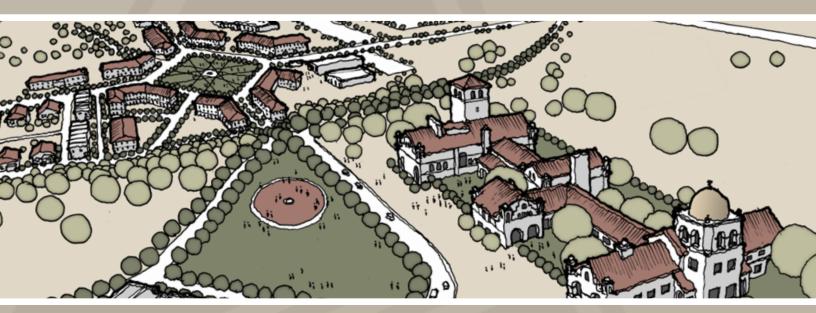
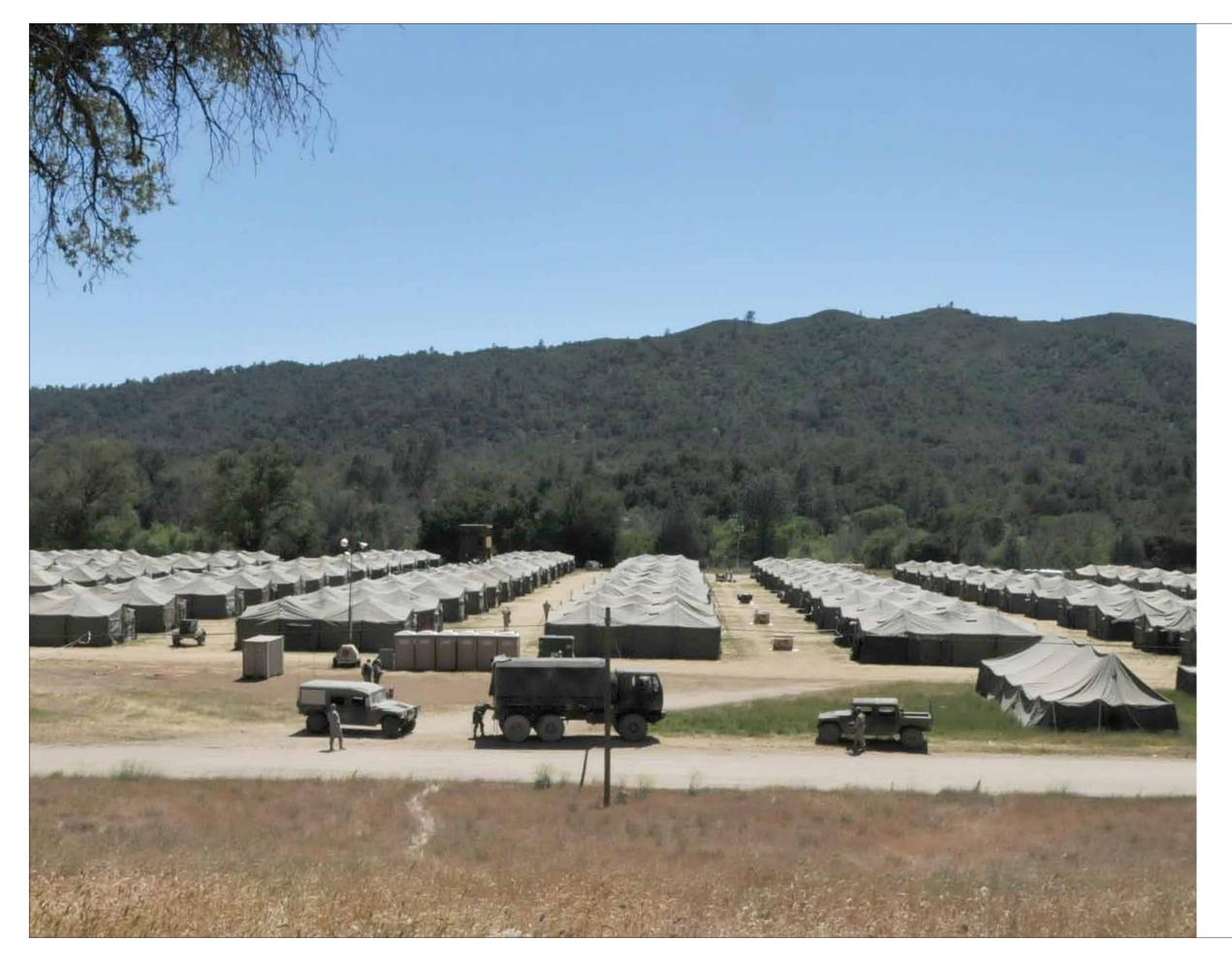
FORT HUNTER LIGGETT

REAL PROPERTY MASTER PLAN DIGEST



THE URBAN COLLABORATIVE, LLC



CONTENTS

| Foreword | 4 |
|---------------------------------|---|
| Background | 6 |
| The Site | C |
| Planning Vision | 2 |
| Design Principles | 4 |
| On Design | 4 |
| Overall Plans | |
| Framework Plan 2 | 6 |
| Illustrative Plan 2 | 8 |
| Regulating Plan | C |
| Parks & Quads Plan 3 | 2 |
| Transportation Plan 3 | 2 |
| Tactical Vehicle Route Plan 3 | 6 |
| Commercial Vehicle Route Plan 3 | 8 |
| Street Tree Plan 4 | C |
| Emergency Access Plan4 | 2 |
| Parking Plan4 | 2 |
| Area Development Plans | |
| Blackhawk Hills ADP4 | 6 |
| Mission Valley ADP 5 | C |
| Hacienda Heights ADP5 | 2 |
| The Future6 | C |
| Acknowledgements 6 | 2 |

FORT HUNTER LIGGETT MASTER PLAN DIGEST

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Scope of the plan

This report summarizes the Real Property Master Plan. Fidelity to the vision, goals, and planning principles can only be achieved by an installation-wide commitment.

This entire planning effort was accomplished through a series of educational planning and training practicums sponsored by Headquarters, US Army Corps of Engineers. Stakeholders throughout the installation and surrounding community received AIA and AICP credits for their participation.

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FOREWORD

elcome to Fort Hunter Liggett, designated in 2005 as the premier western training site for the United States Army Reserve. As the Army's mission and needs continue to grow and change, Fort Hunter Liggett's mission will evolve to support the training needs of Combat Support and Combat Service Support units worldwide. In order to ensure Fort Hunter Liggett is poised to flexibly meet future growth, we embarked upon a master planning process

to sustainably guide development. The results of this collaboration that involved stakeholders from throughout the installation are contained in this Digest.

Fort Hunter Liggett is on the cutting edge of sustainable Army initiatives, including multiple endeavors aimed at fulfilling Executive Order 13514, Federal Leadership in Environmental, Energy,



and Economic Performance. Fort Hunter Liggett has been selected as a net-zero energy installation, participating in a pilot effort throughout the Department of Defense to develop best practices where the installation produces, on site, the same amount of energy it uses annually. Fort Hunter Liggett is starting the process of determining a baseline amount of energy used, pursuing energy efficiency and conservation strategies, and implementing renewable energy projects, including a 1.162 MWdc solar electric system commissioned in April 2012. This system is comprised of two large (1175ft x 45ft) carport structures that will provide shaded parking for Army tactical vehicles while simultaneously delivering power to the installation. Additional plans for solar plants at Fort Hunter Liggett are already underway.

This is an exciting time for Fort Hunter Liggett, and we are pleased to share the results of this planning effort, which builds upon the rich history of the region and ensures Fort Hunter Liggett is poised to remain a relevant asset for the United States Army well into the future.

COL Donna Williams

USAG Fort Hunter Liggett Commander



BACKGROUND

"People make the critical difference; well trained teams with defined objectives are key to success."

- COL James Suriano, Garrison Commander

Fort Hunter Liggett

MISSION, HISTORY, AND LOCATION

stablished in 1941, the U.S. Army Garrison Fort Hunter Liggett, California is the Army's newest training center dedicated to providing premier training sites for Combat Support and Combat Service Support units. Fort Hunter Liggett falls under the senior command of Installation Management Command (IMCOM) Central.

Fort Hunter Liggett provides ranges, training areas, and facilities to support year-round joint, multi-component, and interagency training to prepare Warriors to fight and win the Global War on Terrorism.

Fort Hunter Liggett encompasses four unique, diverse, and geographically dispersed Department of Defense installations located in the northern and central part of California. The headquarters at Fort Hunter Liggett oversees the base operations, training facilities, and housing assets of Fort Hunter Liggett and Parks RFTA. Fort Hunter Liggett also provides lodging and dining facilities at the B.T. Collins Army Reserve Center (Sacramento). (Source: Fort Hunter Liggett Garrison Website)

Fort Hunter Liggett Vision Statement

Recognized as the Best Combat Support Training Center in the Nation.

Fort Hunter Liggett Mission Statement

Enabling Soldiers to Prepare for War While Caring for Their Families



6 FORT HUNTER LIGGETT MASTER PLAN DIGEST
FORT HUNTER LIGGETT MASTER PLAN DIGEST

BACKGROUND



Historic Mission

Originally designated Hunter Liggett Military Reservation in 1941, the installation is named for Lieutenant General Hunter Liggett (1857 - 1935), who commanded the 41st National Guard Division, and later, the First Corps of the American Expeditionary Forces during World War I. He also served as Chief of Staff for General John Pershing. In 1975, the reservation was re-designated Fort Hunter Liggett Military Installation.

Until 1952, fort administration was under Camp Roberts' (17 miles by tank trail) authority. Fort Hunter Liggett was a sub-installation of Fort Ord until November 1993 when the installation came under United States Army Reserve Command. Fort Hunter Liggett is the headquarters for the U.S. Army Combat Support Training Center and serves multi-service active and reserve components.

Fort Hunter Liggett's mission is to maintain and allocate training areas, airspace, facilities and ranges in order to support reserve and active components field maneuvers, live fire exercises, testing, and Institutional Training. Additionally, the installation provides quality of life and logistical support to training units.

(Source: Fort Hunter Liggett Garrison Website)



Historic Hacienda



Lieutenant General Hunter Liggett

THE SITE

ort Hunter Liggett encompasses approximately 167,683 acres situated about 25 miles southwest of King City and about 86 miles south of old Fort Ord in California. In 1940, in anticipation of training Soldiers for combat on WWII European fronts, the War Department purchased over 200,000 acres of local ranch lands between the Salinas River valley divide and the Pacific Ocean. Terrain varying from level valleys bordered by gentle hills to steep, rugged mountains has since provided opportunities for real world training and defense technology testing. At present, 162,000 acres of the installation are used for training, supporting an average of 30,000 personnel over 575,000 training days annually.

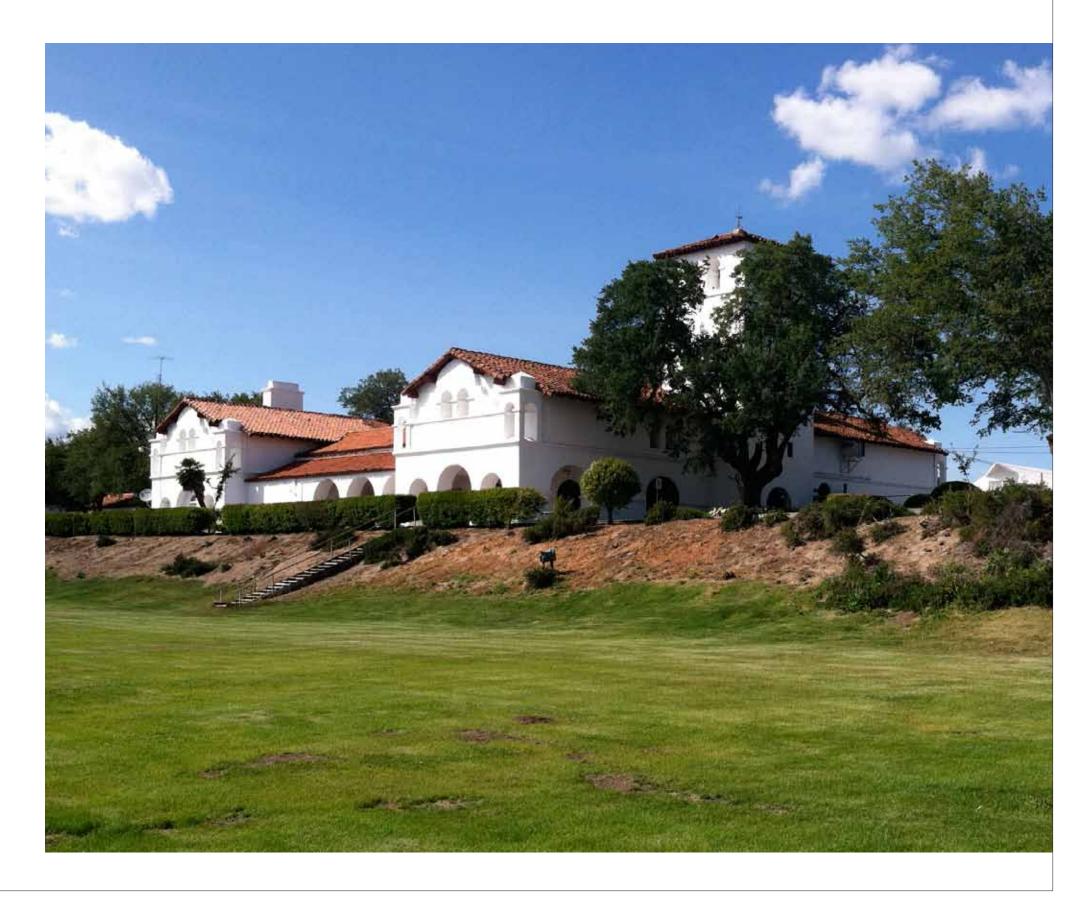
Historically, much of what is now Fort Hunter Liggett was owned by William Randolph Hearst for his cattle operations. The installation has inherited custody of a beautiful historic structure, the Hacienda, which was designed for the Hearst family by renowned architect Julia Morgan. The Hacienda is an excellent example of adaptive reuse. From its early days as a working ranch headquarters, the Hacienda has since been used as a restaurant, a club, conference facilities, lodging, and commander housing, ensuring its continued vitality as a show-piece for Fort Hunter Liggett.

