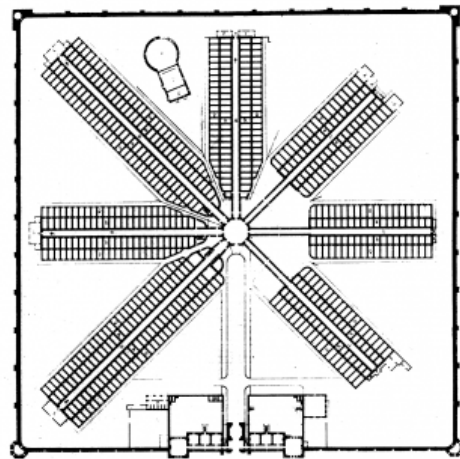




Eastern State [Redux]

Christopher Mojo | Undergraduate Architectural Thesis

Eastern State [Redux]
Christopher Mojo | Undergraduate Architectural Thesis | Cal Poly SLO





Eastern State [Redux]

An adaptive reuse solution for the historic Eastern State Penitentiary



Eastern State [Redux]

An adaptive reuse solution for the historic Eastern State Penitentiary

Christopher Mojo

Architecture Thesis 2012-2013

Bachelors of Architecture

California Polytechnic University

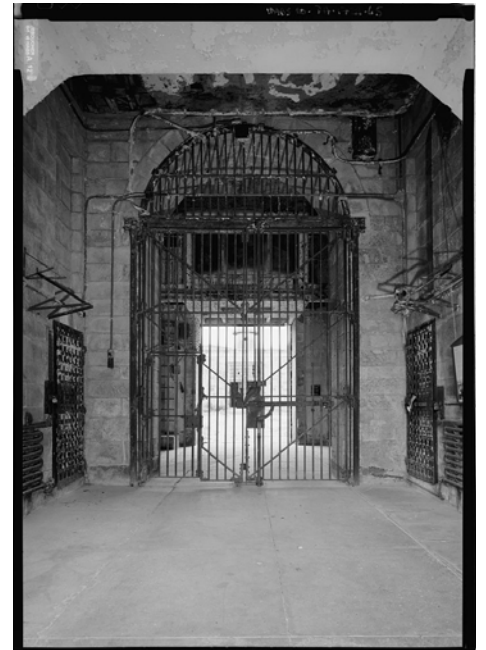
San Luis Obispo

Kent MacDonald + Bruno Giberti



I would like to say thank you to my professors Kent MacDonald and Bruno Giberti for their constant insight and architectural wisdom and for pushing me to not be timid in the dissection of historic monuments, Sally Elk at the ESP Foundation for her help in locating necessary historic information and drawings of Eastern State, and to my parents for their love and support throughout my college career.

Thank you.



Contents

Abstract	10
Chapter One: Research	
Approaches for the Reuse of Buildings with Negative Pasts	12
Chapter Two: Pre-Design	
Background	22
Problem Statement	26
Precedents	28
Chapter Three: Schematic Design	
Process	36
Chapter Four: Final Design	
Addition/Subtraction	42
Form Generation	43
Circulation	44
Program Disbursement	45
Vicinity and Site Plan	46
Floorplans	48
Visualizations	50
Elevations	60
Section	62
Typical Cellblock Section	64
Structure	66
Materials	67
Works Cited	70





Abstract

Buildings and places, like people, have biographies. These biographies grow from cultural, economic, political, and especially social conditions throughout their lifetimes. Inherently these factors form a piece of historical significance that society—local, national, international—attributes symbolically to a physical structure. These social structures that are understood and attributed to physical sites over time form such strong associations that when the physical usefulness becomes inept, the social structures may remain. Buildings and places are essentially social and cultural products, therefore whether the physicality of a building is intact or not, the history and impression it has obtained over its life continues to impact society either positively or negatively.

Society is constituted through the buildings and spaces it creates, however, what happens when the social structure built into a specific space is removed. What happens when a new “social life” is injected into a building whose biography has a culturally or socially strong resonance within a community or society? The removal of a specific imbedded social structure from an understood physical structure could have detrimental effects on the community in which it has so long represented, but it may also revamp and catalyze new beginnings for a once storied history. What is the social significance of this adaptation, and is it possible to alter the “social life” of an historical place with an already written biography and be beneficial?

