



ELIZABETH GONZALEZ
SENIOR PROJECT 2013



BRINGING NATURE
TO THE
URBAN CHILD

BRINGING NATURE TO THE URBAN CHILD

A NATURE PLAY PARK IN THE CITY OF RICHMOND CALIFORNIA

ELIZABETH GONZALEZ

Senior project presented June 14, 2013 to the faculty of the Landscape Architecture Program at the University of California, Davis in partial fulfillment of the requirements for the Degree of Bachelors of Science in Landscape Architecture

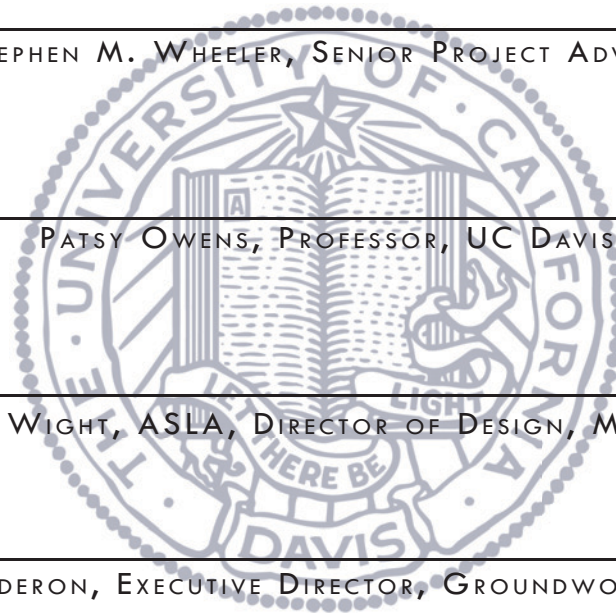
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The goal of this project is to design a nature play park in the city of Richmond California, along the Richmond Greenway. The nature play park will provide under served children in the surrounding neighborhood a space where children can experience nature and engage in free play and will serve as an educational site for children at the local elementary school. With CPTED design strategies, the park's design aims to prevent vandalism and illegal activities while enhancing the play experience of the users. The project includes research on successful design strategies used in other nature play parks and Crime Prevention Through Environmental Design (CPTED) design strategies for public spaces that will help lower crime rates and increase the quality of life of the residents.

After several site visits, analyzing the site, and conducting surveys, I have developed a plan for a nature play park that will expose children to nature at an early age and provide a safe, green space for the community. I want children who live in underprivileged neighborhoods to have the opportunity to experience and play in nature, to set their minds free, and learn that nature is beautiful. I know that many people who live in densely populated areas are afraid of nature and its inhabitants; for this reason I believe that we should expose children at a young age to prevent this from happening. I also found that having green spaces can help reduce crime rates. The residents of this area are in dire need of such place.

DEDICATION

A MIS PADRES, POR DARME LA OPORTUNIDAD DE ESTUDIAR Y APOYARME SIEMPRE.

TO MY PROFESSORS, AND CLASSMATES FOR YOUR SUPPORT AND GUIDANCE
THROUGHOUT THE YEARS.

TO MY LITTLE ONES, WHO HAVE BEEN MY MOTOR AND INSPIRED ME TO DESIGN FOR
CHILDREN.

ACKNOWLEDGEMENTS

I WOULD LIKE TO THANK THE MEMBERS OF MY COMMITTEE, WITHOUT YOUR GUIDANCE, THIS WOULD HAVE NOT BEEN POSSIBLE.

I WOULD ALSO LIKE TO THANK OTHERS WHO PROVIDED ME WITH GUIDANCE AND INFORMATION THROUGHOUT THE PROCESS.

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INTRODUCTION

CITY DEMOGRAPHICS

A few miles from Berkeley is the city of Richmond. It is 16 miles northeast of San Francisco California and was incorporated on August 7, 1905 and became a charter city on March 24, 1909. The city's population according to the 2010 U.S. Census Bureau, was 103,701 people. With 39.5% of the people being Hispanic or Latino, 26.6% Black or African American, 31.4% White, and 13.5% Asian. The number of housing units were 39,328. Family households made up 68.4% of the population. In addition, there were 39.1% households with 1 or more people under 18 years of age, and households with 1 or more people 65 and over were 20.8% of the total population. According to the U.S. Census, persons under eighteen years were 24.9% of the population, while persons per square mile were 3,448.9 (US Census, 2010). The higher

percentage of this age group shows that there is an opportunity and a need to provide the younger population of the city of Richmond with areas to experience and play in nature.

In the park needs and deficiencies survey.

The city of Richmond does not meet the adopted standards of 3 acres of community or neighborhood parkland per 1,000 population. Acreage deficiency is greater in the central code of Richmond, which is where most of the population resides and where the site is located.

CITY DEMOGRAPHICS

In the city of Richmond, crime rates from 2011 to 2012 have seen minimal increase. According to the city's crime view community program, the year 2012 had a significant increase in armed robbery, and attempted robbery. Commercial and resident burglary decreased but auto burglary increased by 23% (Crime view community program, 2013). Overall, the city has seen a decrease in crime rates; however, it is still known to be on the top dangerous cities in California and the nation. With these statistics and the negative/notorious fame the city holds, there is a greater demand to implement Crime Prevention Through Environmental Design (CPTED) strategies. It is a great opportunity to figure out what works in this area and can be used as a model for other troubled urban cities.

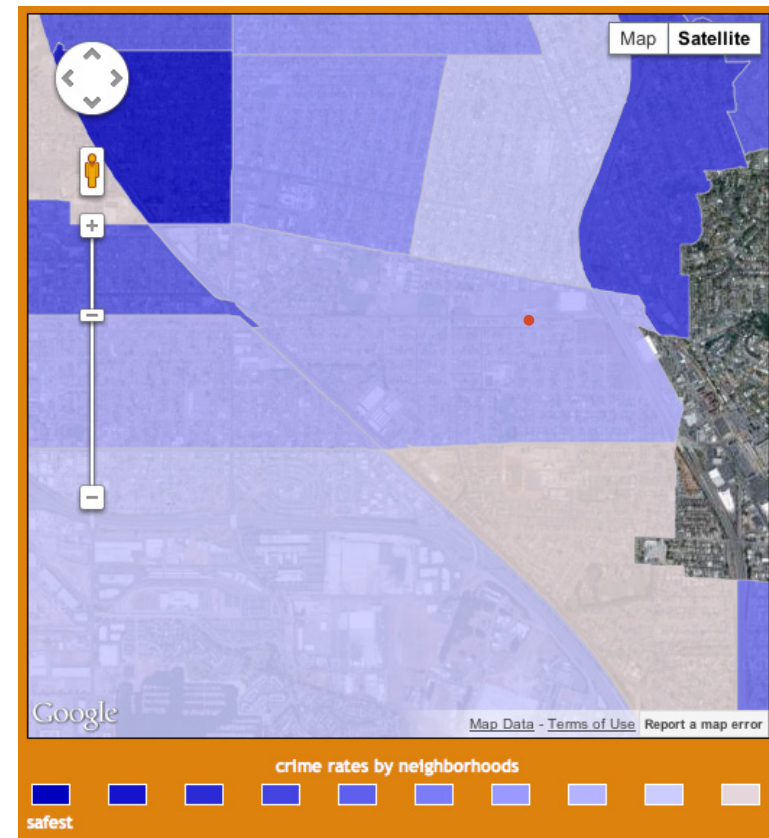


Fig. 1.0 Crime view community program

The site is located in one of the neighborhoods with the higher crime rates.