In general, the installation is bounded on the north by Los Padres National Forest and private lands, on the east by the foothills of the Santa Lucia Mountains, on the south by the Monterey/San Luis Obispo county line and on the west by approximately 55 miles of Los Padres National Forest.

In the summer months, daytime temperatures may be 100 degrees or higher but soon after sunset, the temperature drops rapidly and the nights are cool and pleasant. During the long summer, humidity is very low, rain seldom falls, and streams dry up or disappear underground. During this arid period, fire danger is so great that over 450 miles of firebreaks on the installation prevent wild fires and aid in fire suppression. Winter temperatures are cool and frost is not uncommon. The rainy season usually is between December and February when the average annual 20-inch rainfall is expected. During this period, fertile valley soils soak up the moisture to provide abundant spring and summer wildlife feed.

Many wild animals thrive in the area; the most numerous being the California ground squirrel, rabbits and deer. Other animals include gray tree squirrels, raccoons, wildcats, mountain lions, skunks, badgers, fox, coyotes, opossums, wild hogs, tule elk and an occasional bear. There are also dove, pigeons, quail, wild turkey, hawks, eagles and ducks. The variety of game animals makes hunting a favorite sport for military and civilians in the area. Fishing is good in stocked ponds scattered throughout the installation.

The varied terrain and weather conditions at Fort Hunter Liggett provides unique opportunities for continuing training and testing and make the installation a valuable asset for future armed forces land use needs. (Source: Fort Hunter Liggett Garrison Website)



000000 a and a **PLANNING VISION** To create a **flexible training environment** surrounding an attractive small town with walkable main streets and a usable town **square**, where Soldiers, civilians, and their families enjoy living and working.

A new vision

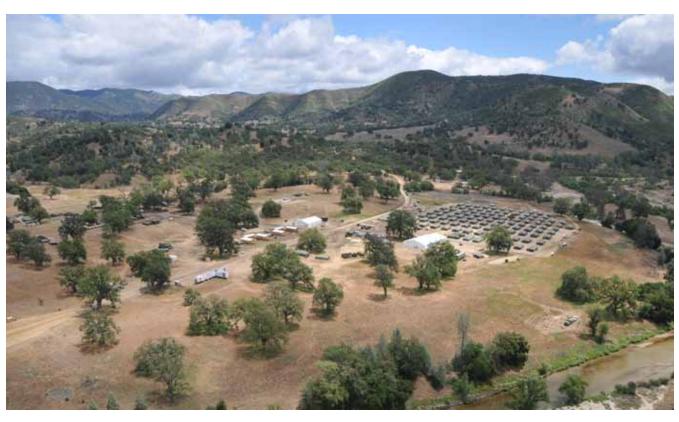
for Fort Hunter Liggett

In February of 2010, stakeholders began the process of creating a vision for master planning at Fort Hunter Liggett. Over a multi-day workshop, representatives from units throughout the garrison and partner agencies discussed the strengths, weaknesses, opportunities, and threats facing Fort Hunter Liggett to establish a planning vision, goals, and planning principles to guide future endeavors. Once the planning vision was established - To create a flexible training environment surrounding an attractive small town with walkable main streets and a usable town square, where Soldiers, civilians, and their families enjoy living and working – the Fort Hunter Liggett community began the area development planning process to guide future development.

Planning Vision:

To create a **flexible training environment** surrounding an **attractive small town** with **walkable main streets** and a **usable town square**, where Soldiers, civilians, and their families enjoy living and working.

DESIGN PRINCIPLES



Fort Hunter Liggett Training Land

Planning Principles

From this planning vision, four design goals emerged to guide the alternative development process:

Goal 1: Flexible Training Environment. Create a sustainable plan for development that maximizes opportunities for flexible use and provides room for growth to meet future needs.

Goal 2: Attractive Small Town. Create places that contribute to a vibrant small-town feel and enhance community cohesion.

Goal 3: Walkable Main Streets. Create streets that provide safe, convenient, and comfortable walks in a pedestrian-centric environment.

Goal 4: Usable Town Square. Provide an area where Soldiers, civilians, and families can gather to live, work, shop, and play.

From these goals, stakeholders collaboratively developed a list of principles (or design objectives) to form a common language to guide area development planning throughout Fort Hunter Liggett. This idea is based in part on work by Christopher Alexander, as published in A

Pattern Language. Alexander argues that we need a common language for design if we are to avoid the sterile and disjointed environments so prevalent today.

Design principles are grouped in five categories - district, buildings, streets, parking, and open space. District level design principles refer to a language common throughout all development at Fort Hunter Liggett. Principles are then grouped according to their impact on the built environment - buildings, streets, parking, and open spaces. The goals are listed below each principle, emphasizing how the principles work in concert to support the planning goals and achieve the overall vision.

DISTRICT:

Transit-Oriented Development

Development centered on public transportation reduces dependency on the automobile. The carbon footprint reduction potential is enormous, and monetary savings to the residents is available by reduction in driving. The incorporation of transit requires specific locations for transit stops, which then concentrate development activ-

ity in that area. Examples are bus stops, metro stops, or light rail stops. Corresponding development in the area includes vertical and horizontal mixed-use development, residential development, and car parks. These development opportunities concentrate desirable activities within a 10-minute walk from transit stops. Incorporating intermodal transportation is also effective in tying bicycles into the mass transit system. Bike lanes also tie back to connected sidewalks, providing safety in transportation as an alternative to the automobile.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town

10-Minute Walk

In general, people are willing to walk ten minutes (1/2 mile) to go to school and work or to access retail and services. Workplaces, schools, homes, and shopping located in horizontal mixed-use areas within a 10-minute radius support a pedestrian-focused environment. People are less dependent on a car, which positively impacts the environment and creates opportunities for increased neighborhood cohesion. When planning, it is essential to determine the 10-minute walk radius and ensure that schools, workplaces, shopping and other conveniences are located within this arc. However, if this walk is across parking lots, along disconnected sidewalks, or unprotected from the hot sun, people will not walk, even for five minutes.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town
- 3: Walkable Main Streets

Town Center

Different types of people have different needs, but all people desire a place to gather with others, actively or passively; accomplish their day-to-day chores; allow children to run; hold public gatherings; or just sit quietly and read or observe people and the excitement of daily activity. The town center is the place to accomplish all of these things. It is comprised of a group of attractive, vertical, mixed-use buildings that may include places to shop, dine, live, worship, work, and play, surrounding an open green gathering space. A town center will provide convenient, easy access to amenities for residents, trainees

and civilian staff. In addition to being a retail and serviceoriented area, it will become a true destination with high volumes of day-to-day traffic to participate in the variety of available activities. The town center will be easily accessed through a connected sidewalk network, making it a safe, comfortable, pedestrian-friendly destination near living and working areas.

Supports Goal(s):

- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Town Square

A town square is an open space in the middle of a town center that is enclosed by vertical mixed-use buildings that may include places to shop, dine, live, worship, work, and play. It provides a place to host public gatherings where community bonds can form. Town squares should be located in the town center that is retail and/or service-oriented with high volumes of day-to-day traffic. By framing the town square with buildings on four sides, common spaces, both inside and out, can be created. Town squares should also have several distinguishing characteristics - connected sidewalks that cross, a fountain or similar feature near the center, landscaping, views to nature, or other axes and focal points, benches and places to gather. Town squares should be no more than one block wide. The length of the town square is much more flexible, and should be designed to complement the area in which it is sited. A town square of the appropriate width will enable increased interaction and contribute to a sense of community cohesion.

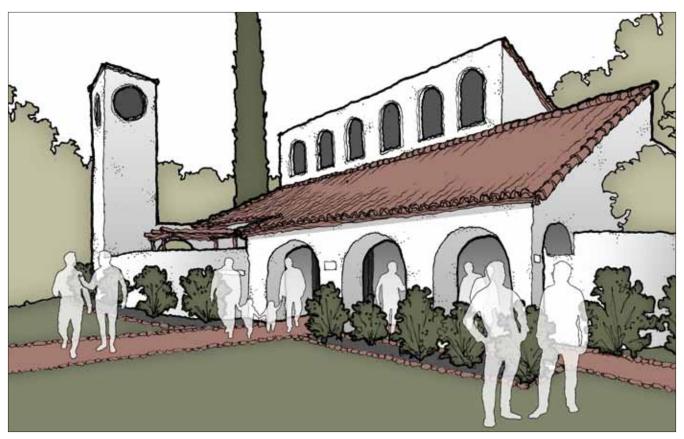
Supports Goal(s):

- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Storefronts

Too often, buildings turn a blank wall to the street. This discourages pedestrian access and limits interest on the street. Local police have adopted Crime Prevention Through Environmental Design strategies since the 1960s. The key principle they use (and that the military should adopt) is natural surveillance or "eyes on the street." Installations simply do not have enough security staff to watch over the entire installation. When storefront glazing faces

DESIGN PRINCIPLES DESIGN PRINCIPLES



Chapel

the street, people inside buildings can watch the public realm and report unusual activity. The military's response, contrary to empirical evidence, is to eliminate windows since they pose a safety hazard if they are shattered in an explosion. However, the likelihood of just such an event is reduced when people can naturally watch the streets, and the impact of shattered glass can be minimized by the use of laminated glazing. Storefronts also often cultivate places to gather, common spaces inside and out, within a town center.

Supports Goal(s):

- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Horizontal Mixed-Use

Horizontal Mixed-Use development is comprised of a group of attractive, vertical, mixed-use buildings that may include places to shop, dine, live, worship, work, and play. A mixed-use development promotes town centers and town squares that provide convenient, easy access to amenities for residents living nearby. In addition to being a retail and service-oriented area, it will become a true destination with high volumes of day-to-day traffic to participate in the variety of available activities. Living and amenities will be easily accessed through a network of connected sidewalks, making it a safe, comfortable, pedestrian-friendly destination with clear wayfinding throughout.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town

Compact Development

Compact development combines stores, homes, and working places with public facilities and amenities within a 10-minute walk of each other. It contributes to active community environments where people can live, work, shop and play. The key to compact development is a close proximity of living, working, shopping, schooling, and socializing elements in a compact environment. The benefits of compact development include reducing

infrastructure costs, reducing vehicular traffic, preserving open space, supporting economic vitality, and cultivating clear wayfinding.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Clear Wayfinding

Wayfinding is the ability to find one's way in an unfamiliar environment. Given the temporary nature of assignments at military installations, any environmental cues that can help people find their way are welcome. There are several ways to improve wayfinding without getting into the details of mapping and signage. These ideas tap into the intuitive way people navigate. First, use a street grid whenever possible and key streets should terminate in axes, focal points and memorable landmarks. In addition, run connected sidewalks parallel to the street grid to allow for clear views and site buildings so they face these street systems. Keep parking lots to the rear and utilize perimeter parking. Finally, ensure that facilities have visible entries to direct people into their lobbies.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Places to Gather

Places to gather create opportunities for people to meet for a conversation, share ideas, and create community bonds. Gathering spaces can provide a space to host public gatherings, or for private conversations to occur. Places to gather should be located in the town center and throughout a development. They should be located in close proximity to retail or service-oriented area in a place with high volumes of day-to-day traffic, and have benches or tables where people can stop and sit. Gathering spaces can also accommodate special events. Commander's calls, unit picnics, and outdoor concerts can all find a home in this space.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town

- 3: Walkable Main Streets
- 4. Usable Town Square

Campus Quads

Despite the impressive architecture of the beautiful buildings that surround them, the most notable and memorable areas of most university campuses are their quads. These common areas create places to gather for the areas they define. The elements of a campus quad include an outdoor open space with places to sit and room to run, framed by appropriately scaled buildings and crossed with connected sidewalks. This design allows clear wayfinding from building to building and from the quad to the surrounding areas, bringing more movement and life into the area. The quad provides a link to the views to nature, and serves as an invitation for people to gather, contributing to a sense of community.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Xeriscaping

A building's curb appeal can vary greatly depending on the look of the landscaping that surrounds it. Landscaping can cause a great strain on the environment as well as a building's budget by the amount of potable water needed to keep particular landscaping alive. Using a landscaping tactic called xeriscaping is a way to reduce the use of supplemental water. Xeriscaping uses plants that are native or adapted to the building location's specific climate, and because of this, they require no additional water. Xeriscaping can become beautiful landscaping in campus quads and can be used in planting strips and medians, as well as car parks.