Places that have socially troubled or neglected pasts—prisons, sites of terrorist attacks, internment camps, derelict neighborhoods, slums—are prevalent throughout the nation. Many of these types of places, whose previous uses have now been removed, are being sought after and slated for new life. The chance to write a new biography over the pages of the prior, melding their histories, is an example of the attempt to implement a new social life within an existing place. Whether the change is successful or not depends on the impact the new function and architecture have on the previously established social and physical structures. This balancing game of social structures, new and old, is one that remains to be explored.

Approaches for the Reuse of Buildings with Negative Pasts

"Memory is built. Memory is not something which is just there. It is also constructed...When we remember we are not in the past. We are always remembering now...Very often and most likely it is material objects in their opacity which evoke that memory. The unconscious knowledge or imagination of what was there. So you have to stumble across a stone and fall down to remember what was on the ground."

— Daniel Libeskind

Buildings and places, like people, have a biography. These biographies grow from cultural, economic, political, and particularly social conditions throughout their lifetimes. Inherently these factors form a piece of historical significance that society—local, national, international—attributes symbolically to a physical place. These understood social structures are attributed to physical sites over time forming such strong associations, that when the physical usefulness becomes removed, the social structures may remain. Buildings and places are essentially social and cultural products, therefore whether the physicality of a building is intact or not, the history and memories it has obtained over its life continue to impact society—positively or negatively.

Society is constituted through the buildings and spaces it creates; however, what happens when the social structure built into a specific space is removed? What happens when a new "social life" is injected into a building whose biography has a culturally or socially strong impact on a community or society? The removal of a specific imbedded social structure from an understood physical structure could have detrimental effects

on the community in which it has so long represented, but it may also revamp and catalyze new beginnings for a once storied history. What is the social significance of this adaptation, and is it possible to alter the "social life" of a historical place with an already written biography and be successful?

Places that have socially troubled or neglected pasts—sites of mass genocide, imprisonment, terrorist attacks—exist throughout the world. Many of these, whose pasts are now chilling memories, are slated for new life. The chance to write a new biography over the pages of the prior, melding their histories, is an example of the attempt to implement a new social life within an existing place. Whether these changes are successful or not depends on the impacts the new functions and architecture have on the previously established social and physical structures and the people who interact with them.

When encountering the task of reconstituting existing places whose vast societal audiences associate with negative histories and memories, there appear to be a few different approaches

one may take. The normalization of existing buildings with adverse histories in turn refashioned into places of new life and use played major roles in post-war German rehabilitation. Re-development of existing abandoned structures through renovation and addition of new construction in order to implement a new use has been the prevailing proposal for Eastern State Penitentiary in Philadelphia, Pennsylvania. Lastly, the site of Ground Zero in New York City, New York, where terrorist attacks fell the Twin Towers and the nearly 3,000 people working within and around, has been re-imagined with purely new construction, replacing totally the memory of the existing buildings and using only the site itself as historical context to this catastrophe. The struggles and successes of each approach are vast and will be presented here; however, overarching above all else is the fact that no matter what approach is taken, the success of the scheme will rely on how well it reflects the idea that "maturity in a culture, as in an individual, requires that we act to become something new, and at the same time, not reject what we have been: to continually integrate creation with memory."

The existence and rise of the Nazi party has cast a shadow over much of Germany's national history. Memories of the days when Adolf Hitler and his Gestapo mass murdered millions of Jews and other minorities, all while wearing the symbolic mark of the swastika, has imprinted in the minds of many the association between the Nazis and the numerous symbols of the Third Reich. At the end of the war, these symbols and associations kept the dark cloud of repression looming over Germany, in particular Munich, leaving the remembrances and traces of the Nazi regime etched into the physical built environment.

