



Community Connections The Santa Rosa
Greenway Project

A Senior Project by Andrew Stricklin

ABSTRACT

The Santa Rosa Southeast Greenway is a very real project at its very first stages of development. Presently, all that exists is an undeveloped piece of property and a handful of community members with a desire to imagine something what could be. My involvement with this group has brought about knowledge on what obstacles exist to development and what program elements people would like to see take place. A few key elements such as a bike path and open space recreation are among the top desires as discovered through several meetings and surveys collected by the group.

It is my intention to develop a conceptual master plan for this 50-acre greenway as well as show the possible future connections to the rest of the city in an effort to promote a healthier place to live, commute to work and have a spot for recreation. The enormity of the project size limits the detail to be presented at this point make this project most successful as a promotion and visual representation of what could be in order to garner support towards project reality. All design and map analysis has been taken from city GIS and planning surveys and then extrapolated to be shown in a way for all to understand. All photos of the site are visual documentation to current conditions and have been merged with designs to give a more true feel of the greenway presented.



DEDICATION



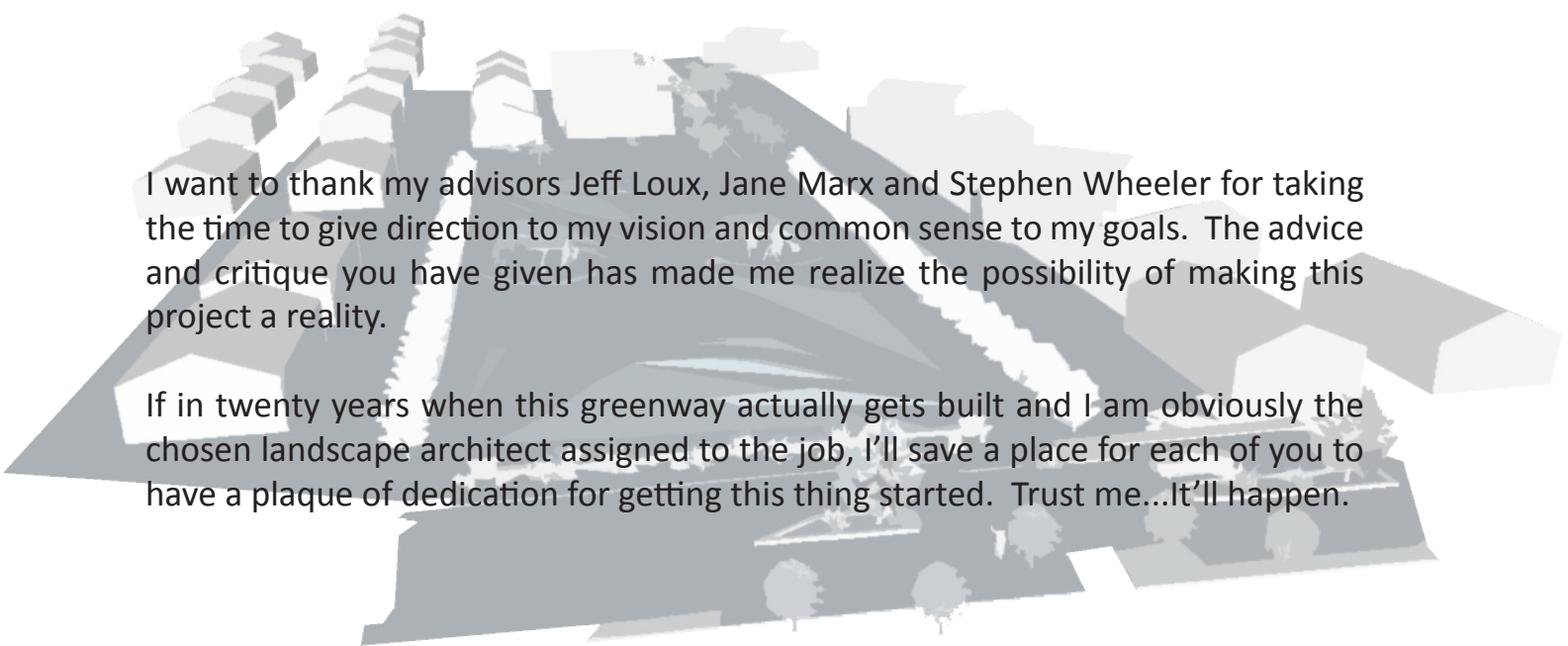
To my wife Sara

Thank you for your patience and never ending support. You are my help, my guide and my best friend. Most of all, you are the love of my life.

We did it babe!!!



ACKNOWLEDGMENTS



I want to thank my advisors Jeff Loux, Jane Marx and Stephen Wheeler for taking the time to give direction to my vision and common sense to my goals. The advice and critique you have given has made me realize the possibility of making this project a reality.

If in twenty years when this greenway actually gets built and I am obviously the chosen landscape architect assigned to the job, I'll save a place for each of you to have a plaque of dedication for getting this thing started. Trust me...It'll happen.



Community Connections

Designing the Santa Rosa Greenway

A Senior project presented to the Landscape Architecture Department of the University of California, Davis in partial fulfillment of the requirement for the degree of Bachelor of Science in Landscape Architecture

Andrew Stricklin 2011

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TABLE OF CONTENTS

Abstract.....	i
Dedication.....	ii
Acknowledgments.....	iii
Introduction.....	1
I. Research.....	2
Background.....	2
Understanding the Site.....	8
Greenways.....	12
Precedent Studies.....	18
II. Design.....	28
Site Observations.....	29
Opportunities and Constraints.....	31
Site Design.....	35
Concept Plan.....	36
Program Elements.....	38
Conclusion.....	44
III. Reference.....	45
List of Illustrations.....	46
Bibliography.....	48



INTRODUCTION

In Santa Rosa, CA stretches the skeletal remains of what at one time would have been a highway cutting literally through the eastern region of the city. A highway was envisioned to extend through the neighborhoods and over the newly created and extremely successful Spring Lake Park. After decades of protests from citizens not wanting a bridge to cross the park, Caltrans abandoned the highway route and the strip of land has remained deserted to this day. Just over two miles in length and averaging 300 feet in width, such a vacant piece of land has attracted undesirable dumping of garbage with no official city monitoring.

This piece of land remains ripe for developmental planning and design as a greenway for the surrounding community. Local residents have already begun to organize and plan for its future, yet a cohesive and unified plan remains absent.

Santa Rosa holds a rich history in innovation, art and culture; however, the boom of growth from the highway system split this budding city in several places over the years leaving ill-connected neighborhoods. Travel across town is relegated to automobiles as bike and pedestrian trails are scattered and disjointed without any unified connectivity. Cul-de-sacs and the vacant Caltrans property pose very real obstacles in travel.

Other successful greenway and open space projects similar in concept to the study site in Santa Rosa show methods and ideas in how to reconnect a city that is already established without making the design look like an afterthought or filler in the grand design of the whole. The historical projects by landscape architect Fredrick Law Olmsted are consistent in making natural connections for travel at the human scale. Recent design projects in Santa Rosa show models of success and even potential connections to the greenway site in study. Through comparison with these successful designs and better understanding of what truly makes a greenway successful both for the ecology and user, a framework takes place for creating a trail system and open space that works in reconnecting the community.



Santa Rosa – A History

Soon after its founding in 1854, the small town of Santa Rosa began to flourish because of the wealth generated by agriculture. The town was officially incorporated in 1868 and the arrival of the first railroad in 1870 enabled the city’s population to grow tenfold in seven years. (Santa Rosa City Founders 2009) Not long after this surge of growth, Santa Rosa experienced several setbacks to its emerging identity, including devastating earthquakes and new highways dividing the town. The resilient and determined town used these obstacles as agents of change and rediscovery, allowing the City to outgrow its small farm town character and transform its identity. Today, Santa Rosa is the largest city in Sonoma County and fifth largest city in the Bay Area. (Stanley 2008)

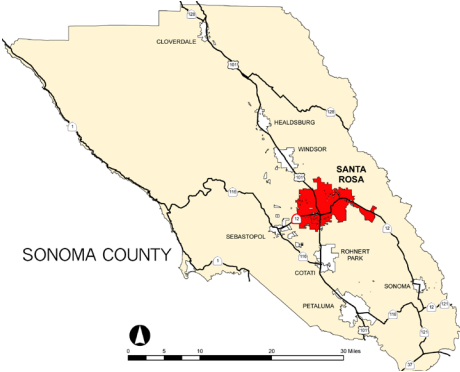


fig. 1.1



fig. 1.2

Santa Rosa is the largest city in the wine country and 12th largest in California



Adapting to Change

Horse-drawn streetcars were replaced by the railroad as the city's agricultural movement justified the presence of three major rail lines. (Stanley 2008) With the advent of rail service, Santa Rosa's Railroad Square was developed to the west of the city's original commercial center, Courthouse Square. Railroad Square still contains many historic structures and was placed on the National Register of Historic Places in 1979. (DC&E 2007)

The infamous April 18, 1906 San Francisco Earthquake destroyed Santa Rosa, resulting in a higher percentage of deaths in Santa Rosa than were killed in San Francisco. (Stanley 2008) Even though many of Railroad Square's buildings were built strong enough to survive the 1906 earthquake, the aftermath led to a transformation of the City's entire downtown area. (DC&E 2007)



fig. 1.3



fig. 1.4

Left: The railroad was a vital part of Santa Rosa's agricultural export and connection to San Francisco. Right: The 1906 earthquake almost completely destroyed Santa Rosa. Few buildings remain today.





fig. 1.5

HWY 101 Divides Town

As the city began to rebuild, the emergence of the automobile altered the very bones of Santa Rosa's structure as the railroad was quickly replaced by the car and the three railway lines were replaced by highways and country roads. As years progressed and automobiles became the primary mode of transportation in Santa Rosa, the downtown area took on a new appearance.

