





### designing war/ an architecture of defense&destruction

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A nation that continues year after year to spend more money on military defense than on programs of social uplift is approaching spiritual doom.

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#### abstract

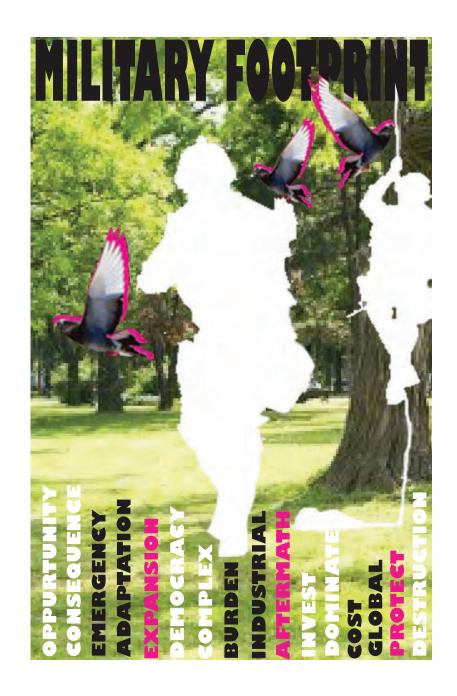
An institution built around destruction and war can offer insight and innovation into architecture and construction processes. Temporary and permanent military occupation impacts the surrounding environment and community economically, socially, and environmentally. The United States' vast military footprint, domestically and globally far exceeds that of any other nation, the actions of an institution of such size and influence undoubtedly have equally as vast and far-reaching effects on every space in which it occupies.

When military installations are closed or no longer needed, a void, which must be addressed quickly, is created. The void of a decommissioned military base results in dislocation for the local population, loss of jobs, reduction in business revenues, environmental remediation work and many other harmful effects on the surrounding community.

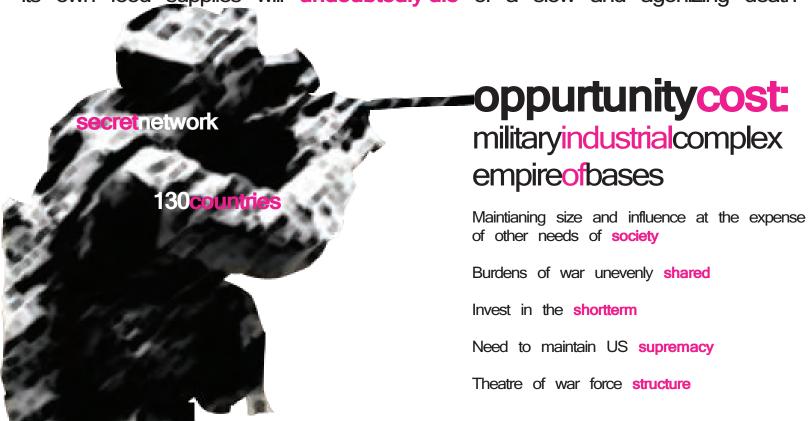
It is the goal of this thesis to redefine the military footprint as an opportunity to convert spaces of war into places to benefit the public. The way in which the Military effects cities on such a massive scale can facilitate a system from which the architecture becomes a catalyst for redevelopment, economically and culturally benefiting cities facing military abandonment.

#### introduction

This thesis begins to explore and tries to understand the way that in which demilitarization effects the local environment and community. The goal of this is to create a system that is applicable to other abandoned military installation conditions. This is done with the hope of generating a viable community that can sustain itself in spite of the rapid removal of such a powerful institution. Communities that are adaptive, collaborative, resilient, powerful, connected. A community that is adaptive in the sense that it meets changing needs physically and economically; collaborative by using local communities to shape new infrastructure, while working with existing environmental systems; resilient by being economically diverse, and environmentally aware; connected with the community globally, technologically and historically; and powerful enough to have adequate resources.



"such a **giant military might,** like some ancient dinosaur that has **outgrown** its own food <u>supplies</u> will **undoubtedly die** of a slow and agonizing death"



"the rest of the world just hopes that when the dinosuar dies, it does not fall on their neighborhood and crush some hapess bystanders"

#### **Creation from Destruction**

What can be learned from military occupation, can the military create and not just destroy? What happens to an occupied area after the military leaves? Is adaptive reuse of a military base an effective urban strategy?

What are the Social-Political Implications and temporary and long term effects on native civilians, cities, and architecture, in which there is a military presence or even occupation?