"The American Military Government prompted the first steps taken towards dealing with Nazi architectural legacy in Munich... [Military Government authorities] ordered that any monument, memorial...[or] edifice... which tends to preserve and keep alive the German military tradition, to revive militarism or to commemorate the Nazi Party, or which... [was] of such a nature as to glorify incidents of war... must be completely destroyed and liquidated" However, it was the establishment of a clause within Allied Control Council Directive No. 30, Liquidation of German Military and Nazi



One of Nazi architect Albert Speer's first completed works, the Zeppelinfeld was a rallying ground for the Nazi party. During the normalization period, American forces famously removed and destroyed visible Nazi insignias

Memorials and Museums, on May 13, 1946, that saved much of the built history of the Third Reich from total demolition, allowing for its eventual normalization. This clause stipulated that an "object of essential public utility or of great architectural value should not be destroyed... when the purpose of this Directive can be achieved either by the removal therefrom of the objectionable part(s) or by some other alternative constituting an effective eradication of its memorial character." As a result, a superficial kind of denazification became the early response to many Nazi buildings.

Through this liquidation phase many Nazi buildings were superficially purified of their Nazi insignias, given new functions, and liberated for

postwar use. This normalization of Nazi buildings was seen by the Germans as an act of purging themselves artificially of the memories and associations both locals and non-locals held with these places. In direct competition with the push for total demolition of these structures, arguments in favor of their pragmatic normalization portrayed them as "vivid reminders of Nazi cultural barbarism, [therefore] preserving the memory of the past and helping to safeguard the future." Yet, while most Nazi buildings enjoyed an anonymous existence in this forgetful era of normalization through their reconstitution into office buildings, housing projects, and more, evidence of memory's persistence repeatedly surfaced. "As easily as one can tear an unsuc

successful sketch out of a sketchbook, one unfortunately cannot do away with an inglorious period of our history... to tear out the page 'Nazi Buildings' from Munich history in order to look better to the world...helps nothing. Indeed, in doing so, we would be viewed as document forgers." It was this argument that began to fray the "successes" of some attempts at denazification among the German public. As more and more swastikas and other insignias representing Nazi rule were removed, it was coincidentally these absences on the buildings that created their own presence for the alert passerby. There were also symbols left in public sight, attempting to be reinvested as democratic icons. "On the one hand, the desire for a sharp break with the Nazi past was evident in the attempt to eliminate its physical signs. On the other hand, continuity with the Third Reich was tolerated as long as its remnants were refashioned into a form more appropriate for the post-war democratic order." An underlying idea that the complete removal of Nazi insignia attempted to completely banish memory, whereas the partial preservation of the memory of the Third Reich through the refashioning of its symbols allowed for future confrontations with its legacy. It was the combination and execution of these two thought processes that determined the future success or demolition of buildings within post-war Germany. In Munich, many examples of Nazi architecture were successfully normalized during urban post-war development. These buildings were given new uses for many different purposes, "by the early 1960s, a variety of state and city agencies as well as major private institutions had taken over and given new functions to the monumental structures of the Third Reich such as the party buildings on the Königsplatz, the Zentralministerium, the Haus des Deutschen Rechts, and the Luftgaukommando, among others." However,

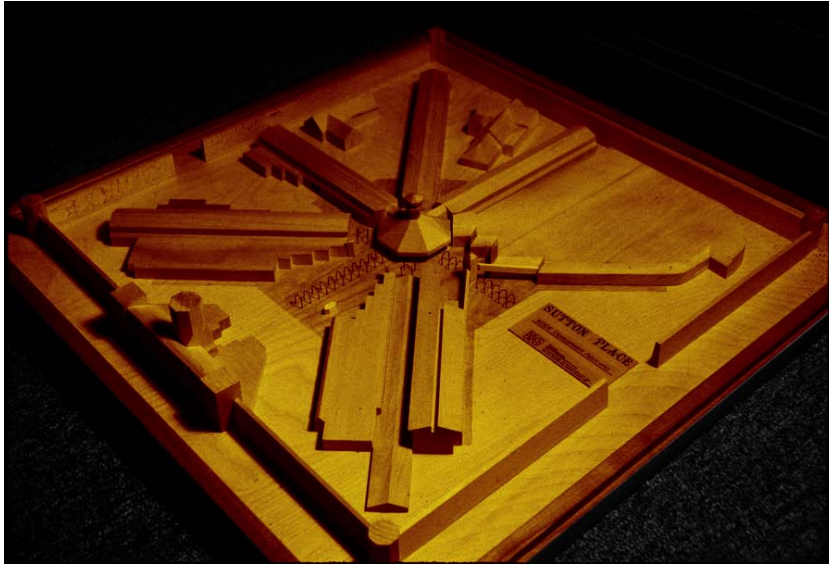
the success it seemed, of strictly reusing existing buildings—without the addition of new construction, or contrarily, complete demolition—lie more within the ability of the individual person's rationale to accept these new uses effectively moving on, much like the buildings surrounding them attempt to. "It is possible that purging the city of signs of the Third Reich was merely an easy surrogate for the more difficult task of intellectually and morally wrestling with recent history. 'Nothing will have been accomplished through exterior cleansing if the individual person does not erase the un-spirit of Nazism from his thoughts and deeds.'"