RICHMOND GREENWAY HISTORY

The Richmond Greenway Project was started in 1997. It is part of the rails to trails metropolitan grants program, which was granted two million dollars in planning and construction funding. The old railroad is The Atchinson-Topeka and Santa Fe Railroad (AT&SF), which has been in Richmond since 1904. It carried freight through the city during WWII when Richmond became national leader of wartime industry and woman's labor movement. After remaining unused for 25 years, the railroad is now being transformed into the Richmond Greenway. The greenway came about after the National Park Service's Rivers and Trails Conservation Assistance Program helped the city purchase the land from the rail companies.

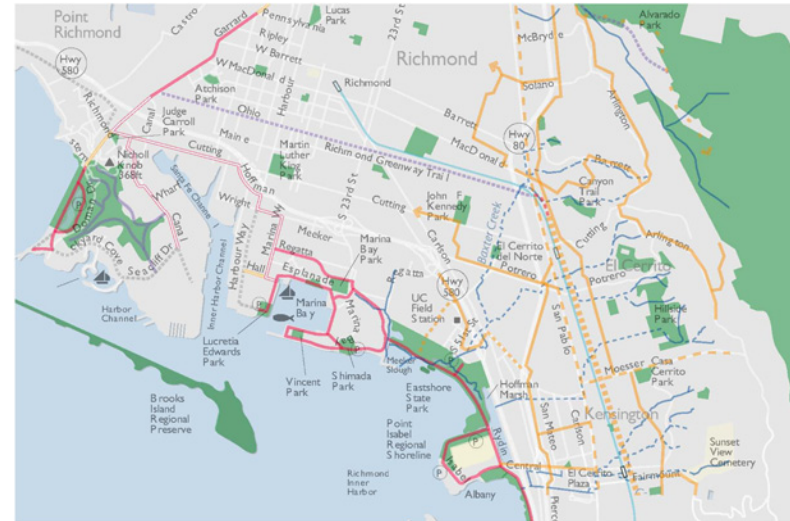


Fig. 1.1 Richmond Greenway Map (Joel Camacho)



Fig. 1.2 Rails to trails sign along the Greenway

RICHMOND GREENWAY HISTORY

The greenway plan includes a three-mile community bicycle and pedestrian rail-trail bordered by 32 acres of community-designed artwork, urban agriculture and recreational space. The goal is to make key connections with community resources, access to other trails and public transportation. In 2010, a new 1.3-mile segment was opened. It parallels BART between 23rd Street and San Pablo Avenue. The first segment is between 2nd and 23rd Street and connects residents to the Richmond BART station. At San Pablo Avenue, a connection to the Ohlone Greenway is being planned.

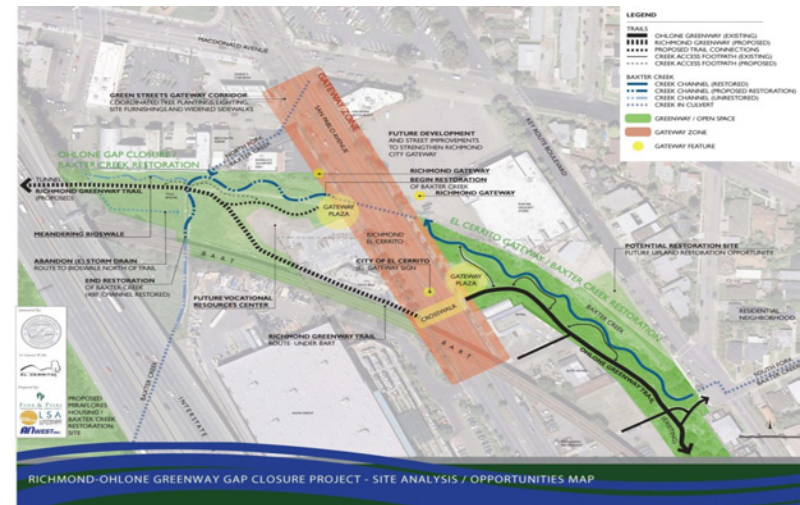


Fig. 1.3 Greenway gap closure analysis map

GROUNDWORK RICHMOND HISTORY

Groundwork Richmond (GWR) is a local non-profit organization who adopted the site. This non profit was established in 2010. GWR is part of a larger network of 20 Local Groundwork organizations, referred to as Trusts, that make up Groundwork USA. The network is founded on the concept of interdependence. Each trust is locally organized and controlled to address the needs of the community in which it operates. They are dedicated to urban renewal of brownfields, polluted lands and abandoned parks.

GWR is dedicated to helping the city of Richmond improve the outdoor environment while engaging local residents in improvement projects. The city of Richmond has two programs which GWR has decided to help with. One of the program is the adopt-a-tree program. GWR and

a youth green team have organized neighborhood tree-planting events to develop the tree canopy in the low-income neighborhoods of Richmond. Another priority for the organization is to help develop two sites along the Greenway which is part of the city's adopt-a-site program on the Greenway.

Fig. 1.4 Groundwork Richmond Logo



Out of the two sites that Groundwork Richmond adopted, one of them is the Ohio Avenue and 42nd Street, the site next to the Richmond Greenway. The site is part of a larger project called the Richmond Greenway Project. GWR partnered with the city and as part of their adopt-a-site program on the Greenway, they adopted the site on the eastern end of the Greenway since there was a lot of activity and adopters on the western end. The site is located at the corner of Ohio Avenue and South 42nd Street in the city of Richmond. As part of the adopt-a-site program, GWR found it feasible to include a nature play park.

I've had the idea of bringing nature to the urban child for a long time. I originally wanted to do it in the city of San Pablo, where I grew up in, but once I saw this site, I knew it was

the right place. There was a greater need for it in this area than the one I had selected, and there was an opportunity to actually build it. Apart from promoting the use of the greenway, it has the potential to make the surrounding neighborhood safer. The neighborhood is lacking safe green spaces that can be used by children, since the existing parks are perceived as unsafe by both children and parents. This park will be very different from other parks. Having a nature play park will reintroduce children to nature and enhance the aesthetics of the neighborhood, which is one of the goals of GWR.

INTRODUCTION

Groundwork Richmond has already created service-learning projects for local youth organizations, which include a local high school welding shop to develop benches and bike racks for this site and the painting of the mural on site.



Fig. 1.5 Benches for the site



Fig. 1.6 Newly painted mural on the site

People live separated from the natural world. The Richmond Greenway connects a variety of habitats and communities. By including a nature play park along the greenway, many people will have access to nature and children can have a place to play freely in a less directed manner.

