



---

**CORPORATE OFFICE**  
2392 MORSE AVE  
IRVINE, CA 92614

MAIN 949 777 4000  
FAX 949 777 4050

[WWW.SUNCAL.COM](http://WWW.SUNCAL.COM)

November 20, 2014

Local Reuse Authority  
City of Concord  
1950 Parkside Drive  
Concord, CA 94519

**Master Developer Proposal**  
**Implementation of the Concord Reuse Project Area Plan**

Mr. Michael Wright:

Recognizing that the redevelopment of the former Concord Naval Weapons Station (CNWS) site represents one of California's largest mixed-use, transit-oriented development opportunities, we see this property as a major revitalization catalyst for the City of Concord (City), presenting a unique opportunity to create a community that will be progressive, yet achievable.

As one of the largest privately owned master-planned community developers in the nation, SunCal works on and successfully develops projects with a wide range of challenges. We have a long history of successfully generating innovative solutions for large sites that are actionable and able to secure financing.

We have structured a local team that combines extensive knowledge and expertise with national and international experience in the delivery of complex, multi-faceted, long-term, mixed-use environments that are based on transit-oriented development principles. Our goal in assembling this team is to exceed the City's expectations and deliver a truly world-class project to the community.

The SunCal Team is exceptionally well-qualified to lead the specific planning and design, infrastructure construction, and other site improvements, as well as partnering with selected specialty developers who will develop the housing, retail, office, commercial, and sports uses planned for the property. The vision we create for the Concord property will be implementable and sustainable.



**CORPORATE OFFICE**  
2392 MORSE AVE  
IRVINE, CA 92614

MAIN 949 777 4000  
FAX 949 777 4050

WWW.SUNCAL.COM

SunCal is excited to submit our project vision in response to your request for master developer proposals dated July 25, 2014, along with the addendum announcing the extension of the proposal deadline to November 20, 2014 (received on September 11, 2014), to act as master developer to implement the Concord Reuse Project Area Plan. We will bring our collective experience to bear in achieving success with this property. We are extremely excited about the possibility of working with you, your team, the U.S. Navy, and your community in the implementation of the plan. We look forward to further elaborating upon our approach. Our primary point of contact during the proposal evaluation process will be:

Name: Joe Guerra  
Title: Northern California Acquisitions and Entitlements  
Mailing address: 97 South Second Street, Suite 300, San Jose, CA 95113  
Phone number: (408) 307-7806  
Email address: [jguerra@suncal.com](mailto:jguerra@suncal.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Frank Faye', is written over a light blue horizontal line.

Frank Faye  
Executive Vice President  
SunCal

# Master Developer

## Proposal for Implementation of the Concord Reuse Project Area Plan



November 20, 2014

### *Healthy Living, Healthy Community*

SunCal's vision for the CRP Plan Area is one that aligns to the goals and guiding principles of the Local Reuse Authority and the aspirations of the Concord community. The CRP Plan Area is an opportunity to establish a precedent-setting mixed-use, transit-oriented community with unparalleled regional open space resources. SunCal's vision for the CRP is to create a healthy community by integrating innovative approaches to community design, open space organization, and building and infrastructure technologies.





## TABLE OF CONTENTS

Number	Section Name	Page
<b>1</b>	<b>Executive Summary</b>	<b>1</b>
<b>2</b>	<b>Development Project Team</b>	<b>6</b>
2.1	The SunCal Team	6
2.2	SunCal Team Changes	8
2.3	SunCal Team Qualifications	8
<b>3</b>	<b>Project Vision</b>	<b>26</b>
3.1	Planning Considerations and Opportunity	27
3.1.1	Planning Considerations for a World Class Community	27
3.1.2	Opportunity to Plan and Design a Transit-Oriented Development	28
3.2	Market Conditions   Economically Viable and Sustainable Development	29
3.2.1	Project Phasing Considerations	31
3.2.2	Relationship Envisioned Between the Phase One Area and Subsequent Phases	32
3.2.3	Regulatory Agency Negotiations	32
3.2.4	Affordable Housing Accommodations	32
3.2.5	Labor Practices	33
3.2.6	Construction of Backbone Infrastructure	34
3.2.7	Key Financial Issues	35
3.2.8	Other Issues Identified in the Draft Agreement to Negotiate (Appendix D), including its Exhibit C thereto (Preliminary Stage Negotiation Matters)	35



Number	Section Name	Page
<b>4</b>	<b>Development Phase One Property Concept</b>	<b>36</b>
4.1	Phase One Property Concept Overview	36
4.2	Phase One Boundaries	37
4.3	Conceptual Plans	38
4.3.1	Site Opportunities and Constraints	38
4.3.2	Urban Design	40
4.3.3	Land Use Program and Distribution	43
4.3.4	Organization of the Phase One Plan	44
4.3.5	Community Centers and Villages	45
4.3.6	Circulation/Mobility Plan	47
4.3.7	Open Space and Park System	49
4.3.8	Civic Uses and Public Facilities	53
4.3.9	Infrastructure and Backbone Construction	53
4.4	Affordable Housing Approach	58
4.5	Approach to Entitlements and Environmental Documentation	60
4.5.1	Transparent Partnership with Stakeholders	60
4.5.2	Meeting the Requirements of the CRP Area Plan and Climate Action Plan	61
4.5.3	Specific Plan Development	61
4.5.4	Permitting Coordination and Compliance	62
4.6	Conservation Open Space Areas	62
4.7	Approach to Labor Issues	63
4.7.1	Prevailing Wages	63
4.7.2	Local Hire and Apprentice Programs	63
4.7.3	Veteran Apprentice Programs	64
4.7.4	Relationship with Trade Union Representatives and Experience with Project Labor Agreements	64



Number	Section Name	Page
4.8	Environmental Clean-up	65
4.8.1	Effects of Remediation Work on Sequencing and Implementation	65
4.8.2	Potential Contaminants in Phase One Area	65
4.8.3	General Assessment and Remediation Approach	66
4.9	Environmental Sustainability	66
4.10	Public Outreach and Communication	68
5	<b>Development Phase One Property Financing Strategy</b>	<b>70</b>
5.1	Conceptual Development Budget	70
5.2	Conceptual Operating Statement	71
5.3	Conceptual 15-Year Discounted Cash Flow Model and Investment Return Metrics	71
5.4	Land Acquisition Payment Offer	71
5.5	Sources and Uses of Funds	72
5.6	Equity Contributions	72
5.7	Debt Sources	72
5.8	Potential Public Financial Assistance	73
Number	<b>Appendix Name</b>	
A	Key Personnel Resumes	
B	Comments on the Draft Negotiation Agreement and Draft Disposition and Development Agreement	
C	Conceptual Drawings	
D	Affordable Housing Tax Details	
E	Environmental Permitting Details	
F	Environmental Clean-up Details	



Number	Exhibit Name
2-1	The SunCal Team
2-2	The SunCal Team Organizational Structure
4-1	The SunCal Team’s Development Phase One Property Concept
4-2	Phase One Project Boundaries
4-3	Proposed Land Use and Program
4-4	North Station District Aerial Perspective
4-5	Willow Pass Village Core Concept Plan
4-6	Circulation/Mobility Plan
4-7	Street Sections
5-1	Phase One Property Conceptual Development Budget
5-2	Cash Flow Model Assumptions
5-3	Sources and Uses of Funds
5-4	Cash Flow Summary

Number	Figure Name
Appendix A	
1	The SunCal Team Organizational Structure
Appendix C	
1	SunCal Team’s Development Phase One Property Concept
2	Phase One Boundaries
3	Site Opportunities + Constraints
4	Sub-Phasing Plan
5	Land Use Distribution + Summary Development Program
6	High Density Multi-family/Attached (25-50 du/ac)
7	Medium Density Multi-family/Attached (18-24 du/ac)
8	Low Density Clustered/Small Lot SFD (8-12 du/ac)
9	Mixed Use Areas



Number

Figure Name (cont.)

Appendix C (cont.)

- 10 Development Framework
- 11 Development Master Plan
- 12 North Station District
- 13 North Station District - Aerial Perspective + Imagery
- 14 North Station District - Building Heights
- 15 Typical Village Residential
- 16 Willow Pass Village Core
- 17 Village Shopping Center - Concept Plan
- 18 Village Shopping Center Concept - Building Heights
- 19 Circulation/Mobility Plan
- 20 Street Sections
- 21 Street Sections
- 22 Overall Open Space Framework
- 23 Parks + Open Space Components
- 24 1. Residential Paseo
- 25 2. Paseo Crossing Boulevard
- 26 3. Retail Paseo
- 27 4. Active Corner
- 28 5. Paseo Through Parking
- 29 6. Community Park
- 30 7. Corner Retail Plaza
- 31 8. Widened Sidewalks
- 32 9. East-West Connectors
- 33 10. Buffer
- 34 11. Civic Green
- 35 12. Greenway



Number

Figure Name (cont.)

Appendix C (cont.)

- 36 13. Los Medanos Boulevard
- 37 14. Civic Square
- 38 Civic Uses and Public Facilities
- 39 Grading
- 40 Drainage Plan
- 41 Water Plan
- 42 Recycled Water Plan
- 43 Sewer Plan
- 44 Electrical Plan
- 45 Sustainable Design

Appendix D

- 1 Tax Credit and Density Analysis
- 2 Area Plan Diagram
- 3 Preferred Alternative Development Program
- 4 Nine Percent Deals Score Best When They are Within ¼ Mile from Major Transit
- 5 Cap & Trade Funding Requirements
- 6 Concord Naval Weapons Station
- 7 TCAC 9% Site Amenities
- 8 North-Most Portion of the Site  
Scores for 9% Tax Credits with Internet or with Proximity to BART
- 9 Example: 9% Site within TOD Core



Section

1

Executive Summary



## 1 | EXECUTIVE SUMMARY

SunCal's vision for the CRP Plan Area is one that aligns to the goals and guiding principles of the Local Reuse Authority and the aspirations of the Concord community. The CRP Plan Area is an opportunity to establish a precedent-setting mixed-use, transit-oriented community with unparalleled regional open space resources. The overriding theme of our vision is *Creating and Building a Healthy Community*. SunCal's vision for the CRP is to create a *healthy community* by integrating innovative approaches to community design, open space organization, and building and infrastructure technologies. We will use a *whole systems* approach to design a variety of healthy community objectives that encourage physical well-being of residents, as well as healthy environments, economic opportunities, and sustainable lifestyles. With a whole systems approach, an open-space greenway of trees and shrubs is transformed into a living component of the community that recycles storm water, provides wildlife habitat and native plant communities, connects people to their homes, jobs, and shopping through multi-use trails, and provides opportunities for community gardens and local food production. Our healthy community would encourage more walking and biking, less car dependence, a robust natural environment, a work and life balance, a jobs and housing balance, resident interest in each other's welfare, opportunities for lifelong education, access to physical exercise and the outdoors, and much more. We believe that healthy communities are composed of mixed-land uses with unique street designs and diverse housing opportunities with the flexibility to change as demographics change, including mixed-income, mixed-density, multi-generational, affordable, and small-family housing, as well as alternative and senior households, such as assisted living facilities. Additionally, the Phase One area will have neighborhoods with public parks/green spaces and public plazas/community facilities served by world-class public transit. Our vision creates a community that reflects *the way we live and our lifestyle choices* for the long term.

While many aspects of our proposal are best practices throughout the world, there are some unique opportunities in Concord to expand on the notion of a healthy community. For example, typically when a large master-planned community is built, the land that will eventually be built out with residential, commercial, and institutional uses sits fallow awaiting development, sometimes for a decade or more. We are proposing a phasing plan that will take advantage of ample land resources, solar access, arable soils, potential water harvesting, and recycled water availability to develop interim agricultural uses during project development. This will provide a farm-to-table experience unmatched in the region. Small local farming efforts will be rotated on future development lands within the Phase One area to allow local produce to be easily accessible to the Concord community. This can be sustainable for a generation if applied



to the future CRP lands outside of the Phase One area as Phase One build-out comes to a conclusion. Additionally, there is a wonderful opportunity in the required 275-foot development setback from existing neighborhoods to develop community gardens and orchards, which will go on even after the CRP is built out, to further enhance the farm-to-table experience. This could reach up to over 20 acres of permanent agricultural uses in the CRP Plan Area. An agricultural element to our Healthy Living, Healthy Community concept ties directly to the history of Concord where there has been the production of grapes, dairy products, walnuts, pears, apricots, olives, almonds, and cherries, as well as commercial vegetables and beef cattle. In developing the CRP Plan Area, we will strive to re-cultivate the agricultural richness of the community.

### Development Project Team

SunCal will be the master developer and manage the development efforts of the team from their office in the San Francisco Bay Area. We would open an office in Concord if awarded this opportunity. We pride ourselves on seeking out large, complex, multi-layered properties on the leading edge of the development curve – ones that break new ground. From managing complex environmental issues and ever changing political climates to building complicated infrastructure, our success lies in the ability to transform challenging projects into viable communities. We have repeatedly succeeded in entitling and executing master-planned projects throughout the country, particularly in some of the most difficult areas to obtain entitlements, including California.

We have developed a team of firms that we have worked with on multiple successful projects, including the Dublin Crossing Specific Plan Area and Delta Coves in Contra Costa County. The majority of our team hails from Concord and Contra Costa County. SunCal takes local preference policies seriously and believes strongly that a project will be more successful if the majority of our team members are local to the site.

### Cornerstones

As one of the largest privately owned master-plan developers in the nation, SunCal has worked on and developed projects nationwide ranging in difficulties and rewards. We develop our projects with four consistent *Development Cornerstones*. These cornerstones guide us toward ethical practices in successful land development. Our cornerstones are as follows: (1) comprehensive problem solving, (2) site to community revitalization, (3) historical and cultural preservation, and (4) sustainable design.

Our goal is to use land to create communities that will be advantageous to the region and embrace obstacles as a means of creating a unique masterpiece. The project should generate economic vitality to promote the health of the area, while holding sacred the



historical tradition of the community and using it as a building block for designing a meaningful presence. Development plans should be made for the future using the latest sustainable building techniques to provide for the multiple generations to come. On top of our development standards, we aim to fulfill the following project cornerstones: distinctive communities, quality of life, environmental sensitivity, and recreational opportunities. Our sustainable principles support the quality of life of our residents. We strive to design innovative pedestrian-friendly communities and ensure that residents of our communities are surrounded by endless recreational opportunities just beyond their front door.

### World-Class Community that Involves the Community

To make this development a success and to ensure continuity and vitality, the planning process will need to take into account all of the CRP Plan Area phases. SunCal knows that planning a major development takes work from many different organizations and agencies. With transparency between the parties, great things can be achieved. We have a history of working well with city staff because our best interests are serving the interests of the city and the individuals invested in the outcome. Our Dublin Crossing project, similar in scale to the Phase One area of the CRP, is a land exchange with the U.S. Army, giving us an advantage in understanding how to work with local and federal military personnel. Much like the Concord experience, our Dublin project had substantial community input for land planning prior to our being selected. Our respect of the community process led to City Council hearings to consider our Dublin Crossing project where the plans received unanimous approval. On an ongoing basis, the SunCal Team will keep the Local Reuse Authority, council members, City staff and the public fully informed of the SunCal Team's progress. Our process ensures we reach general consensus with stakeholders before the required submittals, disclosures, and hearings. Our partnership with the City, agencies and the public will be established early in the entitlement process to facilitate proactive identification, discussion and resolution of project issues and concerns. SunCal will keep project stakeholders fully informed of the entitlement process via a website, blogs, social media and community meetings.

### The Phase One Plan

The CRP provides one of the most important and forward-thinking development opportunities in the San Francisco Bay Area in decades. The total Phase One area is proposed at 467 acres; comprising 430 acres in the main project area and 37 acres at the Village Shopping Center. The Phase One community plan is organized to create a series of unique community centers linked and integrated by complete streets, diverse neighborhoods, and open space and parklands. The community plan is organized



around community centers and villages. Each community center will have a different role and identity in the community to create diversity, variety, and most importantly, destinations, within the overall community.

- **North Station District** | anchored by the BART station and a civic plaza. This area will have the highest intensity mixed-use development and the most urban characteristics of Phase One, with shopping, employment, and residential uses located within a five to 10 minute walk to the BART station. At the heart, North Station will feature a major civic plaza, pedestrian friendly shopping street, and a market pavilion.
- **Canal District** | at the geographic center of the Phase One area. It has a civic center and is a 10-minute walk and likely three transit stops from North Station and Willow Pass Village. It is a logical school and playfield site providing easy access for children and families on pedestrian/bike friendly and neighborhood streets.
- **Willow Pass Village** | a neighborhood village center another 10-minute walk and/or three transit stops along Los Medanos Boulevard that serves the eastern neighborhoods of the Phase One area. This center, adjacent to Willow Pass Road, provides a local hub for transit connections, convenience retail and restaurants, civic uses, and a community park.
- **Village Shopping Center (at Route 4)** | a regional shopping destination that lies adjacent to Route 4 and Willow Pass Road. The retail area will be an active shopping area with easy access and generous parking. It is organized around a village main street, which will accommodate smaller shops and restaurants and provide short-term parking.

### Economically Viable Development

Too often, development opportunities are not implemented because economic viability is not a key component of early design. Our extensive knowledge of master-planned community development of this scope will guarantee for the Local Reuse Authority that economic viability will not be an element of risk to future implementation. We have developed comprehensive plans to provide the security and sustainability that community members and the City need. As the developer, we ensure that there is a plan in place for funds to keep the quality and care of the project in top-notch condition ensuring a successful community. Through our experience with similar redevelopment projects, we recognize the challenging issues that need to be addressed by this effort. We can assist the Local Reuse Authority in the ongoing efforts with the U.S. Navy and the Department of Defense to ensure that project economic viability is not undermined



by the transaction structure. We spent years with the U.S. Army and the Department of Defense in developing a transaction structure that met the U.S. Army's needs and guaranteed that the Dublin Crossing project will be implemented.

## Conclusion

Through the combination of SunCal's unmatched experience developing master-planned communities, our truly local team of experts, and a partnership with the City and stakeholders, we will implement the CRP in a way that meets the aspirations of the Concord community by creating and building a healthy community that is economically viable and contains vibrant world-class neighborhoods that we will be proud to call home.

## Proposal Organization

For ease of review, we have organized our proposal into five sections, including the executive summary, development project team, project vision, development Phase One property concept, and development Phase One financing strategy, with supporting appendices. Additionally, we have provided our financial capability information in a separate sealed envelope.



Section

2

Development Project Team



## 2 | DEVELOPMENT PROJECT TEAM

### 2.1 | The SunCal Team

SunCal will be the Master Developer for this project. We have developed a team of firms that we have worked with on multiple successful projects, including the Dublin Crossing Specific Plan Area, the largest-ever Reserve Property Exchange Agreement, on land that was formerly part of the Parks Reserve Forces Training Area (also known as Camp Parks) in Dublin, California, and Delta Coves a 560-unit waterfront community in Contra Costa County. We value strength in relationships and are confident that the existing relationships amongst our group will contribute toward flawless communication and project execution. Additionally, our team has redundancy in many technical fields of expertise to ensure that we have the depth to respond to this very large endeavor. Exhibit 2-1 depicts the relationship among the SunCal Team firms.

The majority of our team hails from the city of Concord and Contra Costa County. Every meeting held to prepare for this submission was held in Concord to further reinforce our commitment to driving the local economy where we develop. SunCal takes local preference policies seriously and believes strongly that a project will be more successful if the majority of our team members are local to the site. We are proud of the depth of our local team members.

Exhibit 2-1. The SunCal Team



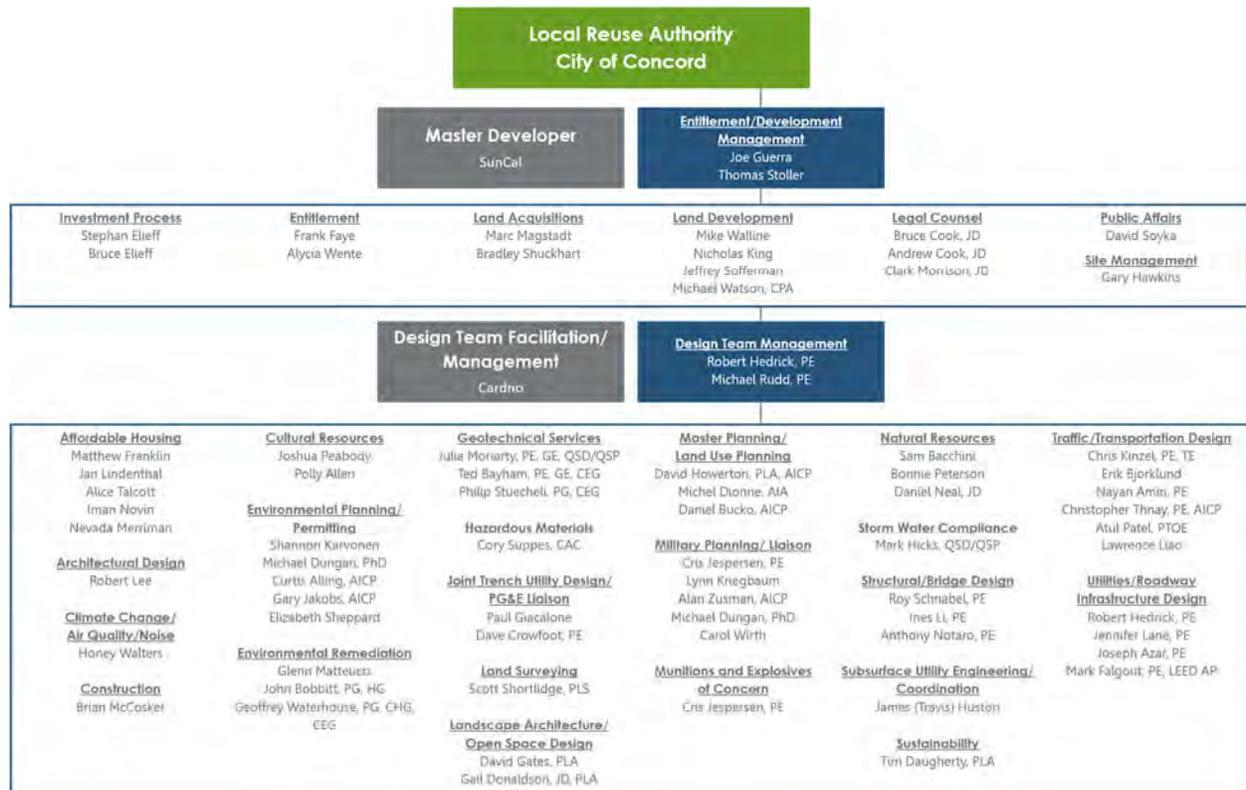
## Healthy Living, Healthy Community



The SunCal Team will provide the full set of services required to successfully develop the Concord site and will be managed by Joe Guerra and Tom Stoller. Joe is a Bay Area native and has almost three decades of experience in the development and municipal government industries. Tom has 20 years of experience facilitating and managing due diligence, forward planning, entitlement, design, and construction. Additionally, SunCal has appointed Cardno (Concord) as the lead consultant. They will provide design team facilitation/management, as well as experts in multiple specialties.

The SunCal Team will provide integrated development services, including developmental approvals and negotiations, land surveying, land use planning, landscape architecture, master planning and engineering, site assessment and development, low-impact design and urban redevelopment, and construction administration. Our team has significant relevant project experience with planning, site design, and engineering on a number of similar projects. We have faith in the skills and expertise of each member and believe we have truly put together an outstanding team to complete this project to the highest quality. Exhibit 2-2 provides the SunCal Team key personnel organizational structure.

Exhibit 2-2. The SunCal Team Organizational Structure





## 2.2 | SunCal Team Changes

Since the submission of the SunCal Statement of Qualifications, several new team members have been added, including Biggs Cardosa Associates, ENGEO, Hart Howerton, and MidPen Housing Corporation. BKF Engineers and Innovative and Creative Environmental Solutions have been replaced with resources within Cardno to better facilitate coordination and focus resources on Concord-based companies. DeSilva Gates Construction and Berloger, Stevens & Associates have been replaced with Independent Construction Company and ENGEO to focus more resources on Concord-based companies.

Further, SunCal anticipates that given the depth and breadth of affordable housing opportunities, there will likely be the need to involve other affordable housing builders/developers to meet the need for affordable housing throughout the entirety of the project. At this time, we have selected a primary partner, MidPen Housing Corporation, for affordable housing.

## 2.3 | SunCal Team Qualifications

The SunCal Team includes leading professionals who plan, design, manage, and deliver sustainable projects and communities. Our Team has a long-standing and proven track record in California on very similar large-scale projects, many of which have the added component and challenges related to complex land transfers and associated environmental responsibilities. Our team has designed thousands of acres of development, master-planned communities, and associated utilities and infrastructure, including the conversion of military properties.

Qualifications summaries and relevant project examples for each firm on the team are provided below. Resumes for the SunCal Team's key personnel are provided in Appendix A and are arranged into master developer and design team sections.



SunCal – Master Developer

SunCal will be the master developer and manage the development efforts of the team from their offices in the San Francisco Bay Area. We would open an office in Concord if awarded this opportunity. We pride ourselves on seeking out large, complex, multi-layered properties on the leading edge of the development curve – ones that break new ground. From managing complex environmental issues and ever-changing political climates to building complicated infrastructure, our success lies in the ability to transform challenging projects into viable communities. We have repeatedly succeeded in entitling and executing master-planned projects throughout the country, particularly in some of the most difficult areas to obtain entitlements, including California. We bring visionary physical and financial solutions to each of our projects, which are market-driven and maximize returns, while managing risk. Today, SunCal is one of the largest real estate development companies in the U.S. that specializes in large-scale master-planned and mixed-use communities. Whether it is a golf-oriented enclave for 200, or a complete mixed-use destination for 10,000 every SunCal community ultimately leads home.

SunCal is recognized for its outstanding ability to turn even the most challenging projects into highly desirable developments. We bring builders into the planning and development process early on, ensuring the market viability of our projects. We work closely with federal, state, regional and local governments, local jurisdictions, and project stakeholders to make each development a success. We are motivated by long-term benefits rather than short-term reported earnings. We select the most appropriate development solutions rather than the most expedient. Headquartered in Irvine, California our company is comprised of a seasoned team of land development experts who possess billions of dollars of transaction and development experience and have executed many successful projects around the world. Our senior executives have acquired, entitled, and developed in excess of 100,000 residential and commercial lots throughout the U.S. Our northern California team brings a depth of knowledge of master-planned development and experience working with the military on developing land that was formerly part of a military installation.

With our active Dublin Crossing development just one quarter-mile from a BART station in Alameda County, we have first-hand knowledge of the development opportunity presented by having a large piece of land adjacent to a BART station. We have been tracking the CRP and the pre-planning for years to determine desired site outcomes completed by the community, stakeholders, City, and Local Reuse Authority is considerable and similar to efforts undertaken by the U.S. Army and the City of Dublin. This roadmap reduces uncertainty and inherent development risks. Additionally,



significant Environmental Impact Report (EIR) work was completed and sets clear parameters for future development and further reduces development risks that are often exacerbated on former military installations.

SunCal has emerged from the Great Recession stronger than ever. In the last two years our California acquisitions have included a 189-acre property in Dublin, California; a 560-unit waterfront property in Contra Costa County, California; a 30-acre property in Rohnert Park, California; and a 985-acre master-planned community in Beaumont, California. We have invested in over \$1.4 billion of distressed loans from the Federal Deposit Insurance Corporation (FDIC). Our financial partnerships are broader than ever.

Joe Guerra and Tom Stoller will manage the day to day local operations and coordination for the SunCal Team, additionally work will be supported internally by Bruce Elieff, Stephan Elieff, Marc Magstadt, Frank Faye, Mike Walline, Nicholas King, David Soyka, Bradley Shuckhart, Michael Watson, Bruce Cook, Andrew Cook, Jeffrey Sofferman, Gary Hawkins, and Alycia Wentte. Representative projects for SunCal include:



1,800 units | 189 acres

Master developer for the Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California

Achieved the largest-ever Reserve Property Exchange Agreement, Transit-oriented, master-planned community, residences, hotels, retail, commercial, restaurants, offices, parks, and trails



1,150 units | 293 acres

Master developer for the Amerige Heights Development, Fullerton, California

Mixed-use New Urbanist community, won the American Planning Association, Orange County section 2001 Planning Project Award and the American Society of Civil Engineers, Orange County branch 2004 Project of the Year Award



3,800 units | 1,920 acres

Master developer for the Potomac Shores Development, Potomac Shores, Virginia

Mixed-use master-planned resort destination, Jack Nicklaus Signature Golf Course and clubhouse, 3.7 million square feet of commercial/retail uses, 40-acre corporate campus, town center, two schools, 12+ sports fields/courts, 850 acres of open space, 10 miles of trails



Cardno will lead the overall design team with the primary role in leading the engineering and infrastructure team. They will lead the engineering site design and technical documentation of residential, commercial, institutional, and recreational districts, infrastructure and utility (wet and dry) assessment, design, and documentation to service these districts, storm water compliance, sustainable site and low impact design, traffic and transportation, structural and bridge assessment and design, and geotechnical engineering. To support the design aspects of the project and to gain an accurate understanding of existing infrastructure, utilities, topography, boundary, and encumbrances their role will include the provision of land surveying services and subsurface utility engineering (SUE, ASCE 38-02). Emphasis will be on the engineering design of Development Phase One, while carefully considering the entire development.

In addition to engineering design, Cardno will facilitate and collaborate with the land and master planning team, landscape architecture and urban design team, implement environmental services, provide military planning, and coordinate with the affordable housing team. This structure ensures that the engineering design and infrastructure will be carefully considered in the implementation of the master plan. Services will be provided from their office in Concord, California with support from their global network of offices.

Founded in 1945, Cardno has a sizable engineering and environmental consulting presence in California and have had a local presence in the City of Concord since the early 1990s. Their experience includes master planning and engineering large-scale planned communities, integrating them into the fabric of the surrounding neighborhoods and the city, revealing untapped development potential, leading public outreach and community involvement, and advising local governments on development strategies to ensure sustainability. Cardno has a significant amount of institutional knowledge gained from working at the Concord Naval Weapons Station for the military, established relationships with local and regional agencies, and extensive bench strength and experience in master-planned communities and military property transfers. They have provided master planning, theming, site design, and engineering on a number of military facilities, including Beale Air Force Base, Nellis Air Force Base, Creech Air Force Base, and Luke Air Force Base. They have provided environmental planning and permitting, natural resource management, and environmental remediation services at several military facilities, many involving land transfers, including Concord Naval Weapons Station, Camp Parks Army Reserve Base, Military Ocean Terminal Concord, Mare Island Naval Shipyard, Fort Ord, Edwards Air Force Base, and Camp Bonneville.



Robert Hedrick, PE, will manage the SunCal Design Team and lead the Cardno work. He will be supported by Michael Rudd, PE, Jennifer Lane, PE, Mark Hicks, QSD/QSP, CPESC, James (Travis) Huston, Tim Daugherty, PLA, Shannon Karvonen, Michael Dungan, PhD, Elizabeth Sheppard, Sam Bacchini, Daniel Neal, JD, Joshua Peabody, Polly Allen, Glenn Matteucci, John Bobbitt, PG, HG, QSP, Geoffrey Waterhouse, PG, CHG, CEG, Cory Suppes, CAC, Alan Zusman, AICP, and Carol Wirth of Cardno, as well as by professionals from the team firms. Representative projects for Cardno include:



1,800 units | 189 acres

Lead development consultant providing planning and civil engineering to SunCal for Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California  
Transit-oriented, master-planned community, dual use facilities for recreational amenities and storm water, and existing channel restoration



2 bridges | 12+ regulatory agencies

Lead for civil and traffic engineering for the Crossings at Interstate 880, Fremont, California  
Master-planned business industrial park, 3,700 linear feet of off-site roadway improvements, coordination/approval from 12+ agencies, including Bay Conservation and Development Commission, California State Lands, Caltrans



1,500 units | 1,000 acres

Provided civil engineering, surveying services, and landscape architecture for the Blackstone Community, El Dorado County, California  
Master-planned community, terrain and natural resource features similar to the Concord site, social and recreational hub, natural grass line vegetated swales for storm water quality



1,711 units | 1,200 acres

Lead development consultant providing civil engineering, surveying, landscape architecture, for West Wing Mountain, Peoria, Arizona  
Master-planned community, steep hillside terrain, nature trails, schools, community center, recreational parks, and early project in Arizona to implement storm water quality practices

Hart Howerton will provide urban design, master planning, and land-use planning, including leading the overall community visioning and master planning efforts of the team, from their office in San Francisco, California. This will include direct coordination with the project team to develop the physical plan components and move forward entitlement efforts. They have four decades of experience working on a mix of retail, commercial, entertainment, and mixed-use assignments from strategy and market positioning to visioning, programming, and design and from new, ground-up developments to repositioning, re-tenanting, and redevelopment scenarios. Their land planners, architects, and landscape architects, including LEED Accredited Professionals, have the privilege of designing award-winning destinations that create value by becoming and remaining market leaders. The Hart Howerton work will be led by David Howerton, PLA, AICP, and supported by Michel Dionne, AIA, and Daniel Bucko, AICP. Representative projects for Hart Howerton include:



1,100 units | 80 acres

Provided architectural review process and led the open space landscape design for the Bay Meadows Infill Development, San Mateo, California

Transit-oriented development with 1,100 residential units, 750,000 square feet of office/retail, interconnected network of streets and parks



5,000 units | 1,900 acres

Provided master planning to SunCal/Athens Group for the Potomac Shores Development, Prince William County, Virginia

Master and land use planning, including 5,000 residential units and extensive trail network



400 units | 1,900 acres

Prepared a Specific Plan and Environmental Impact Report for Solano County for the Middle Green Valley Development, Solano County, California

Master and land use planning, including 75% preserved open space and agriculture and 400 new homes



William Hezmalhalch Architects, Inc. (WHA), established in 1981, will provide land use planning and architectural design from their San Ramon, California office. Their team of 104 professionals provides an integrated planning and architectural design process that has been successfully applied to in-depth community designs, involving mixed-use, commercial, multi-unit, single-family, and related buildings. Their services include historical research, visioning, environmentally-responsible master and site specific planning, entitlement processing, prototype building design, master color and materials guidelines, and sustainable consulting. WHA has received over 500 awards in various disciplines. They have 16 LEED Accredited Professionals and 11 Certified Green Building Professionals on staff. They are an active member of the American Planning Association, Urban Land Institute, U.S. Green Building Council, and several Chapters of the Building Industry Association. WHA work will be led by Robert Lee. Representative projects for WHA include:



1,724 units | 162.5 acres

Provided master architect and design guidelines to SunCal for the Dublin Crossing Master-Planned Community, Parks Reserve Forces Training Area, Dublin, California

Master planning and master architecture, 10.6 units/acre



740 units | 290 acres

Provided master planning and master architecture to Lafferty Communities for the Faria Preserve, San Ramon, California

Master planning, community vision and theme, and master architecture for single-family suburban residential with attached and detached homes, 2.6 units/acre



3,239 units | 1,208 acres

Provided master architect and design guidelines to Easton Development Company for the Glenborough at Easton Guidelines, Sacramento, California

Master-planned community, mixed-use, commercial, retail, school, and recreational space, 2.7 units/acre



Gates + Associates will be supporting the land planning efforts with the development of a comprehensive open space network that will be based on a framework of environmental sustainability, a connection to nature and natural systems, and the promotion of active, healthy, high quality, environmentally responsible, and socially engaged lifestyles from their Contra Costa County office. Established in 1977, they are a 30-person landscape architecture, urban design, and land planning firm. They have designed millions of square feet of both public and private outdoor spaces; including a number of military reuse projects that have transformed decommissioned bases into thriving mixed-use, multi-modal communities. Gates + Associates work will be led by David Gates, PLA, and supported by Gail Donaldson, JD, PLA. Representative projects for Gates + Associates include:



1,995 units | 189 acres

Provided landscape master plan to SunCal for the Dublin Crossing Master-Planned Community, Dublin, California

Multi-modal streetscapes and contemporary, upscale, and sustainable landscape and streetscape system, bicycle and pedestrian circulation, and monumentation/wayfinding



575 units | 25 acres

Provided landscape master plan for the Bay Meadows Infill Development, San Mateo, CA

Dramatic linear park and neighborhood parks, and connection with a network of pedestrian paseos; 2004 Gold Nugget Grand Award winner for Best Redevelopment, Rehab, or Infill Site Plan



1,470 units | 244 acres

Provided landscape master plan for the East Garrison Development, former Fort Ord Army Base, Monterey, California

Greenway wrap-around, linear parks/paseos, storm water management integrated as natural amenities, and water conservation design; Recognized as among "The Best in the West" by Pacific Coast Builders

Ruggeri-Jensen-Azar (RJA) will provide infrastructure design and land surveying from their Pleasanton, California office. They plan and design backbone infrastructure that supports a variety of housing types, recreational benefits, such as parks, trails, and community centers, institutional amenities, such as schools and libraries, commercial, industrial, and public facilities, and pedestrian/bicycle friendly streets for redevelopment projects and large-acreage, mixed-use land developments in the San Francisco Bay Area. These have involved a range of densities, transit-oriented development, and military base closures. Founded in 1995, their team of 80 professionals prepares feasibility studies, facilitates required entitlements, prepares plans, specifications and estimates (PS&E), processes permits, and participates in the overall planning, timing, and phasing of infrastructure. RJA work will be led by Joseph Azar, PE, and supported by Mark Falgout, PE, LEED AP, and Scott Shortlidge, PLS. Representative projects for RJA include:



1,800 units | 189 acres

Provided planning, civil engineering, and land surveying for the Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California Specific Plan and Master Plan, conceptual land use analysis, infrastructure opportunities, constraints, and costs for alternatives, phased design of utilities and roadway infrastructure



400 acres

Providing master planning and civil engineering design for Oakland Army Base Redevelopment, Oakland, California  
Backbone infrastructure, including civil engineering and land surveying for preliminary design of grading, roads, storm drain, and sewer, water, and recycled water facilities, 2.4 million square foot warehouse



380 units | 107 acres

Provided land planning, civil engineering, and design surveys for the Seaside Highlands Development, Former Fort Ord, Seaside, California  
Construction documents, community green belt, regional storm water basin, data and property research to establish areas, and construction staking



TJKM Transportation Consultants –  
Traffic/Transportation Design

TJKM Transportation Consultants (TJKM) will provide traffic/transportation design from their Pleasanton, California office. They have over 40 years of experience providing traffic engineering design, including PS&E, transportation planning, traffic operations, corridor studies, intelligent transportation systems (ITS), traffic safety, and multimodal studies to municipalities, congestion management agencies, metropolitan planning organizations, transportation agencies, consulting firms, attorneys, and private developers. They have been involved in more than 8,000 transportation projects throughout California. They have a team of 25 and their projects range in size from short-term engagements to developing meaningful traffic solutions for a wide range of transportation issues to long-term planning for new developments, communities, and transportation systems. TJKM work will be led by Chris Kinzel, PE, TE, and supported by Erik Bjorklund, Nayan Amin, PE, Christopher Thnay, PE, AICP, Atul Patel, PTOE, and Lawrence Liao. Representative projects for TJKM include:



15,000 units | 3,000 acres

Provide traffic engineering, planning, and design, for the East Dublin Specific Plan, 1985 to ongoing, Dublin, California

Circulation patterns, plan lines, traffic signals, studying impacts of developments prior to construction, and parking lot design for a BART station and circulation system study for another



11,000 units | 4,900 acres

Provided traffic studies for the River Islands Development, Lathrop, California

Travel demand modeling; traffic analysis for 18 on-site and 13 off-site intersections, 12 freeway on- and off-ramps, eight freeway mainline segments, two freeway weaving sections, and four two-lane highway segments



44,000 units | 4,800 acres

Provided transportation planning and traffic engineering services for the Mountain House Community, San Joaquin County, California

Street layout, intersection design, traffic impact analysis and traffic operations studies, master traffic signal plan and designs, phased implementation of transportation measures



Biggs Cardosa Associates, Inc. – Structural/Bridge Design

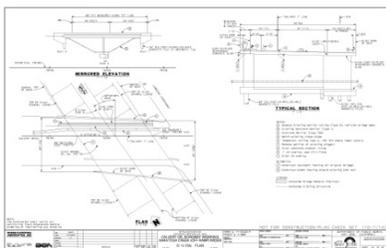
Biggs Cardosa Associates, Inc. will provide structural engineering and bridge design services from their San Jose, San Francisco, and Oakland, California offices. Established in 1986, they provide structural engineering and construction inspection services on a wide variety of projects, including bridges, sound walls, and various transportation and infrastructure projects. Transportation structures include bridges, sound walls, culverts, earth retaining structures, and tunnels for highway, heavy rail, light rail, and pedestrian use. Infrastructure facilities include hydraulic structures, slide repairs, creek trails, and park and recreation facilities. They specialize in the design, rehabilitation, modification, seismic retrofit, and replacement of these structures. Biggs Cardosa Associates work will be led by Roy Schnabel, PE, and supported by Ines Li, PE, and Anthony Notaro, PE. Representative projects for Biggs Cardosa Associates include:



2 bridges | 8 retaining walls

Provided structural engineering, inspection, and construction support for the Crossings at Interstate 880, Fremont, California

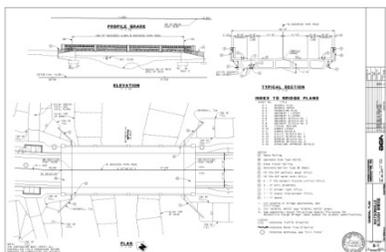
80-foot by 80-foot single span post tensioned concrete slab and 80-foot by 60-foot two-span reinforced concrete slab bridges crossing over waterways, a reinforced concrete box culvert



1 bridge | 4 walls

Provided structural engineering for the Apple Campus off-site improvements, Santa Clara, California

Bridge widening, seismic evaluation and retrofit design of existing bridge, three concrete cantilever walls on shallow foundations, a soil nail wall, various earth retaining structures, and a sound wall supported on piles



1 bridge

Provided structural engineering for Watsonville Slough Bridge, Watsonville, California

100-foot by 46-foot single-span, pre-stressed concrete box girder with special aesthetic components, including custom form liner, concrete pilasters, and metal picket railing, off-site improvement for Manabe-Ow Business Park



ENGEO will provide geotechnical services from their San Ramon, California office. Founded in 1971, they assist in every phase of projects from due diligence for land acquisition and planning through entitlement, permitting, engineering design, and construction. They participate in the design and construction of master-planned, mixed-use developments, including associated infrastructure. Their experience includes projects in military base reuse, residential and mixed-use communities, infrastructure, transportation, water storage, conveyance, and treatment, industrial facilities, geologic hazard mitigation, flood control facilities, civic structures, and urban development. They have been at the forefront of major military base reuse projects, including Mare Island, Treasure Island, Fort Ord, Hamilton Air Force Base, Hunters Point, and Alameda Point. ENGEO work will be led by Julia Moriarty, PE, GE, and supported by Ted Bayham, PE, GE, CEG, and Philip Stuecheli, PG, CEG. Representative projects include:



11,700 units | 6,000 acres

Provided geotechnical services for Dougherty Valley Master-Planned Community, 1985 to ongoing, Contra Costa County, California

Geotechnical and geologic investigations, landslide hazard mitigation, foundation design criteria, lime and cement treatment for foundation stabilization, construction inspection and testing



1,400 units | 1,000 acres

Provided geotechnical services for Mare Island Naval Shipyard Redevelopment, Vallejo, California

Profiled bedrock surface, bay mud, and man-made fill material, provided recommendations for levee stabilization, seismic retrofit of existing buildings, surcharge and wick drain programs, and infrastructure rehabilitation and additions



9,500 units | 4,700 acres

Provided geotechnical services for Great Park Neighborhoods TTOD (Heritage Fields), former El Toro Marine Corps Air Station, Irvine, California

Geotechnical/geological engineering, landslide and collapsible soil mitigation, construction observation during grading/site improvements, and geotechnical assessment reports



Giacalone Design Services, Inc. will provide joint trench utility designs and consulting, including dry utility coordination for gas, electric, telephone, cable, and fiber optics from their Pleasanton, California office. Founded in 1995, their team of 26 provides dry utility coordination, composite, electric, gas, and street lighting designs with photometric evaluation, construction cost estimates, and bid preparation services for residential, commercial, industrial, and mixed-use developments. These include gas designs, New Business Rule 15/16, Rule 20B, and Rule 20C electrical designs, relocation designs, and joint trench composites for projects, including Rule 20A City sponsored projects. They maintain great working relationships with PG&E, AT&T, Verizon, Charter Communications, and Comcast/CableCom. Giacalone Design Services work will be led by Paul Giacalone and supported by Dave Crowfoot, PE. Representative projects for Giacalone Design Services include:

- Provided existing utility plan sheets and preliminary joint trench, gas, and electric designs for the entire infrastructure improvement project for the Santana Row mixed-use development in San Jose, California. The master-planned area anticipates up to 300,000+ square feet of retail/office and commercial use and 513 apartment, live/work condominiums, and townhomes.
- Provided joint trench design and consulting services for the Southtown multi-phased master-planned community in Vacaville, California. Through coordination with utility providers, project engineers and consultants, field visits, and review of existing facility maps, provided approved for construction electric, gas, joint trench composite, and street lighting designs.
- Provided existing utility plan sheets and preliminary joint trench, gas, and electric designs for the entire infrastructure improvement project for the Mossdale master-planned community in Lathrop, California. This was a master-planned area that included nine commercial buildings and 11,225 units of single-family homes, apartments, live/work, and townhomes. They coordinated the electric and gas main line extension facilities with PG&E, CATV, and telephone companies.



MidPen Housing Corporation – Affordable Housing

MidPen Housing Corporation (MidPen) will provide affordable housing development services, including planning, securing entitlements, and developing low and very low income housing, from their Foster City, California office. Since their founding in 1970, they have completed over 6,600 affordable units at over 100 properties for low-income families, seniors, formerly homeless, veterans, or individuals with special needs throughout Northern California, including properties within Contra Costa County. They have a proven track record in securing entitlements, working with local communities, securing affordable housing financing, positioning projects for long-term financial sustainability, and developing attractive and sustainably designed homes. Their developments are award-winning and nationally recognized. MidPen work will be led by Matthew Franklin and supported by Jan Lindenthal, Alice Talcott, Iman Novin, and Nevada Merriman. Representative projects for MidPen include:



10 units | 1.6 acres

Provided affordable housing development services for Main Street Village, Fremont, California

Mixed-use family and supportive housing for Mental Health Services Act residents with 50% of the units set-aside for formerly homeless or at risk of homelessness families/individuals, 64 apartments, ground floor commercial space



157 units | 2.18 acres

Provided affordable housing development services for Station Center, Union City, California

Mixed-use, transit-oriented family housing, LEED Platinum Certification, near BART and bus lines, ground floor retail and commercial space, innovative plan wraps apartment buildings around common areas to create an open feel



66 units | 3.37 acres

Provided affordable housing development services for Manzanita Place, Former Fort Ord, East Garrison, California

Inclusionary family housing, phasing plan allowed affordable housing to move forward, while minimizing financial risk, two non-contiguous sites, 10 garden-style buildings



Ascent Environmental, Inc. – Environmental Planning/Permitting and Natural Resources

Ascent Environmental, Inc. will provide environmental planning, natural resources, air, climate change, and noise analysis services from their Sacramento, California office. Founded in 2010, they provide integrated planning services to ensure compliance with federal, state, and local environmental regulations, including wetland permitting, habitat avoidance and mitigation, and Endangered Species Act compliance, and strategic and effective approaches for securing environmental permit approvals. They have over 35 professionals who provide National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) compliance, implement mitigation monitoring and reporting plans, pre-construction special-status species surveys, sustainability planning, climate change/greenhouse gas analyses, outdoor recreation planning, and air quality and noise analyses. Ascent Environmental work will be led by Curtis Alling, AICP, and supported by Gary Jakobs, AICP, Honey Walters, and Bonnie Peterson. Representative projects for Ascent Environmental include:

- Provided environmental permitting and planning services to SunCal for the Dublin Crossing Mixed Use Community project, a pedestrian-friendly, mixed-use community that will connect the east and west sides of Dublin currently separated by the Parks Reserve Forces Training Area. Provided technical assistance for the Environmental Impact Report (EIR), coordinated the Burrowing Owl Mitigation Plan, conducted protocol level vernal pool branchiopod surveys, prepared the wetland delineation report, and coordinated protocol-level red-legged frog surveys.
- Conducted environmental review of the Greenbriar Development project to supplement a previous EIR and support the project-specific Endangered Species Act Section 7 consultation associated with Section 404 wetland fill authorization with analysis of habitat impacts and mitigation strategies to achieve species conservation. This is a proposed transit-oriented, mixed-density residential and retail/commercial development within the Natomas Basin on the northern edge of Sacramento.
- Prepared an EIR for the Mount Umunhum environmental restoration and public access project for the Midpeninsula Regional Open Space District. Demolition of structures associated with a former U.S. Air Force station located at the peaks of Mount Umunhum and Mount Thayer in the Santa Cruz Mountains is planned. After, ecological and landform restoration would include several trail connections and open space amenities.



Dawson Technical, Inc. – Military Planning/Liaison

Dawson will provide support for early property transfers, environmental services cooperative agreements, military master planning and land-use assessments, and military liaison services from their Walnut Creek, California office. They provide program and project management with clients in the Department of Defense. They have extensive experience working at military facilities undergoing closure through the Base Realignment and Closure (BRAC) process and have negotiated environmental services cooperative agreements for the early transfer of environmentally impacted properties on behalf of Land Reuse Authorities to allow accelerated development and beneficial reuse at several BRAC sites in California. They worked on a team supporting the City of Vallejo for the right to develop the U.S. Navy's former dredge material disposal ponds located on the Western Early Transfer Parcel on Mare Island that resulted in successful negotiation of an environmental services cooperative agreement that transferred the property and the funding to remediate it to the City of Vallejo. Additionally, they worked on the environmental services cooperative agreement for the early transfer of approximately 3,000 acres of munitions and explosives of concern-contaminated property at the former Fort Ord. Dawson work will be led by Cris Jespersen, PE.



Creative Consulting Services – Military Planning/Liaison

Creative Consulting Services will provide support for military master planning and land use assessments and military liaison services from their Pleasanton, California office. They are assisting SunCal on interactions with the U.S. Army Reserve and state regulatory agencies in support of real property exchange at the Parks Reserve Forces Training Area. They are a woman-owned small business with over 14 years of BRAC and other federal real property disposal experience, including leading the analysis and preparation of the overarching 2006 BRAC Master Plan for U.S. Air Force's legacy BRAC installations. As lead for disposal strategy, prepared property disposal plans for 27 U.S. Air Force legacy BRAC bases. A staff member previously served as the Office of Economic Adjustment's Base Transition Coordinator for Oakland Army Base where she managed community relations, served as ombudsman, and facilitated the Department of Army's approval of the City's No-Cost Economic Development Conveyance, environmental services cooperative agreement, and ultimate disposal of the property. She authored the Oakland Army Base Finding of Suitability for Early Transfer for submission for the California Governor's approval and coordinated agency and public reviews. Creative Consulting Services work will be led by Lynn Kriegbaum.



Cox, Castle & Nicholson will provide legal counsel throughout the duration of the project from their San Francisco, California office. They are California's largest real estate law firm. With over 120 real estate lawyers in San Francisco, Los Angeles, and Orange County, they are consistently recognized in state and national publications as one of the nation's premier real estate law firms. Their land use and development practice includes 25 lawyers and is considered by many to be the finest in California. Their development clients include developers and homebuilders, including SunCal, Shea, Standard Pacific, and Taylor Morrison, public and semi-public institutions, including the University of California, energy companies, including First Solar, FRY, and Recurrent Energy.

Cox, Castle & Nicholson work will be led by Clark Morrison, JD. He heads their land use practice and has over 25 years of experience in the entitlement of large, complex development projects. In the East Bay, Clark has handled the entitlement efforts and litigation on numerous large projects, including the Dougherty Valley Master-Planned Community in San Ramon, the East Cypress Specific Plan in Oakley, Staples Ranch in Pleasanton, and the El Charro Specific Plan in Livermore. Outside of the East Bay, he has been involved with numerous base reuse projects, including Hunter's Point/Candlestick, Treasure Island, Oak Knoll Naval Hospital, Mare Island, and others.

Having lived and practiced law in Contra Costa County for over 20 years, Clark is familiar with the history and politics surrounding the Concord Naval Weapons Station, including current efforts for the adaptive reuse of the property. He was heavily involved in the development of the East Contra Costa Habitat Conservation Plan on behalf of the Contra Costa Council and Building Industry Association. He has worked extensively with the U.S. Army Corps of Engineers and state and federal wildlife agencies, negotiating some of the largest wetland fill permits ever issued in California. He enjoys a cooperative relationship with the East Bay Regional Park District and has negotiated many land use settlements with area environmental groups, such as the Greenbelt Alliance and Save Mount Diablo. Additionally, having been involved in Bay Delta Conservation Plan negotiations for many years, Clark is familiar with the water supply situation facing Contra Costa County and the Contra Costa Water District.



## Independent Construction Company – Construction

Independent Construction Company is a Concord-based general engineering and site improvement contractor. The company was founded in 1910 by A. J. McCosker and has been a family-owned business ever since. The company is currently owned and operated by Brian McCosker, the grandson of A. J. McCosker. Brian will be the team lead for this project. He has a construction management degree from California Polytechnic State University at San Luis Obispo and has been at Independent Construction for over 35 years.

Independent Construction is a leader in site improvement work in the San Francisco Bay Area, as well as throughout California and northern Nevada. Independent Construction has yearly sales in excess of \$100 to \$175 million and has the capability to grade in excess of 25 million cubic yards of earth per year. Independent is our preferred general engineering contractor for the site build-out and we will use a negotiated bid process to insure to the maximum extent possible that they will fulfill that role. In this capacity they will handle grading, underground utilities, street construction, and other site improvements for the development.



Section

3

Project Vision



### 3 | PROJECT VISION

SunCal's vision for the CRP Plan Area is one that aligns to the goals and guiding principles of the Local Reuse Authority and the aspirations of the Concord community. The CRP Plan Area is an opportunity to establish a precedent-setting mixed-use, transit-oriented community with unparalleled regional open space resources. The overriding theme of our vision is *Creating and Building a Healthy Community*. While many aspects of our proposal are best practices throughout the world, there are some unique opportunities in Concord to expand on the notion of a healthy community. For example, typically when a large master-planned community is built, the land that will eventually be built out with residential, commercial, and institutional uses sits fallow awaiting development, sometimes for a decade or more. We are proposing a phasing plan that will take advantage of ample land resources, solar access, arable soils, potential water harvesting, and recycled water availability to develop interim agricultural uses during project development. This will provide a farm to table experience unmatched in the region. Small local farming efforts will be rotated on future development lands within the Phase One area to allow local produce to be easily accessible to the Concord community. This can be sustainable for a generation if applied to the future CRP lands outside of the Phase One area as Phase One build-out comes to a conclusion. Additionally, there is a wonderful opportunity in the required 275-foot development setback from existing neighborhoods to develop community gardens and orchards, which will go on even after the CRP is built out, to further enhance the farm to table experience. This could reach up to over 20 acres of permanent agricultural uses in the CRP Plan Area.

We envision a community that truly represents a sustainable systems approach. In response to the cultural evolution toward local, organic foods, neighborhoods in later phases may be oriented around community gardens and orchards or may participate in Community Supported Agriculture, referred to as agrihoods. Such communities respond to a growing desire for families to feel more connected to their food, their environments, and their communities. Neighborhoods may partner with a local organic farmer to grow seasonal fruits and vegetables within the community. A central farm stand, coffee shop, or farm-to-table restaurant have the potential to be profitable, community-based, environmentally beneficial endeavors which can become tremendous assets. (<http://www.resilience.org/stories/2014-05-21/12-agrihoods-taking-farm-to-table-living-mainstream>).

SunCal's vision for the CRP is to create a *healthy community* by integrating innovative approaches to community design, open space organization, and building and infrastructure technologies. We will use a *whole systems* approach to design a variety of healthy community objectives that encourage physical well-being of residents, as well as



healthy environments, economic opportunities, and sustainable lifestyles. With a whole systems approach, an open-space greenway of trees and shrubs is transformed into a living component of the community that recycles storm water, provides wildlife habitat and native plant communities, connects people to their homes, jobs, and shopping through multi-use trails, and provides opportunities for community gardens and local food production. Our healthy community would encourage more walking and biking, less car dependence, a robust natural environment, a work and life balance, a jobs and housing balance, residents interest in each other's welfare, opportunities for lifelong education, access to physical exercise and the outdoors, and much more.

We believe that healthy communities are composed of mixed-land uses with unique street designs and diverse housing opportunities with the flexibility to change as demographics change, including mixed-income, mixed-density, multi-generational, affordable, and small-family housing, as well as alternative and senior households, such as assisted living facilities. Additionally, the Phase One area will have neighborhoods with public parks/green spaces and public plazas/community facilities served by world-class public transit. Our vision creates a community that reflects *the way we live and our lifestyle choices* for the long term.

### 3.1 | Planning Considerations and Opportunity

#### 3.1.1 | Planning Considerations for a World-Class Community

To make this development a success and to ensure continuity and vitality, the planning process will need to take into account all of the CRP Plan Area phases. SunCal knows that planning a major development takes work from many different organizations and agencies. With transparency between the parties, great things can be achieved. We have a history of working well with city staff because our best interests are serving the interests of the city and the individuals invested in the outcome. Our Dublin Crossing project, similar in scale to the Phase One area, is a land exchange with the U.S. Army, giving us an advantage in understanding how to work with local and federal military personnel. In an effort to maintain the historical past of the base, we were able to assist in designing the creation of a History Center building for the Parks Reserve Forces Training Area (also known as Camp Parks) and in keeping their presence alive in certain community design aspects. Additionally, we named the major streets in our new land plan with names that reflect both the agricultural past of the land (hops production) and the recent history as a military facility. Much like the Concord experience, our Dublin project had substantial community input for land planning prior to our being selected. Our respect of the community process led to City Council hearings to consider our Dublin Crossing project where the plans received unanimous approval.



SunCal hopes to use the U.S. Navy's presence in Concord as a factor to make this community recognizable and unique. We will continue to work with the Local Reuse Authority, City Boards and Commissions, and the broader community stakeholders to develop a world-class master-planned community.

### 3.1.2 | Opportunity to Plan and Design a Transit-Oriented Development

The CRP Plan Area has the opportunity to be appropriately scaled to have a main street feel rather than a downtown feel, while providing connectivity between homes, jobs, open space, and transportation, which are programmed for vibrancy and inclusiveness. The Phase One area is anchored by the North Concord BART station and is connected to surrounding communities via regional thoroughfares, such as Willow Pass Road, Bailey Road, State Highways 4 and 242, and Interstate 680. Concord is one of only eight cities in the San Francisco Bay Area with more than one BART station. As such, our vision is based upon multi-modal transportation choices where no single mode dominates and modes are appropriately accommodated close to homes, shopping, jobs and BART. This will enable reduced vehicle miles traveled, and parking demand.

Transportation networks among our communities will be designed to benefit pedestrian and bicycle routes to enhance the work and life-balance goal of this development. Streets will be designed to promote the easiest access to stations, allowing individuals to have a clean and easy connection. Areas closer to transit stations will be developed to use the benefits that transit stations offer, such as placing retail centers and housing with higher densities closer to BART. Connectivity is a key to establishing a successful mixed-use neighborhood. Effectively linking this new neighborhood to surrounding resources, such as BART, will contribute significantly to the success of the community. Our Team has exponential strength in organizing routes in master-planned developments, which will improve the quality of life of future residents. SunCal has worked on developments in the San Francisco Bay Area and throughout the nation that promote Transit-Oriented Development (TOD). We understand the planning required to connect communities flawlessly to existing and/or developing transit lines. Using local transit options does justice to the environment and reduces traffic impacts. In our Dublin Crossing project, we have an extensive bicycle and pedestrian network to connect to the nearby BART station and the adjacent Iron Horse Trail, which extends from the site to Concord. In our Potomac Shores project, we are building the new train station to ensure transit connectivity to the nearby Washington D.C. metro area.

### **Pedestrian and Bicycles | A Transit-Oriented Development Opportunity**

At SunCal, we plan our developments to connect with the region beyond our community lines. With this goal in mind, we pride ourselves on working with our highly experienced consultant teams to create advanced pedestrian and bicycle networks that



flawlessly connect to regional trails. Our developments encourage taking advantage of the pedestrian paseos and bike lanes to benefit the environment and to lay the foundation for healthy lifestyles. Urban design guidelines will be carefully crafted to promote a pedestrian environment that is secure, active, and interesting throughout the day. The pattern of open spaces and pedestrian ways and their relationships to the transit facilities will be a critical factor in creating an exciting pedestrian district. In our more than 80 years of building distinctive communities, SunCal has forged hundreds of miles of recreational trails. Our commitment to creating recreational activity ensures that our project planning is done carefully to integrate parks, open space, trails, and sports fields with the neighborhoods of the communities. From expansive sports fields and world-class golf courses to peaceful pocket parks, families and children of all ages can experience an abundance of recreational opportunities just beyond their front door.

### Functional Open Space and Parks

We take seriously the responsibility to respect natural surroundings where we build. In the Phase One area, we will carefully plan the community to protect biologically sensitive locations. SunCal's commitment to the environment has allowed for the preservation of thousands of acres of ridgelines, wetlands, oak woodlands, and natural habitats within our communities. These lands are home to many of Earth's most spectacular creatures, provide wildlife corridors that provide animals with access to significant habitat areas, and are crisscrossed with miles of trails for public use. We work with highly qualified biologists to coordinate the most effective methods to protect wildlife and endangered species. SunCal acts as a steward of the land and takes care to protect the natural environment from the planning phase through project build-out. We see preserving natural habitat as an essential building block for ethical development. Our objective is to prepare design guidelines for the development that are specific enough to ensure that critical public objectives and key project requirements are carried out, yet general enough to allow for the creative input of others as necessary, as well as to accommodate changing market conditions over the lifetime of the project. Key elements of our development proposal include complete green streets, functional greenways, connectivity, storm water management, community agriculture, and use of water-saving technologies.

## 3.2 | Market Conditions | Economically Viable and Sustainable Development

We believe in shared success. We have developed comprehensive plans to provide the security and sustainability that community members and the City need. As the developer, we ensure that there is a plan in place for funds to keep the quality and care of the project in top-notch condition ensuring a successful community. SunCal works



with the City to assist in determining how funds will be spent and what operations are necessary to implement and guarantee sustainability. In each of our communities, we do in-depth market analysis to ensure each community is built to sustainable limits. Our planning provides security that retail will have the residential capacity to survive and that residents will in turn have the necessary retail to live comfortably without having to travel miles to acquire the desired goods and services. Through our experience with similar redevelopment projects, we recognize the challenging issues that need to be addressed by this effort. The plan must provide for the orderly evolution of the area from its present condition to an urban, transit-oriented mixed-use district and suburban districts to meet the desired living environment for future community members. This metamorphosis requires a powerful vision that can capture the imaginations of agencies, key decision makers, and stakeholders.

Too often, development opportunities are not implemented because economic viability is not a key component of early design. Our extensive knowledge of master-planned community development of this scope will guarantee for the Local Reuse Authority that economic viability will not be an element of risk to future implementation. We can assist the Local Reuse Authority in the ongoing efforts with the U.S. Navy and the Department of Defense to ensure that project economic viability is not undermined by the transaction structure. We spent years with the U.S. Army and the Department of Defense in developing a transaction structure that met the U.S. Army's needs and guaranteed that the Dublin Crossing project will be implemented.

The roadmap developed by the LRA reduces uncertainty and inherent development risks. Additionally, significant EIR work was completed and sets clear parameters for future development and further reduces development risks that are often exacerbated on former military installations. The City went through an extensive process of gaining stakeholder input prior to the issuance of the RFP. The SunCal Team will take that input as the foundation for every decision going forward.

The projected real estate market conditions are very strong in Concord and within the greater San Francisco Bay Area. The land use mix envisioned by the CRP Area Plan is consistent with those market conditions with one caveat about timing and phasing of the very high density and commercial product where the commencement of construction of those uses is done slowly and smartly. We must allow the community to evolve flexibly. Currently, there is not demand for 600,000 square feet of commercial uses within the Phase One area. There eventually will be as rooftops come on line. We must allow that evolution to be organic and not forced. We would propose to develop partnerships with entrepreneurs, growing companies, San Francisco Bay Area institutions, and educators to assist in fostering commercial and institutional uses within



the Phase One area. Additionally, the very high-density housing market has been slow to recover from the last recession. This type of housing has a very high cost to construct and will need to be tracked very carefully to ensure that no sub-phase of the Phase One area experiences too high of a financial burden of economic realities.

### 3.2.1 | Project Phasing Considerations

Our approach to phasing revolves around the four principles of cost efficiency, market demand, physical constraints, and our goal to provide a healthy living environment surrounded and served by agricultural uses. These principles have led to a phasing program that is a three prong approach to development. We would begin construction from the three exterior access points (i.e., State Route 4/Willow Pass, BART station, and Willow Pass/existing neighborhood) and work towards the center.

A very primary concern relative to phasing is cost efficiency and constructability of a master-planned development. The ability to access developable land with the lowest cost burden is a key component to fiscal feasibility of a project. We have focused on early build phases that require the least cost to deliver buildable lots for both residents and new jobs. For example the commercial area located at State Route 4/Willow Pass Road is very far away from other portions of the Phase One development. However, the existence of a freeway interchange and utilities makes this site desirable to come to market early, as a result of the cost efficiency of reaching the site. The same principle applies to the portion of the Phase One area that is adjacent to existing neighborhoods on Willow Pass Road and near the BART station.

Market forces are a critical component of phasing decisions. While a site may be available and easily accessible, if the land use planned for that area is not currently supported in the market place, it would be irresponsible to spend resources on getting that site market ready. This will be a strong factor in sub-phase decisions. For example, market forces may hamper immediate implementation for the State Route 4/Willow Pass Road site and the area near the BART station even though these sites make sense for early development. The State Route 4 commercial site may need to be a phase by itself. It is unlikely that all 300,000 square feet of retail can be absorbed immediately. This would lead to a phasing of that commercial site to accommodate a more modest introductory development. The same rule would apply to the higher density residential and commercial uses near the BART station. There may be a need to have sub-phasing that would allow more market ready product to come on line, while letting demand catch up for other uses in that sub-region.

Physical constraints will play a role in our phasing decisions. The location of ongoing hazardous material sites, the capacity of an existing street, such as Willow Pass Road, and infrastructure needs, such as the location of existing power, water, and sewer have



driven our three prong approach to development of the Phase One area. We are proposing a phasing plan that will take advantage of ample land resources, as well as potential water harvesting and recycled water availability to develop interim agricultural uses during project development.

### 3.2.2 | Relationship Envisioned Between the Phase One Area and Subsequent Phases

Developing a project of this size must be done with special care and consideration of the phasing process. Phases of the property must be handled responsibly and strategically so that the time between completions of phases does not take away from the existing community. Due to the extensive work the Local Reuse Authority and community have done to develop a preliminary land use plan for the entire project, the most important consideration necessary during Phase One is to ensure that subsequent phases are not limited in any way due to decisions that were made in Phase One. One key element in this regard is the economics of infrastructure build-out in Phase One. It is imperative that adequate infrastructure is in place as Phase Two and beyond is reached. This being the case, there will be a heavier burden on Phase One to oversize infrastructure for future phases. It will be necessary to address this in the economic package developed for the project. We at SunCal are experts in putting into place financing mechanisms that assist in spreading the burden of infrastructure evenly across multi-phased projects. Additionally, this necessitates recognition in the dealings with the U.S. Navy of the economic differences often found in the first phase of large development such as this one.

### 3.2.3 | Regulatory Agency Negotiations

SunCal has an exceptional compliance record and extensive experience working with federal, state, and local officials to ensure protection of natural resources starting with project planning and continuing through full development. SunCal will support the City's efforts in securing state and federal permits by ensuring the design elements meet agency expectations with regard to protection of resources. SunCal's natural resource specialists have a long history of successful procurement of Clean Water Act permits and Endangered Species Act consultations.

### 3.2.4 | Affordable Housing Accommodations

SunCal anticipates a total of 793 affordable units of which 235 would be very low, 186 would be low, and 372 would be moderate. This does not include an additional 130 to 260 units of housing for formerly homeless persons or the 60 units set aside for Habitat for Humanity self-help housing. Consistent with the City of Concord's direction, the first affordable housing project will begin after the first 200 market-rate units are constructed. We envision build-out of the required Phase One area affordable housing



units to require at least four stand-alone affordable projects of varying size. The timing of each affordable project will be coordinated with the larger phasing and delivery of the market rate and homeless units. This strategy will allow SunCal to compete in multiple competitive nine percent tax credit rounds and some non-competitive four percent rounds.

SunCal carefully considered the best placement of the affordable housing parcels within the larger Phase One area. We have made sure that the affordable housing parcels are located near market rate parcels to foster integration and result in a truly mixed-income community.

### 3.2.5 | Labor Practices

We understand very clearly the City's desire for us to implement Hire Concord First to create local jobs for local workers, including the training and hiring of local veterans, using local businesses that can provide materials and supplies for the build-out of the CNWS Master Development, and further creating local jobs and enhancing the local economy. Our general contractor, Independent Construction, is based in Concord and is a signatory with both Local 3 Operating Engineers and Northern California Laborers with an agreement on wages that exceed California's prevailing wages. One of the principals of Independent Construction participates as a contractor member for Local 3 Operating Engineers' Joint Apprentice Training Committee and participates on the Board of Trustees for Laborers Trust Funds for Northern California. The Local 3 Operating Engineers and the Northern California Laborers both have a relationship with the non-profit entity Helmets-to-Hardhats, an organization approved by the National Labor-Management Cooperation Committee to assist with placing qualified veterans on construction projects, as well as with City Build, Job Corp, Cypress Mandela, and Work for Warriors local hire programs. They are familiar with using the Union Hall for Contra Costa County in Martinez. Independent Construction, based in Concord, will ensure there are apprentice programs within companies used by as subcontractors.

We will work with the City to maximize development opportunities, at a competitive price, for local development firms. These opportunities would be for residential, commercial, or recreational facilities by local developers in Concord first and then Contra Costa County or the nine San Francisco Bay Area counties. As the project progresses, we would look to team with qualified small businesses and disadvantaged business enterprises and to create opportunities for Concord-based employers and resident workers.

Several of the local affiliates of the Contra Costa Building and Construction Trades Council, such as UA Local 342 and IBEW 302, located in Concord and Martinez, respectively, have Veteran's Affairs Certifying Officials for programs already in place to



assist with recruitment of veterans. Through minimum requested or required veteran apprentice designations on subcontracts, we would create a real market-based incentive for greater veteran participation on the project.

Additionally, outreach could be provided regarding the availability of open apprenticeships and On-the-Job Apprenticeships, as well as matching Veteran's Affairs assistance programs through our team's established working relationships with the Contra Costa County Veterans Services Office, the local Veteran's Affairs Oakland Vocational Rehabilitation & Employment counselors, and several local not-for-profit veterans housing assistance programs.

Lastly, portions of the project that are struggling to maintain a minimum level of local veteran participation could be registered with the non-profit entity Helmets-to-Hardhats, an organization approved by the National Labor-Management Cooperation Committee to assist with placing qualified veterans on construction projects and introducing these men and women to available apprenticeships.

### 3.2.6 | Construction of Backbone Infrastructure

The project is envisioned to be developed in six sub-phases. The sequencing of the sub-phases is driven primarily by existing infrastructure capacity and utility points of connection, economic factors, the desire to provide continuous connectivity between sub-phases, and the transfer timing of the large remediation area central to the Phase One area. Development will begin in the southeast with a small portion, approximately 150 - 250 units, of single-family residential being constructed prior to the new PG&E substation coming online. Once the PG&E substation is in place, construction of the entire length of Alpha Road will provide the critical transit connection for residences at both ends of the project to the BART station, as well as a means of routing utilities across the site. A new widened Willow Pass Road bridge will be assessed to replace the existing aged structure and provide access to the proposed retail site at the southwest corner of State Route 4 and Willow Pass Road. Once the supporting infrastructure and residential units are in place, the Village Retail area located along Willow Pass Road will come alive. Construction will then continue westward towards the future school site. With the eastern half of the project complete, focus will turn towards the higher density residential, retail, and offices adjacent to the BART station creating a gateway plaza for nearby residents and commuters. The final phase of development will round out the residential areas adjacent to the main street retail, as well as grading and provisions for the utility connections for the future civic site adjacent to the school.



### 3.2.7 | Key Financial Issues

As with any large project, obtaining the necessary financing is critical to success. SunCal has a long history of working with third-party capital providers to finance developments of this nature. Typically, SunCal partners with a private equity firm whereby both parties contribute cash to close a transaction and see it through its initial planning phase. As construction activities ramp up, debt providers, often commercial banks, are folded into the financial picture. Bank debt is used to fund the majority of construction and the debt is exhausted as fully-improved land parcels are sold to end users.

It is common to use public debt to finance infrastructure that has a broader benefit to the community. Public debt instruments can come in the form of Community Facilities Districts that are ultimately serviced by residents and businesses that fall within the bounds of the district. Tax Increment Financing is another useful tool to assist in offsetting development costs. Tax Increment Financing bonds are repaid by redirecting a portion of the sales taxes (and the like) that are generated from the product use of land that was previously underutilized. Throughout this RFP process, SunCal has worked closely with several equity firms to ensure that the partnership is adequately capitalized from the outset. SunCal and these third-party providers have longstanding relationships. In each instance, SunCal is actively partnered with these providers in other land development projects.

### 3.2.8 | Other Issues Identified in the Draft Agreement to Negotiate (Appendix D), including its Exhibit C thereto (Preliminary Stage Negotiation Matters)

Comments on both draft agreements are located in Appendix B.



Section

4

Development Phase One Property Concept



## 4 | DEVELOPMENT PHASE ONE PROPERTY CONCEPT

### 4.1 | Phase One Property Concept Overview

The CRP provides one of the most important and forward-thinking development opportunities in the Bay Area in decades. The work done to date by the City of Concord and the Local Reuse Authority sets the framework for a new community that can use innovative planning, design approaches, and technologies in a way that is not possible in typical development settings.

The opportunity begins with large areas of vacant land located immediately adjacent to an existing BART station, connections to freeways and major arterial roads, expansive protected parklands, and most importantly, support from the City of Concord for an exciting new sustainable community. The CRP sets the stage to develop a community that supports a balanced relationship between land uses, real opportunities for economic development, diverse lifestyles, and protection and enhancement of natural resources now and in the future. The SunCal Team's Phase One property concept is shown in Exhibit 4-1 (see Appendix C, Figure 1).

The exhibits referred to throughout this section are contained in Appendix C.

