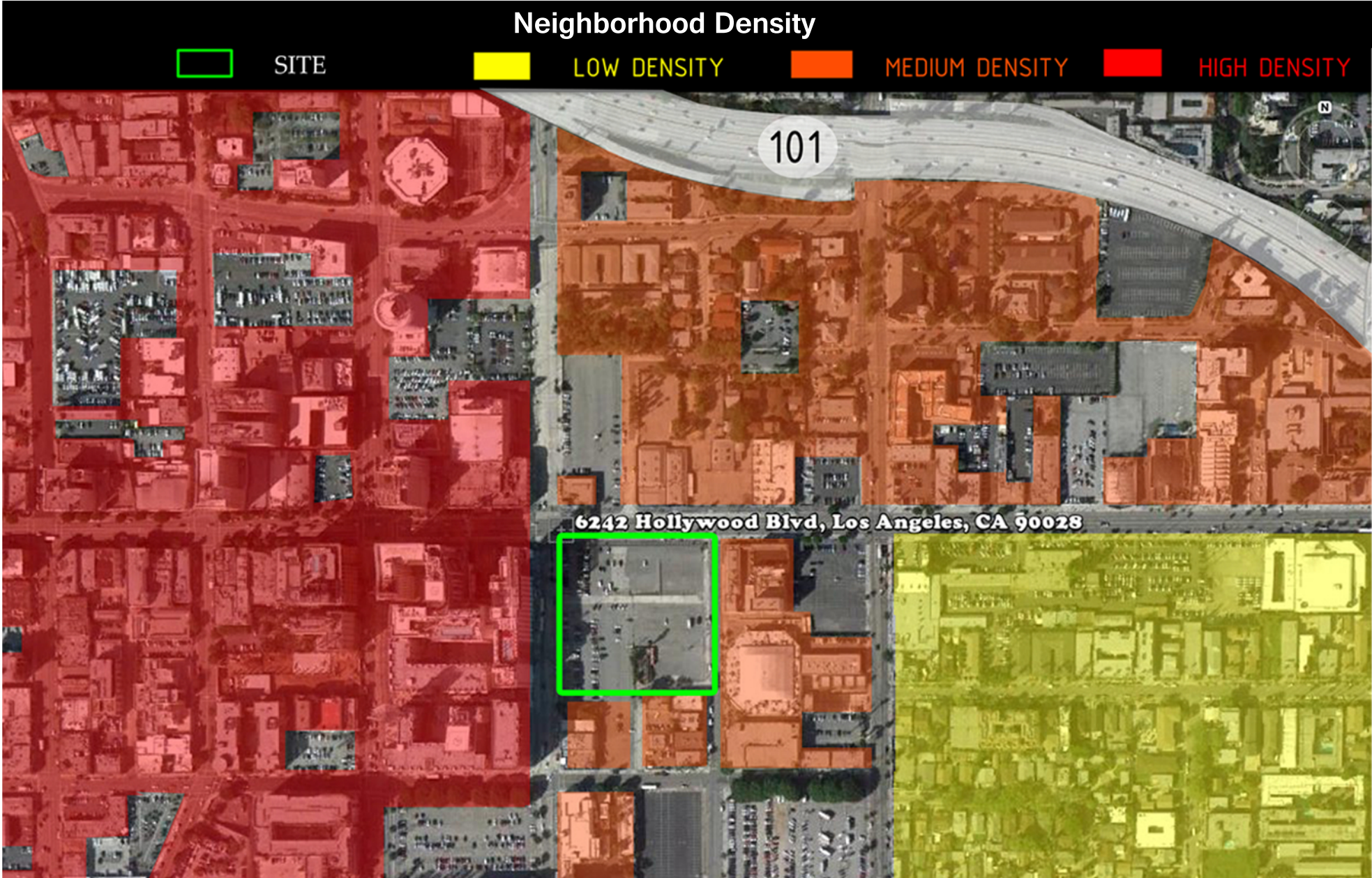
Parking



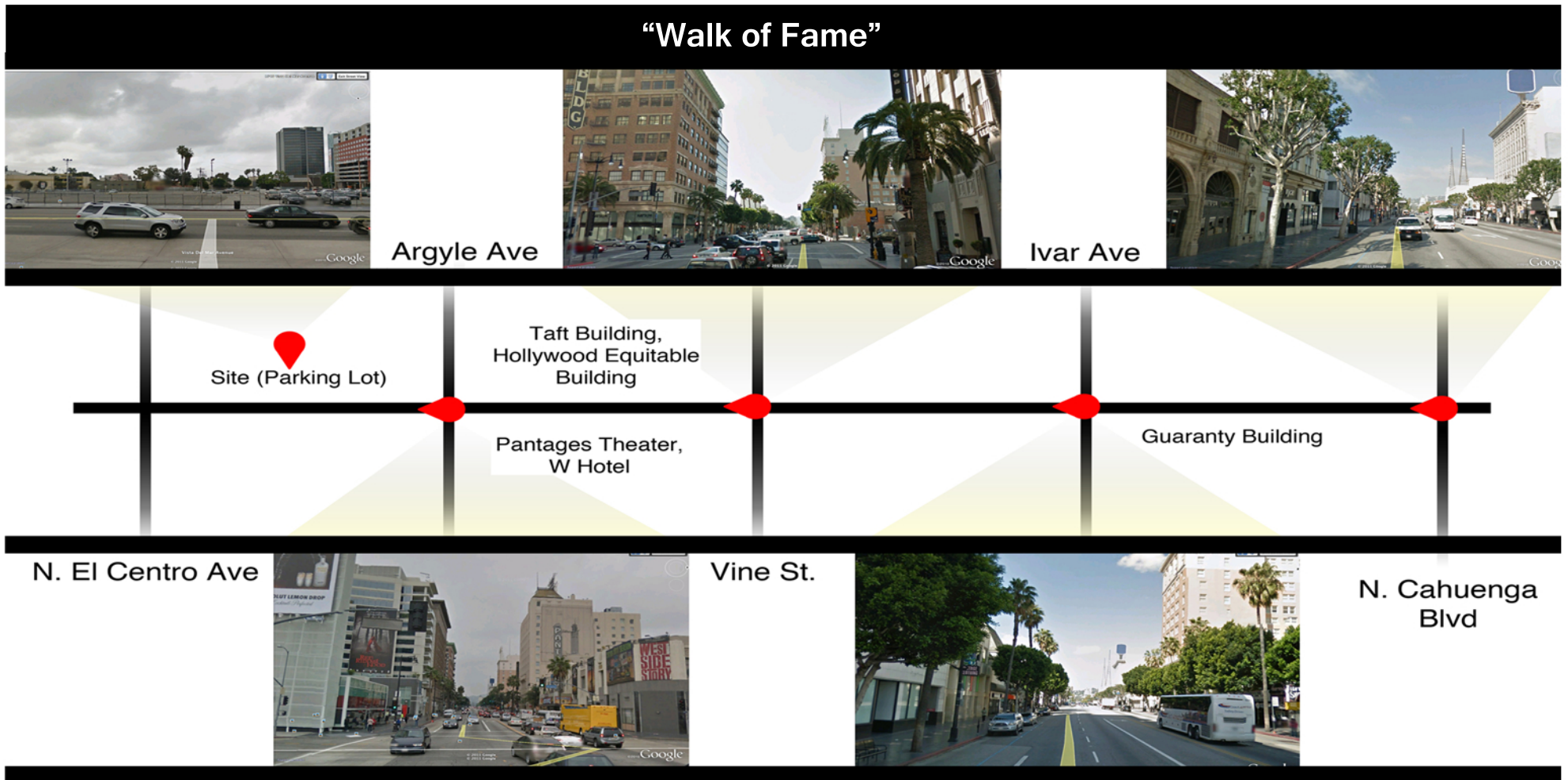
This series of maps shows how large the parking lots are in relation to building footprints. The first map displays that the parking to building ratio seems close to 1:2 surrounding the site. This proves the need for infill development in this area of Hollywood. Located within the Hollywood Re-development project, the highlighted parking lots are an ideal place to start when considering redevelopment.

The second map shows how the landscape is fragmented by these parking lots. The areas dedicated to parking greatly inhibit connectivity within the community and result in asphalt deserts. If these were developed with vegetated parking lots and underground parking structures, visitors would still have a place to park and there would be plenty of housing and other development opportunities to activate these currently blighted areas. Another option would be to convert these parking lots into a series of pedestrian parks connecting the different neighborhoods and supporting the walkable connections to Hollywood Blvd.

SITE ANALYSIS



SITE ANALYSIS



The “Walk of Fame” represents a popular tourist draw. This is an element of Hollywood Blvd that makes it the most pedestrian street in Hollywood as well as a very profitable location.