The year of 1948 marked the greatest physical change in Santa Rosa's history. The north bay of San Francisco development was expanding along with the creation of a northern directed highway. The location of the highway was of great concern to the community, who feared drivers would pass by the city rather than spending money within Santa Rosa. More than a decade of discussion and protest regarding the placement of a bypass eventually led to the construction of Highway 101 right through the center of town. The highway separated east-west streets causing Railroad Square to be removed from Downtown, and resulted in businesses suffering near the

railroad tracks. (Wilson 2004). One newspaper reporter recapped the year of 1948 as one which "has changed the face of Santa Rosa more than any year since 1906. This is the year they sawed the town in half" (LeBaron 1993).



fig. 1.6

A city divided - To preserve Santa Rosa, officials thought best to split it



A New Downtown

Although Railroad Square's identity was revived through new upscale shops and cafes, pedestrian usage between the Square and Downtown has never been fully restored since the construction of Highway 101. (Wilson 2004) The decentralization of commercial services, highway 101 division, development of the Santa Rosa Plaza shopping center and earthquake destruction has impacted the development of Santa Rosa's core and contributed to the separation of the downtown area from Railroad Square. (DC&E 2007)

The loss of rail service has become a source of controversy and frustration today (Stanley 2008) and plans to reinstate a railroad are in progress. More recently, completion of segments of the Prince Memorial Greenway have provided a popular amenity to the downtown area as well as a new connection between Railroad Square and downtown Courthouse Square area.(DC&E 2007) This greenway creates a bicycling and pedestrian trail from downtown Santa Rosa to additional trails that enable people to travel longer and safer distances without the use of an automobile as well as create scenic tours for the avid cyclists who live in and visit Sonoma County. This project has show successful steps to revitalizing Santa Rosa's downtown with the improvement of walkability and more accessibility to destination spots without having a car.



Arts, Culture, Wine & Tradition

The city's agricultural heritage disappeared when orchards were replaced with wineries and vineyards. Santa Rosa is now the largest city in the Northern California Wine County and has become a tourist destination to rival that of Napa County in viticulture. (Santa Rosa Arts & Culture 2009)

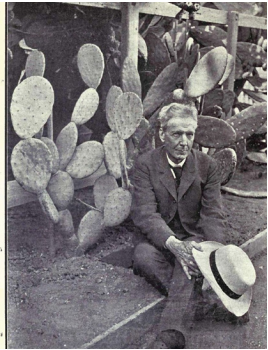


fig. 1.7 Luther Burbank

Also, world renowned horticulturalist, Luther Burbank lived in Santa Rosa for half a century, creating over 800 hybrid plant species in his experimental greenhouse. He helped place Sonoma County on the map as an “agricultural eden” (Wilson 2004). Burbank’s power to lure visitors to Santa Rosa was evidenced when he invited notable inventors Thomas Edison and Henry Ford to visit. The large crowds Edison and Ford drew helped Santa Rosa’s identity grow. (LeBaron 1993) Burbank’s greenhouse survived the 1906 earthquake and still stands today. (Wilson 2004)



fig. 1.8 Alfred Hitchcock

In 1943, Alfred Hitchcock filmed his thriller, *Shadow of Doubt* in Santa Rosa. He continued to use the town in many of his films following. This notoriety has made Santa Rosa a major hub in the Bay Area for filming movies.



fig. 1.9 Charles Shultz

Santa Rosa is also home of the American cartoonist Charles Shultz, creator of the internationally recognized comic strip *Peanuts* which stars Charlie Brown and Snoopy. Having spent more than 40 years of his life in Santa Rosa, Charles Shultz became a well-respected and influential member of the community and is now regarded as Santa Rosa’s “the most beloved resident of the 20th century” (Stewart 2005).



Charles Schulz's legacy in Santa Rosa is ubiquitous, with a museum, ice rink, gallery, regional airport and 55 Charlie Brown statues throughout the city commemorating Shultz. In 2005 Santa Rosa organized the "It's Your Town, Charlie Brown" tribute, which featured the statues of Charlie Brown, each painted by a different local artist to reflect a different theme with unique aspects of Shultz's career or even the business sponsor. This tribute attracted a record number of tourists from around the world searching for each statue. "It has a tendency to bring people together", said Craig Schulz, Charles Shultz's son. "It's what I call rediscovering Santa Rosa. It's been phenomenal so far." (Stewart 2005)

Santa Rosa's culturally diverse population led to a thriving downtown arts program beginning in the late 1990's. Downtown Santa Rosa is now a designated Arts District, encouraging the community to bring art and cultural events to the district, creating an inspiring destination that maximizes the community's opportunities to experience art. (Santa Rosa Arts District 2009)



fig. 1.10



Highway 12 Development



fig. 1.11



fig. 1.12

Above: Large earth mounds form the base of where HWY 12 would have travelled towards Spring Lake

In 1959, the State purchased a right-of-way from the southern edge of Santa Rosa to what is now Annadel State Park to construct a freeway linking Highway 101 to Sonoma Valley. The plan included a bridge over a county reservoir, which is now known as Spring Lake. At this time there was no protest from the community for the freeway plan as development was encouraged.

Soon after the State's plans were commenced, the Sonoma County Water Agency purchased 215 acres of ponds and springs, creating a reservoir to control flooding along the creek as it passed through the town. An unintended consequence was increased usage of the area by equestrians, hikers and fishermen. In 1964, the state Legislature approved a bill to provide funding for recreation and wildlife. Shortly thereafter, plans developed for the 400-acre Spring Lake Park around that 100-acre lake. The County did not see the planned freeway as an obstacle to the development of the new park, as the state still promised to build a bridge across the lake.

Three years before Spring Lake County Park was opened, the state began development of Annadel State Park. Howarth City Park soon followed, allowing hikers, cyclists and equestrians to travel 15 miles or more without leaving public land. Santa Rosa's population continued to increase, along with the usage of these parks and development along the existing route of Highway 12.



General Plan Land Use Diagram

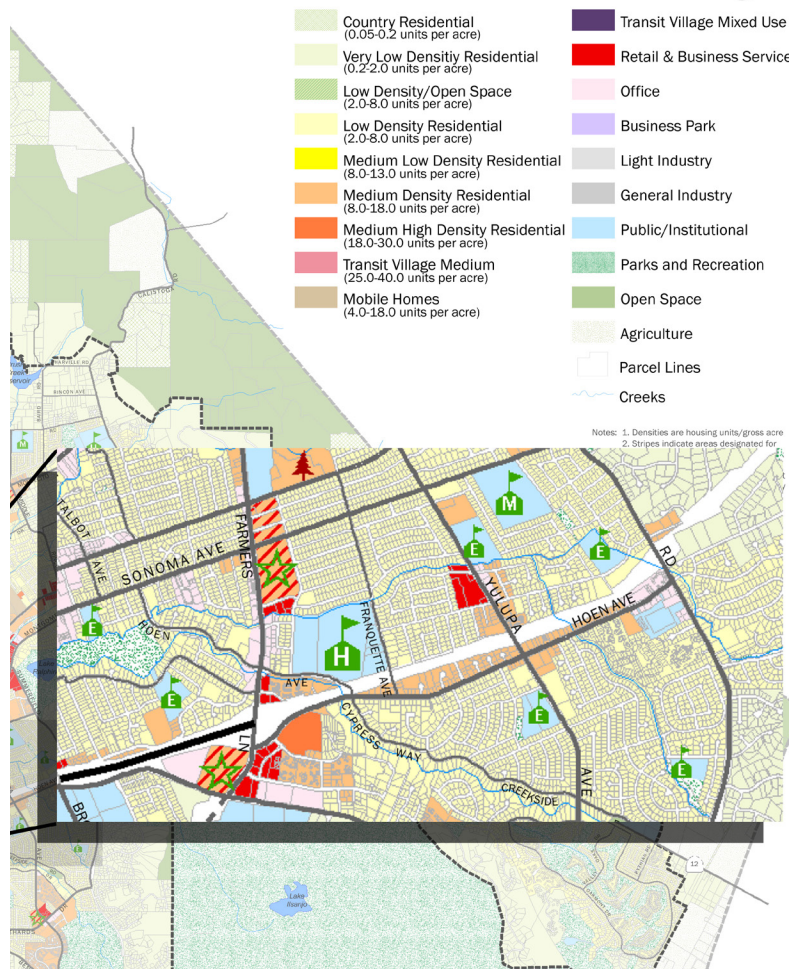


fig. 1.13 The absence of a color key shows the Highway 12 route as disregarded on no longer on any plan.

When Spring Lake became Sonoma County's major attraction and most popular regional park with 700,000 visitors each year, the development of Highway 12 over the lake met strong opposition. With public demonstrations and strongly organized opposition, local citizens were able to stop further planning and development of the land Caltrans had acquired for highway 12. Over the last fifty years, Santa Rosa council members and Caltrans have attempted a resurrection of the project to no success. Environmental Impact Reports were completed and alternative routing of the highway was discussed, even the possibility of tunneling under the lake. (EIP Associates, 1991) With an unrelenting public opposition and the state's financial inability



fig. 1.14





fig. 1.15

to continue plans for the bridge, the project was termed dead. The plans for the freeway were removed from the City and County General Plan in the 1990's. Today, this 300-foot wide, two mile long right-of-way remains undeveloped. (LeBaron, Bridge Dead in the Water 2008) In celebration and in memory of stopping the building of a bridge over Spring Lake, community members used the collected funds against the project to purchase a bench with a plaque marking their victory to be placed at Spring Lake directly in line with where the bridge was planned.

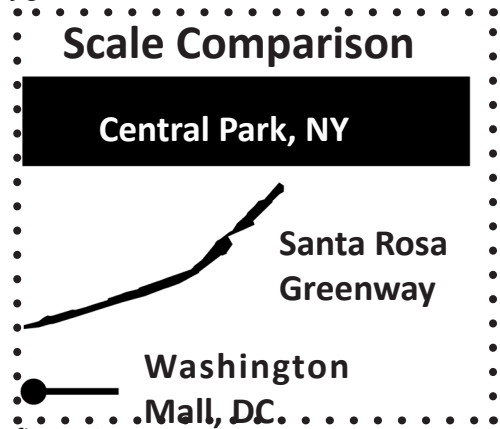


fig. 1.16



fig. 1.17a



fig. 1.17b



Neighborhood Coalition

The property for the highway is nearly 50 acres large and has remained fallow to this day while neighborhoods have grown up around it. Residents have used the land in crossing and occasionally for summer camps for kids without official objections from Caltrans. In 2005, a local co-housing group built a community garden and a small orchard on portion of the land through a leasing agreement with Caltrans. When terms for an extended lease failed, Caltrans mowed down the trees and crops. Shortly after, Caltrans regional directors informed the city of Santa Rosa of plans to declare the 50-acre strip of fallow land as “surplus property” that will then possibly be sold off to a bidder. (LeBaron, Bridge Dead in the Water 2008) These moves by Caltrans drove a community group called the Neighborhood Alliance of Bennett Valley (NABV) to form a specific coalition in order to prevent commercial developers from creating strip malls.



fig. 1.18a

The NABV group bonded under the goal to “ensure protection of their environment, beautification and emergency planning” (LeBaron, Specter of Bridge Fades to Green 2011) for the site’s future.