Exhibit 4-1. The SunCal Team's Development Phase One Property Concept



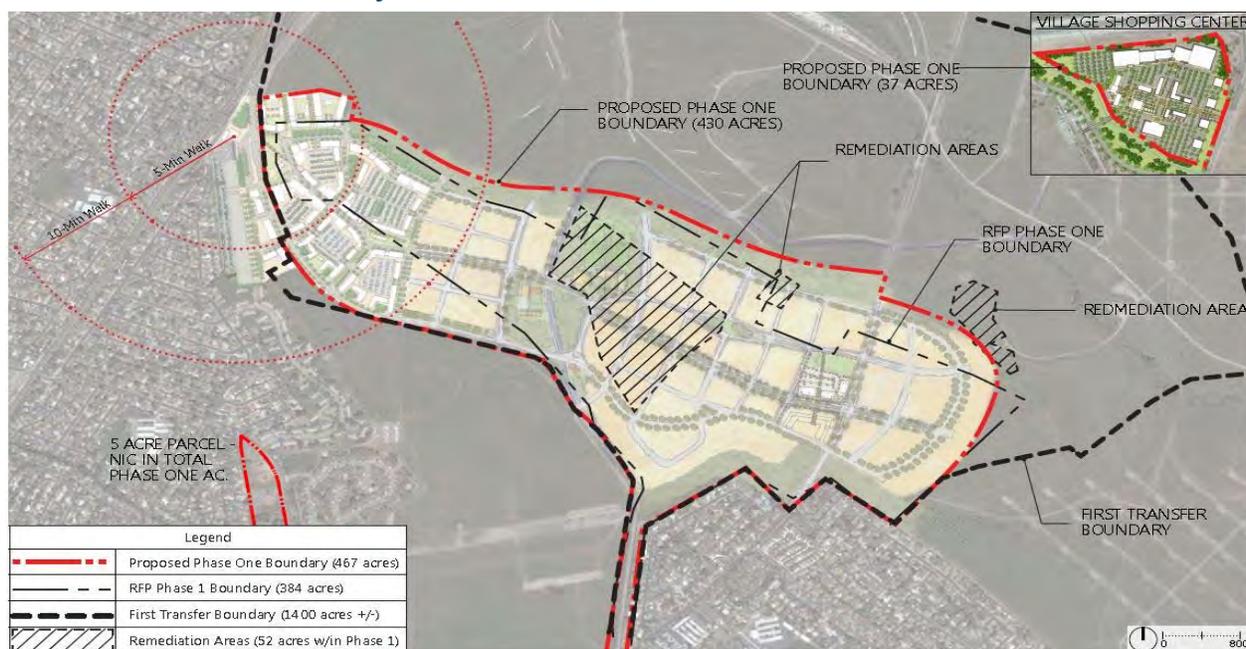


## 4.2 | Phase One Boundaries

The proposed Phase One boundaries are shown in Exhibit 4-2 (see Appendix C, Figure 2). The total Phase One area is proposed at 467 acres; comprising 430 acres in the main project area and 37 acres at the Village Shopping Center. This area is slightly larger than the Phase One project area suggested in the City's request for proposal, but within the 500-acre maximum allowed under the RFP. The SunCal Team expanded the Phase One area primarily to the north, while remaining within the First Transfer Area, including:

- Expanding the Transit-Oriented Development (TOD) Area to be wide enough, north to south, to accommodate two major circulation corridors, the project greenway, mixed-use areas, parking, and adjacent multi-use housing
- Smoothing to allow project circulation to respond to the topography and for neighborhood edges to have proper depth to accommodate land uses
- Ensuring connectivity and continuation for the Phase One development area, including connection to future development areas in terms of major streets, transit, and open space connections
- Providing areas large enough for phasing development as it approaches the BART station, to accommodate a variety of housing densities, circulation corridors, three transportation corridors, the greenway, and civic and park areas. Additionally, the remediation area in the center of the site cuts the Phase One area in two if the full extent of the area is undevelopable.

Exhibit 4-2. Phase One Project Boundaries





### 4.3 | Conceptual Plans

SunCal's vision for the CRP is to create a *healthy community* by integrating innovative approaches to community design, open space organization, and building and infrastructure technologies. We will use a *whole systems* approach to design a variety of healthy community objectives that encourage physical well-being of residents, as well as healthy environments, economic opportunities, and sustainable lifestyles. With a whole systems approach, an open space greenway of trees and shrubs is transformed into a living component of the community that recycles storm water, provides wildlife habitat and native plant communities, connects people to their homes, jobs, and shopping through multi-use trails, and provides opportunities for community gardens and local food production. Our healthy community would encourage more walking and biking, less car dependence, a robust natural environment, a jobs and housing balance, residents interest in each other's welfare, opportunities for lifelong education, access to physical exercise and the outdoors, and much more. The planning and urban design objectives for creating this healthy community include:

- Mixed land uses
- Dedicated pedestrian infrastructure, including sidewalks and trails
- Safe bicycling infrastructure that connects to other modes of transit
- Complete street design that accommodates all modes of transit in a comfortable environment
- Mixed-income, mixed-density, and multi-generational housing
- Accessible public parks and green spaces
- Accessible public plazas and community facilities
- Access to public transit
- Building technologies that meet objectives of sustainability and the Climate Action Plan
- Sustainable infrastructure systems
- Access to healthy local food
- Access to educational facilities and lifelong education.

The challenge is to translate these healthy community concepts into a plan that takes advantage of the CRP site and allows for the flexibility to adapt to new technologies and healthy lifestyle choices.

#### [4.3.1 | Site Opportunities and Constraints](#)

##### Site Physical Characteristics

The Phase One area extends from the North Concord BART Station southeasterly for over a mile beyond Willow Pass Road. The approximate 450-acre area is characterized



by low hills and a northwest/southeast trending ridgeline that rises about 100- to 120-feet in elevation above the valley floor. The site area is composed almost entirely of non-native grasses, which until recently have been cattle grazed for several decades. The site is interspersed with rail tracks and concrete sleeves, which are remnants from U.S. Naval weapons storage. Two remediation sites lie in the center of the Phase One area. Near the BART station is the remnants of an old homestead that includes foundation remains and aged palm trees. Site opportunities and constraints are shown in Appendix C, Figure 3.

### Adjacencies and Context

The North Concord BART Station and large surface parking area lie just west of the Phase One area. West and southwest of the area are existing single-family Concord neighborhoods, schools, and parklands. To the north lies vacant First Transfer Area lands slated for future development. To the east and southeast lies a newly created 2,700-acre East Bay Regional Park District park, carved out of CNWS lands, which will be preserved and developed as a major regional park. To the south, past Willow Pass Road, are future CRP neighborhoods that will be fully connected to the Phase One area.

### Topography

The site topography is defined by a rolling ridgeline extending from the BART station beyond Willow Pass Road. This ridgeline represents the northern boundary of the Phase One area. For most of the site, a southwest exposed slope leads from the ridgeline to the Phase One southern boundary. This gradual southwest facing slope provides a perfect palette of great solar exposure and potential for significant views without steep slopes that would impede walking and biking. This significant southwest exposure allows for architectural and building solutions that use grade changes. The technical challenge will be to grade and shape this topography to appropriate grades for streets and development areas that do not inflate development costs. The site grading approach is addressed in Section 4.3.9.

### Transit Access

The site is blessed with access to the Bay Area's major regional transit system. The opportunity and challenge is to develop project-wide access to this system within the community.

### Vehicular Access

Port Chicago Highway, State Route 4, and Willow Pass Road each provide ready access to Phase One areas from the west, north, and south, respectively. A potential future connection from Olivera Street to the southern portion of the Phase One area has been contemplated.



### 4.3.2 | Urban Design

There is a strong cultural shift taking place in California in which residents are seeking lifestyles that emit fewer greenhouse gases, conserve resources, minimize ecological impacts, and emphasize local, organic food production. Achieving these goals in community design requires a holistic approach that telescopes from macro to micro, addressing everything from linkages to regional circulation networks down to the plant palette specified in the landscape. The SunCal plan for the CNWS maximizes the opportunities inherent in the community's prime location adjacent to regional mass transit, a proposed 2,700-acre regional park, and an existing community to create a mixed-used, livable community with strong internal multi-modal circulation and an integrated open space network that maximizes and encourages access to nature.

#### Mixed Land Uses

Key to the CNWS plan is a mixture of uses that are easily accessible by non-polluting and active modes of transportation. Facilitating movement between destinations of daily life without the use of a fossil fuel burning vehicle provides air quality, health, and wellness benefits. The plan provides a mixture of residential, commercial, office, park, trail, civic, and community agriculture that will be completely accessible by safe and inviting bicycle and pedestrian circulation networks. The TOD to the west and the Village Center area to the east are higher density areas in which residents can accomplish many daily activities within a quarter-mile walk. Complete streets and an integrated open space system allow lower density residential neighborhoods to connect to commercial, park, school uses, and regional transit with a comfortable bike ride or bus trip.

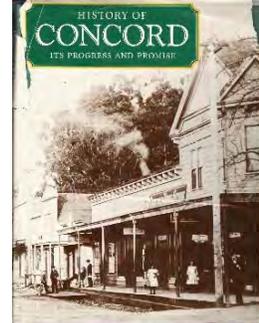
Generous buffers along the existing neighborhoods include trails to enhance the open space and the non-vehicular circulation system. The buffers are bermed and planted with orchards and possibly other crops to create a serene visual screen and a fresh local food source. Community gardens, irrigated through harvested rainwater, are located in the greenway along the north edge of the project and provide the opportunity for families to enjoy their own fresh, organic fruits and vegetables. Community gardens represent an additional local destination for residents to walk or ride bicycles to and are a place that they can spend positive time together engaging with neighbors and building their community.

#### Agriculture – the future that comes from our past

In response to the cultural evolution toward local, organic foods, neighborhoods will be oriented around community gardens and orchards and will participate in Community Supported Agriculture, referred to as agrihoods. Such communities respond to a growing desire for families to feel more connected to their food, their environments, and their communities. Neighborhoods may partner with a local organic farmer to grow



seasonal fruits and vegetables within the community. A central farm stand, coffee shop, or farm-to-table restaurant, have the potential to be profitable, yet community-based and environmentally beneficial endeavors. As we began to develop concepts for an agricultural element to our Healthy Living Healthy Community concept, we tracked down the book titled “History of Concord, Its Progress and Promise” published in 1986 by the Concord Historical Society, which points to Concord’s agricultural roots going all the way back to the mid-1800s when “Don Salvio Pacheco allowed people to pay for the land out of profits from the crops they grew. The favorable climate made farming ideal.” The book cites the existence of grapes, dairy products, walnuts, pears, apricots, olives, almonds, and cherries, as well as commercial vegetables and beef cattle.



Further, we spoke with some local farmers to get a better understanding of the agricultural history of Concord. Robert Hoffner, a farmer who currently resides in Brentwood, but who grew up farming in Concord with his family, provided us with great insight into Concord’s rich history. Robert shared with us that farmers used to grow a variety of crops in the area, including squash, onions, melons, lettuce, cabbage, tomatoes, and sweet corn. Additionally, he mentioned that grains used to be grown on the military base. In developing the CRP Plan Area, we will strive to re-cultivate the agricultural richness of the community and will rely upon trusted advisors, such as Robert, to assist us in achieving this goal. Once we begin the development process, we would like to have local farmers, such as Robert, farm the land.

This research made a very strong case to include an agricultural element to our proposal. We propose that during Phase One development, as some of the land is sitting idle waiting to be developed for possibly as long as a decade, to offer plots to local farmers for use in growing crops. This temporary use could continue for decades if applied to upcoming development phases of the CRP Plan Area. Additionally, we are suggesting that the 275-foot setback from existing neighborhoods be used for commercial orchards, community gardens, and small farming opportunities and that community gardens will be located along the central greenway.

The agricultural theme in our project benefits the local community and can support the expansion of current Concord organizations. Harvest Lots (<http://harvestlots.org/>), a non-profit that turns vacant lots into community gardens, is one group that is counting on the future of our project. The Harvest Lots mission is to ultimately bring the community together to better their neighborhoods, grow local crops, which are then donated to Concord charities, and educate youths. SunCal finds the Harvest Lots mission and values similar to those we hold in our project concept as we truly are



planning for future generations to come. This past year Harvest Lots donated 500 pounds of fresh produce to local food pantries, crisis centers, and the Contra Costa Food Bank. With available land in our development, SunCal wants to join efforts with Harvest Lots and draw Concord community members together to increase the number of Harvest Lots locations. Harvest Lots' current project in Concord turned a neighborhood around by transforming a vacant lot that had been filled with trash, campfires, and unwanted visitors into a safe, well maintained, prosperous plot of land. SunCal and Harvest Lots look forward to working together to create more resources for Concord residents in need and to connect Concord community members at the roots.

### Landscape System

A sustainable landscape system requires a multi-faceted approach designed to provide ecosystem services wherever possible. We base our framework on the Bay-Friendly Landscapes framework, with which our team has a great deal of experience. This third-party rating system, originally developed by StopWaste.org, an agency of Alameda County, is a whole systems approach to sustainable design, construction, and maintenance of the landscape. The Bay-Friendly scorecard evaluates landscapes for implementation of practices that support seven key principles:

- Landscape locally
- Landscape for less to the landfill
- Nurture the soil
- Conserve water
- Conserve energy
- Protect water and air quality
- Create and protect wildlife.

A wide variety of open space and landscape design elements support these principles. Many practices have multiple benefits and synergize with one another. All provide interpretive learning opportunities through signage, art, and other means.

### Storm Water Management

Landscape-based storm water management best practices are emphasized in this plan. Such approaches seek to remove sediments and pollutants from storm water with vegetation and soils and encourage storm water to infiltrate into underlying soils, thereby assisting to recharge groundwater. The range of landscape-based storm water management approaches that can serve as visual amenities and community character elements includes detention/retention basins, streetscape rain gardens, vegetated swales, infiltration planters and pervious paving. Storm water management is seamlessly integrated into the circulation and open space network and is designed to serve as a visual amenity. The plan proposes the use of harvested rainwater in community agricultural areas along the north edge of the site.



### Plant Palette

Plant materials will be carefully selected to ensure a landscape that requires minimal resource inputs and maintenance and that creates an appropriate expression of place. Native, climate adapted, drought tolerant plants will be emphasized. The design aesthetic will be one that allows specified plants to be celebrated and grown to their mature size, thus eliminating the need for regular shearing, a process which requires significant inputs and results in unnecessary waste.

Large shrubs and trees will be carefully selected and located to seasonally shade buildings, air conditioners, and paving to minimize heat islands, as well as building heating and cooling needs.

A local, native plant palette creates optimal wildlife habitat and provides an opportunity to incorporate interpretive programs that teach open space users about the local ecosystem. The use of native and climate adapted plants reduces the need for fertilizer inputs and assists in protecting against pest infestations, thereby minimizing the use of polluting chemicals in the landscape.

Recycled water will be used wherever available for landscape irrigation. Plant palettes will reflect the use of recycled water.

### Materials

Materials used in the landscape and open space system will be specified for their design and place making value, as well as for sustainability characteristics, such as recycled content, durability and longevity, embodied energy/carbon footprint, energy and water efficiency, and life cycle. Examples include high efficiency, ET-based irrigation systems, LED lighting fixtures and motion detection/photo sensitive lighting controls, solar powered lighting, pervious paving materials, recycled content and high solar reflectance index concrete, and recycled content furnishings, fixtures, play structures, play surfacing, and mulch.

### Create and Protect Wildlife Habitat

The extensive open space network planned for the community will create additional habitat for some species by adding a significant number of large trees and shrubs to the site, which currently has minimal vegetation. Future phases will restore and protect the Diablo Creek Corridor, creating enhanced riparian habitat in the plan area.

#### [4.3.3 | Land Use Program and Distribution](#)

The planned phased program build-out is shown in Appendix C, Figure 4. The proposed overall land-use distribution and program summary is shown in Exhibit 4-3 (see Appendix C, Figure 5). Within the North Station area a vibrant mix of retail, office, and



high density residential areas are planned. Further away from the North Station area the residential densities decrease. Medium density housing is clustered around the Willow Pass Village Core.

Typical housing densities and typologies for high, medium, and low density residential areas as well as mixed use areas are shown in Appendix C, Figures 6, 7, 8, and 9.

### Exhibit 4-3. Proposed Land Use and Program



#### 4.3.4 | Organization of the Phase One Plan

The Phase One community plan is organized to create a series of unique community centers linked and integrated by complete streets, diverse neighborhoods, and open space and parklands. The systems connect the community centers, which are spaced at a 10-minute walk apart and are connected by east/west corridors that traverse the gentle south facing slopes of the site providing pedestrian and bike friendly mobility, transit connectivity, and linear parkland. See the overall development framework in Appendix C, Figure 10. The community plan is organized as follows:

- A vibrant transit-oriented district center at the existing North Concord BART station
- A mixed-use center connected to two additional community anchors, relating each Phase One neighborhood to a center
- Three community centers spaced about 10 minutes walking time or three transit stops apart along a roughly west/east shaded, mixed-use, multi-modal transit corridor that is the linear heart of Phase One and future CRP villages



- Develop two additional east/west primary street corridors that predominantly handle vehicular traffic and ensure that all east/west streets, both corridors and neighborhood streets, have proper solar orientation
- Along the northern ridgeline, create a central east/west greenway that connects the BART station, neighborhoods, and centers all the way to the East Bay Regional Park District regional park open space
- Provide for a north/south fabric of low traffic neighborhood streets that connect neighborhoods to centers, corridors, and open space
- Allow for an overall block structure of approximately 400-feet by 400-feet to allow for increased frequent street connectivity, solar exposure, and adequate sized development lots.

A graphic representation of the overall development master plan is shown in Appendix C, Figure 11.

#### 4.3.5 | Community Centers and Villages

Each community center will have a different role and identity in the community to create diversity, variety, and most importantly, destinations, within the overall community.

##### **North Station District**

The TOD is anchored by the BART station and the civic plaza. This area will have the highest intensity mixed-use development and the most urban characteristics of Phase One, with shopping, employment, and residential uses located within a five to 10-minute walk to the BART station. At the heart, North Station will feature a major civic plaza, pedestrian friendly shopping street, and a market pavilion. The mix of uses within the TOD will ensure vitality throughout the day, ranging from workers making their way to BART in the morning to families enjoying the farmer's market and restaurants in the evening. Special urban design and park features outlined in Section 4.3.7 will make this district particularly friendly to pedestrians, while accommodating vehicular and parking away behind buildings fronting Los Medanos Boulevard. The current BART parking lots, outside the Phase One area, could be redeveloped in the future as office or mixed uses to further enhance the transit-oriented and urban character of this district. A conceptual build-out, suggested imagery of the North Station District, and projected building heights are shown in Exhibit 4-4 (see Appendix C, Figures 12, 13, and 14).



Exhibit 4-4. North Station District Aerial Perspective



### Canal District

The Canal District is at the geographic center of the Phase One area. It has a civic center and is a 10-minute walk and likely three transit stops from North Station and Willow Pass Village. It is a logical school and playfield site providing easy access for children and families on pedestrian/bike friendly and neighborhood streets. The Canal District provides a potential school site, active parks, and a civic area for a future community and/or recreation center. The existing Contra Costa Canal runs through the civic area and will be enhanced with trails and plants. Typical low density residential areas that would be found in the Canal District are shown in Appendix C, Figure 15.

### Willow Pass Village

Willow Pass Village provides a neighborhood village center another 10-minute walk and/or three transit stops along Los Medanos Boulevard that serves the eastern neighborhoods of the Phase One area. This center, adjacent to Willow Pass Road, provides a local hub for transit connections, convenience retail and restaurants, civic uses, and a community park. This hub of activity will have many of the same urban design features found in North Station, but at a more neighborhood scale. The village core concept plan is shown in Exhibit 4-5 (Appendix C, Figure 16).

Exhibit 4-5. Willow Pass Village Core Concept Plan





### Village Shopping Center (at Route 4)

Village Shopping Center (at Route 4) is a regional shopping destination that lies adjacent to Route 4 and Willow Pass Road. The retail area will be an active shopping area with easy access and generous parking. It is organized around a village main street, which will accommodate smaller shops and restaurants and provide short-term parking. Larger format stores will anchor each end of the street so that there is significant pedestrian traffic along the street. A cross-axis paseo is provided that connects to larger format and line stores and parking behind the shops fronting the village main street. The main shopping axis and other areas of the shopping village will have many of the urban design features found throughout the Phase One area and significant tree cover for shading and buffering reflective surfaces. A concept plan for the shopping area and proposed building heights are shown in Appendix C, Figures 17 and 18, respectively.

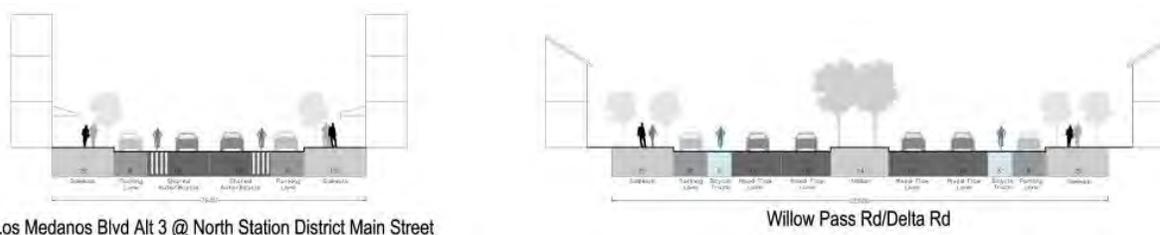
#### 4.3.6 | Circulation/Mobility Plan

Three types of movement corridors are proposed to run the length of the Phase One area and provide future connections to the First Transfer Areas and future development south of Willow Pass Road. The multi-modal transportation framework is designed to move people safely and efficiently with a focus on the reduction of energy use. These corridors each have a different focus providing multi-modal transit, great streets for shopping and walking, vehicular connectivity, and linear green spaces. The east/west corridors are on relatively flat terrain to encourage biking and walking. Exhibit 4-6 shows the overall circulation and mobility plan for the Phase One area followed by typical street sections in Exhibit 4-7 (see Appendix C, Figures 19, 20, and 21).

#### Exhibit 4-6. Circulation/Mobility Plan



#### Exhibit 4-7. Street Sections





### Los Medanos Boulevard

Los Medanos Boulevard will be the central lifeline of the Phase One community that will connect the CRP village neighborhoods and eventually out to Bailey Road. This central spine runs on a northwest to southeast axis through the center of the Phase One area and combines transit, pedestrian and biking ways, and local community vehicular traffic in a pleasant, shaded environment. With unique urban design features, pocket parks, and outdoor seating areas, it becomes the place for shopping and community activities at village nodes. Three major community nodes are located along this corridor separated by a 10-minute walking distance (one half mile). Within the TOD, the boulevard is narrowed down to discourage through traffic and encourage high pedestrian usage.

### Primary Streets Collector

Los Medanos Boulevard is designed for local vehicular traffic, not through traffic. Through traffic is encouraged to follow Primary Street A to access parking areas behind the mixed-use retail areas in the TOD, residential neighborhoods, and eventually Willow Pass Road and the neighborhoods beyond.

### Central Greenway

The Central Greenway is the living, breathing natural corridor that ties together the entire Phase One area connecting the BART station to the new East Bay Regional Park District Park to the east. It runs along the north border of Phase One area and integrates multi-use trails, natural areas, playfields and parks, and community gardens that run parallel and are easily accessible to the villages and neighborhoods to the south.

### North/South Neighborhood Streets

North/south neighborhood streets run north and south perpendicular to these corridors and are low key neighborhood streets that connect to transit, commerce and civic activity, and diverse green spaces. While the northwest to southwest corridors are largely on flat terrain, the north to south neighborhood streets will be at an approximately 4 to 6 percent slope, which is gentle enough for walking or biking and allows for enhanced solar exposure and upper story views. The east/west block face will be about 30 degrees off west for best solar orientation. Blocks should be interspersed and connected with minor neighborhood streets, yield streets, alleys, and paseos.

### Multi-Modal Circulation

Complete streets throughout the plan, along with the highly integrated open space and trails network, safely accommodate pedestrian and bicycle circulation within and between neighborhoods and among destinations. Elements in the public transit, located in dedicated lanes along Los Medanos Boulevard, provide convenient, efficient east-west



transportation across the community and to the BART station and civic square. The bicycle, pedestrian, and mass transit opportunities provided by the plan to reach destinations within and beyond the plan area minimize the need for single occupancy vehicle trips. Generous tree-lined sidewalks encourage walking. Class I and Class II bike paths encourage bicycle circulation.

There is the potential to allow low-emitting/fuel efficient vehicles to access the public transit lane to promote the use of energy efficient vehicles and to optimize the use of this dedicated lane.

Preferred parking for energy efficient vehicles will be provided for 10% of the total vehicle parking capacity at commercial, school, and park locations. Electric vehicle charging stations will be provided for 5% of total vehicle parking capacity

#### 4.3.7 | Open Space and Park System

The Phase One area and CRP future open space system will connect to local parks and a regional park system anchored by the new 2,700-acres East Bay Regional Park District park. The open space framework creates greenway connections to this regional park to serve new residents of the CRP, visitors and residents arriving via the North Concord BART Station, and Concord neighborhoods to the west and south of the CRP. Additional connectivity to parklands within the site and the regional park are provided by trails adjacent to the existing Contra Costa Canal and through neighborhood buffers provided between the CRP and existing Concord residential neighborhoods. The overall concept for park and open space connectivity within and external to the Phase One area is shown in Exhibit 4-8 (see Appendix C, Figure 22). The open space system is a highly integrated network of parks, open spaces, non-motorized circulation networks and gathering spaces that unify and connect the community in an inviting and stimulating outdoor environment. The system provides visual structure to the community, with clearly defined edges, corridors, nodes, and rooms and sets the visual tone of an upscale, yet historically agricultural community. Street tree palette and spacing reflects the circulation hierarchy, assisting users to navigate the community via a verdant wayfinding system. Other landscape elements, such as paving, understory planting, lighting, furnishings, and public art work together to identify distinctions in uses, districts, and pedestrian/vehicle orientation.

The bicycle and pedestrian circulation network and recreation opportunities provided play an important role in creating the lifestyle that contemporary Californians are seeking, a lifestyle characterized by sensitivity to the environment, physical activity, connection to nature and the outdoors, social interaction, and local food production.



The open space system has been carefully designed to be environmentally responsible and to promote the physical and social health and wellbeing of residents and visitors to the community. A variety of elements work together to result in a community that offers many of the key determinants of quality of life, health, and happiness. The open space system is designed to encourage people to get out of their cars and enjoy walking, cycling, shopping, playing, eating, socializing, and gardening in their community.

Fourteen distinct components of the open space system are discussed below and example imagery for each component is provided in Appendix C, Figure 23. Where these components would be typically found within the North Station Area, Willow Pass Core, and typical Village Residential Area are shown Appendix C, Figures 24 through 37. Each of the 14 components is discussed below.

### Residential Paseo

Residential paseos are provided where front entries face one another or face a park. Paseos are richly landscaped as they constitute residents front yards and are likely to be where neighbors stop and chat. Paseos are 18 to 25 feet wide with ornamental planting and low fencing to delineate private from public. A minimum five-foot sidewalk provides for comfortable circulation.

### Paseo Crossing Boulevard

Where paseos cross streets parking is replaced with bulb-outs to narrow the street and slow traffic. Special paving, portal elements, and directional kiosks enhance these areas and improve pedestrian safety by making crossings distinct and highly visible.

### Retail Paseo

Where paseos transition to retail uses, site elements, such as benches, lighting, paving, and architectural portals communicate a change in land uses. Paseos widen to thirty feet to allow storefronts to face the paseo and provide elements, such as outdoor seating and dining, which activate the space and enhance vitality.

### Active Corner

Retail corners on major streets, such as Los Medanos Boulevard, are highlighted by a break in street tree planting and the use of specimen or identity trees. Bulb-outs and special paving at crosswalks calm traffic and enhance pedestrian safety. Store fronts orient to the corner with gathering plazas, seatwalls, planting, and fountain or art elements to activate the space and promote use and social vitality.

### Paseo through Parking

Paseos through parking have special paving and planting at crossings to alert vehicles to their presence. They are screened from parking with planting where appropriate.



## Community Park

Community parks are a destination for active, passive, and civic activities. They are made of several components that create structure and make them an important part of the circulation network, including:

- **Park Edge Promenade** | a 12-foot promenade with a double row of trees provides an attractive, comfortable place to stroll and highlights the presence of the park within the streetscape
- **Internal Park Promenade** | assists in defining civic and recreational spaces within the park, is part of a direct connection between the park, retail, and residential uses, and has a double row of trees that provide much-needed shade and a rich visual amenity
- **Recreation Green** | allows for organized and informal sports play.

## Corner Retail Plaza

The corner retail plaza creates restaurant and retail-oriented space that is open to the community and highly visible to street traffic. Enhanced hardscape, moveable seating, dining patios, decorative lighting, and fountains or other art elements make this place inviting and create an easily identifiable meeting spot within the community. Distinct planting distinguishes the space from the rest of the streetscape.

## Widened Sidewalk

A widened sidewalk creates a strong connection between the corner retail plaza and the park, drawing users between the two destinations by foot and facilitating use of both.

## East/West Connectors

Several east/west spines provide non-motorized connections through the community connecting the greenway and future commercial/flex uses through the plan area neighborhoods to existing neighborhoods to the west and south. In some cases, these connectors are part of the streetscape, but with enhanced bicycle and pedestrian facilities, such as Class I bike lanes and widened sidewalks. One of the connectors takes advantage of the existing canal alignment and will be a multi-purpose trail through the civic green and school green to the greenway. Activity nodes will be provided along the connector and may include rest stops, exercise stations, play areas, or dog parks. Distinct planting, identifier trees, special lighting, and seating will make the connectors attractive, safe, and inviting elements of the open space and circulation system.

## Buffer

A minimum 275-foot buffer is provided along the plan edge adjacent to existing neighborhoods. This buffer will include a 12-foot multi-purpose trail through



harvestable orchard trees over disked understory, and/or community gardens or low hydroseeded bunch grasses. This buffer will evoke the local agricultural history with a rustic, remnant orchard feel. In addition to providing a visual and sound buffer for existing neighborhoods, this area becomes a recreation opportunity and visual amenity, as well as a potential local food source and revenue generating opportunity for the community.

### Civic Green

The civic green provides a large central public space for community buildings, ceremonial greens, and plazas suitable for holding events, such as festivals, farmer's markets, and Fourth of July celebrations. The civic green is part of a large public open space spanning the community from the buffer to the west of the Phase One area to the greenway along the northeast. Together they create a strong visual sense of open space as an integral and prominent part of the community.

### Greenway

A generous greenway follows the northeast edge of the plan area, providing a unique linear open space and non-motorized circulation route along the entire length of the plan area from the TOD area at the north to the southeast end of the community. The greenway connects the future sports park to the civic square and BART station, allowing regional visitors to travel by public transit and bicycle to the park. The greenway will provide landscape-based storm water management and will celebrate Concord's California setting and agricultural past with naturalistic, climate-appropriate planting and orchard groves. Activity nodes along the greenway will provide recreational opportunities and draw residents from the neighborhoods. Activities may include community gardens, dog parks, orchards, natural play areas, and exercise stations.

### Los Medanos Boulevard

Los Medanos Boulevard becomes the central organizing circulation spine of the community. As a complete street, Los Medanos includes bike lanes and generous pedestrian sidewalks, becoming an important part of the open space network. Segments of the streetscape in the commercial and higher density areas are enhanced with main street amenities, such as benches, planters, kiosks, and art. The streets' importance in the overall hierarchy is reflected in its scale and landscape treatments. Distinct street trees, enhanced sidewalk and crosswalk paving, traffic calming at crossings, street lighting, and furnishings are used to express the importance of this street within the community.

### Civic Square

The civic square is a contemporary interpretation of the traditional town green. As the central open space in the TOD area, the civic square offers a space to meet, gather, rest,



and observe in the higher density area of the community. Open lawn allows for informal activities. Hardscape areas can be used for gathering, performances, markets, or festivals. Sculptural elements express the character of the place and create landmarks. Residents of the TOD may use the civic square as their backyard.

#### 4.3.8 | Civic Uses and Public Facilities

The requirements and need for Phase One public facilities have yet to be fully determined. However, it is anticipated that as neighborhoods are completed and occupied, the demand for public facilities will increase. Public facilities provide the core civic uses within the community centers. The Phase One plan has reserved several sites for public facilities as follows:

**North Station Civic Site** | at the terminus of the Los Medanos shopping and mixed-use corridor a prominent location has been reserved for a future library, community, or recreation center.

**North Station Open Market** | adjacent to the civic site an area has been reserved for a likely open air pavilion to accommodate farmer's market, festival, and community events.

**Canal District School Site** | a 10- to 12-acre site has been reserved for a future elementary school and sport fields.

**Canal District Civic Site** | a five-acre site has been reserved for community use as a community recreation or senior center.

The planned civic uses and public facilities are shown in Appendix C, Figure 38.

#### 4.3.9 | Infrastructure and Backbone Construction

The project is envisioned to be developed in six sub-phases (see Appendix C, Figure 4). The sequencing of the sub-phases is driven primarily by existing infrastructure capacity and utility points of connection, economic factors, the desire to provide continuous connectivity between sub-phases, and the transfer timing of the large remediation area central to the Phase One area. Development will begin in the southeast with a small portion, approximately 150 – 250 units, of single-family residential being constructed prior to the new PG&E substation coming online. Once the PG&E substation is in place, construction of the entire length of Alpha Road will provide the critical transit connection for residences at both ends of the project to the BART station, as well as a means of routing utilities across the site. A new Willow Pass Road bridge will be assessed to replace the existing aged structure and provide access to the proposed retail site at State Route 4. Once the supporting infrastructure and residential units are



in place, the Village Retail area located along Willow Pass Road will come alive. Construction will then continue westward towards the future school site. With the eastern half of the project complete, focus will turn towards the higher density residential, retail, and offices adjacent to the BART station creating a gateway plaza for nearby residents and commuters. The final phase of development will round out the residential areas adjacent to the main street retail, as well as grading and provisions for the utility connections for the future civic site adjacent to the school.

### Grading and Drainage

**Grading** | The grading approach for the Phase One area sets out to preserve the natural topography, provide for constructability and walkable streets, and minimize earthwork. Earthwork will be managed by sub-phase to minimize the need for stockpiling or hauling off site. For instance, the retail site at State Route 4 will require significant fill in order to achieve desired visibility from the highway. It can serve as a stockpile site for early phases. The overall site is intended to result in some export for use on future phases of the CRP. It is anticipated that some stockpiling will occur outside of the Phase One boundaries to the extent that timing of land transfers will allow. (See Appendix C, Figure 39).

**Liquefaction Susceptibility** | A portion of the Phase One area is located in an area mapped for potential liquefaction susceptibility. Based on subsurface information on nearby sites in generally similar soil conditions, the potential for damaging liquefaction in the Phase One area is not anticipated to be significant. If the amount of differential settlement exceeds common design practices, then ground improvement techniques or use of a deep foundation would be incorporated. For initial planning purposes, if the potential for liquefaction is found, an estimated 80 percent of the mapped liquefaction area could be addressed by incorporating common differential settlements into foundation design, while 20 percent of the mapped liquefaction area may require ground improvement or deep foundations to support planned structures.

**Drainage** | Storm drain runoff will be captured throughout the site in a series of detention basins that will provide both storage and water quality treatment. Release from these basins to the Contra Costa Canal and existing storm facilities in Willow Pass Road will be metered to maintain the pre-development peak flows. Storm drain detention basins will serve dual purposes as water quality features and as storage for the 100-year runoff. Treated runoff will be conveyed to the Contra Costa Canal and existing 36-inch stub in Willow Pass Road. On-site detention basins will be sized in order to maintain the pre-development peak flow rates. Additional water quality treatment will be achieved via a combination of street side flow through planters, rain gardens, and bio-retention swales in the greenways. (See Appendix C, Figure 40).



## Utilities

**Potable Water** | The existing 48-inch Zone 2 water main in Port Chicago Highway near the westerly boundary of the Phase One area and the existing 8-inch Zone 2 water main in Willow Pass Road near the southerly boundary of the Phase One area will serve the development.

Phase One development will construct the backbone distribution mains and storage tank that will serve the Phase One area and future phases of the CNWS. The construction of the Phase One area backbone water distribution and storage system will be phased into six sub-phases as shown in Appendix C, Figure 41.

- Sub-Phase 1 will be served from the existing 8-inch Zone 2 water main in Willow Pass Road. It will construct the water storage tank located outside of the Phase One boundary and the backbone distribution system within the Phase One streets.
- Sub-Phase 2 will complete the looping of the Zone 2 water system from Port Chicago Highway through the proposed backbone streets of Phase 2 to Willow Pass Road.

The remaining distribution system will be constructed within Sub-Phases 3 thru 6 on an as-needed basis as the remaining sub-phases are developed. The potable water system for the Phase One area will be sized to meet the demand of future phases of the CNWS development and will meet the requirements of Contra Costa County Water District and other affected public agencies.

**Recycled Water** | The recycled water for the Phase One development and the future phases of the CNWS will be provided by Contra Costa County Sanitary District. The capacity of the Contra Costa County Waste Water Treatment Plant to produce recycled water needs to be increased to meet the projected demand for Phase One. Off-site transmission mains will need to be constructed to deliver the recycled water from the treatment plant to the Phase One area. The potential transmission main route will be from the treatment plant east parallel to State Route 4 to the westerly boundary of Phase One near Port Chicago Highway.

Development will construct the backbone distribution mains within the Phase One area and the off-site storage tank to serve Phase One and future phases of the CNWS. The construction of the Phase One area backbone water distribution system will be phased into six sub-phases as shown in Appendix C, Figure 42.

- Sub-Phase 1 will construct the distribution main within the Sub-Phase 1 streets for future use when the off-site recycled water delivery system is constructed.



- Sub-Phase 2 will construct the off-site delivery system, off-site tank, pump station, and distribution main thru Sub-Phase 2 streets to Sub-Phase 1.
- The remaining backbone recycled water system will be constructed on an as-needed basis as part of the Sub-Phase 3 thru 6 developments.

The on-site backbone recycled water system and the off-site delivery system design, route, and sizing will meet the requirements of Contra Costa County Sanitary District, Contra Costa County Water District, and City of Concord.

**Sewer** | The sewer flow from the developments of the Phase One area and the future phases of CNWS will be discharged into the City of Concord sewer trunk line on Willow Pass Road. The existing Willow Pass Road trunk line needs to be upgraded to accommodate the additional sewer flow from the proposed CNWS development.

The backbone sewer system for the Phase One area will be sized to accommodate the future sewer flow from the remaining development plans of the CNWS. The construction will be phased into six sub-phases as shown in Appendix C, Figure 43.

Due to the Phase One area existing topography, proposed grading, and other physical constraints, our preliminary studies indicate that up to three sanitary sewer pump stations will be needed to connect the Phase One backbone sewer mains to the existing Willow Pass Road trunk line.

- Sub-Phase 1 will be served by gravity to the Willow Pass Road trunk line.
- Sub-Phase 2 will construct two sewer pump stations. Pump Station 1 will be near the southwesterly boundary for Sub-Phase 6 and will be sized to accommodate the sewer flow from Sub-Phases 2, 5, 6, and future developments north and south of the Phase One area. Pump Station 2 will be located north of Sub-Phase 3 near Willow Pass Road and will be sized to accommodate the flow from the proposed highway retail site near State Route 4's Willow Pass Road.
- Sub-Phase 3 will construct Pump Station 3 located near the northwesterly corner of Sub-Phase 3. It will be sized to handle the new flow from a portion of Sub-Phases 3, 4, and future developments north and east of the Phase One area.

The backbone sewer distribution system will be constructed on an as-needed basis as the sub-phases are developed. The sanitary sewer system will be sized to meet the requirements of the City of Concord and the Contra Costa County Sanitary District.

**Electrical** | Due to the long lead time of the proposed PG&E substation, the initial phase in the southeast corner of the project will be limited to between approximately



150 to 270 units of single-family residential using the current electrical service available. Once the substation is online, service will be extended to the site along major roadways. (Appendix C, Figure 44).

Existing overhead facilities in the area will be removed, re-routed, or converted to underground, based upon the extent of conflicts as the project develops. PG&E electric facilities will be extended per PG&E Rule 15 Main-Line Extension tariff through the major streets of the new development. Electric services to new homes and commercial projects within the development will be accomplished per PG&E Rule 16 New Service tariff from the newly installed main-line to each building's service point. PG&E's standards require the use of padmount transformers and equipment. However, if the water table is sufficiently low (beyond 10.5 feet below grade), then subsurface equipment can be used (at additional expense).

**Gas** | PG&E gas main will be extended from its current location along Willow Pass Road (near the west side of the project) and extended per PG&E Rule 15 Main-Line Extension tariff through the major streets of the new development. It is expected that the gas system will ultimately be tied back into other existing gas lines near the BART station at the west end of the new development. Gas services to new homes and commercial projects within the development will be accomplished per PG&E Rule 16 New Service tariff from the newly installed main-line to each building's service point. All new trenching will be joint with gas, electric, and telephone/cable television.

**Cable/Phone** | Telephone and cable television trunk lines will be extended from Willow Pass road in a joint trench with gas and electric facilities. Vaults and pull boxes will be located per local utility practices and services to new homes and commercial developments will be coordinated.

### Surface Improvements

The initial project phases will improve Willow Pass Road. In Sub-Phase 1, Willow Pass Road will be widened to four lanes from Landana Drive, currently the location where the four-lane section ends, to Los Medanos, the location of the first land use development within the project. In Sub-Phase 2, the remaining portions of Willow Pass Road between State Route 4 and Los Medanos will be improved to four-lane standards, including the bridge. This improvement will provide connectivity between the retail site near State Route 4 and the entire project. This section of Willow Pass Road is currently congested. The planned four-lane improvement will provide greater community benefits by providing increased capacity.

Following the first phase, the construction of Los Medanos, a complete street, creates the backbone for all roadways. This construction will commence in Sub-Phase 2. Los



Medanos will create the interconnection of the entire Phase One area and provide connectivity from the eastern portion to the BART station.

The community and yield streets will then connect the neighborhoods to Los Medanos and the collectors for circulation throughout the entire project. In the event that delivery of the remediation areas is delayed, roadway infrastructure has been routed to serve this interim condition without the need for temporary improvements, while still providing adequate levels of service to the project.

#### 4.4 | Affordable Housing Approach

SunCal anticipates a total of 793 affordable units of which 235 would be very low, 186 would be low, and 372 would be moderate. This does not include an additional 130 to 260 units of housing for formerly homeless persons or the 60 units set aside for Habitat for Humanity self-help housing. Consistent with the City of Concord's direction, the first affordable housing project will begin after the first 200 market-rate units are constructed. We envision build-out of the required Phase One area affordable housing units to require at least four stand-alone affordable projects of varying size. The timing of each affordable project will be coordinated with the larger phasing and delivery of the market rate and homeless units. This strategy will allow SunCal to compete in multiple competitive nine percent tax credit rounds and some non-competitive four percent rounds. The potential to meet the requirement for moderate income housing via units mixed into other market-rate housing product will need to be fully explored closer to bringing the housing to market to understand fiscal impacts to the project.

SunCal carefully considered the best placement of the affordable housing parcels within the larger Phase One area. We have made sure that the affordable housing parcels are located near market rate parcels to foster integration and result in a truly mixed-income community. In selecting the affordable parcels, we considered proximity to transit and community serving amenities to ensure walkability and affordable sites that will score for competitive state and federal affordable housing funding. A detailed tax credit amenity scoring analysis is available in Appendix D. The analysis shows that portions of the North Concord TOD Core and North Concord TOD Neighborhood score for nine percent tax credits and potentially other TOD funding programs, such as Prop 1C TOD and the new Cap & Trade program.

While the TOD areas represent the ideal location for leveraging affordable housing funding, we agree with the City that the affordable sites should not be clustered into a single area. We propose that as many as two of the proposed affordable housing sites be within the Village Center and/or Central Neighborhoods and that further dispersal of moderate income housing be explored as detailed development plans are developed.



Affordable sites within the Village Center and Central Neighborhoods will likely have to be funded with non-competitive four percent tax credits unless new amenities are built first that assist the sites to qualify them for nine percent credits. We have worked successfully with cities in the past to implement an in lieu fee program for affordable housing implementation. We would be willing to explore such a program in Concord if the City so desires.

In solidifying our approach to affordable housing, we studied the City's density goals set forth in the Preferred Alternative Development Plan and compared them to the minimum densities required by various affordable housing funding sources. We have concluded that affordable housing sites located within the TOD Core and TOD Neighborhood would have to be at least 40 dwelling units per acre to compete for State Cap and Trade and Prop 1C TOD funding, while sites within the Central Neighborhood and Village Center could be built at a much lower density (i.e., 15 to 35 dwelling units per acre). This result in a wide range of building types for the affordable parcels, including Type I concrete podium garage with Type IV residential and wrap product in the TOD areas and either stacked flats with tuck-under parking or surface parked townhomes in the Village Center and Central Neighborhoods.

In addition to our team member MidPen Housing, leading the affordable housing effort for SunCal will be Joe Guerra, Jeff Sofferman, and Mike Watson. Joe Guerra was the lead in the Mayor's office in San Jose on affordable housing policy from 1999 to 2006. During that time, the City of San Jose produced over 10,000 units of affordable housing through a variety of financial, regulatory, and planning mechanisms. This level of production has never been rivaled in the San Francisco Bay Area. Joe interacted with multiple affordable housing developers (both non-profit and for profit) to achieve that goal.

While at Archstone, Jeff Sofferman closed their first New York City development project with total costs of approximately \$300 million. The project consisted of two 24-story residential towers containing 627 rental units, grade level retail, public open space, two live performance theaters, and six condominium lofts. The project contained 125 affordable units and at the time was the largest New York State Housing Finance Agency 80/20 bond financed project (\$268 million offering). It resulted in a significant number of low income housing tax credits.

While at Pennrose, Mike Watson was involved with Pearl Street Apartments development in Hartford, Connecticut. This 201-unit project provided 41 (20 percent) affordable dwelling units with income restrictions. This project included \$5 million in CHAMP 4 funds from Connecticut's Department of Economic and Community Development. Mike was involved with the large-scale Big Apple West redevelopment in Passaic, New Jersey.



This project will consist of 500 residential dwelling units and 60,000-square feet of retail and will take advantage of multiple funding sources, including Low Income Housing Tax Credits that will restrict 20 percent of the residential units to the 50 percent of AMI level.

#### 4.5 | Approach to Entitlements and Environmental Documentation

Project-wide entitlements are in place for the overall CNWS development. These project-wide entitlements include the CRP Area Plan, Programmatic EIR, Navy EIS (assuming certification), and City of Concord approvals. Project entitlements for the Phase One area that need to be secured in the near term likely include a Specific Plan and amended or expanded environmental documentation related to CEQA.

The entitlement of the Phase One area must proceed as a partnership between the City, the SunCal Team, other stakeholders, and the public. The CRP Area Plan and previously City approved planning efforts have created consensus on the goals of the CRP. The SunCal Team shares those goals.

A key strategy of the SunCal Team is to ensure entitlements allow enough flexibility to address market fluctuations and unique opportunities as they arise. At the same time, both the SunCal Team and the City need to be confident that the planned Phase One entitlements can be implemented in the current and near term market conditions. Flexibility built into the entitlements, as expressed through the Specific Plan, need to consider the impact on the existing programmatic EIR, which is based on the approved CRP Area Plan. Significant changes in program, transportation, utilities, and other project components may trigger the EIR to be redrawn, recirculated, and recertified.

##### 4.5.1 | Transparent Partnership with Stakeholders

SunCal will work with the Local Reuse Authority and the City to ensure the negotiated development agreement will have the full support of the various stakeholders without impediments to entitlement. On an ongoing basis the SunCal Team will keep the Local Reuse Authority, council members, City staff, and the public fully informed of the SunCal Team's progress. We recommend an early workshop with the key stakeholders to review the entitlement process and solicit ideas and input. The City went through an extensive process of gaining stakeholder input prior to the issuance of the RFP. The SunCal Team will take that input as the foundation for every decision going forward.

Our process ensures we reach general consensus with stakeholders before the required submittals, disclosures, and hearings. Our partnership with the City, agencies, and the public will be established early in the entitlement process to facilitate proactive identification, discussion, and resolution of project issues and concerns. SunCal will keep



project stakeholders fully informed of the entitlement process via a website, blogs, social media, and community meetings.

#### 4.5.2 | Meeting the Requirements of the CRP Area Plan and Climate Action Plan

The SunCal Team will identify and categorize the specific requirements of the CRP Area Plan and Climate Action Plan. It is important to know if any of these requirements require special attention or discussion with agencies. Many of the requirements of these plans overlap. Design and development strategies proposed by SunCal often address multiple requirements at once. We will apply a whole systems approach to meeting the requirements of the CRP Area Plan and the Climate Action Plan. As applicable, these technical strategy and opportunity requirements will become part of the Specific Plan.

#### 4.5.3 | Specific Plan Development

The Specific Plan will comprehensively address the Phase One area development, including land use, open space, circulation and parking, public services, utilities, resource management, sustainability development standards and guidelines, and development phasing. The basis for the Specific Plan is the approved CRP Area Plan and the negotiated Phase One Development Agreement between the City and SunCal. Studies performed for the development of the CRP Area Plan will form the basis of expanded studies for the Phase One area. The SunCal planning team will work with the City to determine the extent and content of the Specific Plan.

As outlined in the Programmatic EIR for the CRP Area Plan and associated EIR Addendum, future discretionary approval is anticipated to be necessary to fully entitle Phase One. The development proposal values consistency with the Programmatic EIR, reflecting the planning goals, and the development plan of the preferred alternative. However, at a minimum additional environmental review will be required to complete the rezoning anticipated in the Programmatic EIR. The City must comply with CEQA during the rezoning of the Phase One area to reflect the land use outlined in the General Plan. Regional Water Quality Control Board and California Department of Fish and Wildlife must both comply with CEQA prior to issuing permits to impact wetlands or wildlife species. The SunCal Team proposes to design the project consistent with the existing EIR, where possible, to support a CEQA review consisting of a modified Initial Study checklist. This Initial Study would compare the proposed Phase One area project design to the Programmatic EIR to identify any new project impacts, required mitigation measures where possible, and determine if there is a need for an EIR Addendum.

SunCal's NEPA/CEQA experts have developed successful working relationships with agency staff through extensive experience in planning and environmental review of



projects with substantial, sensitive natural and cultural resources. The team offers directly analogous experience with military base reuse for public access in the San Francisco Bay Area (Almaden Air Force Station, Mount Umunhum). Team member Curtis Alling, AICP, has led numerous state- and regional-park planning and environmental review projects throughout California and is very familiar with the Concord Naval Weapons Station, having previously prepared the U.S. Navy NEPA documents for the explosive safety closure of Port Chicago Highway. Additionally, team member Ascent Environmental provided environmental permitting and planning services to SunCal for the Dublin Crossing mixed-use community project at the Parks Reserve Forces Training Area.

#### 4.5.4 | Permitting Coordination and Compliance

SunCal has an exceptional compliance record and extensive experience working with federal, state, and local officials to ensure protection of natural resources starting with project planning and continuing through full development. It is our understanding that the City is working directly with the state and federal resource agencies to obtain permits for impacts to wetlands and special-status species. The proposal assumes that a City-directed site-wide conservation and restoration plan will be in place prior to start of construction in the Phase One area and that SunCal will pay a fee to support the establishment of mitigation and associated monitoring. However, SunCal's strategy for successful permit negotiations and avoidance of schedule delays includes substantial support from SunCal's natural resource experts during the design phase. SunCal will support the City's efforts in securing state and federal permits by ensuring the design elements meet the agencies expectations with regard to protection of resources. For example, SunCal will work with the City to establish a variety of site-specific Low Impact Development features that will serve to manage storm water quality and will be a key consideration for the Regional Water Quality Control Board in their review of the project under the Clean Water Act Section 401. SunCal's natural resource specialists have a long history of successful procurement of Clean Water Act permits and Endangered Species Act consultations that will allow them to anticipate and effectively plan for agency preferences. A detailed description of the permitting coordination and compliance methods are located in Appendix E.

#### 4.6 | Conservation Open Space Areas

Consistent with the existing project mitigation measures as outlined in the MMRP, SunCal's Phase One area design minimizes impacts to wetlands, waters, and associated riparian habitat and does not require the placement of fill in any wetlands or waters. However, should the City choose to coordinate with SunCal for the restoration of Diablo Creek as part of the Phase One area work, the natural resources team will assist in



developing a site design and construction approach that is protective of the wetlands and other waters with the goal of enhancing the functions and habitat value of the creek corridor. These elements include implementation of appropriate construction avoidance and minimization measures as required by project permits, as well as thoughtful site design that buffers the creek with passive open space to minimize impacts from landscape runoff and changes in hydrology, while encouraging public use and interaction with the open space to ensure a sense of ownership and community engagement in the protection of the site's natural resources.

The City has indicated that they are currently preparing the site-wide HMMP and collaborating with the East Bay Regional Park District, who will manage the conservation areas. SunCal's strategy for successful adoption of the HMMP, includes active participation in the review of the HMMP and ensuring that the Phase One area design, access considerations, and construction methods are consistent with the measures and restrictions put forth in the HMMP.

## 4.7 | Approach to Labor Issues

### 4.7.1 | Prevailing Wages

SunCal has a tremendous amount of experience complying with prevailing wage and Federal Davis Bacon Act requirements. We often build turnkey improvements for local jurisdictions where prevailing wage is a requirement. Currently, the construction we are performing for the U.S. Army at Camp Parks in Dublin is Davis Bacon Act compliant. Prevailing wage requirements will be easily met with ongoing vigilance by our project managers and our proposed general contractor, Independent Construction, a signatory with both Local 3 Operating Engineers and Northern California Laborers with an agreement on wages that exceed California's prevailing wages.

### 4.7.2 | Local Hire and Apprentices Programs

We understand very clearly the City's desire for us to implement Hire Concord First to create local jobs for local workers, including the training and hiring of local veterans, using local businesses that can provide materials and supplies for the build-out of the CNWS Master Development, and further creating local jobs and enhancing the local economy. We will continue to employ a local preference policy as we move forward. Independent Construction, based in Concord, will ensure there are apprentice programs within companies used by as subcontractors.

We will work with the City to maximize development opportunities, at a competitive price, for local development firms. These opportunities would be for residential, commercial, or recreational facilities by local developers in Concord first and then



Contra Costa County or the nine San Francisco Bay Area counties. As the project progresses, we would look to team with qualified small businesses and disadvantaged business enterprises and to create opportunities for Concord-based employers and resident workers.

#### 4.7.3 | Veteran Apprenticeship Programs

Several of the local affiliates of the Contra Costa Building and Construction Trades Council, such as UA Local 342 and IBEW 302, located in Concord and Martinez, respectively, have Veteran's Affairs Certifying Officials for programs already in place to assist with recruitment of veterans. Through minimum requested or required veteran apprentice designations on subcontracts, we would create a real market based incentive for greater veteran participation on the project. Additionally, outreach could be provided regarding the availability of open apprenticeships and On-the-Job Apprenticeships, as well as matching Veteran's Affairs assistance programs through our team's established working relationships with the Contra Costa County Veterans Services Office, the local Veteran's Affairs Oakland Vocational Rehabilitation & Employment counselors, and several local not-for-profit veterans housing assistance programs.

Lastly, portions of the project that are struggling to maintain a minimum level of local veteran participation could be registered with the non-profit entity Helmets-to-Hardhats, an organization approved by the National Labor-Management Cooperation Committee to assist with placing qualified veterans on construction projects and introducing these men and women to available apprenticeships.

#### 4.7.4 | Relationship with Trade Union Representatives and Experience with Project Labor Agreements

Independent Construction has experience with Local 3 Operating Engineers and Northern California Laborers with an existing labor agreement with both. They are a union contractor and are our preferred contractor to provide grading and underground work.

SunCal has agreed to Project Labor Agreements before for the horizontal improvements of a master-planned development. Additionally, our proposed Team Manager, Joe Guerra, has an extensive background working with the Building Trades during the time he worked for the City of San Jose.



## 4.8 | Environmental Clean-up

The Phase One area includes areas of potential environmental concern that may require remediation to accommodate the proposed land use mix (see Appendix F for a more thorough discussion). Areas of potential concern include:

- Military Munitions Response Program Site 11 – Guam Way
- Former Inland Burn Area Site 13/Railroad Siding Excavation
- One Preliminary Assessment Re-Verification Investigation Sites T10, T11, T12, and Southern Railroad Excavation
- Preliminary Assessment Re-Verification Investigation Borrow/Dredge Fill Area
- Installation Restoration Site 22A Group 1 Magazine Area
- Installation Restoration Site 22A Group 2 Magazine Area
- Installation Restoration Site 27
- Arsenic in shallow soil
- Railroad tracks and ballasts
- Underground and above ground storage tanks.

### 4.8.1 | Effects of Remediation Work on Sequencing and Implementation

With the exception of potential soil contamination associated with the railroad tracks and use of herbicides, the City anticipates receiving closure and No Further Action/unrestricted use status on the remaining sites with existing environmental concerns. If the closure and No Further Action determinations for a remediation site are not granted, the City has indicated the sites will be removed from the Phase One area. Therefore, remediation of these sites will not impact sequencing and implementation.

The railroad tracks, ballasts, and berms will be removed during normal grading operations. Assuming that soil remediation can be conducted at a staging area within the CNWS site outside of the Phase One area, sequencing and implementation should not be affected.

### 4.8.2 | Potential Contaminants in Phase One Area

Chemicals of concern that may be encountered during grading, road building, underground utility installation, miscellaneous construction activities, and other operations in the Phase One area include:

- Fuel hydrocarbons
- Lubricating hydrocarbons
- Napalm
- Polychlorinated Biphenyls (PCBs)
- Arsenic
- Wood preservatives
- Chlorinated solvents and other volatile organic compounds
- Pesticides
- Metals



#### 4.8.3 | General Assessment and Remediation Approach

If an environmental condition is identified that warrants additional assessment or remediation, we would conduct further assessment, design a remedial approach, and implement active remediation. For the purposes of this discussion, it is assumed that the environmental condition would occur in a reasonably defined area (i.e., a site).

Further assessment would consist of defining the problem, gathering existing site information, identifying data gaps, developing an overall approach to the project, defining the detailed scope of work, developing a site-specific health and safety program, preparing initial deliverables, such as notifications and permits, implementing field operations, and preparing site characterization and/or removal action report for the site. If active remediation is warranted, the remedial design process would include identifying impacted media, developing a site conceptual model showing the potential receptors, conducting a human health and/or ecological risk assessment, identifying the remedial endpoints, evaluating potential remedial methods, conducting feasibility tests, developing the remedial design specifications, and preparing the remedial action work plan. After the remedial design is developed, active remediation would be implemented, including installing and maintaining an appropriate remedial system(s). These steps are discussed in further detail within Appendix F.

#### 4.9 | Environmental Sustainability

There is a strong cultural shift taking place in California in which residents are seeking lifestyles that emit fewer greenhouse gases, conserve resources, minimize ecological impacts, and emphasize local, organic food production. Achieving these goals in community design requires a holistic approach that telescopes from macro to micro, addressing everything from linkages to regional circulation networks down to the plant palette specified in the landscape. The SunCal plan for the CNWS maximizes the opportunities inherent in the community's prime location adjacent to regional mass transit, a proposed 2,700-acre regional park, and an existing community to create a mixed-used, livable community with strong internal multi-modal circulation and an integrated open space network that maximizes and encourages access to nature.

The foundation of our sustainable design strategy is to focus on and implement practical, specific, and measurable solutions. Too often in our industry, sustainable design is reduced to green rhetoric and clichés. With the Phase One area we have the opportunity to create a community where visitors and residents experience how tangible solutions can preserve and protect the environment now and for future generations. (Appendix C, Figure 45).



There are a number of significant categories our sustainable design strategy will address. These are critical to the success of the project and include energy, transportation, water, soils, and ecosystem services. Within these categories, the design team will seek out a program that is experiential in nature. These are solutions that can be seen, touched, and intuitively understood by residents and visitors to the community. This is an important part of our approach. We believe a sound sustainable strategy is more than technical solutions or policy.

A number of industry metrics for sustainable design will be used to ensure the project achieves these objectives. A key point in this strategy is to use a diversity of programs that span traditional measurement systems, such as LEED, with cutting edge and creative solutions. One example of this would be use of Sustainable SITES, which give an emphasis to land, soils, and water conservation, an issue of utmost importance in drought and erosion vulnerable California. In addition to these formal systems our sustainability program will look at accessible and interactive tools that residents can participate in. This could include measuring the walkability of the community through websites, such as [www.walkscore.com](http://www.walkscore.com).

Our sustainability strategy is designed to include a diverse program that is both practical and highly effective. Although the primary goal is to achieve a meaningful sustainable community, it is equally important that our solutions can be experienced and recognized by residents, visitors, and stakeholders.

The significant categories and areas of emphasis that our sustainable design strategy will address include:

- Energy, including renewables, such as solar rooftop, and parking lots
- Conservation, including the California Building Efficiency Standards (Title 24) and Carbon Credits/Offsets, such as:
  - <http://carboncredits.com>
  - [www.carbonfund.org](http://www.carbonfund.org)
- Transportation with an emphasis on walking and biking, including legitimate bike lanes that have a physical separation from traffic and multi-use parking facilities, such as solar shade structures, permeable paving, or a parking garden concept
  - [www.walkscore.com](http://www.walkscore.com)
- Water through conservation by using native plants, water efficient irrigation systems, or greywater recycling and storm water treatment
  - <http://water.epa.gov/polwaste/green/index.cfm>
- Soils protection, enhancement, and composting
- Ecosystem services through open space use and design and Sustainable SITES
- <http://www.sustainablesites.org/benefits/ecosystems-services>



LEED Neighborhood Development measurements (<http://www.usgbc.org/certification>) apply to new land development projects or redevelopment projects containing residential uses, non-residential uses, or mixed uses. Projects can be at any stage of the development process, from conceptual planning to construction. An example of our team's local sustainable project experience is the Treasure Island Master Plan ([http://www.som.com/projects/treasure\\_island\\_master\\_plan](http://www.som.com/projects/treasure_island_master_plan)).

#### 4.10 | Public Outreach and Communication

Participation in the planning and design process is critical to the successful realization of the CRP Area Plan for the former CNWS. Our approach to engaging with the community and stakeholders of a project is to seek active forums in which we can enter into dialogue to deeply understand the issues of an area. Our team is committed to engaging with the community, understanding their needs and concerns, and delivering an exemplary plan. This public planning process allows us to create master plans that fit well with the greater community and bring benefits to the area.

We anticipate working closely with the City and the U.S. Navy to establish a coherent, robust, and transparent strategy of engagement. We use various forms of technology to reach our audience, from websites through digital surveys and e-mailings, to Twitter feeds and Facebook pages. However, like our experience with the technical and innovation markets, a strong digital presence must be combined with on-the-ground traditional techniques for reaching the community. Typically, these methods include community workshops and open houses, formation of focus groups, small interviews, multi-lingual mailings, and other techniques. Each of these strategies provides informative insight into the community and the local issues. Our outreach and communications efforts include, but are not limited to:

- Introduction letter to the community
- Inclusive planning workshops
- Planning charrettes
- Website
- Community meetings and/or open house
- PowerPoint presentations
- Advertising
- Response program
- Media relations
- Briefing books
- Community involvement and sponsorships
- Newsletters
- Attendance at community group and Home Owner Association meetings
- Project brochure and fact sheet
- Response and benefit cards
- Site tours.



The SunCal Team's community outreach philosophy elements include:

**Inclusive** | SunCal's entitlement outreach efforts have been successful because we engage local residents early in the process. We maintain a constant level of two-way communication and community involvement throughout the campaign. Key to this approach is SunCal's inclusive planning process, a series of steps to obtain community input during the creation of the land use plan. Sometimes this means a series of interactive public planning workshops, other times it calls for postcards allowing local residents to outline what they would like to see in the new community. Regardless of the methods used, the goal is for local residents to know they had a hand in shaping the plan, which generally leads to broader acceptance when it is unveiled and when it is considered at public hearings.

**Open** | SunCal's project materials are always open and honest about exactly what it is we are proposing. The scope of our projects typically draws a great deal of interest and questions. We get in front of issues and position a project to best represent it to the community. Additionally, we offer numerous avenues for locals to communicate with us and we are always prompt in our response. This process allows us to identify locals engaged in the issue, build trust, develop positive relationships, and better understand community sentiment.

**Accessible** | SunCal typically takes an active role in the communities we join. This means more than just monetary sponsorships. We like to join Chambers of Commerce and other local groups, assist in the execution of local events, hold our own events, and attend community and civic functions. We become a member of the local community. This active involvement gets our project team out in the community to form relationships, answer questions, and solidify our position as a long-term neighbor.

Ultimately, our commitment to a two-way dialogue process allows many opportunities to discuss the project, provide feedback, and ask questions about our plans. We would like to point out that at the City Council hearings to approve our Dublin Crossing project not a single member of the public rose to speak out against any element of the project. Early community outreach and following closely what a community says they want before starting can lead to a very simple public hearing process.



# Section

5

Development Phase One  
Property Financing Strategy



## SECTION 5 | DEVELOPMENT PHASE ONE PROPERTY FINANCING STRATEGY

### 5.1 | Conceptual Development Budget

Exhibit 5-1 provides the budget summary in 2014 dollars. The cash flow details are provided on page 74 (Exhibit 5-4) and provided as an Excel spreadsheet on the USB flash drive.

Exhibit 5-1. Phase One Property Conceptual Development Budget

	Totals	Per Lot
<b>Number of Lots</b>	1,730	
<b>Purchase Price</b>	\$69,012,325	\$39,892
<b>Master Costs</b>		
Site Preparation and Grading	\$114,347,522	\$66,097
Street Improvements	\$84,310,905	\$48,735
Sanitary Sewer	\$21,701,436	\$12,544
Water Improvements	\$23,022,101	\$13,308
Storm Drain	\$11,062,725	\$6,395
Amenities and Special Construction	\$61,441,280	\$35,515
Utilities	\$51,856,382	\$29,975
Contingency @	\$91,935,587	\$53,142
Fees, Assessments, and Bonds – Map	—	—
Bonding Costs (Cash Deposit)	—	—
Consultants and Engineering	\$62,527,944	\$36,143
<b>Total Master Costs:</b>	<b>\$522,205,881</b>	<b>\$301,853</b>
<b>Intracts Costs</b>		
Impact Fees	\$95,150,000	\$55,000
Intracts	\$43,250,000	\$25,000
<b>Total Intracts Costs:</b>	<b>\$138,400,000</b>	<b>\$80,000</b>
<b>Total Costs (Master and Intracts):</b>	<b>\$660,605,881</b>	<b>\$381,853</b>
<b>Less</b>		
Earned Fee Credits	—	—
Prepaid Fees by CFD	—	—
Reimbursements	—	—
<b>Net Costs:</b>	<b>\$660,605,881</b>	<b>\$381,853</b>



## 5.2 | Conceptual Operating Statement

SunCal has assumed for-sale residential product, which will range in density from 20 dwelling units per acre to eight dwelling units per acre, will sell for between \$608,400 and \$856,440 in 2014 dollars, yielding finished lot values from \$288,796 to \$429,016. Higher density housing units have been assigned per door values that average \$40,000, a figure derived from an analysis of current market rents. Affordable units are subsidized at a rate of \$20,000 per unit. Commercial land sales average \$2,000,000 per acre. Maintenance costs, which will be funded through a combination of developer subsidy, homeowner association dues, and landscape maintenance district(s) are assumed to average \$180,000 per year for the life of the project.

## 5.3 | Conceptual 15-Year Discounted Cash Flow Model and Investment Return Metrics

Exhibit 5-2 provides the cash flow model assumptions. Details of the anticipated cash flow are provided in Exhibit 5-4.

### Exhibit 5-2. Cash Flow Model Assumptions

Item	Amount
Annual Inflation (costs)	2.0%
Annual Inflation (revenues)	4.50%
Construction Loan Type	Revolving
Peak Outstanding Loan	\$59,083,997
Construction Loan Interest Rate	9%
Cumulative Net Operating Income (nominal)	\$173,702,167
Resultant IRR	14.02% Levered
	13.46% Unlevered

## 5.4 | Land Acquisition Payment Offer

The Development Phase One Property represents both an excellent opportunity to acquire a large parcel in a highly supply constrained market and a unique challenge to successfully execute the vision described in this response. One of the biggest hurdles to overcome is the extraordinary cost required to bring the project to fruition. To that end, SunCal proposes to pay for the parcel from lot and land sales over time. Specifically, SunCal will deliver 10% of all net land sales proceeds (after commissions) to the City and/or the U.S. Navy within one month of receipt. As described more fully in the cash flow in Exhibit 5-4, this amount is estimated to be \$69,012,325 in 2014 dollars.



## 5.5 | Sources and Uses of Funds

Exhibit 5-3 provides a listing of sources and uses of funds for the Phase One development.

Exhibit 5-3. Sources and Uses of Funds

Source	Amount
Total Equity Contributions	\$309,257,721
Total Debt (construction)	\$349,711,740
Peak Debt (construction)	\$59,083,997
Public Funds (CFD)	\$195,453,753
Use	Amount
Land Payments	\$69,012,325
Construction Costs	\$522,205,881
Debt Service	\$18,056,829
City Impact Fees	\$95,150,000 (estimated)
G&A, Management, and Development Fees	\$64,604,174
Other Soft Costs (inclusive of approximately \$79 million of cost inflators)	\$96,712,188
Return of Capital	\$309,257,721
Project Profit	\$173,702,167

## 5.6 | Equity Contributions

SunCal has longstanding relationships with a number of well-capitalized equity providers, all of which have the financial wherewithal to fund the acquisition and development of the project. Letters from three such providers were supplied as a part of SunCal’s RFQ submission. Each of those firms remain committed to financing the project, subject to typical due diligence, should SunCal be selected as the developer for the Development Phase One Property.

## 5.7 | Debt Sources

In addition to equity contributions by both SunCal and its financial partner(s), SunCal expects to secure debt to assist in financing the construction of project infrastructure. To assist in securing debt financing, we may require a Lease in Furtherance of Conveyance (LIFOC) structure on the acquisition of the Development Phase One Property. We have successfully used this structure with the U.S. Army in our Camp Parks project located in



Dublin. SunCal has a long history of securing similar financing from national, regional, and local banks.

## 5.8 | Potential Public Financial Assistance

SunCal endeavors to work with the City, state, and other applicable entities to source public funds to offset the costs of qualified infrastructure. This may come in the form of a community facilities district, tax increment financing bonds, and/or other public financing programs.