#### **Military Footprint-Empire of bases**

The United States military has over 900 bases in 130 countries, with a budget of over 250 billion dollars. Such a giant of military might, the United States Military, has outgrown its own supplies, and will undoubtedly suffer the consequence. The military includes a lot of big moving pieces, and has become tough to manage, and no longer manageable even by the office of the U.S. President. There are many regions that depend on the U.S. military for stability, and that pay host nation support, will have to find some other mechanism as the new basis. The U.S. has seems to have a global grand strategy of full spectrum domination. The United States continues to expand its military footprint in countries where no prior troop presence before, including more than 1,000 military bases dotting the globe. There are complaints of unjustified spending as a consequence of the military-industrial complex, and the burdens of war

become unevenly shared in the United States, this is a cost meant as an opportunity cost to American society. Cost is a huge issue for anything the military does, but the protection of our forces and military assets also becomes extraordinarily important so there is a need to balance the cost with the urgent requirements of the military. The empire of the United States military is so large that not even the government itself knows it full size and scope. The empire of bases, while still at or close to its height, will undoubtedly shrink. The military is going to have to scale back its footprint in the years ahead, and economic realities as well as other factors will necessitate that. Militarized Landscapes and military training leads to pollution as well as other forms of environmental damage, but military ownership of certain sites, can keep negative impacts of tourism and urbanization at bay and encourage the preservation of ecologically outstanding habitats, and ecofriendly principles.

#### Military Urbanism

The military footprint has also expanded into the urban environment. Military urbanism is the militarization of urban spaces. This can include changes to built environments in military conflict areas or modifications of cityscapes to strengthen or subvert control by authorities. It also concerns the planning and implementation processes by which areas are fortified and militarized, as well as observations and critiques of these processes. This includes more security, and less privacy for

the public. How the military, through the ,militarization of spaces has further expanded into the city, almost going unnoticed, slowly and secretly creeping into the everyday urban environment is another example of the larger impact the military indirectly has on the built environment at such a large scale.

#### Base Realignment and Closure (BRAC)

One of the biggest factors affecting the United States military footprint is the base realignment and closures act. With this legislation more than 235 military sites are scheduled for closure or realignment. The U.S. military was under orders to downsize5 percent of its entire infrastructure In accordance with this ruling. The ruling will force the relocation of more than 125,000 military personnel and their families. This consolidation was projected to save an estimated \$3.5 billion annually. The goal of this act is to enable the US military to match facilities to forces, and to harnesses the strength and creativity of the private sector by creating partnerships with local communities. All military installations will be reviewed, and recommendations will be based on the military value of the facilities and the structure of the force. The BRAC encourages a cooperative effort between the President, the Congress, and the military and local communities to achieve the most effective and efficient base structure for the consolidation of bases. It will give local communities a significant role in

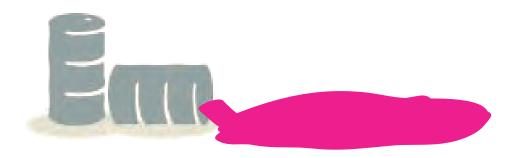
determining the future use of facilities in their area by transferring closed installations to local redevelopers at no cost (provided that proceeds are reinvested) and by creating partnerships with local communities to own, operate, or maintain those installations that remain. Changes in the military structure will necessitate evaluation of our facilities to optimize usage and capability. The BRAC is the most significant efficiency measure undertaken by the United States Military and opens up many issues and opportunities.

#### Demilitarized landscapes

In military terms, a demilitarized zone is an area, usually the boundary between two or more military powers where military activity is not permitted, usually by peace treaty, or other agreement. Often the demilitarized zone lies upon a line of control and forms an international border. The term demilitarized means converted to non-military use or purpose, or returned to a demilitarized field. Many demilitarized zones are also neutral territory, because neither side is allowed to control it. Several demilitarized zones have also unintentionally become wildlife preserves, because the land on which they are located is dangerous for construction, and less exposed to human disturbances or hunting. This is an example of a natural progression of what the reuse of a space previously occupied by the military can become and offers insight into what can

# base relignment and closures act

## WASTES OF WAR



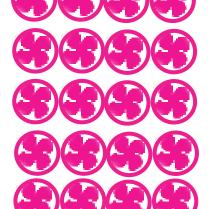
Annually the military spends

=\$1 billion

820

billion

on air conditioning in iraq and afghanistan.







happen when these spaces are planned to be repurposed.

#### Repurpose

Base closure creates a massive obstacle for redevelopment and for the regeneration of the community. Decommissioned military installations effect communities nationally and globally. They can become symbols of victory, arrogance, pain, and consequences of military aggression. These abandoned structures and ghost towns can disrupt neighborhoods and split entire communities. The United State alone will spend billions of dollars of taxpayer funds to do environmental remediation on the 12 million square feet of U.S. military space scheduled to close. Can this opportunity be used to bring economic stability to areas deserted by closed bases?

There is an opportunity, through architecture, to create strong anchors in communities that will generate thousands of jobs and bring economic stability to those who surround these sites Repurposing these closed and abandoned bases not only helps clean up the contamination left behind but also creates options for investment and redevelopment. Whether proposing to refurbish the abandoned military structures or to master-plan the enormous installations, a reuse plan addresses socioeconomic imbalances caused by their initial closures. Repurposing these vacant lots creates jobs, attracts investment, improves the health and living of residents, spurs community participation, preserves history, and helps shift attitudes toward

healing and positive reconstruction, also giving the military a positive perception. Also redevelopment can be more sustainable by reusing existing infrastructure and keeping built structures in good repair.

Some abandoned sites remain blots on the landscape of a long military presence, and others are places of mysterious history and forbidden exploration, all representing a creative opportunity waiting to be released. How can abandoned, closed, and decommissioned military sites be repurposed to publicly serve the communities surrounding them?