Political symbolism, although poignant and striking, is not always inherently associated with building types. Political dissent, treachery, and in many cases state-induced suffering, cause society to form negative associations with whatever symbols are presented in correlation at the time—no matter what building they rest on. Other building types, however, induce strong emotions of fear and repression among onlookers upon first sight. Within this type lies the prison.

"Eastern State Penitentiary, on Fairmount Avenue between Corinthian Avenue and 22nd Street, is a very demanding edifice. It was designed to be." Opened in 1829, the prison was the first of its kind, a radial design with cell blocks coming off a central observatory tower such as spokes on a wheel, designed largely upon Jeremy Bentham's ideal of the Panopticon. A monstrous thirty-five foot tall, twelve-foot-thick revised gothic wall surrounds the entire twelve acre lot within. "Used in the context of prison building, [this revised gothic architectural style] was designed not to make the structure attractive—indeed, quite the reverse. It was to symbolize on the outside the terrors to be

Russian soldiers and a civilian struggle to move a large bronze Nazi Party eagle that once loomed over a doorway of the Reich Chancellery, Berlin, 1945





KODE Developments proposed reuse of Eastern State Penitentiary circa 1987. The plan called for the reuse of the cellblocks for shopping centers and a day care.

expected within, and thus to deter any potential evil-doer from ever entering its portals...The prison system might aspire to reform the criminals within its walls, but outside it was firmly intended to deter." These architectural decisions chosen by the designer, John Haviland, impose a powerful negative association between building and person. Therefore, different from the case of Nazi Germany, in that no specific symbol caused its structure to have the impact it did, Eastern State Penitentiary displays the power of architectural design's ability in implementing collective emotional association.

"More than any other form of institutional building, prisons present a complex set of challenges if they are to accept new uses once their lives as places of incarceration have ended. Prisons

embody highly specific building typologies and structures." Due to both the architectural constraints and negative associations attached to Eastern State Penitentiary, its potential reuse and assimilation into modern day's social fabric have been points of bitter dispute. With knowledge of these concerns the city of Philadelphia called for proposals in 1983 and again in 1987 with ideas on what to do with this abandoned, stigmatized site. KODE Development Associates and Ragan Architecture Group's \$33.3 million dollar proposal, the most elaborate and creative at the time, was chosen as the winner of the competition [figure 2]. "[The winning proposal] aimed to preserve much of the existing structure for what the spokeswoman called 'high price' condominiums and apartments, and would include new buildings for a supermarket, smaller retail

stores, restaurants, a nightclub and possibly a movie theater." One of the more drastic moves this proposal called for was the demolition of the corridors connecting the cellblocks to the central observatory, followed by encasing the observatory in glass and housing a food court to allow patrons to appreciate the corridor views from the central vision point. "KODE characterized its design for the reuse of Eastern State as 'the transformation of an abandoned prison to a viable neighborhood retail commercial and office center...with a sensitivity to the original radial architectural design of John Haviland, as well as a sensitivity to the interests and needs of the adjoining neighborhoods.'" However, as the cellblocks which were once used to house inmates in isolation were relegated to use as service cores for a new shopping center, and the central



The original World Trade Center towers designed by Minoru Yamasaki in 1962 were the site of the 9-11-01 terrorist attacks in New York City, NY.

observatory severed from these cellblocks, the inherent integrity of this structure as a penitentiary, a place of incarceration and suffering, would have been virtually lost.