# UPDATE --- THIS PAGE REPLACES THE FOLLOWING PAGE 74

SunCal  
 Concord Naval Weapons Station  
 Concord, CA

**Cash Flow Summary**

Budget/Actual Month Year	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget
	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028
# Lots	1,730				134	133	179	367	188	63	63		302	301	
Avg. Residual Lot Value (w/ Escalators)	469,876				362,894	362,280	439,832	421,025	403,119	593,808	593,808		526,353	525,768	
Avg. Finished Lot Value	563,246				449,489	448,874	529,925	512,041	495,014	689,415	689,415		627,812	627,227	
Avg. SF (By Product)	1,983				2,018	2,015	2,145	2,014	1,889	2,400	2,400		1,844	1,842	
Avg. Home Price (By Product)	1,062,930				880,047	878,984	1,012,449	980,479	950,040	1,272,751	1,272,751		1,159,918	1,158,946	
PSF (By Product)	517				436	436	472	487	503	530	530		629	629	
<b>REVENUES</b>															
Land Residual Total	\$ 928,958,169	\$ -	\$ -	\$ -	\$ 48,627,846	\$ 48,183,214	\$ 78,729,929	\$ 238,516,350	\$ 82,786,421	\$ 37,409,891	\$ 70,969,891	\$ -	\$ 158,958,467	\$ 164,776,160	\$ -
Deposits	0	-	-	-	4,818,321	10,927,664	(7,872,993)	(294,351)	(96,664)	(3,740,989)	(3,740,989)	31,721,463	(15,895,847)	(15,825,616)	-
Less: Lot Commissions	(27,868,745)	-	-	-	(1,458,835)	(1,445,496)	(2,361,898)	(7,155,491)	(2,483,593)	(1,122,297)	(2,129,097)	-	(4,768,754)	(4,943,285)	-
<b>NET PROJECT REVENUE</b>	<b>901,089,424</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51,987,332</b>	<b>57,665,382</b>	<b>68,495,039</b>	<b>231,066,509</b>	<b>80,206,164</b>	<b>32,546,605</b>	<b>65,099,805</b>	<b>31,721,463</b>	<b>138,293,866</b>	<b>144,007,260</b>	<b>-</b>
Add: Other Revenue	244,383,767	-	-	-	369,029	735,304	16,491,381	29,773,119	21,258,734	22,104,801	19,924,738	7,117,680	56,824,737	35,777,549	34,006,693
<b>TOTAL PROJECT REVENUE</b>	<b>\$ 1,145,473,190</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 52,356,362</b>	<b>\$ 58,400,686</b>	<b>\$ 84,986,420</b>	<b>\$ 260,839,627</b>	<b>\$ 101,464,898</b>	<b>\$ 54,651,406</b>	<b>\$ 85,024,543</b>	<b>\$ 38,839,143</b>	<b>\$ 195,118,603</b>	<b>\$ 179,784,809</b>	<b>\$ 34,006,693</b>
<b>IMPROVEMENT COSTS</b>															
Land	\$ (90,108,942)	\$ -	\$ -	\$ -	\$ (4,716,901)	\$ (4,673,772)	\$ (7,636,803)	\$ (23,136,086)	\$ (8,030,283)	\$ (3,628,759)	\$ (6,884,079)	\$ -	\$ (15,418,971)	\$ (15,983,288)	\$ -
Commission @ Land	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hold Costs	(2,590,000)	(55,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(75,000)
Site Prep and Grading	(114,347,522)	-	-	-	(3,259,291)	(6,756,317)	(19,614,885)	(17,204,811)	(13,917,257)	(14,832,657)	(10,555,800)	(6,583,244)	(14,415,507)	(7,207,753)	-
Street Improvements	(84,310,905)	-	-	-	(1,456,709)	(3,761,346)	(17,666,771)	(12,828,438)	(8,112,820)	(15,169,897)	(11,204,339)	(6,620,771)	(4,993,209)	(2,496,605)	-
Sanitary Sewer	(21,701,436)	-	-	-	(4,205,498)	(7,093,411)	(3,296,715)	(671,008)	(68,621)	(136,239)	(187,258)	(150,284)	(75,142)	-	-
Water Improvements	(23,022,101)	-	-	-	(4,341,452)	(7,284,548)	(5,547,208)	(3,268,024)	(876,973)	(352,754)	(445,764)	(485,152)	(280,150)	(140,075)	-
Storm Drain	(11,062,725)	-	-	-	(290,444)	(714,822)	(3,100,915)	(2,149,740)	(1,069,883)	(510,495)	(1,001,612)	(1,329,215)	(597,052)	(298,526)	-
Amenities & Special Construction	(61,441,280)	-	-	-	(1,969,847)	(3,688,184)	(7,712,534)	(9,011,180)	(9,872,332)	(6,252,632)	(6,773,684)	(6,805,698)	(6,636,793)	(3,319,397)	-
Utilities	(51,856,382)	-	-	-	(820,139)	(1,930,491)	(7,700,404)	(8,012,547)	(7,709,478)	(6,888,344)	(6,118,781)	(5,010,894)	(5,110,202)	(2,555,101)	-
Contingency @ 25.00%	(91,935,587)	-	-	-	(4,085,845)	(7,807,280)	(16,639,994)	(13,942,864)	(10,557,438)	(11,018,850)	(9,059,055)	(6,755,563)	(8,045,799)	(4,022,900)	-
Fees, Assessments & Bonds - Map	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bonding Costs (Cash Deposit)	(55,161,352)	-	-	-	(6,303,875)	(15,807,994)	-	(9,157,240)	(10,467,907)	-	(5,780,826)	(7,643,509)	-	-	-
Consultants and Engineering	(62,527,944)	(545,618)	(6,547,410)	(6,547,410)	(4,065,687)	(16,051,194)	(4,700,717)	(4,737,783)	(8,503,162)	(2,510,953)	(2,626,535)	(5,691,475)	-	-	-
Insurance	(7,220,169)	(25,000)	(25,000)	(25,000)	(4,679,239)	(2,265,930)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)
G&A	(44,346,077)	-	(1,200,000)	(3,751,833)	(3,751,833)	(3,751,833)	(3,751,833)	(3,751,833)	(3,751,833)	(3,751,833)	(3,751,833)	(3,751,833)	(3,751,833)	(3,751,833)	(1,875,916)
Project Management	(28,918,362)	(27,281)	(327,371)	(327,371)	(1,539,939)	(3,544,779)	(4,395,034)	(4,180,467)	(3,587,913)	(2,880,260)	(2,685,132)	(2,355,640)	(2,011,450)	(1,005,725)	(50,000)
Asset Management Fee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal, Closing, etc. @ Land Purchase	(5,150,000)	-	(550,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(200,000)
Legal, Closing, etc. @ A&D Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal, Closing, etc. @ Lot Sales	(432,500)	-	-	-	-	(33,500)	(33,250)	(44,750)	(91,750)	(47,000)	(15,750)	(15,750)	-	(75,500)	(75,250)
Master Marketing Program	(9,528,662)	-	-	-	(595,541)	(893,312)	(2,233,280)	(893,312)	(893,312)	(893,312)	(893,312)	(893,312)	(893,312)	(893,312)	(446,656)
Costs Inflation	(87,506,939)	-	(146,048)	(296,229)	(1,933,180)	(5,960,639)	(9,466,380)	(10,765,743)	(10,932,607)	(10,184,639)	(10,807,484)	(10,688,430)	(10,199,162)	(5,865,995)	(260,401)
Soft Cost Contingency / Audit	(2,070,000)	-	-	(180,000)	(180,000)	(180,000)	(180,000)	(180,000)	(180,000)	(180,000)	(180,000)	(180,000)	(180,000)	(180,000)	(90,000)
Intract Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Property Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition & Developm - Points	(700,000)	-	-	-	(700,000)	-	-	-	-	-	-	-	-	-	-
Acquisition & Developm - Interest Reserve	(17,322,792)	-	-	-	(513,144)	(2,393,564)	(4,155,212)	(3,044,493)	(2,028,230)	(1,724,675)	(628,369)	(1,004,589)	(1,352,446)	(478,070)	-
<b>TOTAL DEVELOPER IMPROVEMENT COSTS</b>	<b>\$ (873,261,676)</b>	<b>\$ (652,898)</b>	<b>\$ (9,000,829)</b>	<b>\$ (11,732,843)</b>	<b>\$ (44,701,123)</b>	<b>\$ (94,943,276)</b>	<b>\$ (117,419,448)</b>	<b>\$ (114,736,743)</b>	<b>\$ (116,989,989)</b>	<b>\$ (85,927,205)</b>	<b>\$ (76,923,274)</b>	<b>\$ (73,516,431)</b>	<b>\$ (59,247,200)</b>	<b>\$ (48,413,905)</b>	<b>\$ (19,056,511)</b>
<b>FINANCING</b>															
Acquisition & Development Loan	390,797,352	-	-	-	18,510,621	39,523,271	60,233,128	58,264,247	48,222,007	42,431,278	40,224,329	33,871,340	32,778,303	16,738,828	-
Repayment of Acquisitic	(390,797,352)	-	-	-	-	(39,267,271)	(43,800,515)	(63,739,815)	(77,945,673)	(42,431,278)	(28,368,930)	(45,726,739)	(29,129,357)	(20,387,775)	-
Improvement Cost Reserve - (Sourced)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Improvement Cost Reserve - Used	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL FINANCING</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 18,510,621</b>	<b>\$ 256,000</b>	<b>\$ 16,432,613</b>	<b>\$ (5,475,568)</b>	<b>\$ (29,723,666)</b>	<b>\$ -</b>	<b>\$ 11,855,399</b>	<b>\$ (11,855,399)</b>	<b>\$ 3,648,946</b>	<b>\$ (3,648,946)</b>	<b>\$ -</b>
<b>CASH FLOW TO EQUITY</b>	<b>\$ 272,211,514</b>	<b>\$ (652,898)</b>	<b>\$ (9,000,829)</b>	<b>\$ (11,732,843)</b>	<b>\$ (26,190,503)</b>	<b>\$ (42,330,914)</b>	<b>\$ (42,586,149)</b>	<b>\$ (35,225,892)</b>	<b>\$ 114,125,973</b>	<b>\$ 15,537,693</b>	<b>\$ (10,416,470)</b>	<b>\$ (347,287)</b>	<b>\$ (16,759,111)</b>	<b>\$ 143,055,752</b>	<b>\$ 160,728,297</b>
<b>LEVERED IRR</b>	<b>15.23%</b>														
<b>UNLEVERED IRR</b>	<b>14.62%</b>														
<b>PROFIT MARGIN</b>	<b>23.76%</b>														
<b>TOTAL PROJECT PROFIT</b>	<b>\$ 272,211,514</b>														
<b>PEAK EQUITY MULTIPLE</b>	<b>2.48x</b>														
<b>PEAK EQUITY</b>	<b>184,371,117</b>														

Exhibit 5-2. Cash Flow Summary

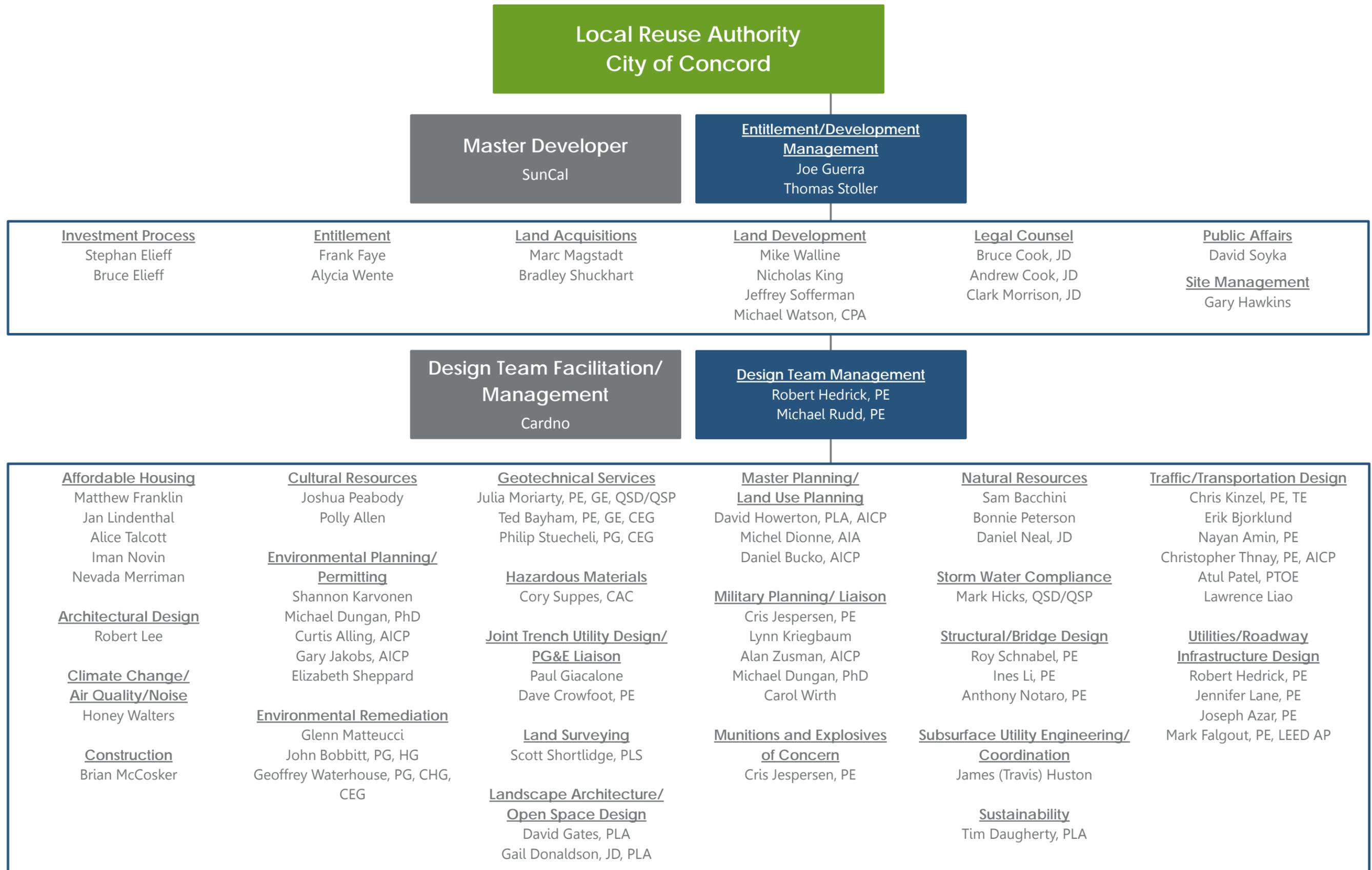
Budget/Actual Month Year	Budget Year 2014	Budget Year 2015	Budget Year 2016	Budget Year 2017	Budget Year 2018	Budget Year 2019	Budget Year 2020	Budget Year 2021	Budget Year 2022	Budget Year 2023	Budget Year 2024	Budget Year 2025	Budget Year 2026	Budget Year 2027	Budget Year 2028	Budget Year 2029	Budget Year 2030	Budget Year 2031	Budget Year 2032	Budget Year 2033
<b>REVENUES</b>																				
Land Residual Total	\$ 781,403,247	\$ -	\$ -	\$ -	\$ -	\$ 48,627,846	\$ 114,183,214	\$ 60,997,315	\$ 153,032,586	\$ 54,562,951	\$ 43,433,157	\$ (4,656,826)	\$ -	\$ 168,292,726	\$ 142,930,277	\$ -	\$ -	\$ -	\$ -	\$ -
Deposits	-	-	-	-	-	4,818,321	7,381,142	(6,099,732)	730,180	(3,828,278)	(1,500,817)	(1,500,817)	30,470,300	(15,249,735)	(15,220,565)	-	-	-	-	-
Less: Lot Commissions	(23,442,097)	-	-	-	-	(1,458,835)	(3,425,496)	(1,829,919)	(4,590,978)	(1,636,889)	(1,302,995)	139,705	-	(5,048,782)	(4,287,908)	-	-	-	-	-
<b>NET PROJECT REVENUE</b>	<b>757,961,150</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51,987,332</b>	<b>118,138,859</b>	<b>53,067,664</b>	<b>149,171,788</b>	<b>49,097,785</b>	<b>40,629,346</b>	<b>(6,017,938)</b>	<b>30,470,300</b>	<b>147,994,209</b>	<b>123,421,803</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Add: Other Revenue	189,222,414	-	-	-	-	369,029	735,304	16,491,381	29,773,119	21,258,734	22,104,801	19,924,738	7,117,680	1,663,385	35,777,549	34,006,693	-	-	-	-
<b>TOTAL PROJECT REVENUE</b>	<b>\$ 947,183,564</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 52,356,362</b>	<b>\$ 118,874,164</b>	<b>\$ 69,559,045</b>	<b>\$ 178,944,907</b>	<b>\$ 70,356,519</b>	<b>\$ 62,734,147</b>	<b>\$ 13,906,801</b>	<b>\$ 37,587,980</b>	<b>\$ 149,657,594</b>	<b>\$ 159,199,353</b>	<b>\$ 34,006,693</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>IMPROVEMENT COSTS</b>																				
Land	\$ (69,012,325)	\$ -	\$ -	\$ -	\$ -	\$ (4,862,785)	\$ (4,818,321)	\$ (6,099,732)	\$ (14,303,259)	\$ (5,456,295)	\$ (4,343,316)	\$ 1,341,683	\$ -	\$ (16,829,273)	\$ (13,641,028)	\$ -	\$ -	\$ -	\$ -	\$ -
Commission @ Land	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hold Costs	(2,890,000)	(305,000)	(305,000)	(305,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	(205,000)	75,000	-	-	-	-
<b>Directs</b> Site Preparation and Grading	(114,347,522)	-	-	-	(3,259,291)	(6,756,317)	(19,614,885)	(17,204,811)	(13,917,257)	(14,832,657)	(10,555,800)	(6,583,244)	(14,415,507)	(7,207,753)	-	-	-	-	-	-
Street Improvements	(84,310,905)	-	-	-	(1,456,709)	(3,761,346)	(17,666,771)	(12,828,438)	(8,112,820)	(15,169,897)	(11,204,339)	(6,620,771)	(4,993,209)	(2,496,605)	-	-	-	-	-	-
Sanitary Sewer	(21,701,436)	-	-	-	(4,205,498)	(7,093,411)	(5,817,260)	(3,296,715)	(671,008)	(68,621)	(136,239)	(187,258)	(150,284)	(75,142)	-	-	-	-	-	-
Water Improvements	(23,022,101)	-	-	-	(4,341,452)	(7,284,548)	(5,547,208)	(3,268,024)	(876,973)	(352,754)	(445,764)	(485,152)	(280,150)	(140,075)	-	-	-	-	-	-
Storm Drain	(11,062,725)	-	-	-	(290,444)	(714,822)	(3,100,915)	(2,149,740)	(1,069,883)	(510,495)	(1,001,612)	(1,329,235)	(597,052)	(298,526)	-	-	-	-	-	-
<b>Directs</b> Amenities & Special Construction	(61,441,280)	-	-	-	(1,969,847)	(3,688,184)	(7,112,534)	(9,011,180)	(9,872,332)	(6,252,632)	(6,773,684)	(6,805,698)	(6,636,793)	(3,318,397)	-	-	-	-	-	-
Utilities	(51,856,382)	-	-	-	(820,139)	(1,930,491)	(7,700,404)	(8,012,547)	(7,709,478)	(6,888,344)	(6,118,781)	(5,010,894)	(5,110,202)	(2,555,101)	-	-	-	-	-	-
Contingency @ 25.00%	(91,935,587)	-	-	-	(4,085,845)	(7,807,280)	(16,639,994)	(13,942,864)	(10,557,438)	(11,018,850)	(9,059,055)	(6,755,563)	(8,045,799)	(4,022,900)	-	-	-	-	-	-
Fees, Assessments, & Bonds - Map	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bonding Costs (Cash Deposit)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultants and Engineering	(62,527,944)	(545,618)	(6,547,410)	(6,547,410)	(4,065,687)	(16,051,194)	(4,700,717)	(4,737,783)	(8,503,162)	(2,510,953)	(2,626,535)	(5,691,475)	-	-	-	-	-	-	-	-
Insurance	(7,220,169)	(25,000)	(25,000)	(25,000)	(4,679,239)	(2,265,930)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	-	-	-	-	-	-
G&A	(38,443,880)	-	-	-	(2,224,026)	(3,812,616)	(3,812,616)	(3,812,616)	(3,812,616)	(3,812,616)	(3,812,616)	(3,812,616)	(3,812,616)	(3,812,616)	(1,906,308)	-	-	-	-	-
Project Management	(26,160,294)	(27,281)	(327,371)	(327,371)	(1,224,746)	(2,754,380)	(4,395,034)	(3,722,605)	(3,064,518)	(2,880,260)	(2,396,090)	(1,973,464)	(2,011,450)	(1,005,725)	(50,000)	-	-	-	-	-
Asset Management Fee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal, Closing, etc. @ Land Purchase	(250,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	(250,000)	-	-	-	-	-
Legal, Closing, etc. @ A&D Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal, Closing, etc. @ Lot Sales	(432,500)	-	-	-	(33,500)	(33,250)	(44,750)	(91,750)	(47,000)	(15,750)	(15,750)	(15,750)	(75,500)	(75,250)	-	-	-	-	-	-
Master Marketing Program	(9,528,662)	-	-	-	(595,541)	(2,233,280)	(893,312)	(893,312)	(893,312)	(893,312)	(893,312)	(893,312)	(893,312)	(893,312)	(446,656)	-	-	-	-	-
Costs Inflation	(79,280,857)	(137,048)	(276,837)	(1,511,832)	(4,609,741)	(9,406,013)	(9,537,269)	(9,289,942)	(10,085,077)	(9,566,534)	(8,887,527)	(10,058,005)	(5,710,415)	(204,616)	-	-	-	-	-	-
Soft Cost Contingency / Audit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intract Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Property Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition & Develop - Points	(600,000)	-	-	-	(600,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition & Develop - Interest Reserve	(17,456,829)	-	-	-	(317,166)	(1,999,680)	(2,757,154)	(904,740)	(1,471,168)	(1,721,671)	(626,610)	(1,864,160)	(3,969,076)	(1,825,403)	-	-	-	-	-	-
<b>TOTAL DEVELOPER IMPROVEMENT COSTS</b>	<b>\$ (773,481,397)</b>	<b>\$ (902,898)</b>	<b>\$ (7,341,829)</b>	<b>\$ (7,481,618)</b>	<b>\$ (35,256,922)</b>	<b>\$ (76,226,767)</b>	<b>\$ (115,586,357)</b>	<b>\$ (99,697,125)</b>	<b>\$ (94,446,915)</b>	<b>\$ (82,731,434)</b>	<b>\$ (69,806,037)</b>	<b>\$ (55,804,437)</b>	<b>\$ (61,203,457)</b>	<b>\$ (50,496,742)</b>	<b>\$ (16,498,858)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FINANCING</b>																				
Acquisition & Development Loan	349,711,740	-	-	-	14,150,166	28,369,991	60,193,890	51,513,532	40,350,135	42,366,562	35,660,175	27,732,472	32,686,551	16,688,265	-	-	-	-	-	-
Repayment of Acquisition & Development Loan	(349,711,740)	-	-	-	-	(39,267,271)	(63,446,776)	(34,139,211)	(57,724,456)	(42,366,562)	(23,841,551)	(10,430,100)	(28,190,985)	(50,304,826)	-	-	-	-	-	-
Improvement Cost Reserve - (Sourced)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Improvement Cost Reserve - Used	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL FINANCING</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 14,150,166</b>	<b>\$ (10,897,280)</b>	<b>\$ (3,252,886)</b>	<b>\$ 17,374,321</b>	<b>\$ (17,374,321)</b>	<b>\$ -</b>	<b>\$ 11,818,624</b>	<b>\$ 17,302,372</b>	<b>\$ 4,495,566</b>	<b>\$ (33,616,562)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>CASH FLOW TO EQUITY</b>	<b>\$ 173,702,167</b>	<b>\$ (902,898)</b>	<b>\$ (7,341,829)</b>	<b>\$ (7,481,618)</b>	<b>\$ (21,106,756)</b>	<b>\$ (34,767,685)</b>	<b>\$ 34,920</b>	<b>\$ (12,763,759)</b>	<b>\$ 67,123,671</b>	<b>\$ (12,374,915)</b>	<b>\$ 4,746,733</b>	<b>\$ (24,595,264)</b>	<b>\$ (19,119,910)</b>	<b>\$ 65,544,290</b>	<b>\$ 142,700,495</b>	<b>\$ 34,006,693</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>LEVERED IRR</b>	<b>14.02%</b>																			
<b>UNLEVERED IRR</b>	<b>13.46%</b>																			
<b>PROFIT MARGIN</b>	<b>18.34%</b>																			
<b>TOTAL PROJECT PROFIT</b>	<b>\$ 173,702,167</b>																			
<b>PEAK EQUITY MULTIPLE</b>	<b>2.48x</b>																			
<b>PEAK EQUITY</b>	<b>117,446,269</b>																			



# Appendix

A

Key Personnel Resumes





Master Developer Key Personnel

## Joe Guerra

## Entitlement/Development Management

**Location:** San Jose, CA

**Firm:** SunCal

**Total Years:** 30

### **Areas of Expertise:**

Land Acquisition

Entitlements

Government Relations

### **Education:**

MBA, Public Administration,  
Golden Gate University, 2006

BS, Psychology and Political  
Science, Santa Clara University,  
1984

### **Licenses/Registrations/**

#### **Certifications:**

Licensed Real Estate Broker,  
CA, DRE #0872881, 1984

### **Affiliations:**

Archbishop Mitty High School  
Assistant Head Coach Varsity  
Women's Basketball

### **Qualifications Overview**

Mr. Joe Guerra is a San Francisco Bay Area native and has three decades of experience in the development and municipal government industries. He spent 14 years in the City of San Jose, the last eight of which he served as the Mayor's Budget and Policy Director overseeing the City and Redevelopment Agency budgets for the Mayor, as well as heading up policy efforts in land use/planning, economic development, affordable housing, and capital programs for community facilities. Since leaving the City of San Jose, he has been with SunCal and currently heads up northern California efforts in land acquisition and entitlements.

### **Relevant Projects**

**Development Team Manager: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** Managed the acquisition and entitlement of the Dublin Crossing project working in conjunction with the U.S. Army and the City of Dublin. The project is a 189-acre, transit-oriented, master-planned community with 1,600 to 1,995 residences, 200,000 square feet of commercial/retail space, hotels, shops and restaurants, offices, and parks and trails. SunCal worked with the top levels of the Department of the Defense to achieve the largest-ever Reserve Property

Exchange Agreement in U.S. history. The project included acquiring land from National Aeronautics and Space Administration and the Alameda County Surplus Property Authority increasing the complexity of the transaction.

**Chief of Staff: City Councilman Frank Fiscalini, Santana Row, San Jose, California.**

Premiere mixed-use development in the nation. Served as Chief of Staff to councilman whose district included Santana Row. Oversaw entitlement process with private developer. Overcame substantial opposition to the project concept within the City and Redevelopment Agency. Wrote enabling memo used by the City Council to approve entitlements.

**Principal Author: City of San Jose Mayor's Office, Affordable Housing Policy, San Jose, California.** Principal author on affordable housing policy measures resulting in 10,000 affordable housing units built in eight years, more than any city in the nation. A variety of financial, regulatory, and planning mechanisms were employed. This level of production has never been rivaled in the San Francisco Bay Area.

**Mayor's Budget and Policy Director: City of San Jose, New City Hall, San Jose, California.** Spanning his time in a City Council office and the Mayor's Office, led team to pass ballot initiative, site selection, architect selection, and building design input for the new City Hall in downtown San Jose. Relocation included receiving voter approval to relocate away from voter mandated previous location.

**Mayor's Budget and Policy Director: City of San Jose, Strong Neighborhoods Initiative, San Jose, California.** Led policy effort and project oversight for rapid expansion of San Jose's Redevelopment Agency into blighted neighborhoods to use tax increment funding to establish new parks, community centers, and economic development in San Jose.

## Thomas Stoller

**Location:** San Jose, CA

**Firm:** SunCal

**Total Years:** 23

### **Areas of Expertise:**

Project Management

Planning

Government Relations

### **Education:**

BS, Mechanical Engineering,  
California State University,  
Fullerton, 1988

Certificate, Land Planner,  
University of California, Davis,  
2002

## Entitlement/Development Management

### **Qualifications Overview**

Mr. Thomas (Tom) Stoller is a senior project manager and liaison for SunCal's real property exchange program with the U.S. military at Parks Reserve Forces Training Area. He has extensive experience dealing with the federal government and U.S. military. He is responsible for the operational tasks for a multitude of projects and assets throughout northern California and Nevada. He leads an internal and external team of staff, consultants, and contractors through due diligence, forward planning, entitlement, design, and construction.

### **Relevant Projects**

**Development Team Manager: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** Managed the acquisition and entitlement of the Dublin Crossing project working in conjunction with the U.S. Army and the City of Dublin. The project is a 189-acre, transit-oriented, master-planned community

with 1,600 to 1,995 residences, 200,000 square feet of commercial/retail space, hotels, shops and restaurants, offices, and parks and trails. SunCal worked with the top levels of the Department of the Defense to achieve the largest-ever Reserve Property Exchange Agreement in U.S. history. The project included acquiring land from National Aeronautics and Space Administration and the Alameda County Surplus Property Authority increasing the complexity of the transaction.

**Development Team Manager: Master Developer, Oak Knoll Project, Oakland, California.** The Oak Koll project is 167 acres of real property located in Oakland, California, that was formerly a naval medical center and which was initially purchased from the Navy. It is anticipated to be a diverse master-planned community of approximately 960 residential units, including single-family homes, townhomes, and apartments, as well as commercial space and open space.

**Development Team Manager: Master Developer, Rohnert Crossings, Rohnert Park, California.** Rohnert Crossings is proposed to be a 30-acre pedestrian-friendly, mixed-use town center that will provide the start of a lively downtown district complete with a central town green in the heart of the community. The former State Farm property

encompasses an entire city block, is located along Rohnert Park Expressway, and is across the street from the City library, police station, and City center plaza. A future Sonoma-Marín Rail Transit (SMART) passenger train station is under construction along the eastern edge of the project, providing the basis for a transit-oriented development.

**Development Team Manager: Master Developer, Delta Coves, Bethel Island, California.** SunCal overcame a difficult entitlement process that included the breach of a super-levee on the Sacramento Delta and working closely with the U.S. Army Corps of Engineers. This is a 310-acre master-planned luxury marina community consisting of 560 waterfront residences, 416 with private boat docks, 230-slip marina, and a private yacht club. The creation of a luxury marina community on Bethel Island required moving an enormous amount of dirt to safely open the project up to the harbor. Though there are other communities across the Delta, Delta Coves is the only one that will offer immediate access to the fast waters, making it a prime setting for a world-class marina and yacht club. Despite the challenges of getting the project approved, Delta Coves delivered as promised, under budget and ahead of schedule. Next will be adding 560 waterfront residences to help breathe new life into the Bethel Island economy.

# Stephan Elieff

## Investment Process

**Location:** Irvine, CA

**Firm:** SunCal

**Total Years:** 30

### Areas of Expertise:

Land Acquisition

Finance

Management

### Education:

MBA, Business Administration,  
University of Southern  
California, 1984

BS, Real Estate and Urban Land  
Economics, University of  
Southern California, 1981

### Licenses/Registrations/

#### Certifications:

Certified Public Accountant  
(inactive)

#### Affiliations:

Leadership Council of the Lusk  
Center for Real Estate  
Urban Land Institute

### Qualifications Overview

Mr. Stephan (Steve) Elieff is President of SunCal and is responsible for the oversight and management of the investment process, as well as all capital market transactions. He joined the company in 2003. He directs SunCal's efforts to secure equity and debt financing for each of the company's investments and is responsible for managing the company's capital strategy. He is a member of SunCal's Investment, Finance, and Asset Management Committees, as well as the Senior Management Committee.

Prior to joining SunCal, Steve was a partner at Lone Star Fund, where he served as President of the Asia Pacific Region with offices in Tokyo, Singapore, Taipei, Bangkok, and Jakarta. Prior to relocating to Asia, he was the Director of Underwriting with responsibility for the valuation and due diligence for Lone Star investments worldwide.

### Relevant Projects

**Investment Manager: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** In 2011, the U.S. Army Reserve and SunCal signed the Department of Defense's largest-ever Reserve Property Exchange Agreement. The transaction is seeing the developer build \$66 million of new military facilities at Parks Reserve Forces Training Area in exchange for land

that will be developed into a 189-acre master-planned community. SunCal was chosen by the U.S. Army through a competitive process that saw numerous companies vying for the project. SunCal will develop Dublin Crossing, a mixed-use, transit-oriented development within walking distance of a Bay Area Rapid Transit (BART) station. This will include 1,600 to 1,995 new homes, 35 acres of parks, 75,000 to 200,000 square-feet of retail and commercial space, and a new elementary school.

**Investment Manager: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.** In 2011, SunCal acquired a partially completed master-planned community in northern Virginia, 30 miles south of Washington, D.C. Potomac Shores offers 1,000 acres

of hardwood forests and two miles of shoreline on the Potomac River. Covering 1,920 acres, this new community is envisioned as a premier resort destination and is planned for more than 3,800 homes, 3.7 million square feet of commercial space, a resort hotel, and a planned marina. It features an 18-hole Jack Nicklaus Signature Golf Course. The town center will have an on-site commuter rail station and major employment uses will be clustered around the station and mixed-use town area.

**Investment Manager: Master Developer, Lighthouse Landing Development, Sleepy Hollow, New York.** SunCal and Diversified Realty Advisors were selected by General Motors in early 2014 to redevelop the former site of the automaker's 97-acre assembly plant along the Hudson River. The joint venture is combining SunCal's and Diversified's expertise to create a mixed-use, master-planned waterfront community featuring up to 1,177 residences, 135,000 square feet of retail space, 35,000 square feet of office use, and a 140-room hotel, among other uses. The property is north of New York City.

**Investment Manager: Master Developer, Westport at Mandalay Bay, Oxnard, California.** This 60-acre coastal development in southern California represented the first marina community built in California in 30 years when it was completed a few years ago. This is a master-planned marina community with a neighborhood commercial center, 306 waterside homes, open space, parks, public and private docks, and an 83-slip marina are connected by a mile of waterfront trails providing public access to the ocean. SunCal extended the Channel Islands Harbor by creating three additional channels through a major excavation process. Approvals were secured from the City and various agencies, including the California Coastal Commission. SunCal worked with the Army Corps of Engineers to construct habitat for shoreline birds, plus two acres of upland habitat.

**Investment Manager: Master Developer, Delta Coves, Bethel Island, California.** This 310-acre project is turning a former dairy farm on an island into a premier master-planned, water-oriented residential community featuring 560 luxury homes, many with private docks, and a yacht club with a marina. Extensive excavations, grading, and engineering created a navigable waterway that provides boating access to San Francisco Bay and the River Delta. The marina basin was dredged to 21 feet below mean sea level. Construction of a 130-acre man-made lagoon prompted strategic governmental relations and community relations to garner local, state, and federal approvals. SunCal breached a Delta levee, a complex engineering feat, which created a 160-foot-wide passage and provides an access channel between the new marina and the Delta. Prior to constructing a new 4.5-mile levee, the topsoil was removed and the sandy soil beneath the new levee footprint was strengthened through compaction.

## Bruce Elieff

## Investment Process

**Location:** Irvine, CA

**Firm:** SunCal

**Total Years:** 37

**Areas of Expertise:**

Land Acquisitions

Finance

Entitlements

**Education:**

BS, Business Administration –  
Real Estate and Finance,  
California State University, Los  
Angeles, 1976

### Qualifications Overview

Mr. Bruce Elieff, Chairman and Chief Executive Officer of SunCal, joined his father in this family-owned business in 1977 and is involved in every aspect of its operations, including land acquisitions, finance, entitlement, infrastructure design and development, and dispositions. He is the Chairman of SunCal's Investment Committee and a majority shareholder.

Bruce has extensive experience in residential and commercial real estate development, including retail, office, multifamily, and industrial properties. His expertise in identifying suitable properties and understanding their fundamental characteristics has allowed SunCal to consistently deliver quality master-planned communities that exceed the expectations of everyone involved. Under Bruce's leadership, SunCal has grown to become one of the nation's largest real estate development companies specializing in mixed-use and master-planned communities.

### Relevant Projects

**Investment Manager: Master Developer, Amerige Heights, Fullerton, California.** The 293-acre Amerige Heights community is the former site of a Howard Hughes defense research facility that required extensive redevelopment. Two million square feet of concrete and steel buildings were demolished with most materials recycled or salvaged. Designed by Peter Calthorpe, this New Urbanist master-planned community has been honored with several design awards and is a mixed-use, pedestrian-friendly community featuring 1,150 homes. Trails and paseos link homes to shopping, schools, parks, and open space, including a 10-acre sports park. An 82.5-acre mixed-use district holds 1.28 million square feet of development.

**Investment Manager: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** In 2011, the U.S. Army Reserve and SunCal signed the Department of Defense's largest-ever Reserve Property Exchange Agreement. The transaction is seeing the developer build \$66 million of new military facilities at Parks Reserve Forces Training Area in exchange for land that will be developed into a 189-acre master-planned community. SunCal was chosen by the U.S.

Army through a competitive process that saw numerous companies vying for the project. SunCal will develop Dublin Crossing, a mixed-use, transit-oriented development within walking distance of a Bay Area Rapid Transit (BART) station. This will include 1,600 to 1,995 new homes, 35 acres of parks, 75,000 to 200,000 square feet of retail and commercial space, and a new elementary school.

**Investment Manager: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.** In 2011, SunCal acquired a partially completed master-planned community in northern Virginia, just 30 miles south of Washington, D.C. Potomac Shores offers 1,000 acres of hardwood forests and two miles of shoreline on the Potomac River. Covering 1,920 acres, this new community is envisioned as a premier resort destination and is planned for more than 3,800 homes, 3.7 million square feet of commercial space, a resort hotel, and a planned marina. It features an 18-hole Jack Nicklaus Signature Golf Course. The town center will have an on-site commuter rail station and major employment uses will be clustered around the station and mixed-use town area.

**Investment Manager: Master Developer, Lighthouse Landing Development, Sleepy Hollow, New York.** SunCal and Diversified Realty Advisors were selected by General Motors in early 2014 to redevelop the former site of the automaker's 97-acre assembly plant along the Hudson River. The joint venture is combining SunCal's and Diversified's expertise to create a mixed-use, master-planned waterfront community featuring up to 1,177 residences, 135,000 square feet of retail space, 35,000 square feet of office use, and a 140-room hotel, among other uses. The property is north of New York City.

**Investment Manager: Master Developer, Lincoln Crossing, Lincoln, California.** This 1,070-acre master-planned community offers 2,900 homes; a 9,000-square-foot community recreation center featuring two pools, a fitness center and meeting spaces; and 47 acres of commercial development, including a regional commercial/retail center with over 700,000 square feet of space. SunCal worked with the City of Lincoln on various planning issues, including the construction of the City's sewer treatment facilities to serve this development, as well as other future projects. Significant project features included a major Caltrans right-of-way for a freeway bypass.

# Frank Faye

## Entitlement

**Location:** Irvine, CA

**Firm:** SunCal

**Total Years:** 27

**Areas of Expertise:**

Land Acquisition

Real Estate

Asset Management

**Education:**

BA, Political Science, University of California, Irvine, 1986

### Qualifications Overview

Mr. Frank Faye is Executive Vice President for SunCal and is responsible for leading the company's new and existing business activities in northern and southern California, as well as Nevada, and is involved in other regions where the company does business. Prior to this assignment, he was the Chief Operating Officer of SunCal, overseeing the company's real estate operations and all aspects of human resources, asset management, and external affairs. Previously, Frank was Director of Planning and Acquisitions at Shapell Industries and Vice President of Land at Centex Homes.

### Relevant Projects

**Entitlement Manager: Master Developer, Westport at Mandalay Bay, Oxnard, California.**

This 60-acre coastal development in southern California represented the first marina community built in California in 30 years when it was completed a few years ago. This is a master-planned marina community with a neighborhood commercial center, 306 waterside homes, open space, parks, public and private docks, and an 83-slip marina and connected by a mile of waterfront trails providing public access to the ocean. SunCal extended the Channel Islands Harbor by creating three additional channels through a major excavation process. Approvals were secured from the City and various agencies, including the California Coastal Commission. SunCal worked with the Army Corps of Engineers to construct habitat for shoreline birds, plus two acres of upland habitat.

**Entitlement Manager: Master Developer, Tesoro del Valle, Santa Clarita, California.** SunCal built this 530-acre community at elevations ranging from 1,300 to 1,932 feet. Site preparation included moving 12 million cubic yards of dirt in a single-phased grading operation. Tesoro del Valle is a master-planned community that features 1,109 homes on a hillside and enjoys views of open space and the city. It offers a variety of high-end, quality homes on predominantly larger lots. Amenities include a 14-acre park/recreation center, a competition swimming pool, tennis courts, baseball diamond, basketball courts, a volleyball court, a pond, a County-maintained equestrian trail, and the historic Harry Carey Ranch once owned by this early western film star.

**Entitlement Manager: Master Developer, Oak Knoll Project, Oakland, California.**

Oak Knoll in the Oakland Hills is the 167-acre site of the former Oakland Naval Medical Center that was decommissioned in 1996. SunCal's plans will restore a creek, provide open space, allow homes on a prominent slope, and offer a mix of residences, shops, and restaurants. SunCal began its involvement in 2005 when it was selected to purchase the property by the federal government from a field of several major developers. SunCal then conducted extensive planning and preparatory work. This included community outreach, initiating the entitlement process, major clean-up and demolition of former U.S. Navy buildings, and designing a mixed-use master-planned community planned to include 960 homes, 82,000 square feet of commercial/retail, and 50 acres of parks and open space. SunCal and its former financial partner, Lehman Brothers, were redeveloping the property when Lehman collapsed in 2008 during the global economic crisis. In May 2014, SunCal purchased Oak Knoll from the Lehman Brothers estate, returning this property to SunCal's portfolio. SunCal is refining the previous plans.

**Entitlement Manager: Master Developer, Park Highlands West Development, Las Vegas, Nevada.**

In 2012, SunCal acquired 208 acres of partially developed property within the Park Highlands master-planned community. SunCal's property is fully entitled and approved for up to 1,800 residences. In June 2014, the North Las Vegas City Council approved SunCal's proposal to divide the overall Park Highlands plan area into stand-alone West and East master plans. SunCal is serving as the master developer for the entire 600-acre West project, including the company's 208 acres. Park Highlands West is one of the few remaining large-scale development opportunities in the Las Vegas area.

**Entitlement Manager: Master Developer, McAllister Ranch, Bakersfield, California.**

The 600-acre McAllister Ranch will be a walkable design featuring tree-lined boulevards and small town appeal. The 1,100-home master-planned community incorporates a pedestrian-friendly plan that includes a publicly accessible walking and biking path system, parks, and recreation facilities, including an 18-hole Greg Norman Signature Golf Course. McAllister Ranch was annexed into the City of Bakersfield in 2006. SunCal had teamed with project financial partner Lehman Brothers to develop the property, but the land was tied up in Lehman's bankruptcy when the firm collapsed in 2008. SunCal won back the property in 2011 when it submitted the top auction bid for this and two other Lehman-related projects.

# Alycia Wente

## Entitlement

**Location:** Dublin, CA

**Firm:** SunCal

**Total Years:** 1

**Areas of Expertise:**

Project Coordination  
Community Outreach  
Land Development

**Education:**

BS, Journalism, California  
Polytechnic State University,  
San Luis Obispo, 2013

### Qualifications Overview

Ms. Alycia (Aly) Wente assists in the entitlement and due diligence process of large mixed-use development. She synthesizes research information on existing and future developments. She works alongside local and regional government officials and participates in community outreach for developments. She has expertise in community outreach, public relations, and social media marketing.

### Relevant Projects

**Project Coordinator: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** Assisted in the entitlement of Dublin Crossing, focusing on community outreach aspects of the project. Community outreach methods practiced included

building relationships with local and regional government officials, social media marketing via blogging, bi-weekly public relations reports on current events, and representing SunCal/Dublin Crossing at political- and City-related functions. The project is a 189-acre, transit-oriented, master-planned community with 1,600 to 1,995 residences, 200,000 square feet of commercial/retail space, hotels, shops and restaurants, offices, parks and trails, a 12-acre elementary school with an extensive pedestrian and bicycle network connecting to the nearby BART station and the Iron Horse Trail, which runs all the way to Concord. The site is located within one quarter-mile from the Dublin BART station. SunCal worked with the top levels of the Department of the Defense to achieve the largest-ever Reserve Property Exchange Agreement in U.S. history. The project included acquiring land from National Aeronautics and Space Administration and the Alameda County Surplus Property Authority increasing the complexity of the transaction.

**Project Coordinator: Master Developer, Rohnert Crossings, Rohnert Park, California.** Managed aspects of the entitlement process for Rohnert Crossings, including serving as a primary community outreach representative. Presented project plans and proposals to committees, represented SunCal in meetings with City officials and at public functions, managed the Rohnert Crossings community outreach blog, and acted as public relations representative at community functions. Coordinated and assisted the consultant team during the initial phase of entitlement. Rohnert Crossings

is proposed to be a 30-acre pedestrian-friendly, mixed-use town center that will provide the start of a lively downtown district complete with a central town green in the heart of the community. The former State Farm property encompasses an entire city block, is located along Rohnert Park Expressway, and is across the street from the City library, police station, and City center plaza. A future Sonoma-Marín Rail Transit (SMART) passenger train station is under construction along the eastern edge of the project, providing the basis for a transit-oriented development.

**Project Coordinator: SunCal, Northern California Acquisitions and Entitlements, Various Locations, California.** Assist and coordinate the acquisition and entitlement of future and potential projects in northern California for SunCal. Locations of acquisitions include Stockton, Vallejo, Rohnert Park, Dublin, Bethel Island, San Benito County, and Concord. Responsibilities include synthesizing due diligence research for the acquisitions, ensuring requirements are met, and strategizing entitlement methods. Coordinated the due diligence, entitlements, and acquisition of concurrently running projects in northern California.

# Marc Magstadt

## Land Acquisition

**Location:** Irvine, CA

**Firm:** SunCal

**Total Years:** 29

**Areas of Expertise:**

Real Estate/Land Acquisitions

Real Estate Disposition

Market Research

**Education:**

BA, Business, University of  
Puget Sound, Washington,  
1985

### Qualifications Overview

As Chief Investment Officer, Mr. Marc Magstadt oversees SunCal's real estate acquisitions. He has been directly involved with the acquisition and disposition of more than 30,000 residential units with sales value in excess of \$2 billion.

Marc previously served as Director of Real Estate for Bennett Consolidated, one of the largest land syndication companies in the United States. In this role, he specialized in the acquisition, pre-development and disposition of raw land in California, Arizona, Washington, and Texas. His past experience includes serving as a project manager with Crown Capital Corporation, a Seattle-based land acquisition company. While at Crown Capital, he was responsible for initial and ongoing market research, feasibility studies, acquisition, preparation, and monitoring of project budgets and performances, coordination of the regulatory approval process, and the re-marketing and disposition of approved properties.

### Relevant Projects

**Land Acquisition Manager: Master Developer, Amerige Heights, Fullerton, California.** Conducted acquisition, disposition, and market research for this project. The 293-acre Amerige Heights community is the former site of a Howard Hughes defense research facility that required extensive redevelopment. Two million square feet of concrete and steel buildings were demolished with most materials recycled or salvaged. Designed by Peter Calthorpe, this New Urbanist master-planned community has been honored with several design awards and is a mixed-use, pedestrian-friendly community featuring 1,150 homes. Trails and paseos link homes to shopping, schools, parks, and open space, including a 10-acre sports park. An 82.5-acre mixed-use district holds 1.28 million square feet of development.

**Land Acquisition Manager: Master Developer, Dublin Crossing Specific Plan Area, Camp Parks Army Reserve Base, Dublin, California.** Conducted acquisition, disposition, and market research for this project. In 2011, the U.S. Army Reserve and SunCal signed the Department of Defense's largest-ever Reserve Property Exchange

Agreement. The transaction is seeing the developer build \$66 million of new military facilities at Parks Reserve Forces Training Area in exchange for land that will be developed into a 189-acre master-planned community. SunCal was chosen by the U.S. Army through a competitive process that saw numerous companies vying for the project. SunCal will develop Dublin Crossing, a mixed-use, transit-oriented development within walking distance of a Bay Area Rapid Transit (BART) station. This will include 1,600 to 1,995 new homes, 35 acres of parks, 75,000 to 200,000 square feet of retail and commercial space, and a new elementary school.

**Land Acquisition Manager: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.** Conducted acquisition, disposition, and market research for this project. In 2011, SunCal acquired a partially completed master-planned community in northern Virginia, just 30 miles south of Washington, D.C. Potomac Shores offers 1,000 acres of hardwood forests and two miles of shoreline on the Potomac River. Covering 1,920 acres, this new community is envisioned as a premier resort destination and is planned for more than 3,800 homes, 3.7 million square feet of commercial space, a resort hotel, and a planned marina. It features an 18-hole Jack Nicklaus Signature Golf Course. The town center will have an on-site commuter rail station and major employment uses will be clustered around the station and mixed-use town area.

**Land Acquisition Manager: Master Developer, Lighthouse Landing Development, Sleepy Hollow, New York.** Conducted acquisition, disposition, and market research for this project. SunCal and Diversified Realty Advisors were selected by General Motors in early 2014 to redevelop the former site of the automaker's 97-acre assembly plant along the Hudson River. The joint venture is combining SunCal's and Diversified's expertise to create a mixed-use, master-planned waterfront community featuring up to 1,177 residences, 135,000 square feet of retail space, 35,000 square feet of office use, and a 140-room hotel, among other uses. The property is north of New York City.

**Land Acquisition Manager: Master Developer, The Fairways Development, Beaumont, California.** Conducted acquisition, disposition, and market research for this project. This 985-acre community is entitled for 3,300 homes and adjoins the Morongo Golf Club at Tukwet Canyon offering two 18-hole Professional Golfers' Association courses. It features 52 acres of parks, four miles of trails, 155 acres of open space, and a 9,000 square foot recreation center with an outdoor aquatic center. The community is planned for 30 acres of commercial/retail uses, including a 220,000 square-foot shopping center. The Fairways was named the 2005 Master-Planned Community of the Year by the Sales & Marketing Council of the Building Industry Association of Southern California.

# Bradley Shuckhart

## Land Acquisitions

**Location:** Irvine, CA

**Firm:** SunCal

**Total Years:** 18

**Areas of Expertise:**

Land Acquisitions

Due Diligence

Land Development

**Education:**

MBA, Real Estate Finance,  
University of Southern  
California, 2004

BA, Philosophy, Pomona  
College, 1996

### Qualifications Overview

Mr. Bradley (Brad) Shuckhart is Vice President of Land Acquisitions for SunCal and is responsible for directing acquisition and due diligence activities for the company. He has acquired 16 properties with an aggregate land price in excess of \$600 million, including distressed lot portfolios, large land development deals, and urban infill projects with an estimated sellout value of \$2 billion. He led acquisition team efforts that resulted in the purchase of three distressed properties at bankruptcy auctions. He orchestrated underwriting and acquisition of a distressed loan portfolio with a combined unpaid principal balance of \$850 million.

Brad acts as a primary interface with the company's Executive Land Committee. Duties include compiling investment committee memos, coordinating meetings with senior executives, and working with

financial partners to qualify deals with complete transactions. He manages the daily activities of seven acquisition professionals and support staff.

### Relevant Projects

**Land Acquisition Director: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** Directed acquisition, due diligence, and development for this project. In 2011, the U.S. Army Reserve and SunCal signed the Department of Defense's largest-ever Reserve Property Exchange Agreement. The developer is building \$66 million of new military facilities at Parks Reserve Forces Training Area in exchange for land that will be developed into a 189-acre master-planned community. SunCal was chosen by the U.S. Army through a competitive process that saw numerous companies vying for the project. SunCal will develop Dublin Crossing, a mixed-use, transit-oriented development within walking distance of a Bay Area Rapid Transit (BART) station. This will include 1,600 to 1,995 new homes, 35 acres of parks, 75,000 to 200,000 square-feet of retail and commercial space, and a new elementary school.

**Land Acquisition Director: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.** Directed acquisition, due diligence, and development for this project. In 2011, SunCal acquired a partially completed master-planned community in

northern Virginia, 30 miles south of Washington, D.C. Potomac Shores offers 1,000 acres of hardwood forests and two miles of shoreline on the Potomac River. Covering 1,920 acres, this new community is envisioned as a premier resort destination and is planned for more than 3,800 homes, 3.7 million square feet of commercial space, a resort hotel, and a planned marina. It features an 18-hole Jack Nicklaus Signature Golf Course. The town center will have an on-site commuter rail station and major employment uses will be clustered around the station and mixed-use town area.

**Land Acquisition Director: Master Developer, Lighthouse Landing Development, Sleepy Hollow, New York.** Directed acquisition, due diligence, and development for this project. SunCal and Diversified Realty Advisors were selected by General Motors in early 2014 to redevelop the former site of the automaker's 97-acre assembly plant along the Hudson River. The joint venture is combining SunCal's and Diversified's expertise to create a mixed-use, master-planned waterfront community featuring up to 1,177 residences, 135,000 square feet of retail space, 35,000 square feet of office use, and a 140-room hotel, among other uses. The property is north of New York City.

**Land Acquisition Director: Master Developer, Oak Knoll Project, Oakland, California.** Directed acquisition, due diligence, and development for this project. Oak Knoll in the Oakland Hills is the 167-acre site of the former Oakland Naval Medical Center that was decommissioned in 1996. SunCal's plans will restore a creek, provide open space, allow homes on a prominent slope, and offer a mix of residences, shops, and restaurants. SunCal began its involvement in 2005 when it was selected to purchase the property by the federal government from a field of several major developers. SunCal then conducted extensive planning and preparatory work. This included community outreach, initiating the entitlement process, major clean-up and demolition of former U.S. Navy buildings, and designing a mixed-use master-planned community planned to include 960 homes, 82,000 square feet of commercial/retail, and 50 acres of parks and open space. SunCal and its former financial partner, Lehman Brothers, were redeveloping the property when Lehman collapsed in 2008 during the global economic crisis. In May 2014, SunCal purchased Oak Knoll from the Lehman Brothers estate, returning this property to SunCal's portfolio. SunCal is refining the previous plans.

**Land Acquisition Director: Master Developer, Delta Coves, Bethel Island, California.** Directed acquisition, due diligence, and development for this project. This 310-acre project is turning a former dairy farm on an island into a premier master-planned, water-oriented residential community featuring 560 luxury homes, many with private docks, and a yacht club with a marina. Extensive excavations, grading, and engineering created a navigable waterway that provides boating access to San Francisco Bay and the River Delta.

# Mike Walline

## Land Development

**Location:** Santa Clarita, CA

**Firm:** SunCal

**Total Years:** 25

**Areas of Expertise:**

Land Acquisition  
Land Development  
Management

**Education:**

AS, Construction Management,  
Los Angeles Pierce College,  
1983

**Affiliations:**

Golden State Gateway  
Coalition  
Building Industry Association,  
Los Angeles/Ventura Chapter  
Valley Industry and Commerce  
Association

### Qualifications Overview

Mr. Mike Walline is Corporate Vice President, Director for Land Development for SunCal. As a member of the company's senior management team, he is responsible for strategic and day-to-day management of the various development projects he oversees. Additionally, he plays an active role in the company's continued efforts to acquire new development opportunities throughout the nation by assisting in the due diligence efforts. Prior to his current assignment, he was President of the Santa Clarita and Ventura Division for SunCal. Before this, he was SunCal's Vice President of Development where he was responsible for project management activities. Over his 25 years in the industry, he has attended many educational certificate programs addressing evolving development trends, laws, and regulations affecting development.

Prior to joining SunCal in 1998, Mike owned his own contracting and development company for eight years, specializing in both residential and complex commercial construction projects. Examples include seismic retrofitting, tenant improvement during active business hours, and specialized activities, such as laboratory upgrades for Amgen Pharmaceuticals requiring air handling and specialized construction practices. Additionally, he served for six years as Vice President of Development, Los Angeles/Ventura Division of Warmington Homes where his duties focused primarily on entitlement and land development.

### Relevant Projects

**Land Development Director: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.** A master-planned community of roughly 2,000 acres and consisting of approximately 4,000 residential units, a town center with mixed-use commercial, retail, and hospitality opportunities, a Jack Nicholas signature golf course with club house, and numerous other community amenities. It was purchased as a distressed property. Tasks included a complete re-entitlement, value-engineering, and re-design to bring the project current with post-recession economic factors without compromising the level of sophistication and beauty sought after in this highly

amenitized community. Challenges of execution included large-scale grading operations with overly deep utilities due to topography. Marine clays are highly prevalent in the region, which causes the need for very selective grading techniques. At the inception of the project a presale of approximately 400 finished lots occurred and phased deliveries occurred on time and on budget within multiple planning areas.

**Land Development Director: Master Developer, Park Highlands West Development, Las Vegas, Nevada.** As part of a very large scale 3,000 plus acre, 15,000-unit master plan, Park Highlands West consists of 600 acres and multiple property owners. The site was purchased as a distressed property. Tasks have included amending the Development Agreement and a complete revamp of major drainage facilities. Additionally, project design documents and covenants are being updated for current site and market conditions. With the multiple property ownership situation, numerous negotiations have been required to enable feasible execution of a difficult structure. This community is currently in the planning stages.

**Vice President of Land Development: Master Developer, Westport at Mandalay Bay Development, Oxnard, California.** The Westport Community is a 58.3-acre water-oriented residential development with 358 residential units, including a visitor-serving mixed-use component comprised of single family homes, condominiums, townhomes, and 22,000 square feet of commercial/retail space. The project incorporates 14.57 acres of new canals connected to the Channel Islands Harbor and allows for both public and private boat docking opportunities. At the time, this community was the first new waterfront marina project constructed in almost 15 years. The 14.57 acres of new canals were constructed by excavating farm fields, installing new seawalls and slope protection, and ultimately dredging a dike to connect the new waterways to the existing harbor. Additionally, a system of trails was constructed that runs through public parks, allowing pedestrian circulation to the waterways and numerous recreational activities. Over one million yards of soil were exported, including approximately 200,000 cubic yards of prime agricultural soil that was ultimately relocated to a degraded off-site farm to help offset the loss of prime farmland. Many challenges were overcome during construction, such as dealing with shallow groundwater conditions, tidal influence, and various soil remediation techniques.

# Nicholas King

## Land Development

**Location:** Irvine, CA

**Firm:** SunCal

**Total Years:** 22

**Areas of Expertise:**

Land Acquisition

Real Estate

Urban Design

**Education:**

MLAUD, Urban Design, Real Estate Development, Harvard University, 1992

MBA, Business Administration, University of Chicago, 2003

**Affiliations:**

Urban Land Institute

### Qualifications Overview

Mr. Nicholas King is Senior Vice President of Strategy for SunCal. He is responsible for strategy, innovation, and design across all SunCal projects. He was previously regional manager for Shell Real Estate in Asia Pacific with responsibility for a \$10 billion portfolio of properties ranging from offices to development of entire new communities in remote locations.

During his seven years with SunCal, Nicholas has been integral to the leadership of all SunCal projects, including Dublin Crossing, Potomac Shores, and Lighthouse Landing. He is part of the executive team building new lines of business for SunCal in the multi-family and high rise urban infill sectors of the real estate industry.

During his extensive career, Nicholas has developed luxury residential, integrated resort, and complex mixed-use urban projects throughout Asia. In 1996, he joined ING Real Estate as managing director for Asia to establish their first closed end fund with \$200 million in equity. This was followed by several years representing the business interests of Ross Perot, Jr. in Asia as Managing Director of Hillwood Asia.

### Relevant Projects

**Senior Vice President of Strategy: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** Integral member of the team. Provides strategy, innovation, and design direction. The project is a 189-acre, transit-oriented, master-planned community with 1,600 to 1,995 residences, 200,000 square feet of commercial/retail space, hotels, shops and restaurants, offices, and parks and trails. SunCal worked with the top levels of the Department of the Defense to achieve the largest-ever Reserve Property Exchange Agreement in U.S. history. The City of Dublin would be united.

**Senior Vice President of Strategy: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.** Integral member of the team. Provides strategy, innovation, and design direction. The project is a 1,920-acre master-planned community and resort destination consisting of 3,987 residential units, 3.7 million square feet of commercial/retail space, a Jack Nicklaus Signature Golf Course, a resort hotel, town center, planned marina, 40-acre corporate campus, two public schools, 12 plus sports fields and courts, nearly 850 acres of open space, and 10 miles of walking, hiking, and biking trails.

**Senior Vice President of Strategy: Master Developer, Lighthouse Landing Development, Sleepy Hollow, New York.** Integral member of the team. Provides strategy, innovation, and design direction. Planned mixed-use, transit-oriented riverfront community that consists of hotel, river view shopping/dining, health club/spa, recreational facilities, 45 acres of open space, community parks/gardens, waterfront promenade, and an historic 1883 lighthouse.

# Jeffrey Sofferman

## Land Development

**Location:** Irvine, CA

**Firm:** SunCal

**Total Years:** 23

### **Areas of Expertise:**

Real Estate Development

Land Development

Due Diligence

### **Education:**

MS, Urban Planning, New York University, 1992

Certificate, Real Estate Development, Rutgers College, 1990

BA, History, Rutgers College, 1990

### **Licenses/Registrations/**

#### **Certifications:**

Licensed Real Estate Broker, CA, #01919406, 2014

### **Qualifications Overview**

Mr. Jeffrey (Jeff) Sofferman is a real estate executive with a strong record of sourcing deals, structuring joint ventures, and developing multi-family and commercial real estate development projects on budget and schedule throughout the United States. He has superior leadership abilities and is skilled at managing a diverse team of consultants and colleagues in a collaborative environment. He has excellent financial and organizational skills and is accustomed to simultaneously managing multiple project teams in several geographic regions. Jeff has a strong record of creating a development pipeline through proactive management, contract negotiation, and design innovations.

### **Relevant Projects**

**Project Manager: Archstone-Smith, Archstone Clinton, New York, New York.** Development project with total costs of approximately \$300 million. The project consisted of two 24-story residential towers containing 627 rental units, grade level retail, public open space, two live performance theaters, and six condominium lofts. The project contained 125 affordable units and at the time was the largest New York State Housing Finance Agency

80/20 Bond financed project (\$268 million offering). It resulted in a significant number of low income housing tax credits.

**Project Manager: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** Directly responsible for development underwriting and financial feasibility analysis related to the multi-family components. The project is a 189-acre, transit-oriented, master-planned community with 1,600 to 1,995 residences, 200,000 square feet of commercial/retail space, hotels, shops and restaurants, offices, and parks and trails. SunCal worked with the top levels of the Department of the Defense to achieve the largest-ever Reserve Property Exchange Agreement in U.S. history. The project included acquiring land from National Aeronautics and Space Administration and the Alameda County Surplus Property Authority increasing the complexity of the transaction.

**Project Manager: Master Developer, Lighthouse Landing Development, Sleepy Hollow, New York.** Directly responsible for development underwriting and financial feasibility analysis related to the multi-family components. This is a planned mixed-use, transit-oriented riverfront community that consists of hotel, river view shopping/dining, health club and spa, recreational facilities, 45 acres of open space, community parks and gardens, waterfront promenade, and an historic 1883 lighthouse.

**Project Manager: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.** Directly responsible for development underwriting and financial feasibility analysis related to the multi-family components. The project is a 1,920-acre master-planned community and resort destination consisting of 3,987 residential units, 3.7 million square feet of commercial/retail space, a Jack Nicklaus Signature Golf Course, a resort hotel, town center, planned marina, 40-acre corporate campus, two public schools, 12 plus sports fields and courts, nearly 850 acres of open space, and 10 miles of walking, hiking, and biking trails.

**Project Manager: Commonwealth Atlantic Properties, Potomac Yard, Alexandria and Arlington, Virginia.** Directly involved in the master planning and entitling of Potomac Yard with 10 million square feet of mixed-use development on 350 acres. Worked with National Park Service and Metropolitan Washington Airports Authority to resolve long-standing legal issues that enabled the site's full development potential. Oversaw day-to-day management, including environmental issues, utility relocations, the sale of non-strategic portions, tax appeals, and asset management and leasing.

**Developer: Archstone Gateway, Anaheim and Orange, California.** . The project consists of 884 multi-family units with an approximate project cost of \$260 million. The 20-acre community is located in two municipalities, The City of Anaheim and The City of Orange. The Project design includes two four-story wrap buildings with above-grade structured parking decks and one four-story podium building.

Other significant California development projects include:

- Rincon Hill in San Francisco: 332 units, 42-story high-rise, joint venture
- Archstone Mission Gorge in San Diego: 444 units, joint venture
- Planning Oakwood Toluca Hills in Los Angeles: 305 units, additional density to existing asset
- Archstone Santa Clarita: 157 unit townhouses, joint venture.

# Michael Watson, CPA

## Land Development

**Location:** Irvine, CA

**Firm:** SunCal

**Total Years:** 14

### **Areas of Expertise:**

Underwriting

Due Diligence

Land Acquisitions

### **Education:**

MS, Real Estate Development,  
University of Southern  
California, 2005

BA, Accounting, California  
State University, Fullerton,  
2003

### **Licenses/Registrations/**

#### **Certifications:**

Certified Public Accountant,  
VA, #38182, 2010

### **Qualifications Overview**

Mr. Michael Watson is Vice President of Land Acquisitions for SunCal. He has managed the underwriting and due diligence process for more than \$1 billion of potential investment on both coasts of the United States. He is responsible for the development process, including identifying new projects, performing feasibility analysis, negotiating purchase contracts, securing financing, design, construction, and lease-up. His skills include advanced financial modeling, advanced VBA programming, and Argus DCF.

### **Relevant Projects**

**Project Manager: Master Developer, Pearl Street Apartments, Hartford, Connecticut.** This 201-unit project provided 41 (20%) affordable dwelling units with income restrictions. This project relied on four public sources, including \$5 million in CHAMP 4 funds from Connecticut's Department of Economic and Community Development, \$14.5 million from the Connecticut Redevelopment Authority, and \$500,000 from the Department of Environmental Protection.

**Project Manager: Master Developer, Big Apple West Redevelopment, Passaic, New Jersey.** Big Apple West is a large-scale redevelopment in Passaic, New Jersey. This project will consist of 500 residential dwelling units and 60,000 square feet of retail and will take advantage of multiple funding sources, including Low Income Housing Tax Credits that will restrict 20% of the residential units to the 50% of AMI level. This project's funding included \$76.5 million 1st position loan subsidized by the New Jersey Housing and Mortgage Finance Authority, \$42.7 million tax credit equity from New Jersey's Economic Development Authority's Economic Redevelopment and Growth Program, \$10.8 million non-competitive 4% Low Income Housing Tax Credit equity, \$1.7 million in HOME funds from the City of Passaic, \$10.8 million Community Development Block Grant funds administered by the New Jersey Housing and Mortgage Finance Authority, and \$26.5 million of other federal and state subsidies.

**Project Manager: Master Developer, Summerset II, Pittsburgh, Pennsylvania.** This is 131 residential rental units located in the Squirrel Hill neighborhood of Pittsburgh in the Summerset at Frick Park master-planned community. Lead in negotiating with the lender and with the 90% investor and assisted the company to secure favorable equity terms. Led the design efforts of the project.

**Project Manager: Master Developer, Plant 64, Winston Salem, North Carolina.** This is 243 units plus 10,000 square feet of retail. This is an historic rehabilitation of a former tobacco factory and relies on both federal and state historic tax credits and involved public sources, three equity investors, two bridge loans, and a construction loan.

**Project Manager: Master Developer, Eager Square, Baltimore, Maryland.** This is 184 units and 9,000 square feet of retail. Five stories of residential Type 3 wood-frame construction over a single at grade Type 1 podium level that contains parking and retail.

**Development Associate: Renaissance at Orange, Anaheim, California.** This is 450 units of Type 5 wood-frame construction. This project was one of the first completed projects in Anaheim's Platinum Triangle. The Platinum Triangle was an area inside Anaheim that up-zoned to allow nearly any kind of development at any density.

**Developer: BRE, Culver City, California.** This is a 200 plus-unit, four-story wood-frame residential development over an underground parking structure. This project was a Ford dealership that was about to go out of business at the corner of Sepulveda and Washington and adjacent to the 405 Freeway.

**Developer: La Sierra, Riverside, California.** This is a 400 plus-unit, transit-oriented, four-story wrap project in southern California's Inland Empire. This project would transform two large parking lots serving a train station into a mixed-use community.

## Bruce Cook, JD

## Legal Counsel

**Location:** Irvine, CA

**Firm:** Argent Management LLC/  
SunCal

**Total Years:** 38

### **Areas of Expertise:**

Real Property Financing and  
Transactions

### **Education:**

JD, Law, University of Utah,  
1975

BS, Chemistry, Brigham Young  
University, 1972

### **Licenses/Registrations/**

#### **Certifications:**

California State Bar  
Order of the Coif, 1975

#### **Affiliations:**

American Arbitration  
Association

### **Qualifications Overview**

Mr. Bruce Cook is General Counsel of Argent Management LLC. He oversees the legal aspects of all SunCal projects and of Argent Management's operations, including transactional activities, purchases and sales, equity and debt financing, land entitlement, corporate compliance, environmental, construction, leasing, and litigation and alternative dispute resolution, as well as other legal matters relating to SunCal projects. He joined SunCal's predecessor in 2003 as general counsel. He has acted as an arbitrator for the American Arbitration Association on its constitution panel and complex cases panel. He is rated 'av' in Martindale Hubbell (its highest rating).

Previously, Bruce was a founder and partner of Voss, Cook & Thel LLP. He engaged in private legal practice with that firm for a period of 25 years with emphasis on real property transactions and financings.

### **Relevant Projects**

**General Counsel: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces**

**Training Area, Dublin, California.** Drafted and negotiated Exchange Agreement with the U.S. Army, negotiated terms of partner/financing arrangements, and is involved in legal aspects of entitlement process and ultimate sales. The project is a 189-acre, transit-oriented, master-planned community with 1,600 to 1,995 residences, 200,000 square feet of commercial/retail space, hotels, shops and restaurants, offices, and parks and trails. SunCal worked with the top levels of the Department of the Defense to achieve the largest-ever Reserve Property Exchange Agreement in U.S. history. The project included acquiring land from National Aeronautics and Space Administration and the Alameda County Surplus Property Authority increasing the complexity of the transaction. The City of Dublin exercises governmental jurisdiction over the project.

**General Counsel: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.** Negotiated all purchase documents for purchase of project and partner/financing arrangements. Oversees the legal aspects of entitlement,

development, and sale of lots of the project. The project is a 1,920-acre master-planned community and resort destination consisting of 3,987 residential units, 3.7 million square feet of commercial/retail space, a Jack Nicklaus Signature Golf Course, a resort hotel, town center, planned marina, 40-acre corporate campus, two public schools, 12 plus sports fields and courts, nearly 850 acres of open space, and 10 miles of walking, hiking, and biking trails.

**General Counsel: Master Developer, Oak Knoll Project, Oakland, California.** Involved in the legal aspects of the bid for the project and negotiation of the successful purchase of the project. Negotiated the documents for the partner/financing arrangements. Oversees the legal aspects of entitlement and development. The Oak Koll project is 167 acres of real property located in Oakland, California, that was formerly a naval medical center and which was initially purchased from the Navy. It is anticipated to be a diverse master-planned community of approximately 960 residential units, including single family homes, townhomes, and apartments, as well as commercial space and open space.

**General Counsel: Master Developer, Northshore at Mandalay Bay, Oxnard, California.** Negotiated purchase documents with the bank that had foreclosed on the project from the previous owner. Negotiated partner/financing arrangements for the project and is involved in the legal aspects of the entitlement and cleanup of the project. The project is a 90-acre master-planned community near the Pacific Ocean consisting of 292 residences, linear park, public walking and biking trails, and nature/wildlife viewing platform.

**General Counsel: Master Developer, Savannah Quarters, Pooler, Georgia.** Negotiated documents for purchase of LLC interests and partner/financing arrangements. Involved in the legal aspects of the sales of lots in the project and the operation of the golf course. The project is a 2,600-acre master-planned coastal community consisting of approximately 8,500 residential units, commercial/retail centers, mixed-use district, a Greg Norman Signature Golf Course with clubhouse, resort-style swim and fitness center with tennis courts, and over 800 acres of nature preserves, parks, lakes, and lagoons.

**General Counsel: Master Developer, Group of Five Projects, Galt, Rohnert Park, Fillmore, Los Angeles County, and Victorville, California.** Drafted and negotiated the purchase documents for the acquisition of the projects and the financing of the projects with a single acquisition/development cross-collateralized loan. Oversees the legal aspects of the entitlement and sale of the projects. The projects contemplate in aggregate in excess of 2,000 residential units/lots throughout the five locations in California, including creation of open space.

## Andrew Cook, JD

## Legal Counsel

**Location:** Irvine, CA

**Firm:** Argent Management LLC/  
SunCal

**Total Years:** 11

### **Areas of Expertise:**

Real Property Transaction Law

### **Education:**

JD, *cum laude*, Law,  
Georgetown University, 2001  
BA, English, Brigham Young  
University, 1998

### **Licenses/Registrations/**

#### **Certifications:**

State Bar of California,  
#231963

Licensed Real Estate Broker,  
CA, #01804295

State Bar of Oregon, #01235

#### **Affiliations:**

California State Bar Association  
Oregon State Bar Association

### **Qualifications Overview**

Mr. Andrew Cook is Associate General Counsel of Argent Management LLC and has held that position since 2003. He is involved in drafting and negotiating real estate and corporate transactional documents, including letters of intent, purchase and sale agreements, loan agreements and related documents, joint venture and single member limited liability company operating agreements and other entity related documents, construction contracts, architectural, design, and engineering contracts, confidentiality and non-circumvention agreements, office leases, broker agreements, deeds, easements, and other land use agreements. Andrew is involved in the strategic formation of a network of companies to finance, hold title to, develop, broker, and sell residential and commercial real estate projects.

He started his legal career working for Miller Nash LLP, a large law firm based in the Pacific Northwest, where he was involved in various types of corporate transactional work, including real estate, mergers and acquisitions, securities regulation, construction, bankruptcy, and tax.

### **Relevant Projects**

**Legal Counsel: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** Drafted and negotiated

Exchange Agreement between SunCal and the U.S. Army, Purchase Agreement between SunCal and National Aeronautics and Space Administration, and the architecture, design, and construction agreements to build facilities. This project is a 189-acre, transit-oriented, master-planned community with 1,600 to 1,995 residences, 200,000 square feet of commercial/retail space, hotels, shops and restaurants, offices, and parks and trails. SunCal worked with the top levels of the Department of the Defense to achieve the largest-ever Reserve Property Exchange Agreement in U.S. history. The project included acquiring land from National Aeronautics and Space Administration and the Alameda County Surplus Property Authority increasing the complexity of the transaction.

**Legal Counsel: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.**

Involved in drafting and negotiating the Purchase Agreement to purchase the project, drafting and negotiating sales agreement to sell northern neighborhoods to national builder, and involved in drafting and negotiating the grading, construction, engineering, and design agreements relating to the project. The project is a 1,920-acre master-planned community and resort destination consisting of 3,987 residential units, 3.7 million square feet of commercial/retail space, a Jack Nicklaus Signature Golf Course, a resort hotel, town center, planned marina, 40-acre corporate campus, two public schools, 12 plus sports fields and courts, nearly 850 acres of open space, and 10 miles of walking, hiking, and biking trails.

**Legal Counsel: Master Developer, Northshore at Mandalay Bay, Oxnard, California.**

Involved in drafting and negotiating the Purchase Agreement to purchase project, and in drafting and negotiating the grading, construction, and design agreements. The project is a 90-acre master-planned community near the Pacific Ocean consisting of 292 residences, linear park, public walking and biking trails, and nature/wildlife viewing platform.

**Legal Counsel: Master Developer, Savannah Quarters, Pooler, Georgia.**

Involved in negotiating the Purchase Agreement to purchase the project, drafted and negotiated Sale Agreement to sell neighborhoods to builders, and in all aspects of developing the project. The project is a 2,600-acre master-planned coastal community consisting of approximately 8,500 residential units, commercial/retail centers, mixed-use district, a Greg Norman Signature Golf Course with clubhouse, resort-style swim and fitness center with tennis courts, and over 800 acres of nature preserves, parks, lakes, and lagoons.

**Legal Counsel: Master Developer, ShadowGlen, Manor, Texas.**

Drafted and negotiated the Purchase Agreement to purchase the project, drafted and negotiated Sales Agreement to sell lots to national builder, drafted and negotiated construction and engineering agreements, and involved in drafting and negotiating document in connection with the development of the project. The project is a 1,400-acre master-planned community consisting of 3,000 residential units, an approximately 50-acre commercial/retail center, an 18-hole golf course with clubhouse, four-acre water park with three pools, 4,300 square foot amenity center, fitness center, and playscapes, 23 acres of sports fields, 505 acres of open space, and nearly seven miles of nature trails.

## Clark Morrison, JD



**Location:** San Francisco, CA

**Firm:** Cox, Castle & Nicholson  
LLP

**Total Years:** 25

### **Areas of Expertise:**

Land Use

Natural Resources

Permitting

### **Education:**

JD, Law, University of  
California, Berkeley, 1987

BA, Psychology, University of  
California, Berkeley, 1984

### **Licenses/Registrations/**

#### **Certifications:**

State Bar of California,  
#130208

### **Affiliations:**

Bay Area Council, Board of  
Directors

California Building Industry  
Association, Governmental  
Affairs Committee

The Nature Conservancy,  
California Leadership Council  
CA Wind Energy Association

CA Association of Land Trusts  
California Construction and  
Industrial Materials Association

## Legal Counsel

### **Qualifications Overview**

Mr. Clark Morrison has more than 25 years of experience in the permitting and development of large and controversial projects. His clients include residential and commercial developers, wind and solar energy development companies, public agencies (universities, water districts, airports, cities, and counties), domestic and international commercial and industrial firms, and wineries and other agricultural concerns. Clark's areas of expertise include California laws affecting the development of real property. He is recognized nationally for his expertise in federal endangered species, wetlands, public lands, and other natural resource laws, and works on the largest habitat conservation planning efforts in the western United States.

Clark is the co-author of the California Land Use Treatise (CEB 2013), a member of the advisory board of the California Land Use Law and Policy Reporter, and an Adjunct Lecturer at the University of California, Berkeley School of Law (Boalt Hall). He has been awarded/recognized by the Best Lawyers in Land Use and Zoning Law, Litigation – Land Use and Zoning, Natural Resources Law, and Real Estate Law from 2007 through 2014 and by the Northern California Super Lawyers from 2004 through 2014.

### **Relevant Projects**

#### **Legal Counsel: Various Developers, Land Use and Development, Large Developments, California.**

Statewide land use practice focused on the entitlement, defense, and development of mixed-use master-planned communities. Advises many of the largest developments in California, including several projects with proposed build-outs of between 10,000 and 25,000 dwelling units. Currently, working on some of the San Francisco Bay Area's best-known urban infill projects, including bayside and military

base reuse projects, which have involved the development of innovative legal and planning concepts to address the growing body of laws promoting the reduction of greenhouse gases. Pioneer in the evolution of California's laws requiring evaluation of water supply resources in connection with new development, having successfully represented the controversial Dougherty Valley project since 1991. Skilled in all aspects of land development, from the preparation of specific plans and environmental impact reports and the negotiation of development agreements, to the defense and settlement of complicated multi-party California Environmental Quality Act (CEQA) lawsuits, and ultimately to implementation of fully permitted projects through the entire process.

**Legal Counsel: BLC Windemere Land Company, LLC, Dougherty Valley Specific Plan, San Ramon, California.** Served as lead counsel on the entitlement of this 11,000-unit master-planned community. The plan was approved in 1992 by the County Board of Supervisors and began construction in 2001. Managed and settled over 11 different lawsuits against this project on issues related to water, wastewater, environmental resources, traffic, and open space preservation. The Dougherty Valley is regarded in the development community as one of the most successful master-planned communities in the history of northern California.

**Legal Counsel: Contra Costa Council, East Contra Costa County Habitat Conservation Plan, Contra Costa County, California.** Served as principal negotiator for the business community in connection with the development of this well-regarded regional Habitat Conservation Plan. Established the foundation for business participation by creating the ten "negotiating principles" against which the plan was eventually judged. Negotiated with environmental groups and public agencies the terms of eventual participation in, and support for, the Habitat Conservation Plan. Viewed by all sides as instrumental in the eventual success of this important plan.

**Legal Counsel: Various Clients, Water Supply Evaluation and Planning, Multiple Locations, California.** Regularly advises developers in all aspects of water law. Experienced in the state and federal Endangered Species Acts, Magnussen-Stevens, Clean Water Act, Porter-Cologne Act, and other laws.

**Legal Counsel: Various Clients, Wetlands and Endangered Species, Multiple Locations, California.** One of the nation's leading attorneys, who routinely advises land developers in wetlands and endangered species laws and regulations. Assists clients negotiate the approval processes of the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Environmental Protection Agency, and California Regional Water Quality Control Boards. Experience includes permitting and litigation under Sections 401/404 of the Clean Water Act, Sections 7/10 of the Endangered Species Act, Migratory Bird Treaty Act, Marine Mammal Protection Act, and Sections 2081/1603 of the California Fish and Game Code.

# David Soyka

## Public Affairs

**Location:** Irvine, CA

**Firm:** SunCal

**Total Years:** 20

**Areas of Expertise:**

Public Affairs

Public Relations

Community Outreach

**Education:**

BA, Graphic Design, University of California, Los Angeles, 1984

### Qualifications Overview

Mr. David Soyka is Senior Vice President of Public Affairs for SunCal. He is responsible for directing the firm's media relations, public relations, community outreach, website development, project entitlement, and marketing. This support is provided to SunCal on a corporate level to its various divisions and the company's master-planned communities and developments. David joined SunCal in 2004 and has a wide breadth of experience in marketing.

### Relevant Projects

**Public Affairs Director: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** Directed the public affairs, public relations, and community outreach activities for this project. In 2011, the U.S. Army Reserve and SunCal signed the Department of Defense's largest-ever Reserve Property Exchange

Agreement. The transaction is seeing the developer build \$66 million of new military facilities at Parks Reserve Forces Training Area in exchange for land that will be developed into a 189-acre master-planned community. SunCal was chosen by the U.S. Army through a competitive process that saw numerous companies vying for the project. SunCal will develop Dublin Crossing, a mixed-use, transit-oriented development within walking distance of a Bay Area Rapid Transit (BART) station. This will include 1,600 to 1,995 new homes, 35 acres of parks, 75,000 to 200,000 square-feet of retail and commercial space, and a new elementary school.