The main goal of the project is to provide children with a place where they can develop their motor skills, imagine and explore while learning about local plants and about other natural elements that exist on or near the site.

One of the concerns is that the site will be a target for vandalism and individuals will refrain from using the site if it looks unsafe. Traffic patterns around the proposed site are an issue and parking is very limited. It can be a potential gathering space for whom the site is

not intended such as: homeless and gangs. For this reason, one of the topics that I will focus on is safety around the site. Safety includes the safety of the children while at play and it includes the site's perceived safety by users. One design strategy that I will use is lighting techniques, for nighttime safety. I will also incorporate more vegetation around the play area since research by Kuo and Sullivan, (2001) found it to be successful in deterring vandalism.

BACKGROUND ON NATURE PLAY PARKS

Children's playgrounds have gone through many changes over the years. They went from traditional swing sets to concrete and steel structures to Nature play parks. Nature parks have been the new initiative. Natural environments were associated with adventure, challenge and risk, which cannot always be fulfilled indoors; as a result, children value a natural environment more than those built (Titman, 1994). Play parks are characterized as having limited structured or dictated play, containing few play structures and more natural elements that make up a play park. This enables children to use their imagination and create their own play. They can explore and discover on their own as they wish.

2

SUCCESSFUL
EXAMPLES

JESTER PARK, IOWA

Jester Park Natural Playscape is located in Granger, Iowa. This park is an example of using one area to attract users to another site. The designer's main goal was to get kids and their families out of the home and "away from technological diversions of modern life"(Natural playscapes,). The areas include a Stonehenge area that not only frames views, but also is arranged in what they call the "council ring" that is used for outdoor classroom activities. Another area is the Forest of the Dead, which consists of hollow, salvaged timber logs with berms cradling them to reduce the fall distance and allow children to climb. This reduction of fall distance is a great strategy that can be implemented at the project site. By implementing various design strategies such as this, the final product will be a safe nature park for the community's children

to play in and an educational site for school visits.



Fig. 2.0 Council ring formed by Stonehenge (Natural Playscapes)

ADVENTURE PLAYGROUND, CALIFORNIA

One example of a successful play area without predetermined structures is Adventure playground at the Berkeley Marina. It is a successful playground because it allows children to interact with each other and gives them permission to play creatively and build their own forts. The concept for Adventure Playgrounds originated after World War II, where a European playground designer studied children playing in the “normal” asphalt and cement playgrounds. Although it has limited access and is staffed, the Adventure playground concept inspires others to build play spaces for children that are not dictated by the design, and rather allow them to use their imagination and explore.



Fig. 2.1
Adventure playground, Berkeley, CA

BAXTER CREEK GATEWAY, CALIFORNIA

An example of a successful park along a greenway is Baxter creek gateway in El Cerrito California. The gateway is part of a restoration project where volunteers helped with the re-vegetation along Baxter creek. This creek is located on the other end of San Pablo Avenue where the connection between the Richmond Greenway and the Ohlone greenway is planned. This was a successful creek restoration project along with the addition of a pocket park. So far, both have been successful at preventing vandalism and an increase in users has been reported. By having a dry creek bed at the nature play park, children can learn about the restoration process and a connection to that site and Baxter creek can be part of an educational walking trip for the local schools.



Fig. 2.2 Entrance to Ohlone Greenway



Fig. 2.3 Aerial view of Baxter Creek in El Cerrito

3

RESEARCH

CPTED

Manipulating the environment to deter criminal activity has been used for many years. However, in recent years, more cities and planning agencies have begun to pay attention and implement the design components of CPTED.

Crime prevention through environmental design (CPTED) is described as the idea of creating a defensive environment to reduce opportunities for crime. Crime reduction can be achieved by applying design features that discourage crime, and encourage legitimate use of the environment. (Gardner, 1995)

In her book *The Death and Life of Great American Cities*, Jane Jacobs challenges the common belief of the time, which was that crowded cities were more dangerous than isolated neighborhoods. Since she believed that the lack of “natural guardianship” in the

environment promoted crime (Jacobs, 1961). Although she listed attributes to make a street safer, these can also be applied to an urban pocket park such as the one on 42nd street and Ohio Avenue. The declaration of public and private space is very useful at the site since there are homes surrounding the area on three of its boundaries. The diversity of use is an attribute that this site holds, which is another attribute that Jacobs listed as essential. Another attribute is having a high use of pedestrian sidewalks. In this case, from the on-site observations, it can be seen that the site is already being used by people “passing-by” and by the informal trails they have created.

The components of CPTED that were chosen to be applied to the site are territoriality, natural surveillance, and lighting.

The territorial reinforcement component is described as simply maintaining a site to show that someone cares about the place. Planting and maintenance are key to territoriality. By having a nature play park on this location, territorial reinforcement will promote social control and empower the neighborhood residents to stop crime themselves.

Landscape design plays a significant role in CPTED. In terms of surveillance vegetation should be selected in a way that it will not obstruct views. Setting minimum and maximum heights for vegetation is crucial. A rule for surveillance is to keep plantings to a maximum height of three feet and trees six feet at its

lowest branch (Gardner, 1995). This allows shade and aesthetics and reduces criminal hiding spots. On the other hand, it was believed that the denser an area is with vegetation, the more hiding places a delinquent has, however, in order to mitigate the risk of crime, various forms of vegetation can be implemented in the site (Kuo and Sullivan, 2001). For example, in a study conducted by Frances E. Kuo and William C. Sullivan in a Chicago public housing development, it was determined that, “The greener a building’s surroundings are, the fewer total crimes”(Kuo and Sullivan, 2001).

Good lighting is one of the most effective crime deterrents. When used properly, light discourages criminal activity, enhances natural surveillance opportunities, and reduces fear (Gardner, 1995). Lighting should allow for good

visibility, therefore areas where a criminal could hide should be avoided along with shadows and bright spots. Lighting is said to create a good feeling about the environment, which in turn gives them a sense of ownership. (Gardner, 1995). It is recommended that lights installed be a white color since they render color better and visitors can be recognized easily. In their article Safer parks after dark, Harnik et al. (2011) argued that LED lights are proving to be more efficient than metal halide. Leading many cities including Los Angeles and San Jose California to switch from metal halide to LED lights. In Los Angeles, a program called Summer Night Lights is helping light public spaces in areas that have high number of gang activity. According to the program director, Alicia Avalos, lighting of certain places has proved to be efficient with

a 40 percent reduction in gang activity (Harnik, Donahue & Thaler, 2011).

Although there is no clear evidence that lighting itself reduces crime; combined with natural surveillance, good lighting can discourage criminal activity, enhance surveillance, and reduces fear.

Based on the components of CPTED that were chosen to be applied to the site, the following is an evaluation of how they were incorporated into the site. The components of CPTED that were chosen to be applied to the site are territoriality, natural surveillance, and lighting.

The site is surrounded by three two-story homes. By having a nature play park on this location, territorial reinforcement will promote social control and empower the neighborhood residents to stop crime themselves.

The windows of the two-story homes surrounding the site were not obstructed. Although there are trees planted near the fences, visibility of the site remained unobstructed.