An innovative solution can be developed to re-envision closed, abandoned, and decommissioned military sites. Working with surrounding communities these former places of conflict can transform oftentimes hostile locations into civic spaces built for the public good.

Repurposing allows for the, clean up the contamination left behind , opportunities for investment and redevelopment, creates jobs, attracts investment, improves the health and living of residents, spurs community participation, and preserves history.

There are opportunities at every abandoned installation, unique to each condition, to reclaim these spaces for positive social, economic, and environmental change. There is aneed for collaboration, and architecture can draw attention to the impact that these bases have on surrounding communities and

the importance of planning their closures. In the end, this thesis will provide a model or solution for the transformation of thousands of abandoned sites like from burdens and military waste into something of use and necessity.

Base redevelopment presents a unique opportunity, and individual circumstances, values, and needs of a site must be taken into consideration. Local economic and market conditions, the extent of environmental contamination, the future owners of the property, and the amount of land available to the community will influence the pace, type, and viability of redevelopment. Local needs and demands for office space, housing, retail, and other forms of commercial development, as well as for recreation and green space must be determined and understood. Armed with this information, the community can start planning for a new future. Critical to their success of the future of a repurposed base would be how the base connects to surrounding neighborhoods, town centers, and the types of development needed for the location, size, existing structures, and infrastructure. The community has the potential to be better off economically and environmentally than when the base was opened. Taking stock of assets and challenges is crucial as well and substantive public education and involvement can lead to support later. Planning for the long term as well as the short term also contributes to the success of redevelopment and better understanding of what facilities (and their condition) exist on an installation permits more efficient use of the space that is available. By classifying each circumstance and condition, a system can be defined for a way in which to revitalize and reuse specific military installations, buildings and equipment unique to each condition.

Beyond the footprint of the military and what is left behind in it's wake this thesis also explores the concept of abandonment and repurposing in relationship to a solution. Also investigating the idea that no thing or any place is ever totally abandoned, just waiting for nature or someone to find it and give it a new life. It explores the innovative ways humans have, and can, re-use their environment and how these paths differ across each circumstance with specific consideration to the conditions and situations the military creates, by rethinking the abandoned world. This thesis aims to be an enabler, a catalyst of the resources available in every place that is abandoned, to a model promoting peace and development, through the sustained and effective transformation of military-related structures, assets, functions and processes. If such consideration of efficiency is taken in order to set up these bases, then why isn't there an effective system, specific to the condition of a military installation, put in place to re-purpose what is left when these bases are no longer needed? There becomes an opportunity, through architecture, to transform places of defense&destruction into spaces of public good.

#### **Project Description**

#### History

The Philadelphia Naval Shipyard National Historic District is comprised of 263 contributing buildings, structures, and objects. It's history starts in 1872 when the land was established as the Naval Shipyard and used as a major ship construction and repair facility. During the early 20th century, the Yard functioned as one of the nation's major Marine Corps receiving stations and later served as a training facility.[1] The US Defense Department shut down the facility in 1995.[2]

#### Outcome

To unify the company and streamline communication and workflow, the company began a search in 2004 for a new headquarters. While an office park may be the answer for some companies (though arguably the worst option), it was out of the question for Urban Outfitters who felt it would not match its character and reputation.

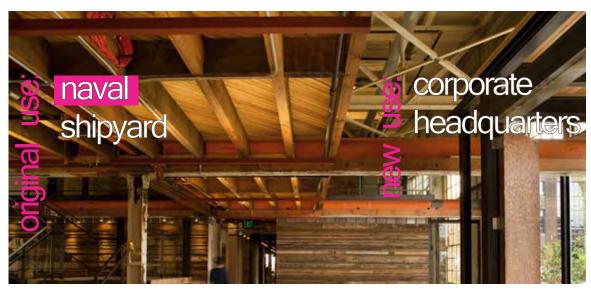
Soon after starting the search, the Naval Yard was discovered and deemed a near-perfect fit by Hayne. The company purchased four buildings and leased a fifth. Adapting the buildings and property cost nearly \$100 million. The property and its built elements were truly reused. Old paint remained on the walls and ample material was reused—stairs were fashioned from wooden beams, for instance, and windows were removed, reglazed, and reinstalled. In all five buildings, employees work in light-filled interiors with open layouts; very few staff members have an enclosed office. Most of the furnishings are custom-made and contain recycled material (tabletops crafted from salvaged wood, for instance). Amenities such as a gym, yoga studio, dog park, and farmers' market













#### **Project Description**

In Marfa, Judd could finally realize his art on a grand scale. On the old army base, he transformed a pair of immense artillery sheds into modern art cathedrals. Glass walls let the sunlight play against the surfaces of 100 of Judd's boxes, making some shimmer. Some glow from within like furnaces.

For his residence, Judd turned two former airplane hangars into a starkly modern compound called the Block. Craig Rember, the Judd Foundation's collections manager, calls it a fusion of art and architecture.

Judd dedicated equally lavish spaces to the artists he admired most. A cavernous warehouse along the railroad tracks houses John Chamberlain's baroque sculptures of crumpled car parts. Six U-shaped barracks are the stage for Dan Flavin's hypnotic light installations. New York painter David Novros was commissioned by Judd to create work specifically for Judd's exhibition spaces.