**Public Affairs Director: Master Developer, Potomac Shores, Cherry Hill Peninsula, Virginia.** Directed the public affairs, public relations, and community outreach activities for this project. In 2011, SunCal acquired a partially completed master-planned community in northern Virginia, 30 miles south of Washington, D.C. Potomac Shores offers 1,000 acres of hardwood forests and two miles of shoreline on the Potomac River. Covering 1,920 acres, this new community is envisioned as a premier resort destination and is planned for more than 3,800 homes, 3.7 million square feet of commercial space, a resort hotel, and a planned marina. It features an 18-hole Jack Nicklaus Signature Golf Course. The town center will have an on-site commuter rail station and major employment uses will be clustered around the station and mixed-use town area.

**Public Affairs Director: Master Developer, Lighthouse Landing Development, Sleepy Hollow, New York.** Directed the public affairs, public relations, and community outreach activities for this project. SunCal and Diversified Realty Advisors were selected by General Motors in early 2014 to redevelop the former site of the automaker's 97-acre assembly plant along the Hudson River. The joint venture is combining SunCal's and Diversified's expertise to create a mixed-use, master-planned waterfront community featuring up to 1,177 residences, 135,000 square feet of retail space, 35,000 square feet of office use, and a 140-room hotel, among other uses. The property is north of New York City.

**Public Affairs Director: Master Developer, Oak Knoll Project, Oakland, California.** Directed the public affairs, public relations, and community outreach activities for this project. Oak Knoll in the Oakland Hills is the 167-acre site of the former Oakland Naval Medical Center that was decommissioned in 1996. SunCal's plans will restore a creek, provide open space, allow homes on a prominent slope, and offer a mix of residences, shops, and restaurants. SunCal began its involvement in 2005 when it was selected to purchase the property by the federal government from a field of several major developers. SunCal then conducted extensive planning and preparatory work. This included community outreach, initiating the entitlement process, major clean-up and demolition of over 100 former U.S. Navy buildings, and designing a mixed-use master-planned community planned to include 960 homes, 82,000 square feet of commercial/retail, and 50 acres of parks and open space. SunCal and its former financial partner, Lehman Brothers, were redeveloping the property when Lehman collapsed in 2008 during the global economic crisis. In May 2014, SunCal purchased Oak Knoll from the Lehman Brothers estate, returning this property to SunCal's portfolio. SunCal is refining the previous plans.

**Public Affairs Director: Master Developer, Delta Coves, Bethel Island, California.** Directed the public affairs, public relations, and community outreach activities for this project. This 310-acre project is turning a former dairy farm on an island into a premier master-planned, water-oriented residential community featuring 560 luxury homes, many with private docks, and a yacht club with a marina. Extensive excavations, grading, and engineering created a navigable waterway that provides boating access to San Francisco Bay and the River Delta. The marina basin was dredged to 21 feet below mean sea level. Construction of a 130-acre man-made lagoon prompted strategic governmental relations and community relations to garner local, state, and federal approvals. SunCal breached a Delta levee, a complex engineering feat, which created a 160-foot-wide passage and provides an access channel between the new marina and the Delta. Prior to constructing a new 4.5-mile levee, the topsoil was removed and the sandy soil beneath the new levee footprint was strengthened through compaction.

# Gary Hawkins

## Site Management

**Location:** Dublin, CA

**Firm:** SunCal

**Total Years:** 7

**Areas of Expertise:**  
Project Management  
Land Development

**Education:**  
BS, Electrical Engineering, ITT  
Technical Institute, 1999

### Qualifications Overview

Mr. Gary Hawkins provides on-site supervision of construction personnel and subcontractors throughout the land development process on projects located within northern California. He coordinates and leads project meetings with on-site construction contractors, field consultants and/or engineers, and other responsible parties, while coordinating conference calls with off-site representatives. He prepares and manages project budgets and cash flows, performs monthly job cost and budget reviews, and updates them accordingly using software that tracks changes, commitments, and uncommitted costs. Gary manages construction schedules of multiple projects to ensure on-time project delivery in accordance with real property exchange agreements. He negotiates, reviews, and

executes contracts, change orders, and purchase orders, while identifying potential impact of those contracts on the overall budget and cash flow. He develops and maintains relationships with government officials to facilitate timely review of land plans, maps, and inspections for approval. His responsibilities include managing engineers and planners to execute environmental studies, working closely with entitlement teams, and maintaining project files and records.

### Relevant Projects

**Site Manager: Master Developer, Dublin Crossing Specific Plan Area, Parks Reserve Forces Training Area, Dublin, California.** Currently, track project budgets for the Dublin Crossing portion along with tracking the costs involved with the Parks Reserve Forces Training Area projects. Communicate with subcontractors and consultants on the private portion, as well as with approved contractors and consultants that the U.S. Army specifies and who have experience building facilities all over the country. This includes weekly meetings and coordination with the Army Corps of Engineers, U.S. Army representatives, and consultants, while building to a strict standard. Once the permits are acquired, will oversee the operations at Dublin Crossing, including coordinating with the general contractor, city staff, and consultants involved with the construction taking place at the site. Dublin Crossing is a project located just north of Interstate 580 off Dublin Blvd. between Hacienda Rd. and Dougherty Blvd. It is 189 acres that will be completed in five separate phases with up to 1,995 residential units, up to 200,000 square feet of commercial uses, a 30-net-acre community park, a five-net-acre

neighborhood park, privately owned open space, a 12-acre elementary school site, and associated infrastructure to serve the project area. SunCal worked with the top levels of the Department of the Defense to achieve the largest-ever Reserve Property Exchange Agreement in U.S. history. The project included acquiring land from National Aeronautics and Space Administration and the Alameda County Surplus Property Authority increasing the complexity of the transaction.

**Project Manager: Master Developer, Oak Knoll Project, Oakland, California.** The Oak Koll project is 167 acres of real property located in Oakland, California, that was formerly a naval medical center and which was initially purchased from the Navy. It is anticipated to be a diverse master-planned community of approximately 960 residential units, including single family homes, townhomes, and apartments, as well as commercial space, open space, and a 50-acre park. When the property was taken over, multiple studies were done on the buildings that were on the site along with the main hospital. These tests were done to measure the amount of lead and asbestos along with other chemicals that could be released into the environment during the demolition phase. Buildings on the site that were demolished were wooden structures, as well as the concrete and steel buildings along with the 11 story hospital, which was imploded in the spring of 2011. Duties included overseeing and tracking each individual test taking place in all of the buildings along with turning in the required paperwork to the proper state departments. Oversaw the demolition efforts, while coordinating with site security in keeping the project secure.

**Assistant Project Manager: Master Developer, Lincoln Crossing, Lincoln, California.** Responsible for the day-to-day operations, including project budgets and schedules, contracts, and subcontractor coordination on a 1,070-acre project with a total lot build out of 2,900 single-family, medium-density, and high-density residential units. The project was built in four different phases and included a 9,000-square foot community center, which was built for the project. Worked with city and state agencies during construction to facilitate their needs on the site regarding open and park space, open waterways, and the future Highway 65 bypass.



# Design Team Key Personnel

## Robert Hedrick, PE



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 21

### **Areas of Expertise:**

Planning and Design

Civil Engineering

Site Development

### **Education:**

BS, Civil Engineering, University of Arizona, 1993

### **Licenses/Registrations/**

#### **Certifications:**

Professional Civil Engineer, CA, #69517, 2006

Professional Civil Engineer, OR, #58057, 1998

Professional Civil Engineer, AZ, #33794, 1999

### **Affiliations:**

Association of Commercial Real Estate

Building Industry Association of Superior California  
California Building Industry Association

National Association of Home Builders

American Society of Civil Engineers

## Design Team Management/Infrastructure Design

### **Qualifications Overview**

Mr. Robert (Rob) Hedrick has more than 21 years of experience in development consulting ranging from in depth planning and design to project and program management, as well as overseeing a wide array of land related services within the engineering, design, and environmental realm. His experience in designing and managing complex and large-scale land development projects has translated into tens of thousands of acres of development, including complex urban infill projects, large tracts of land, challenging land-use conversions, and sites with a variety of environmental constraints, as well as difficult sites to engineer due to topography or infrastructure. He has lead teams towards achieving project goals, while initiating and acting on solutions that maximize the success and viability of a project.

Rob's added value lies in understanding the bigger picture of land and site development and the issues that are important as they relate to a client's needs. He works closely with developers and home builders to assist in maximizing the potential of a parcel of land and emphasizes integration and communication between service disciplines to foster collaborative turn-key services. He has played a key role in facilitating the implementation of project approval with various local, regional, and federal agencies from the initial planning and entitlement phase to permitting and into construction administration.

### **Relevant Projects**

**Senior Project Manager/Principal: Lennar Communities, Blackstone/West Valley View Master-Planned Community, El Dorado Hills, California.** Led all aspects of development, including civil engineering design, planning and layout, landscape architecture, surveying, and construction services for the Community, including the focal point

and signature Clubhouse, as well as the sales and information center. Cardno served as the project lead and designer for an approximately 8,000 foot bike path and coordinated the layout of the bike path to meet the requirements set forth in the Valley View Specific Plan and comply with the environmental permitting for wetlands as established by ECORP, Inc. and the U.S. Army Corp of Engineers.

**Senior Project Manager: Pivotal Group and Pulte Homes, West Wing Mountain Master-Planned Community, North Peoria, Arizona.** Managed all facets of development of this 1200-acre Master-Planned Community. Cardno provided a variety of multi-disciplinary services, including civil engineering, planning, landscape architecture, and surveying for Phase II of this large, multi-phased, master-planned community project. The community is located in a beautiful valley between two mountains, West Wing Mountain and Sunrise Mountain. The community includes steep terrain that posed many obstacles throughout the design process. In addition to residential lots, the project includes a community center, a fire station, a school, parks and trails, a commercial center, and other amenities. The site, originally developed by The Pivotal Group, is now part of the southwest region's largest homebuilders, including Pulte, TW Lewis, Shea, KB Homes, and Standard Pacific Homes.

**Project Manager/Principal: Lennar Communities, Bickford Ranch Master-Planned Community, Placer County, California.** Bickford Ranch is located in the unincorporated area in Placer County between the cities of Lincoln and Penryn. It is a master-planned community designed to offer a wide range of residential opportunities, while still preserving more than 1,100 acres of rural open space. Assisted Lennar Communities with the conceptual planning and schematic design. Provided valuable insight on layout planning given topographical constraints of the hillside development.

**Project Manager: Fairview Village, LLC, Fairview Village Master-Planned Community, Fairview, Portland, Oregon.** Selected by the Urban Land Institute as a "Great Planned Community," Fairview Village is an approximate 400-acre development recognized for its innovativeness as a new community and an alternative growth pattern to suburban sprawl. Fairview Village is a mix of houses, rowhouses, and apartments built among retail, office, and other civic amenities. Project Manager on various residential units providing comprehensive planning, landscape architecture, civil engineering and associated technical reports, surveying, and construction services. Navigated the complex processes of this development, while leading design efforts on the project.

**Project Manager/Engineer: DMB, DC Ranch Master-Planned Community, Scottsdale, Arizona.** Prepared the technical documents, including the Master Water and Wastewater Systems Studies, for many of the Planning Units of this award winning DMB development. These studies and the associated in-depth technical analysis became the basis for design of the overall water and wastewater systems for the development.

## Michael Rudd, PE



**Location:** Concord, CA

**Firm:** Cardno

**Total Years:** 24

### **Areas of Expertise:**

Project Management

Civil Engineering

Storm Water Compliance

### **Education:**

BS, Agricultural Engineering,  
California Polytechnic State  
University, San Luis Obispo,  
1987

### **Licenses/Registrations/**

#### **Certifications:**

Professional Civil Engineer, CA,  
#51806, 1995

### **Affiliations:**

American Society of Civil  
Engineers

**Restoration, South Lake Tahoe, California.** Managed the engineering contract, including the subconsultants throughout the design, permitting, and construction phases of the project. The Lower West Side Project restored 23 acres of wetland and upland habitat within the historic Upper Truckee Marsh and included the removal and disposal of over 82,000 cubic yards of fill material. Work on this high profile project included developing grading and drainage plans, traffic control and routing plans, irrigation well and pumping system design, and storm water pollution prevention plans. Developed supplemental construction documents and permit acquisition for restoring

## Design Team Management

### **Qualifications Overview**

Mr. Michael (Mike) Rudd is experienced in conceptual and final design and project management of civil engineering and environmental projects. He provides senior technical review on erosion control, municipal improvement, and habitat restoration projects. His expertise is in hydrology, erosion and sediment control, culvert and storm drain design, survey office and field activities, and construction management as they relate to land development and public works, river and wetland restoration, stream bank and hillside erosion control, and soil remediation projects.

Mike designs and manages projects involving subdivision and university campus development, agricultural development, watershed management, jurisdictional earthen dam construction, river and wetland restoration, dredge water quality, and soil remediation. His construction management experience includes storm drain and air pollution mitigation, project surveying and layout, haul road development, utility relocation, building and grading permitting, encroachment, water rights, and streambed alteration.

### **Relevant Projects**

**Project Manager/Engineer of Record: State of California Department of General Services, Upper Truckee River, Lower West Side Wetland Restoration and Washoe Meadows Upland**

an additional five-acre quarry site within the Tahoe Basin on state lands using the excavated fill material.

**Project Manager/Engineer of Record: City of South Lake Tahoe, Upper Truckee River, Middle Reach, Stream Restoration Project, El Dorado County, California.** The objective of this river restoration project is to improve fisheries and wildlife habitat and water quality by restoring natural function of the channel, increasing over bank flow, raising groundwater, and distributing sediment into the floodplain more frequently. Directing the professional engineering and consulting services to develop and validate the recommended alternative, develop preliminary and final designs, and provide Federal Emergency Management Agency compliance. The final design process included development of construction documents and storm water pollution prevention plans, followed by bid and construction support. Responsibilities include supporting environmental compliance and permitting. This project is in the third and final year of construction management and storm water compliance support.

**Project Manager: State of California Department of General Services, Upper Truckee River and Wetland Restoration Project, Upper Truckee Marsh, South Lake Tahoe, California.** Responsible for the engineering aspects and overall management of the multi-disciplinary team consisting of five subconsultant firms for this highly visible multimillion-dollar project involving the restoration of the Upper Truckee River and marsh system. The river and marsh restoration project is in the environmental planning phase, including preliminary design documents.

**Project Engineer: Nevada Irrigation District, Combie Phase I Canal Breach Project, Nevada County, California.** Responsible for site assessment, development of preliminary design and construction documents, bid support and contractor selection, and overall construction supervision. This project involved the restoration of upland habitat in extremely steep terrain resulting from a breach in the Combie Phase I Canal owned and operated by the Nevada Irrigation District. The breach eroded over 2,000 feet of hillside into the Bear River. Construction documents included complete storm water pollution prevention plans.

**Project Engineer: Caltrans/Contra Costa Transportation Authority, Route 4 Gap Wetland Mitigation Project, Contra Costa County, California.** Responsible for mitigation document development and production of construction plans and specifications for the Route 4 Gap wetland mitigation project. This federally funded project involved hydrologic water balance analysis, grading design, and coordination with federal, state, and local agencies. Ongoing work on this project includes a 10-year monitoring program, including hydrologic monitoring and maintenance recommendations of constructed seasonal wetlands.

## Matthew Franklin



**Location:** Foster City, CA

**Firm:** MidPen Housing  
Corporation

**Total Years:** 6

**Areas of Expertise:**

Affordable Housing  
Real Estate Development  
Property/Asset Management  
Resident Services

**Education:**

MA, Public Policy, Harvard  
University, 1994

BA, Political Science, Colgate  
University, 1987

**Affiliations:**

National Housing Trust, Board  
of Directors  
California Housing Consortium,  
Board of Directors  
Non-Profit Housing  
Association of Northern  
California, Board of Directors

## Affordable Housing

### Qualifications Overview

Matthew (Matt) Franklin joined MidPen Housing Corporation as President in July 2008. He is responsible for the strategic direction of the firm and oversees all areas of the company, including real estate development, corporate administration, property and asset management, and resident services. He came to MidPen from an appointed post as Executive Director of the San Francisco Mayor's Office of Housing, where he coordinated the city housing policy and oversaw the financing for 3,500 new affordable rental units and the compliance monitoring for 24,000 existing affordable units.

Matt's previous roles include Director of California's Department of Housing and Community Development, where he was the Governor's lead housing policy advisor, Vice President of Emerging Markets for Wells Fargo Home Mortgage, where he managed multi-billion dollar programs producing more than 100,000 loans nationwide for low-moderate-income and minority customers, and senior positions at the U.S. Department of Housing and Urban Development under President Clinton.

Matt currently serves on the Board of Directors for the National Housing Trust, the California Housing Consortium, and the Non-Profit Housing Association of Northern California. He held previous board posts on the California Housing Finance Agency and the California Tax Credit Allocation Committee. His extensive experience and network at all levels of government ensures MidPen is always at the front lines of any new housing related funding program, including the \$600+ million new State Cap & Trade program that will be a critical tool for the successful implementation of the Concord Naval Weapons Station vision.

### Relevant Projects

**President: Allied Housing, Inc./MidPen Housing Corporation, Main Street Village, Affordable Housing Development Services, Fremont, California.** The project was a mixed-use family and supportive housing for Mental Health Services Act residents with 50% of the units set-aside for formerly homeless or at risk of homelessness families and individuals. It consisted of 64 apartments and ground floor commercial space. This development has served as a model for leasing and operating other supportive housing in our own portfolio and beyond.

**President: Station Center, Affordable Housing Development Services, Union City, California.** Station Center is an inclusionary development at the heart of Union City's vision to create the Station District, a vibrant city center bustling with attractive store fronts, community parks, and high-quality housing. It consists of 157 affordable apartments for families in an innovative plan that wraps apartment buildings around common areas to create an open feel. The main open-arch entrance reveals a series of spaces for gathering. There are gardens, playgrounds, a fitness facility, a pool, and a community center where programs are offered to residents. The street frontage on the ground floor is for retail shops, restaurants, and businesses. BART and bus lines are in close proximity, so residents can walk and take public transportation to-and-from this transit-oriented community. Sustainable design is a top priority with Station Center, with a LEED Platinum Certification.

**President: Manzanita Place, Affordable Housing Development Services, Former Fort Ord, East Garrison, California.** Manzanita Place provides 66 families with affordable rental housing. It marks the first housing community on the greater East Garrison master-planned development to be completed and reflects a smart growth approach to community planning. Constructed on two non-contiguous sites, it consists of 10 garden-style buildings. Amenities include a community center, computer lab, children's playground, and several open community areas and outdoor courtyards. In order to ensure the affordable housing could be completed on schedule, MidPen had to not only secure financing for the project in the middle of the credit crisis, but also had to work closely with the market rate developer to develop an infrastructure phasing plan that allowed the affordable housing to move forward, while minimizing the financial risk to the market rate developer.

# Jan Lindenthal



**Location:** Foster City, CA

**Firm:** MidPen Housing Corporation

**Total Years:** 25

**Areas of Expertise:**

Affordable Housing  
Real Estate Development  
Community Development

**Education:**

MA, Public Service, Tufts University, 1988

BA, Hamilton College, 1985

**Affiliations:**

California Coalition for Rural Housing, Board of Directors

## Affordable Housing

### Qualifications Overview

Ms. Jan Lindenthal leads the Real Estate Development Team and brings over 25 years of experience in the community development and affordable housing fields. In her career, she has overseen the production of over 3,200 units. Prior to joining MidPen, Jan served as Vice President of Real Estate and Construction at a non-profit based in Gilroy, California. In this capacity, she led the organization's work in master planning and developing two mixed-use communities in Gilroy. Both communities were multi-phase and involved extensive backbone infrastructure improvements, affordable and market rate components, and supportive housing. Since joining MidPen's team in 2009, she has grown MidPen's development staff from a team of 11 to a team of nearly 30 professionals.

In addition to Jan's experience planning and developing mixed-income communities, she has extensive experience and a personal commitment to the community outreach process. She leads the outreach process on every MidPen project, working with local communities to build acceptance for affordable housing by first listening to understand diverse community viewpoints that include both neighbors and prospective residents and then building consensus around shared community goals and objectives. Jan is deeply committed to the

community engagement and outreach process and understands how getting this part right directly leads to the production of more affordable homes for those in need.

As Vice President of Real Estate Development, Jan is responsible for the management of a 30+ member real estate division, overseeing the development of projects in various stages from pre-development through construction, as well as sourcing new projects, evaluating initial feasibility, negotiating terms of site control agreements, and developing initial project concepts.

### Relevant Projects

**Vice President of Real Estate Development: Kottinger Gardens, Pleasanton, California.** Led the outreach process by working with the local community to build acceptance for affordable housing by first listening to understand diverse community viewpoints that include both neighbors and prospective residents and then building consensus around shared community goals and objectives. Guided MidPen's recent efforts to accomplish community acceptance in the City of Pleasanton where MidPen worked with a Task Force made up of elected officials, neighbors, project residents, and community leaders to build consensus around the shared vision for the redevelopment of existing public housing. This process, which had gone on for nearly 10 years before MidPen's involvement, culminated in unanimous City approval of the project plan within eight months after MidPen was selected to lead the community engagement process.

**Vice President of Real Estate Development: Allied Housing, Inc., Main Street Village, Affordable Housing Development Services, Fremont, California.** The project was a mixed-use family and supportive housing for Mental Health Services Act residents with 50% of the units set-aside for formerly homeless or at risk of homelessness families and individuals. It consisted of 64 apartments and ground floor commercial space. This development has served as a model for leasing and operating other supportive housing in our own portfolio and beyond.

**Vice President of Real Estate Development: Station Center, Affordable Housing Development Services, Union City, California.** Station Center is an inclusionary development at the heart of Union City's vision to create the Station District, a vibrant city center bustling with attractive store fronts, community parks, and high-quality housing. It consists of 157 affordable apartments for families in an innovative plan that wraps apartment buildings around common areas to create an open feel. The main open-arch entrance reveals a series of spaces for gathering. The street frontage on the ground floor is commercial space. BART/bus lines are in close proximity, so residents can take public transportation to-and-from this transit-oriented community. Sustainable design is a top priority with Station Center, with a LEED Platinum Certification.

**Vice President of Real Estate Development: Manzanita Place, Affordable Housing Development Services, Former Fort Ord, East Garrison, California.** Manzanita Place provides 66 families with affordable rental housing. It marks the first housing community on the greater East Garrison master-planned development to be completed and reflects a smart growth approach to community planning. Constructed on two non-contiguous sites, it consists of 10 garden-style buildings. MidPen secured financing for the project in the middle of the credit crisis and worked closely with the market rate developer to develop an infrastructure phasing plan that allowed the affordable housing to move forward, while minimizing the financial risk to the market rate developer.

## Alice Talcott



**Location:** Foster City, CA

**Firm:** MidPen Housing Corporation

**Total Years:** 20

**Areas of Expertise:**

Affordable Housing  
Real Estate Development  
Financing and Structuring of Rental Housing

**Education:**

MS, City Planning, University of California, Berkeley, 1992

BA, Political Science, Washington University, St. Louis, 1984

**Affiliations:**

East Bay Housing Organizations  
NonProfit Housing Association of Northern California

## Affordable Housing

### Qualifications Overview

Ms. Alice Talcott is the Director of Housing Finance, where she provides strategic direction on the funding of MidPen's development and portfolio projects. She has over 20 years of experience in affordable housing development and is an expert in the financing and structuring of rental housing projects. Prior to MidPen, she worked for 14 years at Community Economics, where she assisted non-profit developers in the financing and structuring of over 9,000 units of affordable housing in California and Hawaii, including negotiating over \$825 million in investor equity for 90 projects. Her experience includes six years at the Mayor's Office of Housing in San Francisco. She has been an active advocate on statewide housing issues and has served on the board of the NonProfit Housing Association of Northern California. She is a frequent presenter at the Housing California and the NonProfit Housing Association of Northern California conferences on housing finance issues.

Alice will provide input and direction regarding financing plans, negotiations with investors and lenders, and strategy for successful implementation of the proposed affordable housing development at Concord Naval Weapons Station. This resource in-house differentiates MidPen from many other non-profit developers and gives us a competitive edge when it comes to securing the best investor pricing and preparing winning tax credit applications.

### Relevant Projects

**Financial Consultant:** MidPen Housing Corporation/Allied Housing, Inc., Main Street

**Village, Affordable Housing Development Services, Fremont, California.** Structured the project financing, including an American Recovery and Reinvestment Act (ARRA) grant from the California Tax Credit Allocation Committee in lieu of tax credit equity. The project was a mixed-use family and supportive housing for Mental Health Services

Act residents with 50% of the units set-aside for formerly homeless or at risk of homelessness families and individuals. It consisted of 64 apartments and ground floor commercial space. This development has served as a model for leasing and operating other supportive housing in our own portfolio and beyond.

**Financial Consultant: Manzanita Place, Affordable Housing Development Services, Former Fort Ord, East Garrison, California.** Provide strategic direction on project financing and structuring. Manzanita Place provides 66 families with affordable rental housing. It marks the first housing community on the greater East Garrison master-planned development to be completed and reflects a smart growth approach to community planning. Constructed on two non-contiguous sites, it consists of 10 garden-style buildings. Amenities include a community center, computer lab, children's playground, and several open community areas and outdoor courtyards. In order to ensure the affordable housing could be completed on schedule, MidPen had to not only secure financing for the project in the middle of the credit crisis, but also had to work closely with the market rate developer to develop an infrastructure phasing plan that allowed the affordable housing to move forward, while minimizing the financial risk to the market rate developer.

**Director of Housing Finance: Chestnut Square, Affordable Housing Development Services, Livermore, California.** Provide strategic direction on project financing and structuring. This is a 142 unit mixed-use project that will serve low and very low income seniors and families and will be constructed in partnership with the City on a publicly owned signature site in their downtown. The project is unique in that MidPen, in the capacity of the affordable housing developer, will be driving the process to select a for-profit home builder who will be given the opportunity to build up to 44 market rate homes. With the affordable developer selecting the market rate partner, community benefits will be front and center as MidPen prioritizes development scenarios that ensure the end-product adheres to the vision established by the community.

**Director of Housing Finance: Sonoma Springs, Affordable Housing Development Services, Sonoma, California.** Strategize on financing of a multi-phase, mixed-use, master-planned community that includes 60 units of affordable family housing, 40 units of affordable senior housing, a community garden, retail space, and playground. The project budget is \$23 million.

**Director of Housing Finance: St. Stephen's, Affordable Housing Development Services, Santa Cruz County, California.** This is a 40 unit infill development with a \$15.2 million budget. It is a ground-lease partnership with St. Stephen's Lutheran Church located next door.

## Iman Novin



**Location:** Oakland, CA

**Firm:** MidPen Housing Corporation

**Total Years:** 10

**Areas of Expertise:**

Affordable Housing  
Real Estate Development  
New Housing Development/  
Acquisition

**Education:**

BS, Structural Engineering,  
University of California, San  
Diego, 2007

BA, Urban Studies and  
Planning, University of  
California, San Diego, 2007

**Affiliations:**

Urban Land Institute

Institute transit-oriented development technical assistance panel studies for the Cities of Dublin, Antioch, and San Leandro. He has volunteered as a classroom facilitator for the Urban Land Institute UrbanPlan Program at Berkeley High School. He lives in Contra Costa County and serves on the Walnut Creek Planning Commission.

## Affordable Housing

### Qualifications Overview

Mr. Iman Novin joined MidPen in March 2014 and leads acquisition efforts throughout the San Francisco Bay Area. He identifies sites for potential new housing development or acquisition, conducts initial feasibility analysis, negotiates with property owners, and maintains relationships with brokers, development partners, city staff, and other key local stakeholders. He will provide early feasibility and underwriting for the proposed affordable housing at Concord Naval Weapons Station, as well as oversight and support during transition to a day-to-day MidPen Project Manager(s).

Iman has over 10 years of experience in the real estate development and affordable housing sector. Prior to joining MidPen, he worked at BRIDGE Housing and BUILD as a Project Manager in both their San Francisco and Irvine offices. He has worked with a variety of public and private partners ranging from local jurisdictions, market-rate developers, non-profit organizations, and CalPERS on a wide assortment of project types, including mixed-use, mixed-income, inclusionary, master plan, and transit-oriented development.

Prior to joining BRIDGE/BUILD, Iman worked in the Real Estate and Planning Divisions of the Centre City Development Corporation on redevelopment and affordable housing policy initiatives within the Downtown San Diego Redevelopment Project Area, as well as with Keyser Marston Associates in their San Diego office. He is actively involved with the Urban Land Institute and has authored three Urban Land

**Relevant Projects**

**Assistant Project Manager: BRIDGE Housing, MacArthur BART Transit Village, Oakland, California.** Assisted in securing entitlements for the 624 unit MacArthur BART Transit Village project, which required close collaboration with BART and the City of Oakland. The project included successful grant applications totaling over \$34 million from the State HCD Prop 1C TOD and IIG programs, as well as a LEED for Neighborhood Development Gold level certification.

**Project Manager: BRIDGE Housing, First Phase of Ivy at College Park, Chino, California.** Project Manager for the first phase of Ivy at College Park, a 330 unit very low-, low-, and moderate-income inclusionary family development located within the larger award winning College Park Master Plan.

**Project Manager: MidPen Housing, St. Stephen's, Affordable Housing Development Services, Santa Cruz County, California.** Secured entitlements and financing and managed the relationship with the church. This is a 40 unit infill development with a \$15.2 million budget. It is a ground-lease partnership with St. Stephen's Lutheran Church located next door.

**Project Manager: MidPen Housing, 6800 Mission Street Family Housing, Affordable Housing Development Services, Daly City, California.** Managed environmental due-diligence, design development, and entitlements. This is a mixed-use, transit-oriented, infill development with a \$30 million budget. It consists of retail space on ground level and 52 units with six units reserved for supportive housing population. The infill site was formerly a vacant used car dealership and automotive repair facility. It is part of the revitalization plan along the Mission Street corridor. Construction is expected to start in spring 2015.

## Nevada Merriman



**Location:** Foster City, CA

**Firm:** MidPen Housing  
Corporation

**Total Years:** 7

### **Areas of Expertise:**

Affordable Housing  
Real Estate Development

### **Education:**

BA, Comparative Literature,  
Cornell University, 2001

### **Affiliations:**

Nonprofit Housing Association  
of Northern California  
Housing Leadership Council of  
San Mateo County, Board of  
Directors  
Urban Land Institute

## Affordable Housing

### **Qualifications Overview**

Ms. Nevada Merriman is a project manager for one of northern California's leading non-profit developers and managers of affordable rental housing. She oversees development of new projects, from land acquisition through construction and occupancy, prepares feasibility analysis, and secures public and private financing. Her expertise includes developing award-winning high density, transit-oriented affordable housing in Alameda, Santa Clara, and San Mateo Counties. As a board member, Nevada chairs the policy committee for the Housing Leadership Council of San Mateo County.

### **Relevant Projects**

**Senior Project Manager: Armory Site, Affordable Housing Development Services, Sunnyvale, California.** MidPen and Charities Housing submitted a Notice of Interest to the Onizuka Air Force Station Local Redevelopment Authority in 2006. Submitting this notice confirmed MidPen's eligibility for a public benefit conveyance program that would make the surplus Air Force Station property available at up to a 100-percent discount of fair market value in exchange for providing homeless housing and services. The Base Realignment and Closure (BRAC) Program provided an opportunity for MidPen to work collaboratively with Charities Housing to jointly entitle a 2.7-acre City-owned site. This development consists of 58 affordable apartments with 29 apartments reserved for chronically homeless individuals and families. The project is expected to break ground in December 2014 and be completed in 2016.

**Senior Project Manager: New Home Company, Foster Square, Affordable Housing Development Services, Foster City, California.** MidPen is developing a 66-unit senior building over a 10,000 square foot retail condominium in the heart of Foster City. The project is one component of a 400-unit master plan on 15 acres adjacent to City Hall,

the Peninsula Jewish Community Center, and many other wonderful amenities. It has been thoughtfully designed to accommodate the needs of seniors across the income spectrum as they age in place. The project is expected to break ground in December 2014 and be completed in 2016.

**Senior Project Manager: Family Crossroads, Affordable Housing Development Services, Daly City, California.** Currently, in the process of restructuring the ownership so that InnVision Shelter Network, now a mature and capitalized organization, can rehabilitate and take ownership of the property. This is a portfolio restructuring/recapitalization of a 17-unit transitional housing project operated by InnVision Shelter Network for over 25 years. The construction is expected to start in March 2015 and be completed in 2016.

**Project Manager: Delaware Pacific, Affordable Housing Development Services, San Mateo, California.** This is a mixed-income development consisting of 60 affordable apartments for families and individuals with special needs. MidPen's affordable housing phase was completed in 2013. The second phase, including an additional 60 units of moderate income housing, is currently under construction by the co-developer.

**Project Manager: Peninsula Station, Affordable Housing Development Services, San Mateo, California.** This development consists of 68 affordable apartments for low income families. It received the Mayor's Choice Award by the City of San Mateo and a Green Building Award from Sustainable San Mateo County.

**Assistant Project Manager: Station Center, Affordable Housing Development Services, Union City, California.** Station Center is an inclusionary development at the heart of Union City's vision to create the Station District, a vibrant city center bustling with attractive store fronts, community parks, and high-quality housing. The project consists of 157 affordable apartments for families in an innovative plan that wraps apartment buildings around common areas to create an open feel. Retail shops, restaurants, and businesses are located on street frontage. BART and bus lines are in close proximity to this transit-oriented community. Station Center received LEED Platinum Certification. It has received many awards, including Congress for New Urbanism Charter Award for Global Excellence, and the Urban Land Institute Award for Excellence.

**Assistant Project Manager: 636 El Camino Real, Affordable Housing Development Services, South San Francisco, California.** This development consists of 109 affordable apartments for families and individuals with special needs.

## Robert Lee



**Location:** San Ramon, CA

**Firm:** William Hezmalhalch  
Architects, Inc.

**Total Years:** 25

**Areas of Expertise:**

Community Planning  
Transit-Oriented Development  
Traditional  
New Urban

**Education:**

BS, Urban/Regional Planning,  
California State Polytechnic  
University, Pomona, 1991  
Certificate, Light Construction/  
Development Management,  
University of California, Irvine,  
1997

**Affiliations:**

American Planning Association  
Urban Land Institute  
U.S. Green Building Council  
Northern California Chapter

## Architectural Design

### Qualifications Overview

Mr. Robert Lee is Principal of the Northern California Community Planning and Design team. With over 25 years of planning and entitlement experience, he oversees the creative design solutions and vision for a variety of projects, including large-scale master-planned communities, transit-oriented development, redevelopment, and urban infill projects throughout the San Francisco Bay Area, Central Valley, and Sacramento regions.

His planning approach incorporates many principles of new urbanism and traditional neighborhood design, uniting people to public spaces, parks, squares, and transit to create a memorable place. His expertise in community planning and knowledge of architecture ensures that his contributions on projects fulfill the collective needs of the client, city agencies, and community. He has been instrumental in obtaining approval of many challenging and complex projects in multiple jurisdictions in northern California. Robert's management experiences consist of large-scale master plans, specific plans, design guidelines, and detailed site design from small to medium infill residential and mixed-use projects. Robert is a member of the Windemere Master Plan Architecture Design Review Committee and the Mountain House Master Plan Architecture Design Review Committee.

### Relevant Projects

**Community Plan and Architecture Design Guideline: Argent Management, Dublin Crossing Specific Plan, Dublin, California.** Developed the vision for each neighborhood, programed a diverse

housing variety and density, and authored the specific plan's architecture design guideline. The Dublin Crossing Specific Plan encompasses approximately 189 acres in the City of Dublin. The project area includes 8.7 acres owned by Alameda County

Surplus Property Authority, an 8.9 acre parcel owned by National Aeronautics and Space Administration, and a portion of Camp Parks Reserve Forces Training Area (Camp Parks) military exchange. The site is located north of Interstate 580 and Dublin Boulevard.

**Master Plan and Architect: Signature Development Group/Lehman Bros Joint Venture, Oak Knoll Naval Hospital site, Oakland, California.** A formal naval hospital site located in the Oakland hills encompasses approximately 167 acres. Designed to incorporate up to 900 residential homes of various densities and income levels, including a mixed-use main street village retail center, restoration of an existing creek, and creation of recreation facilities and trails to benefit both surrounding neighborhoods and future residences. Oak Knoll is one of the largest infill sites remaining in Oakland. Incorporated green sustainable design elements, including solar orientation, sensitivity to oak woodland, preservation and restoration of creek, and open space and park land as a major community amenity.

**Master Plan and Architect: Lafferty Communities, Faria Preserve, San Ramon, California.** A 290-acre hillside master-planned community located on the west side of San Ramon, consists of 740 residential homes ranging from senior housing, apartments, town-homes and flats, and conventional single-family detached homes on small lot clusters to 5,000 square foot lots. Based on the City's smart growth initiative, the project development footprint was reduced by 65 acres, a 20% reduction from past approval. The remaining 80% of the site is preserved as permanent open space and parkland. The project was initially approved by the city council in 2006, redesigned in 2012, and received final approval in summer of 2014.

**Master Plan and Architect: McKinley Group, Canon Station, Fairfield, California.** The Canon Station Lake District is a transit-oriented development planned community that encompasses approximately 345 acres. Land uses include a 10-acre village retail center, 21 acres of lake and park land, and approximately 2,100 to 2,200 residential homes with a blend of housing types, including senior housing, work-force housing, family-oriented, and move-down homes. Canon Station is part of the Fairfield Train Station Specific Plan that encompasses over 2,900 acres of land. The project is within easy access to the future train station and to Travis Air Force Base.

## Honey Walters



**Location:** Sacramento, CA

**Firm:** Ascent Environmental,  
Inc.

**Total Years:** 14

**Areas of Expertise:**

Air Quality

Climate Change

Noise

**Education:**

MS, Atmospheric Science,  
University of California, Davis,  
2001

BS, Environmental Science,  
Indiana State University, 1998

**Affiliations:**

Association of Environmental  
Professionals

American Meteorological  
Society

Air and Waste Management  
Association

National Association of  
Environmental Professionals

Solar Cookers International,  
Board of Directors

Institute of Noise Control  
Engineering

Acoustical Society of America

## Climate Change/Air Quality/Noise

### Qualifications Overview

Ms. Honey Walters leads the firm's air quality, greenhouse gas (GHG), and noise analysis practice. She is an expert in air quality impact and compliance analysis, GHG analysis and reduction planning, and noise impact analysis and mitigation planning. Honey has over 14 years of professional experience in the private and public sectors. Her extensive computer modeling experience is coupled with a strong educational background in air pollution chemistry and climate change science, with Bachelor and Master of Science degrees in Environmental Chemistry and Atmospheric Science. Honey has worked directly with numerous state and local agencies, including the California Air Resources Board, California Air Pollution Control Officers Association, Bay Area and Sacramento Metropolitan Air Quality Management Districts, and the Attorney General's office on the development of GHG thresholds of significance, analytical methods, and reduction strategies for California.

### Relevant Projects

**Air Quality/Climate Change/Noise Lead: Midpeninsula Regional Open Space District, Mount Umunhum Environmental Restoration and Public Access Project Environmental Impact Report (EIR), Santa Clara County, California.**

Provided oversight of the air quality, climate change, and noise analysis sections of the EIR. The project includes demolition of structures associated with a former U.S. Air Force station located at the peaks of Mount Umunhum and Mount Thayer in the Santa Cruz mountains. After demolition, the project involves ecological and landform restoration and would include several trail connections and open space amenities, including campground, viewing and ceremonial areas, and a visitors center.

**Principal-in-Charge: City of Roseville Planning, Housing & Redevelopment Department, Westbrook Amendment Air Quality and Climate Change Analyses, Roseville, California.** Prepared the air quality and climate change analyses for the EIR being prepared for the Westbrook Amendment to the Sierra Vista Specific Plan (SVSP). The proposed project includes a General Plan Amendment, Specific Plan Amendment, Rezone, and Development Agreement for an approximately 400 acre property designated Urban Reserve in the SVSP. The proposed land use plan includes 2,029 residential units in a mix of low, medium, and high density; 43.3 acres of commercial land uses; a 10-acre elementary school site; three neighborhood parks; open space preserve; and a new well site. Air quality analysts are estimating the mass of criteria air pollutant and GHG emissions associated with construction and operation of these land uses. Impacts to air quality are being analyzed according to guidance from the Placer County Air Pollution Control District (PCAPCD). GHG emissions associated with the project are being analyzed according to guidance from PCAPCD, as well as other air districts and State agencies in consultation with the City. The analysis is addressing any adverse effects climate change may have on the Specific Plan area, including changes to water supply, increased risk of flooding or drought, and increased frequency or intensity of wildfire (i.e., grass fires) as a result of changing precipitation patterns/temperatures.

**Senior Air Quality/Climate Change Specialist: PCCP Mariposa Lakes, LLC, Mariposa Lakes Specific Plan EIR, Stockton, California.** This project included the preparation of an EIR for a proposed mixed-use development project on approximately 3,800 acres just outside the City of Stockton. The Mariposa Lakes community would include approximately 10,500 homes, 1 million square feet of commercial uses, and 10 million square feet of industrial uses. The project includes construction of 11 artificial lakes and a system of interconnecting canals throughout the project site with man-made wetlands for water treatment and recreation features. A new campus for the San Joaquin Delta Community College is proposed as part of the project. The EIR includes both a project-level evaluation of approximately 1,000 acres proposed for tentative subdivision map approval and a program-level evaluation of the remaining 2,180 acres proposed for future development. Analyzed air quality impacts from project implementation in accordance with Air Pollution Control District-recommended methodologies. Predicted short- and long-term (e.g., construction, mobile, and area source) increases in regional criteria air pollutant and precursor emissions. Analyzed long-term increases in localized emissions, stationary-source emissions, potential exposure of sensitive receptors to toxic air pollutant and odor-sources, land use compatibility, and potential conflicts with existing air quality plans. The analysis included a calculation of the project's generation of GHG emissions and assessed the project's incremental cumulative contribution to global climate change. With respect to indirect effects, the EIR includes an evaluation of potential effects of global climate change on the proposed project.

# Joshua Peabody



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 17

**Areas of Expertise:**

Cultural Resources Management  
Anthropology  
Lithic Analysis

**Education:**

MA, Anthropology, University of California, Santa Cruz, 2004

BA, Anthropology, California State University, Chico, 2001

**Licenses/Registrations/**

**Certifications:**

Exceeds Secretary of Interior Standards for Archaeology Bureau of Land Management Permit to Conduct Cultural Resources Management on Public Lands, CA

**Affiliations:**

American Anthropological Society  
Society for American Archaeology  
Society for California Archaeology

## Cultural Resources

### Qualifications Overview

Mr. Joshua Peabody's expertise lies in identification and preservation of archaeological and built environment sites, as well as traditional cultural properties through cultural resource management. He has worked for private industry, State of California, and the federal government. His experience includes pedestrian archaeological surveys, testing and data recovery excavations, evaluating impacts to cultural resources for permit and lease renewals, performing site inventory and evaluations pursuant to Section 106 of the National Historic Preservation Act (NHPA), interfacing with project stakeholders, and performing Native American consultation at sensitive sites.

### Relevant Projects

**Archaeologist/Author: U.S. Army Corps of Engineers, Pajaro River Levee Enhancement, Environmental Impact Analysis, Monterey County, California.** As lead author on the combined Draft Environmental Impact Statement (EIS)/Environmental Impact Report (EIR), collected existing data on cultural resources, consulted with Native American tribes, and coordinated with U.S. Army Corps of Engineers cultural resources staff to draft the cultural resources section of the environmental document. The document is a combined National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) assessment of project alternatives.

**Project Manager/Archaeologist: Confidential Energy Provider, On-Call Cultural Resources Services, California.** Responsible for the execution and management of services provided on the Reliability, Improvement, and Maintenance Program. Project manager on more than 100 projects in the program and managed a staff of six in-house

archaeologists and multiple subcontractors performing the cultural resources compliance work.

**Archaeologist: Southern California Edison, Big Creek Hydroelectric Relicensing, San Joaquin River Watershed, California.** Performed national register evaluations of three sites near Huntington Lake and performed pedestrian survey of about 250 acres in support of individual gage and recreation area improvements as part of preparation of the Exhibit E for the Big Creek Hydroelectric Relicensing.

**Archaeologist: Placer County Water District, Middle Fork American River Federal Energy Regulatory Commission Hydroelectric Relicensing, Placer County, California.** Performed data analysis and co-authored portions of the National Register of Historic Places eligibility report. Completed report sections were in support of meeting Section 106 of the NHPA as amended. The project involved relicensing the Middle Fork American River hydropower project that involved eight rivers and streams and four reservoirs using the Federal Energy Regulatory Commission Integrated Licensing Process.

**Environmental Planner/District Archeologist: U.S. Forest Service, Amador District of El Dorado National Forest, Pioneer, California.** Duties included day-to-day execution of the cultural resources program under the El Dorado Programmatic Agreement. This included developing grazing allotment plans and evaluating impacts to cultural resources for permit and lease renewals, performing site inventory and evaluations pursuant to Section 106 of the NHPA, and serving as supervisor for a small crew of technicians. Oversaw management of the Mormon/Carson Immigrant trail. Associated duties included interfacing with OCTA members and performing Native American consultation at sensitive sites associated with westward expansion along the trail. Provided contract oversight and management and worked with intra-agency departments, including the Grazing, Timber, Fire, Hydrology, and Biology Departments. Prepared environmental and cultural management reports, developed requests for proposals and annual budgets, and managed fieldwork. Worked with the public during interpretive activities and supervised employees and volunteers.

**Archeologist: U.S. Forest Service, Enterprise Team, Lassen National Forest, California.** Served as crew leader on an Enterprise Team based in the Lassen National Forest, including leading crews performing pedestrian archaeological surveys and excavations for almost three years. Served as an instructor on a PIT project involving the excavation of camp sites along the Lassen Emigrant Trail in Lassen County. Worked in the Shasta-Trinity, Mendocino, Lassen, Plumas, El Dorado, Modoc, and Tahoe National Forests. Primary duties were organizing and leading fieldwork and report writing.

## Polly Allen



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 12

### **Areas of Expertise:**

Cultural Resource Management and Compliance  
Sections 106 and 110  
Integrated Cultural Resource Management Plans

### **Education:**

MS, Historic Preservation, Columbia University, 2008  
BA, History, University of Wisconsin, Madison, 2002

### **Licenses/Registrations/ Certifications:**

Qualified Architectural Historian, Secretary of the Interior's Professional Qualifications Standards, U.S.

### **Affiliations:**

Society for Industrial Archaeology  
San Francisco Architectural Heritage  
Sacramento Old City Association  
Society of Architectural Historians

## Cultural Resources

### **Qualifications Overview**

Ms. Polly Allen is experienced in cultural resource management and regulatory compliance relating to the built environment. She has served as Lead Architectural Historian on a wide range of documentation projects, including those under Sections 106 and 110 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). Her clients include a broad array of federal, state, and local agencies, including the Department of Defense, Federal Highway Administration, Caltrans, and multiple local development agencies.

Polly is well-versed in project design, from project delineation and Area of Potential Effects development to intensive survey, field recordation and management, report documentation, and agency review. She has worked on military installations across California, Nevada, and Arizona undertaking documentation and evaluation projects in support of NHPA and National Environmental Policy Act (NEPA) compliance. Projects include large-scale inventory and evaluation of U.S. Army, U.S. Navy, and U.S. Air Force real property, as well as Section 106 effects analysis and mitigation strategies, development of Integrated Cultural Resource Management Plans, and the development of appropriate historic contexts for base management programs.

### **Relevant Projects**

**Lead Architectural Historian: Ecology and Environment, Inc., Concord Naval Weapons Station, Concord Community Reuse Project, Concord, California.** Led cultural resource compliance activities under Section 106 related to the reuse of the former lands of Concord Naval Weapons Station, an approximately 12,000 acre

armament storage depot. Responsibilities included field recordation and evaluation of over 300 historic period built environment resources, including buildings, structures, and objects related to military use and resources predating military occupation.

**Lead Architectural Historian: March Air Reserve Base, Cold War Cultural Resources Inventory and Evaluation Update Report, March Air Reserve Base, California.** Led a cultural resources compliance project under Sections 106 and 110 of the NHPA. Working directly under Base environmental management staff, undertook resource evaluations under National Register of Historic Places (NRHP) and CEQA for 79 Cold War buildings and structures and led agency coordination on behalf of March Air Reserve Base.

**Lead Architectural Historian: Edwards Air Force Base, Cold War Inventory and Evaluation Report, Edwards Air Force Base, California.** Led a cultural resources compliance project under Sections 106 and 110 of the NHPA at the Air Force Research Lab at Edwards Air Force Base. Working directly under Base environmental management staff, undertook resource evaluations under NRHP and CEQA for approximately 100 Cold War buildings and structures, including a number of structures comprising NRHP eligible districts in the Air Force Research Lab. Evaluated resources were highly technical in nature, with survey that included rocket test stands, aerospace features, munitions ranges, and other research, development, testing, and evaluation related features.

**Lead Architectural Historian: March Air Reserve Base, Integrated Cultural Resource Management Plan, March Air Reserve Base, California.** Authored the March Air Reserve Base Integrated Cultural Resource Management Plan in conjunction with Base environmental management staff. The plan was conducted in compliance with pertinent U.S. Air Force guidance and laid out the framework for cultural resources compliance under Sections 106 and 110 of the NHPA. Additionally, the plan aligned cultural resources goals with other Base compliance efforts in relation to NEPA and other programmatic, operational, and security frameworks.

**Lead Architectural Historian: Naval Air Station Fallon, Dixie Valley Cultural Landscape Survey, Naval Air Station Fallon, Nevada.** Led the Dixie Valley Cultural Landscape Survey, an intensive landscape assessment commissioned by Naval Air Station Fallon of the portions of their lands previously occupied by the agricultural settlement of Dixie Valley. As part of the project, undertook intensive field survey, developed boundary and area justifications, developed a detailed historic context for evaluation, and drafted a comprehensive cultural landscape assessment that evaluated the potential for a cultural landscape under NRHP standards.

## Shannon Karvonen



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 15

### **Areas of Expertise:**

Clean Water Act

Endangered Species Act

Mitigation and Monitoring  
Plans

Storm Water Quality

### **Education:**

BS, Conservation and Resource  
Studies (Water Resources and  
Wildlife Habitats Emphasis),  
University of California,  
Berkeley, 1995

### **Licenses/Registrations/ Certifications:**

Certified Professional in  
Erosion and Sediment Control,  
CA, #6191, 2010

Qualified SWPPP Developer/  
Practitioner, CA, #00458, 2010

### **Affiliations:**

Society of American Military  
Engineers

Women's Transportation  
Seminar

Building Industry Association

## Environmental Planning/Permitting

### **Qualifications Overview**

Ms. Shannon Karvonen has expertise in land planning and constraints analysis, supervision of resource studies, permitting, and construction-phase permit compliance, as well as storm water quality management and restoration. She specializes in large-scale development, electrical/gas transmission and distribution, and transportation, assisting in project design during the planning phase, supervising the development of National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) documents, and obtaining permits, including Clean Water Act Section 404/401, Endangered Species Act, and California Department of Fish and Wildlife. Shannon acts as primary agency contact and supervisor for environmental compliance programs for complex transportation and development projects.

### **Relevant Projects**

**Environmental Compliance Manager: SunCal, Dublin Crossing, Camp Parks, Dublin, California.**

Manages the environmental entitlement and compliance activities for Dublin Crossing, a 180-acre transit-oriented community that is being converted from military to private development. Prepared the permitting strategy and coordinated the preparation of the biological and cultural resources reports to support a Section 404 Individual Permit, Section 401, and California Department of Fish and Wildlife, including technical reports required for state historical preservation office and Endangered Species Act consultations. Oversaw protocol-level Branchiopod and California Red-legged frog surveys, wetland delineations, and biological resource assessments. Peer reviewed the Environmental Impact Report (EIR). Oversees studies and permitting associated with flood mitigation and a road project.

**Senior Project Manager: SunCal, Bickford Ranch, Placer County, California.** Managed the environmental entitlement and compliance activities for a 1,942-acre, mixed-use master-planned project. Responsible for obtaining project permits, including the Section 404 (letters of permission and nationwide permits), Section 401 certifications, and streambed alteration agreements (Section 1602). Managed the storm water pollution prevention plans (SWPPP) site inspections and construction activities for mitigation projects. Provided preserve monitoring and management oversight. Directed the development and implementation of a riparian habitat mitigation plan. Oversaw the construction monitoring program and ensured compliance with the oak tree permit and tree mitigation program, biological opinion, state historical preservation office memorandum of agreement, bat monitoring plan, raptor monitoring plan, and EIR.

**Senior Project Manager: SunCal, Lincoln Crossing, Lincoln, California.** Directed the Lincoln Crossing project, which consisted of a 1,070-acre development with 4.1 miles of waterways, six bridges, and 207 acres of wetland preserve. Managed resource studies required by six environmental agencies and oversaw site investigations comprising wetland delineations, special status species surveys, arborist surveys, and water quality analysis. Obtained environmental permits for: 1) fill of jurisdictional wetlands (on-site and off-site); 2) realignment of Ingram Slough; 3) creation of a new creek and three lakes; 4) creation of a one-mile floodway channel; 5) creation of mitigation wetlands; and 6) removal of oak trees. Acted as liaison to the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, Regional Water Quality Control Board, California Department of Fish and Wildlife, Department of Water Resources, and the City of Lincoln. Oversaw construction-phase environmental compliance. Developed SWPPPs for multiple phases with use of advanced filtration technology. Prepared mitigation and monitoring plans and Preserve Operations and Management Plan. Oversaw preparation of construction-level plans for riparian and wetlands restoration.

**Senior Project Manager: City of Lincoln, Nelson Lane Bridge Replacement and Road Widening, Lincoln, California.** Directed resource studies, NEPA/CEQA documentation, permitting, and agency liaison associated with the replacement of a two-lane bridge with two, two-lane bridges and construction of a  $\frac{3}{4}$ -mile four-lane roadway with median bioswale. Worked directly with Caltrans in preparing the wetland delineation, natural environmental study, biological assessment, cultural resources reports, noise and air studies, water quality study, arborist report, and visual study. Oversaw preparation of the Section 404/401 permit applications, California Department of Fish and Wildlife Section 1600 Notification, and the initial study/mitigated negative declaration. Acted as primary liaison to Caltrans and state and federal agencies, including the facilitation of Section 7 Consultation.

## Michael Dungan, PhD



**Location:** Santa Barbara, CA

**Firm:** Cardno

**Total Years:** 33

### **Areas of Expertise:**

NEPA/CEQA

Environmental Planning and  
Permitting

Biological Resource Studies

### **Education:**

PhD, Ecology and Evolutionary  
Biology, University of Arizona,  
1984

MS, Ecology and Evolutionary  
Biology, University of Arizona,  
1979

BA, Zoology, University of  
California, Santa Barbara, 1975

### **Licenses/Registrations/**

#### **Certifications:**

Certified Senior Ecologist, U.S.,  
2008

#### **Affiliations:**

Acoustical Society of America  
Ecological Society of America  
California Botanical Society  
California Native Plant Society  
Society of Wetland Scientists

**Terminal Concord, California.** Provided direction and review for preparation of the Integrated Natural Resources Management Plan. Authored, co-authored, and/or

## Environmental Planning/Permitting/ Military Planning/Liaison

### **Qualifications Overview**

Dr. Michael Dungan is a senior ecologist and project manager with broad experience in terrestrial, wetland, and marine ecosystems. He manages several biological resources staff in the southwestern region, providing mentorship, direction, and quality assurance. He has experience, both as a project manager and technical contributor, to baseline biological resource studies and habitat evaluations, project permitting and regulatory compliance, and environmental impact assessment under the National Environmental Policy Act (NEPA), Executive Order 12114 (Environmental Effects Abroad), and the California Environmental Quality Act (CEQA).

In addition to having a working knowledge of the requirements of NEPA and CEQA in all resource areas, Michael's technical expertise includes marine ecological resources and related statutory/regulatory requirements (e.g., Marine Mammal Protection Act, Endangered Species Act, Magnuson Stevens Act, Clean Water Act, Coastal Zone Management Act); wetlands delineation, classification, impact assessment, mitigation, and restoration feasibility and design; terrestrial vegetation and rare plant surveys, oak tree inventories, and revegetation and restoration issues; and endangered species and habitat issues, particularly as related to land and water use and military activities in coastal, mountain, and desert environments in the southwestern U.S.

### **Relevant Projects**

**Senior Ecologist: U.S. Army Military Surface Deployment and Distribution Command, Integrated Natural Resources Management Plan, and Environmental Assessment, Military Ocean**

provided quality assurance for key sections of the plan and related documentation, including responses to regulatory agency comments and concerns. Managed a shoreline survey focusing on the extent and quality of tidal and non-tidal wetland habitats on the installation and prepared the corresponding report to the Army, which became an appendix to the plan.

**Senior Ecologist: U.S. Army Military Surface Deployment and Distribution Command, Environmental Impact Statement for Repair and Replacement of Piers 2 and 3, Military Ocean Terminal Concord, California.** Primary author of biological resource sections of the Environmental Impact Statement (EIS), Biological Assessments submitted to National Marine Fisheries Service and U.S. Fish and Wildlife Service, and Essential Fish Habitat Assessment. Managed contractor surveys and contributor to other regulatory compliance documentation submitted to state and federal agencies.

**Project Manager: Ryland Homes, Rancho San Vicente Housing Development, Revegetation Monitoring, Rancho San Vicente, California.** Managed the revegetation monitoring to meet San Diego County permit requirements for the housing development. Oversaw field monitoring, preparation of reports documenting compliance, and interface between the County and Ryland Homes.

**Project Manager: AT&T and California State Lands Commission, CEQA Documentation and Permitting Support for AT&T China-U.S. and Japan-U.S. Projects, Multiple Locations, California.** Project Manager for two projects that involved the installation of new fiber optic cables on the seafloor off of Morro Bay in San Luis Obispo County and Manchester in Mendocino County, California. The cables completed system networks to serve the growing demand for digital communication and directly link the U.S. and other nations of the Pacific Rim. Managed the preparation of and wrote key sections of the California State Lands Commission's CEQA documents for these projects, which were finalized in the spring of 2000. Managed continuing environmental and permitting support during and after installation, including mitigation monitoring, review of cable burial results, and post-installation assessment cable installation effects on the seafloor.

**Principal Investigator/Field Studies Coordinator: Naval Facilities Engineering Command, Environmental Assessment for Enhancement of Operations and Training, Marine Corps Mountain Warfare Training Center, Bridgeport, California.** Senior Ecologist for the environmental review of enhanced operations and training capabilities for the Mountain Warfare Training Center on 53,000 acres of land in the Humboldt-Toiyabe National Forest. Managed biological surveys for rare plants, wetlands, and sensitive wildlife species on the National Forest. Provided direction and review and co-authored key sections of the environmental assessment and related documentation.

## Curtis Alling, AICP



**Location:** Sacramento, CA

**Firm:** Ascent Environmental, Inc.

**Total Years:** 35

**Areas of Expertise:**

NEPA/CEQA

Climate Change

**Education:**

MA, Recreation Resources Planning and Development, Texas A&M University, 1977  
BS, Wildlife Science, Cornell University, 1975

**Licenses/Registrations/**

**Certifications:**

AICP, U.S., #040218, 1984

**Affiliations:**

American Planning Association California (APACA), Co-Chair Enhanced CEQA Action Team, 2011-2012  
APACA, Chair Climate Change Task Force, 2007  
Association of Environmental Professionals, Chair Legislative Review Committee, 1995-2004

## Environmental Planning/Permitting

### Qualifications Overview

Mr. Curtis Alling, AICP, is a recognized expert in the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) and a specialist in complex environmental impact assessment programs. He has managed or directed more than 1,000 Environmental Impact Statements (EISs), Environmental Impact Reports (EIRs), environmental assessments (EAs), natural resource management, habitat restoration, environment review, or regulatory compliance projects for federal, state, and local agencies, private industry, and land developers. His projects cover a broad spectrum of settings, including stream and wetland restoration in the Lake Tahoe Basin, State Park general plan preparation from Humboldt to Los Angeles Counties, and a statewide habitat conservation plan. He has managed numerous complex, litigious projects and large-scale joint NEPA/CEQA documents. His project specialties include water resources projects, habitat mitigation planning, flood control projects, outdoor recreation planning, endangered species compliance, community planning, and interagency environmental consultation programs. Curtis is a recognized specialist in climate change adaptation and mitigation planning.

He has been a member of the American Institute of Certified Planners since 1984. Curtis has personally managed or directed 11 CEQA documents that were the subject of litigation. The defensibility record of these projects is outstanding. Curtis has regularly instructed for the Association of Environmental Professionals, American Planning Association, University of California, Davis Extension, and University of California, Los Angeles Extension on CEQA and NEPA practice.

## Relevant Projects

**Project Manager/Author: WESTDIV, Department of the Navy, Concord Naval Weapons Station Port Chicago Highway Explosive Safety Closure EA/EIS, Contra Costa County, California.** Manager and primary author of the EA and later the EIS for the U. S. Navy regarding the Concord Naval Weapons Station (NWS) Port Chicago Highway explosive safety closure, a controversial road closure in Contra Costa County. The proposed project involved closing an existing section of public roadway through the 7,600-acre tidal area of the Concord NWS to protect public safety in the unlikely event of an explosives accident at the loading piers in Suisun Bay. Key issues included public safety from explosion hazard, wetlands, endangered species (salt marsh harvest mouse and California clapper rail), traffic effects, and non-motor vehicle circulation. The EIS was adopted and the road closure was subsequently approved and implemented.

**Project Director/Author: WESTDIV, Department of the Navy, EIR/EIS and Coastal Consistency Determination for the Navy Broadway Complex, San Diego County, California.** Director and contributing author of the EIS and EIR and primary author of the Coastal Consistency Determination for the Broadway Complex Detachment. The proposed project involved redevelopment of the existing office uses at the Navy Broadway Complex to support a high-density, 2.5 million-square-foot, mixed-use development project. The proposed reuse of U.S. Navy property along the high-value, central bayfront of the City of San Diego required both Department of Defense and City of San Diego approval. It was required to be consistent with the city's Local Coastal Program under the requirements of the Coastal Zone Management Act. The objective of the U.S. Navy was to develop sufficient commercial space to economically support approximately 1 million square feet of U.S. Navy offices for co-location of administrative functions of the San Diego Naval Complex.

**Project Director: City of San Mateo and Caltrans District 4, Bay Meadows Redevelopment Project and U.S. Highway 101/Hillsdale Interchange Project EIR, San Mateo, California.** Directed EIR preparation for the Bay Meadows Redevelopment Project and U.S. Highway 101/Hillsdale interchange project. The Bay Meadows Racetrack property was one of the last remaining major infill parcels available in the city. The project proposed to include a new campus-style headquarters for Franklin Fund in a mixed-use plan with retail, entertainment, multiple-family residential, single-family residential, and park/open space uses. The proposed mixed-use redevelopment included over one million square feet of commercial uses, 775 dwelling units in a mix of densities, and neighborhood parkland in the 204-acre specific plan area. The project included substantial infrastructure improvements, including modifications to the U.S. 101/Hillsdale Boulevard interchange. Key issues included traffic, hydrology, public services, aesthetics, noise, air quality, hazardous materials, and land use compatibility. The EIR was certified and the project has been implemented.

## Gary Jakobs, AICP



**Location:** Sacramento, CA

**Firm:** Ascent Environmental,  
Inc.

**Total Years:** 30

**Areas of Expertise:**

NEPA/CEQA

Environmental Planning

Environmental Policy

**Education:**

BA, Economics and

Environmental Studies,

University of California, Santa

Barbara, 1981

**Licenses/Registrations/**

**Certifications:**

AICP, U.S., #6240, 1988

**Affiliations:**

American Institute of Certified  
Planners

American Planning Association

Association of Environmental  
Professionals

Urban Land Institute

reduced costs to the taxpayer. It involved extensive interagency coordination, development of a remediation plan, and intensive community involvement. The project included preparation of a coastal consistency determination and evaluation of consistency with the local coastal plan.

## Environmental Planning/Permitting

### Qualifications Overview

Mr. Gary Jakobs, AICP, is a principal and project director with a diverse background in preparing environmental planning studies throughout California and the western United States. He leads Ascent's National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) practice, ensuring the practitioners are current on practice methods, regulations, emerging trends, and applicable case law. Gary specializes in NEPA/CEQA compliance projects and focuses on environmental policy and other environmental regulations. He regularly instructs other professionals and public agencies on environmental compliance. He has participated in the analyses and management of projects ranging from large-scale planned communities and general plans, urban high-rise and redevelopment to water resources development, wastewater treatment, industrial and energy developments, including renewable energy projects, telecommunications, prisons, and airport expansions.

### Relevant Projects

**Project Manager: U.S. Department of Navy/City of San Diego, Broadway Complex Project Environmental Impact Statement (EIS) and Environmental Impact Report (EIR), San Diego, California.** The U.S. Navy and City of San Diego partnered to propose a major 3.25 million square foot proposed hotel/office development project on a brownfield site near the waterfront near downtown San Diego. Both NEPA (U.S. Navy) and CEQA (San Diego) compliance was required. The project was an innovative public-private venture for the Department of the Navy to provide U.S. Navy office facilities at

**Project Director: City of Sacramento, Greenbriar Development Project, Endangered Species Act Compliance Support, Sacramento, California.** The Greenbriar Development is a proposed transit-oriented mixed-density residential and retail/commercial development within the Natomas Basin on the northern edge of the City of Sacramento. Implementation of the proposed project may result in incidental take federally listed species or may remove potentially suitable habitat of federally listed species. Although within the geographic boundaries, the Greenbriar site is not included in the permit area of the Natomas Basin Habitat Conservation Plan; therefore, implementation of the Greenbriar Development required a project-specific Endangered Species Act Section 7 consultation associated with Section 404 wetland fill authorization. Directed the environmental review of the project to supplement a previous EIR and support the Endangered Species Act consultation process with analysis of habitat impacts and mitigation strategies to achieve species conservation.

**Project Director: Bay Area Rapid Transit District (BART)/Jones Lang LaSalle, Dublin/Pleasanton BART Station Transit Village EIR, Pleasanton and Dublin, California.** Directed an EIR for establishment of mixed-uses on two sites straddling a proposed BART station. The sites were in the cities of Pleasanton and Dublin. The EIR was required to meet the needs of both jurisdictions. Proposed uses included residential, hotel, commercial, and offices. Key issues addressed were land use, visual resources, noise/vibration, and traffic and parking.

**Project Director: City of Lathrop, River Islands at Lathrop EIR and Permitting, San Joaquin County, California.** Directed the preparation of the EIR and project permitting for the River Islands at Lathrop Project. The project consists of a mixed-use development (11,000 homes, 30,000 jobs) on approximately 4,900 acres on an inland island in the Sacramento/San Joaquin River Delta. Worked closely with the City, the applicant, and the planning team to identify potential environmental constraints, resolve or minimize these constraints through project design, and conduct environmental processing and permitting. Major issues included flood control, water availability, terrestrial and aquatic endangered species, agricultural conversion, water quality, and traffic. The EIR evaluated the overall 20-year phased buildout on a programmatic level and evaluated the first phase of development at a project level of detail, so that the first phase of construction could proceed without additional review. Permit applications and consultation is being conducted with the U.S. Army Corps of Engineers (404 permitting), U.S. Fish and Wildlife Service (Endangered Species Act compliance), and National Marine Fisheries Service (Endangered Species Act compliance).

## Elizabeth Sheppard



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 11

### **Areas of Expertise:**

Environmental Permitting  
NEPA/CEQA  
Water and Air Quality

### **Education:**

BS, Special Major in  
Environmental Science,  
California State University,  
Sacramento, 2004  
Certificate, Land Use Planning,  
University of California, Davis,  
In Progress

### **Affiliations:**

The Association of Women in  
Water, Energy, and the  
Environment  
Women in Transportation

## Environmental Planning/Permitting

### **Qualifications Overview**

Ms. Elizabeth Sheppard is experienced in regulatory compliance serving in roles as project manager, technical editor, analyst, and writer. She has worked on a variety of projects that primarily involve water resources, energy, renewable energy, and recreation, including projects conditioned through the Federal Energy Regulatory Commission relicensing process. Most recently, she has been working on land development projects.

Elizabeth's regulatory compliance expertise includes National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), Clean Water Act Sections 404, 402, and 401, Fish and Game Code Section 1600, Clean Air Act, local air district regulations, state and federal Endangered Species Acts, Federal Energy Regulatory Commission, National Historic Preservation Act, and California Air Resources Board regulations developed under AB32 for greenhouse gas emissions reductions. She has the ability to constructively work with regulatory agency staff, on behalf of her clients, to identify reasonable and appropriate mitigation taking into account both the qualitative and quantitative impacts from a project.

### **Relevant Projects**

**Project Manager/Principal Author: Turlock Irrigation District, Upper Main Canal-Tunnel No. 2 Daylight Project, Stanislaus County, California.**

The project involved day lighting an approximately 360-foot long by 30-foot wide irrigation canal to eliminate risk of failure and damming of the canal. Project issues include impacts to on-site waters (seasonal wetlands, irrigation canal, and ephemeral drainage) and threatened and endangered species upland habitat for California tiger salamander and San Joaquin kit fox, water quality, soils/rock material disposal, tree removal and replacement, blasting/explosives, hazardous materials, air quality, and cultural resources. Evaluated environmental constraints and design alternatives (costs, maintenance, and schedule) to

identify the preferred project alternative. The project included a CEQA initial study/mitigated negative declaration and environmental permits, a California Department of Fish and Wildlife Incidental Take Permit, Clean Water Acts Section 404 and 401, U.S. Fish and Wildlife Service Biological Assessment, and Fish and Game Code Section 1600. Consulted with regulatory agency staff in negotiating reasonable mitigation and expedited permit approvals.

**Project Manager/Principal Author: Rio Linda/Elverta Community Water District, L Street Reservoir and Pump Station Project, Rio Linda, California.** Prepared a CEQA initial study/mitigated negative declaration and federal cross-cutting checklist for NEPA compliance to obtain Proposition 50 Safe Drinking Water State Revolving Funds. The project involved construction of a 1.2 million gallon water storage reservoir, pump station, control building, standby power generator, improvements to Well 12, and other improvements. This project was implemented to bring the water system into compliance with a California Department of Public Health Compliance Order requiring redundancy to be built into the system for emergencies, such as power failures, so the system meets the minimum system requirements. Project issues include vicinity of the site to sensitive receptors, air quality, equipment vibration to sensitive structures, and storage of hazardous materials.

**Principal Author: City of Yuba City, Feather River/Willow Island Parkway Project CEQA Document and Environmental Permitting, Yuba City, California.** Prepared the CEQA document and regulatory permit applications (Clean Water Act Sections 404 and 401, and Fish and Game Code Section 1600) for impacts to state and federal waters for recreational improvements to floodplains of the Feather River. Recreational improvements include the development of pedestrian and bike trails, access road improvements, parking facilities, and boardwalk. Consultation with the regulatory agency staff included discussion on impacts to surface waters and riparian habitat and mitigation. Project issues include valley elderberry longhorn beetle habitat impacts, floodplain development, aquatic resources, wetland delineation, and floodplain jurisdiction.

**Principal Author: Various Clients, Air Quality and Greenhouse Gas Analysis, Multiple Locations, Northern California.** Analyzed air quality and greenhouse gas impacts and prepared reports or impact sections for various projects within Northern California. Projects included utility line installation, commercial, and water resource infrastructure. The sections identified the significance of the projects and recommended measures to reduce the projects below a level of significance.

# Glenn Matteucci



**Location:** Petaluma, CA

**Firm:** Cardno

**Total Years:** 33

**Areas of Expertise:**

Assessment and Remediation  
Soil Characterization  
Geologic Interpretation

**Education:**

BS, Geology, University of the Pacific, Stockton, 1980  
Certificate, Hazardous Materials Management, University of California Berkeley Extension, 1994  
Graduate Studies, Geology, California State University, San Jose, 1985

**Affiliations:**

Geological Society of America  
Northern California Geologic Society

groundwater containing petroleum hydrocarbons. He implements program-related requirements, including health and safety compliance, project progression, and portfolio budget management, and increases program performance on projects, while maintaining client satisfaction.

## Environmental Remediation

### Qualifications Overview

Mr. Glenn Matteucci is a Program/Senior Project Manager. His responsibilities include insuring that personnel and resources are allocated towards providing our clients with quality services and value. He has experience as a project manager and geologist, including conducting environmental assessment and remediation projects, geotechnical investigations, and geophysical hydrocarbon exploration evaluations. He conducts budget control, cost tracking, and invoicing of projects, manages contractor coordination, prepares work plans, implements field work, writes and reviews technical reports, and implements design recommendations.

With over 1,000 soil borings and monitoring wells logged, he has developed specialties in soil characterization and geologic interpretation. Glenn has managed as the project and program manager for soil and groundwater assessments of gasoline and diesel fuel hydrocarbons and volatile organic compounds in soil and groundwater at over 100 retail service stations and bulk distribution plants. He has performed these tasks for municipalities, county, state, and federal public projects, and private sector clients. Activities included client and regulatory liaison and integrating geologic, hydrogeologic, and engineering data.

Glenn's experience includes environmental geologic investigations, from developing programs, handling logistics, and acting as a liaison between the client and governmental agencies, to developing and observing clean-up activities for soil and

### Relevant Projects

**Project Manager: Napa State Hospital, Environmental Consulting Services Associated with a Fuel Pipeline Leak, Napa, California.** Project Manager responsible for providing technical and administrative oversight for project scopes; budget/technical strategy, design, implementation, and oversight; and client and agency negotiation/liason. Provided groundwater monitoring and sampling and environmental consulting services associated with a fuel pipeline leak associated with an aboveground storage tank system for generators. Performed a closure evaluation to assess pathway to closure and identified/recommended work scopes remaining to achieve closure. Awaiting authorization to perform soil vapor assessment to finalize closure pathway. Work scopes to date have been completed on time and on budget.

**Project Manager: County Corporate Center, Groundwater Assessment Activities Associated with Underground Storage Tanks (USTs), Redwood City, California.** Responsible for providing technical and administrative oversight for project scopes; budget/technical strategy, design, implementation, and oversight; and client and agency negotiation/liason. During activities associated with a UST release, Cardno was tasked with devising and implementing assessment strategy to delineate and monitor a hydrocarbon fuel release. Prepared and implemented assessment work plans, including soil borings and well installation; performed groundwater assessment; periodic groundwater monitoring and sampling; sensitive receptor survey; risk analysis; closure well destruction activities; and closure. Work scopes were completed on time and on budget.

**Program Manager: Major Oil and Gas Company, Assessment and Remediation of Leaking UST Sites in Western U.S.** Provided program and project management for Cardno's ConocoPhillips and UNOCAL environmental project portfolio. Responsibilities included providing and assisting with program and project administrative and technical oversight, including program/project budget development and oversight, resource inventory, allocation and assignments, client management, and select oversight agency negotiation/liason.

**Project Manager: Various Clients, Environmental Remediation, Numerous Petroleum Impacted Sites, Multiple Locations, California.** Analyzed subsurface transport properties and provided specification for remedial design for numerous petroleum impacted sites. Managed projects involving design, installation, and operation of groundwater pump and treat, air-sparging, soil vapor extraction, dual-phase and multi-phase extraction, and high-vacuum multi-phase extraction systems.

## John Bobbitt, PG, HG



**Location:** Petaluma, CA

**Firm:** Cardno

**Total Years:** 37

### **Areas of Expertise:**

Assessment and Remediation  
Geologic/Hydrogeologic  
Characterization  
Regulatory Compliance

### **Education:**

MS, Geology, University of  
California, Davis, 1982  
BS, Geology, University of  
California, Davis, 1976

### **Licenses/Registrations/ Certifications:**

Professional Geologist, CA,  
#4313, 1987

Certified Hydrogeologist, CA,  
#938, 2010

### **Affiliations:**

Geological Society of America  
Groundwater Association of  
California

## Environmental Remediation

### **Qualifications Overview**

Mr. John Bobbitt, PG, HG, has experience conducting environmental investigations. He specializes in assessment of soil and groundwater; remedial investigations; hydrogeologic evaluation of aquifer and vadose zone properties and constituent transport; evaluation of regulatory compliance and negotiation with regulatory agencies; risk analysis, risk-based decision making, and risk-based corrective action analyses; fate and transport analysis and natural attenuation potential; soil vapor intrusion analysis; technical review; and data compilation and analysis for litigation support. He has experience developing and implementing varied scopes of work, managing logistics for drilling and sampling operations, providing analysis and advice, and acting as a liaison between the client and governmental agencies. John has acted as the senior technical overseer for environmental assessment and remediation programs for varied clientele, providing technical document review and quality assurance and quality control. He has experience conducting environmental investigations for major oil and independent fuel retailers, dry cleaners, chemical and plastic manufacturers, and other public and private industrial clients.