SITE NEEDS



1. Housing for mixed income groups to accomodate loss of **affordable housing**.
2. Respond to entertainment history by reviving Hollywood as entertainment capitol. **Develop adaptive signage and establish a motion picture museum.**
3. Site needs to be **mixed-use** as called for in the Hollywood Redevelopment Plan due to proximity to metro station.
4. **Public open space** to activate small entertainment oriented businesses and inspire social interaction. Need a place to access sunlight, food, and places to sit to observe Hollywood Blvd.
5. **Sustainable land use.** Building needs to respond to scarcity of potable water. Incorporate constructed wetland as landscape/park feature functioning to filter grey water from building uses and rainfall.

PRECEDENTS

LA Live Regal Cinema



140,000 square feet
14 auditoriums, including 6 RealD
3D screens and 3,705 seats.
800 seat Premiere Cinema features a
70 ft giant screen
*(Los Angeles Attractions)

The Grammy Museum



four floors of exhibits exploring the creative process, the art and technology of the recording process, and the enduring legacy of all forms of recorded music.
One-of-a-kind artifacts, films, and interactive experiences join together with exciting design, compelling interpretation, and plenty of music to create an amazing and immersive Museum experience.
*(Los Angeles Attractions)

Bryant Park Outdoor Film Festival



Every summer, thousands of people flock to Bryant Park on Monday nights to watch classic films under the stars.
The films are projected from the upper terrace onto a screen on the Fountain terrace, while the audience picnics on the Lawn, in the gravel paths, and in the allees.
(Bryant Park Corporation)

PRECEDENTS

W Hollywood Hotel



<http://hksinc.com/news/images/w-opening1.jpg>

Along Hollywood Blvd, adjacent to my site, the W hotel showcases the potential of joint public and private mix use. Oriented around the metro portal beneath it, the complex creates plaza space for commuters to wait for the metro, while the building draws people in to enjoy a drink or bite to eat. The four star, 300 room hotel combines retail with 150 residential condos and 375 apartment units, 80 are low income. This provides the opportunity for the community to live and work in Hollywood.

Similarly, I see the value of combining mixed-income residential with hospitality and commercial industries. Also, the W Hotel received LEED silver certification proving that there is a demand for sustainability in Hollywood. On the other hand, I wish to incorporate sustainability in a much stronger way. Through a reduced building footprint, I will increase the availability of land for sustainable uses, such as a constructed wetland.

Fox Tower / Pioneer Square



<http://en.wikipedia.org/wiki/File:Pioneer-SquareDaytime.jpg>

Fox Tower is a 27-story office building in Portland, Oregon designed by TVA Architects and developed by Tom Moyer. The building is named after the Fox Theatre, which occupied this site since 1911. Currently, the ground floor houses retail stores and the Regal Fox Tower 10 movie theater. It is also unique in that it neighbors two of the most active public plazas in downtown Portland: Director's Park and Pioneer Square. Due to its proximity, I was able to observe the activities and traces of activity from summer to winter and day to night. In summary,

| Day | Night |
|--|--|
| <ul style="list-style-type: none"> ● Lunch and dinner hours, restaurants are frequented by surrounding work force. ● Adjacency to Director's park increases activity and revenue for Fox Tower | <ul style="list-style-type: none"> ● Activity is dependent on movie theater. ● Retail and offices are primarily closed. Opportunity for night-life is high, as ● pedestrians continually walk by. |

PRECEDENTS

New Taipei City Art Museum Competition

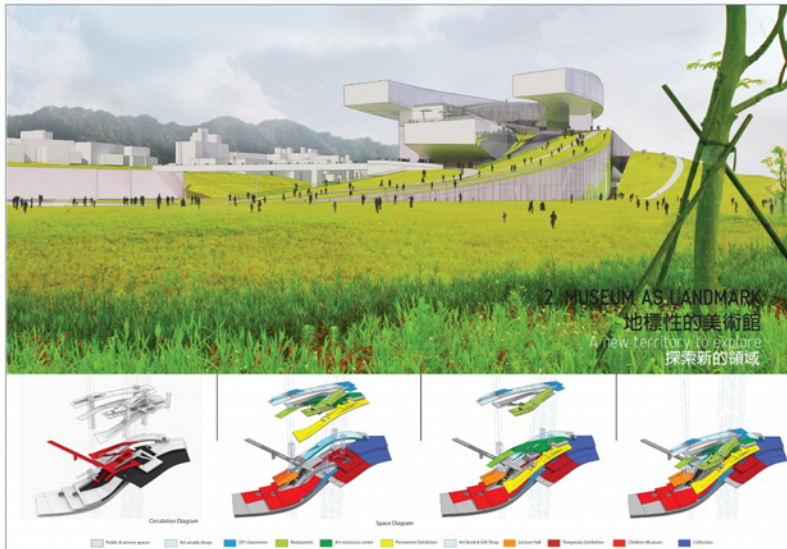
新北藝博館 概念設計 | 國際競圖

競圖須知 Design Brief
 空間需求與設計準則
 Space Requirements and Design Guidelines
 規劃設計會議說明
 Background Information for the Project

| 空間編號 Space No. | 空間名稱 Name of Space | 數量 Quantity | 單元面積 Unit Area (sqF) | 面積小計 Total (sqF) | 備註 Remarks |
|-------------------|--------------------------------------|----------------|-------------------------|---------------------|---|
| 100 | 公共空間 Lobby | 1 | 1300 | 1300 | |
| 100.01 | 入口 / 候車區 Entrance/loopers | 1 | 1000 | 1000 | |
| 100.02 | 服務台 Information center | 1 | 50 | 50 | |
| 100.03 | 輔助停車位 Auxiliary car storage | 1 | 80 | 80 | |
| 100.04 | 購物區 Retail area | 1 | 50 | 50 | |
| 100.05 | 人工牆面展區 Retail shop area | 1 | 20 | 20 | |
| 100.06 | 保安人員休息區 Staff lounge | 1 | 30 | 30 | |
| 100.07 | 保安控制室 Security control station | 1 | 20 | 20 | |
| 100.08 | 員工休息區 Staff room | 1 | 50 | 50 | |
| 110 | 特別展示區 Special exhibit space | 1 | 6000 | 6000 | |
| 110.01 | 大型展覽室 Large special exhibit room | 2 | 1200 | 2400 | 1. 展廳以設計/攝影/攝影器材展覽為優先考量 2. 空間內可設置多層樓層 3. 展廳內可設置多層樓層 4. 展廳內可設置多層樓層 |
| 110.02 | 中型展覽室 Medium special exhibit room | 3 | 600 | 1800 | 1. The floor areas may be subdivided into smaller areas according to exhibit size 2. Must accommodate large-scale exhibits 3. Must accommodate large-scale exhibits |
| 110.03 | 一般展覽室 Common special exhibit room | 5 | 300 | 1500 | |
| 110.04 | 休息區 Resting area | 3 | 100 | 300 | 1. 展廳以設計/攝影/攝影器材展覽為優先考量 2. 空間內可設置多層樓層 3. 展廳內可設置多層樓層 4. 展廳內可設置多層樓層 |
| 120.01 | 大型展覽室 Large exhibit room | 2 | 800 | 1600 | 1. 展廳以設計/攝影/攝影器材展覽為優先考量 2. 空間內可設置多層樓層 3. 展廳內可設置多層樓層 4. 展廳內可設置多層樓層 |
| 120.02 | 一般展覽室 Common exhibit room | 2 | 400 | 800 | 1. 展廳以設計/攝影/攝影器材展覽為優先考量 2. 空間內可設置多層樓層 3. 展廳內可設置多層樓層 4. 展廳內可設置多層樓層 |
| 120.03 | 休息區 Resting area | 1 | 100 | 100 | 1. 展廳以設計/攝影/攝影器材展覽為優先考量 2. 空間內可設置多層樓層 3. 展廳內可設置多層樓層 4. 展廳內可設置多層樓層 |

"The New Taipei City Museum of Arts Conceptual Design International Competition."