Lighting is included in the plan to add surveillance at night and was placed in a way

that will not disturb the surrounding residents. Assigning spaces to designated users throughout. Such as the sand balance log area for children and the amphitheater for all ages, and the dry creek bed for educational purposes.

Overall the site design incorporated most of the CPTED components.

4

DESIGN
OPTIONS

DESIGN OPTIONS

TO ENCOURAGE CHILD DEVELOPMENT, THERE ARE SEVERAL OPTIONS AVAILABLE.

I decided to use boulders instead of a simple lawn and rope for climbing. Although a slide was preferred by interviewees, I did not see a significant contribution to the nature play theme. Instead I included a balance log and sand area. That helps develop motor skills and allows for creative play.

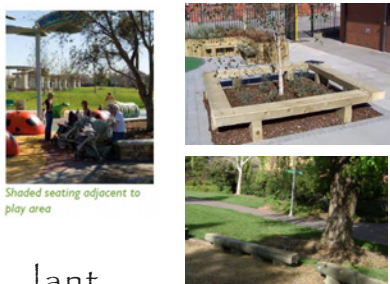
For seating options, the Kennedy High School students worked on two metal benches and two bike racks. There will be more benches and picnic tables throughout the site. I also added logs around the sand area to provide parents with informal seating.

Plants will be mainly natives with some edibles. Plants in front of the mural will not exceed 18 inches in height. Planting throughout the site is not to exceed 36 inches in height to allow visibility.

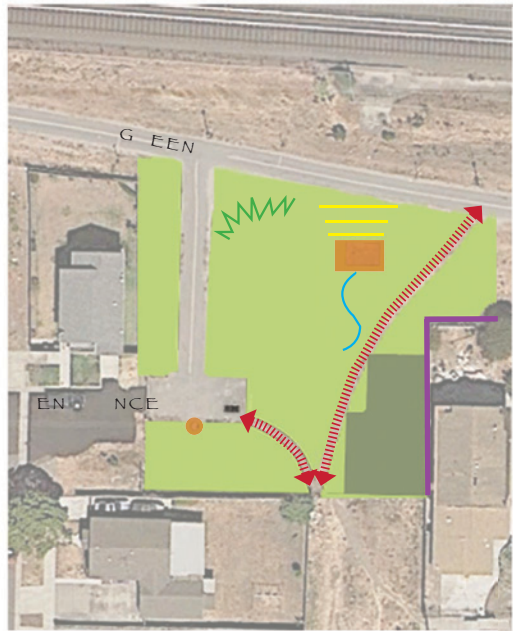
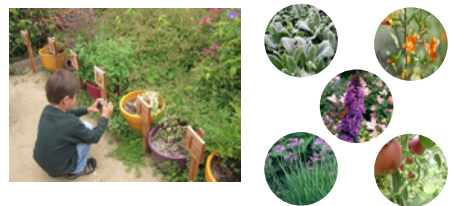
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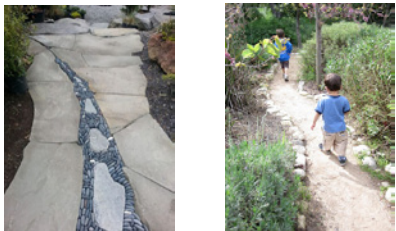


Fig. 4.0 Poster presented in one of the community council meetings. This poster informed the residents of the variety of elements that can be incorporated in a nature play area and highlighted the aesthetic values of such.

DESIGN FOR PLAY

Experiences:

People-plant interaction

Stimulate senses

Motor Skills

Learning Settings:

Interpretive signage

Butterfly garden

Open- ended play settings:

Logs/ sand area

Boulders

Storm sewer platform

Lawn area

Landforms, topography:

Circulation

Supervision

Vegetation:

Edibles

Trees

Butterfly garden

Dry creek bed

Water element:

Dry creek bed

5

THE
SITE

SITE OBSERVATIONS / CONTEXT

The site is located at the last section of the Richmond Greenway right before it reaches its end at San Pablo Ave. It is meant to be a resting spot for families traveling on the greenway. Currently there is a fence blocking off pedestrian traffic on the south end of the site. However, people have cut open a section of the chain-linked fence and have created clearly defined informal social paths. Among the users was a young woman who used travels through the site and uses it as a shortcut to the Target shopping center on the other side of the Bart tracks. Many people use the site as a travel route to and from the local elementary school and High school. Since it is currently an empty lot, people only walk through the site, with the exception of a few bikers and scooter users who use the steep sloped path at the north east end as a ramp and a challenging run-through. The

area gets some morning shade from the two story residence on the east end and afternoon shade on the west end from another two-story residence.

There are two storm sewers on site. A large concrete frame surrounds one of them; which is a good opportunity for children to play on a remnant. When one is on top of the manhole, one can hear water flowing underneath. It is thought to be a remnant of a creek. The site has a slope on the north end beginning from the north end of the concrete rectangle up to the greenway trail. On the West end is the entrance to the site. There is a large rectangular asphalt area that allows vehicular access to the greenway. It may need to be kept clear for emergency vehicles.

SITE IMAGES



Ohio Ave. And
42ND St.