### **Relevant Projects**

**Project Manager, Hydrogeologist, and Senior Geologist: Major Oil and Gas Company, Site Assessments and Remediation, Numerous Retail Gasoline Service Stations, Multiple Locations, Northern California.** Managed and completed site assessment and remediation at over 500 retail gasoline service stations and bulk distribution terminals. Scope included assessing soil,

groundwater, and soil vapor; developing and implementing soil, groundwater, and soil vapor Sampling and Analysis Plans; characterizing geology and hydrogeology (hydraulic

gradient evaluation, groundwater elevation fluctuations, groundwater flow and contaminant transport potential); selecting and implementing remedial actions (soil vapor extraction, dual-phase extraction, groundwater extraction and treatment, excavation, monitored natural attenuation, *in situ* bioremediation); evaluating aquifer characteristics (pumping tests, slug tests); evaluating vapor-phase transport and vapor intrusion potential; assessing human health and ecological risk; modeling groundwater flow and transport; modeling vadose transport; conducting regulatory liaison and negotiation; and providing litigation support. Project budgets ranged from \$5,000 to \$2,500,000. Project efforts resulted in numerous remediation system installations, site clean-ups, and case closures.

**Senior Project Geologist: Aerojet Corporation, Rocket Motor Manufacturing and Testing Facility, Evaluation of Limits and Characteristics of Waste in Three Historic Landfills, Rancho Cordova, California.** Evaluated the limits and characteristics of waste in three historic landfills containing industrial and potentially hazardous wastes at a rocket motor manufacturing and testing facility in northern California. The limits and characteristics of waste were evaluated by reviewing historical aerial photographs and by excavating numerous pits and trenches along the perimeters of the waste cells. The waste content was identified, logged, and documented and samples of soil fill and native soil underlying the waste were collected and analyzed. The data from the landfill evaluation were used to support the selection and design a non-prescriptive cap.

**Senior Project Geologist: Various Clients, Soil Vapor Intrusion Assessments, Multiple Locations, California.** Evaluated soil vapor intrusion potential and associated risks at residential, commercial, and industrial buildings. Responsibilities include: development of Sampling and Analysis Plans; design and installation of soil vapor wells and sub-slab vapor sampling points; collection and analyses of soil vapor, sub-slab vapor, and indoor and outdoor air samples; evaluation of building construction and selection of attenuation factors and screening levels; modeling of soil vapor intrusion potential (Johnson and Ettinger model); data reduction/interpretation; and reporting.

**Project Geologist: Public Storage, Contaminated Soil Excavation, Former Bulk Distribution Plant, Sacramento, California.** Managed excavation of 3,000 cubic yards of soil contaminated with heating oil at a former bulk distribution plant. Excavation was conducted while the site was undergoing redevelopment and active construction. Soil was hauled to a third-party facility and bio-remediated. Responsibilities included field oversight of excavation and hauling activities, collection of confirmation soil samples, documentation of sampling and analyses, reporting, and regulatory liaison. The project resulted in case closure and completion of construction.

**Geoffrey  
Waterhouse, PG,  
CHG, CEG**



**Location:** Petaluma, CA

**Firm:** Cardno

**Total Years:** 26

**Areas of Expertise:**

Assessment and Remediation  
Geologic/Hydrogeologic  
Characterization  
Regulatory Compliance

**Education:**

MS, Geology and Geophysics,  
Princeton University, 1986  
BS, Earth Sciences, University of  
California, Santa Cruz, 1984

**Licenses/Registrations/  
Certifications:**

Professional Geologist, CA,  
#5019, 1991  
Certified Hydrogeologist, CA,  
#334, 1995  
Certified Engineering  
Geologist, CA, #1561, 1991

**Affiliations:**

Association of Environmental  
and Engineering Geologists

## Environmental Remediation

### Qualifications Overview

Mr. Geoffrey (Geoff) Waterhouse has conducted a wide variety of geologic, geotechnical, and hydrogeologic investigations. He has worked on construction projects, environmental projects, geologic hazards assessments, and projects that combine these three areas. He focuses on establishing a clear and efficient path forward by developing productive working relationships with clients and oversight agency personnel.

Geoff has performed site characterization studies and investigated the geologic feasibility of major roadways, reservoirs, large containment tanks and spheres, and substantial excavations with vertical or near-vertical walls, within the difficult environment of an active industrial complex with significant existing impacts in soil and groundwater. On many of these large projects he has monitored the excavation and grading phase, reacting decisively to new findings in the field.

He has successfully worked with numerous governmental oversight agencies, including the California Regional Water Quality Control Board, Air Pollution Control Districts, County Environmental Health Departments, Cities, California Geological Survey, California Coastal Commission, California Office of Statewide Health Planning and Development, and the Montana Department of Environmental Quality.

### Relevant Projects

**Senior Project Geologist: Major Oil and Gas Company, Site Assessments, Multiple Locations, Greater San Francisco Bay Region and the Sacramento and Fresno Metropolitan Areas, California.** Evaluated site stratigraphy, soil and groundwater impacts, hydrogeologic conditions, and

groundwater contaminant trends at active and former service stations. The work included client and regulatory liaison and integrating geologic, hydrogeologic, and engineering aspects of the projects. Site closure or No Further Action status was obtained on many of these sites from a variety of local oversight programs, from Sacramento to Fresno to the San Francisco Bay area.

**Project Manager: Various Clients, Remediation Systems, Active and Former Service Stations, Greater San Francisco Bay Region and the Sacramento and Fresno Metropolitan Areas, California.** Managed remediation systems at active and former service stations. The extraction systems included air sparging, groundwater pumping, soil vapor extraction, and dual-phase (water and vapor) extraction. The treatment systems included air strippers, catalytic oxidizers, and granular activated carbon. The work included weekly monitoring of the sites and fine-tuning of the various system components to maximize hydrocarbon removal, while maintaining strict permit compliance and staying within client budgetary restraints.

**Senior Project Geologist/Manager: Major Oil and Gas Company, Former Bulk Plant Site Assessment, Santa Rosa, California.** Developed site history, clarified historical parcel boundaries and Responsible Parties, and delineated the extent of residual kerosene- and diesel-range hydrocarbons at a former bulk plant with railroad access. Used direct-push, cone penetration test, hydro-punch, and hollow-stem auger drilling methods to evaluate stratigraphy and install wells. Demonstrated separation from adjacent parcel impacts and lack of impact to nearby Santa Rosa Creek and residences. Performed feasibility studies for groundwater pump and treat, air sparge, and soil vapor extraction. Removed abandoned underground piping and associated impacted soil.

**Project Geologist: City of Benicia, Geologic Background Report for the Seismic Safety Element of the Benicia General Plan, Benicia, California.** Prepared a comprehensive report on the geologic hazards facing the City of Benicia in preparation of their revised general plan. Presented findings at an open City Council meeting and answered questions and concerns of the council members and public.

**Project Geologist: Contra Costa County, Merrithew Hospital, Geologic and Seismic Hazards Investigation, Martinez, California.** Conducted an investigation of geologic hazards, including landsliding, slope stability, faulting, and bedrock seismic velocity and response for a new six-story hospital building.

**Project Geologist: Adobe Creek Golf Course, Geologic and Hydrologic Investigation for Proposed Adobe Creek Golf Course, Petaluma, California.** Conducted surface investigation, including location and evaluation of aquifers suitable for use as water sources for golf course irrigation, and conducted an aquifer-testing program on a deep well to evaluate irrigation water resources.

## Julia

Moriarty, PE, GE,  
QSD/QSP



**Location:** San Ramon, CA

**Firm:** ENGEO

**Total Years:** 20

### **Areas of Expertise:**

Deep Foundations

Earth Retaining Structures

Foundation Design

Geosynthetic Materials

Grading Project Management

Hillside Grading

Liquefaction Analyses

Slope Stability

Subgrade Stabilization

### **Education:**

BS, Civil Engineering, California  
State University, Chico, 1994

### **Licenses/Registrations/**

#### **Certifications:**

Professional Civil Engineer, CA,  
#58128

Professional Geotechnical  
Engineer, CA, #2679, 2005

Qualified SWPPP Developer/  
Practitioner, CA, #00210

### **Affiliations:**

California Stormwater Quality  
Association

## Geotechnical Services

### **Qualifications Overview**

Ms. Julia Moriarty joined ENGEO in 1994. As Principal Engineer, her responsibilities include technical input to staff for geotechnical design, mitigation, and implementation of geotechnical parameters, as well as making field recommendations and conducting technical reviews of ENGEO's documents of service. She provides project management for master-planned, mixed-use, and residential developments, as well as infrastructure, transportation, energy, and flood control developments. Her geotechnical expertise includes projects requiring remedial grading, slope stability, landslide repair, liquefaction and soft soil mitigation, design of reinforced slopes and mechanically stabilized earth systems, pavement design, and developing design criteria for structures and walls. In addition, she has extensive construction observation experience during remedial grading and grading, utility installation, pavement construction and rehabilitation, retaining wall construction, and deep foundation construction.

Julia has been the lead geotechnical consultant for large projects that have collectively included more than 50 million cubic yards of earthwork; hundreds of miles of roadway/utility improvements; public infrastructure, including water tanks, bridges, tunnels, detention basins, infiltration ponds; military base reuse projects; golf courses with associated amenity lakes, comfort stations, cart bridges and tunnels, and maintenance and clubhouse facilities; commercial and retail centers; community centers; and public buildings, including police and fire stations.

### Relevant Projects

**Principal Geotechnical Engineer: Five Point Communities, Great Park Neighborhoods TTOD, Geotechnical, Environmental, and Water Quality Services, Former El Toro Marine Corps Air Station, Irvine, California.** The project is a master-planned community that will include roughly 9,500 residential units, schools, parks, open space, commercial, and industrial developments along with associated drainage and utility improvements. The project encompasses approximately 4,700 acres and is a base reuse project. Several active drainage corridors pass through portions of the site, including Marshburn, Bee Canyon, Agua Chinon, Borrego Canyon, Serrano Creek, and San Diego Creek. Since 2009, ENGEO has provided geotechnical, environmental, and water quality consulting services to the design team and master developer for the project. Services performed included geotechnical and environmental assessment reports for individual development districts, sedimentation analysis and water balance services for Agua Chinon, water resources services for Borrego Wash Wildlife Corridor, construction storm water pollution prevention plan preparation and implementation, post-construction best management practices storm water management design and reports, and geotechnical and environmental construction observation and testing for earthwork and site improvement activities. In addition, ENGEO assisted with preparing the soil and geology and water quality sections of the 2011 Supplemental Environmental Impact Report (EIR) and 2012 Second Supplemental EIR for the project.

**Principal Geotechnical Engineer: East Garrison Development, Geotechnical Services, Former Fort Ord, Monterey County, California.** Oversaw the geotechnical explorations, fault study, and engineering design for use in the project EIR, operations/maintenance, and construction of this multi-phase redevelopment of roughly 800 acres with up to 3,100 homes at build-out. Performed infiltration analysis, developed remedial grading plans, performed plan reviews, oversaw pavement studies, attended project meetings, provided consultation, designed several mechanically-stabilized earth walls, and oversaw geogrid reinforced slope designs. Oversaw construction observation services during grading and utility installation, as well as wall, detention and infiltration basins, and pump station construction. The proposed development consists of a master-planned community of mixed density and use for a total of approximately 1,800 units, emergency response facilities, and retail/commercial. Site grading has been completed in Phases 1 and 2 of the project site and comprised over two million cubic yards of earthmoving and installation of several miles of subsurface drainage facilities and pipelines (gravity and force main). The project storm water management is 100 percent site retention/recharge through the use of infiltration basins, detention basins, and a lined basin with associated pump station. Off-site improvements included shoulder widening of Reservation Road and installation of several miles of pipelines (gravity and force main).

## Ted Bayham, PE, GE, CEG



**Location:** San Francisco, CA

**Firm:** ENGEO

**Total Years:** 26

### **Areas of Expertise:**

Earthquake Fault Evaluation  
Excavation and Shoring  
Foundation Design  
Hillside Grading  
Landslide Investigations and Repairs  
Liquefaction Analyses  
Pavement Evaluation/Design  
Slope Stability

### **Education:**

BS, Engineering Geology,  
Northern Arizona University,  
1984

### **Licenses/Registrations/**

#### **Certifications:**

Professional Civil Engineer, CA,  
#48793

Professional Geotechnical  
Engineer, CA, #2480, 2000

Certified Engineering  
Geologist, CA, #2063, 1997

### **Affiliations:**

American Society of Civil  
Engineers

## Geotechnical Services

### **Qualifications Overview**

Mr. Ted Bayham joined ENGEO in 1998 and has 26 years of professional experience in geotechnical engineering and engineering geology, including waterfront projects along San Francisco Bay, naval base redevelopments, and numerous large earthwork projects situated in technically challenging hillside conditions in the San Francisco Bay Area. He has served as Principal Engineer on various land development projects over soft and highly compressible bay mud conditions, where surcharge programs and vertical drains were employed to pre-consolidate sites. In addition, he has served as Principal Engineer on various projects that used a variety of mitigation approaches to densify and develop projects over liquefiable sites. He has been Principal Engineer on historic building renovations and seismic upgrades, geotechnical instrumentation and monitoring programs, mid-rise structures and below grade structures in shallow groundwater conditions, large industrial and commercial developments, and emergency facilities.

### **Relevant Projects**

**Principal Engineer: Lennar Communities, Mare Island Naval Shipyard Redevelopment, Vallejo, California.** Provided quality control on the geotechnical, environmental, hydrologic, and construction services related to residential, commercial, and industrial development of this historic naval base redevelopment. Served as one of the prime consultants associated with the planning and management for this project. Redevelopment of Mare Island Naval Shipyard includes large residential parcels. Services included recommendations for site grading, drainage, foundation criteria, retaining wall design, and preliminary pavement sections for the development. Oversaw the installation of wick drains

in the compressible bay mud soil layer that extended down approximately 15 feet throughout the site. Drainage challenges were mediated through horizontal collector drains, or strip drains, that were extended along the wick drains to carry water. Following installation, designed a  $\pm 18$  inch-thick lift of fill over the strip drains prior to compaction and other soil improvements.

**Project Manager: Crystyl Ranch, Unit 1 and 2, Mitigation and Grading Design, Concord, California.** Responsible for mitigation of massive ancient landslides and mass grading design for a two million cubic yard subdivision development. Through optimizing landslide repairs, which reduced remedial grading requirements by one million cubic yards or greater, the project cost was substantially reduced. Provided geotechnical services during mass grading, site improvement construction, and special inspections for retaining walls. The Crystyl Ranch property encompasses  $\pm 600$  acres within a system of hills and valleys. Mass grading improvements included partial landslide removals and slope buttressing, on-site utilities, roadwork, and retaining wall installation. Coordinated field testing and observation during mass grading and underground trench utility backfill.

**Principal-in-Charge: Schaefer Ranch, Geotechnical Services, Dublin, California.** Responsible for this eight million cubic yard earthwork project. Reviewed and provided oversight and guidance during design and construction. The approximately 500-acre site is located in steep hillside terrain. Construction involved over eight million cubic yards of civil and corrective grading and included hard-rock blasting and engineered fills up to 180 feet deep. Site grading consisted of landslide repairs, construction of a school site, a fire station site, an East Bay Regional Park staging area and trailhead, a city park, a municipal water tank, multiple off-site mitigation ponds, several miles of roadway, underpass improvements, underground utilities, and the construction of 407 single-family residential lots.

**Principal-in-Charge: Sequoia/Conifer Terrace, Landslide Repair Design, Danville, California.** Developed the design of an innovative tieback anchor system on an unstable slope located between Conifer Terrace and Sequoia Terrace in Blackhawk, a gated residential neighborhood in Contra Costa County. Oversaw the tieback installation, which successfully arrested the movement of a large landslide that directly threatened about 15 million-dollar homes. Involved with an evaluation of multiple alternatives for stability improvements on the hill slope. Prepared cost estimates for the Geologic Hazard Abatement District for design, construction, and monitoring services for their use in the bid process. The project consisted of a unique structural repair for the mitigation of a large active landslide in close proximity to existing homes.

## Philip Stuecheli, PG, CEG



**Location:** San Ramon, CA

**Firm:** ENGEO

**Total Years:** 28

### **Areas of Expertise:**

Earthquake Fault Evaluation  
Geologic Hazard Evaluation  
Geomorphology  
Hillside Grading  
Landslide Investigations and  
Repairs  
Mining/Quarries  
Slope Stability

### **Education:**

MS, Geology, Ohio State  
University, 1984  
BS, Geology, Ohio State  
University, 1982

### **Licenses/Registrations/**

#### **Certifications:**

Professional Geologist, CA,  
#4861, 1990

Certified Engineering  
Geologist, CA, #1640, 1991

### **Affiliations:**

Association of Engineering  
Geologists

## Geotechnical Services

### **Qualifications Overview**

Mr. Philip Stuecheli joined ENGEO in 1998 and has more than 28 years of engineering geology experience, working on a wide range of projects, including residential and commercial grading projects, school sites, expert witness services for litigation, peer review services for city and county governments, and consultation work for public agencies and private clients. He is the lead geologist in charge of geologic hazard evaluation and geotechnical site characterization for many successful projects covering several thousand acres of land in the California Coast Ranges, and Transverse Ranges in the Central Valley, and in western Nevada. His responsibilities include estimation of construction quantities and costs and coordination of geotechnical issues with civil engineers and public agencies. During project construction, Philip is responsible for overseeing geologic construction observation, coordinating geotechnical work with contractors and property owners, and interfacing with inspectors, peer reviewers, and public agency personnel.

### **Relevant Projects**

**Associate Geologist: Treasure Island Naval Base Reuse, Geologic Assessments, San Francisco, California.** Performed a literature review and geologic mapping of the proposed viaduct improvements and the project development areas on Yerba Buena Island as part of sub-phase 1 of the Treasure Island project. The study included a review of geotechnical and geological information in U.S. Navy files and compilation of an engineering geologic map of the island. Assessed the age and construction of the various Yerba Buena viaduct structures and the foundation soil conditions at each bent as part of a study of the proposed viaduct seismic retrofit. Based the review, ENGEO prepared

working drawings of the geotechnical conditions for the design team. The mapping efforts were used during early project planning and budgeting. Planned improvements for the 330-acre naval base site include as many as 6,000 housing units, 235,000 square feet of retail space, two hotels, a conference center, and a commercial district near a proposed ferry terminal in front of Building 1 in the island's southwestern corner. Approximately 85 percent of the footprint will be occupied by low-rise structures, up to five stories in height; the balance will comprise mid- and high-rise buildings.

**Lead Engineering Geologist: Lennar, Dougherty Valley Master-Planned Community, San Ramon, California.** Lead engineering geologist during project design and construction. Earthwork consisted of buttressing hundreds of landslides and over 50 million cubic yards of earthwork. The Gale Ranch development is a major mixed-use project that includes 5,830 residential units, an 18-hole golf course, a clubhouse, recreation parks, a church, culverts, bridges, and three public schools.

**Project Manager: Tejon Mountain Village, Geotechnical Exploration, Kern County, California.** Supervised a preliminary geotechnical exploration and California Environmental Quality Act impacts study. Project manager and primary client contact through the initial project planning and the preparation and certification of the project Environmental Impact Report. The project consists of a proposed mixture of residential, commercial, and recreational uses on approximately 5,000 acres of a 28,253-acre site with the remaining land set aside as a nature reserve.

**Associate Geologist: Palos Colorados Design, Geotechnical Exploration and Corrective Grading, Moraga, California.** Led the site characterization, design, and project approval. The Palos Colorados Property comprises approximately 460 acres and is located west of St. Mary's Road, east of Moraga Road, and north of Rheem Boulevard in the East Bay Hills of Contra Costa County in Moraga. The Palos Colorados project is a proposed hillside development with approximately 123 residential units, including an extensive trails network and wetland preservation.

**Project Manager: Wilder (Formerly Orinda Gateway), Geologic Services, Orinda, California.** Managed the geologic characterization, geotechnical engineering design, testing and observation, and quantity tracking services during the planning and construction of the Wilder project. The development is on 2,000- acres and will include 245 custom homes. The project, located in steep and geologically complex hillside terrain, included approximately eight million cubic yards of excavation and geotechnical landslide remediation. The project includes creek restoration, construction of three bridges, and construction of approximately 40 mitigation wetlands. Housing construction is expected to continue for several years. Project challenges included a complex approval process that required several years of negotiation with the City of Orinda and public resource agencies.

## Cory Suppes, CAC



**Location:** San Ramon, CA

**Firm:** Cardno

**Total Years:** 27

### **Areas of Expertise:**

Building Sciences

Mold

Asbestos/Lead

### **Education:**

BA, General Science with  
Mechanical Engineering  
Emphasis, University of Denver,  
1987

### **Licenses/Registrations/**

#### **Certifications:**

Certified Asbestos Consultant,  
CA, #01-2998, 2001

AHERA Accredited Project  
Designer, Management  
Planner, Inspector, Contractor  
Supervisor, U.S.

OSHA 40-Hour HAZWOPER  
and Annual Refresher

OSHA 8-Hour Supervisor

NIOSH 582 Analyst

## Hazardous Materials

### **Qualifications Overview**

Mr. Cory Suppes has experience in multi-disciplinary environmental and industrial hygiene assessments. He has specific abatement project experience in the removal of over 500 industrial, commercial, and public projects. Over his career he has gained specific expertise in indoor environmental issues, including asbestos management, indoor air quality assessment, methamphetamine, mold, lead hazard risk assessment, soil sampling, and management of hazardous materials abatement projects.

With his broad-based experience in project management and environmental projects, Cory brings solid success in managing relations, diplomacy, and assuring full compliance with regulatory agencies. His particularly strong record in the areas of efficiency, productivity, and profitability along with engineering, analytical, and administrative skills facilitate environmental projects to successful completion.

Cory has provided hazardous materials surveys on military bases, including U.S. Air Force Academy, Camp Parks, Dublin, CA; Alameda Naval Station, Alameda, CA; Oakland Army Base, Oakland, CA; Oakland Naval Hospital, Oakland, CA; NASA/Ames Research Center, Moffett Field, CA; Treasure Island, San Francisco, CA; The Presidio, San Francisco, CA; Edwards Air Force Base, Edwards, CA; Fort Ord, Monterey, CA; Vandenberg Air Force Base, Lompoc, CA; Rough & Ready, Stockton, CA; Beale Air Force Base, Marysville, CA; Travis Air Force Base, Fairfield, CA; Mather Air Force Base, Sacramento, CA; Sacramento Army Depot, Sacramento, CA; Coast Guard Island, Alameda, CA; California National Guard Armory, San Bruno, CA; and Cheyenne Mountain Air Force Station (NORAD), Colorado Springs, CO.

## Relevant Projects

**Project Manager: U.S. Navy via Catellus Corporation, Hazardous Materials Assessments, Alameda Naval Air Station, Alameda, California.** Oversaw and performed hazardous materials assessments, cost estimates, remediation, demolition, and deconstruction design, and remediation oversight management of all the buildings on 215 acres at the former Fleet Industrial Supply Center and East Housing areas of the former Alameda Naval Air Station. This project was accomplished in preparation for the commercial and residential redevelopment of the decommissioned military facility. The buildings that were part of this project included 589 units of housing (800,000 square feet), ten warehouses (two million square feet), hospital building (120,000 square feet), and several smaller buildings, including a boiler building. The hazardous materials survey portion included a detailed inventory of asbestos containing materials, including subsurface piping and soil, lead-based containing components, PCB ballasts and transformers, universal waste, ozone depleting chemicals organo-chlorinated pesticide contaminated soil and building materials, and underground storage tank identification.

**Project Manager: U.S. Army, Former Fort Ord, Hazardous Materials Survey, Monterey County, California.** Oversaw and performed hazardous materials assessments of 15 buildings located on the military base campus. The buildings were in disrepair and needed to be demolished for safety reasons and to allow development of new retail establishments. The contract consisted of hazardous materials surveys and cost estimates, preliminary demolition waste evaluation, and preparation of contract documents for pre-demolition abatement and abatement monitoring services associated with the demolition of the buildings.

**Project Manager: Edwards Air Force Base, Inspections, Specifications & Monitoring, Edwards, California.** Project Manager of a team that performed inspections for asbestos, lead, mold, methamphetamine, and other hazardous materials for the housing developments (~200 units) on the base that Hunt Building Company was involved with. For renovations and demolition activities, our field technicians documented air quality and worker safety.

**Project Manager: Owens Corning, Asbestos/Lead Inspections, Consulting and Re-inspections, Santa Clara, California.** Oversaw an extensive inspection for asbestos and lead containing materials in 2006. The inspection was to identify all asbestos containing building materials and lead-based paint throughout the plant. The materials were cataloged noting the location, quantity, and condition. The report contained the above documentation plus a surveillance plan for hazardous material management. Once budgetary constraints were lifted, generated scope of work for abatement, cost estimates, assisted with bid walks, contractor selection, performed air monitoring, and supervised the projects. Conducted re-inspections on a six-month rotation.

## Paul Giacalone



**Location:** Pleasanton, CA

**Firm:** Giacalone Design  
Services, Inc.

**Total Years:** 19

### **Areas of Expertise:**

Joint Trench Utility Designs  
Dry Utility Coordination

### **Education:**

Coursework, Civil Engineering,  
California State University, San  
Jose, 1995

Coursework, Wayne State  
University, 1992

Coursework, Gavilan Joint  
Community College name,  
1991

## Joint Trench Utility Design/PG&E Liaison

### **Qualifications Overview**

Mr. Paul Giacalone, one of the principals of Giacalone Design Services, Inc., graduated from Gilroy High in 1990 and went on to attend Gavilan College in Gilroy and then Wayne State in Nebraska. Paul was then accepted into the engineering program at California State University, San Jose. While attending there, Paul worked in the construction industry for a local company installing joint trench utilities and eventually estimating and managing the same types of projects. In 1999, he decided to take on a new challenge and business venture now known as Giacalone Design Services, Inc.

For the past 15 years, Paul has worked closely with the company's clients in the management of their projects and has been personally involved in the daily operating, administrative, and financial operations of the company. His extensive knowledge and understanding of project development from its design through its construction is a valuable tool in the applicant design process.

### **Relevant Projects**

**Senior Project Manager: Federal Realty Investment Trust, Santana Row Mixed-Use Development, San Jose, California.** Provided existing utility plan sheets and preliminary joint trench, gas, and electric designs for the entire

infrastructure improvement project for the Santana Row mixed-use development. The master-planned area anticipates up to 300,000+ square feet of retail/office and commercial use and 513 apartment, live/work condominiums, and townhomes. Coordinated electric facility removals and relocations with PG&E, CATV, and telephone companies. Prepared designs for electric new business and overhead to underground conversions, as well as gas designs for new business service and facility relocation.

**Senior Project Manager: D.R. Horton, Southtown Multi-Phased Master-Planned Community, Vacaville, California.** Provided joint trench design and consulting services for Phase 2, Areas 1 through 8, of the Southtown multi-phased master-planned

community. Through coordination with utility providers, project engineers and consultants, field visits, and review of existing facility maps, provided approved for construction electric, gas, joint trench composite, and street lighting designs. This development consisted of over 190 lots of single family homes, stubs for future commercial use, community park, and service to a pump station.

**Senior Project Manager: TCN Properties, Mossdale Master-Planned Community, Lathrop, California.** Provided existing utility plan sheets and preliminary joint trench, gas, and electric designs for the entire infrastructure improvement project for the Mossdale master-planned community. This was a master-planned area that included nine commercial buildings and 11,225 units of single family homes, apartments, live/work, and townhomes. Coordinated the electric and gas main line extension facilities with PG&E, CATV, and telephone companies. Prepared designs for electric new business and gas designs for new business.

**Senior Project Manager: Power Systems Design, Treasure Island, San Francisco, California.** Provided joint trench design and construction estimates/budgets, feasibility studies and forward planning on a time and material basis.

## Dave Crowfoot, PE



**Location:** Pleasanton, CA

**Firm:** Giacalone Design  
Services, Inc.

**Total Years:** 33

**Areas of Expertise:**  
Joint Trench Utility Designs  
Dry Utility Coordination  
PG&E Liaison

**Education:**  
MBA, Business Administration,  
St. Mary's College, 1997  
BS, Electrical Engineering, Iowa  
State University, Ames, 1981

**Licenses/Registrations/  
Certifications:**  
Professional Electrical Engineer,  
CA, #11965, 1985

**Affiliations:**  
International Association of  
Electrical Inspectors  
National Society of  
Professional Engineers  
Institute of Electrical and  
Electronics Engineers

## Joint Trench Utility Design/PG&E Liaison

### Qualifications Overview

Mr. Dave Crowfoot joined the firm in 1998, after having worked for PG&E for 17 years. He served as the Director of Engineering and Planning in PG&E's San Jose office from 1993 until he joined the team at Giacalone Design Services 16 years ago. As Director at PG&E, he managed and directed departments with 130 engineers, estimators, project managers, mappers, and clerical employees. As a Project Manager at Giacalone Design Services for the past 16 years, his primary responsibilities include managing the Commercial, Multi-Family, and Rule 20 divisions of the Company. Dave's years of experience at PG&E and at Giacalone Design Services continues to serve as a valuable tool for their clients.

### Relevant Projects

**Project Manager: Federal Realty Investment Trust, Santana Row Mixed-Use Development, San Jose, California.** Provided existing utility plan sheets and preliminary joint trench, gas, and electric designs for the entire infrastructure improvement project for the Santana Row mixed-use development. The master-planned area anticipates up to 300,000+ square feet of retail/office and commercial use and 513 apartment, live/work condominiums, and townhomes. Coordinated electric facility removals and relocations with PG&E, CATV, and telephone companies. Prepared designs for electric new business and overhead to underground conversions, as well as gas designs for new business service and facility relocation.

**Project Manager: Fairfield Development, Crescent Village Forward Planning and Design for Phase 1, 2, and 3, San Jose, California.** Provided forward planning and design services for redevelopment of the Sony Site into a large residential and commercial community. Prepared preliminary gas and electric

plans, as well as an overall utility plan for coordination. Scope of work included designs of gas, electric, joint trench composite, and street lighting for three phases consisting of over 1,700 residential units and 10 retail buildings, bid package preparation, review and analysis of utility contracts and coordination of pre-construction meetings with dry utility providers and numerous meetings with design team.

**Project Manager: Regency Centers, East Washington Place, Petaluma, California.**

Provided gas, electric, joint trench composite, and street lighting designs for service to a large commercial project consisting of 18 buildings. In addition to the new business drawings, provided a Rule 20 design to underground 1,600 linear feet of electric overhead facilities. Scope of work included bid package preparation, review and analysis of utility contracts, and coordination of pre-construction meetings with dry utility providers.

**Engineering & Planning Director: Pacific Gas and Electric Company, San Jose, California.**

Managed and directed a department of 130 employees responsible for delivering \$80 million in capital infrastructure improvement projects. Developed system-wide prioritization criteria to ensure the highest priority work was accomplished. Established focus by providing project management and estimating support for reconstruction projects. Managed timely construction of capacity improvement projects. Analyzed governance issues between PG&E and the City of San Jose. Provided recommendations to PG&E management on how to build an effective relationship with City government.

**Senior Distribution Engineer/Reconstruction Planning Supervisor: Pacific Gas and Electric Company, Hayward, California.**

Supervised mappers, estimators, and engineers responsible for the planning support of 40-60 high voltage distribution circuits, including voltage regulation, power factor management and outage protection. Supervised workgroup of 25 engineers and estimators responsible for justifying and managing \$40 million in capital reconstruction budget. Initiated reliability projects that maintained 10% distribution circuit reliability performance. Facilitated an employee involvement committee to identify and correct office safety hazards.

## Scott Shortlidge, PLS



**Location:** Pleasanton, CA

**Firm:** Ruggeri-Jensen-Azar

**Total Years:** 32

### **Areas of Expertise:**

Boundary Retracement  
Right-of-Way Engineering  
Geodetic Surveys  
Control Networks  
Subdivision Mapping

### **Education:**

Coursework, Surveying and Engineering, Texas A&M University

Coursework, Surveying and Engineering, Austin Community College

### **Licenses/Registrations/**

#### **Certifications:**

Professional Land Surveyor, CA, #6441, 1990

#### **Affiliations:**

Institute of Transportation Engineers

other workplaces, parks, open space, and entertainment within easy access to public transportation and an interconnected network of sidewalks and bicycle routes. The land surveying work to date has included the boundary resolution and documenting existing easements for this future mixed-use development.

## Land Surveying

### **Qualifications Overview**

Mr. Scott Shortlidge has more than 32 years of experience in land development, municipal, and transportation surveying/right-of-way engineering. He specializes in surveying and right-of-way engineering projects ranging from preliminary land nets to final right-of-way mapping products, project control through property descriptions, to construction staking support. Scott is experienced in managing surveying and mapping products, including hard copy, appraisal, and record right-of-way mapping for Caltrans. His other responsibilities include directing and computing GPS networks, tract maps, parcel maps, record of surveys, transfer deed documents, and topographic design surveys.

### **Relevant Projects**

**Project Land Surveyor: California Capital & Investment Group, Inc., Oakland Army Base, Oakland, California.** Responsible for preparation of boundary surveys, right-of-way engineering, property rights mapping, and coordination of easement documents for proposed utilities for approximately 200 acres of the redevelopment of the Oakland Army Base for the City of Oakland.

**Project Land Surveyor: SunCal Companies, Camp Parks Reserve Force Training Area, Dublin, California.** This project involves master planning of the redevelopment of a 190-acre portion of the 2,485-acre Camp Parks Reserve Force Training Area that is called Dublin Crossing. The Specific Plan envisions an "Urban Village" setting, which will include a variety of housing types, shops, offices, and

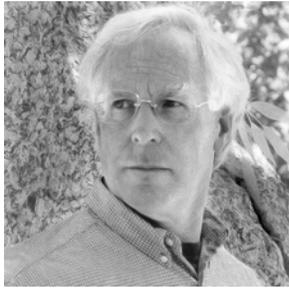
**Project Land Surveyor: The Tracy Hills Project Owner, LLC, Tracy Hills Specific Plan, Tracy, California.** Development of this 6,200-acre Tracy Specific Plan development will include residential, commercial, recreational, institutional, and light industrial uses. The land surveying work to date has included preparation of a parcel map, title research, and boundary retracement surveys.

**Survey Manager: City of Redwood City, El Camino Real Grand Boulevard Streetscaping Project, Broadway Street to Brewster Avenue, Redwood City, California.** This project consisted of pedestrian, streetscape, and landscape improvements along approximately 0.1 mile of El Camino Real from Broadway Street on the south to Brewster Avenue on the north. Among the specific improvements were street corner sidewalk ramp improvements, bulb-out sidewalk extensions, median widening for pedestrian refuges, Americans with Disabilities Act-compliant curb ramps, sidewalk widening, street trees, new street lights and pedestrian-oriented street lighting, and roadway repaving and striping. The surveying efforts included providing the ground control for aerial base mapping, supplemental topographic design surveys, and preparing a record land net.

**Survey Manager: City of Martinez, Sywest/Meyer Redevelopment/Buskirk Avenue Widening Phase II, Pleasant Hill, California.** This project included a high-density mixed commercial and residential development, roadway widening, utility upgrade and undergrounding, and landscape improvements. Responsible for topographic surveys and preparation of legal plats and descriptions for the final phase of this city redevelopment project. The work was part of the environmental planning support and design services associated with the development of the Sywest and Meyer properties and the widening of Buskirk Avenue from Lamkin Lane to Hookston Avenue. Assisted the Redevelopment Agency in evaluating the acquisition of excess Caltrans right-of-way to be developed as part of the project.

**Surveyor Manager: Contra Costa Transportation Authority, SR 4 Widening "A" Street to SR 160, Antioch, California.** The project consisted of widening 3.5 miles of State Route 4 in Antioch, including design of new and upgraded overcrossings and interchanges. The survey efforts included coordination with client, ROW staff, Caltrans survey staff, County survey staff, and engineering staff. The survey work products consisted of providing ABC mapping, survey control (GPS network) reporting, hardcopy mapping, construction survey control mapping (CSCM), supplemental topo design surveys, providing land descriptions for over 50 parcels, pre- and post-construction record of survey maps, final control monumentation, and transfer documents.

## David Gates, PLA



**Location:** San Ramon, CA

**Firm:** Gates + Associates

**Total Years:** 36

### **Areas of Expertise:**

Urban Design

Open Space Planning

Pedestrian-Friendly Environs

Universal Access

Sustainable/LEED Design

### **Education:**

MA, Urban Design, Harvard University, 1970

MLA, Landscape Architecture, Harvard University, 1968

BA, Landscape Architecture, University of California, Berkeley, 1966

### **Licenses/Registrations/**

#### **Certifications:**

Landscape Architect, CA, #1550, 1970

### **Affiliations:**

American Society of Landscape Architects

## Landscape Architecture/Open Space Design

### **Qualifications Overview**

Mr. David Gates is a landscape architect, urban designer, and site planner. His expertise includes large and small scale projects for both the private and public sectors. He has over 36 years of professional experience designing parks and recreation facilities ranging from neighborhood parks to recreation and open space master plans. His public project portfolio includes streetscape and downtown revitalizations, community and civic centers, fire stations and libraries, and master plan and guideline documents.

David applies his ability to develop creative solutions that recognize a variety of viewpoints to create spaces that are celebrated, educational reflections of the community in context with their environments. His designs successfully integrate the needs of diverse user groups.

David has served on a number of city design review boards. This breadth of experience allows him to work with citizen's groups and city agencies in a positive, efficient, and sympathetic manner. David's design expertise has been recognized by Urban Designer of the Year, the Builder's Association, MAME, the Gold Nugget Best of the Best, the San Francisco Chronicle, and many others. David's new urbanist approach is exemplified in much of the firm's work.

### **Relevant Projects**

**Urban Designer: The Martin Group, Hamilton Master Plan, Novato, California.** Historic Hamilton Field, a former military facility, is now a comprehensively planned community of 355 acres of mixed-use, commercial, and residential development

surrounded by open space. Produced an overall master plan to guide future development, as well as landscape design for some neighborhoods. An extensive

outreach program resulted in a community-supported plan that avoids adverse impacts on neighbors and the environmental systems. The open space elements include a trail system through the rolling hills with native oak woodlands, as well as protection of wetlands and sensitive habitats.

**Urban Designer: City of Concord, Boatwright Sports Park Master Plan, Concord, California.** The nine-acre sports park is located between two creek corridors in Concord. Hydrological concerns and site limitations were key issues influencing the landscape and irrigation design. Heritage oaks were preserved and incorporated into the new design. Facilitated a public workshop and provided design, irrigation, and construction expertise.

**Urban Designer: Seeno Construction, Metroplex Center, Concord, California.** Phase one of a two-phase office project was completed in the summer of 2003, strengthening the City's position as a premier business destination. A palm tree corridor scales the building and connects pedestrians with the strategic intersection of Willow Pass Road and Waterworld Parkway. The entry plaza is highlighted with water elements, boulder placements, accent planting, and paving materials.

**Urban Designer: East Garrison Partners, East Garrison Master Plan, Monterey County, California.** Set upon 244 acres in the historic Fort Ord, East Garrison will be a self-contained community, including 1,400 new homes, a library, eight parks, an arts district with revitalized historic buildings, public transit, and a mixed-use town center. With plans to repurpose the land to provide an array of housing types, the community has been recognized by the Monterey Business Council for its success as a public/private partnership and by the Pacific Coast Builders Conference as among "The Best in the West."

**Urban Designer: Surland Development, Ellis Transit Village, Tracy, California.** Providing access to the regional employment, retail, and services, the ACE train line will form the foundation of a multi-modal district. This district will accommodate expanded transit services, such as trolley, bus, and vanpool services, connecting to other neighborhoods and community service areas within Tracy.

**Urban Designer: Madison Marquette Retail, Bay Street Art and Memorialization Plan, Emeryville, California.** The history of the Ohlone Indians is memorialized along this Temescal Creek channel. The project's image and character is derived from its rich cultural past. Worked with local artists to interpret natural history, geology, aquatic plant life, and biological systems of the Ohlone life and culture. The juxtaposition of this historic infill in the midst of the vibrant commercial row brings interpretive art to the public. A creative collection of art components and informational signs depict the Ohlone Indians' rich cultural past.

## Gail Donaldson, JD, PLA



**Location:** San Ramon, CA

**Firm:** Gates + Associates

**Total Years:** 14

### **Areas of Expertise:**

Park and Recreation Planning  
Master Planning  
Design Review

### **Education:**

MLA, Landscape Architecture,  
University of California,  
Berkeley, 1994

JD, Law, Hastings College of  
Law, 1978

### **Licenses/Registrations/ Certifications:**

Landscape Architect, CA,  
#4516, 2007

State Bar of California, #83309

LEED Green Associate

Bay-Friendly QLP

### **Affiliations:**

American Society of Landscape  
Architects

American Planning Association  
Urban Land Institute

U.S. Green Building Council

## Landscape Architecture/Open Space Design

### **Qualifications Overview**

Ms. Gail Donaldson has managed numerous public and private projects at Gates + Associates and other firms. She has demonstrated skills in project concept development, design development, and planning. Her public sector projects include streetscape beautification plans, downtown revitalization projects, design guidelines, and park and campus master plans. Gail's experience has given her a detailed understanding of the issues that are of greatest concern to cities and other municipal governments. Her expertise includes landscape design guidelines and standards development, park and recreation planning, and specific plan development and implementation. Gail has assisted municipalities in obtaining grant funding for urban greening and transit oriented projects. She has served on the Emeryville Planning Commission since 2006, as well as serving on its General Plan and Zoning Update Steering Committee.

### **Relevant Projects**

**Urban Designer: Adrienne Chaney, Patterson Parks and Recreation Master Plan, Patterson, California.** Gates + Associates is preparing a Parks and Recreation Master Plan that will address the long-term vision for the City's parks and recreation, as well as strategies and priorities for meeting the immediate needs of the community. Working with a community steering committee, focus groups, and through the use of interactive community workshops, planning for the recreational needs of the growing community, including joint use of school facilities. In coordination with development of the Circulation Master Plan, will emphasize safe access and linkages between parks, schools, and residences, including Class I paths between destinations, and design guidelines/standards that support safe access.

**Urban Designer: City of Richmond, Citywide Parks Master Plan, Richmond, California.** Gates + Associates developed a comprehensive and coordinated Citywide Parks Master Plan for the City of Richmond. Based on existing documentation and evaluation of existing parks, working with the advisory committee to define park classifications, assess distribution and use, and to determine facility standards. Identifying an implementation strategy based on funding options and needs priorities.

**Urban Designer: City of Pismo Beach, Pismo Beach Complete Street Plan, Pismo Beach, California.** The Complete Street Plan is a comprehensive plan for bicyclists and pedestrians along the City's primary roadway running for five miles through the center of the City. The route is comprised of distinct segments with varied land uses, roadway conditions, and right-of-way constraints. Uses along the route include residential, neighborhood, commercial districts with small-scale retail, elementary school, senior communities, hotels, parks, and downtown areas. Challenges include narrow right-of-way segments and grading constraints, on- and off-ramps for Highway 101, and driveway and parking conflicts. Stakeholder involvement, public outreach, and community workshops are integral to the project.

**Urban Designer: West Tracy Owners Group, Cordes Ranch Specific Plan, Tracy, California.** Gates + Associates led the design team and property owners in the mixed-use/industrial development of this 1,600 acre site. Issues addressed included the freeway interface, its unique image and entries with a sense of arrival and a hierarchy of roads that established the overall character. Additional topics addressed were the core retail/service center that supported future and adjacent uses, open space network that enhanced the quality of the environment, and infrastructure, such as water supply and site drainage.

**Urban Designer: City of Pleasanton, East Pleasanton Specific Plan, Pleasanton, California.** A comprehensive team led by Gates + Associates has worked with a citizen's task force to develop a vision and guidance for the future development and conservation of the 1,110-acre area of eastern Pleasanton. The plan calls for a mix of residential, retail, office, industrial, and parks and open space on approximately 400 acres, surrounded by approximately 700 acres of water quality and conservation uses.

**David  
Howerton, PLA, AICP**



**Location:** San Francisco, CA

**Firm:** Hart Howerton

**Total Years:** 30

**Areas of Expertise:**

Master/Land Use Planning  
Landscape Architecture

**Education:**

MS, Landscape Architecture,  
University of California,  
Berkeley, 1977

BS, City Planning, University of  
Virginia, 1974

**Licenses/Registrations/  
Certifications:**

Professional Landscape  
Architect, CA, #1722, 1978

**Affiliations:**

American Society of Landscape  
Architects

American Institute of Certified  
Planners

Council of Landscape  
Architectural Registration  
Boards

Urban Land Institute, Executive  
Council and Foundation

Governor

NCLARB Certified

**Master Planning/Land Use Planning**

**Qualifications Overview**

Mr. David Howerton leads Hart Howerton as Chairman providing high-level strategy and planning on all projects. As a result of his ground breaking work on many environmentally-sound, conservation based, highly marketable new communities, including the nationally acclaimed Santa Lucia Preserve in California and Palmetto Bluff in South Carolina, he is consistently relied upon to provide business planning and strategy recommendations to his clients.

David is widely recognized as one of the leading talents in the profession, both in the business and academic fields. He has taken active roles in the Urban Land Institute and is a regular guest lecturer at the University of California, Berkeley and at Harvard. He serves as a Trustee of the School of Architecture Foundation at the University of Virginia. David has received an ASLA certificate of honor for excellence in the study of landscape architecture.

**Relevant Projects**

**Principal-in-Charge: SunCal/The Athens Group, Potomac Shores, Prince William County, Virginia.**

Completed the master planning of this 1,920-acre site on the shores of the Potomac, 30 miles from downtown Washington D.C. The plan reorganizes and re-orientes the land uses to create a concentration of activity in a town center with a flexible block pattern on the bluffs above the Potomac. The plans call for 5,000 residential units organized in a series of forested neighborhoods on the challenging hilly terrain. The neighborhoods will be linked to one another and the town center by an extensive trail network.

**Principal-in-Charge: MeadWestvaco, Nexton, Charleston, South Carolina.** Prepared development plans for the 4,500 acre Nexton community just outside of Charleston. Situated along Interstate 26 in the prime growth corridor, the property benefits from 1.5 miles of highway frontage between two interchanges. Prepared plans for a large-scale mixed-use community that combines five million square feet of office and retail with a range of distinct residential neighborhoods comprising 11,000 units. The entire community is organized around an extensive sustainable landscape and takes a whole systems approach to circulation, infrastructure, community facilities, recreation, and environmental management.

**Principal-in-Charge: Pacific Union Company, Santa Lucia Preserve, Carmel, California.** The design of the 20,000-acre (8.093 ha) Santa Lucia Preserve in Carmel Valley was premised on the belief that the property's intrinsic value lies in its natural beauty, vastness- and rich landscape. Designed the master plan from exhaustive environmental studies, leaving 90% of the land as open ranch land managed by a private land trust. The plan included 350 ranches, an equestrian ranch center, and an 18-hole Tom Fazio-designed private golf course – all set within a permanent land preserve. Prepared the design guidelines for new construction, led the team that designed the infrastructure, and served on the architectural review board. Architects for the renovation of the historic Hacienda and the new golf clubhouse, as well as for private residences within the community. The architectural work draws on Monterey's distinctive architectural heritage, regional climate, and coastal California lifestyle.

**Principal-in-Charge: Duke Energy, Crescent Resources, Palmetto Bluff, Bluffton, South Carolina.** On an 18,000 acre (7,284 ha) barrier island surrounded by rivers and wildlife preserves within South Carolina's coastal low country, master planned and designed a conservation-based community incorporating a maritime forest, preserve, and a pedestrian village fashioned after historic coastal towns. The first phase of the master plan included a village center, four residential neighborhoods with over 800 home sites, and a fitness center with exercise studios, pool, and tennis courts. The owner/developer retained Hart Howerton to design the infrastructure and prepare design guidelines for the character of the new village, including buildings and landscapes, which together help position the community in the region.

**Principal-in-Charge: DMB, EastMark, Mesa, Arizona.** Hart Howerton prepared the development strategy for a vibrant, sustainable center for the region on a 3,200-acre brownfield site at the edge of metropolitan Phoenix. The master planning, infrastructure design, and landscape/open space master planning created the structure for a mixed-use, transit-oriented development pattern ranging from active urban center to natural open spaces, establishing a model for contemporary urban development in the southwestern United States.

## Michel Dionne, AIA



**Location:** New York, NY

**Firm:** Hart Howerton

**Total Years:** 25

**Areas of Expertise:**

Urban Design

Land Planning

Community Development

**Education:**

MS, Architecture and Urban Design, Columbia University, 1986

BS, Architecture Université de Montréal, 1984

**Licenses/Registrations/**

**Certifications:**

NCARB Certified, NY,  
#024446-1, 2014

Registered Architect, NY,  
#3012441, 1992

**Affiliations:**

American Institute of Architects  
Ordre des Architectes du  
Québec

## Master Planning/Land Use Planning

### Qualifications Overview

With over 25 years of professional experience as an urban designer and architect, Mr. Michel Dionne has been responsible for the design and planning of new mixed-use, resort, urban infill, and transit-oriented communities in the United States, Canada, the Caribbean, Mexico, France, the Czech Republic, Brazil, Russia, and China.

Michel's site-specific and contextually driven approach has been recognized by numerous awards from the Urban Land Institute, Congress for the New Urbanism, and the American Institute of Architects. Awarded projects include the master plan and town center buildings for Val d' Europe (the EuroDisney community outside Paris) and the towns of Celebration and Watercolor, Florida.

Michel has led planning and design teams on large-scale communities, including a new 1,200 acre mixed-use community in the Washington, D.C. area; an updated master plan for Research Triangle Park in Raleigh/Durham, North Carolina, which incorporates a town center and residential neighborhoods into one of the nation's leading research communities; multiple mixed-use communities totaling 78,600 acres near Charleston, South Carolina, 75% of which is conserved land, parks, lakes, and rural areas; and large mixed-use communities in Dallas, Texas.

His retail planning and design experience includes the Arlington Town Center in Arlington, Texas for the Texas Rangers and Dallas Cowboys; plans for a new city in China's Yunnan Province; new high-density residential neighborhoods in Tianjin, China; hotel

and resort work; and a new transit-oriented community at Bay Meadows in San Mateo, California. Michel has led urban design work, such as the Lower Manhattan Streetscape project for the Alliance for Downtown New York, Inc., and the creation of master plans to transform waterfronts in Washington, DC, New York City, Miami, and Barcelona.

Prior to joining Hart Howerton, Michel was a partner at Cooper, Robertson & Partners in New York. He is native of the province of Quebec, where he worked in the public and private sectors.

### Relevant Projects

**Design Principal: Wilson Meany, Bay Meadows, San Mateo, California.** Led the master plan refinements, design guidelines and site plan, and architectural review process leading to the entitlement of the project. Currently, engaged by the owner to continue the architectural review process and lead the open space landscape design. Currently under construction, this 80-acre transit-oriented infill development of a former racetrack in San Mateo is comprised of 750,000 square feet of office and retail and 1,100 residential units ranging from stacked flats to townhomes and single-family residences, within an interconnected network of streets and parks.

**Design Principal: SunCal/The Athens Group, Potomac Shores, Prince William County, Virginia.** Completed the master planning of this 1,920-acre site on the shores of the Potomac, 30 miles from downtown Washington D.C. The plan reorganizes and re-orientes the land uses to create a concentration of activity in a town center with a flexible block pattern on the bluffs above the Potomac. The plans call for 5,000 residential units organized in a series of forested neighborhoods on the challenging hilly terrain. The neighborhoods will be linked to one another and the town center by an extensive trail network.

**Design Principal: MeadWestvaco, Nexton, Charleston, South Carolina.** Prepared development plans for the 4,500 acre Nexton community just outside of Charleston. Situated along Interstate 26 in the prime growth corridor, the property benefits from 1.5 miles of highway frontage between two interchanges. Prepared plans for a large-scale mixed-use community that combines five million square feet of office and retail with a range of distinct residential neighborhoods comprising 11,000 units. The entire community is organized around an extensive sustainable landscape and takes a whole systems approach to circulation, infrastructure, community facilities, recreation, and environmental management.

## Daniel Bucko, AICP



**Location:** San Francisco, CA

**Firm:** Hart Howerton

**Total Years:** 25

### **Areas of Expertise:**

Urban Design

Land Planning

Community Development

### **Education:**

MS, Landscape Architecture,  
University of Massachusetts,  
1985

MS, Regional Planning,  
University of Massachusetts,  
1984

BS, Education, University of  
Connecticut, 1978

### **Licenses/Registrations/**

#### **Certifications:**

American Institute of City  
Planners, 2006

#### **Affiliations:**

American Society of Landscape  
Architects

American Institute of Certified  
Planners

American Planning Association  
San Francisco Planning and  
Urban Research Association

## Master Planning/Land Use Planning

### **Qualifications Overview**

Mr. Daniel (Dan) Bucko is a senior urban planner and project manager with over 25 years of experience as an urban designer, land planner, and community development specialist on a wide range of projects, including downtown, mixed-use, transit-oriented developments, resort, residential, new towns, and sustainable communities. His specialty is providing integrated and forward thinking solutions that respond to environmental, community, and economic concerns. He works at scales small to large from the design of the new B Cellars Winery in Napa to sustainable new community plans for 15,000 residents and 4,000 jobs in San Benito County.

Dan has directed major projects in a variety of locales, including the United States, Middle East, Caribbean, and Asia. Projects have included the Avila Beach brownfield redevelopment, California; Taghazout Resort, Agadir, Morocco; Concord Community Reuse Plan, Concord, California; Treasure Island, San Francisco, California; El Paso Downtown Redevelopment Plan, El Paso, Texas; Liu Lin New Town, Tianjin, China; and Dubai Investment Park, Dubai, United Arab Emirates. Prior to joining Hart Howerton in 2008, Dan worked as a studio director and senior project manager at SMWM in San Francisco, as a senior associate at the Planning Collaborative in Oakland, as a senior land planner and urban designer at Khatib & Alami CEC, Dubai, United Arab Emirates, and with SOM in San Francisco, California.

### **Relevant Projects**

**Project Manager/Designer: Kennedy Wilson, Dillingham Ranch Agricultural Subdivision and Agricultural Cluster, North Shore, Oahu, Hawaii.** Hart Howerton is leading the planning and entitlement effort for an agricultural subdivision

within historic Dillingham Ranch. Plans have been submitted to the City and County of Honolulu for the 3,000-acre ranch to be subdivided into agricultural areas, including tropical fruit orchards, crops, grazing, equestrian/pasturage, and preservation areas. A community of 90 single family homes and 15 cluster cottages would be integrated into this agricultural setting. The extensive agricultural operation would provide the backdrop and character for the new community and provide funds for agricultural operations, maintenance of community infrastructure, and up keep of the historic Dillingham Lodge.

**Project Manager/Designer: B Cellars Winery, Entitlement and Design Services, County of Napa, California.** Hart Howerton provided entitlement and design services for the new B Cellars Winery in Napa Valley. Coordinated development of the overall master plan, plan through the County entitlement, and conceptual design of the three winery buildings, landscape and grounds, and extensive wine caves. The County Planning Commission unanimously approved the project, which is near completion of construction as of the summer of 2014. The winery is unique in that it combines wine growing and wine making operations with extensive caves and hospitality areas within a garden atmosphere.

**Project Manager/Urban Designer: San Benito Rancho LLC, San Benito New Town, County of San Benito, California.** Hart Howerton was lead urban and community planner on a 7,000-acre new town adjacent to a planned high speed rail stop south of Gilroy, California. The new community would integrate substantial employment, residential, commercial, and open space uses into an integrated plan using the site's original contours and drainages as a guide for community organization. A new town center would accommodate over 4,000 jobs, while being the civic, commercial, residential, and transportation heart of the community. A variety of residential villages comprised the planned 7,500 residential units. Greenway corridors, which integrate storm water treatment, the creation of new riparian habitat, substantial recreation uses, and an extensive multi-use trail system, linked areas of the site to the town center, preserved floodplain of the Pajaro River, and upland areas. The plan has been amended to the County's General Plan as of 2012.

**Project Manager: City of Concord, Concord Community Reuse Plan, Concord, California.** Managed the SMWM in the development of the reuse plan in concert with ARUP, CMG Landscape Architects and other project team consultants. The reuse plan was developed with considerable community and stakeholder involvement. Assisted with leading community workshop sessions where residents and stakeholders had direct input on plan components and organization. This was followed by the development of multiple plan alternatives for City and resident review and input. Ultimately a preferred alternative was selected, refined, and approved by the Reuse Authority and City in 2008.

## Cris Jespersen, PE



**Location:** Walnut Creek, CA

**Firm:** Dawson Technical, Inc.

**Total Years:** 24

### **Areas of Expertise:**

Military Planning

Early Property Transfer

Environmental Services

Cooperative Agreement

UXO/MEC

### **Education:**

BS, Chemical Engineering,  
University of California, Davis,  
1982

### **Licenses/Registrations/**

#### **Certifications:**

Professional Chemical  
Engineer, CA, #4727, 1992

### **Affiliations:**

Society of American Military  
Engineers

Mare Island Restoration  
Advisory Board

the Western Early Transfer Parcel that transferred the property and the funding to remediate it to the City of Vallejo. In a separate transaction, the developer of the dredge ponds assumed the liability for completion of the remediation of the parcel, as well as other associated obligations from the City, and negotiated an insurance program (cost cap and pollution legal liability) to support the transaction.

## Military Planning/Liaison/ Munitions and Explosives of Concern

### **Qualifications Overview**

Mr. Cris Jespersen is a licensed engineer with over 24 years of experience in program and project management with clients in the Department of Defense. He has extensive experience working at military facilities undergoing closure through the Base Realignment and Closure (BRAC) process. Cris has negotiated environmental services cooperative agreements for the early transfer of environmentally impacted properties on behalf of Land Reuse Authorities (LRAs) to allow accelerated development and beneficial reuse at several BRAC sites in California.

### **Relevant Projects**

**Program Manager: City of Vallejo, Western Early Transfer Parcel, Mare Island, California.** Worked on a team supporting the City of Vallejo for the right to develop the U.S. Navy's former dredge material disposal ponds located on the Western Early Transfer Parcel on Mare Island. During negotiations with regulators regarding the reuse of the dredge ponds, it became apparent that reuse would not be allowed until the U.S. Navy completed cleanup of the 70 acre Resource Conservation and Recovery Act (RCRA) landfill and IR-05 on U.S. Navy-retained property located adjacent to the dredge ponds. The team approached the U.S. Navy with the idea of conducting an early transfer of the U.S. Navy-retained parcels in this area. Working with the U.S. Navy and the City of Vallejo, the team negotiated an Environmental Services Cooperative Agreement for

**Program Manager: Fort Ord Redevelopment Authority, Environmental Services Cooperative Agreement, Fort Ord, California.** In 2005, approached by LFR (now ARCADIS) to team on a response to a request for proposal to assist the Fort Ord Redevelopment Authority on negotiating an Environmental Services Cooperative Agreement for the early transfer of approximately 3,000 acres of munitions and explosives of concern (MEC)-contaminated property at the former Fort Ord. Through a competitive process, the LFR-Weston team was selected to represent FORA in negotiating the Environmental Services Cooperative Agreement with the U.S. Army BRAC Office and regulators. LFR led the team and provided program management, planning, and consulting services for the transaction. Weston provided legal and technical expertise for negotiating the agreement and technical expertise for the remediation of the MEC-contaminated sites. Both LFR and Weston supported the client in obtaining cost cap and pollution legal liability insurance policies for the transaction. What became known as the FORA ESCA Team (LFR, Weston, and Westcliffe Engineers) assumed responsibility for cleanup of the property to allow the acceleration of redevelopment for a variety of uses.

**Program Manager: Various Clients, Investigation, Cleanup, and Closure of Multiple Sites Contaminated with Unexploded Ordnance (UXO) and Munitions and Explosives of Concern, California, Washington, Alaska, Oregon, and Hawaii.** Conducted investigation, cleanup, and closure of multiple sites contaminated with UXO and MEC. These sites included work for the:

- U.S. Army at:
  - Camp Bonneville, Washington
  - Dry Canyon Artillery Range, California
  - Fort Ord, California
  - Fort Richardson, Alaska
  - Umatilla Army Ammunition Depot, Oregon
- U.S. Navy at:
  - Chocolate Mountain Aerial Gunnery Range, California
  - Mare Island Naval Shipyard, California
  - Kaho' olawe Naval Gunnery Range, Hawaii.

## Lynn Kriegbaum



**Location:** Pleasanton, CA

**Firm:** Creative Consulting Services

**Total Years:** 18

### **Areas of Expertise:**

Military Liaison

Federal Real Property Disposition

Community Relations

### **Education:**

MBA, Business Administration, University of Phoenix, 1990

BA, Public Services

Administration, University of San Francisco, 1979

### **Affiliations:**

National Association of Professional Women

## Military Planning/Liaison

### **Qualifications Overview**

Ms. Lynn Kriegbaum has extensive Base Realignment and Closure (BRAC) and other federal real property disposal experience. As a woman-owned small business and the sole proprietor of Creative Consulting Services, she works in partnership with SunCal.

Lynn provides expertise and support on BRAC and military partnership projects. She provided BRAC 2005 Strategic Planning support to the Office of the Deputy Assistant Secretary of the U.S. Army (Infrastructure Analysis). She developed the U.S. Army's "One Voice" BRAC 2005 information packets. Lynn was responsible for planning and execution of the BRAC 2005 Garrison Commanders' Workshop. She was responsible for planning, document preparation, and execution of the U.S. Army's Base Transition Coordinator Training for BRAC 2005 and was the key author for the U.S. Army's "Handbook for Growth Communities" for BRAC 2005.

### **Relevant Projects**

**Military Liaison: Reserves Forces Training Area, Camp Parks, Real Property Exchange, Dublin, California.** Serves as SunCal's liaison for interactions with the U.S. Army Reserves and state regulatory agencies in support of the real property exchange project at Reserves Forces Training Area, Camp Parks. Instrumental in assembling the team, preparing the winning proposal, and facilitating the process for the U.S. Army's largest Reserve Property Exchange.

### **Team Lead: U.S. Air Force, Property Disposal Plans, 27 Legacy BRAC Installations.**

Lead team member responsible for the analysis and preparation of individual disposal plans for each of the U.S. Air Force's 27 legacy BRAC installations (BRAC 1988 through 1995) and as a key member of the team preparing the overarching 2006 BRAC Master Plan for the U.S. Air Force. Additionally, responsible for subsequent one-year and two-year progress reviews and plan updates for the 27 installations.

**Office of Economic Adjustment's Base Transition Coordinator: Oakland Army Base, Property Disposal, Oakland, California.** Served as the Office of Economic Adjustment's Base Transition Coordinator for Oakland Army Base, which was approved for closure under 1995 BRAC legislation. Key responsibilities included serving as the impartial liaison between the Department of Army and City of Oakland, managing community relations, participating in the West Oakland Community Action Group meetings, serving as ombudsman, and facilitating the Department of Army's approval of the City of Oakland's No-Cost Economic Development Conveyance, the Environmental Services Cooperative Agreement, and ultimate disposal of the property. Identified actual and potential problems and provided solutions or alternative recommendations to U.S. Army, City of Oakland, or other agencies to facilitate transfer and reuse. Assisted the Department of the Army to ensure that all transfer related actions taken by the U.S. Army met the criteria of the President's Five-Part Plan to support community redevelopment. Assisted the BRAC environmental coordinator with environmental clean-up coordination. Assisted in preparation and review of the Environmental Impact Statement for the disposal and the associated Record of Decision. Authored the Oakland Army Base Finding of Suitability for Early Transfer for submission to the State of California for the Governor's approval and coordinated the agency and public reviews. Additionally, authored the Lease in Furtherance of Conveyance for the Public Benefit Conveyance of property to the East Bay Regional Park District.

**BRAC Officer: Oakland Army Base, Base Closure, Oakland, California.** Responsible for the closure of Oakland Army Base in accordance with the 1995 BRAC legislation. Formulated local policies to support the base closure and realignment as prescribed by the Department of the Army. Identified and implemented objectives, procedures, and actions necessary to achieve base closure by approved date. Tracked the required actions and scheduled completion dates in order to close Oakland Army Base by target deadline. Prepared and oversaw master timelines, analyses and studies of resources, facilities, and equipment to determine best utilization during closure process. Represented the Command in meetings with local government officials and private citizens on base closure issues and concerns. Prepared and presented Power Point briefings on closure status to various levels from base employees to the Assistant Chief of Staff for Installation Management, Department of the Army and the Transcom Commanding General. Successfully closed Oakland Army Base on schedule. Successfully negotiated an agreement between the U.S. Army Reserves and Local Reuse Authority that overcame a stalemate position.

## Alan Zusman, AICP



**Location:** Charlottesville, VA

**Firm:** Cardno

**Total Years:** 42

### **Areas of Expertise:**

Encroachment Planning

Land Use Planning

Enhanced Use Leasing

### **Education:**

MS, Transportation Planning,  
Polytechnic Institute of New  
York University, 1972

BS, Aerospace Engineering,  
Polytechnic Institute of New  
York University, 1971

### **Licenses/Registrations/**

#### **Certifications:**

American Institute of Certified  
Planners, U.S., #125203

#### **Affiliations:**

Society of American Military  
Engineers

Regional Commander on encroachment challenges that could impede the U.S. Navy's ability to meet mission requirements. Based on experience working with numerous local and state governments, non-governmental organizations, and other federal agencies, the Program was established and funded within the U.S. Navy.

## Military Planning/Liaison

### **Qualifications Overview**

Mr. Alan Zusman joined Cardno after a 30-year career with the Naval Facilities Engineering Command (NAVFAC) as a senior civilian. He was the Director of Intergovernmental Planning and was the Program Manager for the U.S. Navy's Air Installations Compatible Use Zones (AICUZ) Program and Encroachment Management Program. In this capacity, he worked with senior U.S. Navy Commands, installations, and community leaders to foster compatible development in the vicinity of U.S. Navy installations. He was directly responsible for authoring the encroachment program policy and for advising senior officials within the U.S. Navy and Department of Defense (DoD) on strategies for achieving compatible land use.

Alan was the U.S. Navy's representative to the DoD Readiness and Environmental Protection Initiative Interservice Working Group, the Office of Economic Adjustment Land Use Interservice Working Group, and Chairman of the DoD Noise Working Group. He has extensive experience in land use planning and fostering working relationships with governmental and non-governmental organizations.

### **Relevant Projects**

**Senior Civilian: U.S. Navy, Community Planning and Liaison Program, Washington, D.C.** Developed the U.S. Navy's Community Planning and Liaison Program requirements, roles and responsibilities, and training program, including workshops and seminars. The program has the primary responsibility of advising the installation Commanding Officer and

**Encroachment Management Director: Naval Facilities Engineering Command, Intergovernmental Planning Division, Headquarters, Washington, D.C.** Responsible for developing and directing the U.S. Navy's Encroachment Management Program, including encroachment action plans, encroachment partnering, and managing AICUZ and aircraft noise programs. Primary advisor to Deputy Chief of Naval Operations (Fleet Readiness), Commander, Navy Installations Command (CNIC), and Assistant Secretary of the Navy (Energy, Installations and Environment) for aircraft noise. Represented the U.S. Navy on DoD Readiness and Environmental Protection Initiative Interservice Working Group, DoD Noise Working Group, and DoD Office of Economic Adjustment Land Use Interservice Working Group. Developed CNO AICUZ policy and CNIC encroachment management policy. Developed Department of Navy land use compatibility guidelines for aircraft noise and aircraft safety. Provided policy and technical support to U.S. Navy Regions, Mission Component Commands, and Facility Engineering Command staffs. Primary instructor at over 75 CNO AICUZ Seminars.

**Program Manager: Naval Facilities Engineering Command, Encroachment Management Program Development for U.S. Navy Regions and Activities, Headquarters, Washington D.C.** Managed three projects under the direction of Naval Facilities Engineering Command Headquarters providing encroachment program support to U.S. Navy Regions Northwest, Hawaii, and Marianas Islands (Guam). Support included development of outreach plans and brochures, Region encroachment management policy (instructions), and Community Planning and Liaison training.

**Project Director: Naval Facilities Engineering Command, Enhanced Use Lease Program, Headquarters, Washington, D.C.** Directed the Enhanced Use Lease (EUL) program to optimize underutilized U.S. Navy land and facilities, including program management, development of CNIC EUL policy, and EUL training program. Developed multi-phase EUL program, including economic and market studies and real estate lease execution. Developed land and facility scoring matrices to analyze potential EUL candidates. Spearheaded use of EUL for renewable energy. Advised senior U.S. Navy leadership on merits of proposed EUL projects. Conducted national EUL Forums with the development community.

**Deputy Director, Asset Management: Naval Facilities Engineering Command, Programming and Budgeting for Shore Infrastructure Planning, Headquarters, Washington D.C.** Responsible for programming and budgeting for shore infrastructure planning, including strategic planning, business management system process improvements, encroachment management, AICUZ, range planning, geographic information systems support. Managed EUL economic and market studies, development of IT tools to support business line requirements, and management of \$8M - \$10M centrally managed facility planning budget.

## Carol Wirth



**Location:** Jacksonville, FL

**Firm:** Cardno

**Total Years:** 20

**Areas of Expertise:**

Military Planning  
Military Operations and Training  
Stakeholder Facilitation

**Education:**

BS, Ecology and Evolutionary Biology, University of Arizona, 1994

**Affiliations:**

Society of American Military Engineers

## Military Planning/Liaison

### Qualifications Overview

Ms. Carol Wirth is a military planner who has broad experience in program and project management, stakeholder facilitation, and investigative roles for diverse projects for military and other clients. With expertise in military and environmental planning, she has had great success in providing key clients with exceptional problem-solving services covering a wide range of military operations and training issues, including expansion needs, range renewal, mission sustainment, and environmental sensitivity and compliance. Many of Carol's projects have been directly associated with complex and high profile land administration and policy issues involving the Department of Defense, government agencies, other stakeholders, and the interested public. She has worked for all branches of the military, as well as the Bureau of Land Management and National Park Service. She has managed dozens of National Environmental Policy documents, a wide range of small area and large complex planning projects, integrated natural and cultural resources management plans, and is a leader in providing innovative encroachment planning related services.

### Relevant Projects

**Project Director: Army Surface Deployment and Distribution Command, Environmental Impact Statement (EIS), Modernization and Repair of Piers 2 and 3, Military Ocean Terminal Concord (MOTCO), California.** Directed this 20-month, high-profile EIS evaluating the modernization and repair of Pier 2 and repair of Pier 3 at MOTCO to meet current and future mission requirements. Piers 2 and 3 are past their structural and design life and lack modern operational efficiencies. Without implementation of the proposed action, the U.S. Army's ability to meet its designated security mission at MOTCO in the short- and long-term would be severely impaired. Additional efforts associated with this EIS included special status species surveys, underwater cultural resource survey, two biological assessments for federally listed species, and an essential fish habitat assessment.

**Project Manager: Army Surface Deployment and Distribution Command, Real Property Master Plan, Integrated Natural Resources Management Plan, Integrated Cultural Resources Management Plan, and Environmental Assessment, Military Ocean Terminal Concord, Concord, California.** Managed this multi-faceted project addressing planning needs for the 6,640-acre MOTCO, which was turned over to the Army as a result of Base Realignment and Closure 2005 with the 834<sup>th</sup> Transportation Battalion assuming installation management responsibility in October 2008. Issues addressed in the Real Property Master Plan were increased efficiency of port operations, potential introduction of general cargo unit movements in addition to ammunition cargo, rail, staging, and other facilities requirements. Natural resource management issues include threatened and endangered species, essential fish habitat, California ground squirrel control, agricultural grazing, and wetland management. Cultural resource management issues include historic structures and the Port Chicago disaster site, a National Memorial site.

**Primary Author: Marine Corps Air Station Camp Pendleton, Master Plan Update and Traffic Study, Camp Pendleton, California.** Primary Author of the Marine Corps Air Station Camp Pendleton Master Plan. The master plan provides a consolidated assessment of existing factors affecting land use; analyzes issues, constraints, and opportunities, including a detailed analysis of development potential, antiterrorism/force protection, and traffic; provides an analytical categorization and evaluation of the planning issues; and outlines a three-tiered recapitalization plan for the Air Station, including new construction, demolition, and other projects.

**Planner: Naval Air Facility El Centro, Activity Overview Plan, El Centro, California.** Prepared existing conditions assessment evaluations for this master planning effort. This included information on natural and manmade constraints and existing land uses, as well as identifying and analyzing opportunities and constraints.

**Planner: Naval Air Station Lemoore, Activity Overview Plan, Lemoore, California.** Prepared existing conditions assessment evaluations for this master planning effort. The focus of these efforts was on summation of facility assets assessment data, such as facility age and condition information and presentation of such data in a tabular and graphical format in terms of mission critical, mission support, and quality of life functions.

**Planner: Marine Corps Base Camp Pendleton, Basic Facilities Requirements Study, Camp Pendleton, California.** Assisted with the inventory and calculation of facility requirements for various units and facility category codes at the base. Efforts included field surveys and interviews, office evaluation, and preparation of basic facility requirement worksheets comparing existing assets to requirements.

## Sam Bacchini



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 21

### **Areas of Expertise:**

Botany

Herpetology

Wetlands

### **Education:**

BA, Zoology, University of California, Davis, 1991

### **Licenses/Registrations/**

#### **Certifications:**

U.S. Fish & Wildlife 10(a)(1)(A)  
Recovery Permit, Vernal Pool  
Crustaceans and California  
Tiger Salamander, CA,  
#TE-795938-7, 2011

California Department of Fish  
and Wildlife Plant Voucher  
Collecting Permit, Special-  
Status Plants, CA, #08045.1,  
2013

**County, California.** Preparing the Biological Assessment as a part of the Dublin Crossing Project's federal Endangered Species Act Section 7 consultation. The project involves the redevelopment of approximately 180 acres of the Camp Parks Reserve Forces training area that will be transferred from military to civilian use.

## Natural Resources

### **Qualifications Overview**

Mr. Sam Bacchini has technical and practical experience identifying and studying terrestrial vertebrates, invertebrates, and flora in ecosystems throughout California and elsewhere in North America. His experience includes field surveys, background research, and impact analysis for many special status species. Sam has in-depth knowledge of the habitat requirements and agency survey protocols for a variety of species. His experience includes coordinating and directing the work of field survey teams for small- to large-scale projects involving numerous species issues. He prepares U.S. Army Corps of Engineers Section 404 and U.S. Fish and Wildlife Service Section 7 and Section 10 permits. Sam assists in preparing National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) documents, biological assessments, wetland delineations, and related reports.

### **Relevant Projects**

**Project Biologist: City of Marina, University Villages Specific Plan Environmental Impact Report (EIR), Former Fort Ord, Monterey County, California.** Prepared the biological resources section of the University Villages Specific Plan EIR. The project involved redevelopment of portions of the Former Fort Ord for future commercial and residential civilian use.

**Project Biologist/Herpetologist: Dublin Crossing CP, LLC, Dublin Crossing Project, Alameda**

**Project Biologist: City of Lincoln, Village 1 Specific Plan Project EIR, Placer County, California.** Prepared the biological resources section of the EIR for the Village 1 Specific Plan, an approximately 1,832-acre development project in western Placer County. The project was designed to be implemented in phases. Potential project impacts for portions of the project were analyzed at a project level, while other portions of the project area were analyzed at a programmatic level.

**Project Biologist: City of Vacaville, Lower Lagoon Valley Specific Plan EIR, Solano County, California.** Prepared the biological resources section of the EIR for the Lower Lagoon Valley Specific Plan, an approximately 2,309-acre development project. The project included approximately 900 acres of residential and commercial development with approximately 1,400 acres of open space and recreational facilities.