This bastardization of the original structure from its past caused the Mayor of Philadelphia, under public scrutiny and pressure from community groups, to eventually halt all redevelopment proposals. The reasoning behind this halt stemmed from public outcry and petitions wanting “to assure that future development be compatible with the needs of the community and the character of this landmark.” However, how does one know what is compatible when a building such as Eastern State is the subject of the debate? Whereas in Germany where the government was able to remove swastikas and other physical symbols of Nazi oppression in hope of ridding those associations, that option is not possible with Eastern State. The attempt by KODE to demolish parts of the original structure and build new construction in its place, yet at the same time retaining significant portions of the wall and penitentiary intact, seemed to be the more logical route to follow. Providing a memory of the past yet moving the structure into modern times by refashioning it into new pieces would have been a successful approach, however, scrutiny presented itself when it became apparent how little of the existing historic structure was being utilized for public use—rather acting as storage and back of house spaces for new programmatic additions. These new spaces didn’t enhance the historic nature of the building or present it in new light, rather they shunned the negative history of the cellblocks and corridors, banishing them from public eyes, with new construction maintaining the focus of the design. The lack of success here lies in the failure of the developers to realize

and focus in on the historic nature of the existing structure, building off of its past rather than away from it. As Thomas Hine, architecture critic for the Philadelphia Inquirer, proposes, “aside from the walls, the prison is a complete unknown to most Philadelphians, and those who want to use it will have to learn how. Given time, and a new, positive way of thinking about the site, a slow, careful approach will be much better than a big, bad development.”

Although the specifics were far from similar, the one thing both German denazification and Eastern State modernization had in common were that they both utilized existing structures. However, what if the negative associations on a site are not represented in what stands today, but rather, in what is no longer present. “The skyscraper targets in New York City were prominent symbols of our civilization, buildings of American invention that all over the world expressed the spirit of a will to soar above the earth in creations of steel, concrete and glass. The terrorists chose very carefully. They discerned those skyscrapers as the cathedrals of our age and aimed at their heart.”

On September 11, 2001, two civilian-filled planes, hijacked by terrorists, flew directly into both respective towers of the World Trade Center in New York City, resulting in the destructive collapse of both towers and the death of nearly 3,000 American workers, first-responders, and bystanders. With the destruction and ruin of two of New York City’s most prominent symbols of western capitalism and American solidarity, the immediate question of what to do next loomed over the heads of many. “Ruin value hovered around the WTC site for a time... but it was destroyed, as the program of clearance made its relentless, violent

progress towards total erasure of all signs of the violence that had occurred.” As the ruins of the site were removed, different schemes and ideas of how to combat and respond to this abrasive attack on American soil ran rampant. Politicians, architects, and American citizens all struggled with determining the best strategy of what to do with this now massive, empty hole in the middle of downtown Manhattan. “From the earliest days after the attack there was a near universal belief that a building at Ground Zero could give meaning to what had taken place there, and that architecture’s ‘best minds,’ despite such a long, long vacation from pathos, could create such a thing.” However, in reality, “the sudden rush of professional chatter post 9.11.01 seemed like ‘a kind of disciplinary therapy, a reassertion of the traditional figure of the architect as the generator of culturally reassuring objects, an ongoing denial of the fact that architects are just as confused as the traumatized people they serve.’” It became quickly apparent that with such an unprecedented tragedy of this magnitude, on a site in one of the leading financial and cultural hubs in the world, no one really knew what to do. How does one go about developing a grave site where thousands lay buried and memories of destruction are still fresh and vivid in the eyes of the nation?