Fig. 5.0 Images of the site

SITE ANALYSIS

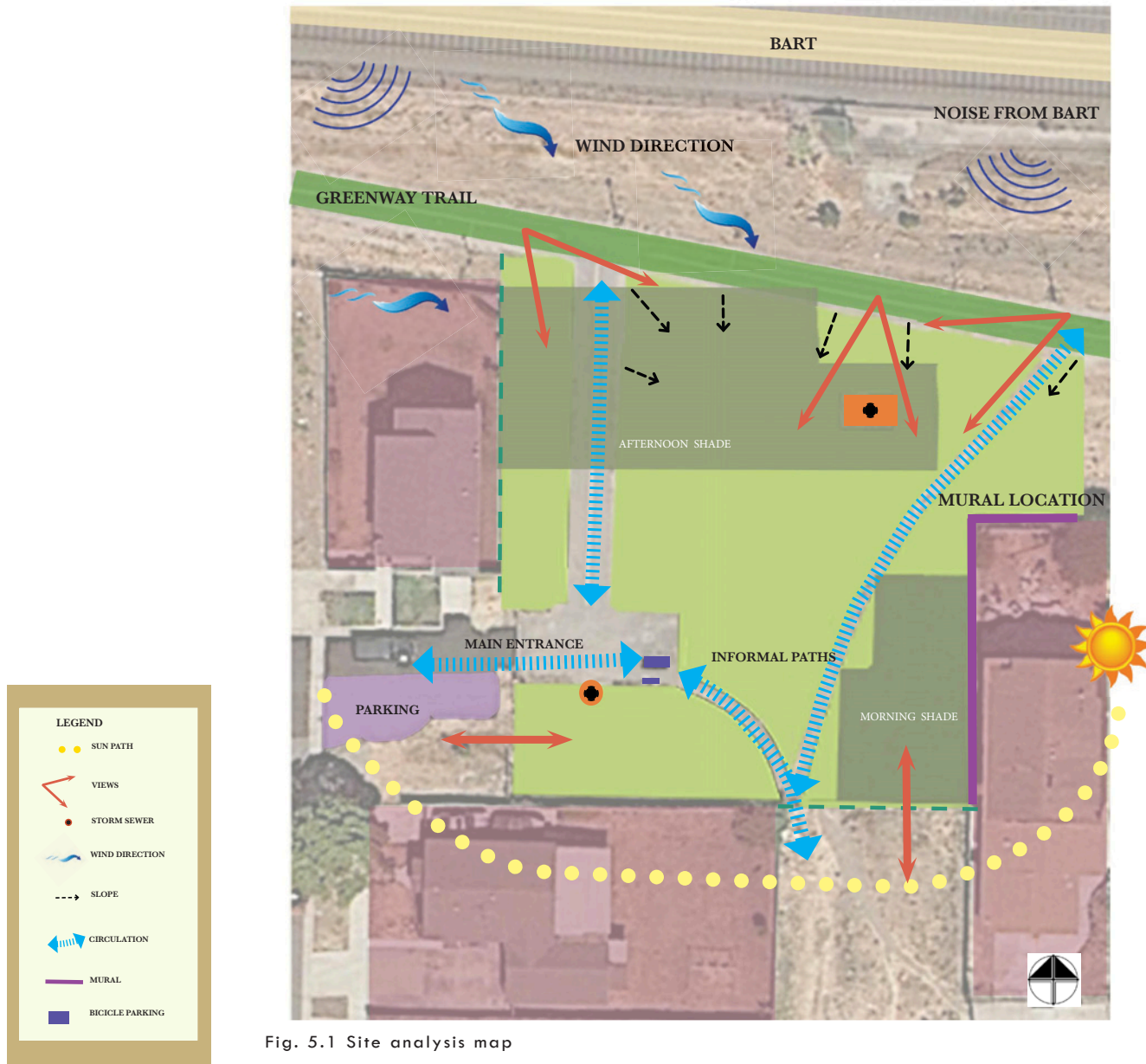


Fig. 5.1 Site analysis map

SITE CONTEXT

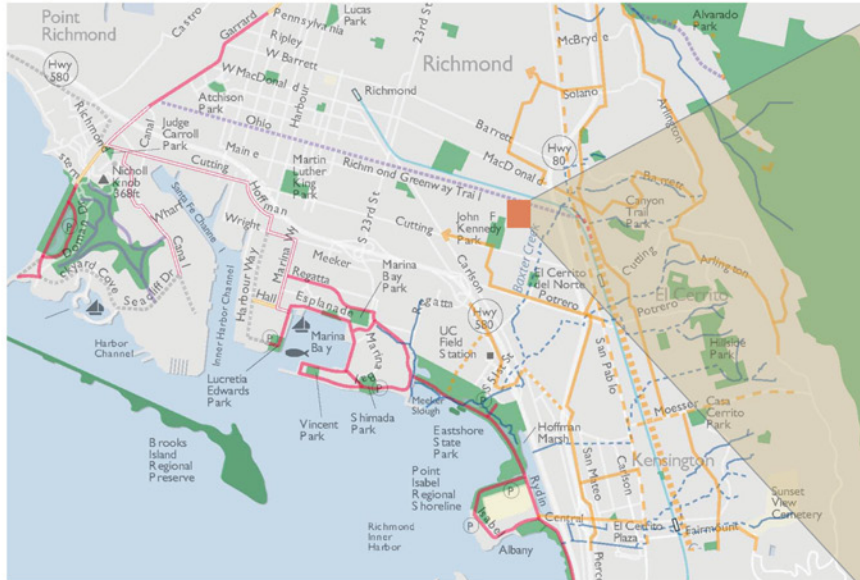


Fig. 5.2 Greenway map



SITE LOCATION

MARTIN LUTHER KING JR.
ELEMENTARY

Fig. 5.3 Site context map / Google Earth Image

CIRCULATION

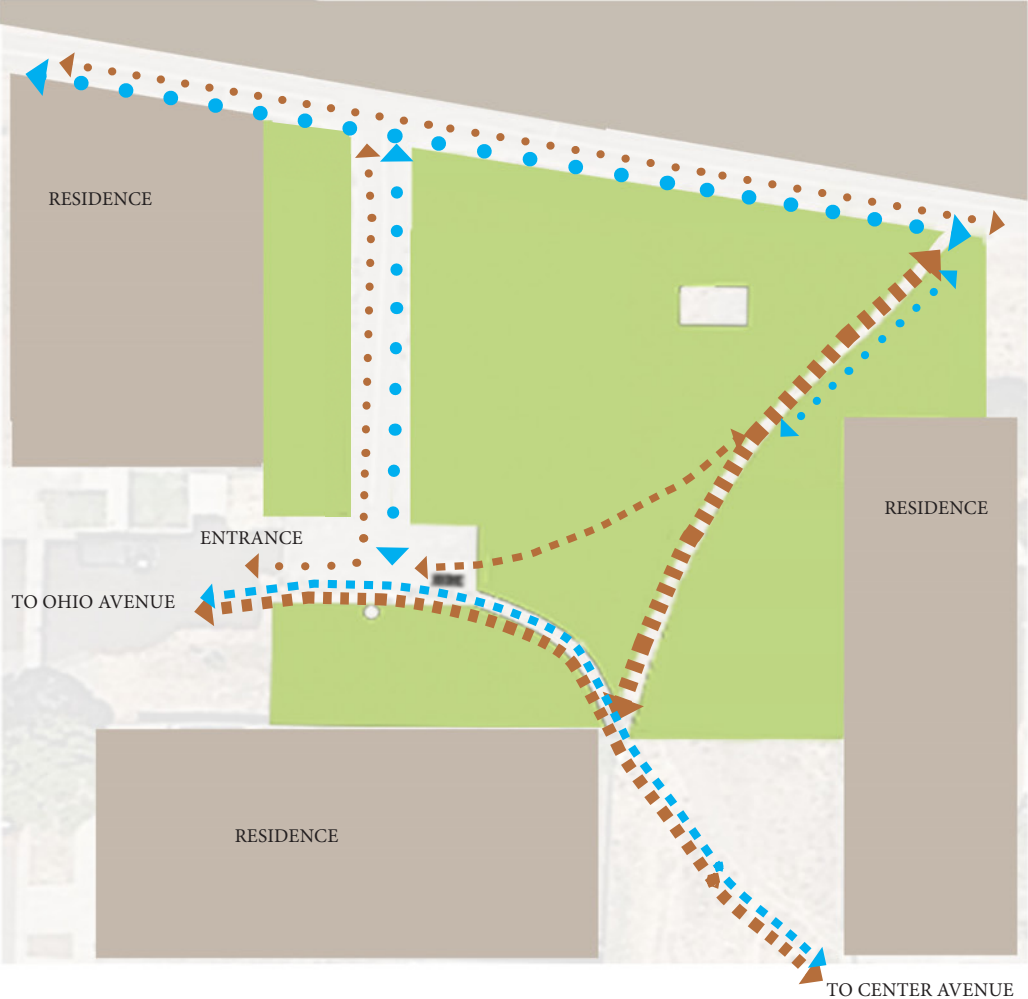


Fig. 5.3 Site circulation map

Fig. 5.4 Circulation Map/ Google Earth Image

OPPORTUNITIES / CONSTRAINTS

The proposed site for the nature park has many opportunities. The area is at a lower grade than the trail, which increases visibility from the path. In addition, the site is also visible from the end of Ohio Avenue and Center Avenue. The surrounding residences are two-story, which gives a sense of surveillance. There is enough paved area for bicycle parking and the bike lane is in great condition. Since it is near San Pablo Avenue, which marks the end of the Richmond Greenway, it is an opportunity to make this area a rest stop for families with children; the children can explore and discover while the parents rest. In addition to trail users, the nature park can be visited by schools located only blocks away and used as an educational site. Further down there is a bridge over BART tracks and a tunnel under interstate 80 to allow multiple access routes to the site.