The NABV has canvassed the neighborhood to bring awareness of the site to people in order to gain their support. In-home meetings, rotary club speeches and frequent seminar sessions have been held over the last two years to discuss the potential the land might offer to the community if given to development of a greenway. Their goals include:

1. Improve the quality of life and local economy.
2. Promote sustainable and healthy lifestyles by encouraging walking, biking and use of alternative transportation.
3. Provide residents with an urban greenway, restoring and enriching the natural environment.
4. Enhance connectivity between East and West County.
5. Build community spirit and address neighborhood needs. (Proux 2011)



fig. 1.18b



Greenways Defined



fig. 1.19

A greenway is simply defined as a linear open space or corridor of natural vegetation that is more natural as a whole than its surroundings. This could consist of sparse or dense vegetation as well as a riparian element as central to the strip of land. The years following WWII gave way to an explosion of suburban sprawl and city fragmentation, patches of land amidst developments have proven invaluable in connecting neighborhoods. Greenways can “help protect waterways from non-point source pollution, and they can decrease the impacts of habitat fragmentation by allowing animals to move between habitats that would otherwise be isolated by human activities” (D. Smith 1993).

The first discussions of greenways are traced back to 1892 in the planning of the Adirondack Park in New York. Planners drew a “blue line” on a map to delineate the 6 million acres of the park. This concept developed into a “greenline” approach to protecting land, both privately and publicly owned, for the purpose of creating parks. Ebenezer Howard pushed this idea of protected land into creating natural barrier strips of land surrounding planned communities to prevent unsustainable expansion. (Zube 1995)

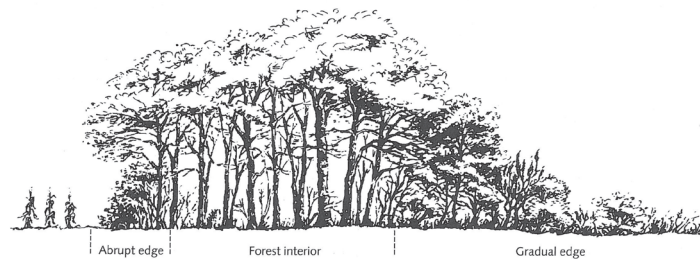
Ecological Sink

Two devastating changes took place in the ecology of the greenway site for Santa Rosa. First, when the Santa Rosa greenway property was first acquired by Caltrans for the highway, mostly open fields and wildlife surrounded the area. The route chosen was simply the most direct eastward travel. As Santa Rosa boomed in population and development, the



greenway became enclosed and an ecological dead-end. Wildlife coming from Annadel Park was stopped at this nature cul-de-sac. A second impact on the site was the destruction of the natural water flow from Spring Creek through the greenway. The original Spring Creek crossing the eastern section of the site was prone to flooding in the winter. (LeBaron, Bridge Dead in the Water 2008) A bypass was created to channel the majority of water from the creek to the newly created Spring Lake. The remaining portion of the creek was mostly buried under roads and earth. A remnant flow of water remains today crossing the greenway. This type of situation of natural vegetation removal and urban enclosure to a riparian zone makes the site “susceptible to contamination from an array of materials moving downslope, including sediment, excess nutrients, and other pollutants” (D. Smith 1993).

fig. 1.20



Functions of a Greenway

Environmental land planner and author Daniel Smith discusses the benefits a greenway can bring to a community as three functions; ecological, social and environmental.

Ecological – By simply considering the preservation of open space and natural vegetation a greenway maintains, natural functions of native plants and animals are allowed to promote a healthy land. Small preserved portions of land go a long way in filtering water runoff and supporting a larger variety of plant and animal variety. The additional plant life also serves as a cooling agent to the urban heat buildup of the city.



Social – Perhaps the most appreciated of greenway functions are the social benefits, both active and passive. People may express concern for their surrounding environment; however, more interest in a greenway’s preservation comes from how the community will use the site. The active uses of the greenway include biking, walking, fishing and other recreational functions that primarily get the attention of the neighborhood and how it will serve them. Passive benefits include aesthetics and a healthier surrounding.

Environmental Ethics – The less observed of the three benefits, a greenway serves a psychological role in connecting people with the environment. That “get away” time so often mentioned when a vacation approaches is really just the human mind telling the body it needs to unplug from urban life and return to nature. The time to appreciate the beauty of nature and how the world functions apart from mankind brings respect and admiration for the environment. (D. Smith 1993)

Proper Design

The Corridor

The design of the Santa Rosa greenway must aim to not only serve the community but more importantly protect and improve the natural environment already in place. With any greenway or open space design, it is important to consider how the site will be used and to what extent.

Professor and landscape architect James Thorne describes the importance of balance within the size and layout of a greenway with a strong emphasis on how man interacts with nature. He gives three elements in creating a balanced corridor.



Width - First, a design must establish a proper width. A narrow greenway will be comprised entirely of plant and animal species that thrive on what is known as an “edge effect” with very little space between opposing sides. (Thorne 1993) Very specific types of animals remain in the cover of the midrange to taller class of trees typically found on the edge of ecological systems. Unfortunately, most greenways designed today are post-urban development and function as the space between the built environments. This limits and defines the width of the greenway’s maximum size.

Connectivity - The second element Thorne mentions is the level of connectivity the site serves. The level of connectivity is calculated by the number and severity of breaks or disturbances along a greenway such as crossing roads or even natural blockages such as large rocks. This is taken into consideration with the movement of animals and how far they can travel within the site. (Thorne 1993) In Santa Rosa’s case, the majority of larger or visiting animals would enter the greenway from Spring Lake in the east. Two wide roads currently cross the greenway site making for very poor connectivity. Presently, deer and rodents do manage to make their way to the site; however, occasional traffic collisions show the brutal conflict of nature reaching into the city.

Quality - The final element mentioned is a combination of the first two; quality. The quality of the corridor is the variety and layering of vegetation to match the width and flow of movement throughout the site. (Thorne 1993) A balance between these elements must be adaptive to the surrounding neighborhood, traversing creek, hikers, bikers and critters.



Use Characteristics

Determining the function of a greenway depends on who, what, when, where and how people are going to use it.

Who – A demographic survey and study of the neighborhood surrounding a greenway as well as the larger city will provide useful insight on who will be using the land. Planning large playgrounds and adventure parks for a design excludes the elderly and handicapped unless there are places to sit and watch with ease of access.

What – This area is comprised of the programming for the greenway. Will there be a bike path? What type of bike path will be used? What will be the ecological makeup? Are there gardens, active areas, sensitive areas?

fig. 1.21



When – The “when” is not only a temporal aspect of planning but a duration study. Knowing the time of day the majority of users will activate the space will require planning for lighting and noise. There is an obvious conflict with placing a sports field with night lights next to residential housing that may be disturbed by the evening noise. The duration of use or intensity a program element will be used needs to be channeled and contained to specific intended areas. A pathway that receives heavy traffic should be built to handle the abuse with material such as concrete. If sensitive spaces such as riparian habitats are nearby, barriers should be planned to discourage overflow traffic from trampling the area. (Cole 1993)



Where – Finding the perfect union between man and nature can often be compared to oil and water. Designs rarely find the right balance in allowing man to enjoy and explore natural habitats without disturbing or displacing them. Deciding where to create spaces people to travel or sit will need to be clear, defined and at a safe distance from where native species are intended to grow or live.

How – People tend to understand a site’s purpose almost immediately on first encounter much like walking into a Walmart or library. Many successful park programs are simply open spaces that allow the user to use as desired. Conflicts may arise when people begin to use specified programs against their sustainable design. Such activities must be prevented and redirected. This may include blocking horses or off-road vehicles from entering sensitive paths or skateboarders from altering the conditions of benches or seat-walls. Biologist David Cole suggests educating the user of the site’s purpose can go a long way before the need to use stern blockades. By using simple symbols or educational signs describing the natural habitat of plants and species, people will find a personal commitment to protecting the land. (Cole 1993) People understand what “No” or “Stop” mean on a sign; however, making someone understand the consequences for disturbing nesting birds or walking on fragile plants will give them a sense of responsibility to preserving the site.



fig. 1.22a



fig. 1.22b



Boston Emerald Necklace

The Boston Emerald Necklace, designed by Fredrick Law Olmsted, established an early precedent for a concept of using greenways to accommodate multiple uses. The design recognized the potential of linear spaces for providing access to city parks and extending the benefits of parks into nearby neighborhoods. (Smith 1993)

Olmsted spent almost twenty years (1878-1896) on the design of this notable series of greenways, consisting of 1,000 acres of parkland stretching 5 miles in Boston and Brookline, Massachusetts. The Necklace encompasses six parks and waterways: the Arnold Arboretum, Back Bay Fens, Franklin Park, Jamaica Pond, Olmsted Park, and the Riverway stretch. Green open spaces, rivers, ponds, and an array of trees, shrubs, flowers, wildlife habitat, riparian life, bridges and other structures can be found throughout the park. (Emerald Necklace Conservancy 2011)