Supports Goal(s):

2: Attractive Small Town

Maintain Existing Trees

When a new development is being pursued, the general consensus is to level the site and start from scratch, making it easier to plan roads and building locations. Little thought goes into the preservation of existing trees and habitats that have spent decades or possible centuries evolving. By cutting down these trees the development

DESIGN PRINCIPLES

immediately loses its distinctive sense of place and time. Keeping and maintaining these existing trees can give the new development a look that could otherwise not be obtained for at least 50 years when the newly planted trees have matured. The existing trees can be utilized within new development as street trees and within campus quads and town squares.

Supports Goal(s):

2: Attractive Small Town

BUILDINGS:

Narrow Wings

Before air conditioning and electric lighting, planners and architects knew that narrow buildings with operable windows facilitated natural ventilation and light, and allowed more opportunities for building occupants to have views of nature. Wide buildings create unpleasant work environments, are difficult to navigate, and expensive to maintain. Rooms with light on only one side appear small, have greater glare, poor ventilation, and inadequate light distribution. A primary way to enhance the spaciousness of an office setting, increase energy efficiency, and to improve the quality of life for installation personnel is to bring in as much light to the facility as possible. Thin, multi-story buildings allow natural light on both sides, promoting environmental sustainability. Buildings with narrow wings (a maximum of 50' wide) also help define exterior spaces and allow "eyes on the street" for AT/FP measures.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town

Vertical Mixed-Use

In response to funding streams, user wishes, or other outside drivers, installations often build single-use buildings that contribute to sprawl. These buildings come with their own AT/FP buffers, utility laterals, and parking lots. Vertical, mixed-used buildings in which compatible uses are collocated can reduce sprawl by combining complementary uses. This minimizes the need to for multiple AT/ FP buffers and extra utility lines. In addition, horizontal mixed-use areas contribute to a vibrant and safe retail core by bringing more "eyes on the street" from residences or offices on upper floors. When siting facilities, care should be given to analyze complementary functions and

combine uses whenever possible. Compatible functions should be collocated in vertical mixed-use facilities that are economically and environmentally sustainable, use land more efficiently, and support multi-story buildings.

Supports Goal(s):

- 2: Attractive Small Town
- 3: Walkable Main Streets

Multi-Story Buildings

Filling the landscape with single story buildings is not a sustainable practice. The resulting low-density environment forces excessive automobile use and consumes valuable land, which can limit future development opportunities. From a construction point-of-view, three one-story buildings require three times the foundation and roof area as one similarly sized three-story building. And they require three times the AT/FP standoff and up to three times more length of utility laterals to service each building. Vertical mixed-use development should build multi-story buildings that use land more efficiently, help define campus guads, and provide views to nature.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town
- 3. Walkable Main Streets

Visible Entries

Have you ever wasted time wondering where a building's entry was? Recessed entries, hidden entries, and poorly scaled entries make finding the front door difficult. According to Christopher Alexander in A Pattern Lanquage, entries must be placed in such a way that people who approach the building see the entrance as soon as they see the building itself. Entries should be visible from all directions and lines of sight. This is accomplished by thinking actively about the position and shape of the entry, and considering the visibility at each main line of approach to the building. The shape must be distinct, protruding from the main body of the building, or changing the height of the building around the entrance. In a campus quad or town center, entries should also be aligned with connected sidewalks to create clear wayfinding.

Supports Goal(s):

- 2: Attractive Small Town
- 3: Walkable Main Streets



Mission Valley Training Campus

Compatible Development

Humanity's impact on the earth is dramatic. The United States Military is committed to minimizing their impact. The built environment must incorporate infill development standards all the way from planning to construction to daily use of facilities and open spaces. From a planning perspective, design areas to minimize sprawl, greenfield development, and stormwater runoff. Maximize infill and compact development, and support transit-oriented development. Reduce roof area and internally contain stormwater within car parks and green spaces. In addition, the base should be aware of and respectful to offbase development. We want to be a good neighbor and our development patterns can help this effort.

Supports Goal(s):

2: Attractive Small Town

Infill Buildings

As new development progresses, old development will deteriorate and eventually be in need of update or replacement. Reusing areas that have already been developed is a key element in reducing urban sprawl and promoting sustainability. This also helps to reduce the amount of greenfield development and has the potential to turn a neglected urban site into a positive place to gather. Infill buildings should be vertical mixed-use buildings, multi-

story buildings, and should respond to the nature of the surrounding horizontal mixed-use development.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town

Historic Buildings

At many installations there are facilities that have historic value at a local and/or national level. In addition to having historic activities taking place within their walls, the structures themselves are made to last, and represent a significant period of architecture. They are usually designed well, with large operable windows, narrow wings, and long-lasting structural members that all contribute to a significant building value. Future plans should use the facility locations as a starting point for development, and build upon them while incorporating their architectural

Supports Goal(s):

2: Attractive Small Town

Adaptable Buildings

Buildings designed for specific uses and specific equipment limit future adaptability. We know that missions change and buildings need to adapt to different uses. To accommodate this requirement, designers must create

DESIGN PRINCIPLES

adaptable buildings. These buildings have narrow wings that can work for administrative, mission oriented, commercial or even housing uses. They are also mixed- use and multi-story, which allows for more square footage to accommodate a wider range of users. Hierarchical differentiation of spaces is minimized so that a wider range of personnel can use one floor plan arrangement. Columns and load-bearing walls are minimized, and open floor plans with flexible furniture should be standard.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town

Arcades

Traversing between facilities in inclement weather is a hassle. Arcades provide shade in the summer heat, protect pedestrians from rain and snow, and enable clear wayfinding between buildings. In addition, arcades provide protection and shade to a building's exterior, often reducing cooling costs and thus increasing environmental sustainability. They can often contribute in defining visible entries for a building. Arcades can provide environmental protection from snow to sunny heat depending on the time of year. Arcades contribute to a safer and more comfortable 10-minute walk between buildings. In addition, arcades, when attractively planned and designed, only enhance a building's façade and contribute to the attractiveness of the built environment. They can also become an axis and focal point for borrowed landscape and provide opportunity for views to nature.

Supports Goal(s):

- 2: Attractive Small Town
- 3: Walkable Main Streets

Greywater Reuse

Greywater is wastewater generated from domestic activities such as laundry, washing and bathing, and dishwashing. It makes up from 50 – 80% of wastewater. Typically on an installation, greywater is disposed of along with blackwater, or sewage, and ends up as effluent in rivers and oceans. However, with the introduction of a separated treatment plant, greywater can be treated to limit pollution and health risks, then reused. Treated greywater can be used for all types of landscape irrigation, and in some cases, for flushing toilets. This recycling of greywater is a great method of water conservation.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town

STREETS:

Street Grids

The traditional approach of designing local streets, collectors, and arterials funnels traffic from the former into the latter and contributes to congestion. Drivers rarely have options and are thus all forced onto the arterials. This applies to pedestrians as well - but because many people typically do not like walking along congested arterials, they simply do not walk. A well-planned street grid can make the difference between a pleasant driving and walking experience and a frustrating one. Street grids enable clear wayfinding. Some of the greatest cities are laid out on a street grid – San Francisco and Kyoto for example. In downtown Portland, Oregon, the grid is 200' x 200,' which maximizes the number of valuable corners and gives people many options for accessing various parts of the city.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Medians

A broad, landscaped median that also provides a protected turning lane is a key element in the development of a great street. Where appropriate, streets should have medians 10' - 20' wide, with street trees planted 25-35 feet on center. The trees provide shade, street definition, a safety buffer and create a pleasant driving environment. Median-divided roads are typically located at the perimeter of districts and act as arterials. They can carry significant traffic volumes on one or two through lanes in each direction. Medians can also buffer incompatible land uses. On one side may be an industrial area and on another may be a residential area. The more disparate the uses, the wider the median should be to screen the uses.

Supports Goal(s):

2: Attractive Small Town



Fort Hunter Liggett Training Excercise

Planting Strips

To save a little bit of money, developers have eliminated the traditional planting strip in many newer subdivisions. They have built "curbwalks" where the sidewalk is attached to the curb. The benefit of planting strips far outweigh the costs. Planting strips not only add to the aesthetic value of a great street, but also create a safety buffer for pedestrian access. When used in conjunction with alleys, the planting strips can be continuous down residential blocks, which makes for a better environment for street trees. Planting strips should be located along every major street, be at least four feet wide and be placed between the road and the sidewalk. They should be filled with low-maintenance plants that are indigenous to the local environment.

Supports Goal(s):

- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Street Trees

Streets without trees are less attractive, less safe, and not the most comfortable places to walk along. Trees cre-

ate pleasant axes and focal points, provide shade, and lend shape to a street network. Street trees should be planted at regular intervals along as many streets on the installation as possible. They should be placed in a planting strip between curbs and sidewalks. From this location, trees can help shade both the street and sidewalk, and the rhythm of trunks slows traffic and can protect pedestrians. It is important to select low-maintenance trees that will mature and flourish in the local area. For a cost of \$250 to \$600 (includes planting and three years of maintenance), one street tree can provide over \$90,000 of direct benefits during its lifetime.

Supports Goal(s):

- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Connected Sidewalks

People want pedestrian access – a walk that is safe, pleasant, directionally clear, and shopping-accessible. Connected sidewalks are crucial to creating a pedestrian-friendly installation. Sidewalks should be a minimum of

DESIGN PRINCIPLES

five feet wide, shaded by street trees, and separated from the road with a planting strip at least four feet wide. Sidewalks should be connected in order to provide clear wayfinding, and provide a sense of direction and purpose to a destination. A pedestrian-friendly community reduces environmental impacts, increases a sense of neighborhood cohesion, and provides positive health benefits. The more the built environment can support walking, the better-connected neighbors can be

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town
- 3: Walkable Main Streets
- 4. Usable Town Square

Traffic Circles

Typically intersections are developed in traditional right angle geometries. Although a street grid is beneficial for many reasons, developing some circular intersections has advantages. A traffic circle is a thoroughfare that creates a self-policing environment that has shown to be safer for both drivers and pedestrians. Once introduced, traffic circles have been shown to provide traffic calming benefits along previously congested streets. They also provide opportunity for unique axes and focal points within a neighborhood.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town

PARKING:

On-Street Parking

Many installations provide an overabundance of parking lots, resulting in a "sea of asphalt." As architect and author Christopher Alexander describes in A Pattern Language, in order to make an environment fit for human use, no more than nine percent of land area should be devoted to parking. One way to reduce the area devoted to parking lots that destroy the natural environment is to maximize the availability of on-street parking. Because cars parked on the street use the street for maneuvering, one parking space on the street uses about 180 square feet. That same space in a parking lot uses over 350 square feet. Similarly, when we separate parking lots from streets we also add to the required force protection buffer. When we combine parking and streets, we combine the buffer as well. In

addition to saving land, on-street parking provides easy, convenient access to retail and services, and contributes to traffic calming.

Supports Goal(s):

1: Flexible Training Environment

Parking Behind

Parking should be hidden whenever possible, located to the rear or side of homes and buildings. Rather than being garage-scapes that celebrate the automobile, military family housing needs an aesthetic of human-scaled homes. With cars to the side or rear of homes, the fronts can be devoted to front porches. Garages or carports can be accessed off a back alley or side yard access lane. When parking is accessed off of an alley, there is no need for curb cuts in the front of homes, which makes the connected sidewalk system safer (pedestrians do not have to compete with cars) and it allows for more on-street parking.

Supports Goal(s):

2: Attractive Small Town

Car Parks

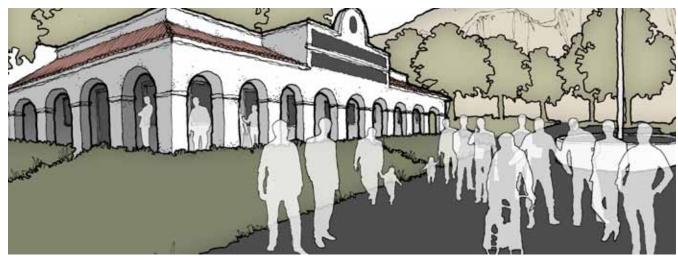
Parking areas are public spaces and should be designed as such. As habitable spaces, parking benefits from trees planted closely enough that their branches provide a canopy over vehicles help to create a car park. On-site runoff can be treated more effectively in the islands within the car park. Twenty-foot-wide medians replace the storm-water retention facilities usually present in parking lots and do not change the overall area required. With cars consolidated into car parks, safe pedestrian access is enhanced and the concept of walkable neighborhoods is reinforced. Shared car parks can be accessed off a secondary street, back alley or access lane. When parking is accessed to the rear or to the side, there is no need for curb cuts in the front of buildings, allowing for a safer pedestrian network (as pedestrians do not have to compete with cars) and allowing for more safe, convenient, and inexpensive on-street parking.

Supports Goal(s):

2: Attractive Small Town

Perimeter Parking

Often, the difference between parking standing out as a blight or seamlessly blending into the surrounding area is a matter of siting choice. In order to create a walkable setting with a campus quad, parking should be located at



Fort Hunter Liggett Headquarters

the perimeter of a cantonment. When parking is moved to the perimeter, the heart of the installation is dedicated to the installation's occupants, personnel, and facilities rather than an unsightly sea of parking asphalt. Buildings can share a car park at the rear of the facility to allow for clear, well-defined, well-landscaped entries that are inviting and provide safe pedestrian access.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town
- 3: Walkable Main Streets

Solar Parking

Parking lots are expensive to maintain, create heat islands, and cause excess storm water runoff. Land dedicated to parking does not further mission capability or environmental sustainability, but is a necessary component of any program. Installing solar panels over parking spaces allows an installation to maximize the use of its surface area by thinking vertically. Surface parking can be leveraged to generate energy and be used more efficiently.