Winner: Baldacci-Boronski

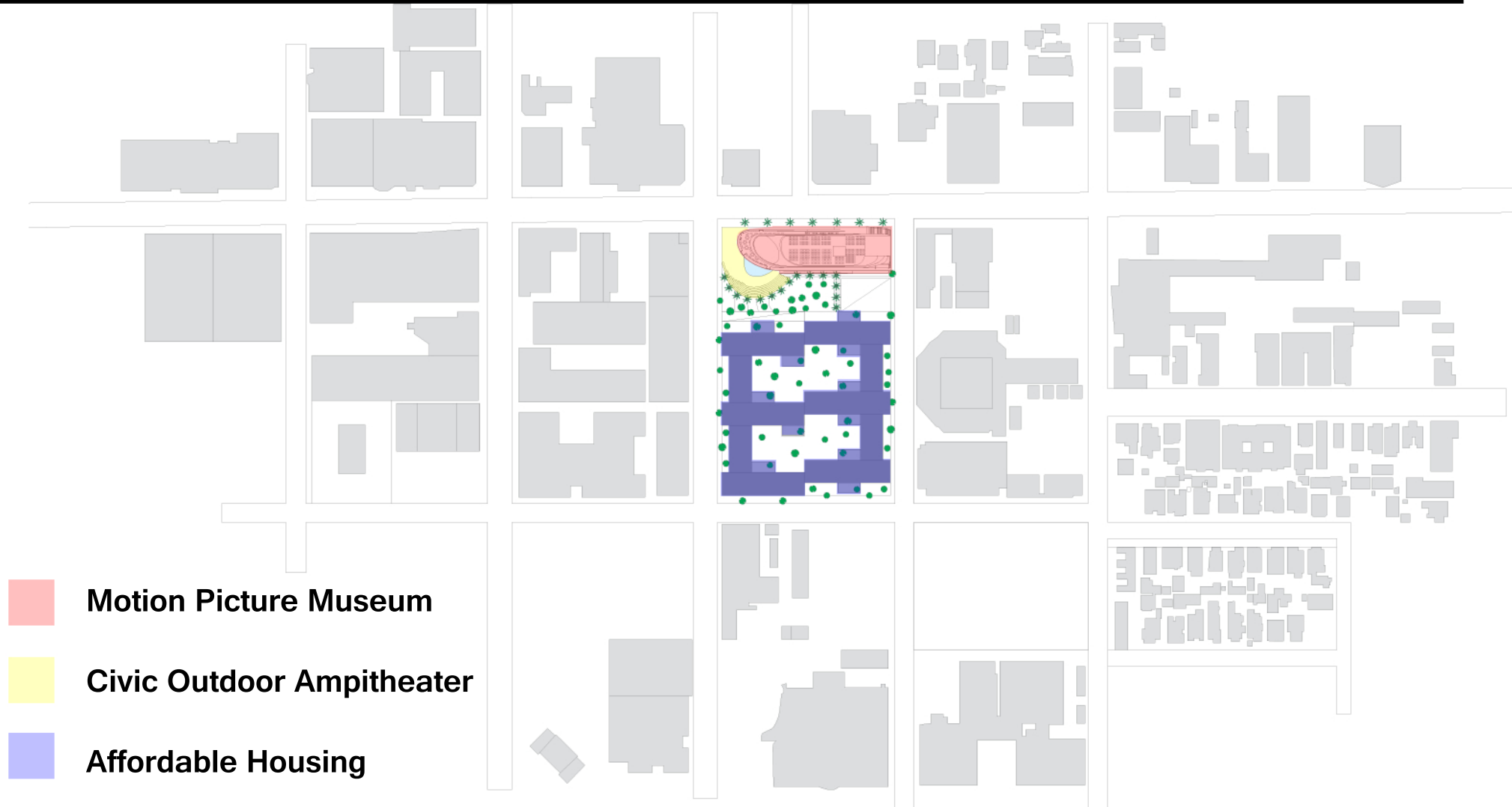


http://www.archdaily.com/177169/new-taipei-city-museum-of-art-competition-winners/a1-layout4_jl/

The New Taipei City Museum of Arts Competition was very helpful when considering programming. The competition documents detailed spatial requirements and floor areas for an art museum, which I found correlated well with a film-centered museum. Although the program for this competition was in metrics, quick calculations provided me with square footage requirements for my program. I was able to replicate and modify program requirements from these documents and apply spatial descriptions to my project due to identical scales. In Hollywood, the community has specified an interest in film, which narrows the focus of my museum designs to an art form. Film and art are synonymous, but the documentation/media used to create art is the key difference. Film should be experienced differently than sculpture or painting, which is how I have furthered the Taipei program to fit Hollywood. However, there will be significant differences in the character of the exhibitions due to a darker film setting. The function of a museum is well defined in terms of support spaces and service, but the experience is different. User groups vary from students to foreign tourists and this program addresses these users well. I think another critical role of the museum is introducing children to the experience. Museums need to educate visitors and expand one's imagination to encourage creativity. This greatly impacts the correlation between museums and classrooms.

PROGRAM

Urban Design



PROGRAM

Motion Picture Museum Ground Floor



http://www.mouseplanet.com/9001/The_Walt_Disney_Family_Museum_A_Photo_Tour



<http://www.mccullagh.org/image/1ds-1/holocaust-museum-lobby-1.html>

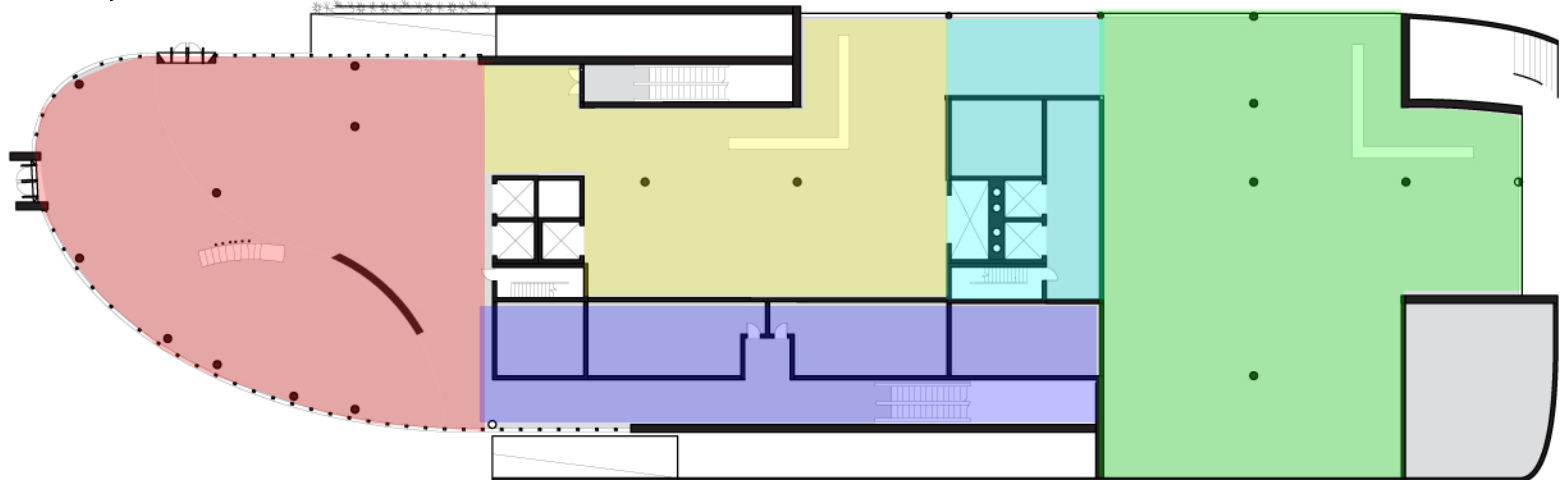


<http://groong.usc.edu/orig/rb-20070219.html>



<http://www.notcot.org/post/37316/>

- Museum Lobby - 15,000 S.F.
- Ticketing/Personal Item Storage - 1,500 S.F.
- Gift Shop - 5,000 S.F.
- Library Access - 500 S.F.
- Film Bookstore - 10,000 S.F.