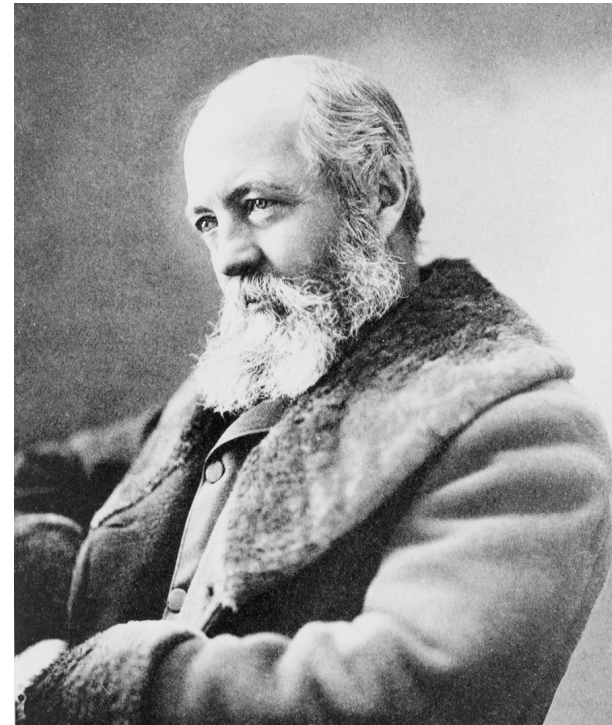


fig. 1.23 Fredrick Law Olmsted



fig. 1.23

The Park has suffered from more than 50 years of neglect which has been addressed over recent years. A conservancy was established to advocate the restoration and preservation of the Emerald Necklace in the late 1990's. The Conservancy has been successful at gaining community commitment through education and advocacy and overseeing maintenance plans and ongoing maintenance efforts. (Emerald Necklace 2011)

The Emerald Necklace was recently recognized as one of the 10 Great Public Spaces for 2010 under the American Planning Association's (APA) Great Places in America program. APA Great Places exemplify exceptional character and highlight communities of lasting value. (Emerald Necklace Conservancy 2011)

The Emerald Necklace is the only remaining intact linear park designed by Olmsted. The Park is listed in the National Register of Historic Places. (Emerald Necklace Conservancy 2011)

fig. 1.24



Morningside Park NY

Context

Built in 1883, Morningside Park was a difficult project for designers Frederick Law Olmsted and partner Calvert Vaux who had recently finished some other large parks nearby such as Central and Prospect Parks. This 30-acre piece of property is long and narrow in shape and was broken up with large rock outcroppings making for a fragmented plan. The final design was exalted as very successful with its meandering pathways, sweeping vistas and rugged contrasts between landscape and built structures. Being confined and surrounded by development on the sides, Morningside lends itself as a park to pass through I travel with several programmed nodes along the way. Over the next 100 years, great changes would occur with the addition of fountains, monuments, playgrounds and athletic fields. (Park 2011) With the passing years, budgets and attention to the park decreased. Morningside Park had faced many years of neglect and abuse creating an unsafe and unsightly open

space for the community. Without a clear and organized plan for the future of the park, decades



fig. 1.25



of projects and changes to the property left unfinished sites of construction. In the early 1960s, Columbia University was allowed to be built in the park, yet a planned gymnasium was cancelled due to protests. This lack of foresight and planning left large patches of disturbed and graded land for the protested buildings that would never be built, leaving unsightly and unusable areas of land in Morningside. (B. R. Wilson 1985)

Design and Goals

In accordance to preserving historical context, planning for future sustainability and finding a balanced union with the surrounding neighborhood, an updated Master Plan was put forth in 2001 to restore beauty and safety to Morningside Park. Landscape architects Quennell Rothschild & Partners were retained to make these improvements and plan for the future. The firm came up with five design goals that not only meet the needs of Morningside but can be applied to similar park projects.

1. Seek and respond to community concerns to define programmatic and physical improvements.
2. Respect the history of the park and the original intentions...Utilize historically appropriate materials for repairs and replacements.
3. Improve park safety.
4. All improvements must be designed for long life and low maintenance.
5. Improvements should encourage park use by all age groups. Physical improvements should be planned in to respond to ongoing community events and other programs and to the involvement of local area schools. (Partners 2001)



The plan proposed for the park focused on improving the existing program elements such as picnic areas, sports fields and pathways to bring people to the park. By letting the park become outdated and unusable, people stopped coming to the park which led to less care and attention being given to the site in its maintenance and relevance to the community. One of the main priorities for improving the park was the restoration of natural vegetation to the area to handle issues such as drainage and soil erosion. By restoring the natural elements to the park, long-term maintenance is reduced and aesthetics are improved. (Partners 2001)

Relevance

The Santa Rosa Greenway faces many similar challenges to Morningside in its future development. Both areas are not so different in size relatively and both face challenges of programming for a sustainable future that depends on the surrounding neighborhood. In creating a greenway, attention must be given to how people will access and leave the area as well as what they might do in between. A great deal of attention might be placed on the pathways that traverse the site with the intention that people will primarily pass through. Such a narrow focus will lead to a greenway functioning only as a thoroughfare and eventual neglect of underused place-making opportunities. Olmsted gave great emphasis on the entrance to a park as well as forcing a traveler along a path to become involved with the park itself through meandering pathways and visual reveals of the changing areas of a park as he did with Morningside. The Santa Rosa Greenway is a wide and long strip of land with varying ecologies including riparian and oak savannah. There will be a need to plan accordingly for the natural flora and fauna of such localities to work with drainage issues the sites faces. Both Olmsted and recent architect Quennell Rothschild have designed Morningside Park around natural eco-systems to deal with soil and water throughout the park.



Friends of Morningside Park

Perhaps one of the greater lessons to be drawn from Morningside is the impact the local community has had in reinvigorating the park over its century-long span. The Friends of Morningside Park is a community-based coalition of volunteers founded in the early 1980s. Under the common goals of preserving Olmsted's original design for the park and maintaining the active elements that engage visitors of the park, this group has brought life back to a previously neglected park. (Park 2011) Santa Rosa faces similar a similar challenge in making the surrounding neighborhood aware of the potential the greenway could bring as well as establish a long-term sustainable plan that future generations could continue.



fig. 1.26



Prince Memorial Greenway

Context

Near the heart of downtown Santa Rosa flows a revitalized creek designed for both pedestrian and cycling use. This half mile stretch of canal was previously an isolated obstacle to transportation as well as an unsightly and unsafe channel before a group of Santa Rosa citizens envisioned an opportunity for recreation and commerce. Today, the site has been transformed into the Prince Memorial Greenway and is now regarded as one of the jewels of Santa Rosa. (Marx 1998)

Much like the Southeast Greenway site, the Santa Rosa Creek was designed as a flood prevention. The once natural creek was straightened, concrete lined and buried under the city streets with steep walls. The high velocity flow of water and years of soil contamination has made the creek inaccessible and hidden from back-facing businesses. Proponents for a trail to follow the creek started meeting with city officials to create a plan to develop the area into a serene nature walk as well as a conduit to nearby existing trails.



fig. 1.27a



fig. 1.27b



Design and Goals

After years of workshops to garner public interest and ideas for the possibilities of the site, a concept plan was created pointing out opportunities and constraints. The design team identified the opportunity to enhance a habitat for steelhead and rainbow trout which used to flourish in Santa Rosa Creek before the swift channel waters became inhospitable. The concrete channel would need to be broken up and an alteration to the grade would need to be made. A second opportunity for the site was creating access to the water's edge for both pedestrian and handicap accessibility. This would require ramps and prevention of soil erosion as well as landing areas for sitting and enjoyment of the water's edge. One of the most ambitious design ideas was the creation of a pedestrian and bicycle path through the site connecting to the Joe Rodota trail leading to Sebastapol and continuing further to Forestville. (Marx 1998) Such a connection would create one of the county's longest uninterrupted trails for non-motorized travel.

With a staggering budget of over \$23 million, the project was subject of much controversy as some claimed limited recreational value would come from the greenway. Completion of the project has shown contrary evidence as a large number of visitors regularly visit the site as well as travel without a vehicle for their close trips. (Lauer 2004) Future plans for the greenway include rezoning the adjacent properties to the greenway for front facing businesses such as restaurants shopping to attract visitors to overlook and enjoy the waterway flowing through downtown Santa Rosa. (Swartz 2006)



fig. 1.27c



fig. 1.27d



Relevance

The Southeast Greenway shares many similarities and common vestments with the Prince Memorial Greenway in the programs they offer as well as transportation connections they make together.

Ecology – A lot of attention was given to the daylighting and habitat restoration of a riparian environment for both ecological and educational purposes. Prince Greenway has many pathways leading directly to the water's edge in order to immerse the visitor into the natural sights and sounds of nature within the city.

Recreation – An adjacent park to the greenway gives both access to the trail itself as well as a destination for those using the Prince Memorial trail from across the city. The ability to exercise through walking or cycling brings health to residents and less congestion to the roads. The Southeast Greenway likewise makes a connection to a neighborhood park and could offer attractive programs within as well.

Transportation – The connection of downtown Santa Rosa to Sebastapol was created with the Prince Memorial Greenway. By connecting the Southeast Greenway to Prince will complete an east-west route through and beyond Santa Rosa.