Furthermore, the site does have some complications. One primary concern is that the site will be a target for vandalism and individuals will refrain from using the site if it looks unsafe. One of the reasons why it looks unsafe is the graffiti on the fences, and the asphalt. However, if designed properly, this can be prevented. As Kuo and Sullivan mentioned, "...that the incidence of vandalism or graffiti in sites without plantings was 90% as compared to 10% in the sites with plantings" (Kuo and Sullivan, 2001). An additional concern is that the site can turn into a potential gathering space for the homeless and gangs. As a result of the site being without programmed use, in a last site visit, I found that the light poles had been vandalized. After talking to one of my committee members, I found that the light fixtures have copper wiring in them, which is

OPPORTUNITIES / CONSTRAINTS

expensive and therefore a target for vandalism. The city is in progress of securing the lights and locking them better to deter criminals.

The existing trail has a narrow right of way and allows for limited landscaping. Overall, since it is a more recent added portion of the Greenway, the identity and use is not yet well established. The chain-linked fence on one end has been broken and it is also an area of concern. After working with teens painting a mural at the site, it is something that should be highlighted. The youth group worked with mural artists to develop a concept for the mural, which highlights the histories of the surrounding Richmond neighborhoods. Although the major segments of the trail are complete, work in this section of the Greenway is underway. There are still gaps in the 23rd Street under crossing where major streets and rail lines bisect the

corridor and a connection needs to be designed to the Ohlone greenway in its East end. Another gap connecting to the Ohlone greenway could soon be filled where the trail crosses San Pablo Avenue at mid block location, and a signalized crossing has been proposed.

The things that can not be changed at the site are the location of two existing storm sewers. One of them is surrounded by a large concrete frame and sits near the sloping area of the site. Another is located near the main entrance, but is off of the large asphalt area, which is thought to be for emergency and service vehicle access. This area is also a constraint that had to be worked around. The main entrance to the site is not the best location since it is bordered by residential entrances. There is an opportunity, however to add an entry on the south end of the site where an empty lot is located.

Altogether the site is a great opportunity to provide the community with a place to play and gather along the trail. Even though there are some concerns, children who live in underprivileged neighborhoods need to have the opportunity to experience and play in nature, to set their minds free and learn that nature is beautiful. Since it is thought that people who live in densely populated areas are afraid of nature and its inhabitants, children should be exposed at a young age to prevent this from happening. It has been shown that having green spaces can help deter crime. As Kuo and Sullivan mentioned, "There is a variety of evidence suggesting that vegetation may be linked to lower levels of crime in residential neighborhoods, particularly poor inner-city neighborhoods" (Kuo and Sullivan, 2001).

Having children exposed to nature at an early age and providing a green safe space for the community will help lower crime rates and increase the quality of life of the residents. Moreover, having a nature play area in this location will provide an educational opportunity for nearby schools including King elementary school and Kennedy high school, which are only blocks away.