PROGRAM

Motion Picture Museum Exhibition Basement Level



<http://www.dipity.com/sam000/The-History-of-Film-Music/>



<http://www.filmreference.com/Directors-Bu-Co/Cimino--Michael.html>

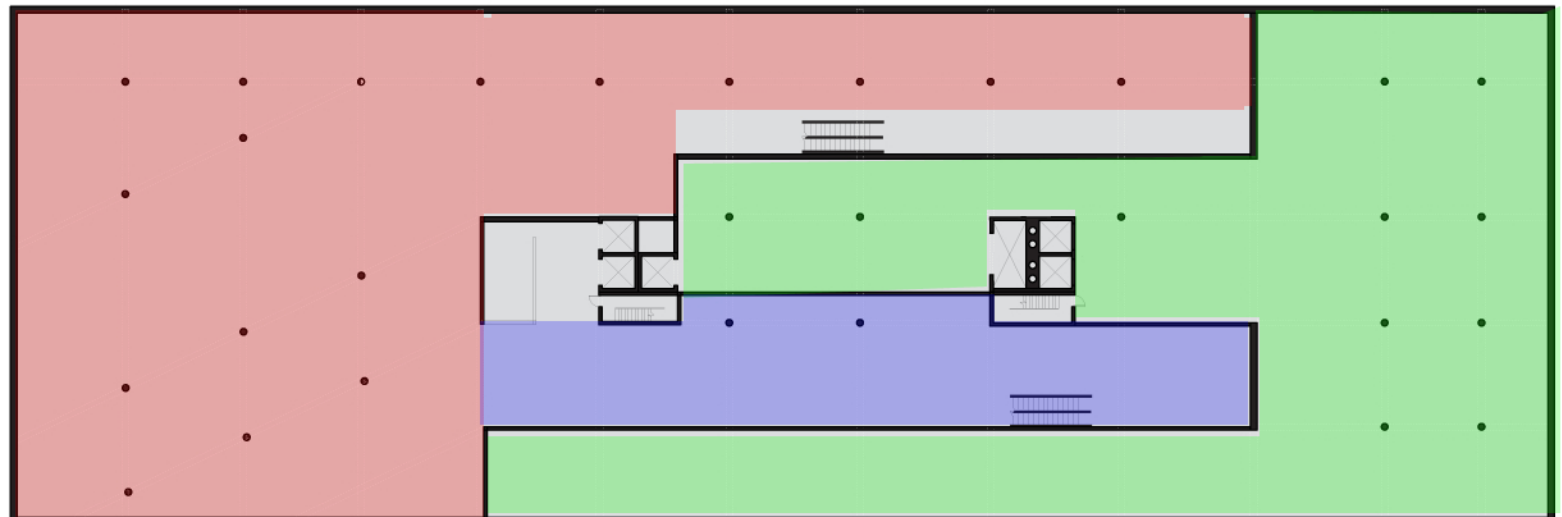


<http://www.westernriver.com/trips/riverranch/>



http://en.wikipedia.org/wiki/Film_editing

- Special Exhibitions - 60,000 S.F.
- Permanent Exhibitions - 2,500 S.F.
- Collection Storehouse - 30,000 S.F.



PROGRAM

Motion Picture Museum Second Level



http://www.greatrestaurantsmag.com/NYAdmin/uploads/film_B

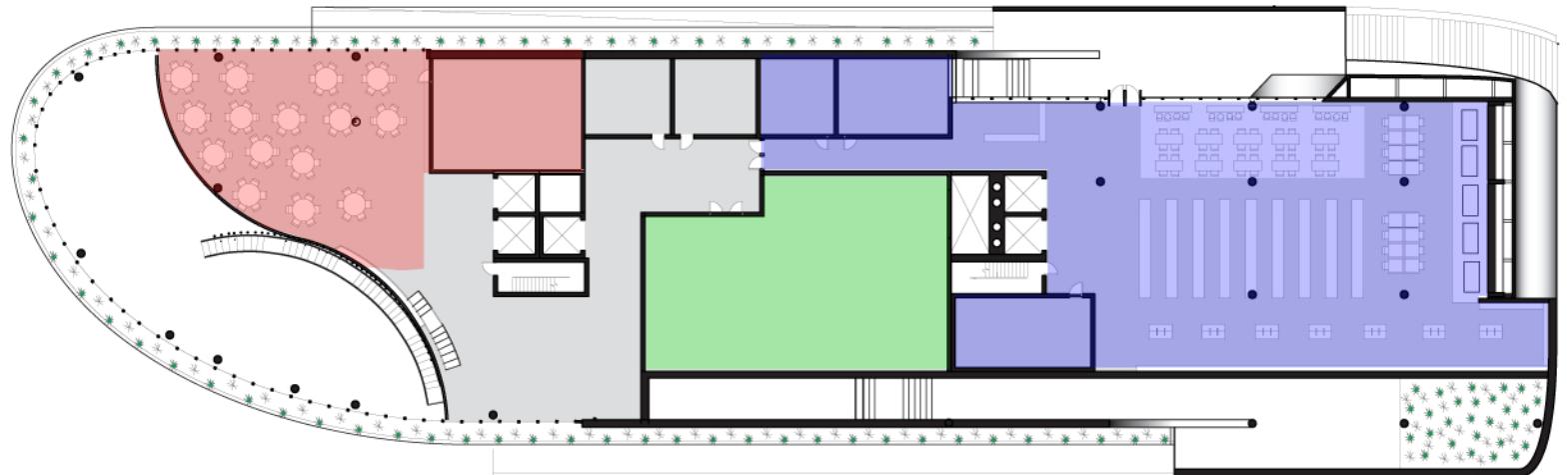


<http://teachingfilmandmedia.wikispaces.com/Unit+Plan+for+Documentaries+in+a+Film+Studies+Classroom>



<http://www.firstlightonline.co.uk/news/first-light-in-the-classroom/>

- Film Bistro - 5,000 S.F.
- Film Library - 15,000 S.F.
- Experience Film Classroom - 5,000 S.F.



PROGRAM

Motion Picture Museum Third Level



http://www.instablogsimages.com/images/2008/01/02/eyecandy-sound-lounge-bar_48.jpg

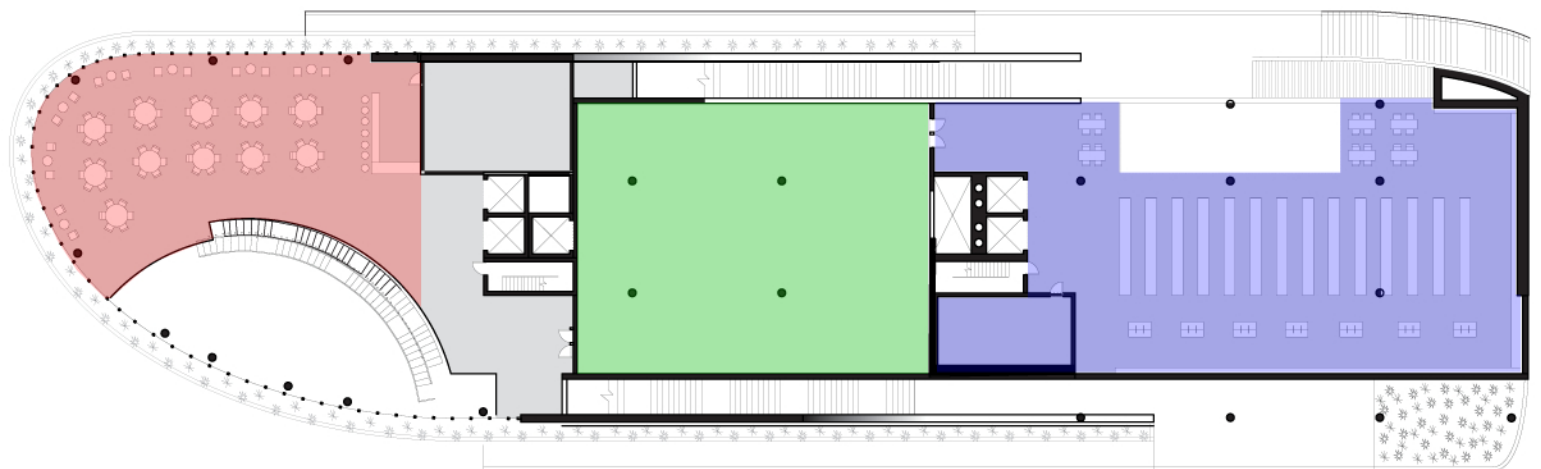


<http://unu-it.com/best-modern-affordable-lounge-design-ideas-samples/lounge-5/>



<http://www.beautiful-libraries.com/6100-1.html>

- Director's Lounge - 5,000 S.F.
- Film Library - 15,000 S.F.
- Lecture Hall- 8,000 S.F.



PROGRAM

Motion Picture Museum Fourth Level



<http://www.nancyafink.com/modular-home-office-furniture-to-->



<http://www.housetodesign.com/2011/03/19/modern-receptionist-->

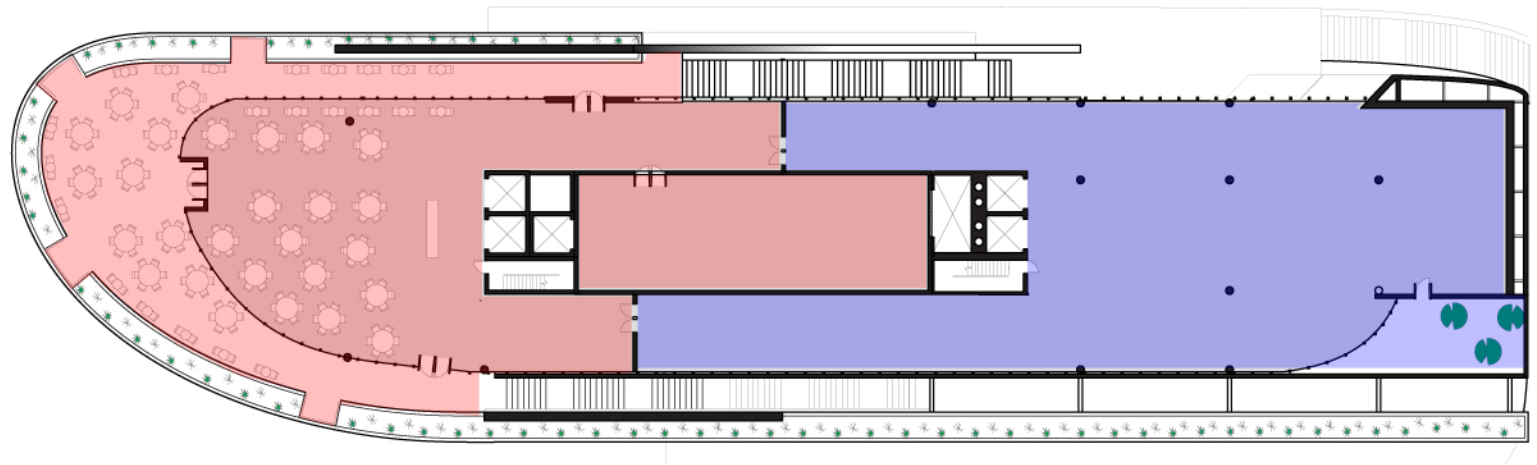


<http://www.nancyafink.com/modular-home-office-furniture-to-->



<http://www.archithings.com/office-interior-inspiration-from--jump-studios/2011/04/02>