fig. 1.27e

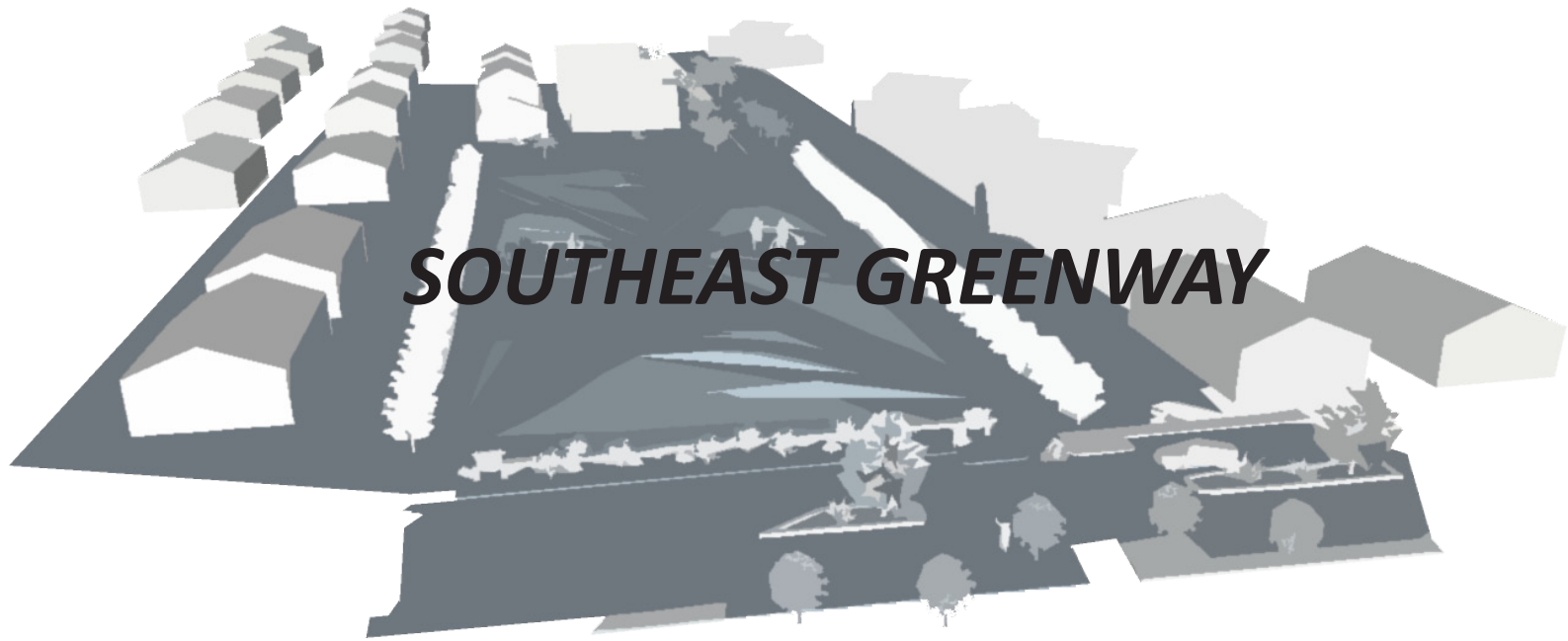


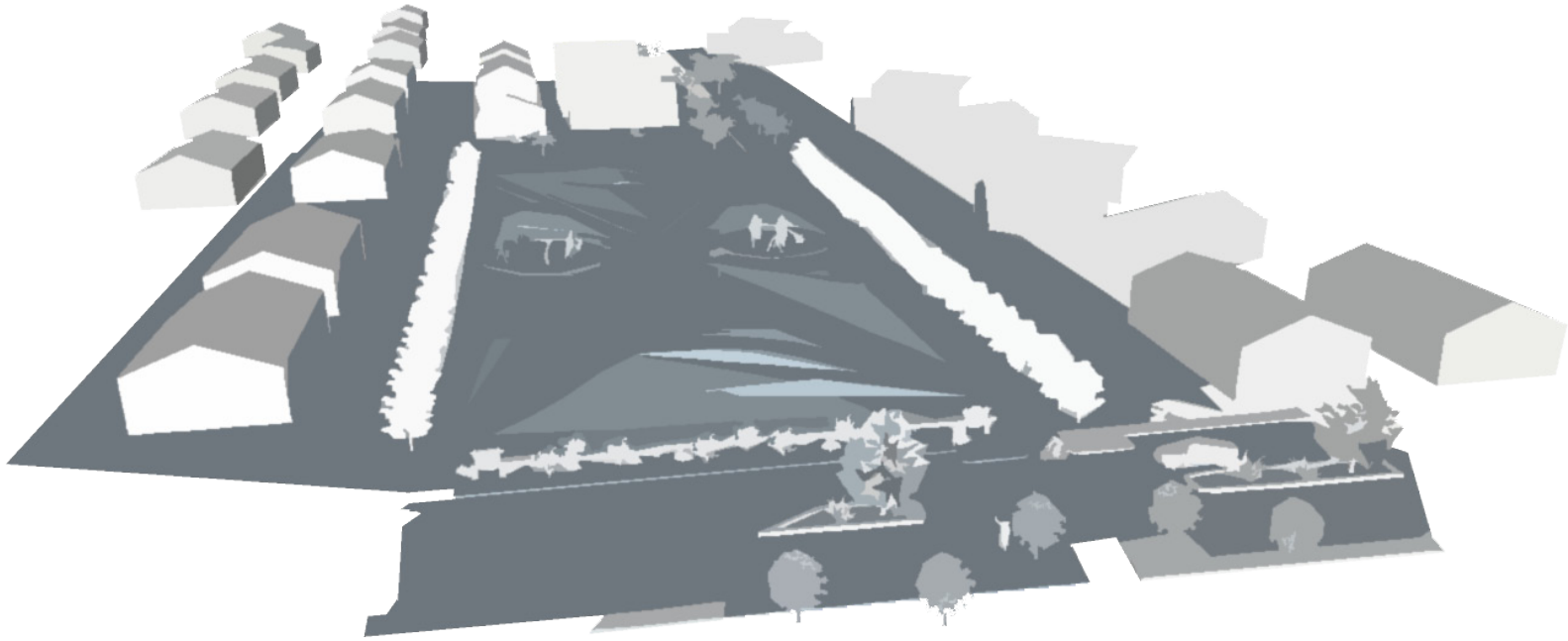
fig. 1.27f



fig. 1.27g







SITE OBSERVATIONS



The site is mostly with a rise in grade beginning east of Summerfield Drive climbing into Spring Lake. The three creeks crossing have been channeled underground yet remnant riparian signs and saturated soil show their original flow. The only lasting vegetation over the years are some protected oak trees and a few walnut trees from an orchard years ago. Each year, Caltrans plows the property to prevent habitation of animals and for fire prevention.



fig. 2.2



pedestrian wear patterns



remnant walnut orchard



public parking access



site used for daily exercise



no trespassing signs



erosion trails & saturated soil near buried creek



extremely wide sections



wide & busy crossroads



cul-de-sac bollards at adjacent properties



buried creeks overgrown with vegetation



"back on" housing



OPPORTUNITIES AND CONSTRAINTS

Whereas the site faces many daunting constraints to its design, the opportunities provide a picture of what could be.

Constraint – First, parcels are “back on” facing away from the greenway creating a dangerous and unmonitored place for people to spend time. Originally, the highway planned for the site made developers turn housing away from looking at the site and tall fences were erected to block sound and sight of the highway. Secondly, some sections of the greenway are more than 500 feet wide making for too much open space to manage for a simple bike trail.



fig. 2.3a



Constraint - Access to and through the greenway is limited. Adjacent roads end in a cul-de-sac. People create their own trails to cross the property.

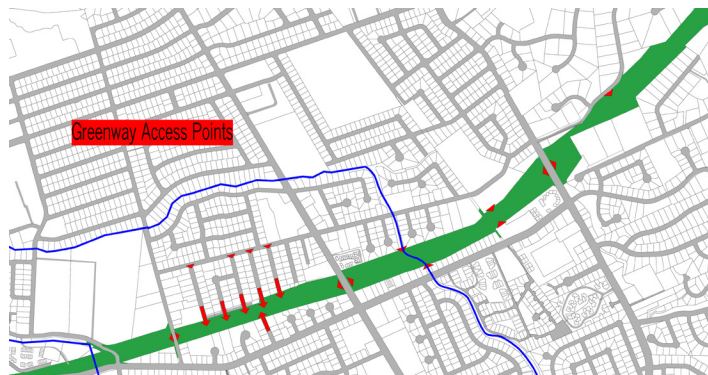


fig. 2.4



fig. 2.3c



fig. 2.3b



Constraint – Three major roads interrupt the greenway with very wide lanes making for dangerous and troublesome crossings for cyclists and pedestrians.

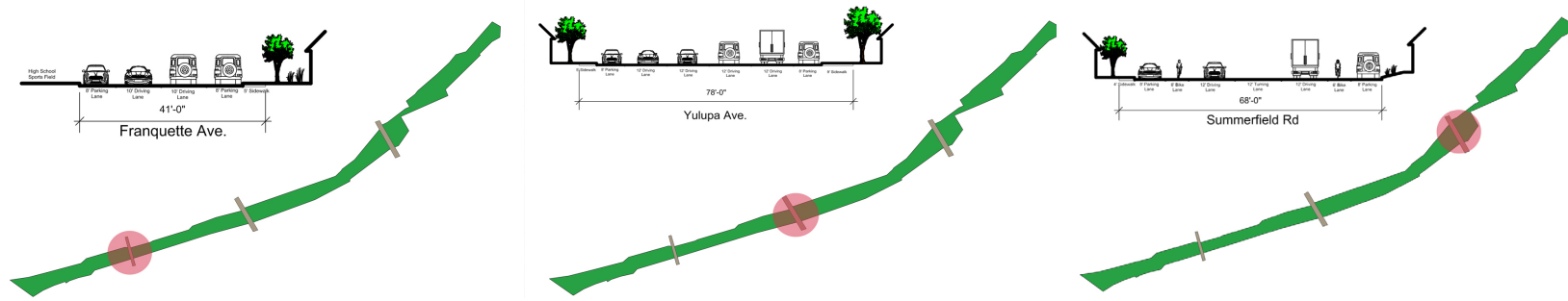


fig. 2.5



Opportunity – The wide greenway allows for the addition of programming such as parks, gardens and additional housing.



fig. 2.6a



fig. 2.6b

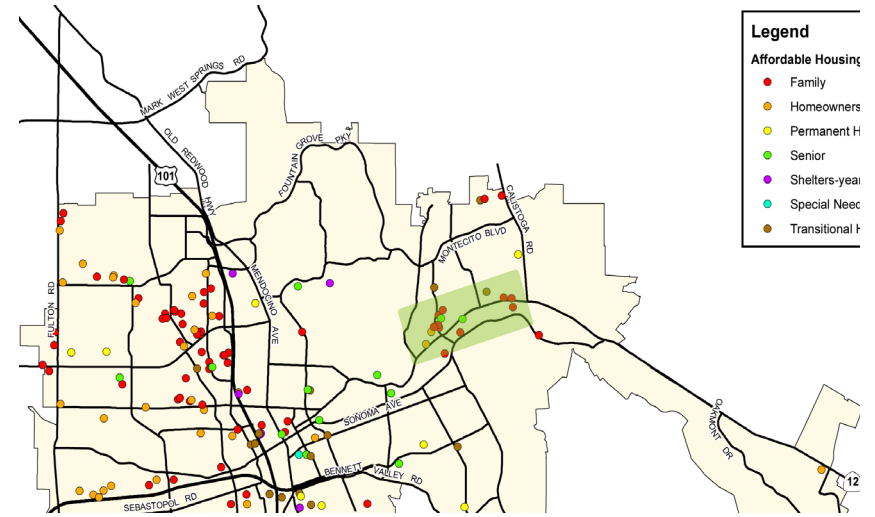


fig. 2.7 demographic studies show need for increased low income compact housing in the adjacent properties