6

CONCEPTUAL DESIGN OPTIONS

CONCEPTUAL MASTER PLAN 1

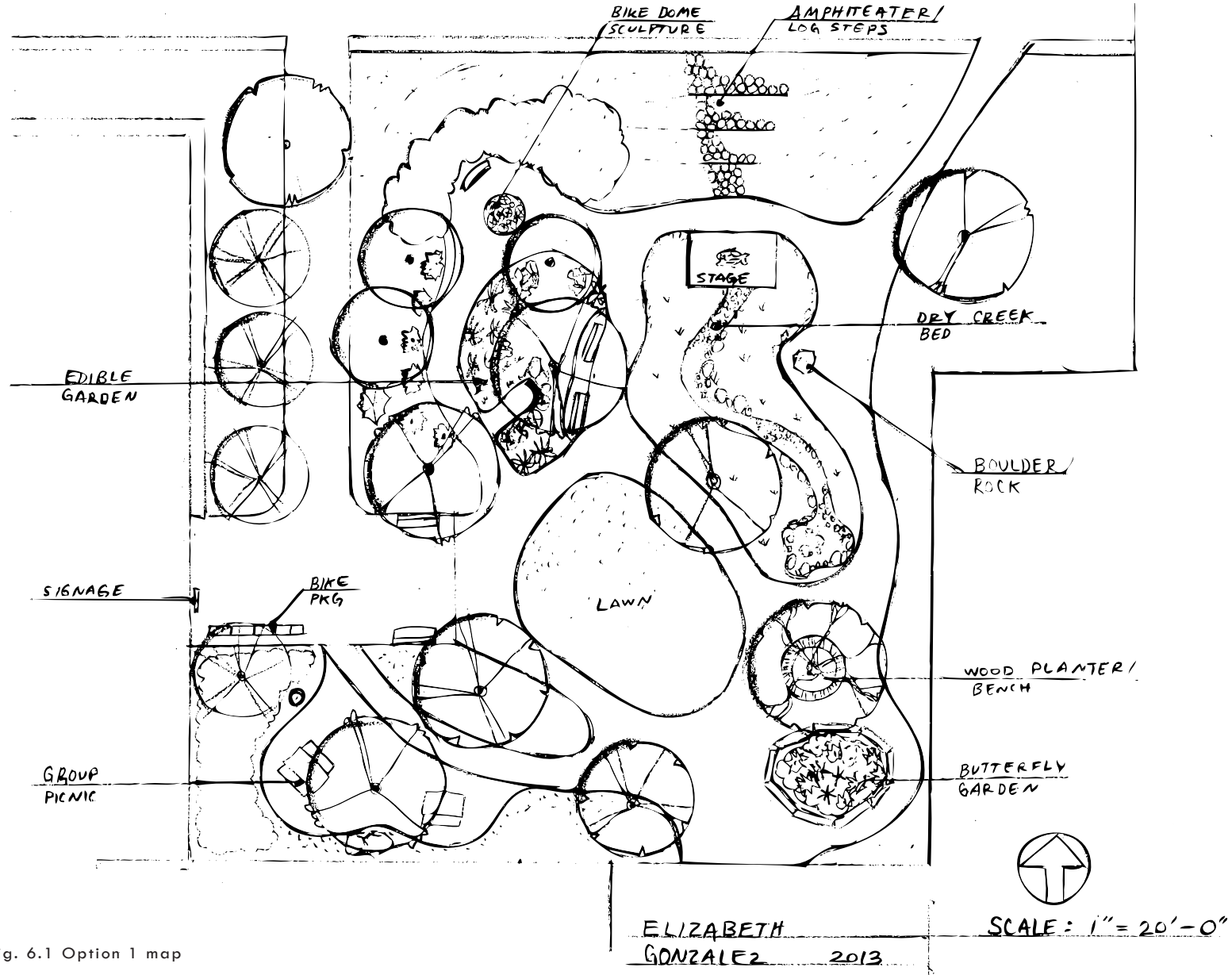


Fig. 6.1 Option 1 map

CONCEPTUAL MASTER PLAN 2

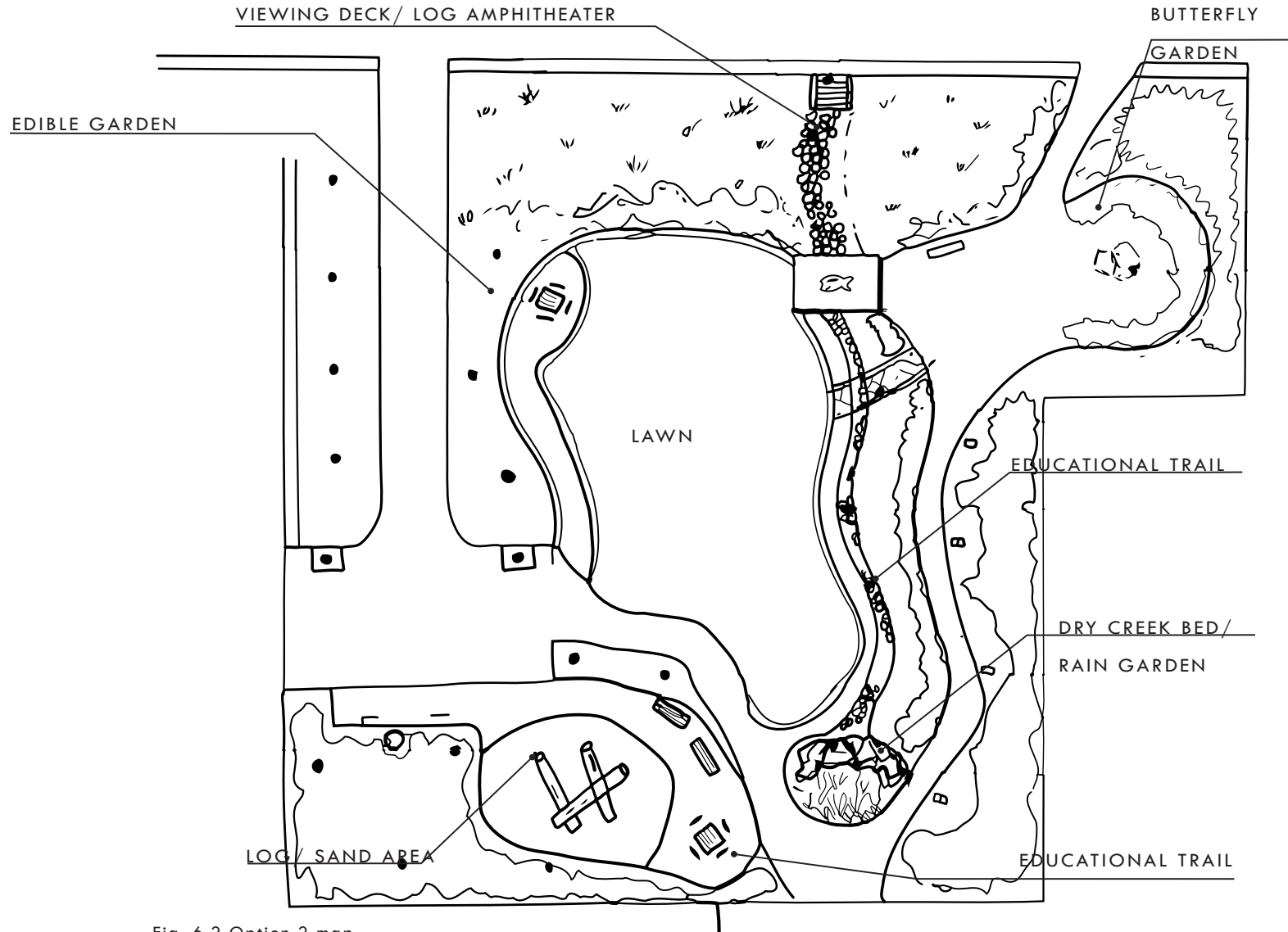


Fig. 6.2 Option 2 map

7

DESIGN

FINAL PLAN

Playgrounds connect people to nature and each other through play and social interaction. This can help make a neighborhood stronger. This site allows children to experience nature in a variety of ways. This includes its plants which include edibles, butterfly- attracting plants and native plantings that feature a variety of colors, textures, smells and tastes. The plan is also designed to accommodate the original desire paths formed by the users of the site. Following the desire lines of users has created a form in the paths which make a walk pleasant. There is another connection from the main entry to the north east trail and the Greenway. By having the plan accommodate the desire line it makes it convenient for users that are crossing through.

One of the main features of this site is the dry creek bed. It begins in the North by the greenway and ends in the south. It is bordered

by an educational path of tree cookies and decomposed granite. Along with interpretive signage, it is meant to be a demonstration site for ecological restoration. The purpose of the dry creek bed is to mimic an actual stream that flows right underneath the proposed site. The large concrete platform from which the bed begins has been replaced with a grate of a shape of a fish. This is more appealing to children and opens up the manhole to view and listen to the flowing waters underneath.

Farther West is an edible garden with low maintenance requirements. Along the path surrounding the garden users will come across a quiet area with an isolated bench but still visible from a distance. This area will provide enough isolation for individuals to gather their thoughts in isolation. Oftentimes children live in crowded homes and need such a place.