- Film Restaurant- 10,000 S.F
- Administrative Offices - 20,000 S.F.



BIOMIMICRY

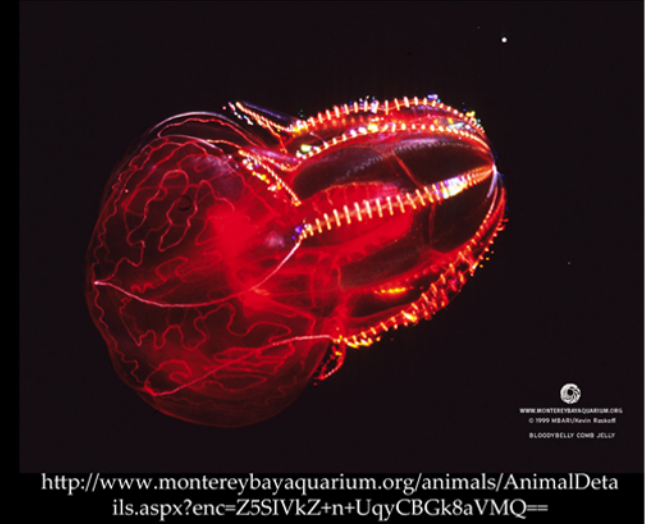
Bioluminescence



(BBC)



<http://chemistry.about.com/od/photogalleries/ig/Glowing-Things/Bioluminescent-Jellyfish.htm>



<http://www.montereybayaquarium.org/animals/AnimalDetails.aspx?enc=Z5SIVkZ+n+UqyCBGk8aVMQ==>

About

Bioluminescence is light created by living organisms and it can create the most fantastic displays. It includes 'phosphorescence' created by marine creatures and seen on the surface of sea at night, the light of fireflies and the faint but eerie glow of some fungi. The light is produced chemically for many different reasons: to attract attention, to frighten enemies, to disguise what you really are, or - in the depths of the sea - to provide your own 'headlights' to search out prey.

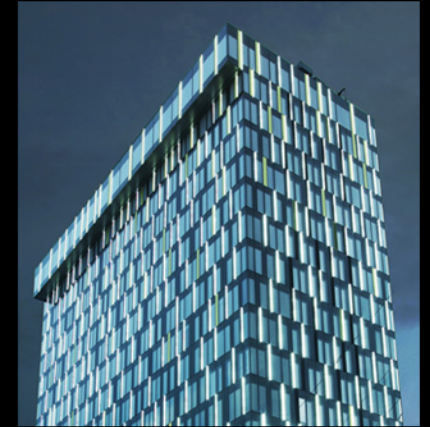
(BBC)

Influence on Project

I find bioluminescence very intriguing. An important aspect of my Hollywood site is signage. The city of Hollywood has laid out a signage plan to identify critical areas for wayfinding and adaptive signage. I would like to explore incorporating signage into the building skin, much like bioluminescence. I see a lot of correlation between the cause and effects of bioluminescence and the role of signage in Hollywood. The entertainment industry relies heavily on the ability to attract business through attractions. I think it would be a unique way to interact with the street front if a building facade could be interactive and direct people to programmatic elements of the museum and supporting elements. As people walk by, the surfaces would change and adapt to lead the way to the outdoor theater where film could be shown within this interactive system of media signage.

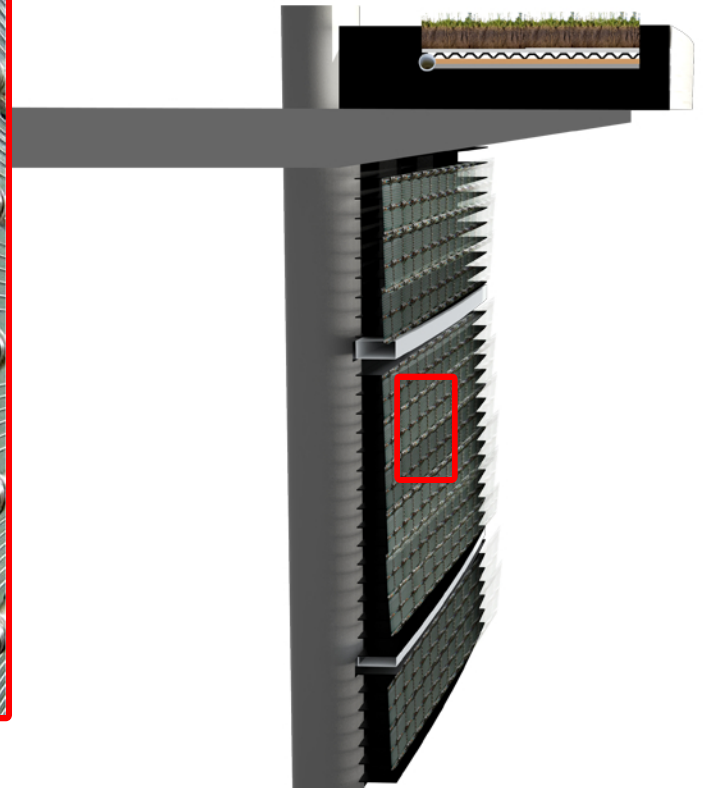
TECTONICS

Media Facade



About

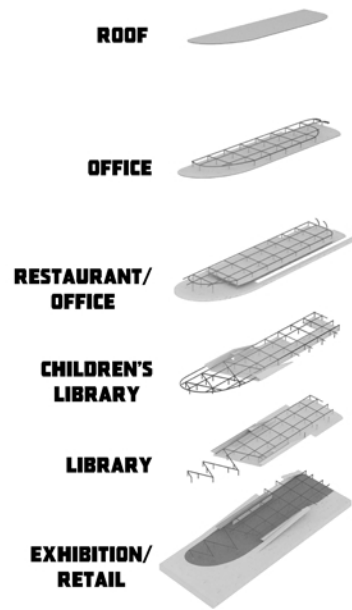
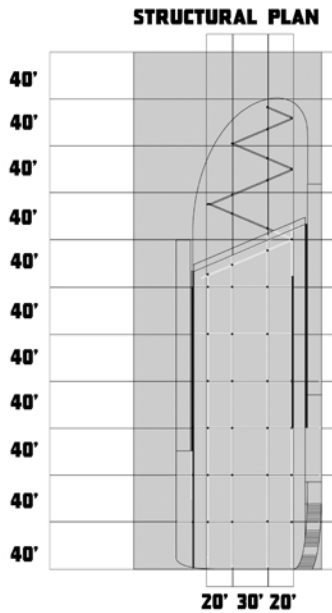
My exploration of bioluminescence led me to media facades. Specifically, I focused on wire media mesh, which is made of stainless steel wire woven together with led lights. During the day it is 75% transparent and at night it has the capability to display high resolution video. This was a great fit for what I was pursuing because it allowed me the opportunity to have a media facade that would shade the building during the day and at night would transform it into a high graphic media facade. The LED bulbs are also low energy consumptive so through solar energy collection and media facade energy consumption calculations, I was able to prove that the Hollywood Motion picture museum media facade was net-zero. This further developed my design concept to bioluminescence.