Judd bought 16 decaying buildings, an entire decommissioned Army base, and three ranches spread across 40,000 acres.

add to the lively and informal atmosphere.uch as a gym, yoga studio, dog park, and farmers' market.













#### **Project Description**

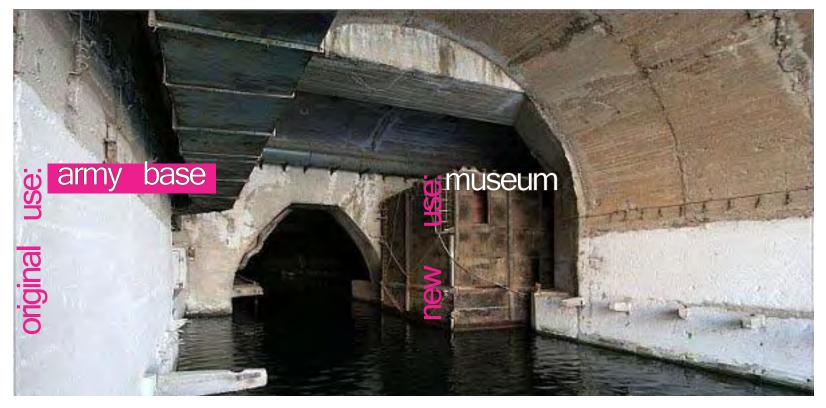
In a bay on the northern shores of the Black Sea, the Soviet army maintained an elaborate submarine base throughout much of the Cold War. Now a museum, this abandoned submarine base in the town of Balaklava, Ukraine is often explored by locals and tourists alike. During the war, Soviet submarines were constructed elsewhere, transported to this base by rail, then deployed into the Black Sea and beyond for covert underwater operations. The tunnels of the submarine base reached far and deep into the mountain above, providing enough room for many submarines and their crew up through the end of the Cold War.



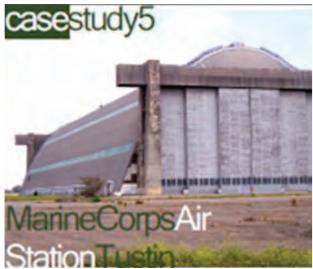


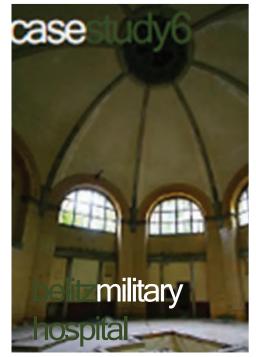


















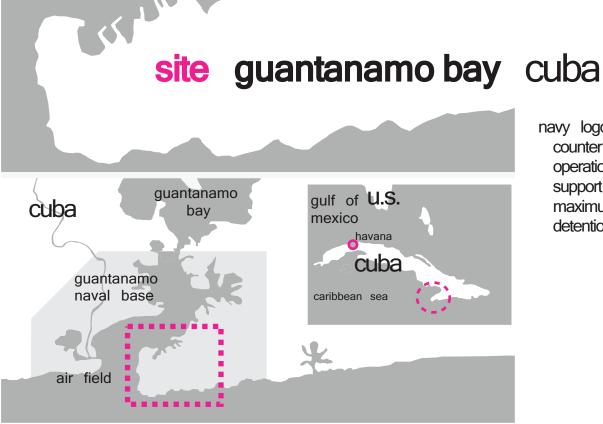




## site

## selection criteria

- 1) Availability of Information
- 2) Location
- 3) Geography
- 4) Local Community/Population
- 5) Architectural features
- 6) BRAC
- 7) Size
- 8) Year abandoned
- 9) Current Status
- 10) Historical significance

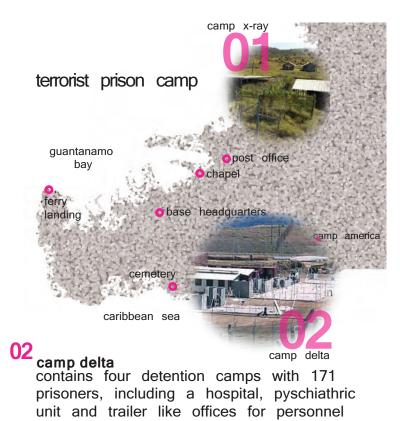


navy logostics base counter drug operations support maximum security detention center



camp x-ray

collection of open air cages, first place set up to hold detainees, abandoned in 2002