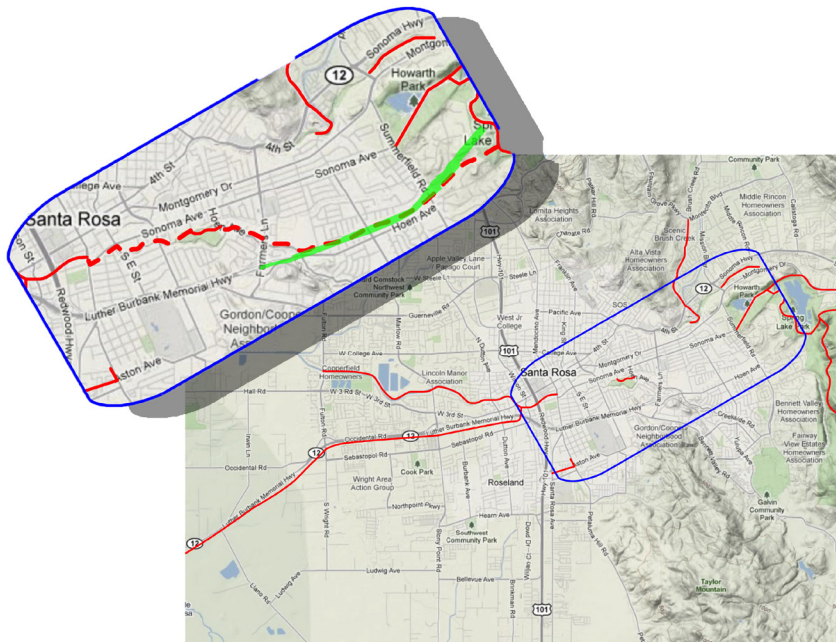


fig. 2.8

Opportunity – The site connects to a large park on one end and has possible connections to another successful greenway which would extend a proposed trail almost to the coast.



Opportunity – The dilapidated creeks make for riparian restoration areas for educational and ecological benefits.



fig. 2.9a



fig. 2.10



fig. 2.9b

Opportunity – The proximity of six schools provides an educational venue of the greenway’s natural elements as well as a “safe routes to school” trail.



fig. 2.11



Design Theme

The goal of the Southeast Greenway design is to connect the eastern part of Santa Rosa with the west and reunite the neighborhood within with a place to recreate and gather together. The city has suffered from a rapid housing expansion with the typical downfall of sprawl and reliance on the vehicle. The greenway itself is currently a literal scar across the city of what would have been an even more invasive highway separating the Bennett Valley neighborhood. Fortunately, this scar has remained undeveloped for half a century providing an opportunity to break through the vehicle and road barriers a pedestrian or cyclist face now as they travel.

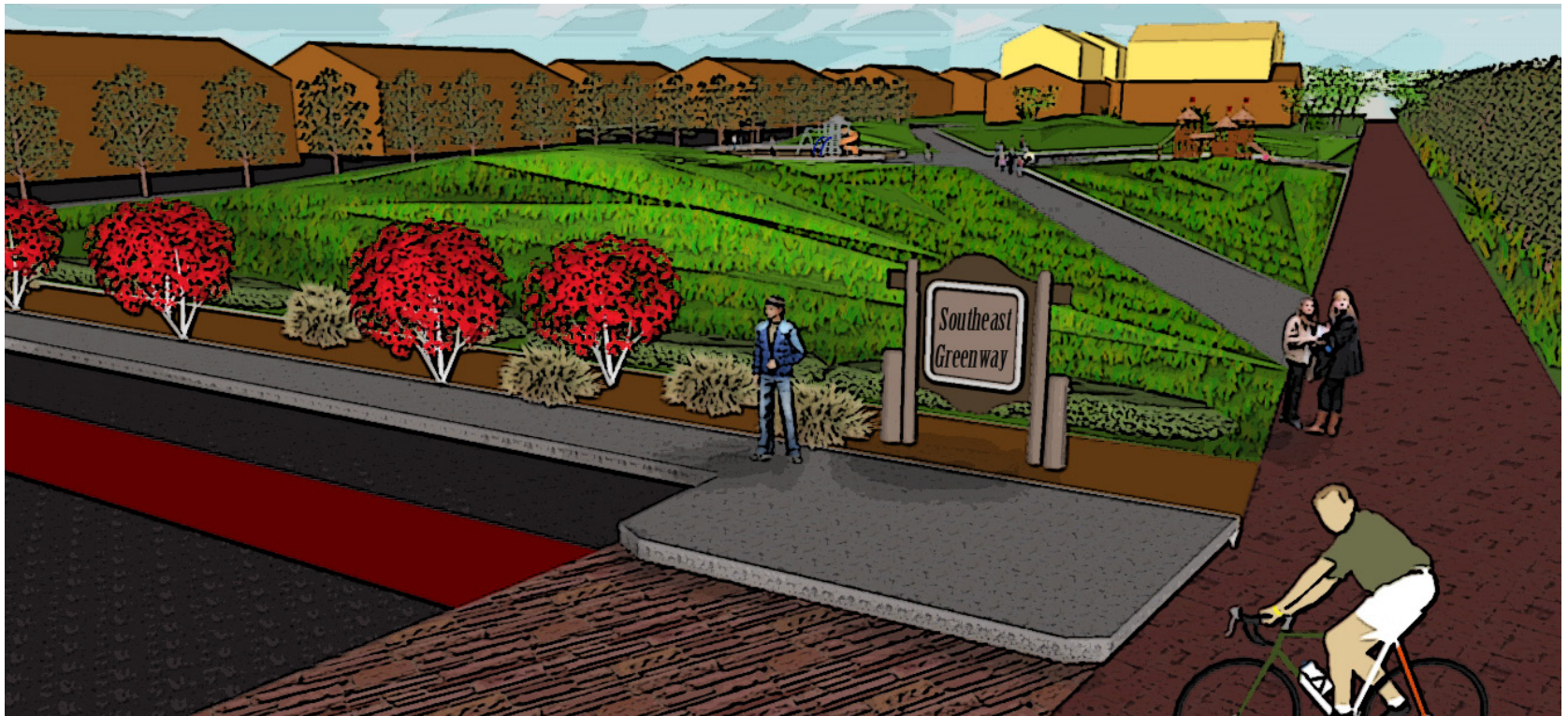


fig. 2.12



Community Connections

The Santa Rosa Greenway Project

CONCEPT PLAN

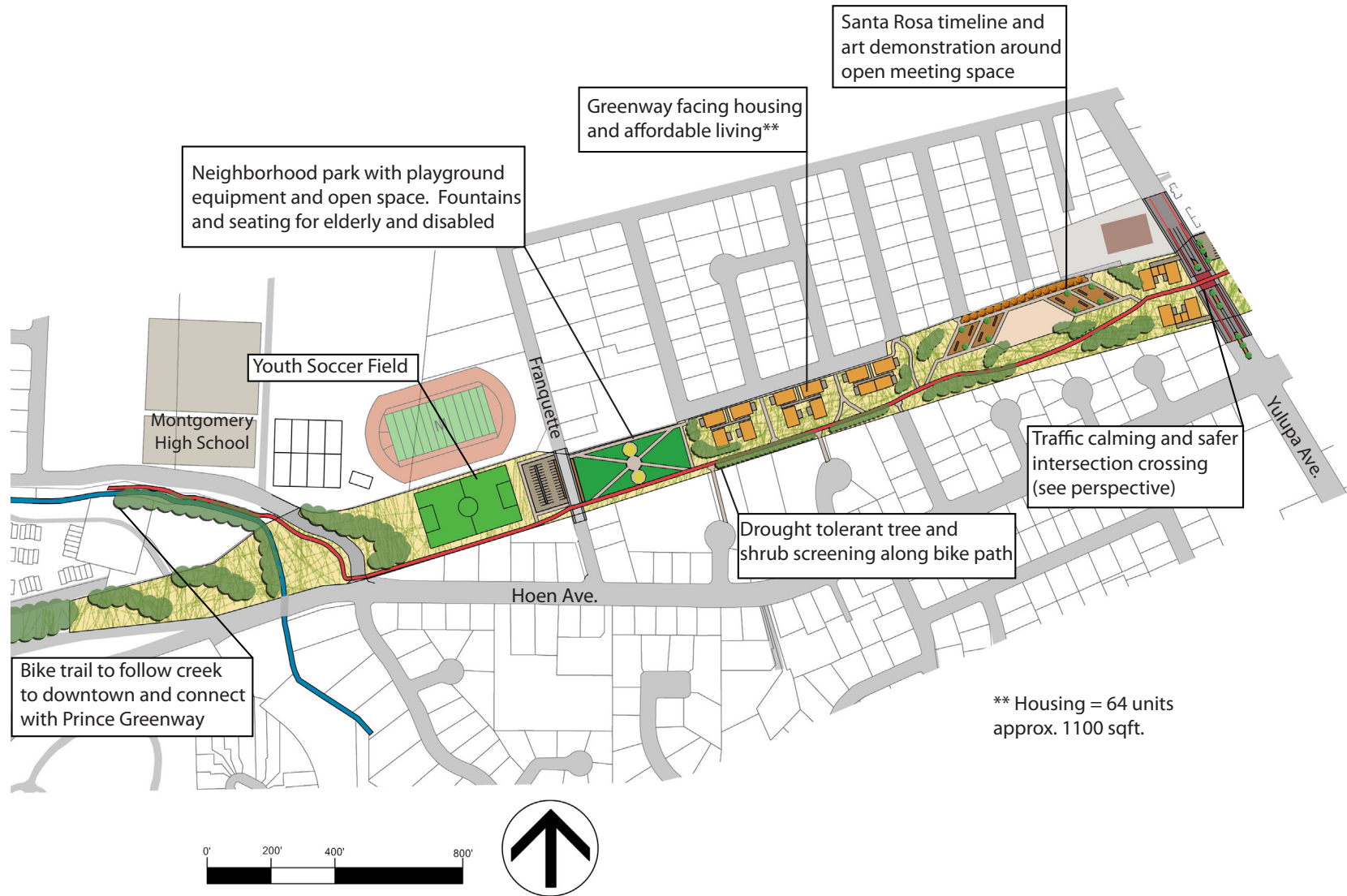


fig. 2.13



*** Native Planting Palette Candidate Materials**

- Black Walnut orchard (*Juglans nigra*)
- Valley Oak (*Quercus lobata*)
- California Oatgrass (*Danthonia californica*)
- Pacific Hairgrass (*Deschampsia holciformis*)
- Gray Dogwood (*Cornus racemosa*)