Supports Goal(s):

- 1: Flexible Training Environment
- 2: Attractive Small Town

OPEN SPACES:

Courtvards

Courtyards are spaces, framed by buildings, with views to nature, that offer places to gather, walk, and sit. Comfortable courtyards are part of a campus quad system, and usu-

ally have grass and trees, with a clear system of connected sidewalks that align with visible entries to promote clear wayfinding between buildings. Courtyards also promote room for growth by strategically locating green space in areas that allow for future building additions as mission requirements change.

Supports Goal(s):

2: Attractive Small Town

Viewshed

The Mission San Antonio de Padua viewshed should be protected and preserved. The installation should use landscape to screen unsightly elements. Additionally, new facilities should be constructed with the Mission Revival style in keeping with the Installation Design Guide and to maintain continuity with historical structures and positively contribute to the overall design of the community. The industrial areas of the installation should be screened from public view.

Supports Goal(s):

2: Attractive Small Town

Landscape Screening

Unsightly views can be a problem on military installations. In order to improve the aesthetic condition of the entire district, landscape screening can be used to screen unsightly structures or parking from view. Native trees, hedges, and shrubs should be utilized as a landscape buffer wherever necessary. The vegetated buffer will reduce erosion and support AT/FP offsets.

Supports Goal(s):

2: Attractive Small Town



Design for Fort Hunter Ligett

he installation was divided into three areas – Blackhawk Hills, Mission Valley, and Hacienda Heights – and an area development plan was prepared for each.

The area development planning process included a weeklong design workshop for each area. An average of thirty stakeholders participated in each workshop, conducting interviews, performing extensive site analysis, identifying program

requirements, discussing the strengths and weaknesses of each area, and developing and evaluating a series of design options and alternatives.

A preferred alternative for each area was developed from common themes consolidated from as many as five alternative options proposed by workshop participants. The preferred alternatives transferred ideas for future development into illustrated plans showing new construction, landscaping projects, road networks, parks, and open space. The preferred alternative outlines the future growth and development plan for Blackhawk Hills, Mission Valley, and Hacienda Heights, showing future build-out and capacity for growth for both known missions. The plan is flexible, allowing development to evolve as future needs dictate. Each area development plan was then knit together to form a comprehensive installation master plan for Fort Hunter Liggett.

The preferred alternative is shown as an il-

lustrative plan that incorporates all the known requirements at this time. This preferred alternative represents only one construction variation, a snapshot in time, that meets the design vision. As the Army's needs grow and change, the need for a flexible plan that still allows the installation to achieve its vision is required. In order to allow this flexibility, a form-based code is provided. The form-based code is comprised of a regulating plan and street, building, and landscape standards.

The final result provides much-needed areas to accommodate the known new mission growth in addition to leaving room to integrate new missions, successfully fulfilling the planning vision to create a flexible training environment surrounding an attractive small town with walkable main streets and a usable town square, where Soldiers, civilians, and their families enjoy living and working. The plans on the following pages serve as graphical representation of planned development for Fort Hunter Liggett.

FORT HUNTER LIGGETT Framework Plan Vision To create a flexible training environment surrounding an attractive small town with walkable main streets and a usable town square, where Soldiers, civilians, and their families enjoy living and working

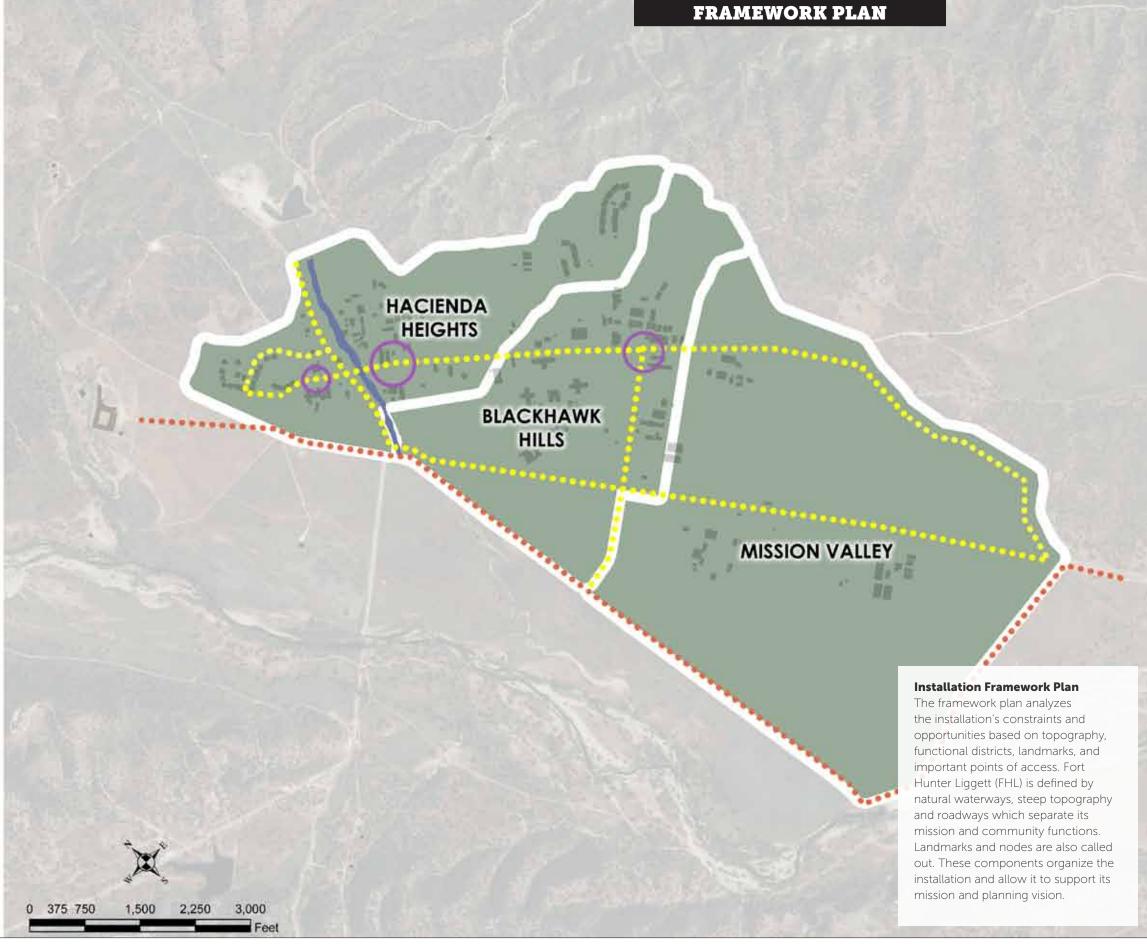
Goals

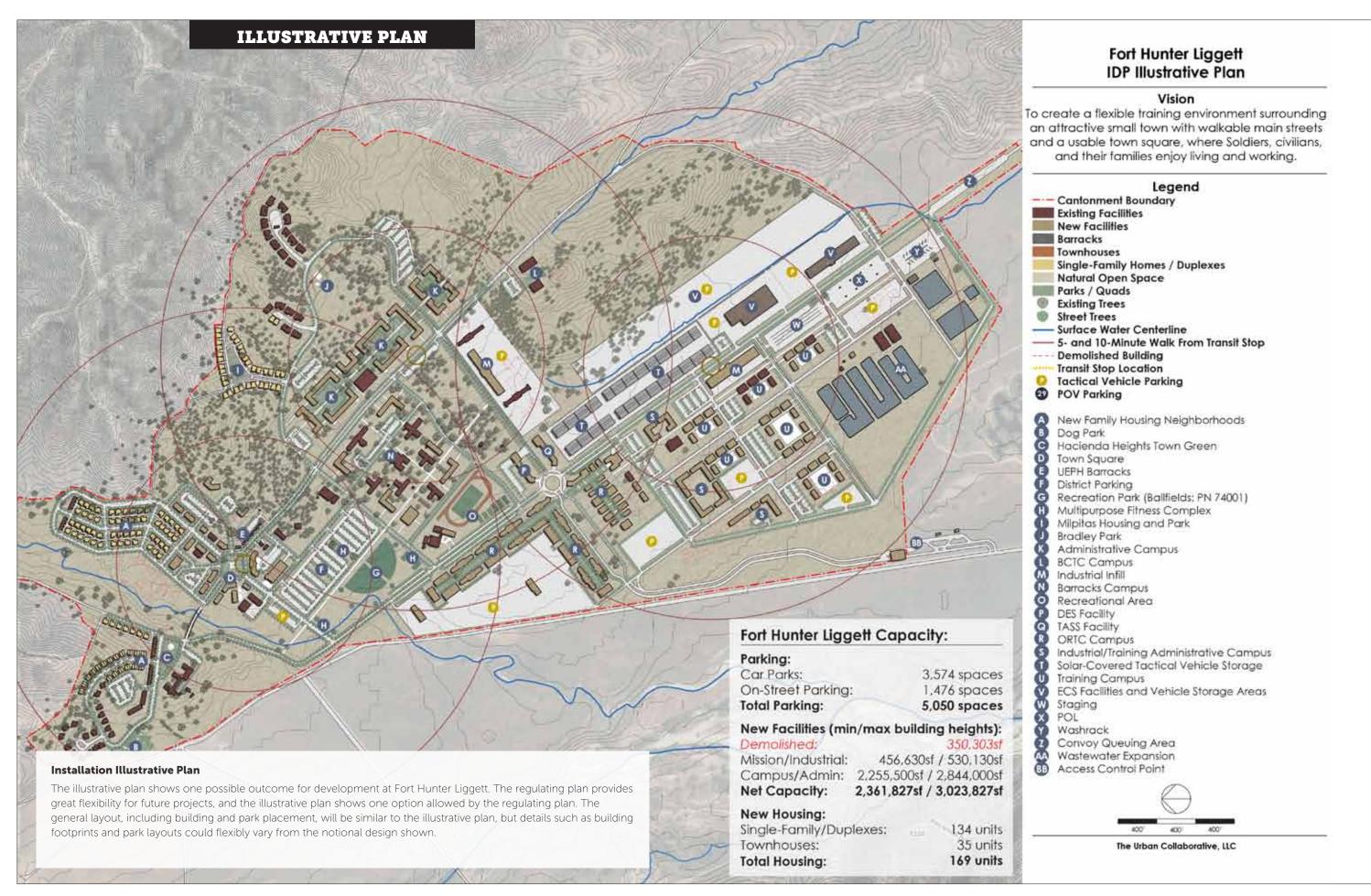
- 1. Flexible Training Environment
- 2. Attractive Small Town
- 3. Walkable Main Streets
- 4. Usable Town Square

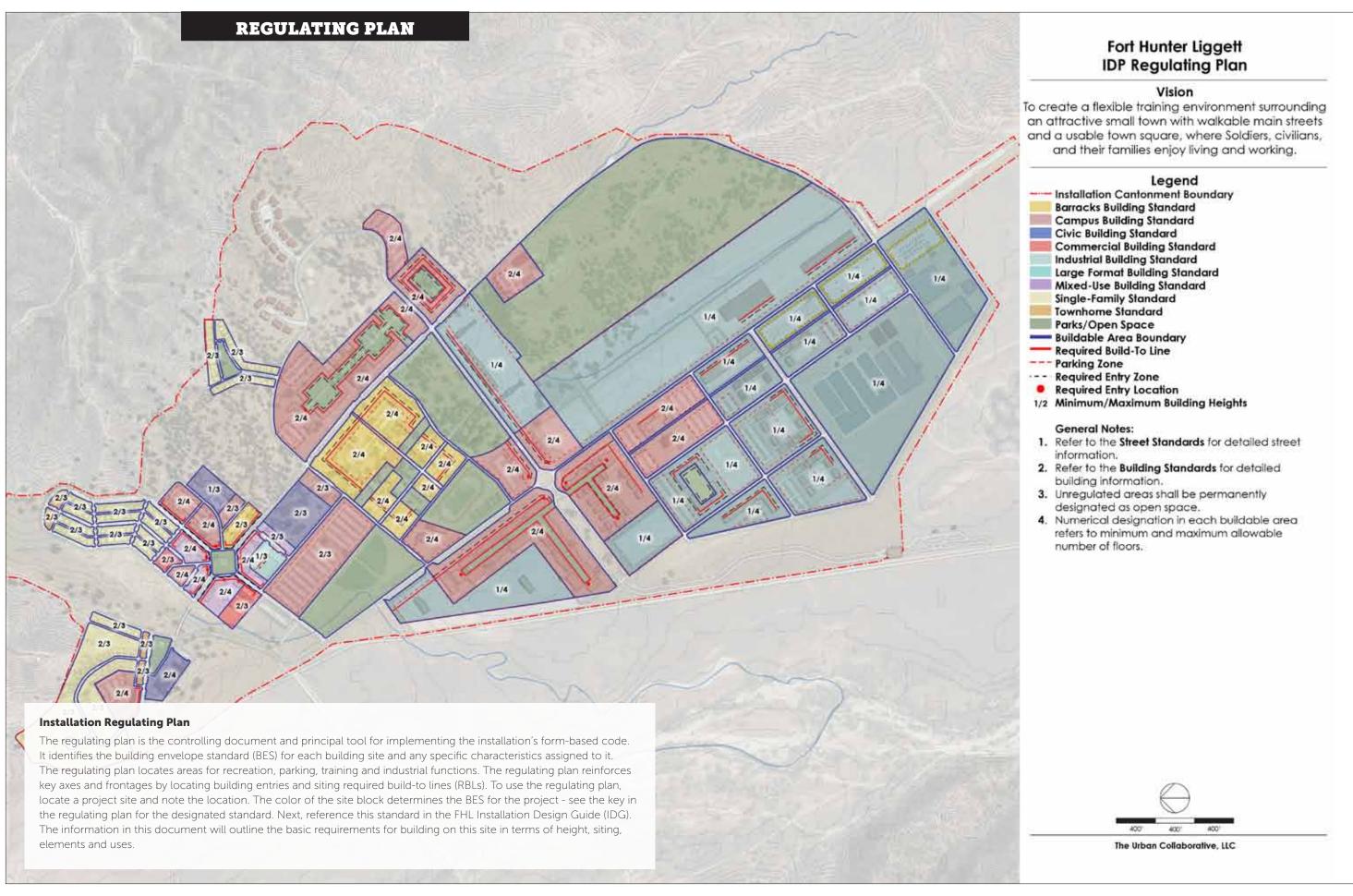
Legend

Primary Public Roads
Primary Cantonment Roads
Secondary Public Roads
Cantonment Focal Points