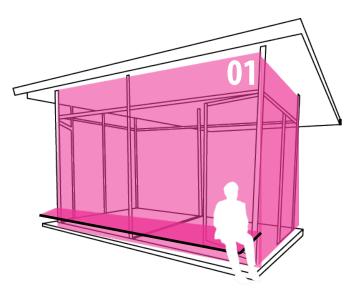


## 01

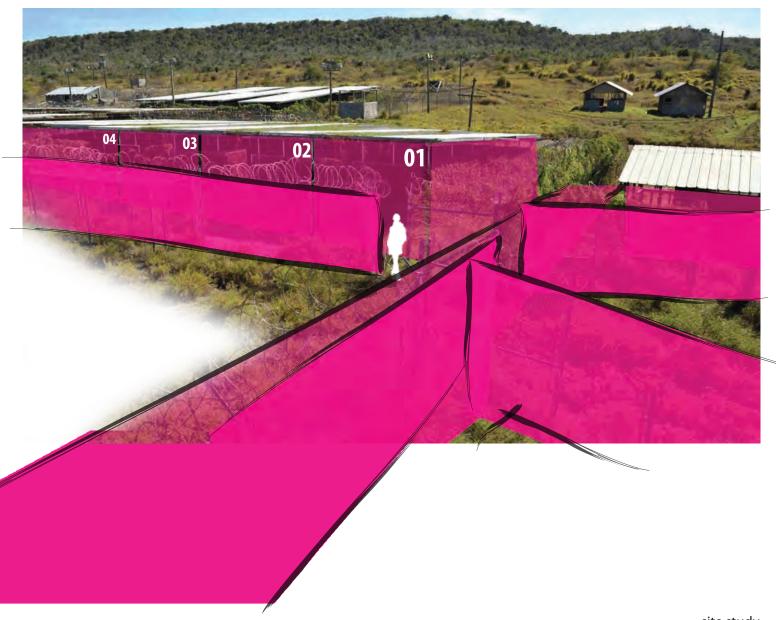
#### Cell blocks as Memory Containers

Series of 23 Memory Containers representing the 23 countries from which prisoners were displaced. Each container includes archives,

historical information, and personal testimonies. Chain link fences will be rep aced with panels of varying colors and light, representing each country. The site will become and open air museum concerned with documenting the displacement of individuals and the emotions and dynamics involved with that experience. Names of the countries will be written on the side of each container. With this museum individuals can learn from the history of the area in order to not repeat past mistakes.



Side panels include benches for sitting and observing the archives.



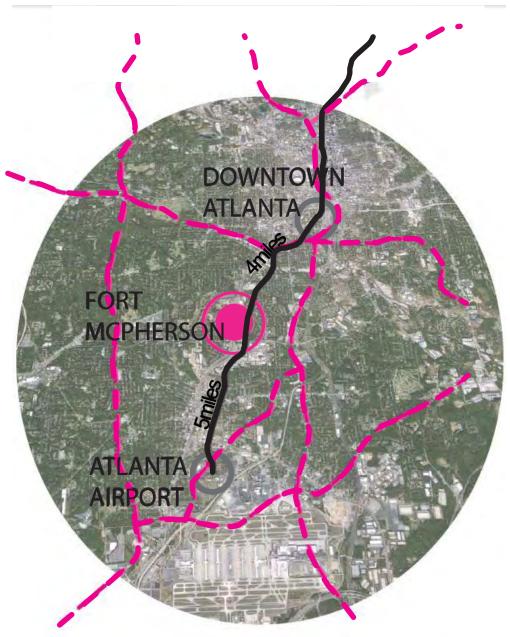
- Gen George S. Patton

A good battle plan that you act on today can be better than a perfect one tomorrow.

# Site Location

Fort McPherson Atlanta, GA 4,142 people \$409 million





- 1 | Fort McPherson is perfectly situated between downtown Atlanta and the world's busiest airport.
- 2 | The Army base has a concentration of buildings suitable for re-purposing as well as space to increase density.
- 3 | The base is accessible by tworapid-rail stations and four major interstate highways.

The closing of Fort McPherson brings the loss of thousands of jobs and the disappearance of nearly \$600 million in annual economic impact.

The 127-acre site is a century of workby the U.S. Army, dating back to the Fort's first days in 1889. The peopleand place have served to defend



# Site Assets

The 488 acre former home of U.S. Army Forces is located betweendowntown Atlanta and Hartsfield-Jackson International Airport. Oakland City MARTA Station to the northeast and Lakewood / Fort McPherson MARTA Station to the southeast provide the necessary transportation connections to The eighteen-hole golf course occupies the majority of the western half of the site.

Staff Row consists of nineteen homes listed on the National Registry





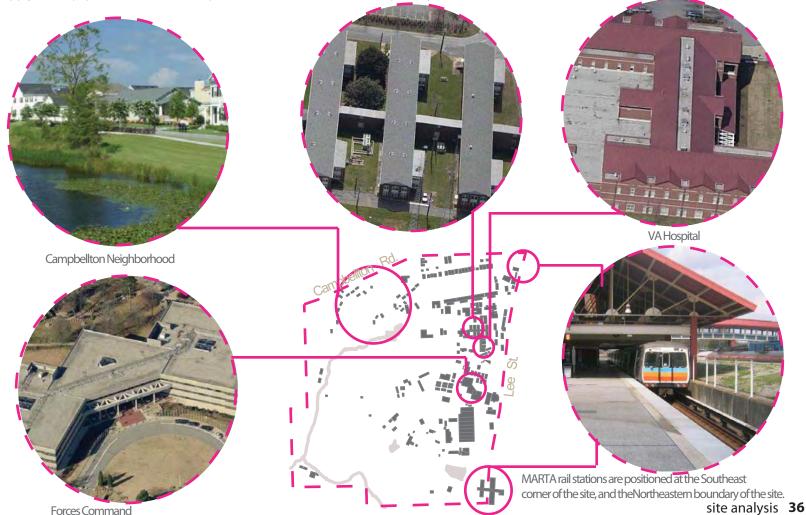
Historic District 40 Buildlings on National Registry of historic places