**Project Biologist: City of Roseville, West Roseville Specific Plan, Placer County, California.** Prepared the biological resources section of the EIR for the West Roseville Specific Plan. The project involved a Sphere of Influence Amendment that encompassed approximately 5,530 acres in western Placer County, adjacent to the western boundary of the City of Roseville.

**Project Biologist/Herpetologist: EVS, Inc., Camp Parks Reserve Forces Training Area, Road and Utility Improvements Project, Alameda County, California.** Prepared a protocol-level habitat assessment for California red-legged frogs and prepared a biological technical report for the Camp Parks Reserve Forces Training Area road and utility improvements project. The project involved the creation of a new detention basin to improve storm water capacity to serve future development on the site after transfer of the land from military to civilian use.

**Project Biologist: Marine Corps Logistics Base Barstow, Marine Corps Logistics Base Barstow, Natural and Cultural Resources Gap Analysis Report, Barstow, California.** Provided senior review and revisions to the Natural and Cultural Resources Gap Analysis Report for the base. The purpose of the report was to identify gaps in compliance with environmental requirements set forth in the Marine Corps Logistics Base Barstow Integrated Natural Resources Management Plan.

**Project Biologist/Herpetologist: U.S. Air Force, McClellan Air Force Base Closure Project, Sacramento County, California.** Acted as an embedded assistant to McClellan Air Force Base environmental personnel to provide support for a variety of environmental compliance and natural resources permitting tasks related to the closure of the base and its transition to the private sector.

## Bonnie Peterson



**Location:** Sacramento, CA

**Firm:** Ascent Environmental, Inc.

**Total Years:** 10

### **Areas of Expertise:**

Biology

Wetland/Water Quality

Environmental Permitting

### **Education:**

BS, Conservation Biology,  
California State University,  
Sacramento, 2004

### **Licenses/Registrations/ Certifications:**

CDFW Scientific Collecting  
Permit, Authorizations 1  
through 7 and 9, #SC-9589

CDFW Threatened/Rare Plant  
Collection Permit, #09041

USFWS Threatened and  
Endangered Species Permit,  
Branchiopods, #TE205600-0

### **Affiliations:**

California Native Plant Society  
The Western Section of the  
Wildlife Society

## Natural Resources

### **Qualifications Overview**

Ms. Bonnie Peterson is a biologist and wetland/water quality regulatory specialist with experience permitting a broad range of projects throughout California. She manages the firm's regulatory compliance practice and implements permitting strategies for compliance with the federal Clean Water Act Sections 401, 402, and 404; the Porter-Cologne Water Quality Control Act; the Dickey Water Pollution Act; Title 23 of the California Code of Regulations; California Fish and Game Code Section 1602; and state and federal Endangered Species Acts.

Bonnie's strong biological and physical science background includes a variety of field assessments and special-status species surveys throughout California. She assists clients in planning and achieving regulatory compliance for natural resource-related permits. Her work includes wetland delineations, environmental sensitivity training, habitat assessments, and surveys for valley elderberry longhorn beetle (VELB), burrowing owl, Swainson's hawk, giant garter snake, and other special-status species; riparian and oak tree monitoring; and vernal pool floristic monitoring. Additionally, she is permitted to conduct surveys for Conservancy fairy shrimp, longhorn fairy shrimp, Riverside fairy shrimp, San Diego fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, and rare plants throughout California. She has previously monitored constructed/reference wetlands and conservation areas and mitigation banks, including preparation of annual monitoring reports. She has prepared Mitigation Monitoring Plans and Open Space Monitoring Plans.

Bonnie is a Certified Professional in Erosion and Sediment Control (CPESC) and is a Qualified Storm Water Pollution Prevention Plan (SWPPP)

Practitioner/Qualified SWPPP Developer (QSP/QSD). She has regularly acted as a liaison among developers, contractors, city and county representatives, various regional water quality control boards, and state and federal regulatory agencies.

### Relevant Projects

**Biological Resources Project Manager: SunCal, Regulatory Compliance, Dublin Crossing Mixed Use Community, Dublin, California.** Prepared and coordinated technical reports and provided environment permitting and planning services for the Dublin Crossing project, a pedestrian-friendly, mixed-use community that will connect the east and west sides of Dublin currently separated by Camp Parks. Provided technical assistance for the Environmental Impact Report, coordination for the Burrowing Owl Mitigation Plan, conducted protocol level vernal pool branchiopod surveys, prepared the wetland delineation report, and coordinated protocol-level red-legged frog surveys.

**Project Biologist: California Department of Corrections and Rehabilitation, Otay Mesa, Level II Infill Correctional Facilities Project, Richard J. Donovan Correctional Facility, San Diego County, California.** Prepared the Burrowing Owl Exclusion and Relocation Plan for the project as required by the project's Environmental Impact Report (EIR). Following approval by the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service, implemented the approved plan, including pre-construction surveys, video scoping of burrows, installation of exclusion doors, and burrow clearance and closure.

**Lead Biologist/SWPPP Inspector: SunCal Bickford Ranch, LLC/Lehman Brothers, Bickford Ranch, Placer County, California.** Prepared the SWPPP for a 1,942-acre mixed-use master development project. Conducted SWPPP site inspections and provided recommendations to ensure compliance with permits. Conducted riparian, vegetation, and hydrology monitoring for the on-site mitigation areas, conducted monitoring for VELB, conducted preserve monitoring, and provided management recommendations.

**Regulatory Specialist: Placer County and Tahoe Regional Planning Agency, LLC, Martis Valley West Parcel Project, Truckee, California.** Assisting with the preparation of the joint EIR/Environmental Impact Statement (EIS) for the proposed Martis Valley West Parcel Project. The site is located in eastern Placer County within the Martis Valley Community Plan area with approximately 83.5 acres of it located in the Tahoe Basin, within the Tahoe Regional Planning Agency jurisdiction. The project is proposing to transfer allocated development density from the East Parcel to the West Parcel to allow development of a 760-unit residential subdivision and 6.6 acres of commercial land uses on approximately 775 acres on the West Parcel near the Northstar Ski Resort. The project would include preservation of the East Parcel that would be rezoned as forest with the intent for the land to be acquired for preservation by a land trust.

## Daniel Neal, JD



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 9

### **Areas of Expertise:**

Environmental Permitting  
Biological Studies  
NEPA/CEQA

### **Education:**

JD, Law, University of  
California, Davis, 2005  
BA, English, Santa Clara  
University, 2000  
AS, Biology, Sacramento City  
College, 2010  
Certificate, Field Ecology  
Career, Sacramento City  
College, 2010

### **Licenses/Registrations/**

#### **Certifications:**

California State Bar, #238903,  
2005

### **Affiliations:**

Bat Conservation International  
California Native Plant Society  
The Wildlife Society, National,  
Western, and Sacramento  
Valley Chapters  
The Wildlife Society Wetlands  
Working Group

## Natural Resources

### **Qualifications Overview**

After several years of private law practice defending the adequacy of municipalities' California Environmental Quality Act (CEQA) documentation, Mr. Daniel Neal returned to school to study biology. His goal is to assist in the design of legally-defensible projects that avoid or minimize impacts to biological resources, while still achieving project objectives. A former employee of the U.S. Army Corps of Engineers Regulatory Division, Daniel's areas of expertise include the Clean Water Act permit applications, biological resource assessments, CEQA compliance, wetland delineations, endangered and special-status species surveys, vegetation surveys, and Central Valley Flood Protection Board levee and floodway encroachment permitting.

### **Relevant Projects**

**Associate Biologist: City of Half Moon Bay, Church Street Subdivision, Half Moon Bay, California.** Prepared a biological resource assessment meeting the requirements of the City of Half Moon Bay's local coastal program and coastal resource conservation standards for the proposed subdivision of a vacant infill parcel bordered on one side by Pilarcitos Creek. This creek is designated critical habitat for the federally-threatened central California coast steelhead DPS (*Oncorhynchus mykiss*) and supports a riparian corridor that provides habitat for the federally-threatened California red-legged frog (*Rana draytonii*), federally-endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), and other special-status species protected under the federal and California Endangered Species Acts. After preparing the project's biological assessment, prepared appropriate mitigation measures and monitoring provisions that were used to form the basis of the

project's biological resources CEQA documentation, which included an initial study and mitigated negative declaration.

**Associate Biologist: City of Manteca, Yosemite Square Subdivision, Manteca, California.** Performed a biological resource assessment and drafted the biological resources section of an initial study/mitigation negative declaration prepared in connection with the conversion of an almond orchard into a master-planned housing development. After field reconnaissance of the project study area, evaluated the project's potential to directly and indirectly impact special-status plant and animal species, including Swainson's hawk (*Buteo swainsonii*), San Joaquin kit fox (*Vulpes macrotis mutica*), and burrowing owl (*Athene cunicularia*). Encouraged the project proponent to participate in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan to fully mitigate for impacts to special-status species and satisfy the project's biological resource CEQA requirements.

**Attorney: University of California, Santa Cruz, Long Range Development Plan Programmatic Environmental Impact Report (EIR) Defense, Santa Cruz, California.** Part of a team of attorneys who successfully defended the Programmatic EIR prepared by the Regents of the University of California against challenges brought by the City of Santa Cruz and a non-governmental organization to the sufficiency's of the Programmatic EIR's analysis of storm water drainage impacts, project alternatives, biological resource impacts, air quality impacts, noise impacts, and aesthetic impacts.

**Biologist: City of Elk Grove, Easement Monitoring, Sacramento County, California.** Conducted Swainson's hawk (*Buteo swainsonii*) habitat quality evaluations, performed conservation easement compliance surveys, and drafted annual monitoring reports for several agricultural parcels near the Cosumnes River.

**Project Scientist: Clover Valley Project, Wetland Delineation, Placer County, California.** Delineated jurisdictional wetlands on a 662-acre site in Placer County for the Clover Valley Project, which is a master-planned residential development featuring a riparian preservation corridor and open space preserve. In addition to the wetland delineation, contributed to the site's biological constraints analysis and surveyed for special-status plant and animal species, including valley elderberry longhorn beetle.

**Biologist: Brocchini Family Partnership, Wetland Delineation, Stanislaus County, California.** Conducted a routine on-site wetland delineation on a 400-acre flood-irrigated pasture using methods outlined in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual in preparation for conversion of that field into an almond orchard. Mapped potentially jurisdictional wetland features using a submeter accuracy GPS receiver. Completed data sheets documenting site vegetation, hydric soils, and hydrology, a map of delineated features, and preliminary wetland delineation report.

## Mark Hicks, QSD/QSP



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 21

### **Areas of Expertise:**

Storm Water Planning and  
Permit Compliance  
Environmental Compliance  
Habitat Restoration

### **Education:**

MA, Organizational  
Communication, University of  
California, Davis, 1992

BA, Economics/Social Science,  
University of California,  
Berkeley, 1989

### **Licenses/Registrations/**

#### **Certifications:**

Qualified SWPPP Developer/  
Practitioner, CA, #00018, 2010

Certified Professional in  
Erosion and Sediment Control,  
CA, #6040, 2010

QSD/QSP Trainer-of-Record,  
CA, #00018, 2011

## Storm Water Compliance

### **Qualifications Overview**

Having worked in the storm water field since the early 1990s, Mr. Mark Hicks has been a pioneer in Best Management Practice (BMP) development and is a leader in adapting to evolving standards and regulatory requirements. His experience includes authoring or supervising more than 300 storm water management plans ranging from simple custom home sites to complex, multi-year public infrastructure projects. He has prepared a variety of specific storm water plans on linear overhead and underground and traditional construction projects, prescribed specific BMP approaches, advised on general compliance strategies, prepared monitoring and reporting plans, performed compliance tracking, and provided overall project management.

Mark's broader experience includes planning and managing a wide range of projects related to environmental protection and enhancement, from navigating the permit process for Clean Water Act compliance to managing on-the-ground habitat restoration projects. In addition to both industrial and construction storm water plans, he has managed the preparation of permit applications, mitigation plans, and reports addressing water quality, emergency site stabilization, wetland impacts, fugitive dust, small dam operations, directional drilling, grazing, local Certified Unified Program Agency permitting, and upland habitat restoration.

### **Relevant Projects**

**Lead Storm Water Consultant/Restoration and BMP Implementation Contractor: Sunridge Park LLC/Sunridge-Anatolia LLC, Sunridge Park and Sunridge-Anatolia Master-Planned Communities, Rancho Cordova, California.** Integral to the

implementation of the environmental compliance measures for this multi-faceted and multi-phased master-planned development since its inception. From 2000 to 2005,

managed the contracting end of the erosion control and wetland restoration elements. Since 2005, served as the lead QSD/QSP, supervising the storm water planning and monitoring on these sister projects. Specifically, established wetland avoidance measures, provided recommendations for overall and phased water quality protection, provided species recommendations, supervised seeding and planting of wetland basins, managed BMP installations and maintenance, and coordinated updates to permit coverage. This project has presented various storm water difficulties surmounted by innovative strategies and detailed planning. Issues related to problematic scheduling, dewatering, wetland avoidance, and nearby surface waters have factored into nearly every phase.

**Restoration/BMP Manager: Parker Development Corp, Serrano Master-Planned Development, El Dorado Hills, California.** As a contractor and consultant, managed the storm water BMP installation and maintenance on this master-planned development involving 1,000+ acres from 1999 to 2006. During this time, supervised oak woodland and wetland restoration activities, including more than 100 acres of mitigation plantings. Using innovative methods and materials, developed both structural and management BMPs that resulted in significant cost savings to the developer.

**Lead Storm Water Consultant: Confidential Client, Point View Drive Extension, Placerville, California.** Consulting for the prime contractor, served as QSD/QSP for this multi-faceted public works project. The project included bridge construction, road realignment, underground and overhead utility relocations, new road construction, and state highway off ramp improvements. On this Risk Level 2 public works project, performed or supervised the storm water functions, including authoring the original storm water pollution prevention plan (SWPPP), performing the risk analysis, managing electronic data through SMARTS, conducting inspections and water sampling, and writing amendments and annual reports. This project posed multiple storm water challenges due to an adjacent abandoned construction site yielding runoff to the project area, in-stream construction work, dewatering operations, and frequent traffic shifts requiring improvised BMP management.

**Qualified SWPPP Developer: Glenwood Drive-In Demolition and Restoration, South Lake Tahoe, California.** QSD of record on this one-season project to reclaim an abandoned drive-in theater site in South Lake Tahoe. The project required the removal of several thousand square feet of asphalt, re-grading the site to match natural contours, and revegetation/stabilization. Assessed project needs and completed the SWPPP plan ahead of an already accelerated schedule. The quality of the plan led to expedited agency approval and ensured a timely construction start.

## Roy Schnabel, PE



**Location:** San Jose, CA

**Firm:** Biggs Cardosa Associates, Inc.

**Total Years:** 27

### **Areas of Expertise:**

Structural Engineering  
Bridge Engineering

### **Education:**

BS, Civil Engineering, Santa Clara University, 1987

### **Licenses/Registrations/**

#### **Certifications:**

Professional Civil Engineer, CA, #46828, 1991

#### **Affiliations:**

American Society of Civil Engineers  
American Council of Engineering Companies  
Consulting Engineers and Land Surveyors of California

## Structural/Bridge Design

### **Qualifications Overview**

Mr. Roy Schnabel started with the firm shortly after receiving his degree in 1987. Since then, he has led design teams for numerous complex transportation projects throughout the San Francisco Bay Area. As principal, his responsibilities include project management, staffing, scheduling and budgeting, obtaining permits, overseeing structural design of projects, developing and producing contract documents, coordinating with clients and contractors, and conducting field review of construction. As project manager for multidisciplinary projects, his responsibilities include coordinating roadway geometrics, traffic control, construction staging, channel work, utility coordination and relocation, and environmental issues associated with the projects, including close coordination with Caltrans, cities, counties, water districts, conservation districts, utility agencies, and various other government agencies.

### **Relevant Projects**

**Principal-in-Charge: Overton Moore Properties, The Crossings at Interstate 880, Fremont, California.** The project involved design of two 80 foot wide concrete bridge structures crossing over waterways, a 50-foot wide by 500-foot long reinforced concrete box culvert, and various retaining walls at a newly developed business park in the City of Fremont just north of Dixon Landing Road. Bridge structures consist of a 80-foot long single span, prestressed concrete slab bridge over Channel B and a 60-foot long, two-span, reinforced concrete slab bridge over Scott Creek.

**Principal-in-Charge: Devcon Construction, Inc., Watsonville Slough Bridge, Watsonville, California.** The project involved design of a 100-foot long by 46-foot wide prestressed concrete box girder bridge over Watsonville Slough. The structure is part of the off-site improvement for the Manabe-Ow Business Park in the City of

Watsonville. Special aesthetic components, such as custom form liner, concrete pilasters, and metal picket railing have been incorporated into the bridge design.

**Principal-in-Charge: Sandis/Apple Inc., Apple Campus Off-Site Improvement Project, Santa Clara County, California.** The project involved design of a bridge widening, various earth retaining structures, and a sound wall in the Cupertino/San Jose/Santa Clara area as part of the Apple Campus 2 off-site improvement. Bridge widening consists of a sliver widening of a 66-foot long, two-span, concrete slab bridge over a flood control channel. Wall structures consist of concrete cantilever walls, a soil nail wall, and a sound wall on piles.

**Project Manager: BKF Engineers/Alameda County Transportation Commission, I-580 Westbound High Occupancy Vehicle Lane Widening Project, Alameda County, California.** Managed the design of five bridge structure widenings, one reinforced concrete box culvert extension, and numerous retaining walls along I-580 in the Cities of Pleasanton and Livermore. Bridge widening consists of cast-in-place T-beams, cast-in-place slab and precast concrete girder structures with overall length ranging from 90 to 180 feet. Maximum width of widening is approximately 26 feet. Three of the bridge structures span over waterways and two-span over local streets.

**Project Manager: BKF Engineers/Contra Costa Transportation Authority, State Route 4 Widening Project, Contra Costa County, California.** Managed the design of three bridge structures and numerous retaining walls and sound walls along State Route 4 in Antioch. G Street Overcrossing consists of a 265-foot long by 68-foot wide cast-in-place prestressed concrete bridge. Contra Loma Boulevard Undercrossing consists of two parallel 160-foot long by 71-foot wide prestressed slab bridges. Contra Loma Boulevard Underpass is a 160-foot long by 27-foot wide cast-in-place prestressed concrete bridge designed to carry bus and future BART traffic. Included in the project are four underground reinforced concrete drainage structures.

**Principal-in-Charge: City of Richmond, Marina Bay Parkway Grade Separation, Richmond, California.** The project involved the feasibility study and final design for a grade separation project to separate railroad traffic from vehicular traffic. The project consists of an 800-foot long by 80-foot wide depressed roadway crossing under two RPRC/BNSF tracks. Deep soil mix wall reinforced with steel piles are used as temporary and permanent earth retaining system. The railroad underpass consists of a 102-foot long by 24-foot wide, two-span, steel girder bridge. Included in the project are three underground concrete drainage structures, a 45-foot deep reinforced concrete pump station structure, and a generator building.

Ines  
Li, PE



**Location:** San Jose, CA

**Firm:** Biggs Cardosa Associates,  
Inc.

**Total Years:** 23

**Areas of Expertise:**

Structural Engineering  
Bridge Engineering

**Education:**

MS, Structural Engineering,  
University of California,  
Berkeley, 1990

BS, Civil Engineering, University  
of California, Berkeley, 1989

**Licenses/Registrations/**

**Certifications:**

Professional Civil Engineer, CA,  
#51561, 1994

**Affiliations:**

American Society of Civil  
Engineers  
American Institute of Steel  
Construction

Business Park in the City of Watsonville. Special aesthetic components, such as custom form liner, concrete pilasters, and metal picket railing have been incorporated into the bridge design.

## Structural/Bridge Design

### Qualifications Overview

Ms. Ines Li joined the firm in 1991 after receiving her master's degree in 1990. She has over 23 years of design and managerial experience and has led design teams for numerous complex transportation projects, including extensive experience in the design of new construction, widening, replacement, and seismic retrofit of various vehicular, rail, and pedestrian bridges, retaining walls, and sound wall structures. As engineering manager, Ines' responsibilities include leading the structural analysis, design, and development of construction details, producing contract documents, providing quality control, coordinating with clients, contractors, and subconsultants, and conducting field review of construction.

### Relevant Projects

**Project Manager: Overton Moore Properties, The Crossings at Interstate 880, Fremont, California.** Managed the design of two 80-foot wide concrete bridge structures crossing over waterways, a 50-foot wide by 500-foot long reinforced concrete box culvert, and various retaining walls at a newly developed business park in the City of Fremont. Bridge structures consist of a 80-foot long single span prestressed concrete slab bridge over Channel B and a 60-foot long, two-span, reinforced concrete slab bridge over Scott Creek.

**Project Manager: Devcon Construction, Inc., Watsonville Slough Bridge, Watsonville, California.** Managed the design of a 100-foot long by 46-foot wide prestressed concrete box girder bridge over Watsonville Slough. The structure is part of the off-site improvement for the Manabe-Ow

**Project Manager: Sandis/Apple Inc., Apple Campus Off-Site Improvement Project, Santa Clara County, California.** Managed the design of a bridge widening, various earth retaining structures, and a sound wall in the Cupertino/San Jose/Santa Clara area as part of the Apple Campus 2 off-site improvement. Bridge widening consists of a sliver widening of a 66-foot long, two-span, concrete slab bridge over a flood control channel. Wall structures consist of concrete cantilever walls, a soil nail wall, and a sound wall on piles.

**Assistant Project Manager: BKF Engineers/Alameda County Transportation Commission, I-580 Westbound High Occupancy Vehicle Lane Widening Project, Alameda County, California.** Assisted in managing the design of five bridge structures widening, one reinforced concrete box culvert extension, and numerous retaining walls along I-580 in the Cities of Pleasanton and Livermore. Bridge widening consists of cast-in-place T-beams, cast-in-place slab, and precast concrete girder structures with overall length ranging from 90 to 180 feet. Maximum width of widening is approximately 26 feet. Three of the bridge structures span over waterways and two-span over local streets.

**Assistant Project Manager: BKF Engineers/Contra Costa Transportation Authority, State Route 4 Widening Project, Contra Costa County, California.** Assisted in managing the design of three bridge structures and numerous retaining walls and sound walls along State Route 4 in Antioch. G Street Overcrossing consists of a 265-foot long by 68-foot wide cast-in-place prestressed concrete bridge. Contra Loma Boulevard Undercrossing consist of two parallel 160-foot long by 71-foot wide prestressed slab bridges. Contra Loma Boulevard Underpass is a 160-foot long by 27-foot wide cast-in-place prestressed concrete bridge designed to carry bus and future BART traffic. Included in the project are four underground reinforced concrete drainage structures.

**Project Manager: City of Richmond, Marina Bay Parkway Grade Separation, Richmond, California.** Managed the design of a grade separation project. The project consists of an 800-foot long by 80-foot wide depressed roadway crossing under two RPRC/BNSF tracks. Deep soil mix wall reinforced with steel piles were used as temporary and permanent earth retaining system. The railroad underpass consists of a 102-foot long by 24-foot wide, two-span, steel girder bridge. Included in the project are three underground concrete drainage structures, a 45-foot deep reinforced concrete pump station structure, and a generator building.

**Project Engineer: City of San Jose, Tasman Drive Bridges Over Coyote Creek, Santa Clara, California.** Project engineer for the design of three five-span, cast-in-place prestressed box girder bridges ranging from 644 to 685-foot long.

## Anthony Notaro, PE



**Location:** San Jose, CA

**Firm:** Biggs Cardosa Associates,  
Inc.

**Total Years:** 23

### **Areas of Expertise:**

Structural Engineering  
Bridge Engineering

### **Education:**

BS, Architectural Engineering,  
California Polytechnic State  
University, San Luis Obispo,  
1988

Engineer Officers Basic Course,  
U.S. Army Corps of Engineers,  
1989

### **Licenses/Registrations/**

#### **Certifications:**

Professional Civil Engineer, CA,  
#51739, 1994

## Structural/Bridge Design

### **Qualifications Overview**

Mr. Anthony Notaro joined the firm in 1991, after serving with the U.S. Army Corps of Engineers. He has over 23 years of experience in structural engineering with an emphasis on transportation and infrastructure projects. He has been a project manager on numerous projects, including new construction, rehabilitation, and/or seismic retrofit of various pedestrian, vehicular, and rail bridge structures, retaining walls, sound walls, and various hydraulic structures, including tanks, pump stations, junction boxes, floodwalls, drainage channels, and creek trail facilities. As an associate, Anthony's responsibilities include managing projects, scheduling, budgeting, overseeing structural analysis and design of projects, developing and producing contract documents, coordinating with clients, contractors, and subconsultants, providing construction engineering support, and conducting field review of construction.

### **Relevant Projects**

**Engineering Manager: City of Sunnyvale, Old Mountain View, Alviso Road Bridge Replacement, Sunnyvale, California.** The project involved the replacement of an existing five-span reinforced concrete T-girder bridge over Calabazas Creek. Value engineering includes the use of specialized construction staging to minimize creek impacts and rapid erection methods to reduce construction durations and costs.

**Assistant Project Manager: BKF Engineers/San Joaquin Council of Governments, State Route 4 Crosstown Extension, Stockton, California.** Assisted in managing the development of advance planning study documents for the extension of the State Route 4 freeway near the Port of Stockton. The preferred alternative included over 4,000 linear feet of retained fill and twin elevated guideway structures spanning the BNSF mainline, four Port of Stockton spur tracks, and several city streets.

**Senior Quality Control Engineer: Rajappan & Meyers/San Joaquin Council of Governments/Caltrans, North Stockton I-5 Corridor Improvements, Stockton, California.** The project involved the design of 16 bridge structure widenings and one culvert modification as related to the inside widening of the I-5 Corridor from Country Club Parkway to Eight Mile Road and construction of full auxiliary lanes from March Lane to Hammer Lane in North Stockton.

**Quality Control Engineer: BKF Engineers/Alameda County Transportation Commission, I-580 Westbound High Occupancy Vehicle Lane Widening Project, Alameda County, California.** The project involved the independent check for the design of five bridge structure widenings, one reinforced concrete box culvert extension, and numerous retaining walls along I-580 in the Cities of Pleasanton and Livermore. Bridge widening consists of cast-in-place T-beams, cast-in-place slab, and precast concrete girder structures with overall length ranging from 90 to 180 feet. Maximum width of widening is approximately 26 feet. Three of the bridge structures span over waterways and two-span over local streets.

**Senior Project Engineer: BKF Engineers/Caltrans, Willow Street Viaduct Widening, San Jose, California.** The project involved the widening design and seismic retrofit of a four-span, cast-in-place prestressed concrete box girder over Willow Street and the Guadalupe River as part of the State Route 87 widening project.

**Quality Control Manager: County of San Benito, Rosa Morada Road Bridge Replacement, San Benito County, California.** The project involved the replacement of the existing single lane, simple span, scour prone structure across Arroyo Dos Picachos with a new two-lane structure. A temporary low-water crossing maintains traffic during construction.

**Engineering Manager: BKF Engineers, Mission College Boulevard Widening, Santa Clara, California.** The project involved the structural widening and retrofit of Mission College Boulevard Bridge over San Tomas Aquino Creek.

**Lead Project Engineer: Santa Clara Valley Transportation Authority, Los Gatos Creek Bridge, San Jose, California.** The project involved the design of a simple-span light rail crossing of Los Gatos Creek as part of the Vasona Corridor Light Rail Extension. A shallow cast-in-place, prestressed cellular concrete through bridge was designed to accommodate the severe profile restrictions imposed by the adjacent city street, proposed light rail train station and high creek flows.

## James (Travis) Huston



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 6

### **Areas of Expertise:**

Subsurface Utility Engineering  
and Coordination

### **Education:**

AS, Business Management,  
Salt Lake Community College

### **Licenses/Registrations/**

#### **Certifications:**

U.S. Army Corps of Engineers,  
Construction Quality  
Management for Contractors,  
U.S., #SW9-02-12-00578, 2012

### **Affiliations:**

American Public Works  
Association  
American Society of Civil  
Engineers  
California Regional Common  
Ground Alliance  
Nevada Regional Common  
Ground Alliance

during disaster recovery personal protection equipment, construction fall protection safety, and lockout and tagout procedures.

## Subsurface Utility Engineering/Coordination

### **Qualifications Overview**

Mr. James (Travis) Huston is responsible for Cardno's subsurface utility engineering (SUE) and professional utility coordination projects throughout northern California. He has more than six years of SUE operations and project management experience in the utility industry. His experience includes quality control and safety, as well as all phases of construction. He has worked on multiple SUE projects for a wide variety of clients, including Century Link, Quest, SW Gas, Questar Gas, Nevada Energy, Utah Power & Light, Cox Cable, Comcast, and other public and private clients.

Travis develops and manages projects associated with SUE, including designating, mapping, and potholing. He directs oversight and management of underground utility location companies. He provides utility coordination, including preliminary utility review, utility mark-out, topographic survey, utility plan preparation, utility design, and emergency utility response plan. He prepares health and safety plans and provides training, accountability, and enforcement of local codes, ordinances, and directives pertaining to safety and compliance. He maintains as-built drawings showing deviations made from the contract drawings on a daily and/or weekly basis. He performs three phases of quality control, including maintaining submittal register, preparing and maintaining a testing plan and log, and maintaining a cumulative list of contractual deficiencies. His training includes OSHA 30-hour hazard recognition, Federal Emergency Management Agency emergency management active shooter, fire safety, National Association of State Fire Marshals pipeline emergencies awareness, safety and health

**Relevant Projects**

**Project Manager: Marine Corps Logistics Base, Design/Build Lighting Replacement, Barstow, California.** Provided quality control and site safety management on a production, day-to-day level. This was a \$760,000 engineering design/build construction project that included the design, engineering, and installation of electrical power wires and fluorescent lighting in Warehouses 5, 6, 7, 10, and 12 on the base. Developed overall quality control by attendance of progress meetings, reviewed equipment submittals, verified pre-construction plans submittals, and maintained quality control plans, safety plans, and environmental plans. Supervised and took control of quality control job site task and actions taken. Ensured employees and people surrounding the job site were working in a quality control manner following safety procedures from Naval Facilities EM-385-11. At the completion of this project, received an "Outstanding" performance evaluation by Naval Facilities Engineering Command Southwest, Resident Officer in Charge of Construction Barstow for quality assurance/quality control management and a letter of appreciation from the facility user.

**Project Manager: Marine Corps Base Camp Pendleton, Design/Build Intersection and Lighting, Camp Pendleton, California.** Responsible for quality control and site safety management on a production, day-to-day level. This was a \$650,000 engineering design/build construction project that included the design, engineering, construction, and installation of traffic lighting and road widening at the intersection of Basilone Road and Las Pulgas Road on the base. Performed utility coordination at various stages of the design process. Implemented and managed the quality control program and provided oversight or performance of the control and inspection procedures in line with approved government contractor quality control guidelines dealing directly with the government quality assurance representative on quality control-related matters. Responsible for the project being constructed in strict accordance with the quality control plan.

Tim

Daugherty, PLA



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 20

**Areas of Expertise:**

Landscape Architecture  
Sustainability

**Education:**

BS, Landscape Architecture,  
Arizona State University, 1997

**Licenses/Registrations/**

**Certifications:**

Professional Landscape  
Architect, CA, #4889, 2003

**Affiliations:**

American Planning Association  
American Society of Landscape  
Architects  
Urban Land Institute  
Arizona State University,  
College of Architecture and  
Environmental Design, Faculty  
Associate

## Sustainability

### Qualifications Overview

Mr. Tim Daugherty is experienced in landscape architecture, planning, and project management. He has been engaged in master planning activity in the United States, China, Africa, and Latin America. He has designed and managed projects that span the distance between large-scale residential, high-profile commercial, environmental planning, sustainability, and international project efforts. Tim works closely with clients and the project team to arrive at creative and practical designs that make a positive impact on communities and the environment. He leads the process from initial concept design to final design and installation, including dedicating hours in the field ensuring that design and construction are in perfect accord to achieve the highest goals for the project.

### Relevant Projects

**Principal Landscape Architect: Lennar Communities, Bickford Ranch, Placer County, California.** Bickford Ranch is located in the unincorporated area in Placer County between the cities of Lincoln and Penryn. It is a master-planned community designed to offer a wide range of residential opportunities, while still preserving more than 1,100 acres of rural open space. Cardno's landscape architecture team worked with Lennar Communities for major entry monumentation, entry bridge design, fence design, and road landscape. Envisioned for the community are a number of recreational amenities, including trails and parks.

**Principal Landscape Architect: El Dorado County/Lennar, Blackstone-West Valley View, El Dorado County, California.** Cardno served as the project lead and designer for the Blackstone Trail Master Plan in the 1,500 acre Blackstone-West Valley View master-planned community in El Dorado Hills. The master plan consists of bicycle, pedestrian, and multi-use paths and hiking trails interwoven within the surrounding

open space and parks. The plan included conceptual design for two parks, which are focal points on the trail system.

**Principal Landscape Architect: Studio Daniel Libeskind, Maya Island, Abu Dhabi, United Arab Emirates.** Maya Island is a 2,000 hectare island located 7.5 kilometers off the shore of Abu Dhabi and is planned as a mixed-use development. Cardno was hired to provide landscape master planning for the island along with consulting on sustainability (Estidama) goals.

**Principal: Nakheel, Dubai Waterfront Island Master Plan, Dubai, United Arab Emirates.** The Crescent Islands are part of the Dubai Waterfront, the world's largest development located in Dubai, and will extend from the coast approximately 15 kilometers and consist of six islands totaling approximately 2,400 hectares. The developer of the project invited Cardno to join a select few of the top global design firms to enter an exclusive design competition with the purpose of developing an urban design framework and concept plans for each of the six islands.

**Landscape Architect: Del Webb (Pulte Homes), Sun City Lincoln Hills, Lincoln Hills, California.** Near the foothills of the Sierra Nevada Mountains lays the 2,800-acre Del Webb community of Lincoln Hills. The site has been sculpted to accommodate housing, while saving the environmentally-protected water courses and habitats. Intimate neighborhoods within the community combine open space and views of mountains, foothills, and distant cities.

**Principal Landscape Architect: Communities Southwest, The Meadows, Peoria, Arizona.** The Meadows is a part of the Camino a Lago master-planned community consisting of approximately 1,350 acres. Cardno is providing multi-disciplinary services, including planning, water resources, civil engineering, landscape architecture, and surveying. The Meadows is a master-planned mixed-use development consisting of single-family detached residential homes, a community center, an elementary school, and a city park. The community has been designed to provide a broad range of residential zoning districts. Cardno is working with the State Land Department and the City for the preparation of a State Plat for designation of the arterial and collector road locations and alignments.

**Principal Landscape Architect: Beazer Homes, Desert Rose, Phoenix, Arizona.** Cardno provided civil engineering, planning, landscape architecture, and surveying on this high-end residential project located at the base of South Mountain Park in Phoenix. Key elements in the design included new entry monumentation, trail design and connectivity to the park, recreational amenities, and comprehensive salvage work on protected native trees.

## Chris Kinzel, PE, TE



**Location:** Pleasanton, CA

**Firm:** TJKM Transportation Consultants

**Total Years:** 53

### **Areas of Expertise:**

Municipal Traffic Engineering  
Freeway Operations  
Transportation Planning  
Arterial System Planning  
Traffic Impact Studies

### **Education:**

MS, Transportation Engineering, University of California, Berkeley  
BS, Civil Engineering, California State University, Fresno

### **Licenses/Registrations/**

#### **Certifications:**

Professional Traffic Engineer, CA, #TR0023  
Professional Civil Engineer, CA, # C15347

### **Affiliations:**

Institute of Transportation Engineers  
American Society of Civil Engineers  
American Public Works Association  
Dublin Rotary

## Traffic/Transportation Design

### **Qualifications Overview**

Mr. Chris Kinzel is the Vice President of TJKM. He has 53 years of experience in nearly all aspects of traffic engineering and has managed and performed hundreds of traffic studies over the years. A former municipal engineer, much of his career today is focused on working with city and county traffic engineers to determine the most effective strategies for reducing traffic congestion. He has worked with many California developers and homebuilders, performing development studies and presenting results.

Chris has made presentations at hundreds of city council, planning commission, and public meetings to present traffic study recommendations. He has taught traffic-engineering courses for the University of California and the University of Santa Clara. He wrote the "Traffic Studies" chapter of the *Traffic Engineering Handbook*, published by Prentice-Hall, and assisted the Institute of Transportation Engineers (ITE) with updating the current edition of the *Parking Generation Manual*. Chris was a member of the 10-person team that conducted the final review of the 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> Editions of the *ITE Trip Generation Manual*.

### **Relevant Projects**

**Project Director: SunCal, Dublin Crossing Development, Traffic Studies and Design, Dublin, California.** Directed the transportation planning and design of the major circulation aspects of this large-scale development project. Provided design or review of the traffic work associated with this major east Dublin development located adjacent to the Dublin BART station.

**Project Director: City of Dublin, Alameda County Surplus Property Authority, and Various Private Developers, East Dublin Planning, Evaluation Studies, and Traffic Design, Dublin, California.** Directed the traffic studies and traffic design for the entire East Dublin area, which consists of several thousand dwelling units, several million square feet of non-residential development, and several miles of arterial and collector streets.

**Project Director: BART, City of Dublin, and Lead Architect, Dublin/Pleasanton and West Dublin/Pleasanton BART Stations, Traffic Studies, Dublin and Pleasanton, California.** Directed the traffic studies for both stations and conducted the traffic and parking design of the east station. Several traffic signals were designed.

**Project Director: Catellus Development Company, Pacific Commons Mixed-Use Development, Transportation Design, Traffic Studies, and Environmental Impact Report (EIR), Fremont, California.** Direct the transportation planning and design of the major circulation aspects of this large-scale development project. Prepare comprehensive traffic studies, environmental reports, geometric design, signal design, and signing and striping design for the multi-use project.

**Project Director: Kamilos Development Company, Mariposa Lakes Mixed-Use Development EIR, Stockton, California.** As a member of the project team, participated in planning, design, and traffic studies from inception to entitlement for a project with over 11,000 dwelling units and 11 million square feet of non-residential development.

**Project Director: Mountain House Community Services District, County of San Joaquin, and Various Private Developers, Planning, Evaluation Studies, and Traffic Design, Mountain House, California.** Directed the traffic work for the planning, design, and construction of this new community in San Joaquin County. Work included major street design, interchange planning, entitlement and design, and the other traffic aspects of a new community, including day-to-day on-call services for the senior community staff.

**Principal-in-Charge: Various Clients, Comprehensive Parking Studies of Several Downtown Areas, California.** Provided overall direction of comprehensive parking studies of several downtown areas. The studies included evaluation of various policy issues of importance to downtowns, including parking requirements, pricing, timing, enforcement practices, design, and garage planning, design, and operations. The areas included downtown Walnut Creek, City of Vacaville, City of Grass Valley, downtown Oakland, downtown San Francisco, and downtown Healdsburg.

## Erik Bjorklund



**Location:** Pleasanton, CA

**Firm:** TJKM Transportation Consultants

**Total Years:** 24

**Areas of Expertise:**

Traffic Signal, Signing, and Striping Design

Street Lighting

Signal Timing

Arterial/Interchange Design

**Education:**

AS, Computer-Aided Drafting Technology, ITT Technical Institute

Fundamentals of Traffic Signal Design, Basic 170 Controller

Course, and Construction

Inspection of Traffic Signals

University of California,

Berkeley Extension

**Affiliations:**

Institute of Transportation Engineers

## Traffic/Transportation Design

### Qualifications Overview

Mr. Erik Bjorklund has 24 years of design experience; 22 of those years have been spent with TJKM. He has been the lead designer for over 600 signal design, modification, and signal interconnect projects throughout California. He has extensive experience performing field analyses to determine geometric configurations of intersections and has conducted many peer reviews of other designers' work, providing clients with useful design modifications.

Erik has prepared hundreds of signing and striping design plans and traffic signal system maps using AutoCAD. Many of the design projects he has led include Caltrans coordination and obtaining an encroachment permit. His familiarity with Caltrans' design standards results in minimal plan check revisions, moving design projects efficiently through the agency's approval process. TJKM's design projects often include construction support services and Erik has established a good working relationship with many of the developers and contractors in the San Francisco Bay Area.

### Relevant Projects

**Lead Designer: Alameda County Transportation Commission, Webster Street SMART Corridor Project, Arterial/Interchange Design, Alameda County, California.** The primary goals of this project, being administered by the Alameda County Transportation Commission, were to address current traffic congestion, improve transit service, enhance emergency access, be proactive in planning for the future, provide better traveler information, and improve air quality through reduction of vehicle emissions, without widening roadways. The Webster Street SMART Corridor project will achieve these goals through implementation of advanced signal system technology and Intelligent Transportation

Systems (ITS) strategies and enhance the efficiency of the existing transportation network, including both the Posey and Webster Street Tubes.

**Lead Designer: City of Hayward, State Route 238 Advanced Traffic Management System (ATMS) and Corridor Improvements Project, Hayward, California.** In collaboration with the prime civil engineering consultant, TJKM fast tracked evaluation and design of an Advanced Traffic Management System with adaptive coordination capabilities, as part of the corridor improvements for State Route 238 in Hayward. TJKM's ITS services for the project included: 1) developing the ATMS functional requirements; 2) preparing draft and final concept of operations reports; 3) analyzing traffic detection and communications requirements; and 4) evaluating adaptive control traffic signal systems and selecting the system that most effectively met the City's signal system requirements. In addition to preparing traffic signal, pavement delineation, and signing plans, TJKM will design detection and fiber optic/copper signal interconnect at 28 intersections. TJKM prepared plans, specifications, and estimates for an ATMS that included layout of the signal interconnect cable from the field traffic signal controller to the control room, SIC wiring and control room layout, and control room detail. TJKM is currently assisting City staff in the construction support of the adaptive system and conducting the System Acceptance Testing. TJKM is designing the City's Traffic Management Center and integrating the signal system back to the Traffic Management Center using a hybrid of ethernet over fiber and ethernet over copper. Beyond the State Route 238 Corridor Improvements Project, the Advanced Traffic Management System is expected to be extended to most corridors in the city during future phases.

**Project Engineer: City of Visalia, ITS and Synchronization Project, Visalia, California.** TJKM prepared plans, specifications, and estimates for fiber optic interconnect and wireless interconnect systems along Akers Street, Whitendale Avenue, and Caldwell Avenue in the City at 20 signalized intersections. The project schedule was very aggressive, with PS&E to be completed within a one month timeframe. TJKM kept the project schedule on track and within budget. As part of this project, TJKM is preparing AM, midday, and PM peak hour signal timing coordination plans on these three corridors, as well as on five other corridors (Demaree Road, Mineral King Avenue, Noble Avenue, Conyer Street, and Giddings Street).

**Project Manager: City of Dublin, Signal Interconnect System, Various Locations, Dublin, California.** Design of the city-wide interconnect system. The project ran interconnect down Dublin Boulevard from the eastern terminus to San Ramon Valley Boulevard.

## Nayan Amin, PE



**Location:** Pleasanton, CA

**Firm:** TJKM Transportation  
Consultants

**Total Years:** 24

### **Areas of Expertise:**

Transportation Planning

Traffic Impact Studies

Traffic Operations

### **Education:**

MS, Civil Engineering,  
California State University, San  
Jose, 1996

BS, Civil Engineering,  
Saurashtra University, 1990

### **Licenses/Registrations/**

#### **Certifications:**

Professional Traffic Engineer,  
CA, #2290

### **Affiliations:**

Institute of Transportation  
Engineers

## Traffic/Transportation Design

### **Qualifications Overview**

Mr. Nayan Amin has over 24 years of both public and private sector experience in the areas of transportation planning, traffic impact studies, transportation management plans, construction scheduling, construction area signs, signing and striping, traffic signal coordination, traffic operations, transit priority, traffic signal systems, freeway and arterial management studies, and intelligent transportation systems planning, design and construction oversight. He specializes in macro and microscopic model development and application for analysis of impacts across modes of transportation. His projects range from traffic studies for developments, specific plans, general plans, corridor studies, and area-wide studies to long-term planning studies. Studies include multi-modal operations, light-rail, bus rapid transit, pedestrian, bicyclists, and traffic safety and operations.

### **Relevant Projects**

#### **Task Leader: High Speed Rail Transportation Section, Fresno to Palmdale Segment, California.**

Task Leader responsible for evaluating traffic impacts of the proposed High Speed Rail in the State of California between Fresno and Palmdale. Prepared the transportation section of the Environmental Impact Report, which evaluated more than 400 study intersections and 300 roadway segments. Key components of the traffic analysis work included data collection; travel demand forecast; evaluation of existing, existing plus project, cumulative, and cumulative plus project conditions at the study intersections and roadway segments; developing

appropriate goals and policies to describe a long-range vision for the project, while maintaining flexibility for modes to evolve over time; determining the appropriate phasing of transportation improvements; and formulating transportation design guidelines. The project identified impacts and provided recommendations to mitigate impacts from the proposed project.

**Task Leader: Contra Costa Transportation Authority, Interstate 80/San Pablo Dam Road Interchange Corridor Study, Contra Costa County, California.** Task Leader responsible for traffic planning and operational analysis for the project covering approximately a 10-mile study area. The project included development of 2035 traffic volumes using the County's macro model. The results were then put into various micro-simulation models to perform a detailed traffic analysis of the geometric alternatives. Based on the analysis, recommendations were developed to improve traffic operations throughout the study corridor, including arterial streets. The analysis was conducted across different modes of transportation. A significant issue for the client was to obtain approval of the project from the appropriate agencies, including Federal Highway Administration, Caltrans, Army Corps of Engineers, California Department of Fish and Game, Regional Water Quality Control Board, and others. Of particular interest to the client was finishing the project within the tight schedule and starting the construction by 2010 to address the funding requirement. Traffic operational analysis was conducted using SIMTRAFFIC, VISSIM, and SYNCHRO. Operational models were calibrated and validated to replicate existing conditions based on data collected for the project. Locations of bottlenecks and queue lengths, travel demand and capacities at the key screenlines, bottlenecks and on/off-ramps were determined, travel time and delay and level of service analysis were conducted as part of the traffic analysis. Based on the analysis for future conditions recommendations to improve traffic operations were segregated into near-term and long-term measures due to budget constraints.

**Task Leader: San Mateo Transportation Authority, U.S. Highway 101/Broadway Interchange Corridor Project, San Mateo County, California.** Task Leader responsible for conducting traffic operational analysis for the project report and environmental document for the Broadway Interchange Project and plans, specifications, and estimates phase for this project. Based on the analysis, alternatives were developed to improve traffic operations throughout the study corridor, including arterial streets. Traffic operational analysis was conducted using SIMTRAFFIC, FREQ, and SYNCHRO. Operational models were calibrated and validated to replicate existing conditions based on data collected for the project.

**Task Leader: Contra Costa Transportation Authority, State Route 4 High-Occupancy Vehicle Lane Widening Project, Contra Costa County, California.** This project involves the preparation of plans, specifications, and estimates for the State Route 4 high-occupancy vehicle lane widening. The project includes the development of the design, construction specifications, and estimate of signs, sign structures, locations, signing, and striping traffic management plans. Critical issues include coordination with previous phases of the project, commercial property owners, and multiple local jurisdictions.

## Christopher Thnay, PE, AICP



**Location:** Pleasanton, CA

**Firm:** TJKM Transportation  
Consultants

**Total Years:** 28

### **Areas of Expertise:**

Corridor Studies

Circulation Plan

Traffic Impact/Parking Studies

### **Education:**

MS, Transportation/  
Infrastructure Planning and  
Management, Stanford  
University, 1985

BS, Civil and Environmental  
Engineering, University of  
Wisconsin, Madison, 1983

### **Licenses/Registrations/**

#### **Certifications:**

Professional Traffic Engineer,  
CA, #TR1771, 1993

American Institute of Certified  
Planners, U.S., #10403, 1993

### **Affiliations:**

City of Hayward Planning  
Commissioner

Institute of Transportation  
Engineers Fellow

Valley Transportation Authority

## Traffic/Transportation Design

### **Qualifications Overview**

Mr. Christopher Thnay has served as project manager for many large planning and operation projects around the San Francisco Bay Area. He is particularly interested in fostering a good balance between land use and transportation needs. His expertise includes corridor studies, context sensitive roadway design, traffic impact and parking studies, circulation plan, safety audits, traffic calming, and general plan roadway policies and programs.

### **Relevant Projects**

**Project Manager: Mountain House Community Services District, On-Call Traffic/Transportation Services, Mountain House, California.** Projects include Citywide Traffic Monitoring Plan, develop sight distance and access criteria, citywide plan line study, traffic impact fee update, Intelligent Transportation Systems Master Plan, Mountain House High School impact study, and Town Center Circulation Plan.

**Project Manager: City of Palo Alto, Charleston-Arastradero Corridor Improvements, Palo Alto, California.** The primary focus was to improve travel for bicycles and pedestrians. Managed the initial participation in a multidisciplinary team to analyze challenges and opportunities in the corridor with an eye towards changing the four-lane, undivided road into a facility with one through lane in each direction coupled with a landscaped median, bike lanes, and other urban design features to make the road less intrusive along with increased traffic safety for all modes.

**Project Manager: City of Patterson, Transportation Infrastructure Master Plan, Patterson, California.** As part of the City's General Plan Update, prepared a Transportation

Infrastructure Master Plan, which provides a long-term guide for the City to anticipate and accommodate future growth in a way that maintains an acceptable quality of life for City residents and visitors alike through sustainable community strategies. Planning for the future, citywide bicycle facilities is a key component of the plan. The City has a long history of planning for the needs of bicyclists. The City adopted its bicycle plan policies as part of its 1992 General Plan update. Due to scarce funding, only a few of the recommended facilities within that plan were constructed. In 2001, the City adopted a bicycle map that proposed a more complete bicycle network.

**Project Manager: City of San Carlos, Downtown Parking Study, San Carlos, California.** Managed the completion of the update of the San Carlos Downtown Parking Study in 2013. This included collecting occupancy and turnover data, conducting stakeholder meetings, and recommending innovative parking management strategies. The study consisted of a review of existing public and private parking conditions in the downtown, analysis of parking demand based on existing conditions, documentation of public comments on downtown parking from a variety of downtown stakeholders, and recommendations that meet existing and future parking needs of diverse downtown parking users that include merchants, employees, and customers.

**Project Manager: City of San Carlos, St. Francis Avenue Traffic Calming Study, San Carlos, California.** Managed a traffic calming study on a roadway segment that extends approximately 5,000 feet or nearly one mile. High speeds and volumes are usually the two most worrisome traffic factors to residents. High speeds and volumes contribute to the sense that it is unsafe to walk or bike in a neighborhood. Related concerns included difficulty getting out of driveways, parked cars being hit, and traffic noise. Other key concerns involved obstacles to convenient and safe walking and bicycling in neighborhoods. These concerns involved either the lack of protected crossings and pathways or discontinuous facilities.

**Project Manager: City of Patterson, General Plan Update, Patterson, California.** Managed the preparation of a background report summarizing existing transportation conditions. Evaluated the existing transportation element and policies for future applicability. Updated the City's portion of the StanCOG traffic-forecasting model, developed 2025 traffic forecasts, evaluated results, and tested alternatives. Drafted the new transportation element, including goals, policies, and programs. Prepared the traffic portion of the Environmental Impact Report for the General Plan. Attended and participated in meetings with staff, Planning Commissions, and the Council.

## Atul Patel, PTOE



**Location:** Pleasanton, CA

**Firm:** TJKM Transportation  
Consultants

**Total Years:** 23

**Areas of Expertise:**

Traffic Signals  
Lighted Crosswalk Systems  
Traffic Control Devices

**Education:**

BS, Civil Engineering, Texas  
A&M University, 1991  
MBA, Technical Management,  
University of Phoenix, Northern  
California, 2004

**Licenses/Registrations/**

**Certifications:**

Professional Traffic Operations  
Engineer, CA, #TR2321, 2002

**Affiliations:**

Institute of Transportation  
Engineers  
Intelligent Transportation  
Society of California  
South Bay Transportation  
Officials Association

## Traffic/Transportation Design

### Qualifications Overview

Mr. Atul Patel has 23 years of traffic engineering and transportation planning experience, including working in both the public and private sectors. He is a California-licensed Traffic Engineer and Professional Traffic Operations Engineer. Additionally, he is a Professional Civil Engineer in Texas and Arizona. Prior to joining TJKM, he served as the City Traffic Engineer for the City of Menlo Park and prior to that was the Traffic Engineering Design Group Leader at DKS. During his tenure with the City of Menlo Park, he co-developed the City's signal design and equipment standards and was actively involved in the planning and design of the traffic, parking, and pedestrian circulation of their El Camino Real Downtown Specific Plan and the Facebook Environmental Impact Report (EIR) projects and implementation of the City's long-term parking machine system downtown. He has managed numerous projects, including traffic impact and parking studies for large-scale developments and plans, specifications and estimates (PS&E) for traffic signals, lighted crosswalk systems, traffic control devices, and roadway improvements.

### Relevant Projects

**Project Manager: County of Marin, Signal Modification at Redwood Highway at Highway 101 On/Off Ramp, Marin County, California.** Managed the project, including upgrading the traffic signal equipment, conducting a traffic analysis to determine the optimum phasing for the intersection, and preparing plans, specifications, and estimates for installation of new traffic signal poles, accessible pedestrian signal push buttons, controller cabinets, controller, and safety lighting. The project involved coordination with Caltrans for obtaining an encroachment permit.

**Project Manager: City of Sunnyvale, Remington Drive at Bernardo Avenue Traffic Signal Design Installation, Sunnyvale, California.** Managed this highway safety improvement project that included emergency vehicle preemption, environmental clearance documentation, civil intersection improvements, design of a new traffic signal at the intersection, installation of American's with Disabilities Act (ADA) ramps, audible pedestrian push buttons, fiber optic interconnect along Remington Drive to Mary Avenue, and add alternate design continuing to the Sunnyvale-Saratoga Road intersection. The project included photometric analysis of the safety lighting and preparation of traffic control plans for the potholing work at the intersection.

**Project Engineer: City of Hayward, Signal Modification at Mission Boulevard at A Street and Foothill, Hayward, California.** Prepared traffic signal modification plans as part of the State Route 238 corridor improvements project. The City later decided to include an additional crosswalk at each intersection. Modified the design to include an additional crosswalk and evaluated the effect of the additional crosswalk on the intersection operation in Synchro.

**Project Manager: City of Sunnyvale, Signal Reconstruction at Four Intersections, Sunnyvale, California.** TJKM is the prime consultant responsible for preparing plans, specifications, and estimates for intersection and traffic signal modification improvements at Hollenbeck/Homestead, Hollenbeck/Alberta, Arques/Oakmead, and Mathilda/Olive. The intersection improvements included installation of pedestrian curb bulb outs, grading and drainage improvements, removal and installation of traffic signal poles, signing and striping improvements, fiber optic interconnect system installation, upgrading curb ramps to ADA standards, and preparing environmental categorical exclusion documentation. Currently, working with Siegfried, the subconsultant for civil engineering improvements on this project.

**Deputy Project Manager: City of Visalia, Intelligent Transportation System and Signal Synchronization Project, Visalia, California.** Responsible for development of system level requirements for the communication network, preparation of plans, specifications, and estimates for traffic signal controller upgrades, wireless ethernet communication system, and fiber optic communication systems along Akers Street, Whitendale Avenue, and Caldwell Avenue in the City. The design interconnected 19 traffic signal controller locations to the City's Advanced Transportation Management System and Traffic Operations Center using fiber optic cable.

## Lawrence Liao



**Location:** Pleasanton, CA

**Firm:** TJKM Transportation  
Consultants

**Total Years:** 16

**Areas of Expertise:**

Travel Demand Model  
Development/Update  
Travel Demand Model  
Application  
Software Development

**Education:**

MS, Transportation  
Engineering, University of  
California, Berkeley, 1997  
MS, Industrial Engineering,  
University of New Haven, 1993  
BS, Industrial Engineering,  
Tunghai University, Taiwan,  
1989

**Licenses/Registrations/**

**Certifications:**

Certified Cube Trainer

**Affiliations:**

Institute of Transportation  
Engineers

## Traffic/Transportation Design

### Qualifications Overview

Mr. Lawrence Liao has more than 16 years of experience in the areas of travel demand forecasting and software development. He has developed or updated travel demand models at various levels ranging from cities, counties, Metropolitan Planning Organizations to states. He has provided modeling support for various projects, such as traffic impact studies, general plan update, environmental impact reports/environmental impact statements, corridor studies, impact fee studies, transit-oriented development, corridor system management plans, managed lane modeling, and federal research projects. In addition, he has developed customized software tools to postprocess microsimulation model output and facilitate data exchange across software platforms.

Lawrence is experienced in major travel demand modeling software packages, including Cube, TransCAD, EMME, and VISUM, as well as common programming languages, such as Python, Java, MS Office VBA, C++, Pascal, and Fortran. He is one of only five certified Cube Trainers in the world and is a former technical support lead at Citilabs, the software vendor for Cube-Voyager package. He has provided Cube technical support, conducted numerous Cube model training, and is an expert in Cube-Voyager/TP+ scripting.

### Relevant Projects

**Project Manager: Community Planning Association of Southwest Idaho (COMPASS), Boise, Idaho.** Providing on-call modeling support, which includes identifying and implementing short-term quick fixes from various reports/technical memorandums, as well as performing minor script changes as specified by COMPASS staff.

**Project Manager: Solano Transportation Authority, Solano County, California.** Provided travel demand modeling on-call services, which included providing ongoing support for the development, maintenance, and improvement of the Napa Solano Travel Demand Model, distributing the model, and providing technical support and troubleshooting. The latest model improvement was to adapt the Metropolitan Transportation Commission activity-based model platform for the Napa and Solano county area.

**QA/QC: California High-Speed Rail Authority/Metropolitan Transportation Commission, California High Speed Rail Model Development, California.** Provided Voyager scripting support and QA/QC for the integration of metropolitan planning organization's mode choice models into the High Speed Rail Model, which covers the entire state.

**Task Manager: Napa County Transportation and Planning Agency, Countywide Transportation Plan Update, Napa, California.** Developed draft 2040 Land-Use Database by extrapolating 2030 Land-Use data out to year 2040, while maintaining the consistency with the 2040 county control totals in the San Francisco Bay Area Sustainable Communities Strategy.

**Task Manager: Strategic Highway Research Program 2 Project C10, Sacramento, California.** Key staff in charge of model integration for this project. The project integrated the state-of-the-art activity-based model (SACSIM) maintained by the Sacramento Area Council of Governments with the best available traffic microsimulation model, DynusT. The project included enhancements to SACSIM and DynusT to analyze the effects of reliability on the transportation system and integration of the new integrated model with the U.S. Environmental Protection Agency's MOVES program for air quality analysis.

**Task Manager: Caltrans, Interstate 5/State Route 99, Interstate 80/State Route 51, State Route 65, U.S. 50 Corridor Management Systems Plans, Sacramento, California.** Lead modeler in charge of converting static travel demand information from the regional demand model (SACMET07) into time-dependent trip tables for four corridors in the Sacramento area. Developed a standard procedure to ensure that the final time-dependent trip tables are feasible for traffic microsimulation models. Presented the procedure developed at the TRB Integrated Corridor Management Workshop in Irvine, California in September 2009.

## Jennifer Lane, PE



**Location:** Sacramento, CA

**Firm:** Cardno

**Total Years:** 14

### **Areas of Expertise:**

Civil Engineering

Residential Land Development

Master Planning

AutoCAD

### **Education:**

BS, Civil Engineering, Santa Clara University, 1999

### **Licenses/Registrations/**

#### **Certifications:**

Professional Civil Engineer, CA, #65801, 2003

### **Affiliations:**

American Society of Civil Engineers

## Utilities/Roadway Infrastructure Design

### **Qualifications Overview**

Ms. Jennifer Lane has over 14 years of experience in residential land development and master planning. Her skills in organization and effective communication make her a great lead for her design team – coordinating closely with architects, hydrologists, landscape architects, structural engineers, planners, developers, jurisdictions, and other key stakeholders. This coordination allows Jennifer to provide her clients with the experience and “big picture” understanding that is critical to a project’s success. She is actively involved in her projects from preliminary design, final engineering, specification preparation, and bid negotiations to construction administration and inspection.

### **Relevant Projects**

**Project Engineer: Lennar Communities, Blackstone/West Valley View Master-Planned Community, El Dorado Hills, California.** Cardno was involved in all aspects of development, including civil engineering design, planning and layout, landscape architecture, surveying, and construction services for the Community, including the focal point and signature Clubhouse, as well as the sales and information center. Cardno served as the project lead and designer for an approximately 8,000 foot bike path and coordinated the layout of the bike path to meet the requirements set forth in the Valley View Specific Plan and comply with the environmental permitting for wetlands as established by ECORP, Inc. and the U.S. Army Corp of Engineers.

**Project Manager: Ranch Capital, Northwest Land Park, Sacramento, California.** Cardno provided multi-disciplinary services for this Planned Unit Development, including land use planning, entitlements, civil engineering, survey services, and landscape architecture. Northwest Land Park will develop into a vibrant, livable residential infill community that is reflective of the established community. Residential units, retail spaces, and park will replace the industrial and commercial buildings

currently situated on the 31.7 acre project site. The overarching goal of the project is the orderly and systematic development of an integrated, residential, and mixed-use community that is consistent with the goals and policies of the City's 2030 General Plan.

**Project Manager: DR Horton, Provence, Sacramento, California.** Cardno provided civil engineering and survey services for the development of 14 acres in the City of Sacramento's North Natomas community. This 187-lot townhome community was the first development by a production builder (DR Horton) to achieve LEED Silver Certification in the State of California. Due to the nature of a higher density development, utility placement, including fire water service and joint trench coordination, was crucial throughout the design and construction phases of the project. Due to the national economic downturn, the property has since been sold and Cardno is currently assisting the new owner to retrofit the distressed property and gain entitlements for a 242-lot condominium community. Cardno is working closely with the owner, architect, and dry utility consultant to produce a design that will minimize the removal and replacement of existing improvements and accommodate the new condominium products, while providing a quality layout with a cohesive community feel. Provence was designed to be in close proximity to the future RT light rail intended to go through North Natomas. The rail will provide a connection between downtown Sacramento and the airport and provide a means of public transit to the downtown corridor.

**Project Manager: DR Horton, Villa Toscana, Reno, Nevada.** Villa Toscana is one of the latest residential communities in the rapidly-growing region of Reno, Nevada. Cardno assisted DR Horton develop over 24 acres for this 240-condominium subdivision consisting of 80 triplex units. Due to Villa Toscana's location in the foothills of the Sierra Nevada mountain range, Cardno had to overcome substantial topographical issues, such as detailed pad and site grading on slopes exceeding ten percent, as well as the removal of 200,000 yards of dirt from the hillside site. Cardno provided civil engineering and surveying services for on-site improvements, as well as approximately 1,900-feet of public roadway and utility upgrades.

**Project Engineer: Jennifer Lin, Dublin Ranch, Dublin, California.** Services provided included civil engineering design of grading, utilities, and roadways for this 1,500-acre master-planned community.

**Project Engineer: GenCorp, Aerojet Due Diligence, Sacramento County, California.** Assisted in the preparation of the drainage analysis, water studies, and utility and roadway master plans for this 13,000-acre redevelopment site.

## Joseph Azar, PE



**Location:** Pleasanton, CA

**Firm:** Ruggeri-Jensen-Azar

**Total Years:** 32

### **Areas of Expertise:**

Military Base Redevelopment  
Master Planning  
Utilities/Roadway Infrastructure  
Entitlements  
Land Surveying

### **Education:**

MS, Civil Engineering,  
University of Detroit, Michigan,  
1982

BS, Civil Engineering, University  
of Detroit, Michigan, 1981

### **Licenses/Registrations/**

#### **Certifications:**

Professional Civil Engineer, CA,  
#44628, 1989

### **Affiliations:**

California Building Industry  
Association  
California Homebuilders  
Foundation

## Utilities/Roadway Infrastructure Design

### **Qualifications Overview**

Mr. Joseph Azar serves as a Principal/Senior Project Manager for a wide range of land development projects. He has extensive experience in master planning and entitlements of large land development projects, preparation of improvement and grading plans, parcel maps, tentative maps, and final maps for residential, commercial, and recreational developments. Joseph oversees RJA's sizable office and field surveying operations that have been an important related service for all of RJA's major land development projects.

### **Relevant Projects**

**Project Manager/Principal: SunCal Companies, Dublin Crossing Specific Plan, Camp Parks, Dublin, California.** Responsible for preparation of the Dublin Crossing Specific Plan for redevelopment of a 190-acre portion of the 2,485 acre Camp Parks Reserve Force Training Area. Led the team of planners and other consultants for preparation of the Specific Plan and provided technical oversight for the land surveying and preparation of site plans for the utilities and roadway infrastructure supporting the proposed mixed-use developments. The Specific Plan envisions an "Urban Village" setting, which will include a variety of housing types, shops, offices and other workplaces, parks, open space, and entertainment with easy access to public transportation and an interconnected network of sidewalks and bicycle routes. The project is designated as "Transit Center/Dublin Crossing" in Alameda County's Priority Development Area in the Alameda County PDA Investment and Growth Strategy document.

**Project Manager/Principal: California Capital & Investment Group, Inc., Oakland Army Base Redevelopment Project, Oakland, California.** Responsible for the master planning and technical oversight of the development of plans, specifications, and

estimates (PS&E) for the Oakland Army Base redevelopment project. The master planning of backbone infrastructure for approximately 400 acres included design of grading, roads, and storm drain, sewer, water, and recycled water facilities to serve the approximately 4.5 million square feet of industrial/Port of Oakland-related development. For approximately 200 acres of the project, provided technical oversight for the preparation of plans, specifications, hydrology, and storm water management plans and land surveying services that included boundary surveys, right-of-way engineering, and property rights mapping.

**Principal-in-Charge: The Tracy Hills Project Owner, LLC, Tracy Hills Specific Plan Area, Tracy, California.** This approximately 6,200-acre Specific Plan Area will be developed for mixed uses of which approximately 3,500 acres will be reserved for open space. Responsible for technical oversight of the master planning of sewer, water, and storm drainage infrastructure in conformance with the City's Utilities Master Plan, as well as quality assurance for preparation of the Parcel Map and boundary surveys. The residential uses will include high, medium, low, and estate lots and there will be a business park, commercial, light industrial, professional office, and medical uses, and elementary and high schools. Recreational amenities will include neighborhood parks, a golf course, lake, and 7,000-foot long, 16 ½-foot wide recreational trail. The main arterials will include 10,000 feet of Class 1 concrete bike/pedestrian path.

**Project Manager: Signature Properties, Ruby Hill Residential Community, Pleasanton, California.** This development is located in the historic Livermore Valley, 50 miles east of San Francisco. The heart of this development is a golf course designed by Jack Nicklaus and his company, Nicklaus Design. The project includes recreation areas and hundreds of acres of vineyards. Led a team of consultants and provided project management and civil engineering services for this 1,900-acre, 850-unit residential development with hundreds of acres of vineyards. Services included civil engineering and land surveying services for both on-and off-site utility facilities, a clubhouse, community park, tennis/swim center, and improvements to the rural roadway accessing the new community. The utilities included design of 10,000 lineal feet of 16-inch diameter water transmission main, 70,000 feet of 12-inch diameter water lines, two 1.5 million gallon water storage tanks, pump station, and 80,000 lineal feet of 10-inch (average) diameter sewer lines. The roadway improvements included a new intersection, acceleration lanes, turn pockets, and an equestrian trail. Grading on the project required moving 11 million cubic yards of soil.

**Project Manager: Various Developers, South Livermore Specific Plan Area, Livermore, California.** Led RJA's planning, engineering, and surveying services to facilitate the development of residential tracts in the 1,891-acre South Livermore Specific Plan for various developers.

## Mark Falgout, PE, LEED AP



**Location:** Pleasanton, CA

**Firm:** Ruggeri-Jensen-Azar

**Total Years:** 15

### **Areas of Expertise:**

Civil Engineering

Storm Water Treatment

Measures

### **Education:**

BS, Civil Engineering, California State University, Chico, 1999

### **Licenses/Registrations/**

#### **Certifications:**

Professional Civil Engineer, CA, #63394, 2002

LEED Accredited Professional, U.S., 2009

Certified Professional in Storm Water Quality, CA, #0566, 2009

Qualified Storm Water Practitioner/Developer, CA, #00423, 2011

### **Affiliations:**

American Society of Civil Engineers

entitlement and construction documents (PS&E) for utilities, storm drainage facilities, roadway improvements, and grading, as well as the storm water management plan for C.3 compliance, hydraulic/hydrologic calculations, and hydrology study.

## Utilities/Roadway Infrastructure Design

### **Qualifications Overview**

Mr. Mark Falgout has 15 years of experience in a variety of public works projects and private site developments that include preparation of design, plans, specifications, and estimates for public roadway, water, sewer, and drainage infrastructure improvements. He is experienced in coordinating and gaining approvals from local cities, counties, state, and federal agencies, as well as special districts. Mark is a specialist in storm water treatment measures and is a Certified Professional in Storm Water Quality and a Qualified Storm Water Developer/Practitioner.

### **Relevant Projects**

**Senior Project Engineer: California Capital & Investment Group, Inc., Oakland Army Base Redevelopment Project, Oakland, California.** The master planning of backbone infrastructure for approximately 400 acres included design of grading, roads, and storm drain, sewer, water, and recycled water facilities. For the approximately 200 acres of this City of Oakland property, prepared plans and specifications for grading and storm drainage facilities, hydrologic calculations, and storm water management plans, as well as providing construction consultation services.

**Project Manager: The Irvine Company, Riverview, North San Jose, California.** Responsible for civil engineering and surveying services for development of this 32.6-acre site proposed for 1,700 multifamily podium style residences, 45,000 square feet of retail space, and a 5.1-acre park. The project, located adjacent to the Guadalupe River, was a former research and development park. Prepared

**Project Manager: Mission Valley Properties, Jordan Ranch, Dublin, California.**

Responsible for civil engineering and design of grading, utilities, drainage, and roadway backbone infrastructure for development of 780 residential units spread over six neighborhoods with parks, elementary school, and retail space on 189 acres. Neighborhoods 1-3 include single-family detached homes featuring traditional, cluster, and small lot/alley loaded units. Neighborhoods 4-6 include a mix of townhomes and lofts. For development of specific neighborhood infrastructure, currently preparing construction documents for several developers.

**Project Manager: SunCal Companies, Delta Coves, Bethel Island, California.**

Responsible for this unique mixed-use project located in the California Delta area. At project completion, there will be a total of 494 single-family homes, 100 condominiums, yacht club with docks, recreation center, and commercial facilities. The work included designing a 2 ½ mile levee and finger peninsulas using soil from the lagoon to create a 150-acre, 31-foot deep lagoon, as well as finished grading, sewer, water, and storm drainage facilities, and roadways. Challenges faced during development of the project included designing the utilities to at or below sea level mitigated by gravity and pump stations and design of a seepage control system that included a slurry wall and a groundwater control system comprised of a weir structure and a perforated pipe collection system.

**Project Engineer: Shapell Homes, Renaissance, San Ramon, California.** Responsible for preparation of construction documents for this 105-unit, multi-family neighborhood in Gale Ranch, a 2,708-acre community in San Ramon. The work included engineering and design of utilities, roads, and site drainage facilities, as well as hydraulic/hydrologic modeling, and coordination with the client, construction contractor, and project team.

**Project Engineer: Ponderosa Homes, Ironwood Active Adult Community, Pleasanton, California.** Responsible for the site development of this 110-unit adult active, single-family neighborhood which is part of a 92-acre, mixed-use project that includes 193 units of single-family attached and detached housing, a 6-acre church site, and a 2.5-acre park. The work included preparation of entitlement documents for utilities, storm drainage facilities, roads, and associated improvements. Performed hydraulic/hydrologic calculations and prepared the storm water management plan for C.3 compliance. During construction, provided construction support and bidding assistance.



# Appendix

## B

Comments on the Draft Negotiation Agreement  
and Draft Disposition and Development

4. Exclusivity of Negotiations.

The Parties agree and acknowledge that, during the Preliminary Stage, City shall be conducting concurrent negotiations with the Second Developer Candidate regarding development of the Development Phase One Property and that such concurrent negotiations are expressly contemplated and permitted by this Agreement. Negotiations during the DDA Stage, if applicable, shall be exclusive. Therefore, if the City Council selects Developer as the preferred master developer and enters into the DDA Stage with Developer, City shall be negotiating exclusively with Developer. Notwithstanding the above, during the entirety of the Negotiating Period, this Agreement shall not prevent City from providing information regarding the Development Phase One Property and development thereof to persons or entities other than Developer or the Second Developer Candidate.

5. Planning and CEQA Review.

Pursuant to the California Environmental Quality Act (“CEQA”), City certified a Final Programmatic Environmental Impact Report (“EIR”), adopted Overriding Findings of Significance and adopted a Mitigation Monitoring and Reporting Program (“MMRP”) in conjunction with adoption of the Reuse Plan and adopted an Addendum to the EIR in connection with the CRP Area Plan. Developer acknowledges that, in conjunction with City permits and approvals and City consideration of a DDA for the Development and/or subsequent approvals, it will be necessary to undertake additional environmental review of the specific Development pursuant to CEQA, although the EIR may be used on a programmatic level. Such environmental review may require preparation of additional CEQA documents for the Development and/or subsequent phases of development that may occur on the balance of the Development Footprint. If Developer is selected as the master developer of the Development Phase One Property and the DDA is executed between Developer and the City, Developer will pay all costs incurred by City in connection with consideration of a DDA or any other applications for City and federal, state and other regulatory agency permits and approvals, including all costs associated with environmental review and, if necessary, preparation of additional CEQA documents, including supplemental or subsequent environmental impact report(s), if any, with respect to the conveyance of the Development Phase One Property and/or the Development.

6. Reimbursement of City Costs; Good Faith Deposit. Developer shall be required to reimburse the City for certain costs incurred during the Preliminary Stage of the Negotiating Period and, if selected as preferred master developer, the DDA Stage of the Negotiating Period, as set forth in detail below.

6.1 Preliminary Stage Negotiations. In consideration for this Agreement, Developer has, prior to execution of this Agreement by City, provided to City a cash deposit of Two Hundred Fifty Thousand Dollars (\$250,000) (“**Initial Good Faith Deposit**”). City shall be entitled to draw against the Initial Good Faith Deposit and apply such draws to pay all internal and third party expenses incurred by City in connection with the proposed Development and negotiations hereunder, including but not limited to expenses of financial consultants, attorneys, planners and engineers, to negotiate draft term sheets and agreements and review infrastructure plans, development plans and the timing and financial ability to complete the Development, all related solely to the Development (collectively, “**City Costs**”) during the Preliminary Stage of

the Negotiating Period [We want to make sure this money is not spent on costs incurred to negotiate with the other developer, or, in the alternative, that half of the costs will be paid from the Initial Good Faith Deposit made by the other developer and half by us]. City shall provide Developer with monthly invoices for City Costs. Such invoices must provide sufficient detail from which Developer may confirm who performed the services, the nature of the work performed, the hours worked, the rate charged to the City, and that the services were performed for City Costs. Reimbursement of City Costs during the Preliminary Stage shall be capped at a maximum of the Initial Good Faith Deposit and City shall not be entitled to any reimbursement over the amount of the Initial Good Faith Deposit. If Developer is selected as the preferred master developer, the remaining balance of the Initial Good Faith Deposit, if any, shall be retained by City and supplemented with the Second Good Faith Deposit, as set forth in Section 6.2 below. If Developer is not selected as the preferred master developer, then the remaining balance of the Initial Good Faith Deposit and any interest earned thereon, less any amounts needed to pay City Costs incurred prior to the date on which the Second Developer Candidate is selected as the preferred master developer, shall be refunded promptly to Developer.