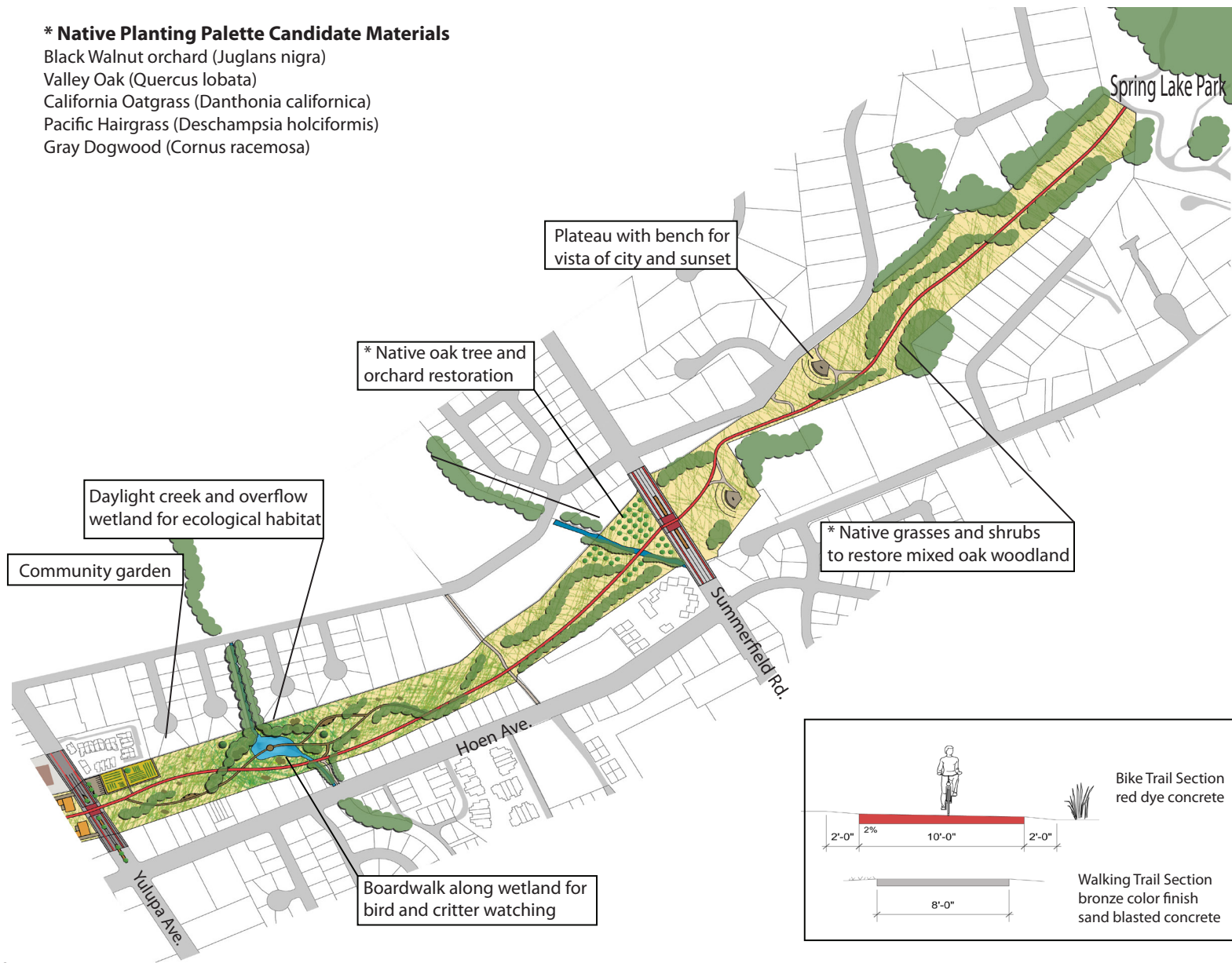


fig. 2.13



Bike Path and Housing Integration

The dominant vein of the greenway will be a Class 1 bike lane. This type of bike lane is separated and protected from traffic either through separation or the use of bollards or other obstacles between the cyclist and cars. This trail allows the user to travel without fear of vehicle collision from Annadel State Park through the site to eventually connect to downtown Santa Rosa and the Prince Memorial Greenway. Leaving the greenway and following a proposed trail along the Santa Rosa Creek, a rider will face few delays at road intersections. For the main intersections at Summerfield and Yulupa, a proposed road diet with bulb-outs and center median reduce the lane distance a pedestrian or cyclist must cross.

Greenway Housing

In an effort to bring eyes on the greenway for safety and accessibility, adjacent properties will be encouraged to lower their fences to view the greenway as an extension of their own backyard. The broad expanse of the greenway offers a few locations for the addition of low-income housing.

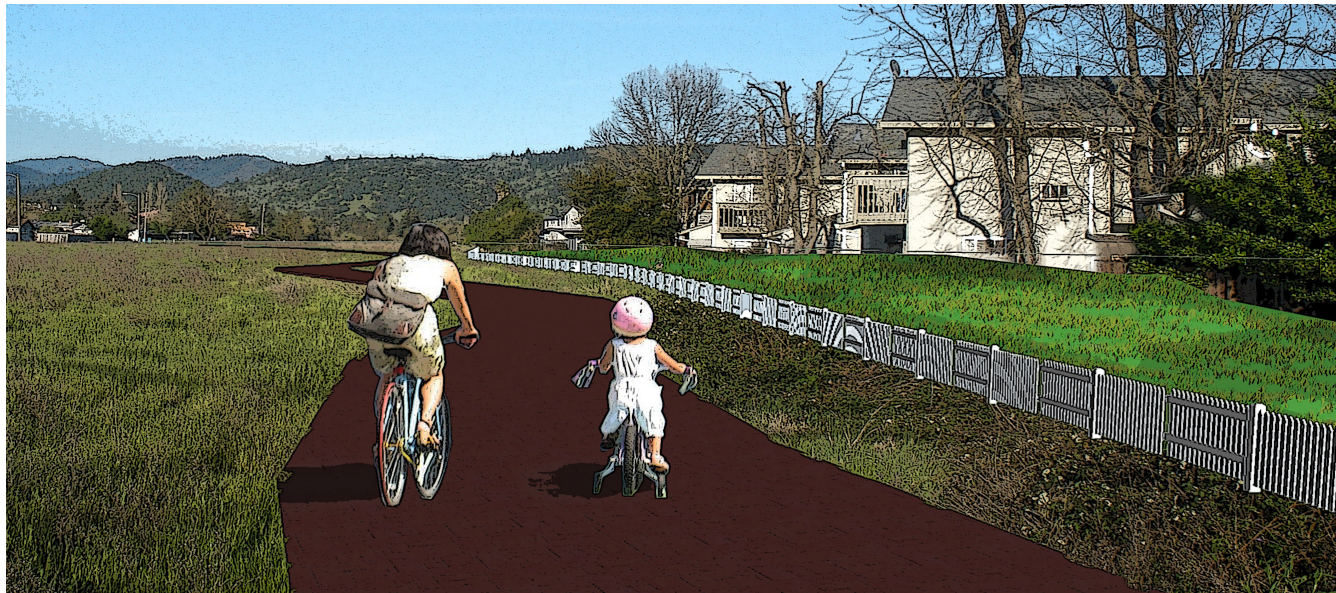


fig. 2.14



Park and Paths

The majority of pedestrian walking will be combined with the bike trail down the main corridor of the greenway. Splits and alternate routes will allow the user to divert from the main path to specific program elements or to reenter the adjacent neighborhood. Benches will be decorated through artistic expressions by the locals schools will stand as representations of each school in the nearby proximity. These can be periodically changed to reflect class changes and trends. Also, a small public park with playground equipment and rolling grass mounds will give a much needed play area and place to sit and enjoy the sights will serve both the elderly and children in the neighborhood as well as bring a destination quality and activation to the site.



fig. 2.15





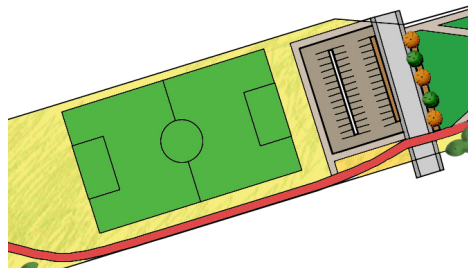
fig. 2.16

Orchard Revitalization

Before the Bennett Valley neighborhood was created, large fields were used for crops and orchards. Fruit trees and a Black Walnut hybrid dominated the area even as development sprang up around the greenway. Today, a remnant group of walnut trees remain as memory of the past. The proposed design would seek to restore and add to these trees a small display of orchard trees to continue as a historical tribute to the farmers of Santa Rosa's past

Community Gardens

The community garden created on the greenway's site in 2005 was a cooperative act from the Yulupa co-housing residents. Urban agriculture is on the rise around cities as groups of people seek organic produce from their own work and the ability to then trade and barter with other such urban farmers. Smaller property lots and dense housing make growing one's own crops impossible without land. The greenway offers the opportunity for lot space to be rented and cultivated for crops or plants of ornamental value.



Sports Field

A standard soccer field fit for American Youth Soccer Organization games will be placed at the western end of the greenway for neighborhood competitions. Parking will be added to prevent an excess of on-street parking.



Riparian Restoration

Three creeks currently cross the greenway site. The streams are for the most part buried from years past attempts of flood control. The design shows the possibility of daylighting one of the creeks and scooping away some of the terrain around the stream to create an overflow wetland area as was normal to the area before plans to build highway 12 over the area. Replanting native grasses and riparian trees alongside the stream will give home to small animals and birds in an attempt to restore a little bit of nature back to the area. To protect the area while engaging the visitor, a boardwalk will break away from the main bike trail to meander through the wetland site. This venue can be used by the nearby schools for educational purposes in study of wildlife and differing ecologies.