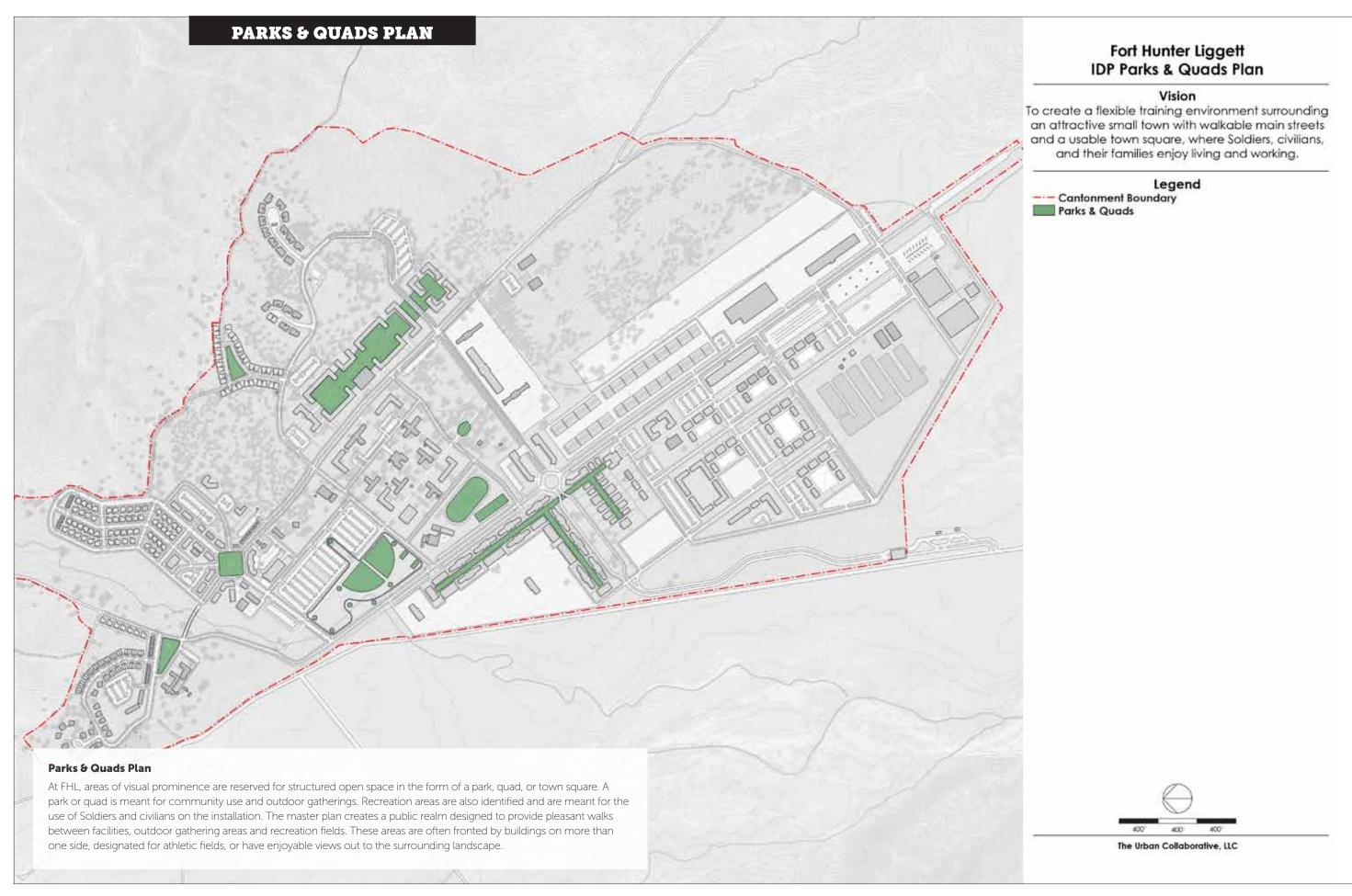


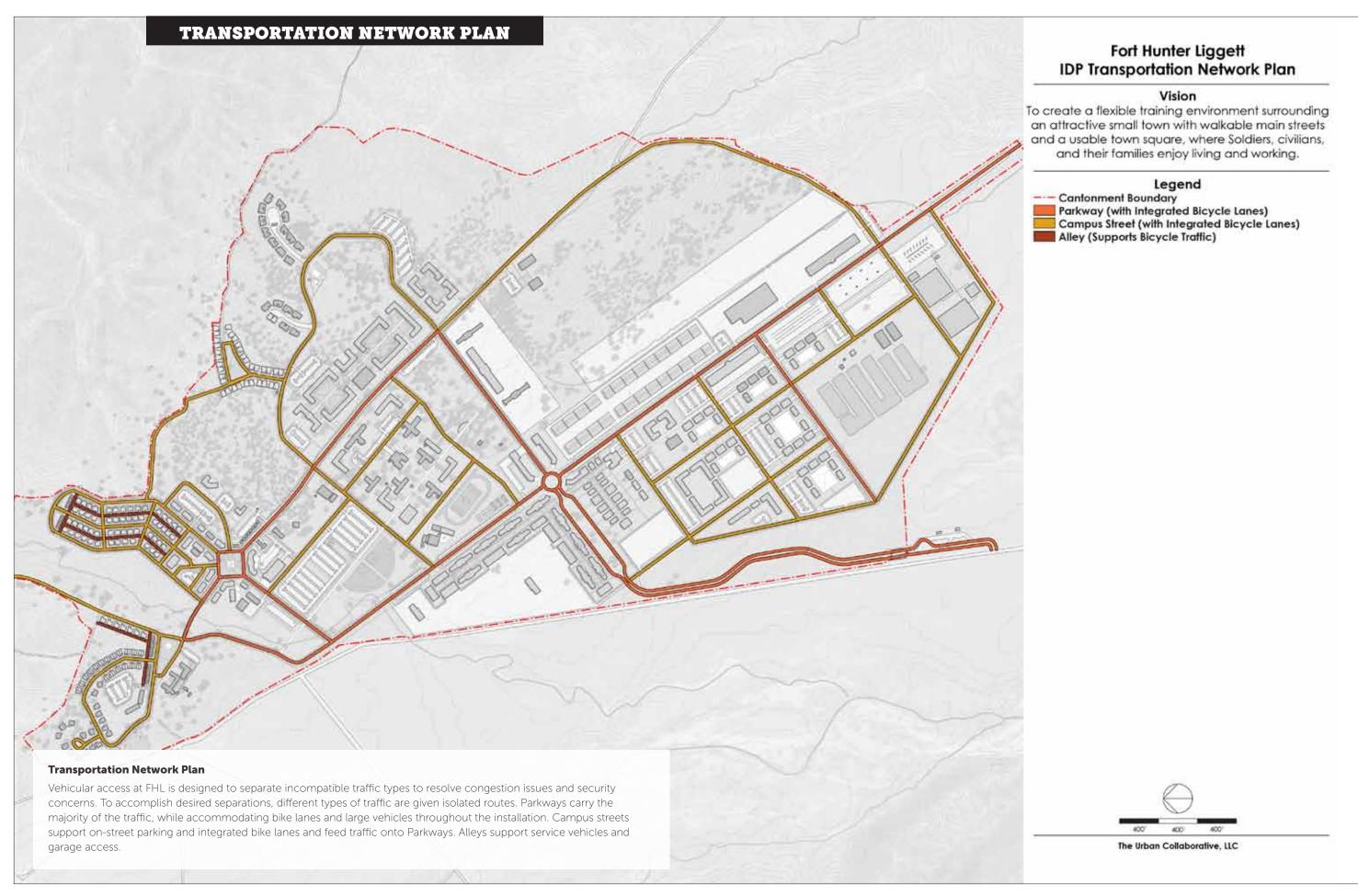


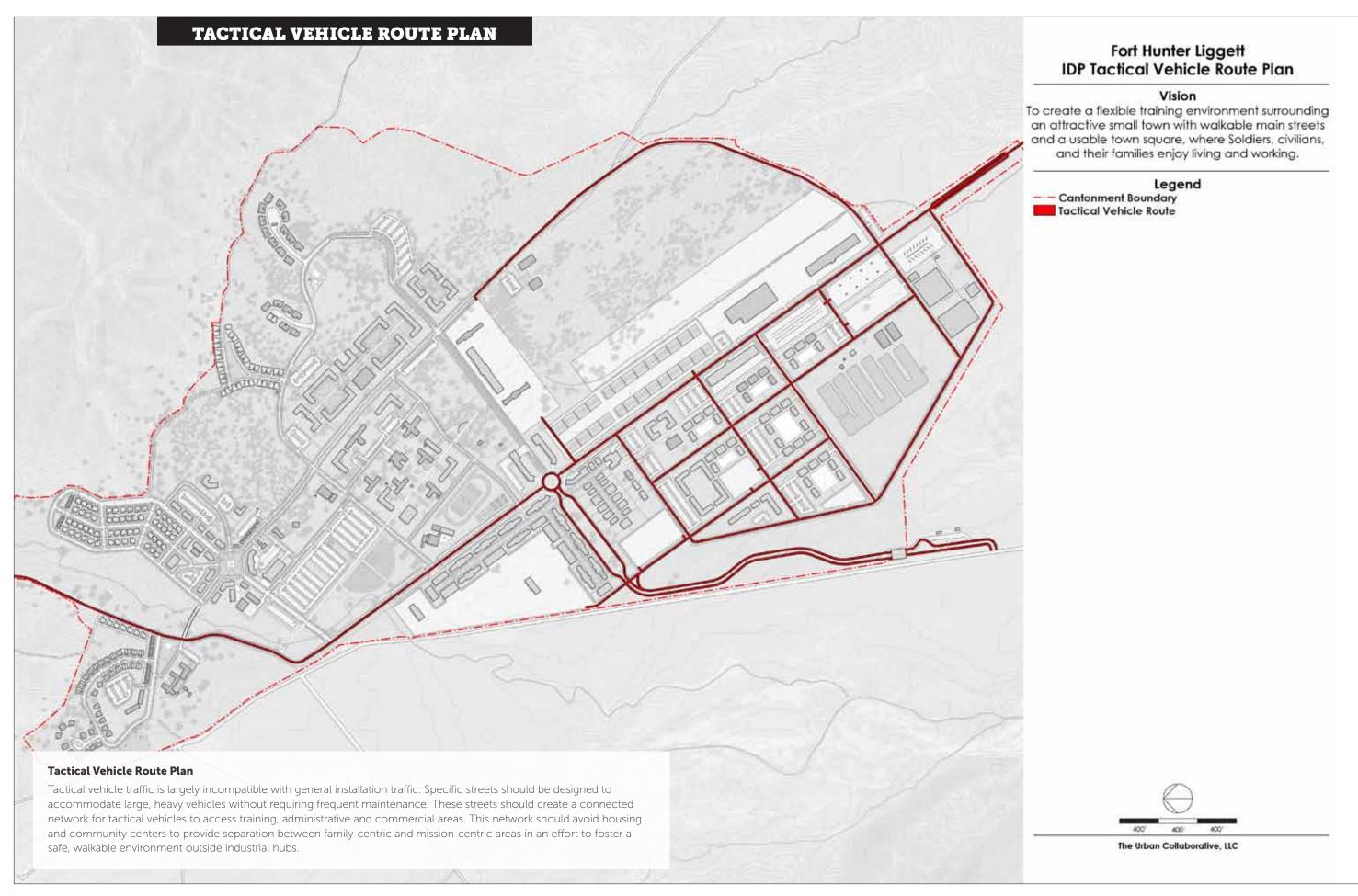