6.2 DDA Stage Negotiations. If Developer is selected as the preferred master developer, Developer shall supplement the Initial Good Faith Deposit by providing to City a second cash deposit of Three Hundred Fifty Thousand Dollars (\$350,000) (“**Second Good Faith Deposit**”). The remaining balance of the Initial Good Faith Deposit, if any, as supplemented by the Second Good Faith Deposit, shall be referred to as the “**Good Faith Deposit**.” City shall be entitled to draw against the Good Faith Deposit and apply such draws to pay all City Costs incurred during the DDA Stage of the Negotiating Period. City shall provide Developer with monthly invoices for City Costs. Such invoices must provide sufficient detail from which Developer may confirm who performed the services, the nature of the work performed, the hours worked, the rate charged to the City, and that the services were performed for City Costs. Reimbursement of City Costs at the DDA Stage shall be capped at a maximum of the Good Faith Deposit and City, except as may otherwise be agreed upon by the Parties, shall not be entitled to any reimbursement over the amount of the Good Faith Deposit. If the Parties enter into a DDA, the remaining amount of the Good Faith Deposit shall be disposed of as specified in such agreement. If this Agreement is terminated without execution of a DDA for any reason, then the Good Faith Deposit and any interest earned thereon, less any amounts needed to pay City Costs incurred prior to the date of termination, shall be refunded promptly to Developer.

6.3 Deposit Accounts. City shall be under no obligation to pay or earn interest on the Initial Good Faith Deposit or the Second Good Faith Deposit, but, if interest shall accrue or be payable thereon, such interest (when received by City) shall be accumulated by City and added and held as part of the Initial Good Faith Deposit or the Second Good Faith Deposit, as applicable.

## 7. Progress Reports.

Within ten (10) days following either Party’s request, which may be made from time to time during the Negotiating Period, the other Party shall submit to the requesting Party a written progress report advising the requesting Party on the status of all work being undertaken by or on its behalf.

remaining provisions of this Agreement and the application thereof shall remain in full force and effect and shall not be affected, impaired or invalidated.

17. Integration.

This Agreement contains the entire understanding between the Parties relating to the matters set forth herein. All prior or contemporaneous agreements, understandings, representations and statements, oral or written, are merged in this Agreement and shall be of no further force or effect.

18. Modifications.

Any alteration, change or modification of or to this Agreement, in order to become effective, shall be made in writing and in each instance signed on behalf of each Party.

19. Waiver of *Lis Pendens*.

It is expressly understood and agreed by the Parties that no *lis pendens* shall be filed against any portion of the Development Phase One Property or any other portion of the CRP Area with respect to this Agreement or any dispute or act arising from this Agreement.

20. Rights to Design Concepts and Development Plans.

Once submitted, all development project design concepts and plans shall become the property of the City. The City, without compensation to Developer or any third party, may use such development project design concepts and plans, together with any and all ideas and materials submitted in connection with the negotiations hereunder, whether or not Developer is selected as the preferred master developer and whether or not City and Developer enter into a DDA. [We would like to discuss this Section. We want to retain ownership of our designs and ideas, and, in the event we are not selected as the master developer, we do not want our designs and concepts used. It would not be fair to have us develop and pay for designs and then have another developer get the benefit of our work.]

21. Interpretation.

As used in this Agreement, masculine, feminine or neuter gender and the singular or plural number shall each be deemed to include the others where and when the context so dictates. The word “including” shall be construed as if followed by the words “without limitation.” This Agreement shall be interpreted as though prepared jointly by the Parties. Titles and captions are for convenience of reference only and do not define, describe or limit the scope or the intent of this Agreement or any of its terms.

22. Authority.

Each person executing this Agreement on behalf of Developer does hereby covenant and warrant that (a) Developer is created and validly existing under the laws of \_\_\_\_\_, (b) Developer has and is duly qualified to do business in California, (c) Developer has full corporate power and authority to enter into this Agreement and to perform all of Developer’s

**CONCORD NAVAL WEAPONS STATION  
DISPOSITION AND DEVELOPMENT AGREEMENT**

by and between

CITY OF CONCORD,  
a California municipal corporation

and

\_\_\_\_\_

a \_\_\_\_\_

Dated: \_\_\_\_\_

The following draft constitutes our general comments to the Disposition and Development Agreement. While we think the changes encompass all of the major issues and points for negotiation, as we learn more about the Project and the various agreements and exhibits, we may have additional comments. In addition, we have not listed any minor wording changes, as at this stage, we only want to state the major concerns we have with the contract.

## DISPOSITION AND DEVELOPMENT AGREEMENT

THIS AGREEMENT (“**Agreement**”) is entered into by and between the CITY OF CONCORD, a municipal corporation, in its capacity as the local reuse authority for the former Concord Naval Weapons Station (“**City**” or “**LRA**”), and \_\_\_\_\_, a \_\_\_\_\_ (“**Master Developer**”) as of \_\_\_\_\_, 201\_\_. The City and the Master Developer are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties**.”

### R E C I T A L S

The following Recitals are a substantive part of this Agreement:

A. City has solicited and evaluated development proposals from development entities for the first phase of development of the approximately 5,028-acre property known as the Inland Area of the Concord Naval Weapons Station (“**CRP Area**”).

B. The Concord Naval Weapons Station was once the United States Navy’s primary ammunition depot on the Pacific Coast. The Navy vacated the CRP Area in 1997, and in 2005 officially placed it on the Federal base closure list. At that point, the City, acting through its City Council, was designated as the Local Reuse Authority by the Department of Defense pursuant to the provisions of the federal Base Realignment and Closure Act (P.L. 101-510), as amended (“**BRAC**”). The City engaged in a seven-year planning process, which, among other things, culminated in the adoption of the Concord Reuse Project (“**CRP**”) Area Plan.

C. Approximately 2,700 acres of the CRP Area (“**Regional Park**”) will be set aside for habitat conservation/restoration, open space and passive recreation pursuant to a public benefit conveyance from the United States government to a regional parks agency. An additional approximately 80 acres may be set aside for various public benefit uses, including, potentially, a first responder training facility, the City-owned portion of the golf course and various Caltrans, BART and City rights-of-way property. The balance of the CRP Area comprising approximately 2,248 acres (“**Development Footprint**”) will be transferred by Navy to City under the economic development conveyance provisions of BRAC. The Navy will transfer the Development Footprint to City in phases, with the first transfer to consist of approximately 1,400 acres (“**First Transfer Parcel**”). The CRP Area, the Regional Park, the Development Footprint and the First Transfer Parcel are each depicted on the Site Map attached hereto as Exhibit A. The property that is the subject of this Agreement is an approximately \_\_\_-acre portion [*exact acreage to be determined through RFP process, but generally anticipated to be an amount between 350 and 500 acres*] of the First Transfer Parcel (“**Development Phase One Property**”), as described and depicted on the Map/Legal Description of Development Phase One Property attached hereto as Exhibit B.

corresponding assignment of any rights or obligations of Master Developer pursuant to this Agreement to such Assignee as to such Parcel, pursuant to this Agreement;

(6) Upon or at any time after the satisfaction of the Phase Four Conditions Precedent applicable to a Parcel, the sale or leasing for occupancy of any part of the Development Phase One Property in accordance with the terms of this Agreement.

“**Person**” means an individual, partnership, limited partnership, trust, estate, association, corporation, limited liability company or other entity, domestic or foreign.

“**Phase One**” shall mean, with respect to any Parcel, the period of time commencing upon mutual execution of this Agreement and ending upon the acquisition of fee title to such Parcel by City.

“**Phase Two**” shall mean, with respect to any Parcel, the period of time commencing upon acquisition of fee title to such Parcel by City and ending upon the satisfaction of all Phase Three Conditions Precedent and conveyance of fee title or a leasehold interest, as the case may be, by City to Master Developer.

“**Phase Three**” shall mean, with respect to any Parcel, the period of time commencing upon the conveyance of fee title or a leasehold interest, as the case may be, by City to Master Developer, and ending upon the satisfaction of all Phase Four Conditions Precedent and conveyance of fee title or a leasehold interest, as the case may be, by Master Developer to an Assignee.

“**Phase Three Conditions Precedent**” shall mean the conditions precedent to the City’s obligation to convey any Parcel to Master Developer, which shall include all of the following [We would like to discuss and negotiate the Phase 3 Conditions Precedent. We think that closing should occur at the time that we receive Entitlements for the Property, and after expiration of appeal periods or resolution of timely appeals. Such Entitlements would include a Specific Plan, a Tentative Map and an EIR. Many of the other conditions would come later, after we own the Property, i.e., some Development Permits, Subdivision Improvement Agreements, bonds, etc. We want to make sure that all of the Phase 3 Conditions Precedent are commercially feasible, practical and achievable prior to the transfer of the Property.]:

(1) Fee Title. The Federal Government shall have conveyed the Parcel to the City;

(2) Specific Plan and Development Permits. The City shall have approved the Specific Plan and any Development Permit, including without limitation a Tentative Map, required for the construction of the Horizontal Improvements for the particular Parcel;

(3) Tentative Map. A Tentative Map for the particular Parcel shall have been approved;

(11) Commitment to Commence Improvements. Master Developer shall demonstrate to the reasonable satisfaction of the LRA Executive Director or designee that Master Developer will commence the required Horizontal Improvements not later than sixty (60) days after conveyance of fee or leasehold title, as the case may be, and is committed to continuously and diligently prosecute such required Horizontal Improvements to Completion within the time provided therefor in the Schedule of Outside Performance Dates; and

(12) Title Insurance. The Title Insurance Company shall be committed to issue the Title Insurance Policies; and

(13) *[additional relevant closing conditions to be included].*

“**Phase Four**” shall mean, with respect to any Parcel, the period of time commencing upon the conveyance of fee title or a leasehold interest, as the case may be, by Master Developer to an Assignee, and ending upon Completion with respect to such Parcel.

“**Phase Four Conditions Precedent**” shall mean the conditions precedent to Master Developer’s right to convey any Parcel to an Assignee for construction of Vertical Improvements (which may be satisfied prior to or after completion of the corresponding Horizontal Improvements), which shall include all of the following [We would like to discuss and negotiate the Phase 4 Conditions Precedent. Many of these conditions will not be satisfied at the time we intend to transfer portions of the Property to home builders. I.e., all Horizontal improvements completed or bonded for, all entitlements received for the construction of all Vertical Improvements, commitment to begin Vertical Improvements 30 days after conveyance and to continuously and diligently prosecute Vertical Improvements to Completion, etc. We do not think these requirements are reasonable or practical prior to transfer. For instance, at least in-tract Horizontal Improvements would be bonded for and completed by the prospective builder after conveyance. In addition, it is impractical to require a builder to commit to begin construction 30 days after conveyance and to prosecute construction to completion based on a set construction schedule. Often tracts are taken down in phases, and construction of Vertical Improvements is based on absorption of the market. Again, we want to make sure that the Phase 4 Conditions Precedent are commercially feasible, practical and achievable not only by us, but by prospective builders.]:

(1) Satisfaction of Phase Three Conditions. All applicable Phase Three Conditions Precedent shall have been satisfied;

(2) Approval of Assignee. To the extent required by this Agreement, the City shall have approved the proposed Assignee;

(3) Assignee Formation Documents. Any Assignee shall have delivered to the City documentation relating to the corporate, partnership, limited liability or other similar status, as the case may be, of the entity to which Master Developer intends to assign its rights under this Agreement as to such Parcel (and if any such entity is a limited partnership, its general partners, and if any such entity is a limited liability company, its members), including, without limitation and as applicable: limited partnership agreement and any amendments thereto; articles of incorporation; State of California Limited Liability Company Articles of

One Property, to be approved by the City Council, which shall include the required contents listed in California Government Code Section 65451, and Section \_\_\_ of Chapter \_\_\_ of the Municipal Code of the City of Concord.

“**Sports Fields**” shall mean the public sports fields to be developed on property to be owned by the City of Concord located \_\_\_\_\_ [insert as applicable “on” or “adjacent to”] to the Development Phase One Property as depicted on \_\_\_\_\_.

“**Subdivision Improvement Agreement**” shall mean an agreement between Master Developer and the City relating to Improvements required as a condition of approval of any subdivision or parcel map with respect to any Parcel.

“**Tentative Map**” shall mean a vesting tentative map or tentative map, as defined in California Government Code Section 66424.5, approved by the City for the Development Phase One Property or any portions thereof.

“**Title Company**” shall mean \_\_\_\_\_ or any other title insurance company mutually acceptable to City and Master Developer.

“**Title Insurance Policies**” shall mean and include, as applicable, the following ALTA extended coverage policies of title insurance issued by the Title Company, subject to the Approved Title Conditions:

(1) An owner’s policy of title insurance in favor of Master Developer insuring Master Developer’s fee or leasehold title in the Parcel (as applicable), in such amount and with such reasonable endorsements as may be requested by the insured Party (“**Owner’s Title Policy**”);

(2) A policy of title insurance in favor of City insuring City’s reversionary interest in any Lease Parcel, and/or right of reverter, as applicable, with respect to any Parcel, in such amount and with such reasonable endorsements as may be requested by the insured Party (“**City’s Title Policy**”) [This is the first mention of City’s right to a reverter. We view any right of reverter to be extremely problematic, and may render this deal unfinancable. We therefore would want to remove any right of reverter contained in this document.]; and

(3) A mortgagee’s policy of title insurance in favor of the Mortgagee or Leasehold Mortgagee (as applicable), insuring the lien of a Permitted Mortgage or Permitted Leasehold Mortgage, in the amount of the Permitted Mortgage, or Permitted Leasehold Mortgage with such reasonable endorsements as may be requested by the insured Party (“**Lender’s Title Policy**”).

“**Vertical Improvements**” shall mean any of the buildings, structures, landscaping and other improvements to be constructed or installed on or in connection with the development of the Development Phase One Property, consistent with the CRP Area Plan, the Specific Plan and the Entitlements approved by the City staff, other than the Horizontal Improvements.

a presumption that control with respect to a corporation or limited liability company is the right to exercise, directly or indirectly, more than fifty percent (50%) of the voting rights attributable to the controlled corporation or limited liability company, and, with respect to any individual, partnership, trust, other entity or association, control is the possession, indirectly or directly, of the power to direct or cause the direction of the management or policies of the controlled entity.

1.6.4 City approval of any Permitted Transfer, as defined in Section 1.2 hereof, shall not be unreasonably withheld, conditioned or delayed if all applicable conditions for approval thereof described in this Agreement have been satisfied. Notwithstanding any provision of this Agreement, City approval or disapproval of any Assignment or Transfer that is not a Permitted Transfer shall be granted or withheld in the City's sole and absolute discretion. At the time of any proposed Transfer or Assignment, Master Developer shall disclose to the City the proposed terms of such Transfer or Assignment. Any proposed assignment of Master Developer's rights and obligations hereunder to an Assignee as to one or more Parcels shall be for the purpose of constructing the Vertical Improvements required by this Agreement and/or operating the structures and other Improvements on such Parcels, and shall be subject to the satisfaction of all Phase Three Conditions Precedent applicable to such Parcel.

1.6.5 Master Developer shall promptly notify City of any and all changes whatsoever in the identity of the Persons in control of Master Developer or the degree thereof, of which it or any of its officers have been notified or otherwise have knowledge or information. Except for Permitted Transfers, this Agreement may be terminated by City, subject to Section 6.1, if there is any significant change (voluntary or involuntary) in membership, management or control, of Master Developer prior to Completion.

1.6.6 Upon or at any time after satisfaction of the Phase Four Conditions Precedent applicable to a Parcel, Master Developer shall have the right, subject to the approval of the City, to assign its rights and obligations under this Agreement with respect to such Parcel to an Assignee, but no such assignment shall be required. Master Developer shall not assign such rights and obligations without the approval of the City, which shall not be unreasonably withheld, conditioned or delayed, subject to the satisfaction of all Phase Four Conditions Precedent applicable to such Parcel and to the provisions of this Section 1.6.6. Any attempted transfer of this Agreement or any Parcel, or any portion or interest therein which is not authorized by this Agreement or expressly approved in writing by City shall be void and of no force or effect. In the event Master Developer intends to effectuate such an assignment, not later than thirty (30) days prior to the proposed date of assignment, Master Developer shall submit to City a request for approval of assignment, including the name and a description of such proposed Assignee's relevant experience, a reasonably current financial statement of the proposed Assignee, an Assignment and Assumption Agreement substantially in the form attached to this Agreement as Exhibit C, executed by Master Developer and the proposed Assignee [It may be problematic to have to have a signed assignment agreement prior to receiving approval from the City of the assignment.], a copy of any agreement between Master Developer and such proposed Assignee, and any additional information reasonably requested by City in connection with such proposed assignment.

1.6.7 Neither this Agreement nor any interest herein shall be assignable by operation of law (including, without limitation, the transfer of this Agreement by testacy or

(e) Master Developer shall have obtained and delivered to City a binder or certificate evidencing the Environmental Insurance, effective upon the mutual execution of this Agreement by the Master Developer and City [Environmental insurance should become effective only upon transfer of the Property to the Developer, not upon execution of the DDA.];

(f) Master Developer shall have delivered to City documentation relating to the corporate, partnership, limited liability or other similar status, as the case may be, of Master Developer's limited liability company and its members (and, if any member is a limited partnership, its general partners, and if any member is a limited liability company, its members), including, as applicable: articles of incorporation; State of California Limited Liability Company Articles of Incorporation (LLC-1) and (as to the Master Developer and its managing member only) Statement of Information and Operating Agreement (including any amendments thereto); copies of all resolutions or other necessary actions taken by such entity to authorize the execution of this Agreement and any other documents or instruments required by this Agreement; a certificate of status issued by the California Secretary of State; and a copy of any Fictitious Business Name Statement, if any, as published and filed with the Clerk of Contra Costa County; and

(g) \_\_\_\_\_ *[other items to be negotiated and inserted as appropriate]*.

1.7.2 Entitlements and Closing Conditions. Following the mutual execution and delivery of this Agreement, City and Master Developer shall proceed diligently and in good faith to complete the entitlement process and satisfy all Phase Three Conditions Precedent relating to each Parcel when and as required by this Agreement and the Schedule of Outside Performance Dates attached hereto as Exhibit T.

1.7.3 Horizontal Improvements. [This section does not contemplate that some Horizontal Improvements, namely in-tract improvements, would be completed later by a home builder. Also, this section does not allow for us to obtain acquisition financing, only financing "necessary to pay costs reasonably allocable to the Horizontal Improvements . . ."]

(a) Subject to the satisfaction of the Phase Three Conditions Precedent, Master Developer shall promptly begin, and thereafter diligently prosecute to completion, all of the Horizontal Improvements when and as required by the Specific Plan, the CRP Area Plan, the Entitlements and this Agreement.

(b) Master Developer shall not encumber any Parcel until all Phase Three Conditions Precedent applicable to such Parcel have been satisfied and the Parcel has been conveyed to Master Developer. Upon the satisfaction of all Phase Three Conditions Precedent and the conveyance of such Parcel by City to Master Developer, Master Developer shall have the right, subject to the terms of this Agreement, to encumber the fee title of any such Sale Parcel and the leasehold title of any such Lease Parcel, with a Permitted Mortgage, and encumber such title, but only for the purpose of obtaining financing necessary to pay costs reasonably allocable to the Horizontal Improvements for the Parcel encumbered by such financing.

(g) \_\_\_\_\_ *[insert other requirements as applicable]*.

1.7.6 Schedule of Outside Performance Dates. Master Developer and any Assignee shall begin and complete all construction and development within the respective times specified therefor in the Schedule of Outside Performance Dates. The Parties acknowledge that the times of performance set forth in the Schedule of Outside Performance Dates represent outside dates, and agree to act promptly and diligently and to use their best efforts to perform their respective obligations in the shortest feasible time, but in any event within the outside dates required by the Schedule of Outside Performance Dates. Except for *de minimus* changes approved in writing by the Master Developer and the LRA Executive Director, or designee, the Schedule of Outside Performance Dates shall not be amended except by amendment to this Agreement, first approved by the Master Developer and the City Council. [We view the requirements of this section to be overly rigid, as Construction Schedules are always changing based on a variety of factors. It is also impractical to require City Council approval of any amendment to the Construction Schedule that is not de minimus. Given the size of the project, we (and any merchant builders) need some flexibility in dealing with inevitable problems that will arise.]

1.7.7 *[other items to be negotiated]*.

## 1.8 Federal Requirements.

1.8.1 The parties acknowledge and agree that this Agreement is entered into as part of an Economic Development Conveyance of the Development Phase One Property to the City pursuant to the BRAC and MOA. The *[insert, as applicable, final executed or form of final MOA which Developer hereby approves]* is attached to this Agreement as Exhibit P.

1.8.2 Notwithstanding any provision to the contrary contained herein, this Agreement is and shall be subject to the terms and conditions of the MOA, and the rights, obligations and remedies of the Federal Government thereunder, and nothing contained in this Agreement shall be construed in a manner that is inconsistent with the rights, obligations and remedies of the Federal Government thereunder.

1.8.3 Notwithstanding anything in this Agreement to the contrary, if any provision of this Agreement tends to contradict, modify or in any way change the terms of the MOA, the terms of the MOA shall prevail and govern; or if any provision of this Agreement in any way tends to limit the Federal Government in its administration of the BRAC, this Agreement shall be deemed amended so as to comply with the MOA and the BRAC.

## 2. DISPOSITION OF PROPERTY.

### 2.1 Obligations Prior to Conveyance of Development Phase One Property to Master Developer.

2.1.1 During Phase Two, Master Developer shall at all reasonable times have the right of access to and entry upon any portion of the Development Phase One Property owned by the City or of which the City has the right of possession, for the sole purpose of obtaining data and making surveys and tests necessary to carry out this Agreement.

2.2.5 The purchase price payable by Master Developer for any Sale Parcel shall be the sum of: (i) the amount of \$\_\_\_\_\_ [purchase price subject to negotiation], payable upon the Close of Escrow, plus (ii) \_\_\_\_\_ [insert reference to revenue or profit participation provisions of Participation Agreement, if applicable]. [It should be stated that the Good Faith Deposit is applicable to the Purchase Price. This Agreement needs to deal with the disposition of the remainder of the Good Faith Deposit made pursuant to the Agreement to Negotiate, as in that Agreement, Section 6.2 states, "If the Parties enter into a DDA, the remaining amount of the Good Faith Deposit shall be disposed of as specified in such agreement."]

2.2.6 The rent payable for any Lease Parcel shall be the sum of: (i) the amount of \$\_\_\_\_\_ [ground rent subject to negotiation], payable in advance, upon the Close of Escrow, plus (ii) \_\_\_\_\_ [insert reference to revenue or profit participation provisions of Participation Agreement, if applicable], which is attributed to the Lease Parcel.

2.2.7 In consideration of this Agreement, Master Developer agrees to pay to City the City's share of \_\_\_\_\_ [insert reference to revenue or profit participation provisions of Participation Agreement, if applicable], pursuant to the terms and conditions of the Participation Agreement. The Participation Agreement shall survive the termination of this Agreement and continue in effect until the City has received its full share of \_\_\_\_\_ [cross-reference to applicable revenue or profit participation definition(s), if any, to be inserted].

2.3 Conditions Precedent to Conveyance of Development Phase One Property. [We reiterate the same issues here with respect to the Phase 3 and Phase 4 Conditions Precedent.]

2.3.1 The Close of Escrow for any Parcel to be sold or leased by the City to the Master Developer pursuant to this Agreement is conditioned upon all of the Phase Three Conditions Precedent applicable to such Parcel occurring prior to or concurrent with the time for the Closing of such Parcel set forth in the Schedule of Outside Performance Dates.

2.3.2 The Close of Escrow for any Parcel to be sold or subleased by the Master Developer to an Assignee pursuant to this Agreement is conditioned upon all of the Phase Four Conditions Precedent applicable to such Parcel occurring prior to or concurrent with the time for the Closing of such Parcel set forth in the Schedule of Outside Performance Dates.

2.3.3 In addition to the provisions of Sections 2.3.1 and 2.3.2, the Close of Escrow for any Parcel (both from City to Master Developer, and from Master Developer to an Assignee) shall be conditioned upon the following:

(a) Closing Cost Statement. Escrow shall have delivered closing statement of costs.

(b) Supplementary Escrow Instructions. City and/or Master Developer and/or Assignee, as the case may be, shall have prepared such supplemental escrow instructions as may be needed.

2.6 Condition of Title.

2.6.1 In the case of any Sale Parcel, City shall convey fee title, and in the case of any Lease Parcel, City shall convey a leasehold in the Parcel free and clear of all liens, encumbrances, assessments, easements, leases and taxes, except:

- (a) all taxes for the period subsequent to the Close of Escrow;
- (b) any assessments which may be levied after the Close of Escrow for street lighting, maintenance or other similar obligations of property owners, which shall be the responsibility of Master Developer;
- (c) title exceptions set forth in the Preliminary Report issued by \_\_\_\_\_, dated \_\_\_\_\_ (“**Approved Title Conditions**”), a copy of which is attached to this Agreement as Exhibit V;
- (d) covenants, conditions and restrictions and title exceptions set forth in the MOA from the Federal Government, without any modification or change;
- (e) \_\_\_\_\_ *[other exceptions to be listed as applicable]*; and
- (f) any other exceptions which are otherwise consistent with this Agreement and which are accepted in writing by Master Developer.

2.7 Development Phase One Property Conditions; Hazardous Substances.

2.7.1 The Parcels shall be conveyed in an “as is” condition, with no warranty, express or implied by City as to the condition of the soil (or water), its geology, the condition of any existing structures, the presence of known or unknown faults or the existence of any Hazardous Substances in, on or in connection with the Development Phase One Property or any existing improvements thereon. Master Developer has investigated the Development Phase One Property and improvements thereon, and may perform such further investigations as Master Developer may deem necessary or appropriate. City shall have no obligation to Master Developer or any other Person to remediate any portion of the Development Phase One Property or provide for the Development Phase One Property to be suitable for the development required by this Agreement. *[Terms regarding Navy’s obligations to address and remediate additional hazardous materials that may be discovered on the Development Phase One Property during development to be negotiated among City, Navy and Master Developer.]* *[The parcels should not be transferred in an as-is condition. They should be transferred in the same state in which the Navy agreed to transfer them. We need to receive the benefit of the Navy clean-up, whether it be before or after the conveyance of the property to us.]*

2.7.2 Representatives of Master Developer shall at all reasonable times have the right of access to and entry upon each Parcel comprising the Development Phase One Property for the purpose of obtaining data and making surveys and tests necessary to carry out this Agreement. Master Developer agrees to indemnify, defend and hold City and its officers, employees, contractors and agents, harmless for any and all claims, liability and damages arising

2.10.4 Method of Proration. All prorations shall be made in accordance with customary practice in Contra Costa County, except as expressly provided herein. City and Master Developer agree to prepare a schedule of tentative prorations prior to the Closing Date. Such prorations, if and to the extent known and agreed upon as of the Close of Escrow, shall be paid into Escrow by the respective parties. Any such prorations not determined or not agreed upon as of the Close of Escrow shall be paid by City to Master Developer, or by Master Developer to City, as the case may be, in cash as soon as practical following the Close of Escrow. A copy of the schedule of prorations as agreed upon by City and Master Developer shall be delivered to Escrow Agent at least three (3) business days prior to the Closing Date.

2.10.5 Payment of Fees. Except as provided in Section 3.3 of this Agreement, City and Master Developer shall each pay their legal and professional fees and fees of other consultants incurred by City and Master Developer, respectively.

2.11 Remainder of EDC Site.

After Completion of the development of the Development Phase One Property, Master Developer may have the right to enter into exclusive negotiations with City with respect to Master Developer's potential acquisition of all or a portion of the remainder of the First Transfer Parcel subject to the terms and conditions of this Section 2.11. *[Scope of Master Developer's exclusive negotiating rights with respect to balance of First Transfer Parcel to be negotiated. Such rights to be dependent upon Master Developer's achievement of specified milestones in connection with development of Development Phase One Property.]*

3. FINANCING.

3.1 Method of Financing.

3.1.1 Financing Horizontal Improvements.

(a) Master Developer intends to finance the Development Cost of the Horizontal Improvements with a combination of debt (including, to the extent approved by the City, Community Facilities District and/or Infrastructure Financing District bonds or other similar financing mechanisms, as described in Section 1.7.3(c) of this Agreement) and Master Developer's equity.

(b) Not later than thirty (30) days prior to the time provided in the Schedule of Outside Performance Dates for commencement of construction of the Horizontal Improvements, Master Developer shall submit to the LRA Executive Director or designee evidence of financing for the construction and installation of the Horizontal Improvements, including, at a minimum, the items set forth in Section 1.2(8) of the definition of "Phase Three Conditions Precedent" under Section 1.2 which, in summary, include: a final project budget; a construction contract; a construction schedule; and substantially final financing documents. [We feel that the requirements here are impractical. Particularly the requirement that we have a construction contract in place 30 days prior to commencement, and that financing documents be in "substantial final form."]

(c) City shall approve or disapprove such evidence of financing within thirty (30) days after receipt. City shall not unreasonably withhold, condition or delay approval. If City shall disapprove any such evidence of financing, City shall do so by written notice to Master Developer stating the reasons for such disapproval.

### 3.1.2 Financing Vertical Improvements.

(a) Within the respective times provided therefor in the Schedule of Outside Performance Dates, Master Developer or its Assignee shall submit to the LRA Executive Director or designee, for each Parcel to be conveyed, a proposed method by which Master Developer or its Assignee intends to finance the construction of the Vertical Improvements on the Parcel.

(b) Such method of financing shall include, at a minimum, a budget of all Development Costs relating to such construction (consistent with the Project Budget described in Section 3.2, below) and identification of sources of funds to pay such costs.

(c) City shall approve or disapprove such method of financing within thirty (30) days after receipt. City shall not unreasonably withhold, condition or delay approval. If City shall disapprove any such proposed method of financing, City shall do so by written notice to Master Developer stating the reasons for such disapproval.

(d) Within the respective times established therefor in the Schedule of Outside Performance Dates for the satisfaction of Phase Four Conditions Precedent for a Parcel, Master Developer or its Assignee as to a Parcel shall submit to City evidence satisfactory to the LRA Executive Director or designee that Master Developer has obtained the financing necessary for the construction of Vertical Improvements on the Parcel in accordance with this Agreement. Such evidence of financing shall include, at a minimum, the items set forth in Subsection 1.2(8) of the definition of "Phase Four Conditions Precedent" under Section 1.2. [This section brings up similar issues as 3.1.1. In particular, it will not be the Master Developer that obtains financing for Vertical Improvements.]

(e) City shall approve or disapprove such evidence of financing within thirty (30) days after submission of complete information. City shall not unreasonably withhold, condition or delay approval. If City shall disapprove any such evidence of financing, City shall do so by written notice to Master Developer and its Assignee stating the reasons for such disapproval.

### 3.2 Project Budget.

The parties anticipate that all Development Costs shall be as set forth in the Project Budget, which shall be deemed approved by the City upon approval of this Agreement. Subsequent changes to the Project Budget shall not require City approval, except: (a) material changes to the Project Budget shall be subject to review and approval by the LRA Executive Director or designee as part of the review and approval of Phase Three Conditions Precedent; and (b) changes to the Project Budget shall be subject to review and approval by the LRA Executive Director or designee as part of the review and approval of Phase Four Conditions Precedent; and (c) in the event of any significant changes to the Project requiring an amendment

to this Agreement, or implementation agreement amending this Agreement (but not including interim changes in cost or revenue budget estimates), the City shall have the right to review and approve any changes to the Project Budget as of the date of such amendment or implementation agreement. Upon approval by the City, the Project Budget shall be replaced by the approved revised Project Budget.

### 3.3 Payment of City Administrative Costs.

Subject to the terms of the Interim Property Management Agreement, Master Developer, at its expense, shall operate, manage and maintain the entirety of the First Transfer Parcel, including the Development Phase One Property, for the period commencing upon the mutual execution and delivery of this Agreement and terminating upon the date upon which the last Parcel comprising the Development Phase One Property is conveyed to Master Developer, or, with respect to the balance of the First Transfer Parcel, such later date as City and Master Developer may agree. In addition, Master Developer shall pay, and shall reimburse City for the City's administrative costs and expenses in administering the project and this Agreement, including salaries and fringe benefits of City employees and the out-of-pocket expenses costs and fees of consultants, contractors and attorneys (collectively, "**City Administrative Costs**") incurred on or after the mutual execution of this Agreement and prior to Completion of all Parcels comprising the Development Phase One Property. Master Developer's obligation pursuant to this Section 3.3 shall survive the expiration or termination of this Agreement. [With respect to paying for City Administrative Costs, we would like the right to assign that obligation to the Assignee with respect to property transferred to the Assignee. Also, we would like this obligation to terminate in the event this Agreement terminates and the City enters into an Agreement with another developer to develop the parcels—that new developer should take on the obligation of paying the City Administrative Costs.]

### 3.4 No Encumbrances Except Permitted Mortgages.

The following provisions shall be applicable to each Parcel until its Completion:

3.4.1 From and after the satisfaction of the Phase Three Conditions Precedent applicable to a Parcel, Master Developer shall have the right to encumber any Sale Parcel or Master Developer's leasehold interest in any Lease Parcel with a Permitted Mortgage or Permitted Leasehold Mortgage, but only for the purpose of securing a loan of funds to be used for financing development costs for Horizontal Improvements. [We want the ability to obtain acquisition financing for the Property, not just development financing.]

3.4.2 From and after the satisfaction of the Phase Four Conditions Precedent applicable to a Parcel, Master Developer and any Assignee shall have the right to encumber any Sale Parcel or Master Developer's leasehold interest or the Assignee's subleasehold interest in any Lease Parcel with a Permitted Mortgage or Permitted Leasehold Mortgage, but only for the purpose of securing a loan of funds to be used for financing development costs allocable to such Parcel.

3.4.3 The purposes described in Sections 3.4.1 and 3.4.2 shall be deemed "**Permitted Financing Purposes.**"

### 3.7 Rights of City Prior to Completion.

In the event of a default or breach by Master Developer or any Assignee under any Permitted Mortgage prior to the Completion of the applicable Parcel, City shall have the right, at its sole option and without any obligation, to cure the default provided such cure is completed at least ten (10) business days before the date of foreclosure. In such event, City shall be entitled to reimbursement by Master Developer or such Assignee of all costs and expenses incurred by City in curing the default, with interest at the highest rate permitted by law (collectively, “**City’s Cure Payments**”).

## 4. DEVELOPMENT.

### 4.1 City Approvals.

4.1.1 It is the responsibility of Master Developer, without cost to City, to obtain all Entitlements and ensure that the development of the Development Phase One Property and construction of the Improvements and the use, operation and maintenance of such Improvements in accordance with the provisions of this Agreement, are permitted by all applicable Governmental Requirements.

4.1.2 Nothing contained herein shall be deemed to entitle Master Developer to any City permit or other City approval necessary for the development of the Development Phase One Property, or waive any applicable City requirements relating thereto. This Agreement does not (a) grant any land use entitlement to Master Developer, (b) supersede, nullify or amend any condition which may be imposed by the City of Concord in connection with approval of the development described herein, (c) guarantee to Master Developer or any other Person any profits from the development of the Development Phase One Property, or (d) amend any City laws, codes or rules. This Agreement is not a “development agreement” as provided in Government Code Section 65864. [We think this Agreement should be considered a “development agreement” under Government Code Section 65864, as it governs the development of the Property. We would want to understand the reasoning behind not characterizing this Agreement as a “development agreement” under such section.]

4.1.3 This Agreement shall be subject to the Specific Plan and the Entitlements, including all requirements of Development Permits issued by the City for the Parcels to be developed pursuant to this Agreement.

### 4.2 Obligation to Clear Certain Parcels.

4.2.1 Upon conveyance of a Parcel to Master Developer, and on a Parcel-by-Parcel basis, Master Developer shall be responsible, at its expense, as part of its obligation concerning the Horizontal Improvements, for the demolition, disposal and clearance of all above- and below-ground structures and improvements, underground storage tanks, debris, munitions bunkers, railroad tracks and sidings, contaminated soil and other structures and obstructions on, under or in those portions of the Development Phase One Property as identified in \_\_\_\_\_ *[scope of site clearance to be negotiated]* (“**Development Phase One Property Clearance**”), to the extent such costs are not paid by the Federal Government. Nothing contained herein shall modify or restrict in any way Master Developer’s rights or remedies

against the Federal Government relating to Development Phase One Property conditions. Nothing contained in this Section 4.2.1 shall be construed to limit or modify in any way the obligations of the Federal Government under the MOA and \_\_\_\_\_ [reference to Navy to City deed to be inserted]. [We want to make sure that the Navy performs all of the clean-up it is obligated to perform, and that we have the right to enforce the Navy's obligations in that regard. In order to do so, we will need to review the MOA, the Deed, and other relevant documents.]

4.2.2 Within the time provided in the Schedule of Outside Performance Dates, Master Developer shall propose the means and methods and prepare and submit plans and specifications in accordance with all applicable State and Federal regulations and guidelines for the Development Phase One Property Clearance, including removal of asbestos and lead-based paint, to City (“**Development Phase One Property Clearance Plans**”). City shall have thirty (30) days from receipt of the Development Phase One Property Clearance Plans to approve or disapprove the proposed Development Phase One Property Clearance Plans, which approval shall not be unreasonably withheld.

4.2.3 Upon conveyance to Master Developer of any Parcel, Master Developer shall commence and complete the Development Phase One Property Clearance as to such Parcel in accordance with the Development Phase One Property Clearance Plans. Master Developer shall carry out the Development Phase One Property Clearance in conformity with all applicable laws and Governmental Requirements, including all applicable federal and state labor laws and requirements.

4.2.4 Prior to commencement of any Development Phase One Property Clearance, Master Developer agrees to procure, or cause its contractor to procure, Payment and Performance Bonds covering the Development Phase One Property Clearance in accordance with the Development Phase One Property Clearance Plans, substantially in the form attached to this Agreement as Exhibit R.

#### 4.3 Standards and Requirements for Development.

The Parcels constituting the Development Phase One Property shall be developed in accordance with and within the limitations established in the CRP Area Plan, the Specific Plan, the Entitlements and any Development Permits required by the Specific Plan. Development shall include below market rate units in accordance with City polices.

4.4 Below Market Rate Units. *[Provisions addressing requirements for affordable rental and for-sale housing, including phasing of delivery in relation to market rate units, to be negotiated].*

#### 4.5 Obligation for Payment of Development Costs.

All development costs (including any cost overruns), including, without limitation, all hard costs, soft costs, the cost of services, wages required to be paid to any person employed by Master Developer, any Assignee, contractor or subcontractor, shall be the responsibility of Master Developer or its Assignee as to any Parcel, without any cost or liability to City.

map. [We have the same issues already mentioned with respect to when the bonds will be required and who will be required to post them.]

4.10.2 Phase Three Conditions Precedent. As part of the Phase Three Conditions Precedent, Master Developer shall obtain Payment and Performance Bonds, naming City as obligee, covering labor, materials and faithful performance of the construction of all Horizontal Improvements, to be constructed in phases, as provided in this Section 4.10.2. Each such bond shall be in the amount equal to \_\_\_\_\_ percent (\_\_\_%) of the construction price in a construction contract between Master Developer or an Assignee and such Party's contractor, which shall have been approved by City, and shall be substantially in the form attached to this Agreement as Exhibit R.

4.10.3 Phase Four Conditions Precedent. As part of the Phase Four Conditions Precedent, Master Developer or Assignee shall obtain Payment and Performance Bonds, naming City as obligee, as its interests may appear, covering labor, materials and faithful performance of the construction of any and all subdivision improvements required in connection with construction of the Vertical Improvements to be constructed on the applicable Parcel, in accordance with the plans approved by the City staff therefor. Each such bond shall be in the amount equal to \_\_\_\_\_ percent (\_\_\_%) of the construction price in a construction contract between such Assignee and its contractor, which shall have been approved by City, and shall be substantially in the form attached to this Agreement as Exhibit R. Master Developer shall, as part of the Phase Four Conditions Precedent, deliver to the City a certificate or certificates from the bonding company(s) issuing such bonds.

4.10.4 Schedule for Delivery of Payment and Performance Bonds. In addition to the bonds required by Sections 4.10.2 and 4.10.3, Master Developer shall provide to the City Payment and Performance Bonds in the following incremental amounts:

(a) Bonds for all demolition and all Horizontal Improvements (except Park Improvements) for each Parcel or portion thereof, to be provided upon the recordation of the Final Map for such Parcel or portion thereof.

(b) Bonds for all Development Phase One Property road improvements, to be provided upon the recordation of the Final Maps for \_\_\_\_\_, in such incremental amounts as may be required by the City in connection with such Maps (provided Master Developer has delivered Payment and Performance Bonds covering 100% of the Development Phase One Property road improvements by the time of the recordation of the last to be recorded of such Final Maps).

(c) \$\_\_\_\_\_ for Park Improvements to be provided upon *[Timing and phasing of bonds to be negotiated]*.

(d) \_\_\_\_\_ *[other bonding requirements to be negotiated]*.

4.10.5 Obligations Guaranteed by Payment and Performance Bonds. The Payment and Performance Bonds shall guarantee Completion of the respective Improvements, subject to a liability cap in each case that has been mutually approved by Master Developer and City, within the time periods set forth in Sections 4.2 through 4.10 of this Agreement.

foreclosure on any security interest in a Parcel by any Person or if the default is not cured within ninety (90) days after the first notice of default is given.

6.1.5 Any notice of default that is personally delivered (including by means of professional messenger service, courier service such as United Parcel Service or Federal Express, or by U.S. Postal Service), shall be deemed received on the documented date of receipt; and any notice of default that is sent by registered or certified mail, postage prepaid, return receipt required shall be deemed received on the date of receipt thereof.

6.1.6 Notwithstanding Section 6.1.1, the failure of any Phase Three Condition Precedent or any Phase Four Condition Precedent which is not caused by the acts or omissions of Master Developer or an Assignee and which is not within the control of Master Developer or an Assignee, shall not, solely by reason of the failure of such condition, be a default by Master Developer, provided:

(a) City shall have no obligation to convey to Master Developer or any other Person any Parcel with respect to which a Phase Three Condition Precedent has not been satisfied, and shall have the right to terminate this Agreement as to such Parcel in accordance with Section 6.9 of this Agreement;

(b) City shall have no obligation to subordinate its right of reverter as to any Parcel with respect to which a Phase Three Condition Precedent or a Phase Four Condition Precedent has not been satisfied;

(c) Developer shall not convey to any Person or entity any Parcel with respect to which a Phase Four Condition Precedent has not been satisfied; [We reiterate that the right of reverter will be an issue for us]

(d) City shall have the right to terminate this Agreement as to any Parcel with respect to which a Phase Four Condition Precedent has not been satisfied in accordance with Section 6.9 of this Agreement, and to exercise its right of reverter in accordance with Section 6.10 of this Agreement; and

(e) \_\_\_\_\_ *[other requirements to be inserted as applicable]*.

6.1.7 The following Phase Three Conditions Precedent, and the failure of such conditions, are deemed, for purposes of this Agreement, to be within the control of Master Developer:

(a) Condition e. (Failure to provide Payment and Performance Bonds as required by such Condition);

(b) Condition g. (Failure to submit Insurance Policies as required by such Condition);

(c) Condition h. (Failure to submit Evidence of Financing, as required by such Condition);

6.9 Termination by City.

6.9.1 Subject to the notice and cure provisions of Section 6.1, and subject to Force Majeure Delay, City shall have the right to terminate this Agreement as to any Parcel with respect to which Master Developer has not satisfied all of the Phase Three Conditions Precedent within the respective time provided therefor in the Schedule of Outside Performance Dates, or Phase Four Conditions Precedent within the respective time provided therefor in the Schedule of Outside Performance Dates, by providing written notice to Developer, in the event of any of the following (each of which shall be referred to as a “**Event of Termination**”): (1) any uncured default by Master Developer; (2) any uncured failure to perform any material obligation required to be performed by Master Developer in the manner and by the date provided in this Agreement, or (3) any failure of a condition set forth in this Agreement as a Phase Three Condition Precedent or Phase Four Condition Precedent except to the extent such condition is in the control of City.

6.9.2 In the event City terminates this Agreement pursuant to this Section 6.9, then this Agreement and any rights of Master Developer, or any Assignee or transferee, in this Agreement, or arising herefrom with respect to City, shall be terminated, and neither City nor Master Developer nor any Assignee shall have any further rights against or liability to the other under this Agreement, except for those obligations which by their terms survive termination hereof. [We would like to discuss the rights of the City to terminate the Agreement as to Property that we have already purchased. We also want to add a provision that says that we will receive a refund of the Good Faith Deposit in the event the Agreement is terminated and Developer is not in default and that any bonds that we have posted will be replaced by any new developer that enters into a development agreement with the City.]

6.10 Right of Reverter. [*Scope of reverter right to be negotiated*].

6.11 Master Developer’s Deposit.

6.11.1 Prior to the execution of this Agreement, Master Developer has delivered to City a deposit in the amount of \_\_\_\_\_ [*amount of Deposit to be negotiated during Master Developer selection process*] (“**Deposit**”), receipt of which is hereby acknowledged. The Parties acknowledge and agree that the amount and timing of delivery of the Deposit have been negotiated and determined in light of Master Developer’s agreement to deliver to the City, at the respective times provided in this Agreement, Payment and Performance Bonds as security for the performance of certain specified obligations, limited to the completion of specified Horizontal Improvements and Vertical Improvements, and the Deposit is not intended to provide security for the obligations secured by any such Payment and Performance Bonds.

6.11.2 The Deposit shall be security for the performance of Master Developer’s obligations hereunder that are not otherwise secured by a Payment and Performance Bond and is intended to compensate City for costs and damages, such as land holding costs, administrative costs of selecting a new developer, increased financing costs to the City, and similar increased costs to City, that cannot be remedied by mere completion of Improvements.

**LIQUIDATED DAMAGES IN ADDITION TO PERFORMANCE PURSUANT TO ANY PAYMENT AND PERFORMANCE BONDS THERETOFORE DELIVERED TO CITY.**

**CITY \_\_\_\_\_ MASTER DEVELOPER \_\_\_\_\_**

**6.13 Return of Deposit to Master Developer under Certain Circumstances.**

Master Developer shall be entitled to the return of all or a portion of its Deposit under the following circumstances:

6.13.1 Disapproval of Specific Plan. In the event the City disapproves the Specific Plan, or approves the Specific Plan subject to conditions that are materially different than the terms set forth in this Agreement, either the City or Master Developer shall have the right to terminate this Agreement upon not less than ninety (90) days' prior written notice, whereupon City shall return Deposit to Master Developer. [The Developer, not the City, should have the only right to terminate in event the specific plan is not approved.]

6.13.2 Disapproval or Conditions to Other Entitlements. In the event, after approval of the Specific Plan, the City disapproves any other entitlements necessary to carry out this Agreement as to any Parcel, or approves such entitlements subject to conditions that are not consistent with this Agreement and have a material adverse effect on Master Developer's ability to carry out this Agreement.

6.13.3 City Default. In the event Master Developer is not in default and the City fails to convey to Master Developer fee title to any Sale Parcel or leasehold title to any Lease Parcel, as the case may be, and fails to cure such default within the time provided in Section 6.1, City and Master Developer agree to cooperate in good faith and meet and confer regarding such default, and Master Developer shall have the right, upon ninety (90) days' prior written notice, to terminate this Agreement as to any Parcel for which any Phase Three Conditions Precedent have not been satisfied, whereupon City shall return the full amount of Master Developer's Deposit, and release any Payment and Performance Bonds previously provided by Master Developer to the extent such Payment and Performance Bonds apply to any Parcel for which any Phase Three Conditions Precedent have not been satisfied.

6.13.4 Failure of Conditions. In the event the City terminates this Agreement as to any Parcel or Parcels as the result of the failure of any Condition Precedent which is not caused by the acts or omissions of Master Developer or an Assignee and which is not within the control of Master Developer or an Assignee, City and Master Developer agree to cooperate in good faith and meet and confer regarding the appropriate reduction of the acreage of the Development Phase One Property resulting from such failure, and City shall return to Master Developer that portion of the Deposit reflecting the proportion of the Development Phase One Property (based on acreage) represented by the Parcel or Parcels as to which City has terminated this Agreement, and City shall release a portion of the Payment and Performance Bonds reflecting the proportion of the Development Phase One Property (based on acreage) represented by the Parcel or Parcels as to which City has terminated this Agreement.

6.13.5 Failure to Obtain Parcels. In the event the Federal Government fails to quitclaim any of the Parcels to the City within the time provided in the MOA, City and Master

or official challenging the validity of any provision of this Agreement or the transactions or development contemplated hereunder (“**Litigation Challenge**”), and the Parties shall keep each other informed of all developments relating to such defense, subject only to confidentiality requirements that may prevent the communication of such information. To the extent Master Developer elects, in its sole discretion, to contest or defend such Litigation Challenge, (i) Master Developer shall take the lead role defending such Litigation Challenge and may, in its sole discretion, elect to be represented by the legal counsel of its choice; (ii) City may, in its sole discretion, elect to be separately represented by the legal counsel of its choice in any such action or proceeding with the reasonable costs of such representation to be paid by Master Developer; (iii) Master Developer shall reimburse City, within ten (10) business days following City’s written demand therefor, which may be made from time to time during the course of such litigation, all reasonable costs incurred by City in connection with the Litigation Challenge, including City’s administrative, legal, and court costs and City Attorney oversight expenses; and (iv) Master Developer shall indemnify, defend, and hold harmless the Indemnified Parties from and against any damages, attorneys’ fees or cost awards, including attorneys’ fees awarded under Code of Civil Procedure section 1021.5, assessed or awarded against City by way of judgment, settlement, or stipulation. Any proposed settlement of a Litigation Challenge shall be subject to City’s and Master Developer’s approval, each in its reasonable discretion. If the terms of the proposed settlement would constitute an amendment or modification of this Agreement, the settlement shall not become effective unless such amendment or modification is approved by both Master Developer and City in accordance with all applicable laws, and City reserves its full legislative discretion with respect thereto. ~~Master Developer’s obligations under this Section 7.4.17.4.1 shall survive termination of this Agreement.~~

7.4.2 City Election to Contest or Defend. In addition, City shall have the right, but not the obligation, to contest or defend such Litigation Challenge, at its sole expense, in the event that Master Developer elects not to do so.

7.5 Nonliability of City Officials and Employees.

No member, official, agent, legal counsel or employee of City shall be personally liable to Master Developer, or any successor in interest in the event of any default or breach by City or for any amount which may become due to Master Developer or successor or on any obligation under the terms of this Agreement.

7.6 Inspection of Books and Records.

City shall have the right at all reasonable times to inspect the books and records of Master Developer pertaining to the Development Phase One Property as pertinent to the purposes of this Agreement. Master Developer shall also have the right at all reasonable times to inspect the books and records of City pertaining to the Development Phase One Property as pertinent to the purposes of this Agreement.

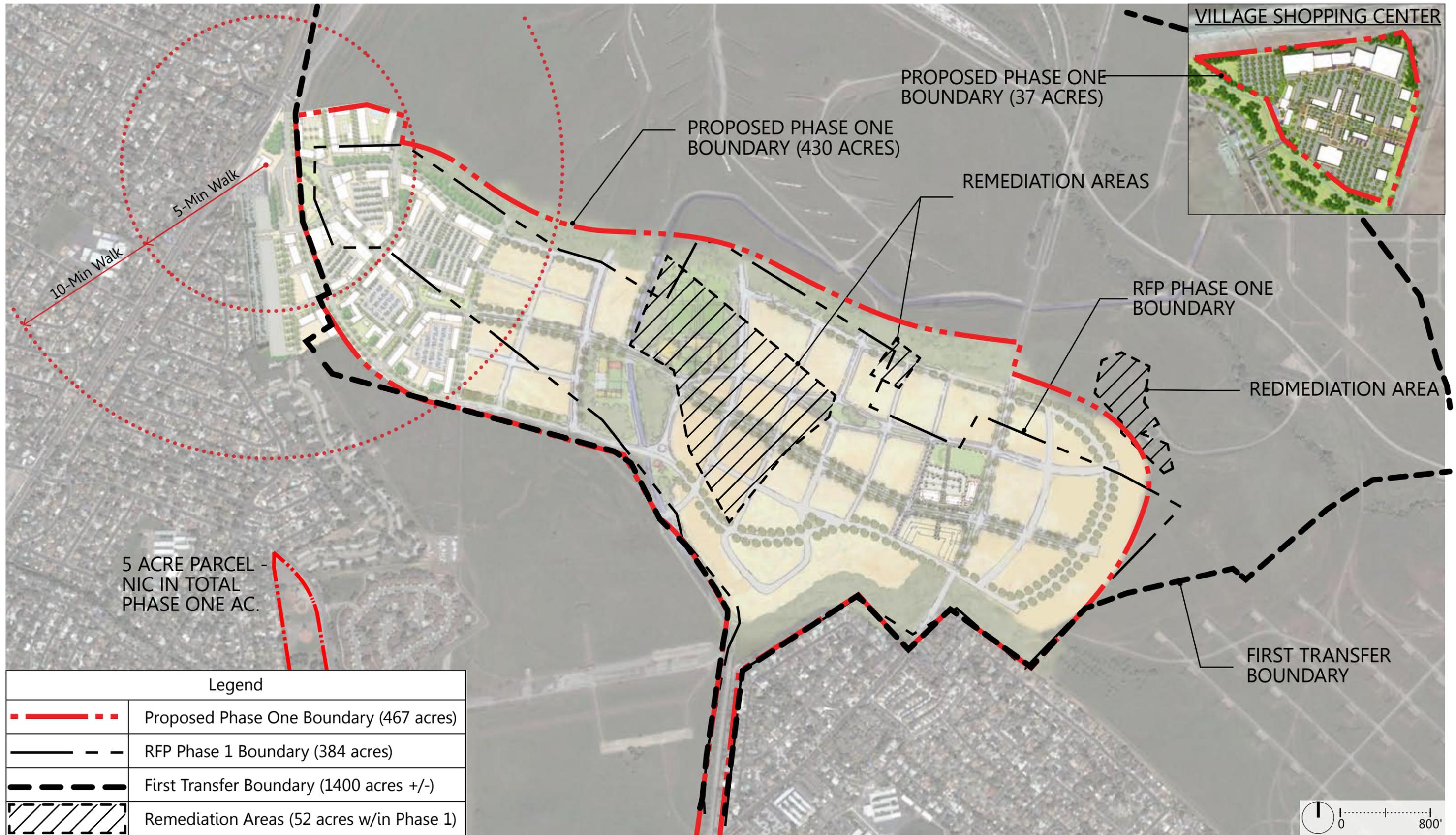


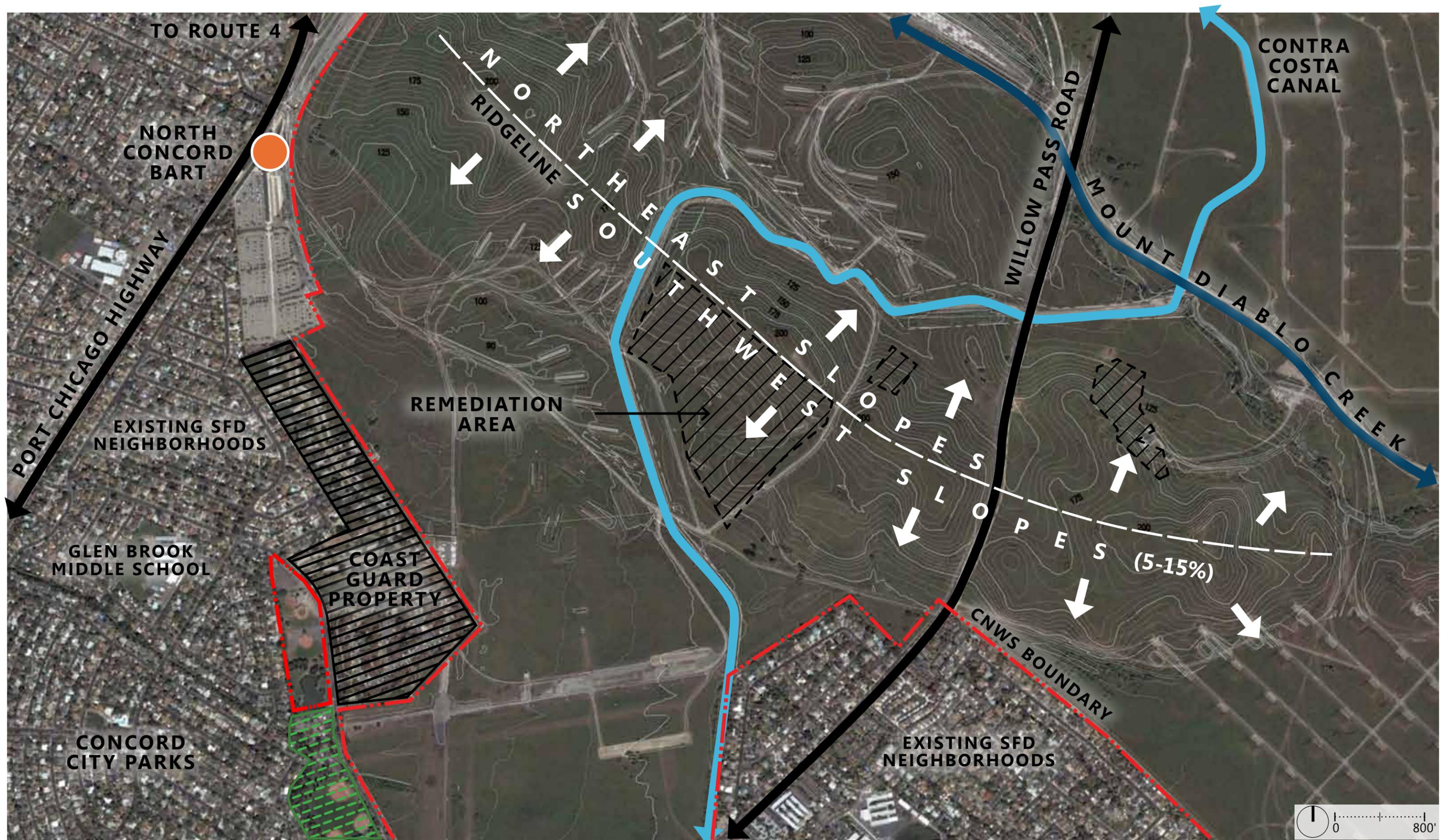
# Appendix

C

Conceptual Drawings















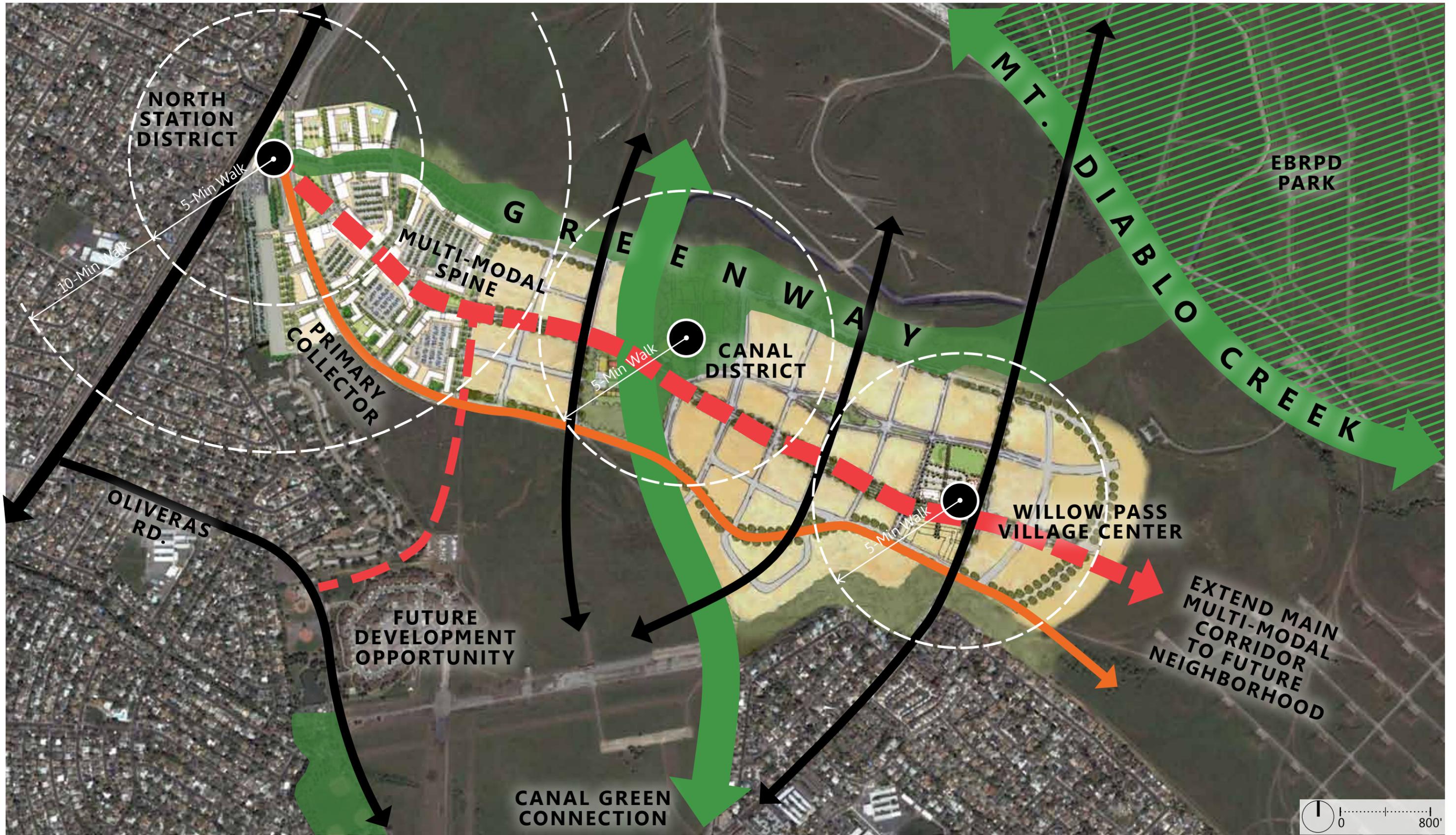
Implementation of the Concord Reuse Plan: Phase One

Medium Density  
Multi-family/Attached (18-24 DU/AC)

Figure 7









Key	Program Area	Total SF	DU's
MU	"Main Street" Retail	145,00	-
MU	"Main Street" 2nd Flr Office	80,000	-
OFF	Office (Basement Parked)	185,000	-
A-HDR	High Density Residential - Affordable (Surface/Structured Parked)	-	651
M-HDR	High Density Residential - Market (Basement Parked)	-	606
<b>Total</b>		<b>410,000</b>	<b>1,257</b>





Legend

- 1. The North Concord Bart Station
- 2. Main Street Mixed Use
- 3. Town Square
- 4. Office
- 5. Parking
- 6. Los Medanos Blvd



Legend	
	1 Level
	2 Levels
	3 Levels
	4 Levels
	5 Levels





Legend

- 1. Neighborhood Pocket Park with Community Building
- 2. Elementary School
- 3. Los Medanos Blvd
- 4. Yield Street
- 5. Community Street
- 6. Pocket Park
- 7. Enhanced crosswalk
- 8. Single Family Homes

- Community Building
- K-6 School
- LDR (6-15 du/ac)



Detached SFD (8-12 du/ac)



Detached SFD (6-10 du/ac)



Community Building



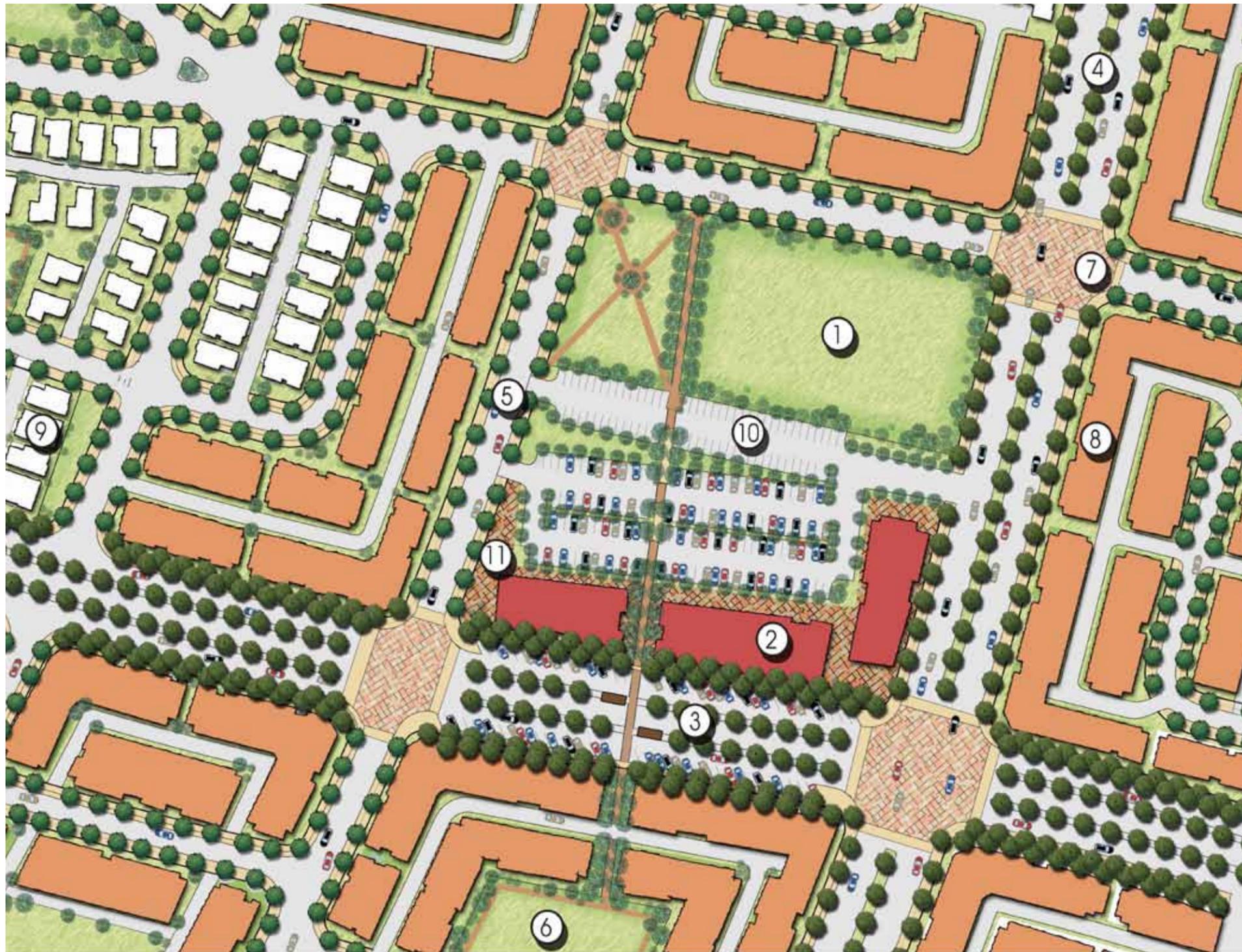
Community Garden



Health and Wellness



Pedestrian Linkages



Legend

- |                                                |                      |                       |                            |
|------------------------------------------------|----------------------|-----------------------|----------------------------|
| 1. The Village Green<br>Public Gathering Space | 3. Los Medanos Blvd  | 6. Pocket Park        | 9. Single Family Homes     |
| 2. Mixed Use Retail /office                    | 4. Willow Pass Road  | 7. Enhanced crosswalk | 10. Weekend Farmers Market |
| 5. Community Street                            | 8. Multifamily Homes | 11. Retail Plaza      |                            |



Village Center



Village Green



Weekend Farmer's Market

- Mixed Use (FAR 0.5)
- MDR (18-24 du/ac)  
Attached Housing
- LDR (6-15 du/ac)  
Detached Housing



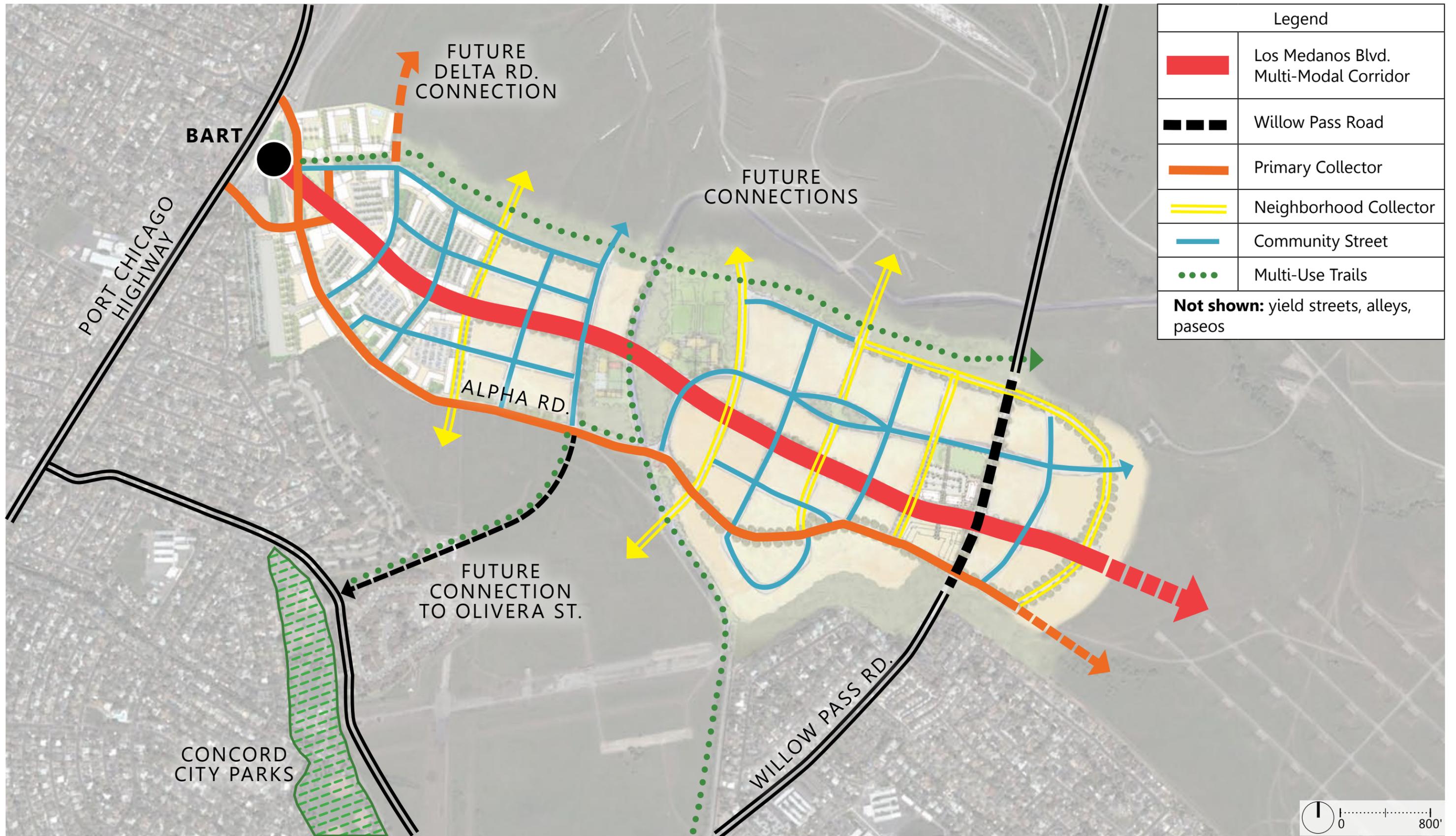
Village Retail

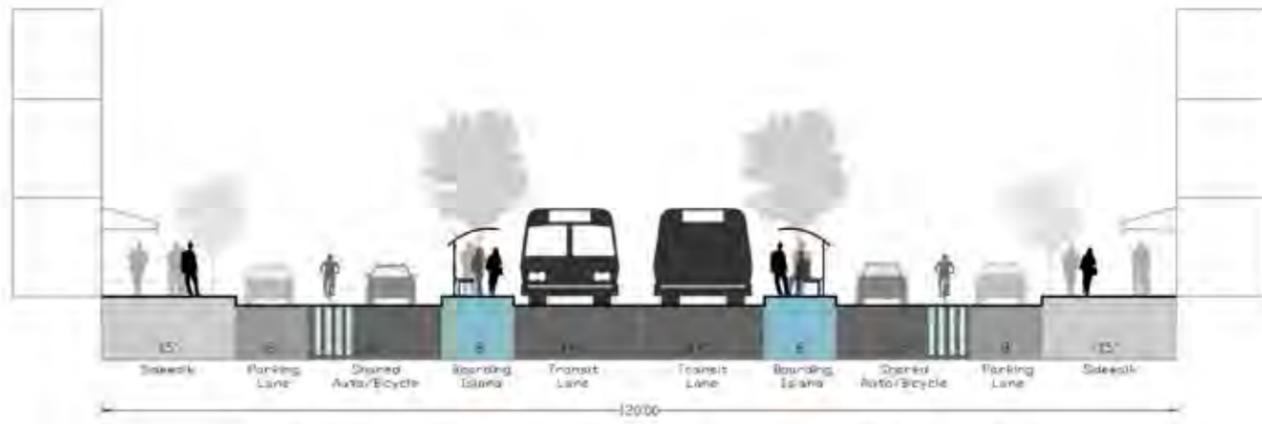
Land Use	Total SF
Commercial/ Retail	325,000 SF



Legend	
	1 Level
	2 Levels
	4 Levels

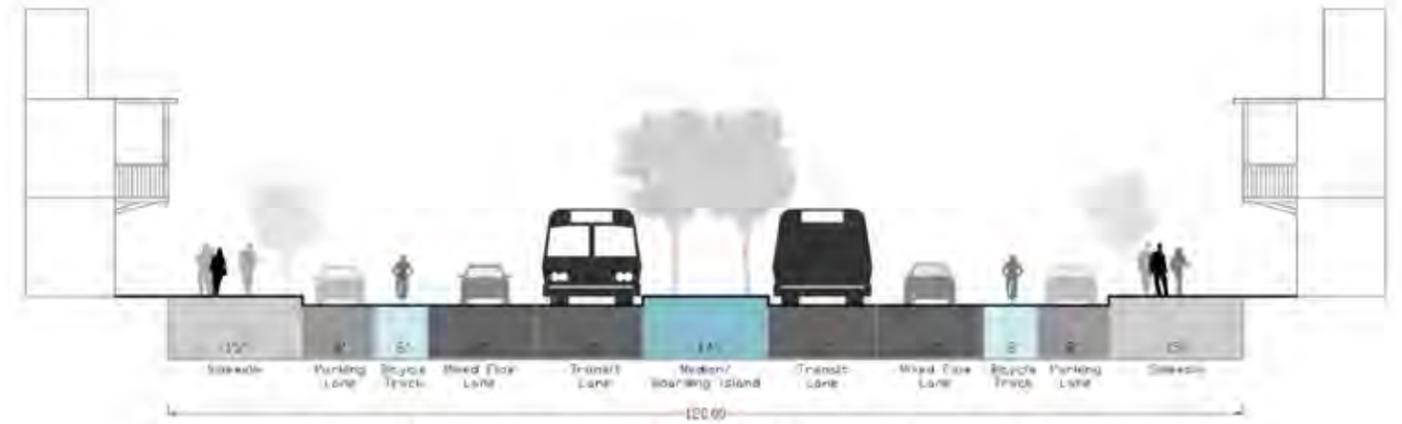






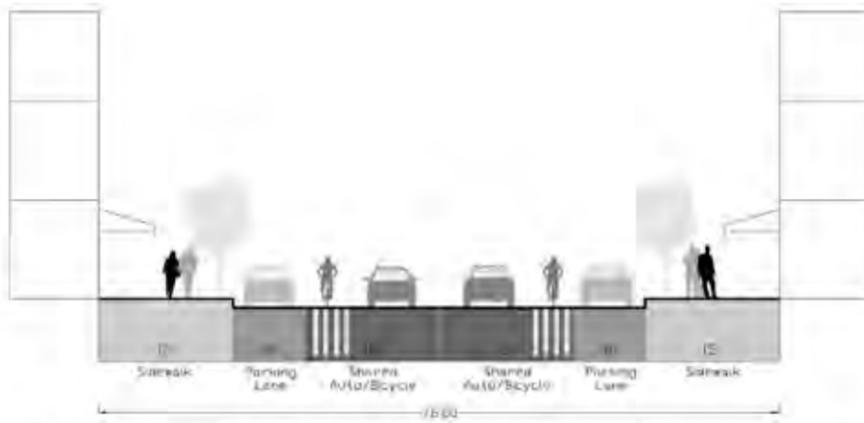
Los Medanos Blvd Alt 1 @ Willow Pass Village Center