One of the more profound reactions came from Charles Gwathmey when he posed, “There’s a great opportunity to rethink what the possibilities are... the really interesting thing is about memory—those two towers were indelible. The replacement has to be incredibly vspiritual and dynamic architecture. Whatever is built there is going to be visited forever.” With the influx of ideas ranging from rebuilding the towers to precisely as they had stood prior, to filling the site with an architec-

ture that assumes its full potential as public art, “the loudest voices were all for building soon, to show that the city and the nation were unbowed by terrorism.” As this push for a symbolic quick turnaround strengthened, a competition calling upon architects, and civilians, from all across the nation to submit design proposals for what would be the new World Trade Center—a figure of America’s solidarity and unwavering promise that no act of terrorism can defeat the American people—began. “The national audience, and particularly their representatives in Washington, needed a new symbol raised, as sure a sign that the nation was fighting back...”

In March 2003, Polish-American architect Daniel Libeskind emerged from this competition victorious. Being only barely two years since the tragedy however, it came as a surprise to many that the Libeskind master plan [Figure 3] indeed had been chosen so abruptly. Not until later had it become clear that the Studio Libeskind design was chosen so quickly not out of cognizant respect of the site and situation, but rather the idea on behalf of Governor Pataki that “a speedy start to rebuilding, pushed by him, would play in his impending reelection, and that [Mayor] Bloomberg saw the pragmatics of a scheme that had delay and deferral built into it.” Due to this push from special interests to quickly and hurriedly choose a design, the process of reconciliation and remembrance was rushed and, I believe, not thoroughly implemented in the final product. “Libeskind is attacked as a “philosophical prankster” and his design as one of tragic incoherence, simultaneously swaggering and weeping, unable to resolve its display of commercial vigor at the skyline with a ghoulish obsession with the yawning pit below.” The drive to memorialize, it turned out, had deadened the creativity of some

One World Trade Center is the primary building of the new World Trade Center complex in New York City. The 104 story tower stands on the site of the previous 6 World Trade Center building.



of the world's most inventive and subtle designers, including Libeskind. This fury prompted critic Herbert Muschamp to argue, "Mr. Libeskind's design looks stunted. Had the competition been intended to capture the fractured state of shock felt soon after 9/11, this plan would probably deserve first place. But why, after all, should a large piece of Manhattan be permanently dedicated to an artistic representation of enemy assault? It is an astonishingly tasteless idea. It has produced a predictably kitsch result."

As with any site embodying such a poignant association, a strong response will only come from reflection and cooperation amongst all entities affected by such tragedy. However, ultimately with the World Trade Center "it was not so much about architecture, about solemn memorial pits or soaring gardens in the sky. Instead, the decision announced to choose Daniel Libeskind's design for the World Trade Center site revolved mainly around politics, economics and engineering." It is due to these forces that many believe

the correct design response was not appropriately selected. However, with the memorial now in place, and the complex continuing to be constructed today, time will only tell if Libeskind's solution to both acknowledging the terrible deaths that occurred on the site yet still looking to the future with hope, will be seen as a success. A major problem Libeskind's design is going to have to overcome however is that "Ground Zero would have to [now] be rebuilt with office buildings, and expressing vengeance and grief are not things that office buildings do; they may rise from a graveyard but they do not redeem it; they may fill a site but they do not heal it."

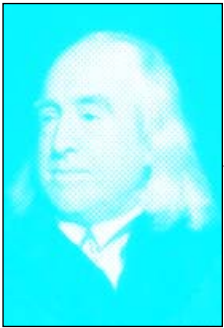
Tragedies will never stop occurring. People will never stop inherently associating specific attributes of pain and suffering to the places in which they happen. For this reason, architects must begin to think of how these sites and buildings, as time progresses, will once again be reconstituted into modern society with new social structures that remove the inherent negativity from their physical constructs. The history and

emotion these sites embody is unparalleled, therefore, the response one takes to adaptively reusing them must not only pay respect, but must take on a whole new meaning and life. Discussed in this paper are three ways sites such as these have been redeveloped—through the removal of symbols and insignias from existing structures, the addition of new construction to an existing building, or the memorialization through new construction on a now empty site. Each route has its pros and cons, however what ultimately determines whether the architect has successfully implemented new social life in response to the negative associations upon his or her site depend solely upon the end result's ability to respect and remember, yet move on from, the life the physical structure once contained.