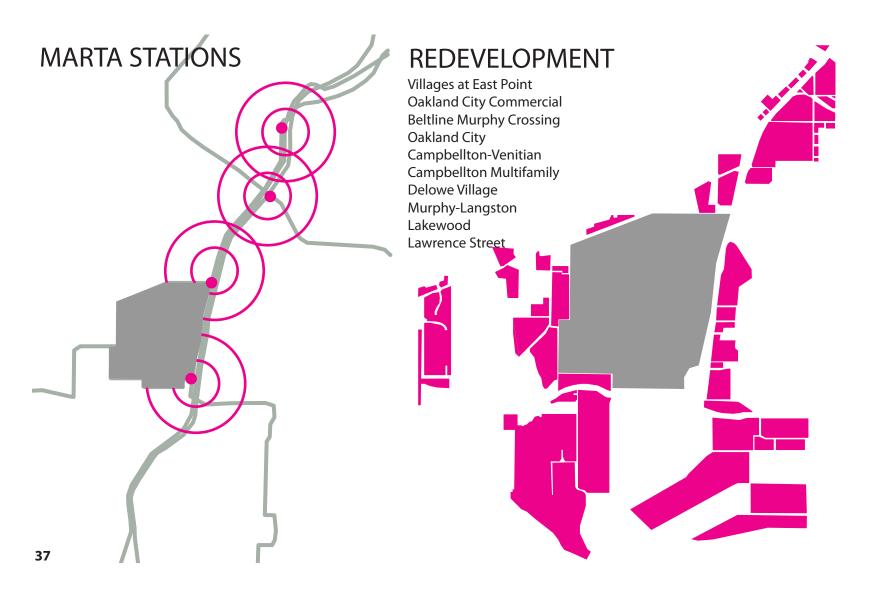
Over 135 acres of open space, including an 18 hole golf course.

#### **Environmental Conditions**

The property is roughly rectangular in shape with 253 buildings and structures. Land use within 1/4 mile is residential interspersed with zones of light industry interspersed. The property is bounded by residential areas to the North (Oakland City), East (Lakewood), and West. Mixed residential and industrial areas lie immediately South of the property. Fort McPherson is used in much the same way asthe surrounding communities. It is broken down into administrative areas, recreation areas, family housing areas, and a small industrial area. From the Spanish-American War until the end of WWII, Fort McPherson's primary missions were the provision of medical services, the processing and training of soldiers and conducting supply and equipment maintenance operations. Since WWII, the base's primary function has shifted towards command and control activities.