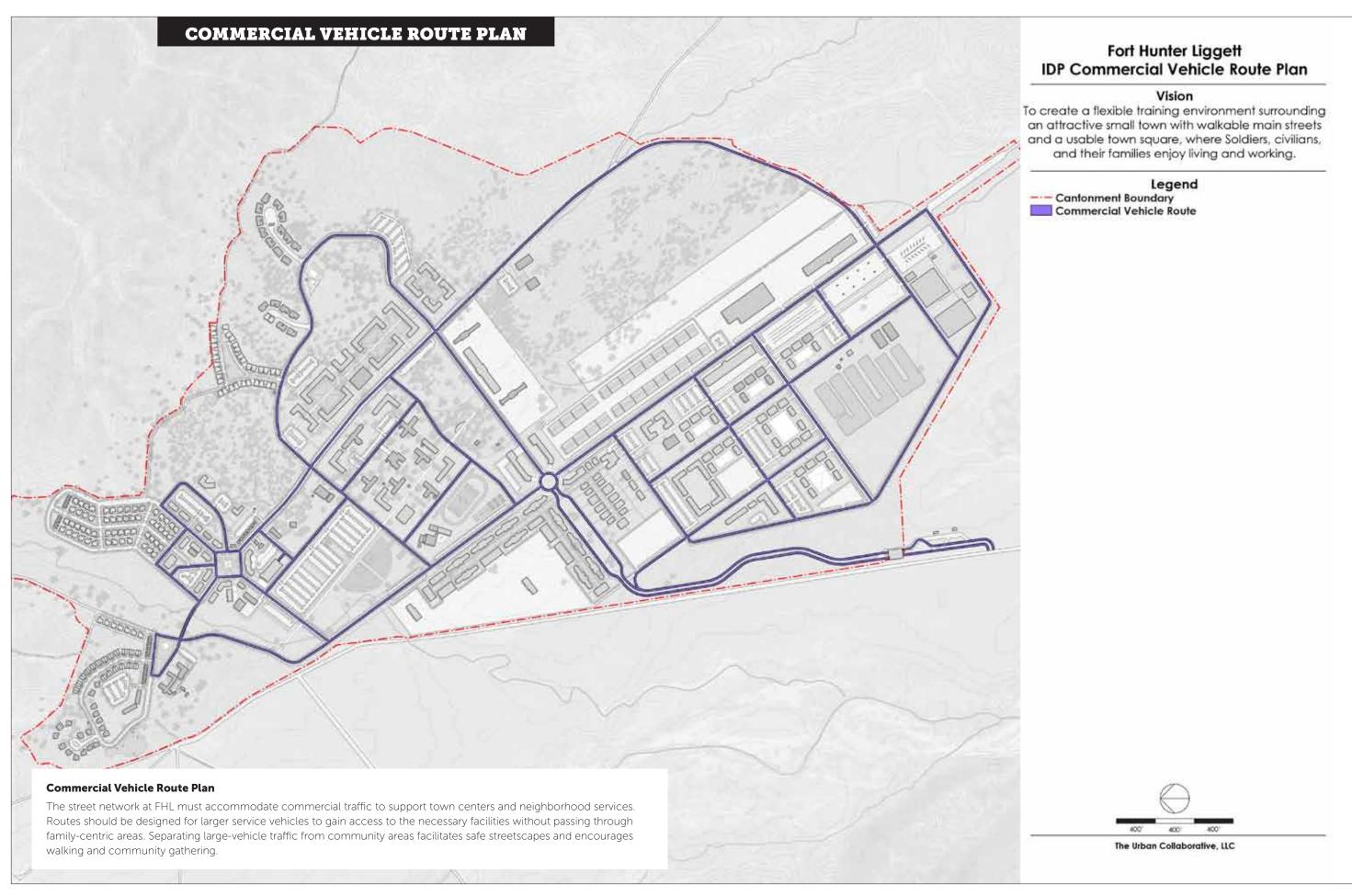


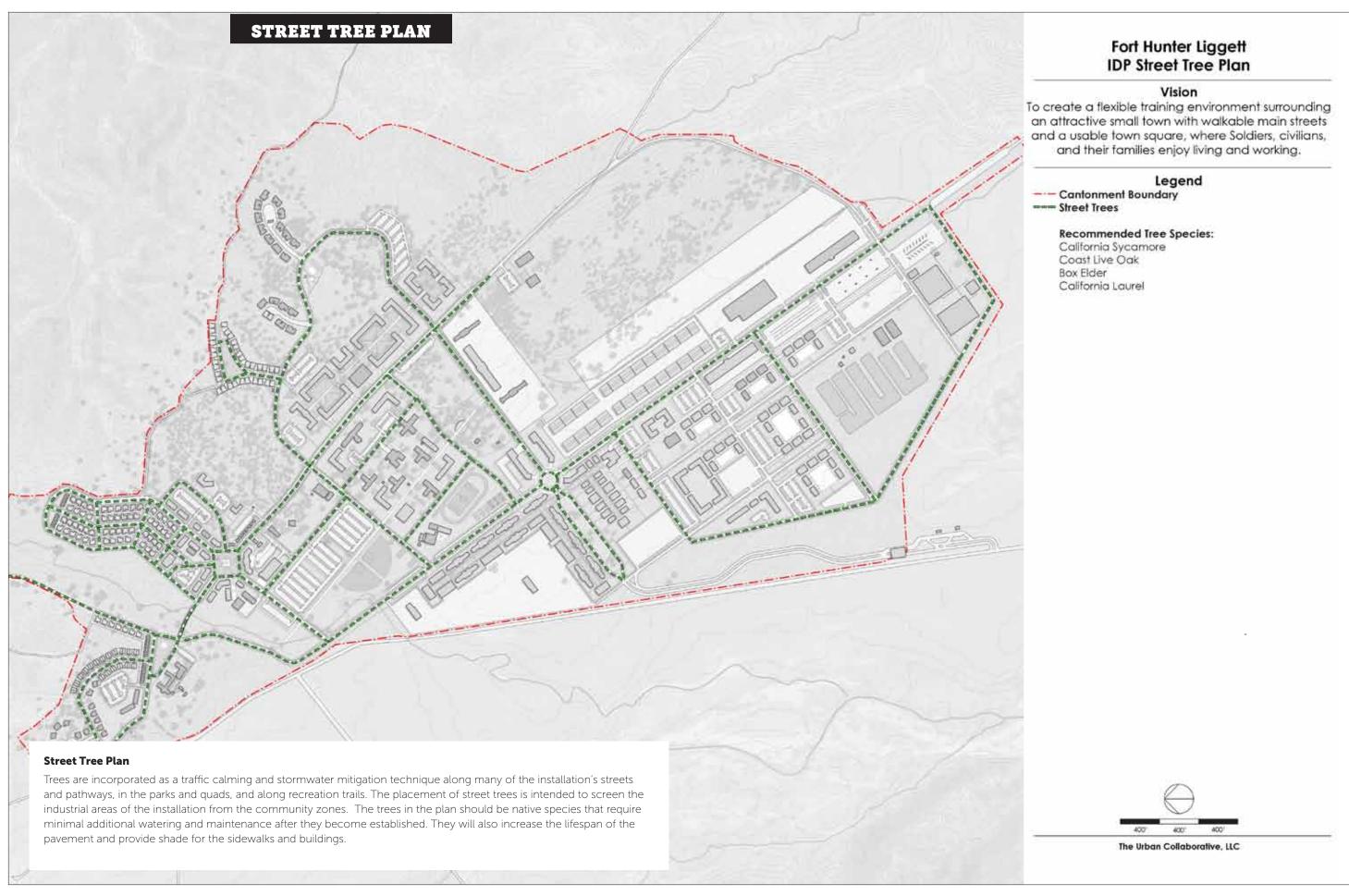
30 FORT HUNTER LIGGETT MASTER PLAN DIGEST
FORT HUNTER LIGGETT MASTER PLAN DIGEST 31