Final 3D Wall Section

STRUCTURE

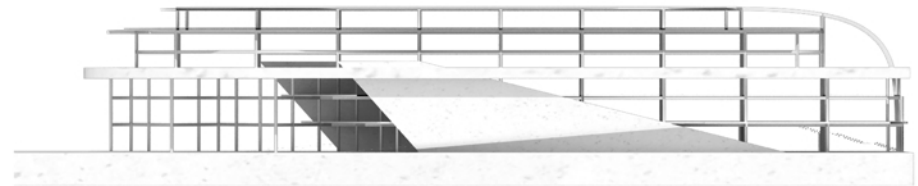
Creating a System



BUILDING ELEVATION

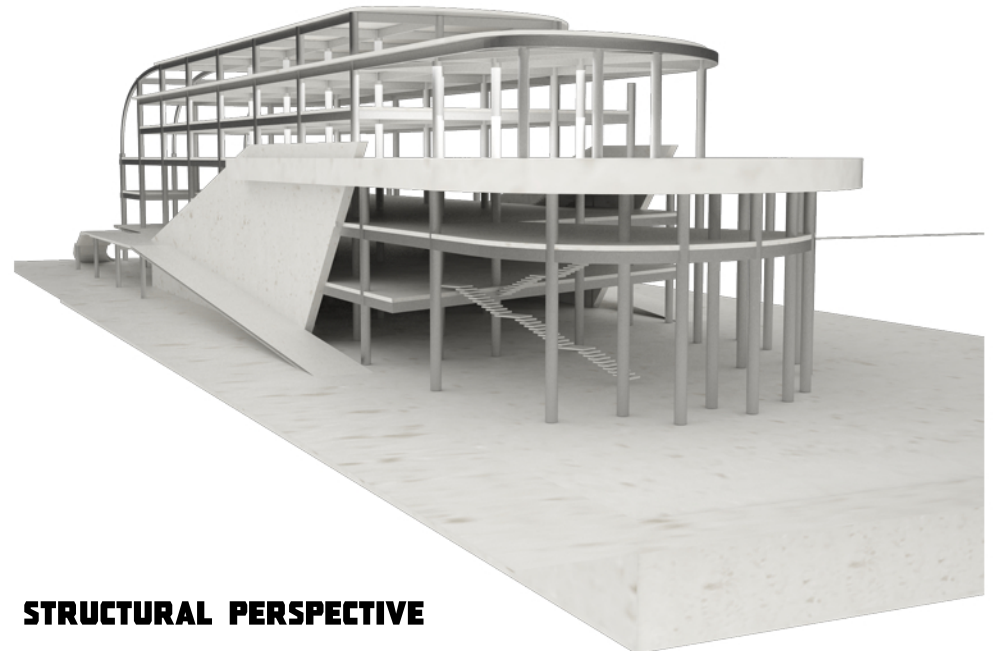


FRAMING ELEVATION



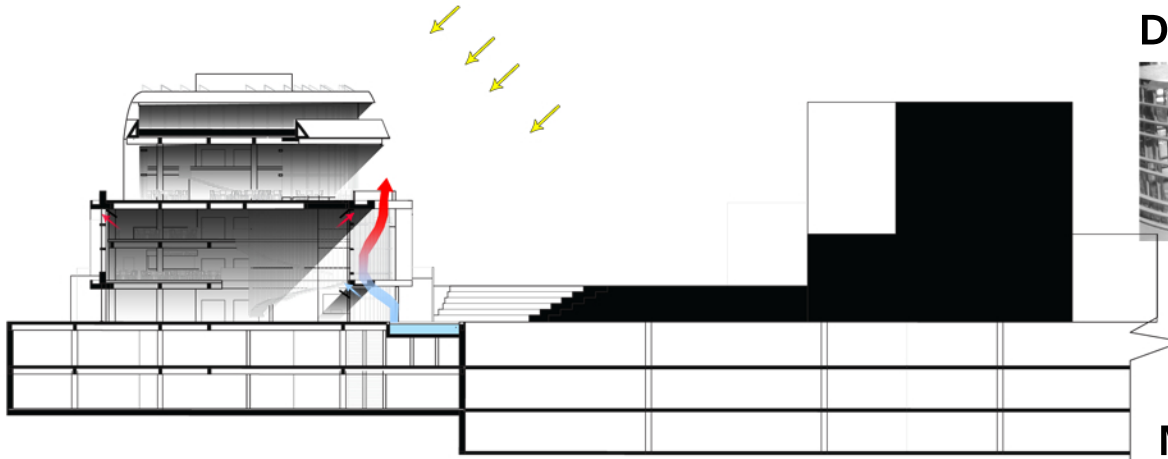
About

My structural system was fairly regular with a break in the atrium space. I wanted to reinforce my design concepts that the building was oriented around this outdoor civic space. The structural system consists of heavy steel frame construction and slab on deck floor plates. Having an orthogonal structural system allowed me to break it at an angle to accommodate the curving nw media facade. Shifting the angle of the beams and columns sent loads back into the core and regular system, yet allowed me to have less columns in the atrium space.

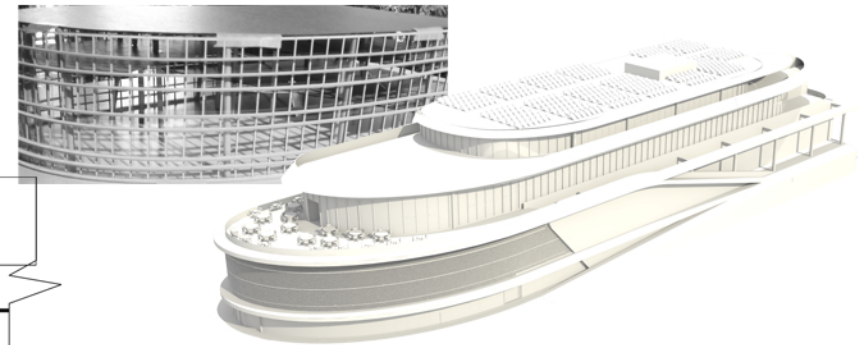


DAYLIGHTING

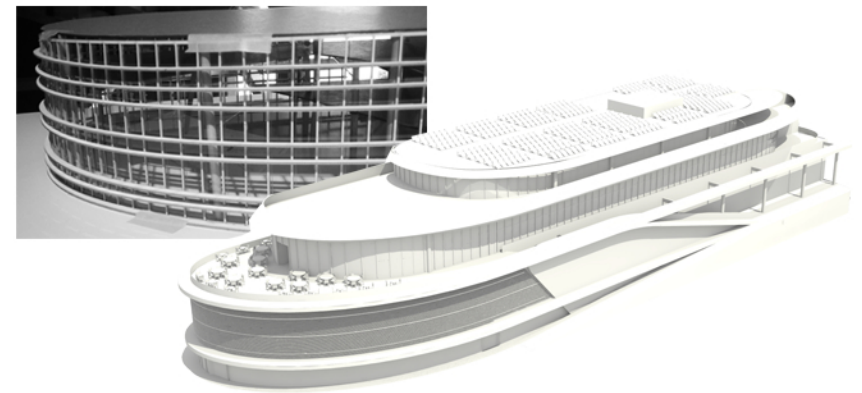
Passive Shade



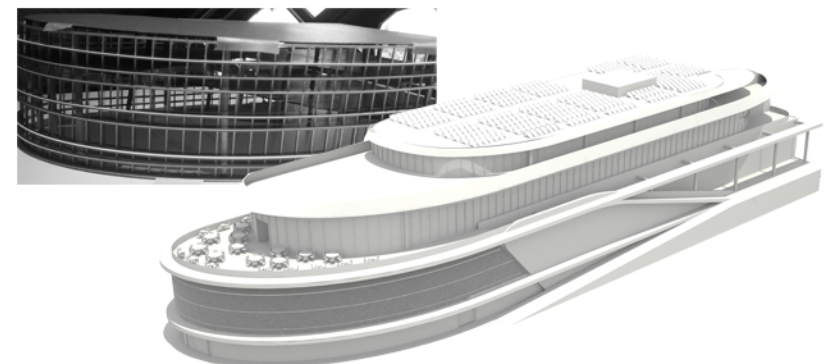
December 21, 2012



March 21, 2012



June 21, 2012



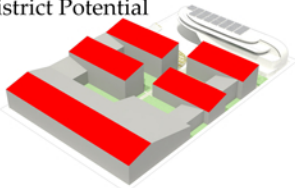
About

Given that my site is located in sunny southern California, I needed to design a building enclosure that passively shaded all glazed portions of the building. As seen from the diagram above, the facades are layered with planted overhangs that shade harsh summer and spring rays and maximize winter solar exposure. I started with a daylighting model to prove that my curtain wall system performed how I intended. As can be seen from both the daylighting images and the computer model, the south facade is completely shaded during the summer and light penetrates into the atrium during the winter. My key concept for daylighting was to put outdoor terraces and urban landscapes in the sun to keep sunlight where it is desirable and reduce internal building cooling loads.