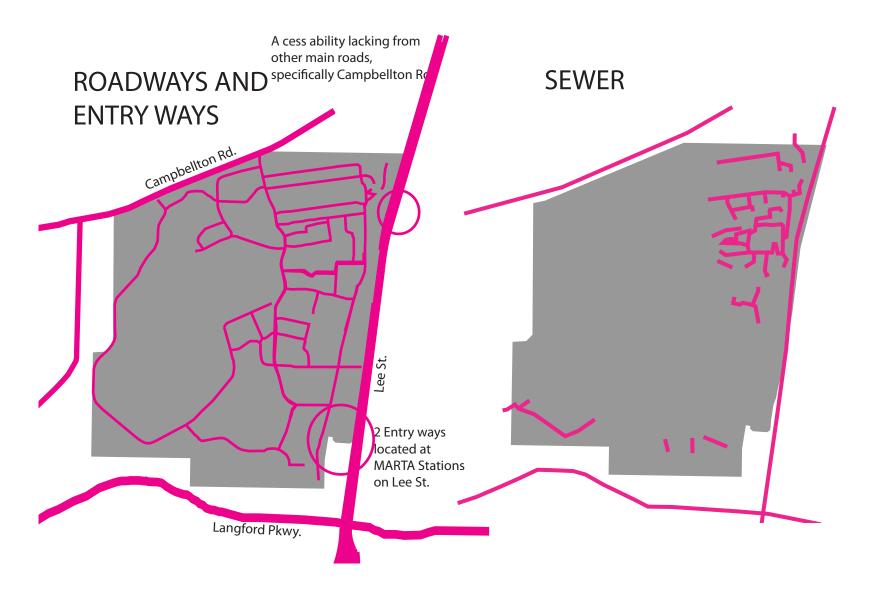
# Site Mappings

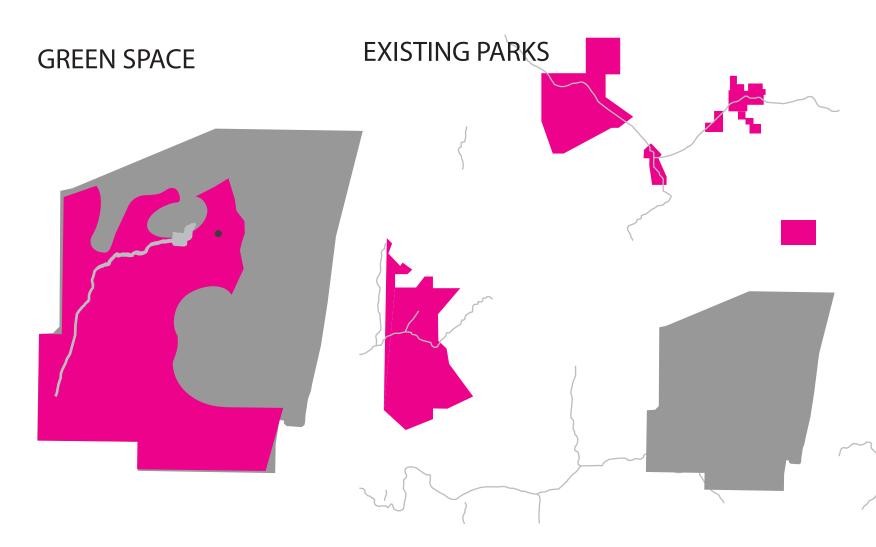


#### **EXISTING BUILDINGS** 253 BUILDINGS AND STRUCTURES

#### HISTORIC DISTRICT

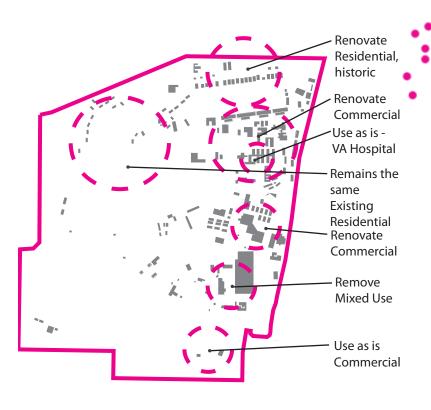


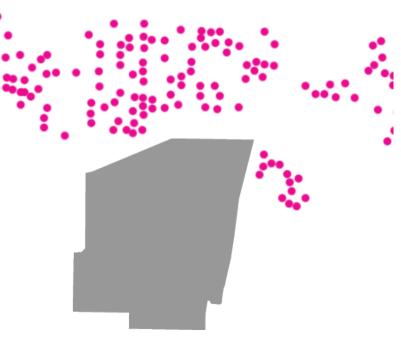




## **BUILDABILITY**

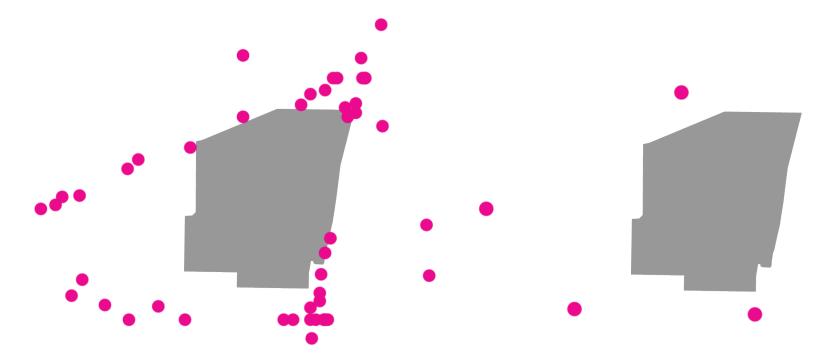
#### **VACANT HOMES**





## **HEAVY TRAFFIC AREAS**

# **PACKAGE STORES**





# Mapping Overlays





Redevelopment, MARTA Stations, and Parks

Heavy traffic areas, Poverty Distribution, and Vacancies

Package Stores and Schools

# Sustainable Urbanism

economic social historical environmental







This plan for Fort McPherson is rooted in design principles that will bring long-term environmental, economic, and social sustainability to the community.

A walkable medium density urban area begins near MARTA station. High concentration of retail, live/work, and restaurants near transit station. Becomes a connection for the outside community. Provides new jobs needed as a result of thousands of jobs lost because of base closure and acts as a transition zone for the bases new use and a catalyst for further development.

# **Master** Plan

reuse of Fort McPherson

#### Campbellton district

New entry way to connect to Cambellton and the surroundia community,includes grocerystore.

Residential Devlopment

#### Open Green Space

Urban farming Zone -Supplemnts grocery store.

Recreation Space

Passive Open Space Bking, walking, and jogging paths.

Event Space



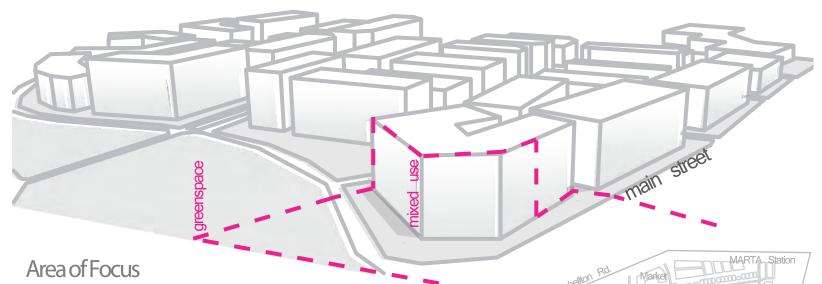
Veterans Affairs VA hospital to remain Forces command repurposed into office and administration.