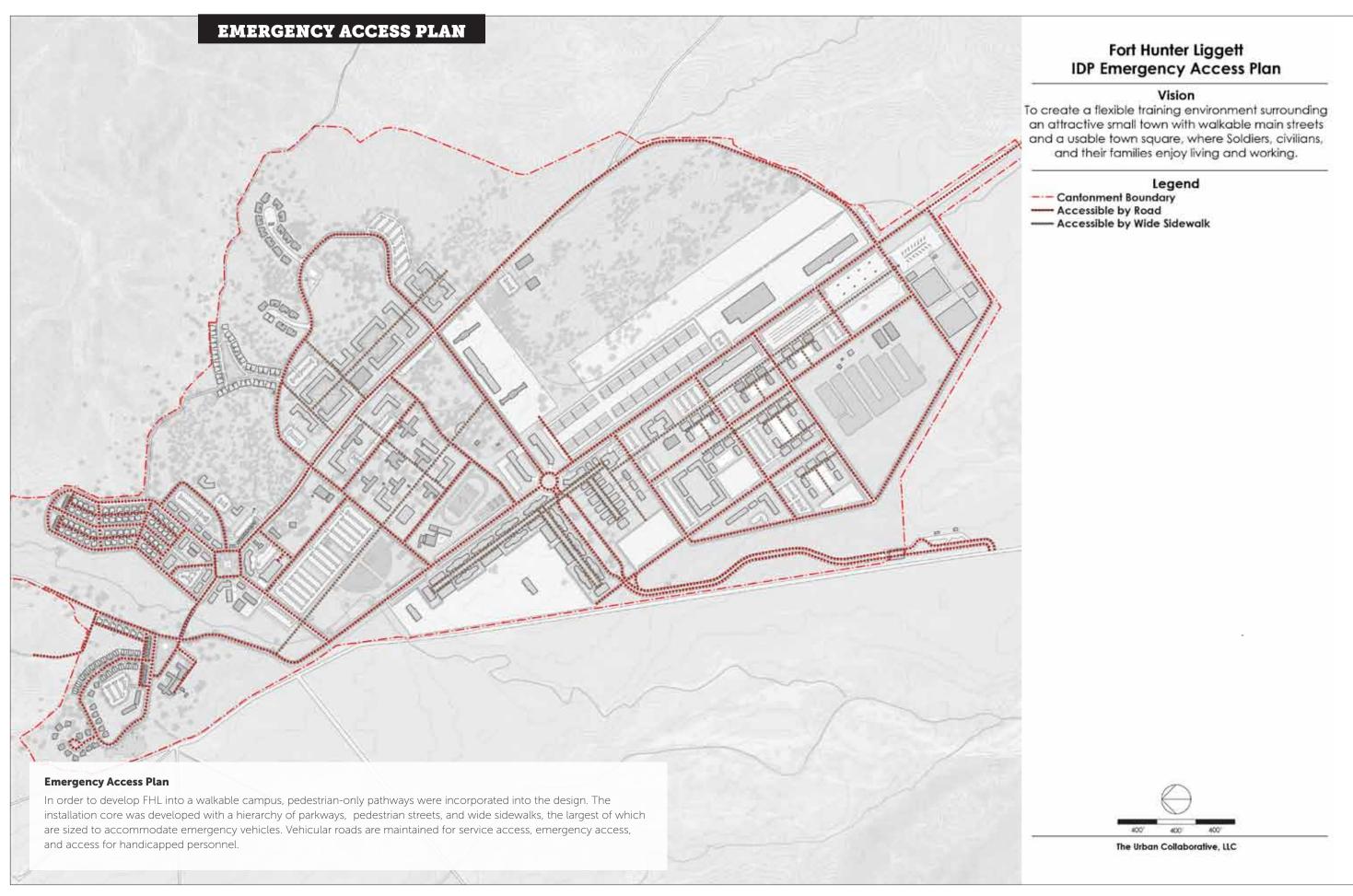




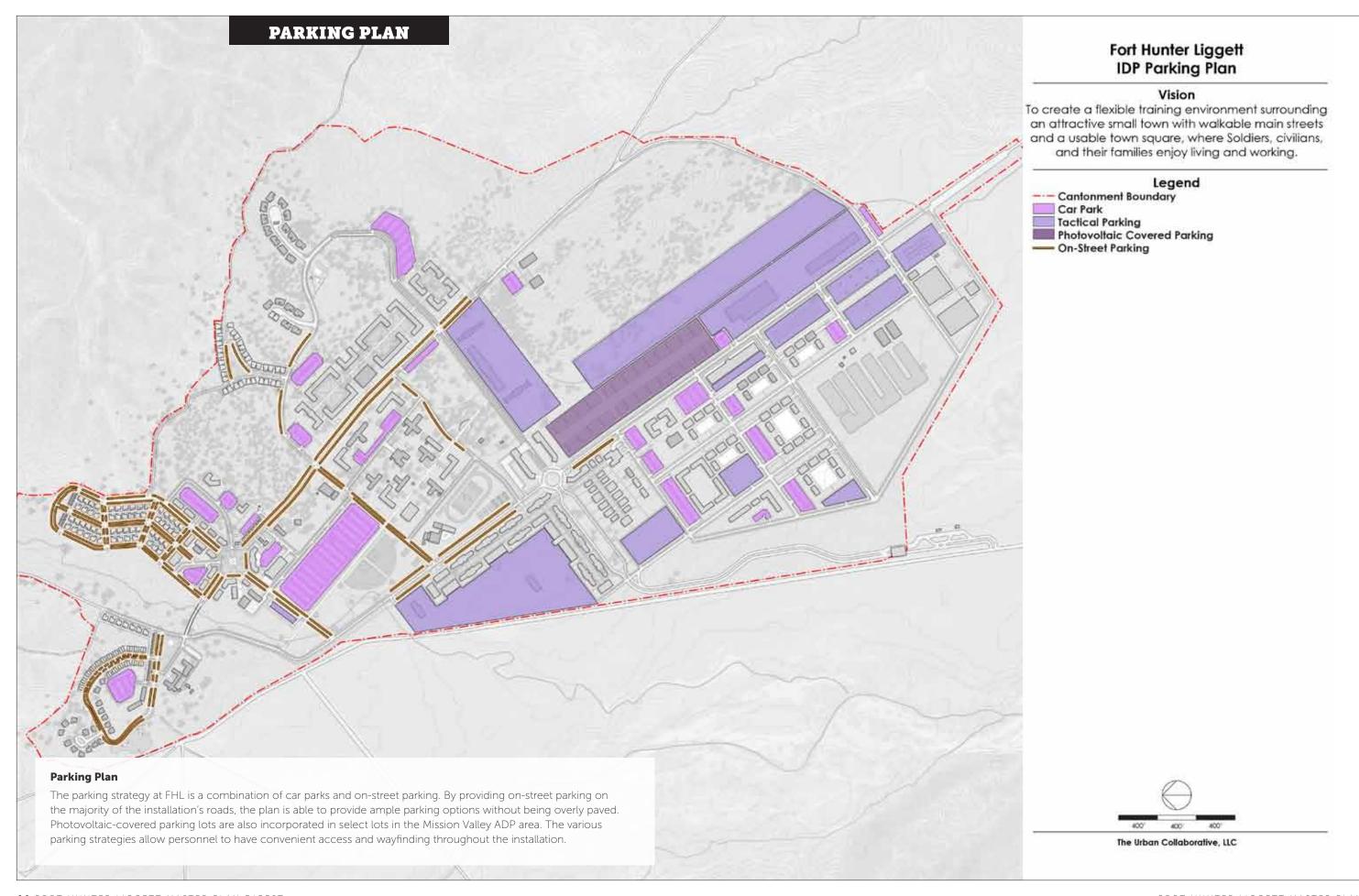




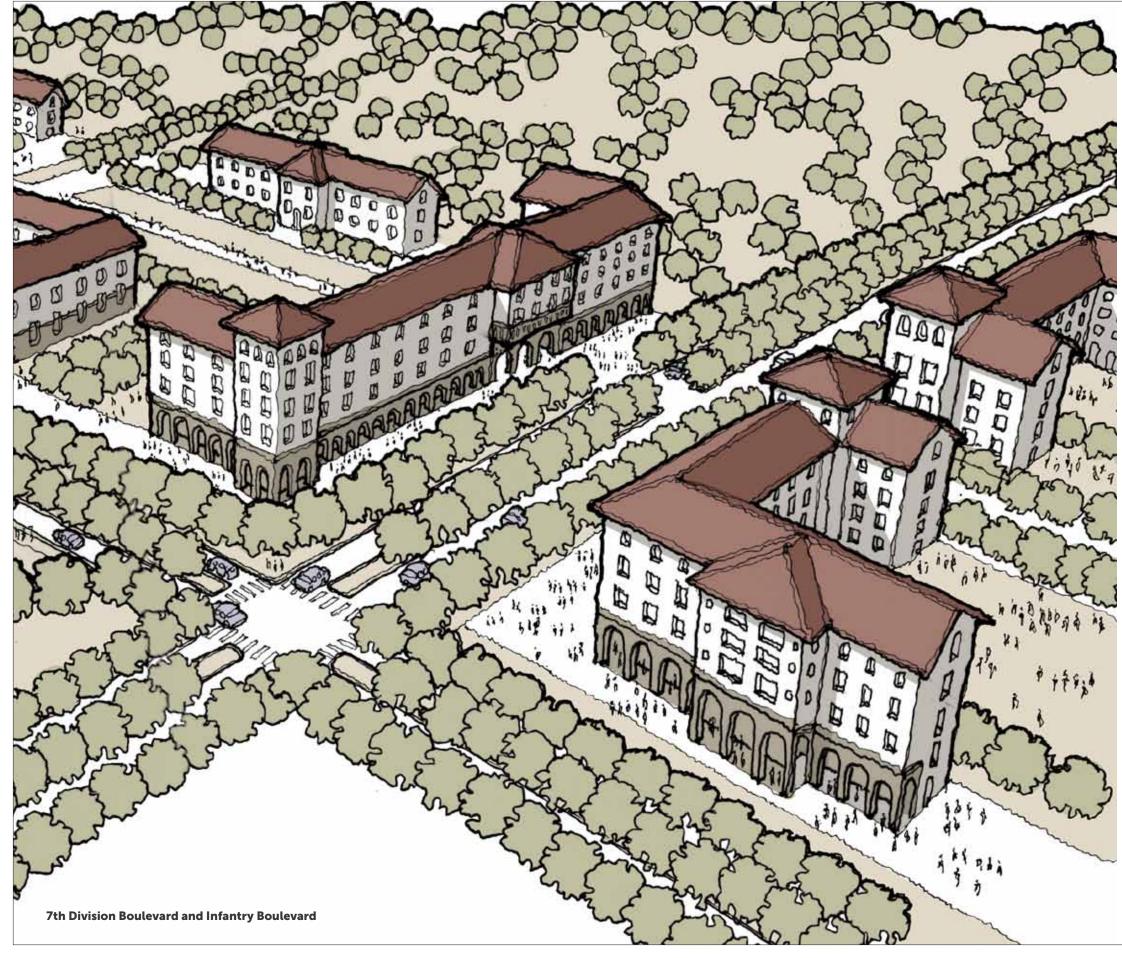




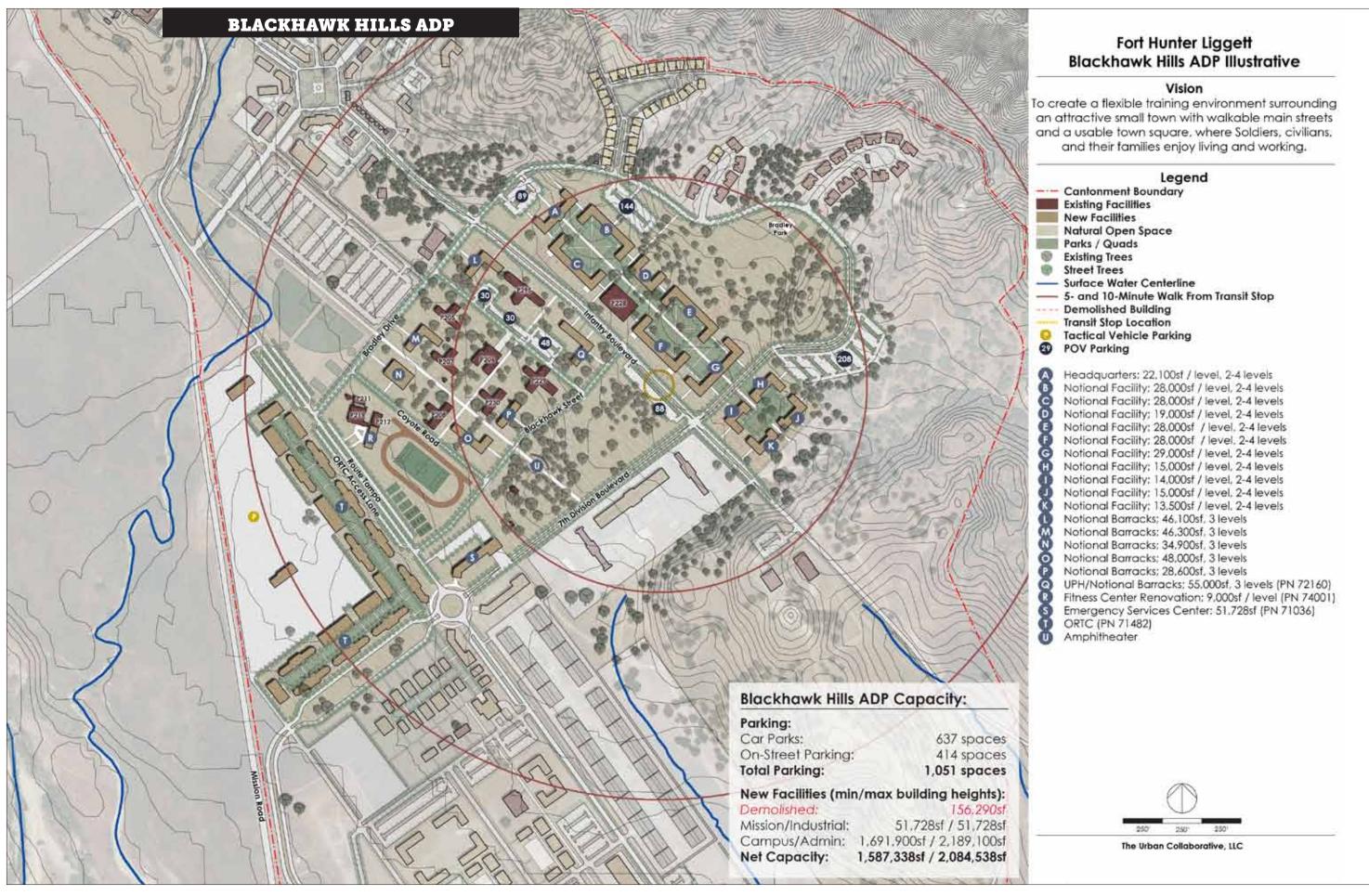
42 FORT HUNTER LIGGETT MASTER PLAN DIGEST
FORT HUNTER LIGGETT MASTER PLAN DIGEST