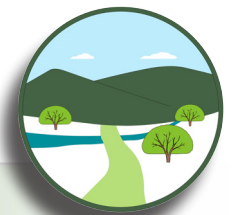


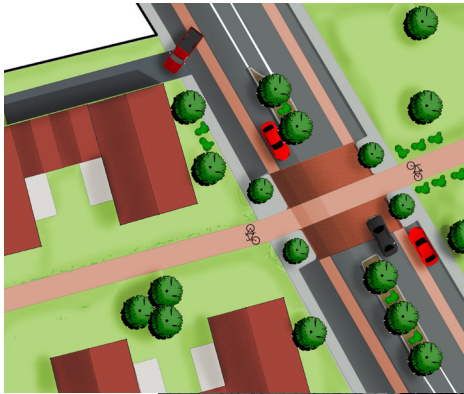
fig. 2.17



The Santa Rosa Greenway

fig. 2.18





Road Diet

By adding a center dividing turn lane, bulb-outs and creating designated class 2 bike lanes, the overly wide roads can become safer to cross and mark entrances to the greenway itself. Color and change in road surface will alert drivers they are crossing pedestrian and bicycle zones.

fig. 2.19a



fig. 2.19b



Historical Timeline

As established, Santa Rosa has a very rich history in Sonoma County with its dependence on the railroad and then expansion into the wine country. Celebrities and historical figures have called Santa Rosa home including as cartoonist Charles Schulz, explorer Robert Ripley, horticulturalist Luther Burbank, pro-cyclist Levi Leipheimer, and celebrity TV chef Guy Fierri. Many movies have used the beautiful scenery and downtown sites of Santa Rosa, most notably Alfred Hitchcock. A proposed timeline celebrating some of Santa Rosa's most memorable moments will be marked on a walkway surrounding an event plaza place where groups can gather for local sales, markets or parties. Wall murals will accentuate the area from local artists in union with Santa Rosa's movement to bring art throughout the city.



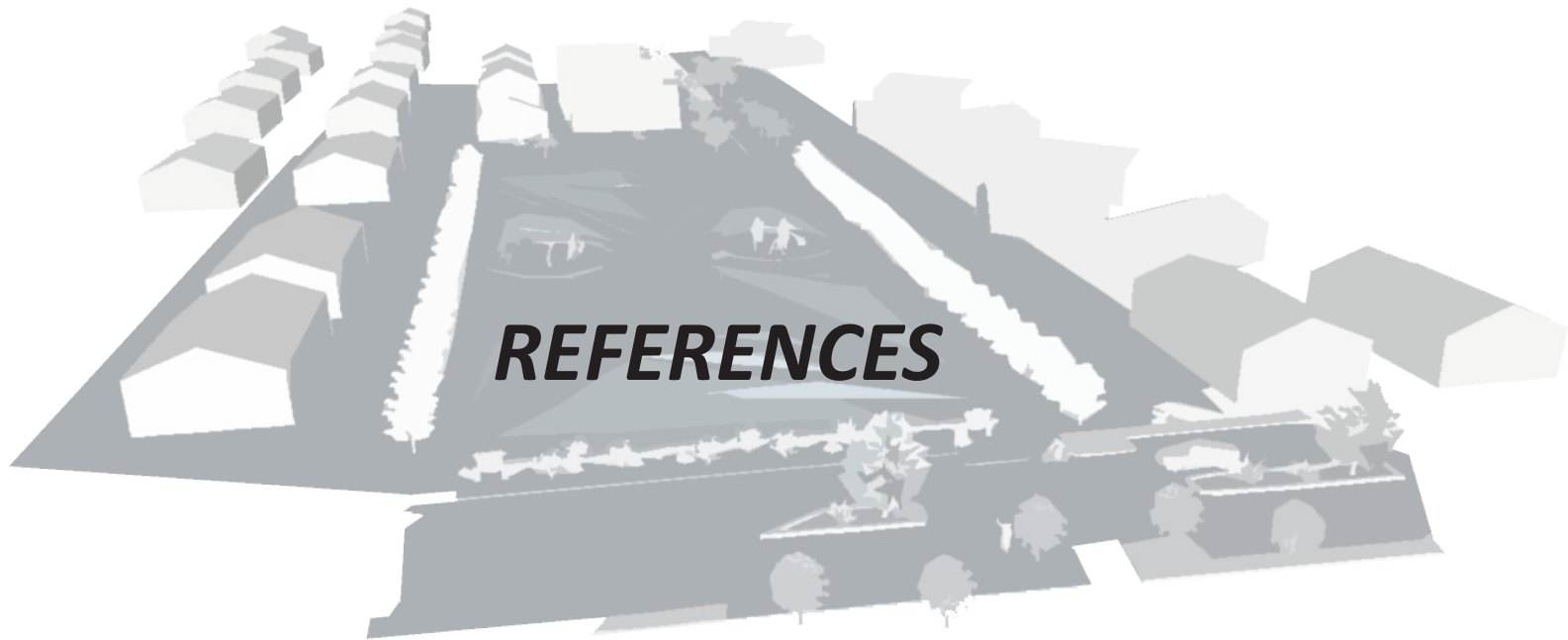
fig. 2.20



CONCLUSION

Unlike the detrimental framework of some cities hurt so badly by urban sprawl with no opportunity for cohesive trails, Santa Rosa has the fortune of having such a large piece of vacant land in its very core preserved for all these years. In flipping a coin on the history that might have occurred if Highway 12 had indeed been built over Spring Lake or not, two negative outcomes could have taken place. A built project would have changed the nature and experience of Spring Lake Park as well as the Bennett Valley neighborhood that the highway would have bisected. An undeveloped project would most likely have filled in the area with additional housing and more cul-de-sacs of disconnect. The stall and waiting game played these last fifty years has given the community the gift of hindsight in understanding the value of leaving open spaces and trails for travel such as what a potential greenway offers now. The opportunity to travel a designated path on bike or foot completely through a city and even further to other cities is so rare today, yet Santa Rosa has this chance. Santa Rosa has the chance to create neighborhoods with open spaces for kids to play. Creeks can be restored for schools to study and wildlife to flourish. Little gestures and minor designs go a long way in reconnecting a community. This greenway site offers so much more and the city would be foolish to miss this second chance.





LIST OF ILLUSTRATIONS

Figure

- 1.1 County Map: Mike Hargreaves GIS, 2011.
- 1.2 Historic Santa Rosa downtown. Photo: Simone Wilson, 2004.
- 1.3 Santa Rosa train station. Photo: Gaye LeBaron, 1993.
- 1.4 Earthquake damage of 1906. Photo: Gaye LeBaron, 1993.
- 1.5 Highway 101 construction. Photo: Simone Wilson, 2004.
- 1.6 A town split in two. Photo: Gaye LeBaron, 1993.
- 1.7 Famed horticulturalist Luther Burbank. Photo: Wikimedia Commons, May 2011.
- 1.8 Film director Alfred Hitchcock. Photo: Zuma World, May 2011.
- 1.9 Charlie Brown creator Charles Shultz. Photo: Library of Congress, May 2011.
- 1.10 Citywide Charlie Brown statues. Photo. City of Santa Rosa, April 2011.
- 1.11 Farmers Lane. Photo: Andrew Stricklin, 2011.
- 1.12 Foundation for overpass. Photo: Andrew Stricklin, 2011.
- 1.13 Santa Rosa Land Use Diagram. Map: Mike Hargreaves, edited Andrew Stricklin, 2011.
- 1.14 Spring Lake. Photo: Andrew Stricklin, 2011.
- 1.15 Greenway site. Photo: Google Maps, March 2011.
- 1.16 Scale comparison diagram. Design: Andrew Stricklin, 2011.
- 1.17 (a,b) Memorial bench for stopping the bridge. Photo: Andrew Stricklin, 2011.
- 1.18 (a,b) Southeast Greenway coalition site walks. Photo: Andrew Stricklin, 2011.
- 1.19 Greenway habit and vegetation. Image: Daniel Smith, 1993.
- 1.20 Greenway edge habitats. Image: Daniel Smith, 1993.
- 1.21 Worn trail from overuse. Image: Daniel Smith, 1993.
- 1.22 (a,b) Defined trails and signage. Image: Daniel Smith, 1993.
- 1.23 Landscape architect Fredrick Law Olmsted. Photo: Architect of the Capitol, May 2011.
- 1.24 Emerald Necklace in Boston MA. Photo: Emerald Necklace Conservancy, May 2011.



- 1.25 Morningside Park entrance. Photo: Friends of Morningside, May 2011.
- 1.26 Morningside Park great lawn and rock formations. Photo: Friends of Morningside, May 2011.
- 1.27 (a-g) Prince Memorial Greenway. Photos: Andrew Stricklin, 2011.
- 2.1 Site context map. Design: Andrew Stricklin, 2011.
- 2.2 Site observation. Photos: Andrew Stricklin, 2011.
- 2.3 (a-c) Site constraints. Photos: Andrew Stricklin, 2011.
- 2.4 Access map. Design: Andrew Stricklin, 2011.
- 2.5 Street sections. Design: Andrew Stricklin, 2011.
- 2.6 (a,b) Community garden. Photos: Andrew Stricklin, 2011.
- 2.7 Demographic map for low income housing. Map: Mike Hargreaves, 2011.
- 2.8 Missing bicycle route connection. Map: Mike Hargreaves, edited by Andrew Stricklin, 2011.
- 2.9 (a,b) Riparian remnant on site. Photos: Andrew Stricklin, 2011.
- 2.10 School children studying wildlife in Santa Rosa. Photo. The Press Democrat, 2011.
- 2.11 Proximity and destination. Map: Mike Hargreaves, edited by Andrew Stricklin, 2011.
- 2.12 Site entrance perspective. Design: Andrew Stricklin, 2011.
- 2.13 Concept Plan. Design: Andrew Stricklin, 2011.
- 2.14 Bike path perspective. Design: Andrew Stricklin, 2011.
- 2.15 Park playground perspective. Design: Andrew Stricklin, 2011.
- 2.16 Remaining orchard. Photo: Andrew Stricklin, 2011.
- 2.17 Great Blue Heron. Photo: The Internet Bird Collection, 2011.
- 2.18 Riparian boardwalk perspective. Design: Andrew Stricklin, 2011.
- 2.19 (a,b) Road diet plan and perspective. Design: Andrew Stricklin, 2011.
- 2.20 Historical timeline park perspective. Design: Andrew Stricklin, 2011.



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Thank You