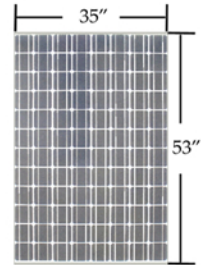
SUSTAINABLE STRATEGIES

Solar Energy and Water Collection

District Potential

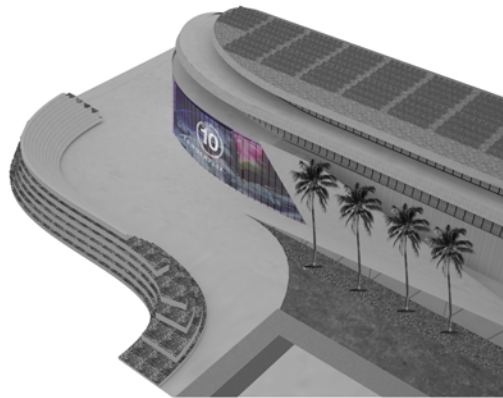


Photovoltaic Module



Total Roof Area = 22,000 ft²
 Number of Modules= 353
 Approximate Annual Power= 64,732 kWh
 Co₂ Reduction per year= 37,221 kg

Charges During the Day, Displays Movies at Night



Total Media Facade Area = 5,000 ft²
 Number of LEDs = 331, 250
 Approximate Annual Power Usage= 32,120 kWh

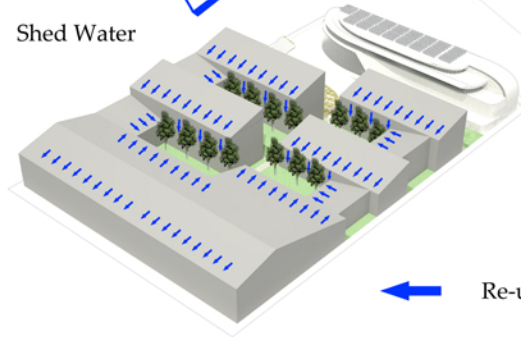
Filter Water



Distribute Water



Shed Water



Secondary Filtration

BRAC Grey Water Filtration



Re-use Filtered Water

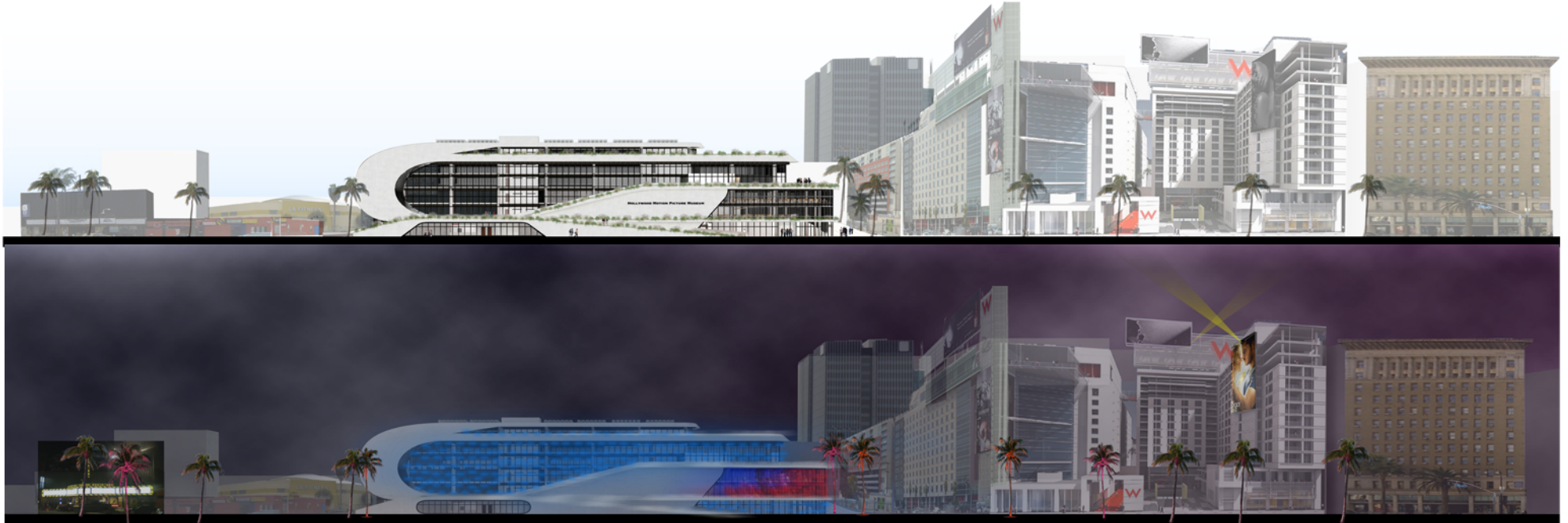
About

The two most valuable resources in southern California are solar energy and water collection. With a plentiful amount of annual sunlight, solar energy can prove viable in this context. Given the energy consumption of the media facade and motion picture museum, it was important for me to calculate just how much energy I would be able to collect to justify large energy outputs. After calculating the total available roof area and number of solar modules, I was able to calculate that the photovoltaic modules would collect 64,732 kWh annually. The media facade would consume roughly half of that at approximately 32,120 kWh annually. Not only is the media facade net-zero but the building will produce twice as much energy to service the building and help with the affordable housing units.

Water is the other major resource. Therefore, strategizing at a district scale allows for mass grey water recycling to support the intense water usage of affordable housing. With the constant daily source of shower, sink, and other building water use, there is great opportunity to filter water through urban gardens, planters, and landscapes. Also, implementing a tertiary system insures clean, re-usable water. For example, a commercial BRAC water filtration system would purify grey water and re-distribute it back to the housing units as potable water. The end result is providing water to support residential and public landscapes as well as potable water for residents at a cheaper rate.

HOLLYWOOD, CA MOTION PICTURE MUSEUM

Transformation of Day and Night- North Elevation

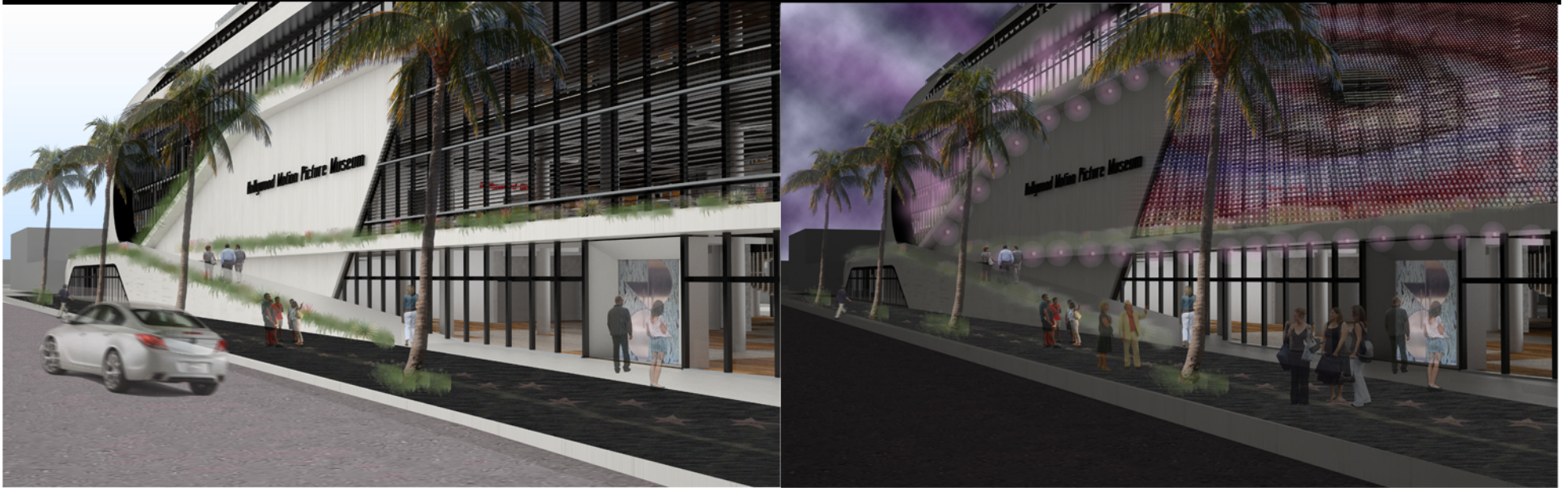


About

The north elevation is located along Hollywood Blvd. It is an addition to the street front that would fill in a major gap along the “walk of fame” as well as re-vitalize an area that is currently run-down and abandoned. The building form emphasizes the connectivity of solids and voids to make the building read as one organism. During the day exterior ramps and public circulation draw attention to the multiple public nodes such as the motion picture museum lobby, the film library, and film restaurant. These pathways are lush with mediterranean plant species and connects teh major arteries of the building to urban landscapes. At night the same facade is active through public circulation but is guided by accent lighting and media facades.