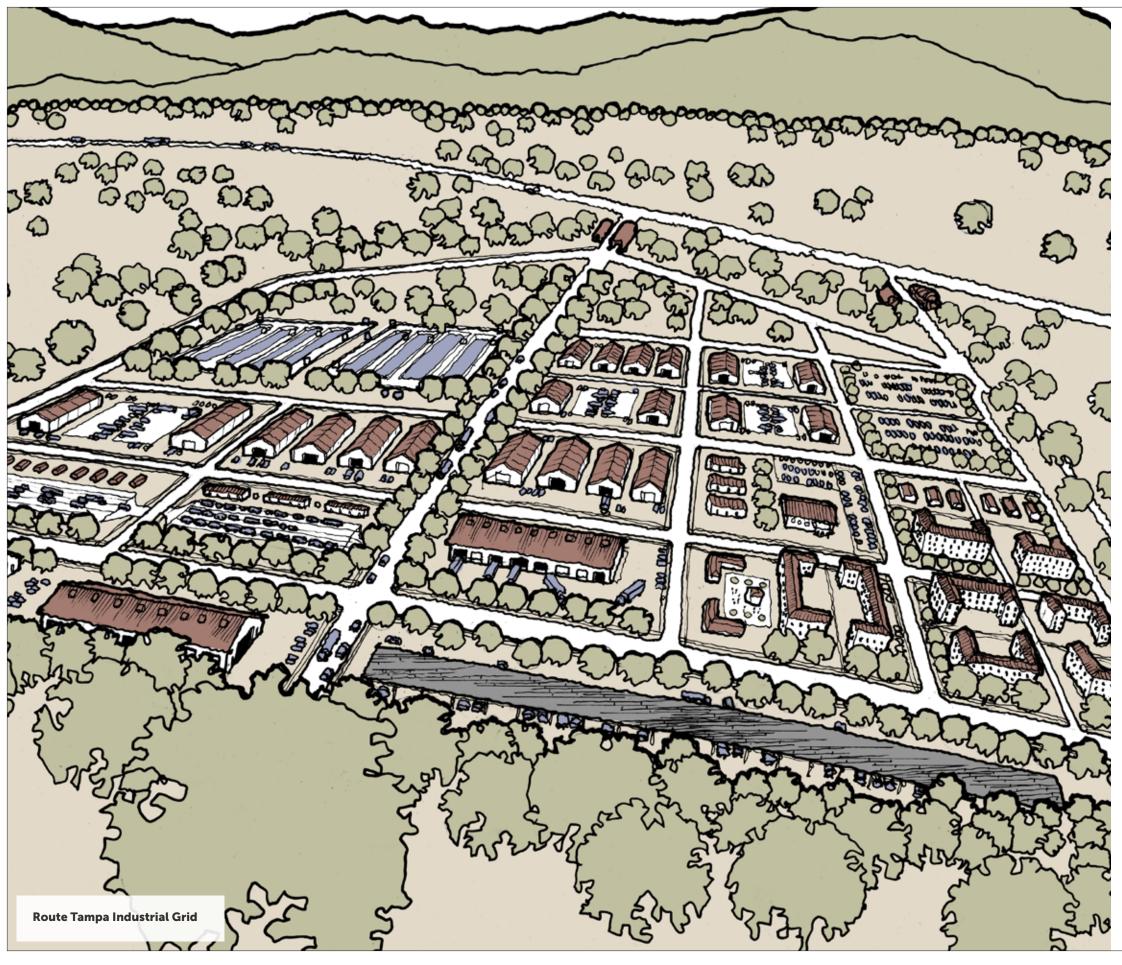




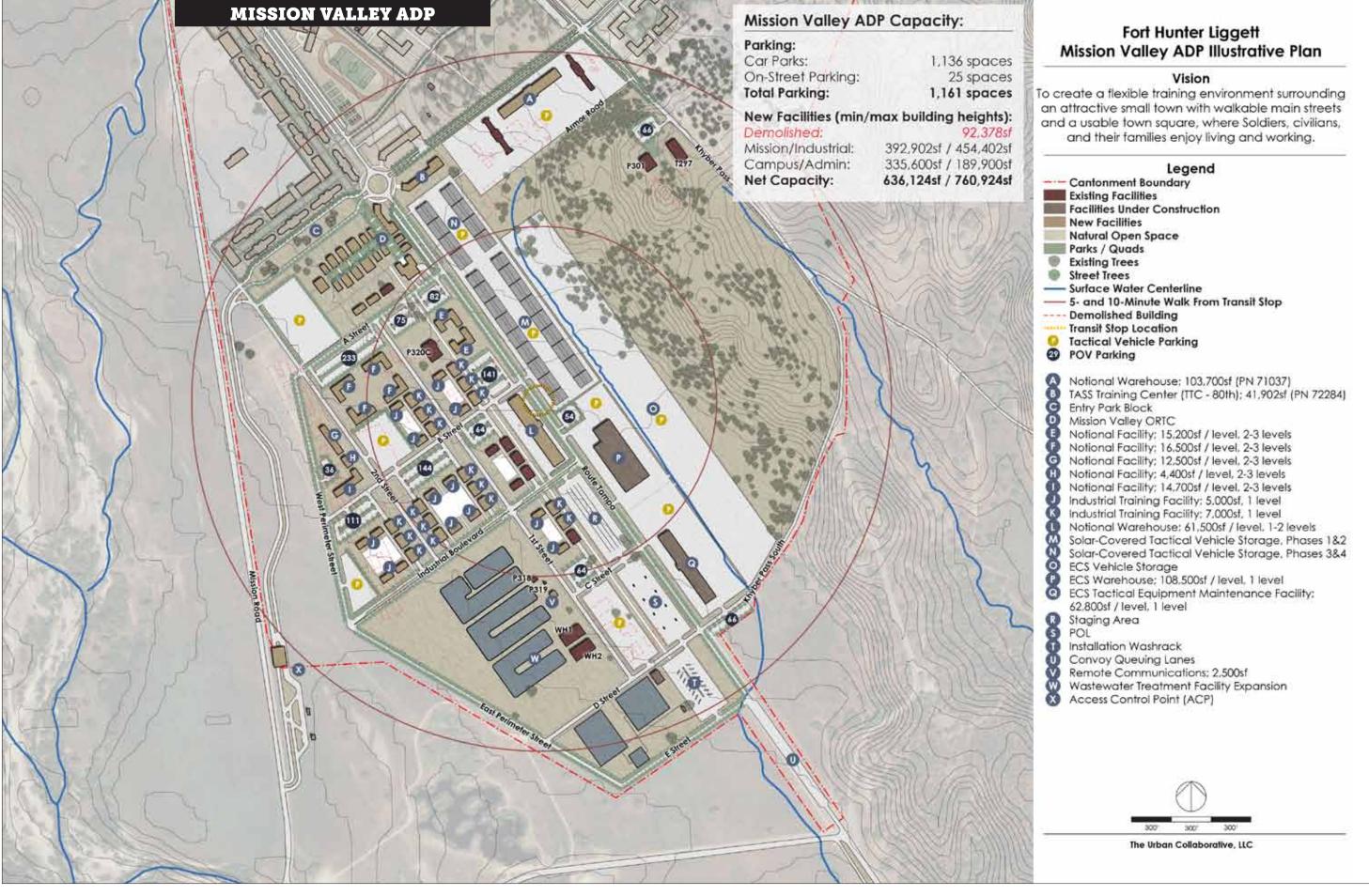


Blackhawk Hills ADP



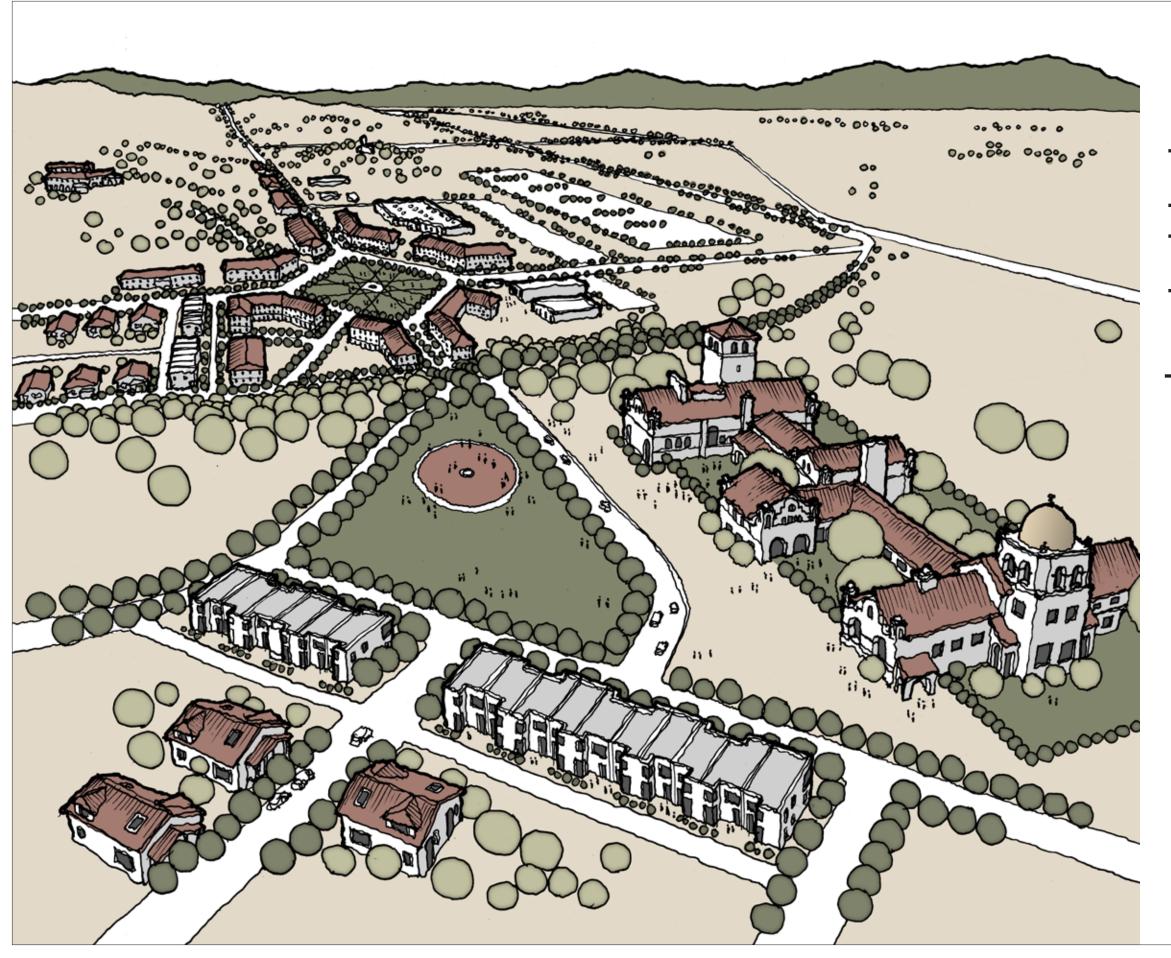


Mission Valley ADP



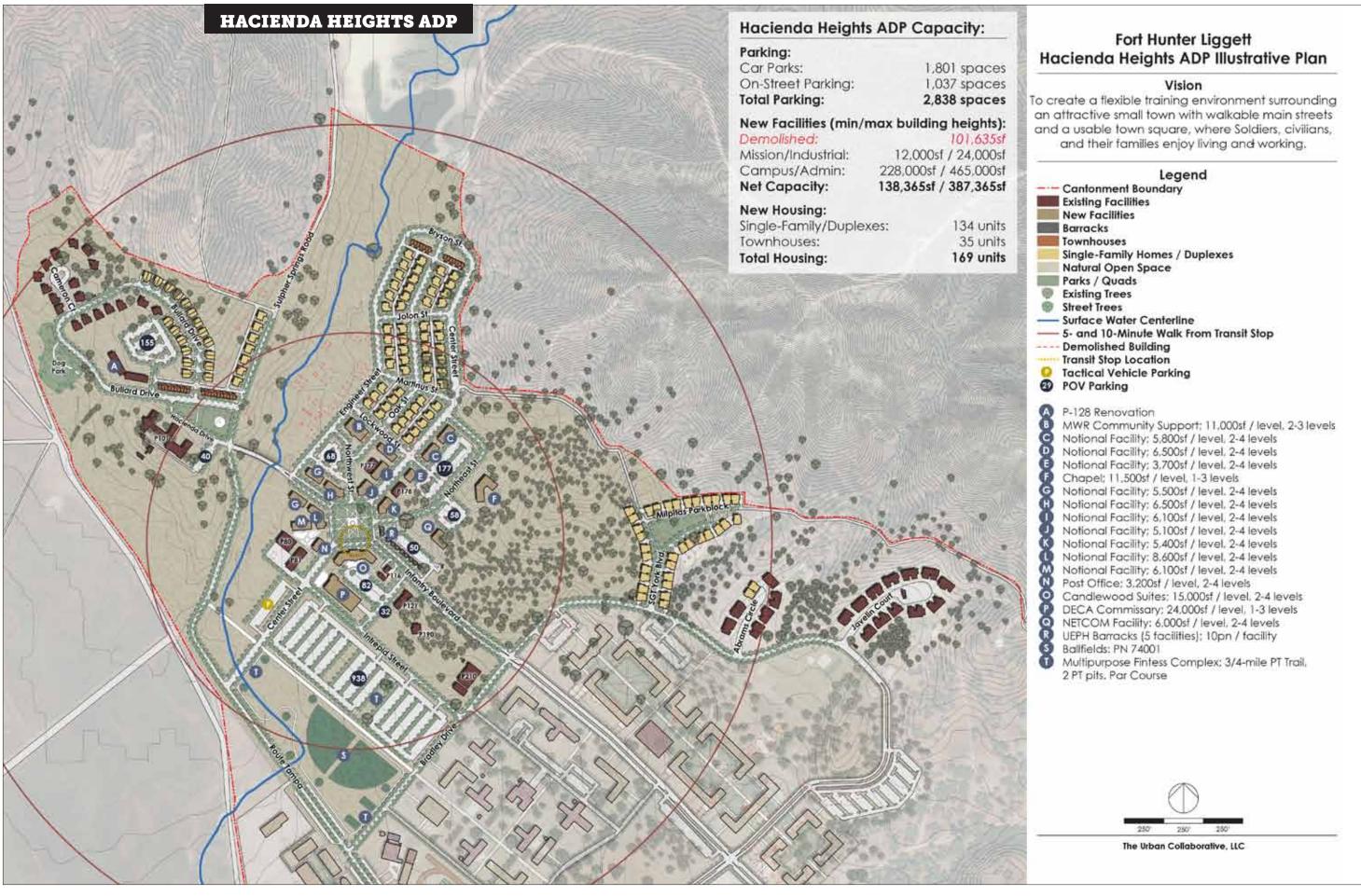
52 FORT HUNTER LIGGETT MASTER PLAN DIGEST
FORT HUNTER LIGGETT MASTER PLAN DIGEST 53

HACIENDA HEIGHTS ADP



Hacienda Heights ADP







The Future

Implementation of Fort Hunter Liggett's master plan has already started – projects to construct a new washrack, a DPTMS campus, solar fields, unaccompanied personnel housing, an ORTC, and the privatized lodge have already been sited in accordance with the regulating plan and will be built in accordance with the master planning vision.

Area Development Plans, a comprehensive Form-Based Code, and a detailed Installation Design Guide consisting of Building Envelope Standards, Streetscape Standards, and Landscape Standards combine to provide guidance and flexibility for how future development will occur in support of Fort Hunter Liggett's vision and mission.

The plan created for Fort Hunter Liggett reflects the current mission needs of the United States Army Reserve and provides a framework for future growth. The plan should be an active document, monitored and changed as necessary to reflect emerging mission needs and ensure that Fort Hunter Liggett is poised to continue its position as the premier Reserve training center, well on its way to creating a flexible training environment surrounding an attractive small town with walkable main streets and a usable town square, where Soldiers, civilians, and their families enjoy living and working.



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LTC Anthony Trutanich

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MAJ Mark Ehinger

MAJ Donald Jernigan

MAJ Steven Messenger

MAJ Sojourner Williams

CPT George Lyton

CPT Michael Sheely

CSM Kevin Newman

CW3 Luis Lebron

SFC Guadalupe Garza

Laura Belton

Richard Camacho

Lisa Cipolla

Liz Clark

Clifford De Mattos

Patrick Foley

Jack Frost

David Fullmer

Keith Gray

Harriet Grindstaff

Mark Grindstaff

Glenn Groome

Gary Houston

Steve Jackson

Juan Jacquez

Doug Joseph

David Kalita

Leonard Lovett

Michael Moeller

Paul Moth

Bruce Quarton

William Riley

Karen Riney

Rosa Rodriguez

Steve Scruton

Cyndi Skinner

Michael Sonnier

Art Watson

Gale Wiest

"Make no small plans; they have no magic to stir men's souls and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will not die, but long after we are gone be a living thing, asserting itself with ever-growing insistence."