Residential Devleopment

#### Main Street Mixed Use

Walkable medium density urban area. Begins near MARTA station. Memorial Public space to activate MARTA station.





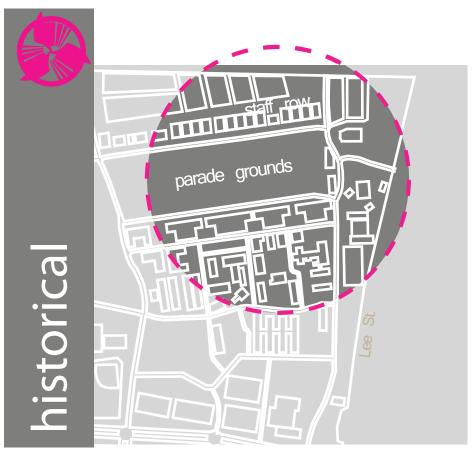
Medium density mixed use Apartments, Retail, Restaurant, and public gathering spaces.

Startup space and business incubator focus area near MARTA s









# Historic District



The historic village is built upon the character of the parade grounds and all of the existing homes and buildings registered on the national registry of Historic Places.

Oakland City MARTA Station to the northeast provides necessary transportation connections Staff Row consists of nineteen homes listed on the National Registry of Historic Places. There are a concentration of 40 buildings which are listed on the National Registry of Historic Places. Preservation of these structures gives character to the development and will help tell the story of the fort's history. The scale and intimacy of these buildings are carried throughout the village as it transitions to the VA District to the South and Campbellton Neighborhood to the west. An already existing framework could be an early catalyst for future development opportunities.



Green Space



This large green space consisting of 135 acres will be redeveloped to serve the entire community. The Recreational area will include a mix of sports facilities Passive Open Space: The passive zone includes walking and bike trails that help connect the overall development. The Event Space is intended to host large outdoor festivals and concerts for the City of Atlanta and City of East Point. Urban Farming and Community Gardens: One of the primary goals of Sustainable Urbanism is to establish vibrant and healthy communities. The generous open space in the redevelopment of FortMcPherson provides many opportunities for the integration of urban farming and community gardens as part of the sustainability story.

50



# historical

# **Veterans** Affairs



Army Operations to become Office and Admin.



VA Clinic to remain the same

#### INTENT

Evaluates sustainability from environmental, economic, and social perspectives.

Its goals are to achieve a unique sense of community and place; expand the range of transportation, employment, and housing options preserve and enhance natural and cultural resources.

- Enhance community services
- Honor the history of the site.
- Promote sound environmental and energy-effi cient concepts.
- Promote green space.
- Provide connections to surrounding neighborhoods
- Develop with respect to local community
- Create a place for everyone
- A jobs generator
- A thriving work / live / learn / play community

# Bases To Places







From
Military
Urbanism
To
Sustainable
Urbanism



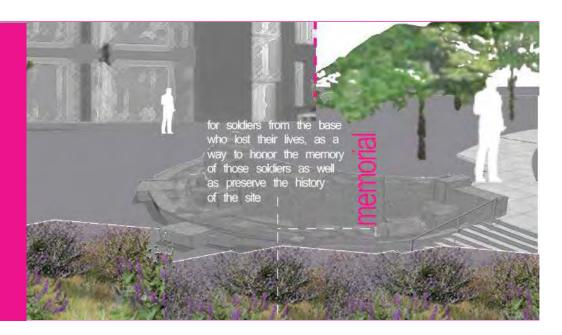
# environmental

Walkable Community
Creating a bstructure that lends
itself to being
more walkable helps connect the
community within
and to surrounding neighborhoods. Encourages use of alternative transportation options.





Honor the history of the site and preserve and restore open space





# economic

Mix Land Uses
The blend of office, residential,
open space
and retail uses give people the
option to truly work, live,
learn, and play in one place.



#### conclusion

This thesis process resulted in a framework to transform and repurpose abadoned military installations. This thesis also explores the concept of military urbanism, abandonement and repurposing through sustainable urbanism in relationship to a solution.

This thesis aims to a catalyst of the resources available in every abandoned military installation. as a model promoting development, through the sustained and effective transformation of military-related structures, assets, functions and processes.

By creating sustainable communities that are adaptive, collaborative, resilient, powerful, and connected. A community that meets changing needs physically and economically; uses local communities to shape new infrastructure, while working with existing environmental systems; economically diverse, and environmentally aware; and connected with the larger communityechnologically and historically; and powerful enough to have adequate resources.

The goal of this framework is to be applicable to other abandoned military installation conditions. This is done with the hope of generating a viable community that can sustain itself in spite of the rapid removal of such a powerful institution.

This frameork of sustainable urbanism is an opportunity, through architecture, to transform places of defense&destruction into spaces of public good.

hey,

mom, dad, alexandra, paul, john, matt, grandpa, family, friends, and soccer teammates

thanks.

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