FINAL PLAN



Fig. 7.0 Plan map

PERSPECTIVE



Fig. 7.1 Photo manipulation/ rendering of balancing log/ sand play area



Fig. 7.2 Photo manipulation of butterfly garden

PERSPECTIVE



Fig. 7.3 Photo manipulation/ perspective of main entrance

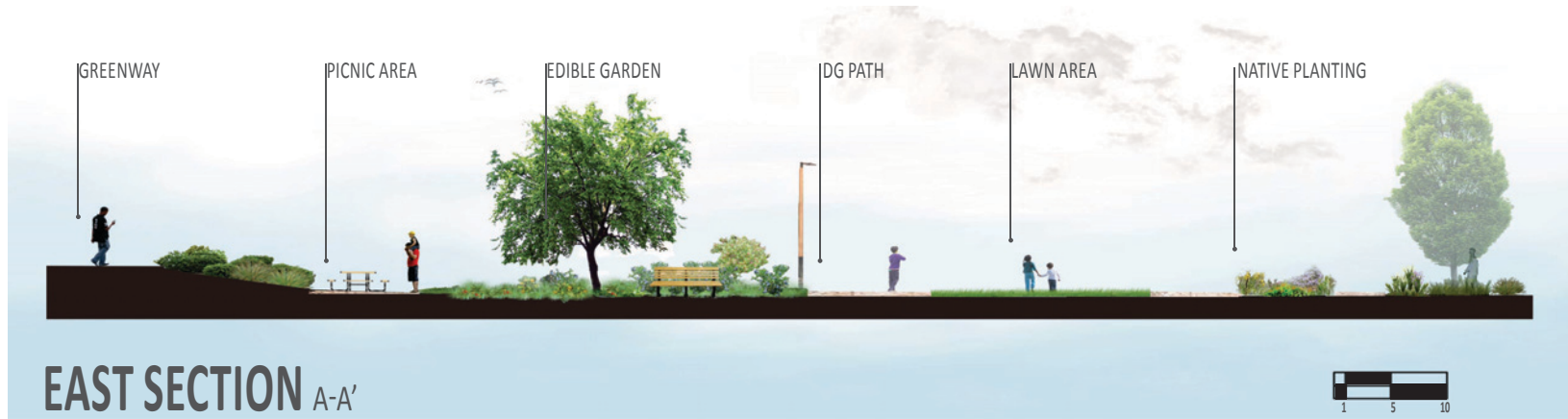


Fig. 7.4 East section

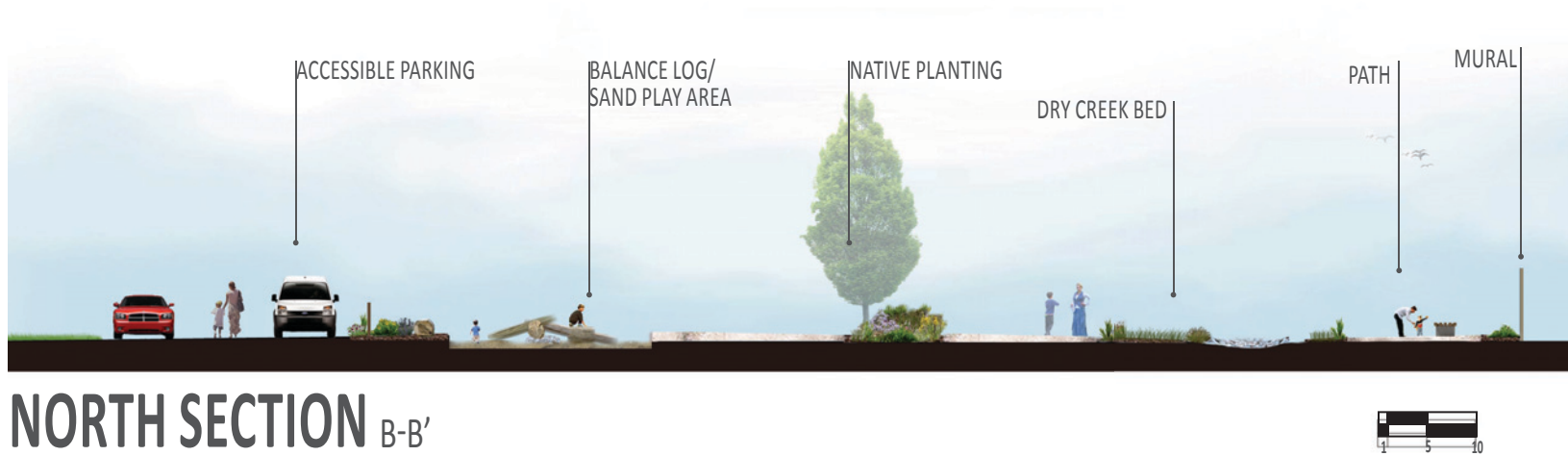


Fig. 7.5 North section

LIST OF FUTURE RECOMMENDATIONS

After analyzing the site surroundings, an empty lot right across the street from the proposed entrance is a perfect opportunity for a farmers market, a community garden, or a park. Having this vacant lot transformed into a usable space will not only benefit the community but also can attract people to the play area and reduce vandalism. It can add to the greenway and help connect the neighborhood better while adding green space.

To the south of the site there is an opportunity to connect the parcel to the nature play area and possibly continue the interpretation of the underground stream. When connected, the three parcels make a large area of total green space which will not only enhance the aesthetics of the neighborhood but will encourage them to reclaim their neighborhood.



Fig. 7.6 Empty lot adjacent to play park entrance. (E. Gonzalez 2013)

THANK

YOU

QUESTIONNAIRE

University of California Davis
Landscape Architecture
Questionnaire: Cuestionario

Ethnicity/ Etnicidad _____ Gender/ Sexo _____ Age/ Edad _____

1. **How often do you visit parks? If you have children, what are their ages?**
¿Que tan seguido visitan parques? ¿ Si tiene hijos, cuales son sus edades?

2. **What type of area do you/ they have to play outdoors at home?**
¿En su casa, que tipo de espacio tienen para jugar afuera?

3. **How often do you/they play outdoors?**
¿Que tan seguido juegan al aire libre?

4. **Would you consider your neighborhood safe?**
¿Considera su vecindad segura?

Why/ Why not?
¿Porque/ porque no?

5. **What is your favorite part of your neighborhood?**
¿Cual es su favorita parte de su vecindad?

6. **What is your least favorite?**
¿Cual es su menos favorita parte de su vecindad?

7. **Do you participate in any outdoor recreation activities? Which ones?**
¿participa en actividades de recreación? ¿Cuales?

8. **What do you find interesting about parks?**
¿Qué encuentra interesante sobre los parques?

9. **What do you think a nature play area looks like?**
¿Cómo cree que se mira un parque infantil de naturaleza?

10. **What is your favorite space, or activity to play in the play area? Why?**
¿Cual es su favorito lugar o actividad para jugar en el área de juegos? Porque?

11. **Other comments?**
¿Otros comentarios?

SURVEY



University of California Davis
Landscape Architecture



Groundwork Richmond has adopted a site along the Richmond Greenway Bike Commuter Path located at 42nd street and Ohio Ave. This survey will help designers choose which options to use when designing a nature play park that will be at the site.

-THANK YOU FOR YOUR PARTICIPATION

MARK ONLY ONE BOX

Please put a check mark next to the feature that you like the most:

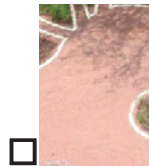
PATHS



Stone and river rock



Decomposed granite

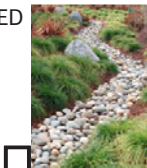


Colored granite



Dirt

DRY CREEK BED



Large rocks



Medium granite



Mixed granite and rocks



Fine Granite

SEATING



Metal without armrest



Metal separated



Wood without backrest



Wood with armrest

A LARGE GRASSY AREA IS IMPORTANT TO ME

YES

NO

HAVING EDIBLE PLANTS IS IMPORTANT TO ME

YES

NO

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