- 104' No on Street Parking
- 120' With on Street Parking



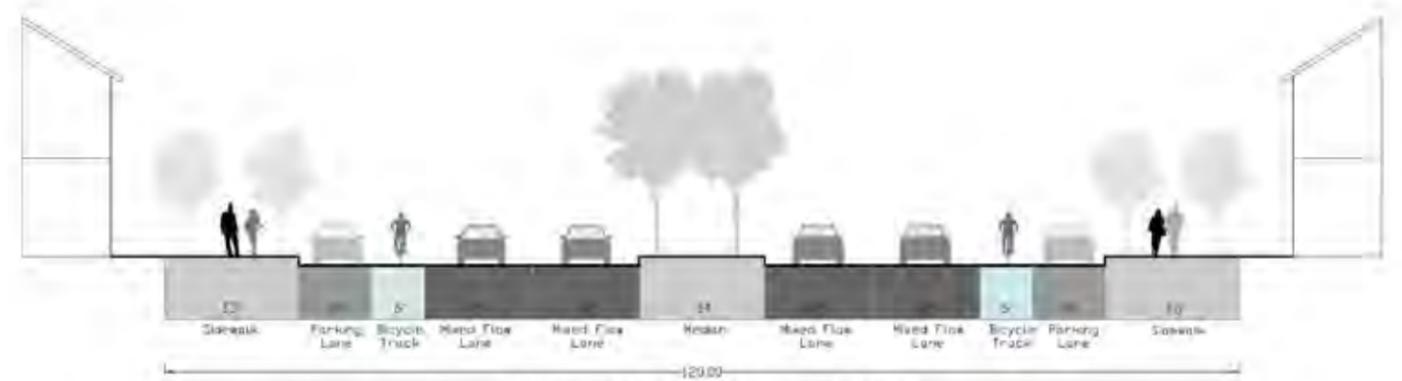
Los Medanos Blvd Alt 2 @ Village Residential

- 104' No on Street Parking
- 120' With on Street Parking



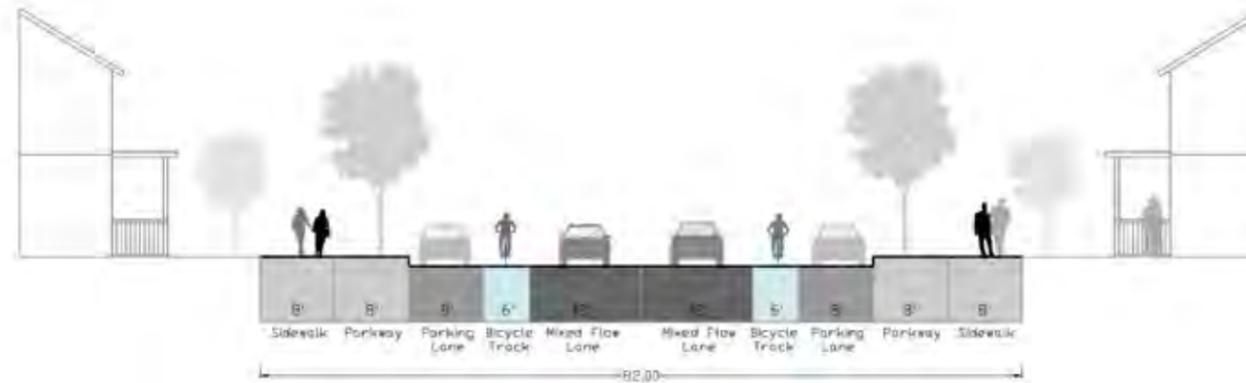
Los Medanos Blvd Alt 3 @ North Station District Main Street

- 60' No on Street Parking
- 76' With on Street Parking

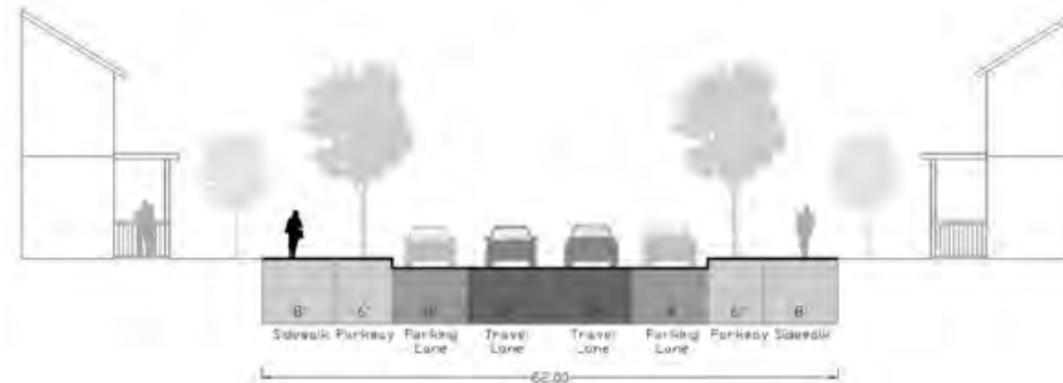


Willow Pass Rd/Delta Rd

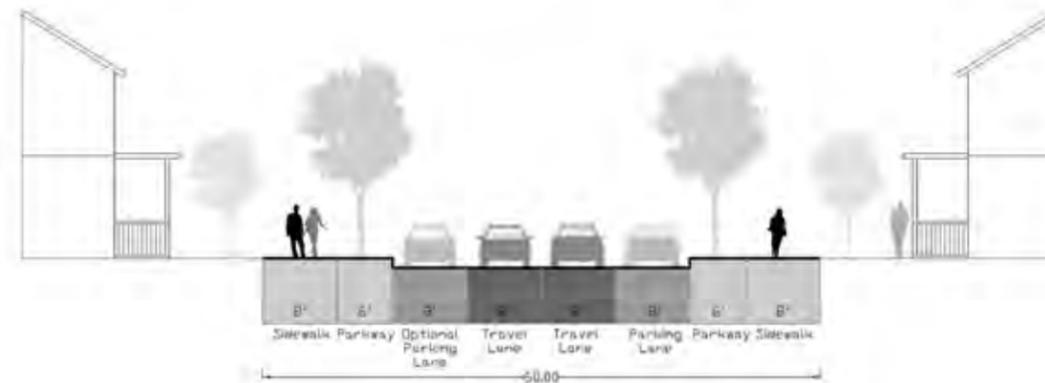
- 104' No on Street Parking
- 120' With on Street Parking



Primary/Neighborhood Collector St



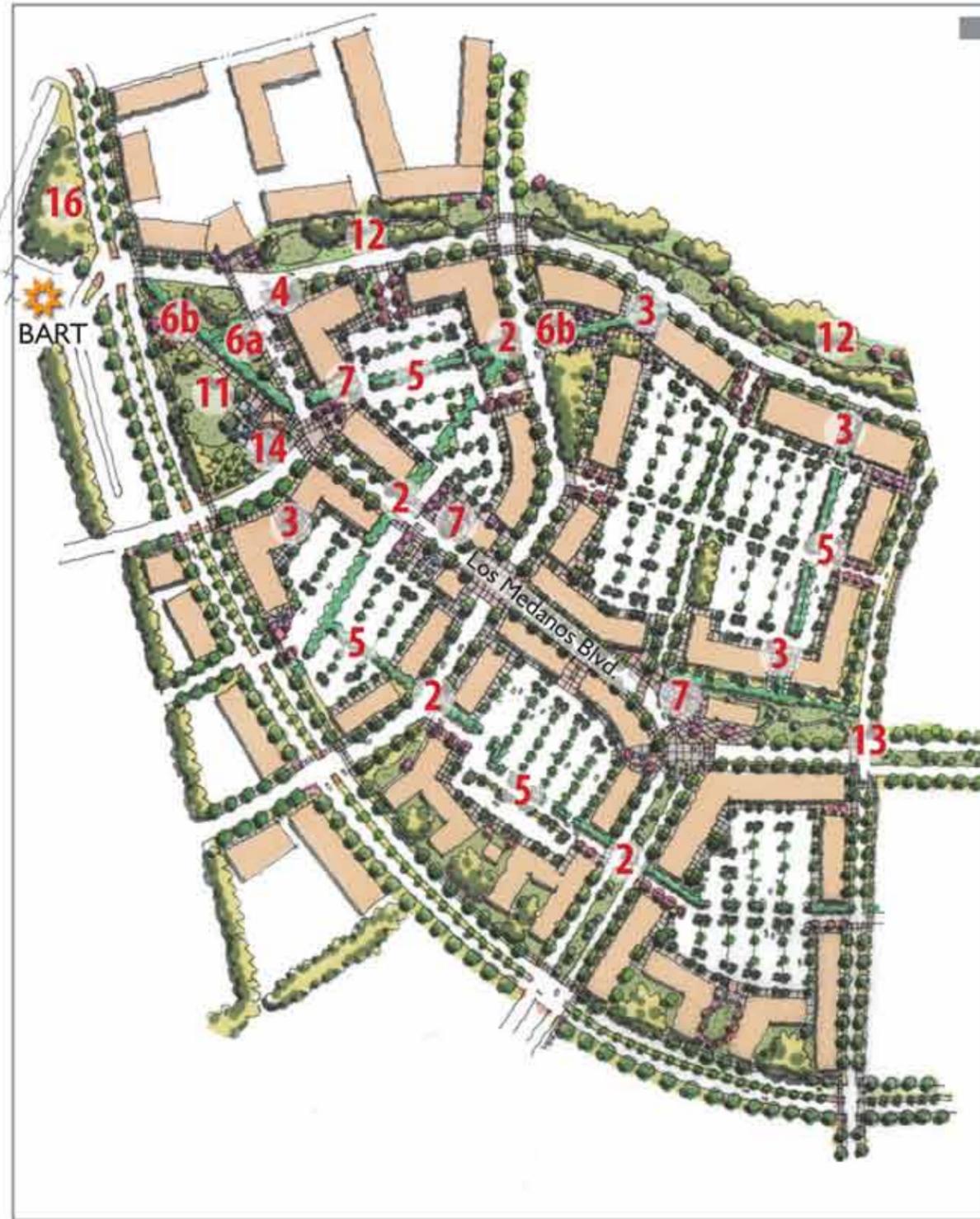
Community Street



Yield Street

- 52' Street Parking on One Side
- 60' Street Parking on Both Sides

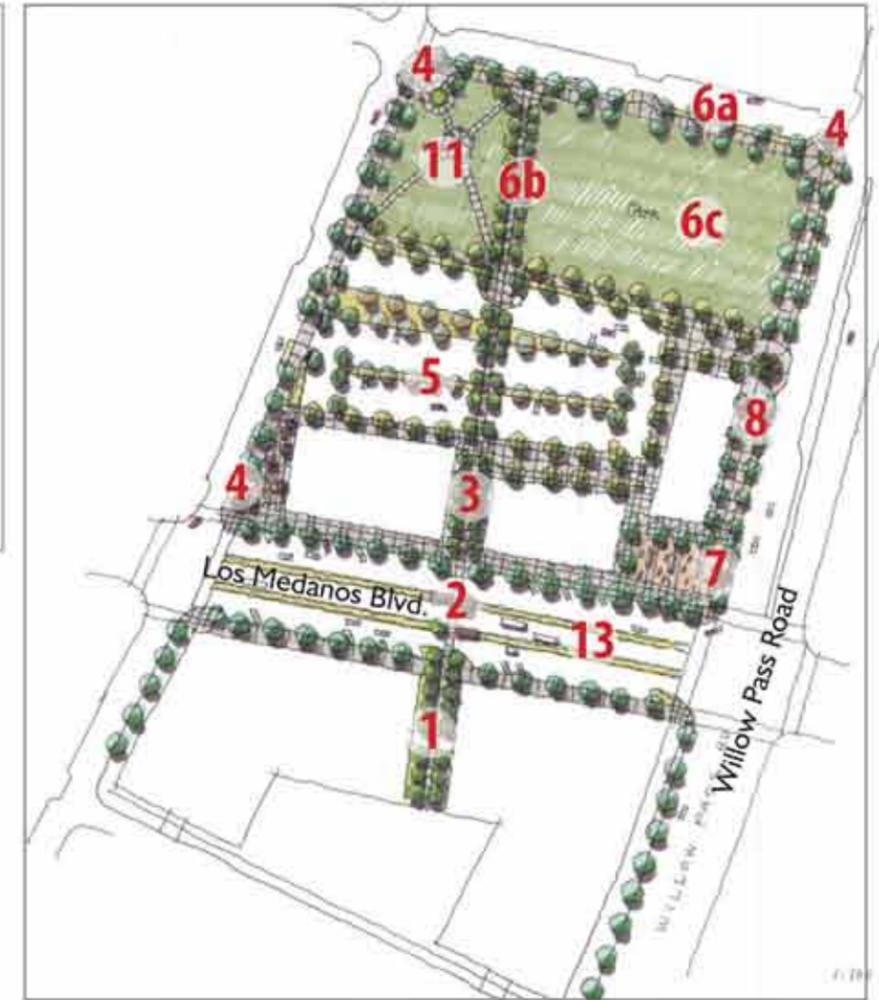




A. North Station District



B. Village Residential



C. Willow Pass Village Core

1. Residential Paseo
2. Paseo Crossing Boulevard
3. Retail Paseo
4. Active Corner
5. Paseo through Parking
6. Park
  - a. Park Edge Promenade
  - b. Internal Park Promenade
  - c. Recreation Green
7. Corner Retail Paseo
8. Widened Sidewalk
9. East-West Connectors
10. Buffer
11. Civic Green
12. Greenway
13. Los Medanos Blvd.
14. Civic Square





A. North Station District



B. Village Residential



C. Willow Pass Core

Residential paseos are provided where front entries face one another or face a park. Paseos are richly landscaped as they constitute residents front yards and are likely to be where neighbors stop and chat. They are eighteen to twenty-five feet wide with ornamental planting and low fencing to delineate private from public. A minimum five-foot sidewalk provides for comfortable circulation.





A. North Station District



B. Village Residential



C. Willow Pass Core

Where paseos cross streets parking is replaced with bulb-outs to narrow the street and slow traffic. Special paving, portal elements and directional kiosks enhance these areas and improve pedestrian safety by making crossings distinct and highly visible.





A. North Station District



B. Village Residential



C. Willow Pass Core

Where paseos transition to retail uses, site elements, such as benches, lighting, paving, and architectural portals, communicate a change in land uses. Paseos widen to thirty feet to allow storefronts to face the paseo and provide elements, such as outdoor seating and dining, which activate the space and enhance vitality.





A. North Station District



B. Village Residential



C. Willow Pass Core

Retail corners on major streets, such as Los Medanos Boulevard, are highlighted by a break in street tree planting and the use of specimen or identity trees. Bulb-outs and special paving at crosswalks calm traffic and enhance pedestrian safety. Store fronts orient to the corner with gathering plazas, seatwalls, planting and fountain or art elements to activate the space and promote use and social vitality





A. North Station District



B. Village Residential



C. Willow Pass Core

Paseos through parking have special paving and planting at crossings to alert vehicles to their presence. They are screened from parking with planting where appropriate.





A. North Station District



B. Village Residential



C. Willow Pass Core

The Community Park is a destination for active, passive and civic activities. It is made of several components that give it structure and make it an important part of the circulation network.

- a. Park Edge Promenade  
A 12' promenade with double row of trees provides an attractive, comfortable place to stroll and highlights the presence of the park within the streetscape.
- b. Internal Park Promenade  
This promenade helps define civic and recreational spaces within the park and is part of a direct connection between the park, retail and residential uses. The double row of trees provides much-needed shade and is also a rich visual amenity.
- c. Recreation Green  
The recreation green allows for organized and informal sports play.



6A 6D



6B



6C



A. North Station District



B. Village Residential



C. Willow Pass Core

The corner retail plaza creates restaurant and retail-oriented space that is open to the community and highly visible to street traffic. Enhanced hardscape, moveable seating, dining patios, decorative lighting and fountains or other art elements make this place inviting to spend time in and create an easily identifiable meeting spot within the community. Distinct planting distinguishes the space from the rest of the streetscape.





A. North Station District



B. Village Residential



C. Willow Pass Core

A widened sidewalk creates a strong connection between the corner retail plaza and the park, drawing users between the two destinations by foot and facilitating the use of both.





A. North Station District

Several east-west spines provide non-motorized connections through the community connecting the greenway and future commercial/flex uses through plan area neighborhoods to existing neighborhoods to the west and south. In some cases these connectors are part of the streetscape but with enhanced bicycle and pedestrian facilities, such as Class I bike lanes and widened sidewalks. One of the connectors takes advantage of the existing canal alignment and will be a multi-purpose trail through the civic green and school green to the greenway. Activity nodes will be provided along the connector and may include rest stops, exercise stations, play areas or dog parks. Distinct planting, identifier trees, special lighting and seating will make the connectors attractive, safe and inviting elements of the open space and circulation system.



B. Village Residential



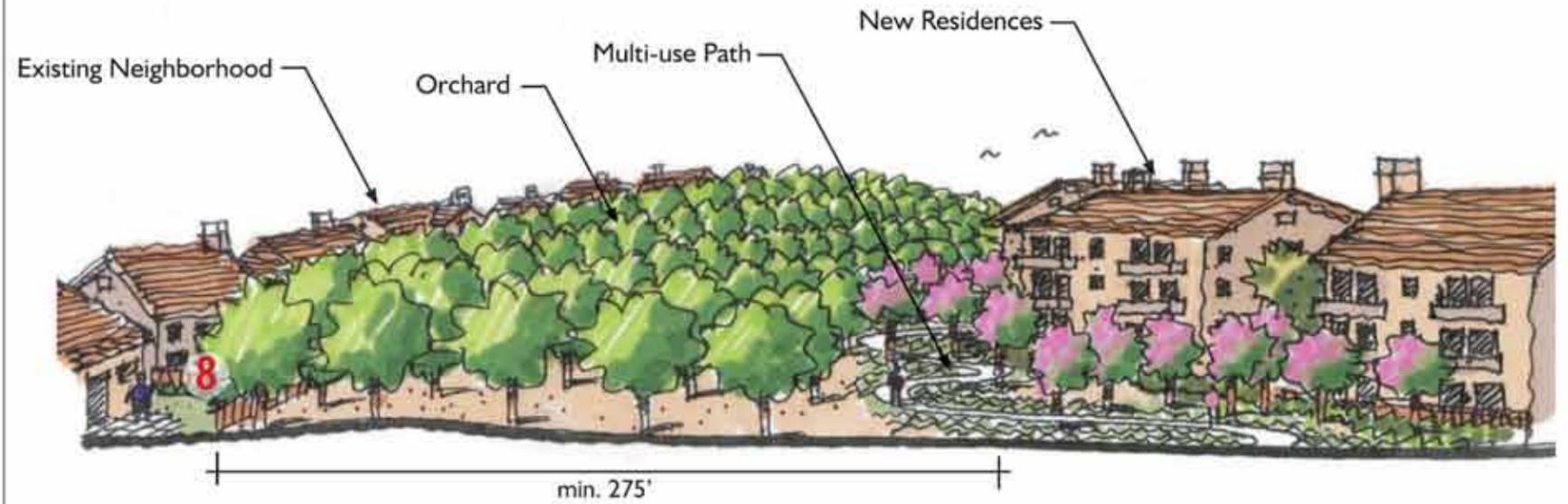
C. Willow Pass Village





A. Transit Oriented Development

A minimum 275' buffer (neighborhood frame) is provided along the plan edge adjacent to existing neighborhoods. This buffer will include a berm planted with harvestable evergreen orchard trees over disked understory, a twelve-foot multi-purpose trail through low hydroseeded bunch grasses. This buffer will evoke the local agricultural history with a rustic, remnant orchard feel. In addition to providing a visual and sound buffer for existing neighborhoods, this area becomes a recreation opportunity and visual amenity, as well as a potential local food source and revenue generating opportunity for the community.





The civic green provides a large central public space for community buildings, ceremonial greens and plazas suitable for holding events such as festivals, farmer's markets, Fourth of July Celebrations, etc. Combined with the School Green, the civic green is part of a large public open space spanning the community from the buffer to the west of the plan area to the greenway along the northeast. Together they create a strong visual sense of open space as an integral and prominent part of the community.



A. Transit Oriented Development





A. North Station District

A generous greenway follows the northeast edge of the plan area, providing a unique linear open space and non-motorized circulation route along the entire length of the plan area from the TOD area at the north to the southeast end of the community. The greenway connects the future sports park to the Civic Square and BART station, allowing regional visitors to travel by public transit and bicycle to the park. The greenway will provide landscape-based stormwater management and will celebrate Concord's California setting and agricultural past with naturalistic, climate appropriate planting and orchard groves. Activity nodes along the greenway will provide recreational opportunities and draw residents from the neighborhoods. Activities may include dog parks, natural play areas, exercise stations, community gardens and orchards.





A. North Station District



B. Village Residential



C. Willow Pass Core

Los Medanos Boulevard becomes the central organizing circulation spine of the community. As a Complete Street, Los Medanos includes bike lanes and generous pedestrian sidewalks, becoming an important part of the open space network. Segments of the streetscape in commercial and higher density areas are enhanced with "Main Street" amenities, such as benches, planters, kiosks, art, etc. The street's importance in the overall hierarchy is reflected in its scale and landscape treatments. Distinct street trees, enhanced sidewalk and crosswalk paving, traffic calming at crossings, street lighting and furnishings are all used to express the importance of this street within the community.





A. North Station District

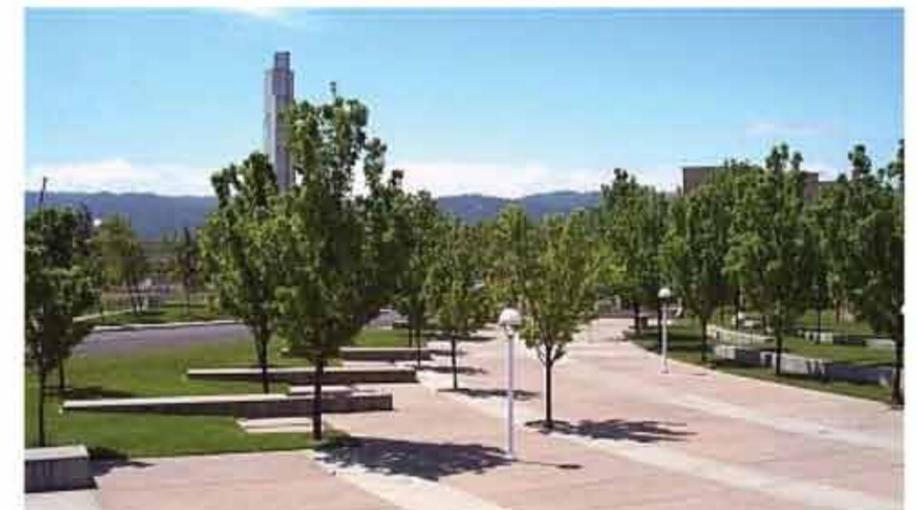


B. Village Residential



C. Willow Pass Core

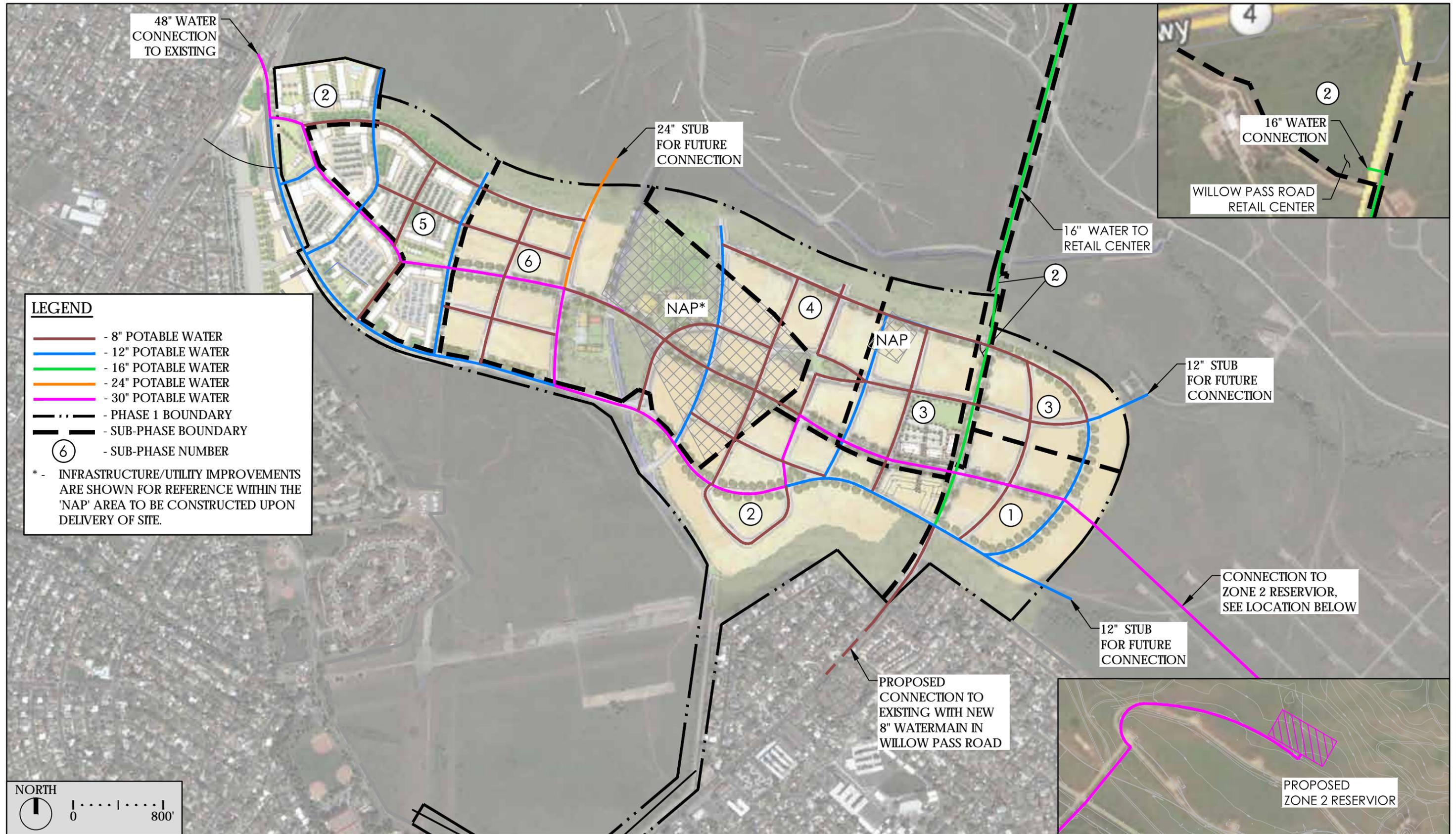
The Civic Square is a contemporary interpretation of the traditional town green. As the central open space in the TOD area, the Civic Square offers a space to meet, gather, rest and observe in the higher density area of the community. Open lawn allows for informal activities; hardscape areas can be used for gathering, performances, markets or festivals; and sculptural elements express the character of the place and create landmarks. Residents of the TOD may use the Civic Square as their backyard.

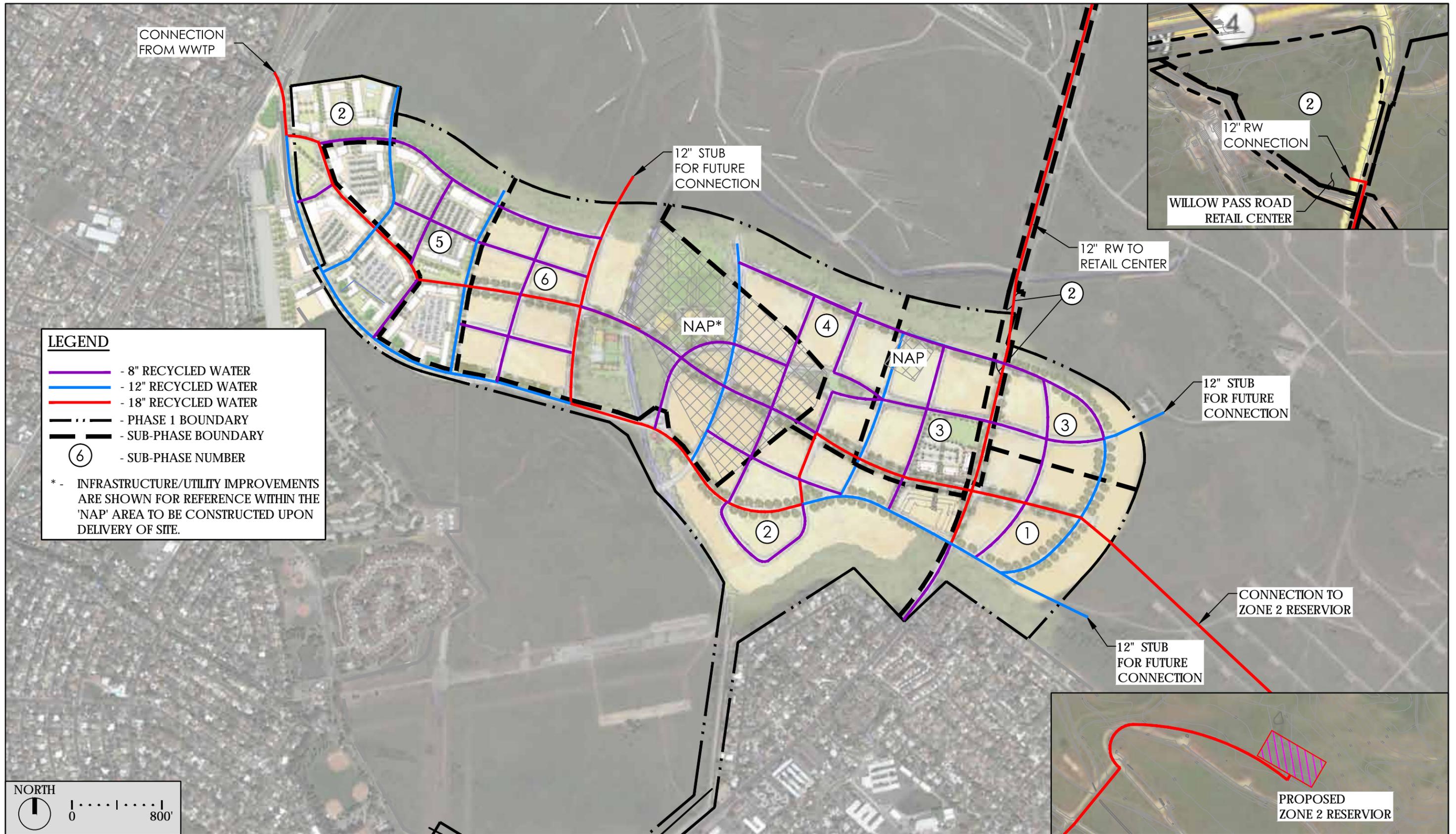




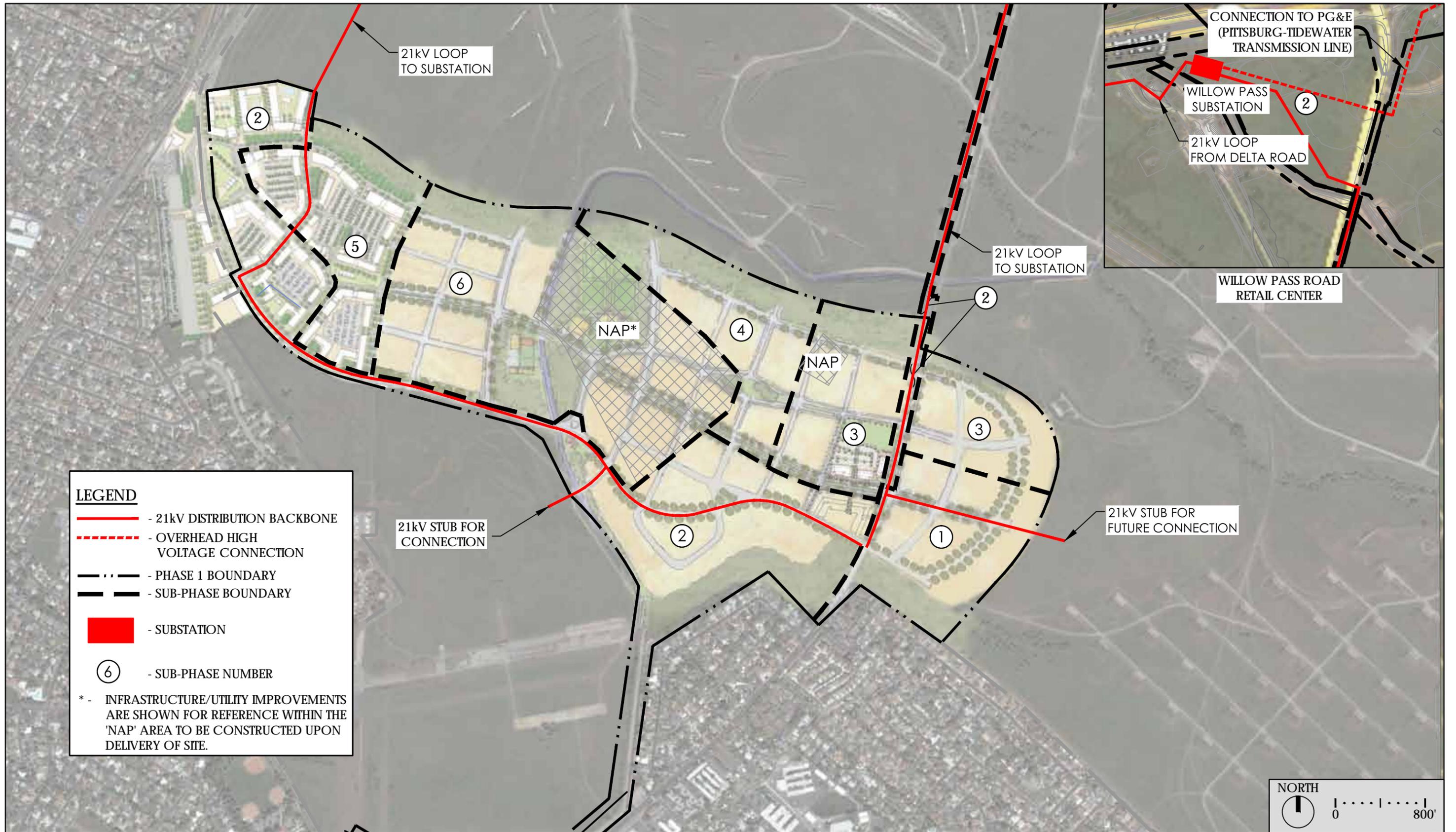


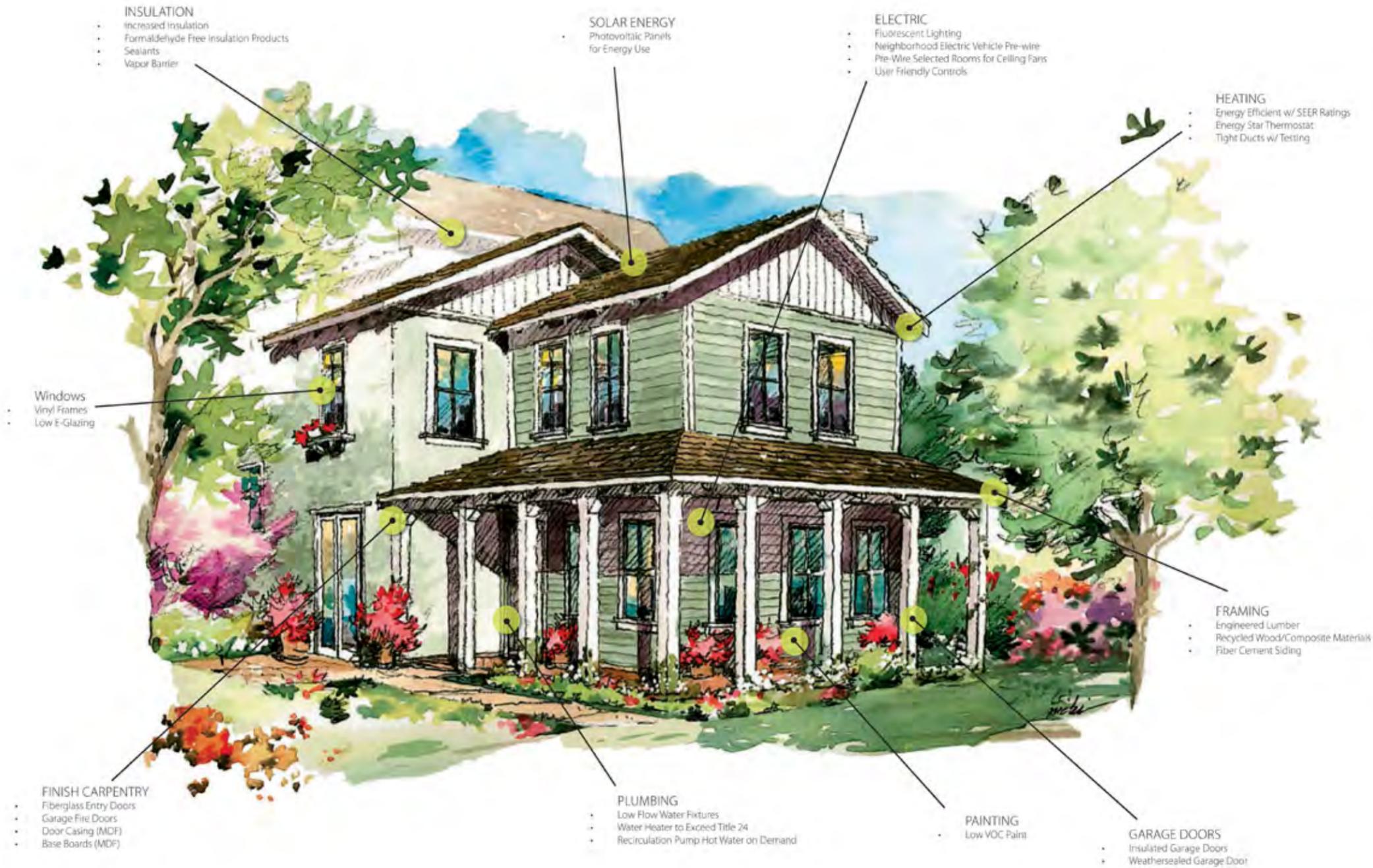












### SUSTAINABLE ELEMENTS

- CALGREEN for Homes
- LEED for Neighborhood Development
- Within walking distance of downtown
- Near train station
- CALGREEN for Homes
- Close proximity to jobs
- Energy efficient lighting, windows, and appliances
- High-tech wiring, communication, and networking infrastructure
- 100% of roofs solar ready
- Low-flow fixtures
- Low water use landscape
- Limited turf
- High efficient irrigation systems
- Construction waste management system



### ZERO ENERGY HOMES

- NightBreeze™ ventilation system
- Spray cellulose insulation in walls & ceilings
- Expandable foam and caulk
- Engineered lumber for headers & beams
- Exposed particleboard sealed
- Compact fluorescent light bulbs
- Ceiling fans
- Bundled wiring package (RG-6 & Cat 5e)
- Faucets with flow reducers
- Roof Overhangs
- Photovoltaic panels
- On-Demand hot water w/ motion sensors
- 5/8" gypsum wallboard
- Insulated concrete foundation
- Advanced infiltration reduction system
- I-joists for 2-story homes
- OSB for subfloor and wall sheathing
- Concrete roof tile
- R-38 attic insulation
- Large areas of tile
- Solar hot water w/ instant gas heater
- Low E-2 Milgard SunCoat™ windows
- 15% recycled flyash in concrete
- Fiber-cement HardiPlant™ (50-year)
- TechShield™ radiant barrier sheathing
- Recycle of waste wood



# Appendix

D

Affordable Housing Tax Details



## APPENDIX D | 9% TAX CREDIT AND DENSITY ANALYSIS

SunCal anticipates a total of 793 affordable units of which 235 would be very low, 186 would be low, and 372 would be moderate. This does not include an additional 130 to 260 units of housing for formerly homeless persons or the 60 units set aside for Habitat for Humanity self-help housing.

Figure 1. Tax Credit and Density Analysis

	District Name	Development Phase One Property		Residential Units			Population	Commercial Area	
		Acres	Percent of Area Plan	Single Family	Townhome	Multifamily	Total Units	Total	Square Feet
9%	TOD Core	20	37%	-	-	380	380	710	179,000
4%	Central Neighborhood	11	6%	20	120	20	150	330	6,000
	Citywide Parks	22	6%	-	-	-	-	-	-
	Central Greenway	75	19%	-	-	-	-	-	-
	TOD Neighborhood	13	14%	-	70	240	310	590	-
	Village Center	20	30%	-	60	90	150	290	104,000
	Village Neighborhood	188	23%	1,140	560	-	1,700	4,390	-
	Commercial Flex	35	17%	-	-	-	-	-	320,000
	<b>Total</b>	<b>384</b>	<b>18%</b>	<b>1,150</b>	<b>810</b>	<b>740</b>	<b>2,700</b>	<b>6,310</b>	<b>609,000</b>

9% deal(s) will be either in the transit-oriented development (TOD) core or TOD neighborhood at approximately 40 dwelling units/acre (DU/AC).

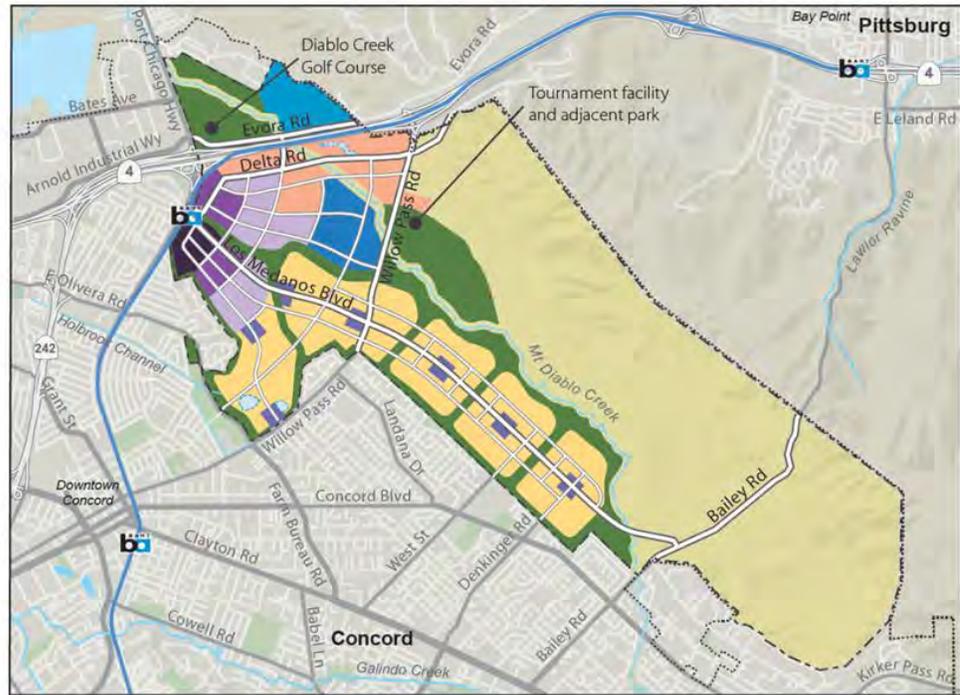
4% deal(s) will likely be in the central neighborhood or village center and at a lower density, i.e., approximately 25 DU/AC.



Figure 2. Area Plan Diagram

9% deal(s)  
40 DU/AC

4% deal(s)  
25 DU/AC



Legend

**Transit Oriented Districts**

- North Concord TOD Core
- North Concord TOD Neighborhood

**Neighborhoods**

- Central Neighborhood
- Village Center
- Village Neighborhood

**Civic and Institutional**

- Campus
- First Responder Training Center

**Commercial**

- Commercial Flex

**Conservation, Open Space and Recreation Lands**

- Conservation Open Space
- Greenways, Citywide Parks, and Tournament Facilities

Not shown: Potential bike and pedestrian facilities in the Regional Park.

**Primary Circulation Network**

- Through Streets
- Collector Streets

0 1,250 2,500 5,000 Feet

- Planning Area Boundary
- City of Concord Boundary
- Seasonal Wetlands (delineated as of 2010)
- 2010 Concord parks

**Activities Included**

- Housing
- Regional Auto Access
- Offices
- Transit, Bicycling + Walking Priority
- Shopping
- Parks and Recreation
- Schools + Public Facilities
- Conservation and Species Protection
- Research + Development



Figure 3. Preferred Alternative Development Program

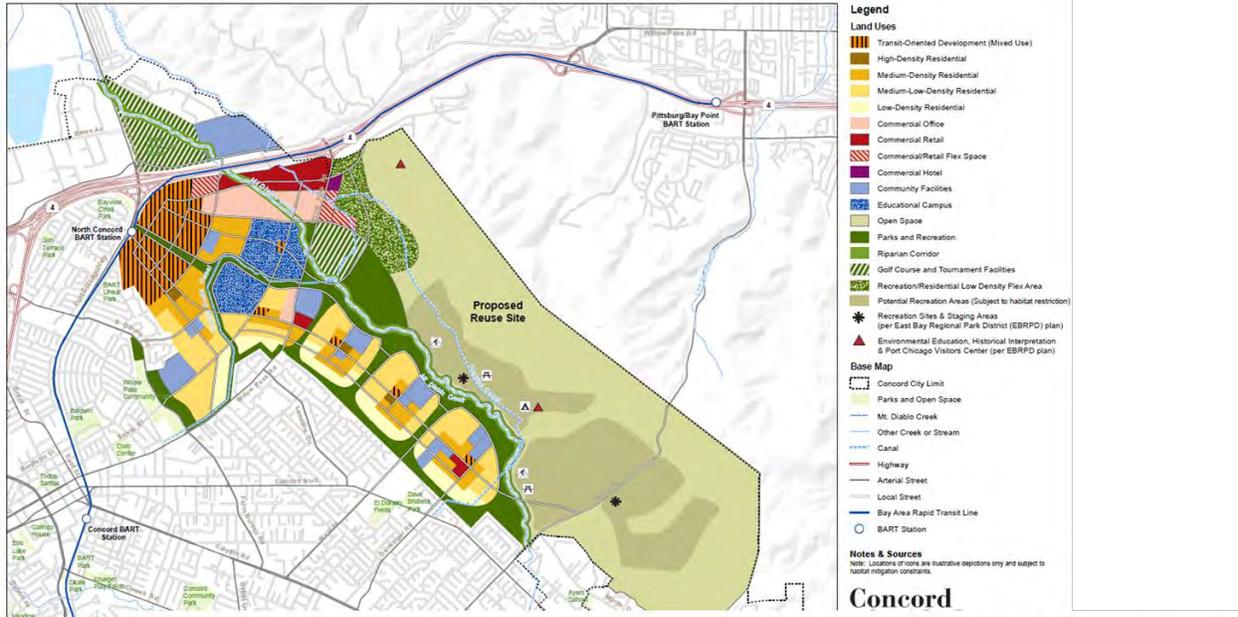


Table 2-1: Preferred Alternative Development Program

Land Uses	Units and Population					
	Acres	Gross DU/Acre	Units	% of Units	Persons/Unit	Population
<b>Residential</b>						
High-Density Residential	20.0	50.0	1,000	8.1%	1.85	1,850
Medium-High Density Residential	38.0	30.0	1,080	8.8%	1.85	1,998
Mixed-Use Residential/Retail	35.0	30.0	1,050	8.6%	1.85	1,943
Medium-Density Residential	300.0	15.0	4,500	36.7%	2.11	9,495
Medium-Low Density Residential	353.0	10.0	3,530	28.8%	2.94	10,378
Low-Density Residential (see Note 1) 150 acres are designated as Recreation/Residential Low Density Flex Area	278.0	4.0	1,112	9.1%	2.82	3,138
<b>Total</b>	<b>1022.0</b>		<b>12,272</b>	<b>100.0%</b>		<b>28,800</b>



Figure 4. Nine Percent Deals Score Best When They are Within ¼ Mile from Major Transit

1. Transit Amenities

BART

The project is located where there is a transit station, rail station, commuter rail station, bus station, or public bus stop within 1/4 mile from the site with service at least every 30 minutes during the hours of 7-9 a.m. and 4-6 p.m., Monday through Friday, and the project's density will exceed 25 units per acre. "Rail station" means a heavy-rail or light-rail station within 1/4 mile of the proposed residential development. This includes a planned rail station otherwise meeting this definition, whose construction is programmed into a Regional or State Transportation Improvement Program to be completed within one year of the scheduled completion and occupancy of the proposed residential development. 7 points

BART

The site is within 1/4 mile of a transit station, rail station, commuter rail station or bus station, or public bus stop with service at least every 30 minutes during the hours of 7-9 a.m. and 4-6 p.m., Monday through Friday. "Rail station" means a heavy-rail or light-rail station, within 1/4 mile of the proposed residential development. This includes a planned rail station otherwise meeting this definition, whose construction is programmed into a Regional or State Transportation Improvement Program to be completed within one year of the scheduled completion and occupancy of the proposed residential development. 6 points

Bus Routes 15 and 315 in the project vicinity do not meet headway frequency. Routes 10 and 310 do, but are too far from the site.

The site is within 1/3 mile of a public bus stop or rail station with service at least every 30 minutes during the hours of 7-9 a.m. and 4-6 p.m., Monday through Friday. "Rail station" means a heavy-rail or light-rail station, within 1/4 mile of the proposed residential development. This includes a planned rail station otherwise meeting this definition, whose construction is programmed into a Regional or State Transportation Improvement Program to be completed within one year of the scheduled completion and occupancy of the proposed residential development. 5 points

The site is located within 1/4 mile of a regular public bus stop, or rapid transit system stop. (For Rural set-aside projects, full points may be awarded where van or dial-a-ride service is provided to tenants, if costs of obtaining and maintaining the van and its service are included in the budget and the operating schedule is either on demand by tenants or a regular schedule is provided) 4 points

The site is located within 1/3 mile of a regular public bus stop or rapid transit system stop 3 points



Figure 5. Cap & Trade Funding Requirements

New Cap & Trade funding approved by the state will likely be modeled after the Prop 1C TOD regulations:

- (4) have a minimum Net Density, upon completion of the Housing Development, not less than that shown on the following table

Project Location Designation <sup>(1)</sup>	MINIMUM NET DENSITY REQUIREMENTS	
	Residential only Projects	Mixed-use Project (floor area ratio, FAR)
Large City Downtown	60 units per acre	>3.0
Urban Center	40 units per acre	>2.0
All other areas	25 units per acre	>1.5

Refer to Section 102 (l) and (bb) for definitions of Project Location Designations

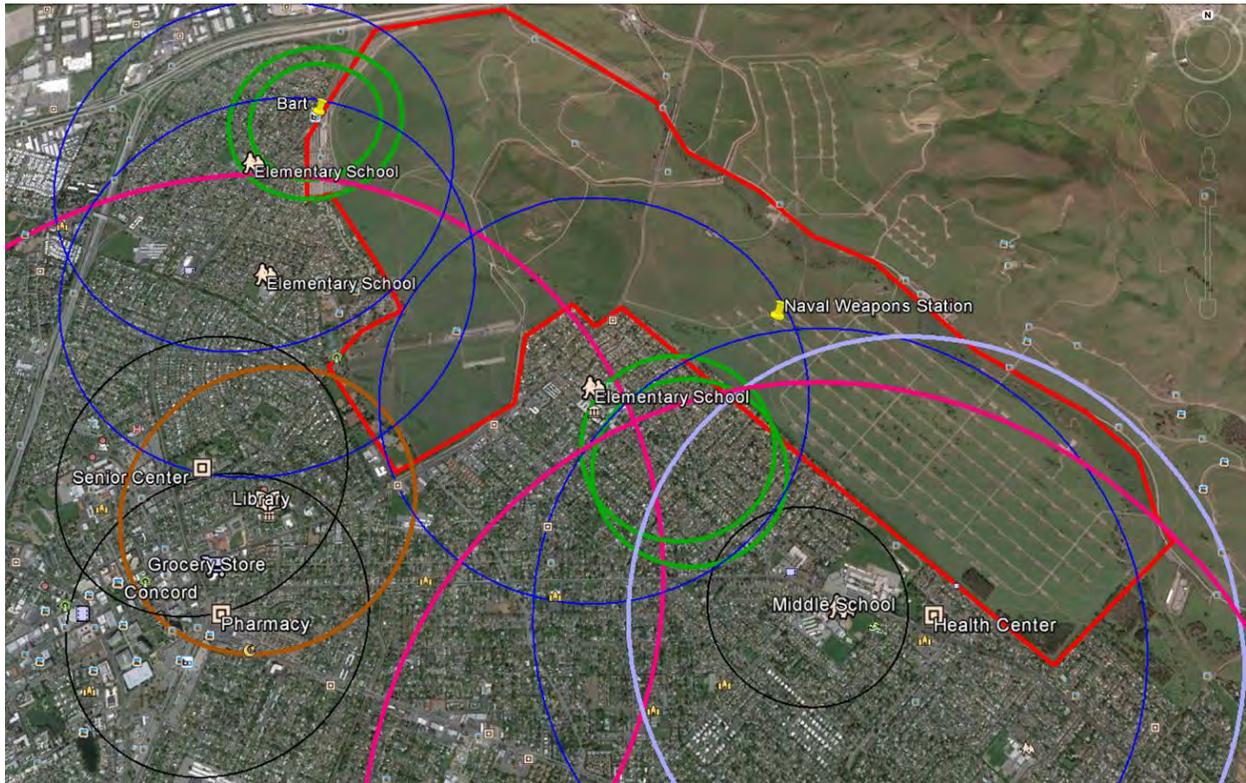
- (B) within one-fourth mile from a Qualifying Transit Station, measured in a straight line from the nearest boundary of the Housing Development parcel to the outer boundary of the Transit Station site; and
- (C) within one-half mile from a Qualifying Transit Station, measured from the nearest boarding point of the Qualifying Transit Station to the entrance of the residential structure in the Housing Development furthest from the Transit Station along a walkable route. The walkable route, after completion of the proposed Project, shall be free of negative environmental conditions that deter pedestrian circulation, such as barriers; stretches without sidewalks or walking paths; noisy vehicular tunnels; streets, arterials or highways without regulated crossings that facilitate pedestrian movement; or stretches without lighted streets.

Figure 6. Concord Naval Weapons Station





Figure 7. TCAC 9% Site Amenities



Transit in green; schools in blue; library in orange; grocery store in pink; health center in purple; and out of area in black



Figure 8. North-Most Portion of the Site  
Scores for 9% Tax Credits with Internet or with Proximity to BART

Amenity	Name	Address	Distance (miles)		Points	Notes
Transit (MANUAL, see below)			N/A		5	
Elementary School OR			0.28		2	
Middle School OR			N/A		0	
High School			N/A		0	
Public Park			N/A		3	
Pharmacy			0.76		0	
Library			N/A		0	
Senior Center			N/A		0	
Grocery Store OR			1.5	Size (interior sq. ft.)	3	
Farmers Market			N/A	43000	0	
Hospital			N/A	N/A	0	
High Speed Internet (MANUAL)			N/A		0	
				Family	13	
				Senior	11	

NOTES:

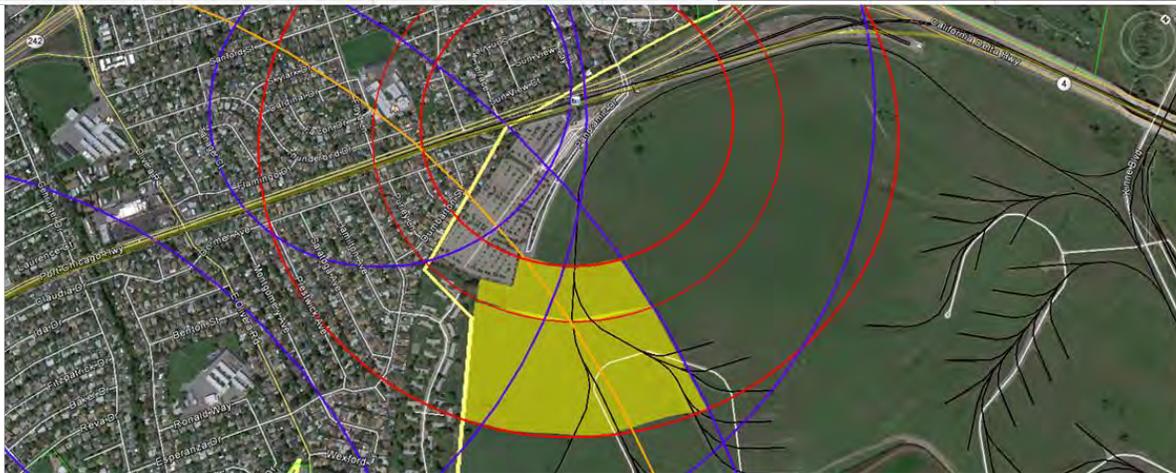




Figure 9. Example: 9% Site within TOD Core

4.6 Acres @ 40 DU/AC = 184 very low and low income units (mix of senior and family). Here we would likely leverage TOD Cap & Trade Funds. There is the potential to explore providing some higher density moderate income housing in this area, too.



In this scenario, we would need an approximate seven-acre parcel within the village center or central neighborhood at a lower density (i.e., 25 DU/AC). These units would be funded with 4% tax credits and MHP and could include operating subsidies from the housing authority or Veteran Affairs to house veterans, at-risk youth, and other special needs populations.



# Appendix

E

Environmental Permitting Details



## APPENDIX E | PERMITTING COORDINATION AND COMPLIANCE

The design of the land use plan itself provides a good foundation for the permitting process. The natural open space will serve as an extension of the existing habitat to the contiguous northeast and as a buffer for the urban development, minimizing an edge effect. The corridor to be established along Mt. Diablo Creek will serve as both an urban amenity and provide the conservation benefits of a healthy riparian habitat along the edge of the project. The density and distribution of seasonal wetlands in the urban areas will result in relatively low wetland impacts for a project of this size.

From a NEPA standpoint, our objective will be to persuade the Army Corps of Engineers to rely upon an Environmental Assessment/Finding of No Significant Impacts instead of an EIS. With slightly over ten acres of wetlands fill anticipated, the best way to achieve this result may be through some additional avoidance. If the total fill can be brought down into the single digits, perhaps by negotiating some avoidance and/or preservation of the Old Airfield wetlands, then an Environmental Assessment/Finding of No Significant Impacts should be within reach. This would make completing a 404(b)(1) alternatives analysis less formidable, particularly given that considerable avoidance is already built into the plan and the wetland resources (other than the Old Airfield wetlands) are fairly thinly distributed across the plan area.

We expect that Regional Water Quality Control Board will require an exhaustive analysis of a variety of factors related to Mt. Diablo Creek, including restoration opportunities, storm water quality issues, and the level of Low Impact Developments built into the project from an urban development perspective. We anticipate that the Regional Water Quality Control Board will have jurisdiction over the project. Our strategy will be constructive engagement that will consider avoidance of the creek impacts associated with this development.

We would anticipate early meetings with the Army Corps of Engineers, Environmental Protection Agency, and Regional Water Quality Control Board at a senior level. The purpose of these meetings would be to reach agreement on the scope of NEPA and 404(b)(1) review, as well as a schedule for processing. Initial meetings would involve Lieutenant Colonel John Morrow, the commander of the Army Corps of Engineers San Francisco District, and Jane Hicks, the civilian regulatory chief; Jason Brush, the head of the Wetlands Section of Region 9 at the Environmental Protection Agency; and Bruce Wolfe, the Executive Officer of the Regional Water Quality Control Board, and Keith Lichten, the newly-appointed head of wetlands permitting. Additionally, we would



recommend contact with Joe Alcara, the top-ranked civilian director in the Army Corps of Engineers South Pacific Division, which oversees the San Francisco District.

With respect to endangered species, we would not recommend a habitat conservation plan. Instead, we believe a programmatic Section 7 consultation that covers both phases of development, but not necessarily the natural open space, would have the best chance for an expeditious conclusion. This has the added benefit of streamlining the individual 404 permits within the plan area and is probably the approach most likely to receive a favorable priority from the understaffed U.S. Fish and Wildlife Service. With respect to the California Department of Fish and Wildlife, an independent 2081 permit (rather than a 2080.1 concurrence letter), together with a streambed alteration agreement, would be the best approach.

At the U.S. Fish and Wildlife Service, we would recommend working with Cay Goude, an assistant field supervisor and his supervisor, Jennifer Norris, who in our experience is a pragmatic manager and would be able to assist in finding workable outcomes. We have good working relationships with Scott Wilson, who heads the regulatory program in the California Department of Fish and Wildlife's Yountville office, and Kevin Hunting, who heads the endangered species program in Sacramento. Both of these relationships will be useful in expediting the permit process.

SunCal anticipates having a full-time environmental compliance coordinator who will be responsible for reporting to the City under the Mitigation and Monitoring Reporting Program, overseeing the construction Storm Water Pollution Prevention Plan (SWPPP), scheduling and documenting environmental, cultural resource, and noise and air quality monitoring activities, updating plans and permits as necessary, and auditing the site on a regular basis for compliance with existing project plans and permits. A centralized environmental compliance coordinator familiar with the Mitigation and Monitoring Reporting Program and permit requirements allows for active decision making in an environment of sometimes conflicting goals to ensure site compliance, as well as early identification of potential conflicts. Where conflicts are identified the environmental compliance coordinator will notify the City and provide supporting studies and documentation to assist with agency consultation. Additionally, a robust environmental compliance education program will be implemented during construction, with frequent updates during site coordination meetings as site conditions dictate.

Biological monitors that will conduct pre-construction nesting bird surveys, rare plant surveys, bat surveys, and spot inspections to ensure that riparian, oak tree, aquatic resource, and nesting bird buffers are maintained, will report to the environmental compliance coordinator. Reports will be available to the City to inform future development and restoration efforts. While no protected cultural resources have been



identified in the Phase One area, SunCal will have on-call cultural resource monitors to respond in the event of an unanticipated discovery. Construction storm water compliance will be managed and overseen by a Qualified SWPPP Practitioner, who will be responsible for conducting on-site monitoring and reporting to a Qualified SWPPP Developer if amendments or updates to the SWPPP are necessary. The environmental compliance coordinator will provide a checklist to the City on a monthly basis documenting compliance for the month and identifying potential emerging issues. This ensures that there is active identification and prevention of conflicts to protect on- and off-site natural resources.



# Appendix

F

Environmental Clean-up Details



## APPENDIX F | ENVIRONMENTAL CLEAN-UP

### 1 | Areas of Potential Environmental Concern

The Phase One area includes areas of potential environmental concern that may require remediation to accommodate the proposed land use mix. Areas of potential concern include:

- Military Munitions Response Program Site 11 – Guam Way
- Former Inland Burn Area Site 13/Railroad Siding Excavation
- One Preliminary Assessment Re-Verification Investigation Sites T10, T11, T12, and Southern Railroad Excavation
- Preliminary Assessment Re-Verification Investigation Borrow/Dredge Fill Area
- Installation Restoration Site 22A Group 1 Magazine Area
- Installation Restoration Site 22A Group 2 Magazine Area
- Installation Restoration Site 27
- Arsenic in shallow soil
- Railroad tracks and ballasts
- Underground and above ground storage tanks.

#### 1.1 | Military Munitions Response Program Site 11 – Guam Way

This site comprises approximately 5.1 acres. Contaminants include petroleum hydrocarbons and chlorinated solvents. Construction debris, metal debris, and munitions are present. A Draft Final Remedial Investigation is currently in agency review. Soil excavation and a soil vapor survey will be conducted. Land Use Covenants, including dig restrictions, building restrictions, and engineering controls will be implemented. The City has excluded this site from the Phase One area. Additional assessment and remediation will be conducted by the U.S. Navy. Remediation by the master developer is not anticipated.

#### 1.2 | Former Inland Burn Area Site 13/Railroad Siding Excavation

This site comprises approximately 60 acres, but the area of actual burning is only three acres in size. The area includes Military Munitions Response Program Sites 3 and 9, as well as a railroad sidings excavation. Contaminants include volatile organic compounds, metals, fuel hydrocarbons, and perchlorate. Munitions and explosive debris are present.



Land Use Covenants, including dig restrictions are anticipated. The City has excluded this site from the Phase One area. Additional assessment and remediation will be conducted by the U.S. Navy. Remediation by the master developer is not anticipated.

### [1.3 | Preliminary Assessment Re-Verification Sites T10, T11, T12, and Southern Railroad Excavation](#)

These sites comprise approximately 1.2 acres and includes three former trenches (possibly burn or disposal pits) that were subsequently filled and mounded. No contaminants have been reported, but a geophysical survey identified metal (likely re-bar). An ecological risk assessment is pending prior to a no further action request being submitted. The City anticipates receiving a no further action finding with unrestricted use. Remediation by the master developer is not anticipated.

### [1.4 | Preliminary Assessment Re-Verification Borrow/Dredge Fill Area](#)

This site comprises approximately 30 acres and was used to supply soil for construction. The excavations were subsequently filled with dredge spoils. Chemicals of concern reportedly include unspecified chemicals, munitions and explosives of concern, and munitions in soil. The City anticipates receiving a no further action finding with unrestricted use. Remediation by the master developer is not anticipated.

### [1.5 | Installation Restoration Site 22A Group 1 Magazine Area](#)

This site comprises approximately 2.4 acres and has six munitions storage magazines. Chemicals of concern include arsenic in soil. A Final Draft Record of Decision has been submitted. The City anticipates receiving a no further action finding with unrestricted use. Remediation by the master developer is not anticipated.

### [1.6 | Installation Restoration Site 22A Group 2 Magazine Area](#)

This site comprises approximately 154 acres and has 39 munitions storage magazines. Contaminants include arsenic in shallow soil. A Final Draft Record of Decision is in preparation. The City anticipates receiving a no further action finding with unrestricted use. Remediation by the master developer is not anticipated.

### [1.7 | Installation Restoration Site 27](#)

This site comprises approximately 0.41 acres and was formerly operated as a weapons engineering and chemical laboratory. Site features include Buildings IA-20 and IA-36, and Solid Waste Management Unit 8. Chemicals of concern include polychlorinated biphenyl compounds, pesticides (chlordane), lead, mercury, and volatile organic compounds. A Record of Decision was submitted in 2013 recommending a no further action designation. It has been approved by the Environmental Protection Agency, Department of Toxic Substances Control, and Regional Water Quality Control Board. The



U.S. Navy has reportedly received the no further action designation. Remediation by the master developer is not anticipated.

### 1.8 | Arsenic in Shallow Soil

Arsenic-based herbicides were formerly used to control vegetation across the Phase One area. There is potential for arsenic to occur in shallow soil across wide areas. There is potential for the herbicide carrier (e.g., hydrocarbon) to occur. The master developer may be responsible for remediation.

### 1.9 | Railroad Tracks and Ballasts

Former operations included use of trains to transport, load, and store munitions. Arsenic-based herbicides were used to control vegetation. Other potential contaminants associated with the railroad tracks and ties include fuel and lubricating hydrocarbons, polychlorinated biphenyl compounds, wood preservatives (e.g., creosote, chromated copper arsenate, alkaline copper quaternary, copper azole, borates, sodium, and potassium silicate), and metals. Approximately 2.7 miles of tracks and ballasts are present within the Phase One area, including the revetments. The tracks and ballasts have not been assessed. The master developer may be responsible for remediation.

Review of assessment activities at Sites 22 and 22A indicates that these sites were used in a similar way by the U.S. Navy (i.e., rail sidings) in a similar timeframe (mid-1940s to mid-1960s). Based on these sites it appears that arsenic impact is generally restricted to the upper six to 18 inches of soil. If required the following approach would be used to mitigate contaminated soil associated with the railroad:

- Removal of tracks, ties, and elevated portions of railway during normal grading operations
- Segregation of shallow impacted soil from deeper non-impacted soil
- Transport of soil to staging area within the CRP Plan Area
- Removal of coarse ballast material by mechanical separation
- Characterization of impacted soil by laboratory analyses, including determination of total and soluble concentrations
- Based on the total and soluble concentrations, volume of impacted soil, and land use mitigation method would be determined (e.g., reuse on site as deep fill, deep burial/entombment, direct disposal, likely as non-hazardous waste at a local Class II landfill, or stabilization/solidification).



## 1.10 | Underground and Above Ground Storage Tanks

Underground and above ground storage tanks were used to store fuels. The tanks have been removed and closed. Underground storage tank IA-36, located near Building IA-36, was removed in 1997. This site has received a no further action designation from Contra Costa Health Services and the Regional Water Quality Control Board. Underground storage tank IA-58, located near Building IA-58, was removed in 1997. This site has received no further action designation from Contra Costa Health Services and the Regional Water Quality Control Board. The site was closed to commercial/industrial standards, consistent with the proposed land use. However, the potential exists for the occurrence of undiscovered residual fuels in soil and dissolved-phase fuel components in groundwater. The master developer may be responsible for remediation of undiscovered hydrocarbons.

## 2 | General Assessment and Remediation Approach

Once an environmental condition is identified that warrants additional assessment or remediation, the general steps described below will be applied. For the purposes of this discussion, it is assumed that the environmental condition occurs in a reasonably defined area (i.e., a site).

- **Define Project** | identify goals and objectives based on proposed land use, define project driver(s), and select staff for project.
- **Gather Existing Site Information** | reports and other records; contaminant concentrations, distribution, and mass in place; historical land use and as-built plans, historical aerial photos, and other applicable data; develop Site Conceptual Model.
- **Identify Data Gaps.**
- **Develop Project Approach** | identify regulatory and stakeholder requirements, define executable project stages and milestones, define path to closure and evaluate alternative green and sustainable work practices.
- **Define Scope of Work** | develop project execution plan for field operations (assessment or remediation), select assessment or remedial methods and technologies, and select appropriate subcontractors.
- **Develop Site-Specific Health and Safety Program** | conduct hazard identification analysis, prepare Site-Specific Health and Safety Plan, prepare Job Safety Analysis documents.



- **Prepare Initial Deliverables** | prepare notifications and permit applications, define data quality objectives, prepare assessment Work Plan or Remedial Action Plan, prepare Sampling and Analysis Plan, and prepare Quality Assurance Project Plan.
- **Implement Field Operations** | review Health and Safety Plan and Job Safety Analysis documents, submit pre-mobilization package to subcontractors to ensure compliance with scope, policies, and procedures, mobilize to site, conduct utility clearance, continuously steward Health and Safety Plan, Job Safety Analysis documents, and near losses, and manage waste.
- **Prepare Site Characterization and/or Remedial Action Report** | compile site data, review and validate laboratory data, verify that data quality objectives are satisfied, prepare draft report, discuss findings, conclusions, and recommendations with City and regulators, finalize site characterization or remedial action report, submit report for City and regulatory agency review, and refine path to closure based on results.

## 2.1 | Remedial Design Approach

If active remediation is warranted, the final remedial design steps that will be followed include:

- **Identify Impacted Media** | and chemicals of concern, including concentrations, distribution, and mass in place, toxicity characteristics, physical, and chemical properties.
- **Develop Site Conceptual Model** | evaluate geology and hydrogeology, potential receptors, review analog sites to evaluate successful or unsuccessful applications of remedial alternatives, and evaluate migration potential of soil vapor and groundwater.
- **Conduct Human Health Risk Assessment and Ecological Risk Assessment** | determine risks posed by the chemicals of concerns and impacted media.
- **Identify Remedial Endpoints** | develop clean-up goals based on risk, proposed land use, and regulatory requirements. If appropriate, apply engineering controls, institutional controls, or Land Use Covenants in lieu of active remediation.
- **Evaluate Applicable Remedial Methods** | if active remediation is warranted, evaluate and select remedial method and equipment based on chemicals of concerns characteristics, distribution, and mass, migration potential, hydrogeological properties, and remedial endpoints, and select system design specifications.



- **Conduct Feasibility Tests** | evaluate feasibility of remedial method by field- or bench-scale feasibility tests.
- **Develop Remedial Design Specifications** | prepare remedial design package, including appropriate drawings and specifications.
- **Prepare Remedial Action Work Plan.**

## 2.2 | Remedial Implementation Approach

To implement the plan for active remediation, the steps that will be followed include:

- Procure materials and equipment
- Select and contract with subcontractors
- Develop the project execution plan
- Implement field operations, including mobilization, staging of equipment and materials, remedial system construction, trenching, well vaults and tie-ins, utility and sewer tie-ins, and demobilization
- System startup test and system startup for continuous operation, including schedule for data collection frequency and locations to be used in system optimization
- Prepare system installation and start-up test report
- System startup for continuous operation
- Continuous system optimization based on trend and data analysis.

## 3 | Contaminant-Specific Remedial Approach

For impacted media, including soil, sediment, groundwater, and soil vapor, the remedial methods discussed in the sub-sections below may be applicable. The remedial method will be selected based on the contaminants of concerns and chemical characteristics, toxicity, concentrations, lateral and vertical extent, mass in place, estimated duration of remediation, capital and operational costs, and other applicable criteria.

### 3.1 | Soil and Sediment

Fuel hydrocarbons:

- Excavation and *ex situ* treatment or disposal
- Soil vapor extraction
- Bioventing
- Thermal desorption
- Chemical dehalogenation
- Solvent extraction
- Stabilization/solidification
- Bioremediation



- *In situ* chemical oxidation
- Natural attenuation.

Lubricating Hydrocarbons:

- Excavation and disposal.

Polychlorinated biphenyl compounds:

- Excavation and *ex situ* treatment or disposal
- Soil washing/acid extraction
- Pyrometallurgical recovery
- *In situ* soil flushing
- Capping/encapsulation.

Perchlorate and propellants:

- *In situ* bioremediation
- Excavation/*ex situ* bioremediation
- Excavation and *ex situ* thermal desorption
- Phytoremediation
- Capping/encapsulation.

Wood preservatives:

- Excavation and *ex situ* treatment
  - Thermal desorption
  - Solvent extraction
  - Incineration/pyrolysis
  - Chemical dehalogenation
  - Bioremediation

- Vitrification
- Capping/encapsulation.

Arsenic and metals:

- Solidification/stabilization
- Vitrification
- Incineration
- *In situ* treatment
  - Soil washing
  - Steam injection and extraction
  - Soil flushing
  - Bioremediation
  - Vitrification
  - Stabilization/solidification
- Capping/Encapsulation.

Chlorinated Solvents and Other Volatile Organic Compounds:

- Excavation and *ex situ* treatment or disposal
- Soil vapor extraction
- Bioventing
- *In situ* chemical oxidation
- Natural attenuation.

Munitions and explosives of concern:

- Exposure and physical removal.



## 3.2 | Groundwater

### Fuel hydrocarbons:

- Groundwater pump and treat
- Air sparge
- Ozone sparge
- *In situ* chemical oxidation
- *In situ* bioremediation
- Biosparge

### Polychlorinated biphenyl compounds:

- Groundwater extraction and *ex situ* treatment
  - Carbon adsorption
  - Chemical oxidation
- *In situ* chemical oxidation.

### Arsenic and metals:

- Groundwater extraction and *ex situ* treatment
  - Precipitation/coprecipitation
  - Membrane filtration
  - Adsorption
  - Ion exchange
  - Permeable reactive barrier
  - Electrokinetic treatment
- Phytoremediation
- Biologic treatment.

### Perchlorate and propellants:

- *In situ* bioremediation
- Excavation/*ex situ* bioremediation

- Dual-phase or multi-phase extraction and treatment
- Natural attenuation.

### Lubricating hydrocarbons:

- Excavation and disposal
- Bioremediation.

- Excavation and *ex situ* thermal desorption
- Phytoremediation
- Capping/encapsulation.

### Wood preservatives:

- Groundwater extraction (plume control) and *ex situ* treatment
- Vertical barrier
- *In situ* bioremediation.

### Chlorinated solvents and other volatile organic compounds:

- Groundwater pump and treat
- Air sparge
- Ozone sparge
- *In situ* chemical oxidation
- *In situ* bioremediation
- Biosparge
- Dual-phase or multi-phase extraction and treatment
- Natural attenuation.



### 3.3 | Soil Vapor

#### Fuel hydrocarbons:

- Excavation and *ex situ* treatment or disposal
- Soil vapor extraction
- *In situ* chemical oxidation.

#### Chlorinated solvents and other volatile organic compounds:

- Soil vapor extraction
- Bioventing.