HOLLYWOOD, CA MOTION PICTURE MUSEUM

Transformation of Day and Night - Museum Entrance



About

The entrance is located along Hollywood Blvd. It is a highly trafficked and fast paced street front. Pedestrians are guided by the “walk of fame” and the Hollywood Motion Picture Museum serves as the entrance to this popular tourist attraction. At the ground level it was important to articulate urban landforms to draw the public above the business of the street to the different levels of the museum. Again, during the day pedestrians are drawn up from the sidewalk by extending planters and at night they are drawn in by the light displays and interactive media facades.

HOLLYWOOD, CA MOTION PICTURE MUSEUM

Transformation of Day and Night - Outdoor Ampitheater



About

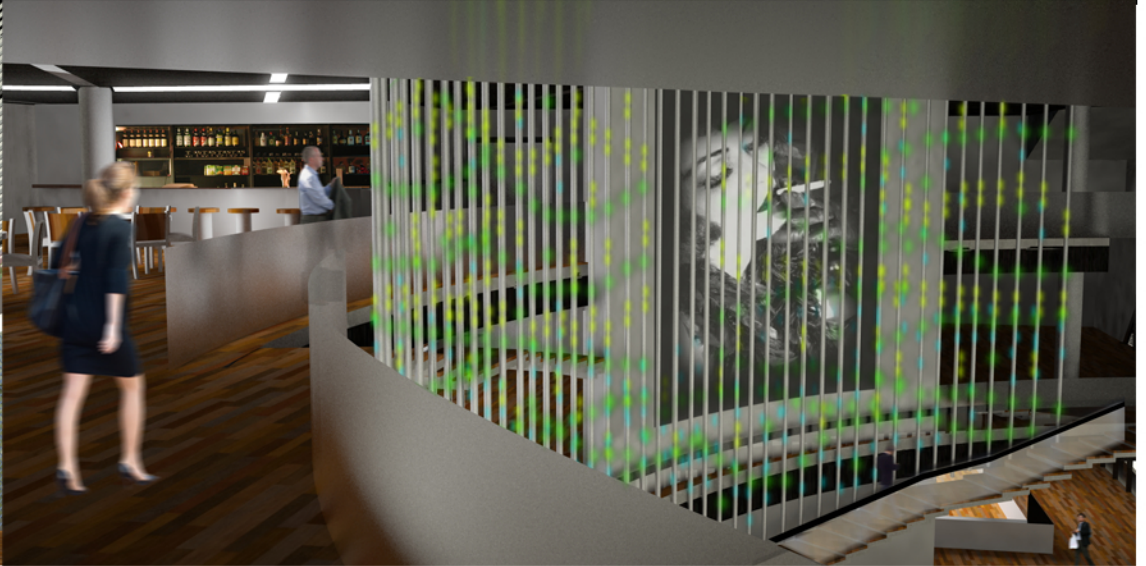
The outdoor amphitheater is a “moment of pause.” During the day it is a place where people can sit and enjoy their lunch. They are cooled down by the reflective pool and shaded by ornamental palm trees and urban landscapes. At night, the community is attracted by Motion Picture Museum Film Screenings. It is an event that is NOT red carpet, but about supporting community interaction. This civic space is formed to shape a larger urban plaza between the pantages, W Hollywood, and motion picture museum. It is a place to take in all that Hollywood Blvd has to offer: the excitement of the high paced street front, events at the Pantages Theater, and film restaurants and lounges within the museum.

HOLLYWOOD, CA MOTION PICTURE MUSEUM

Transformation of Day and Night - Interiors



Ground Floor Atrium



3rd Floor Lounge

About

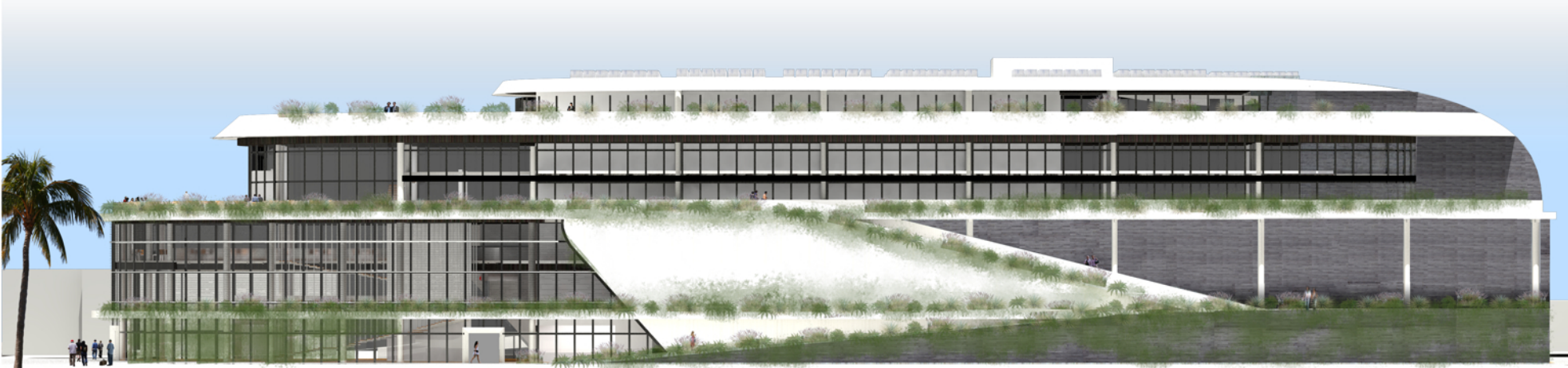
The interior spaces are a mix of light and dark spaces. The Museum Exhibition spaces are underground in a highly light-controlled setting, similarly, the classrooms and lecture hall are located behind large mass walls. Represented in the perspectives, the public spaces are defined by an indoor/outdoor connection and diffused natural light. The most public spaces include the film restaurants, main library reading room and 3rd floor lounge which are defined by larger sectional volumes. At night, bioluminescent media screens wrap around the atrium and LED strings highlight key museum film projections. The grand lobby is designed for maximum flexibility so that the museum staff can arrange planar wall sections however they choose to create a variety of exhibitions.



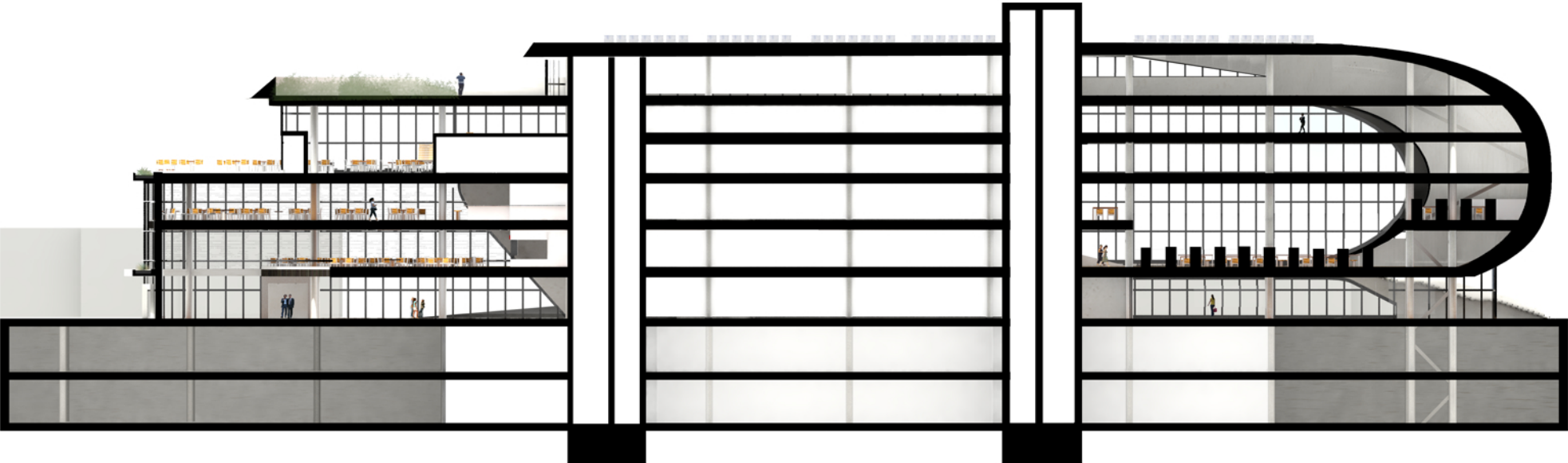
Transverse Section Perspective

HOLLYWOOD, CA MOTION PICTURE MUSEUM

Transformation of Day and Night - South Facade and Building Section



South Facade



Longitudinal Section

HOLLYWOOD, CA MOTION PICTURE MUSEUM

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HOLLYWOOD, CA MOTION PICTURE MUSEUM

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