The World Trade Center memorial fountains and museum built in the footprints of the destroyed Yamasaki towers

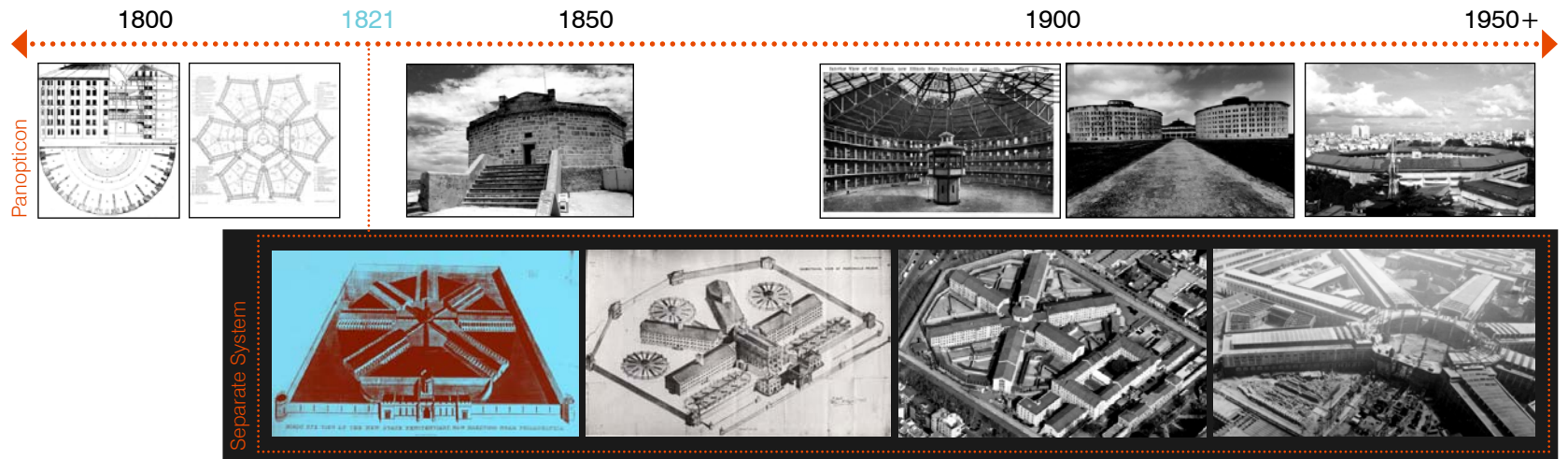




Bentham



Haviland



History

In the late 18th century philosopher Jeremy Bentham established the idea of the perfect prison, or the Panopticon. The concept of the design is to allow a watchman to observe (-opticon) all (pan-) inmates of an institution without them being able to tell whether or not they are being watched. Although a perfect Panopticon is virtually impossible without the use of modern day surveillance techniques such as cameras, the closest physical structure was achieved through the development of the prison as a cylinder, with prisoner cells lining the perimeter of the cylinder and the guard tower in the center. Bentham himself described the Panopticon as “a new mode of obtaining power of mind over mind, in a quantity hitherto without example.” Elsewhere, he described the Panopticon prison as “a mill for grinding rogues honest” Throughout the years following the panopticon was the ideal prison type being developed around the world in order to survey and control inmates.

From the Panopticon however, a new form of incarceration was established — the Separate System:

“The separate system is a form of prison design and philosophy that seeks to enhance the reform process of prisoners through isolation and lack of social interaction. This system was primarily used in constructing a number of prisons in which each prisoner was to be contained in a separate unit, effectively placing each prisoner in solitary confinement. The isolation was further enhanced through a number of methods used to strip a prisoner of his or her former identity.

This separate system was intended as a way to ensure that criminal subcultures and attitudes could not flourish in prisons.

Also called the “Pennsylvania system” due to the use of the separate system in the Eastern State Penitentiary [designed by John Haviland] near Philadelphia, Pennsylvania, this system was often integrated into the design of a prison. A prison built using the separate system would typically look much like part of a wheel that might be used on a bicycle or carriage. There would be a central office that would act as a hub for prison guards and wardens, and from this hub a number of wings would extend like the spokes on a wheel. Each of these wings housed the individual cells in which prisoners would be incarcerated by themselves.

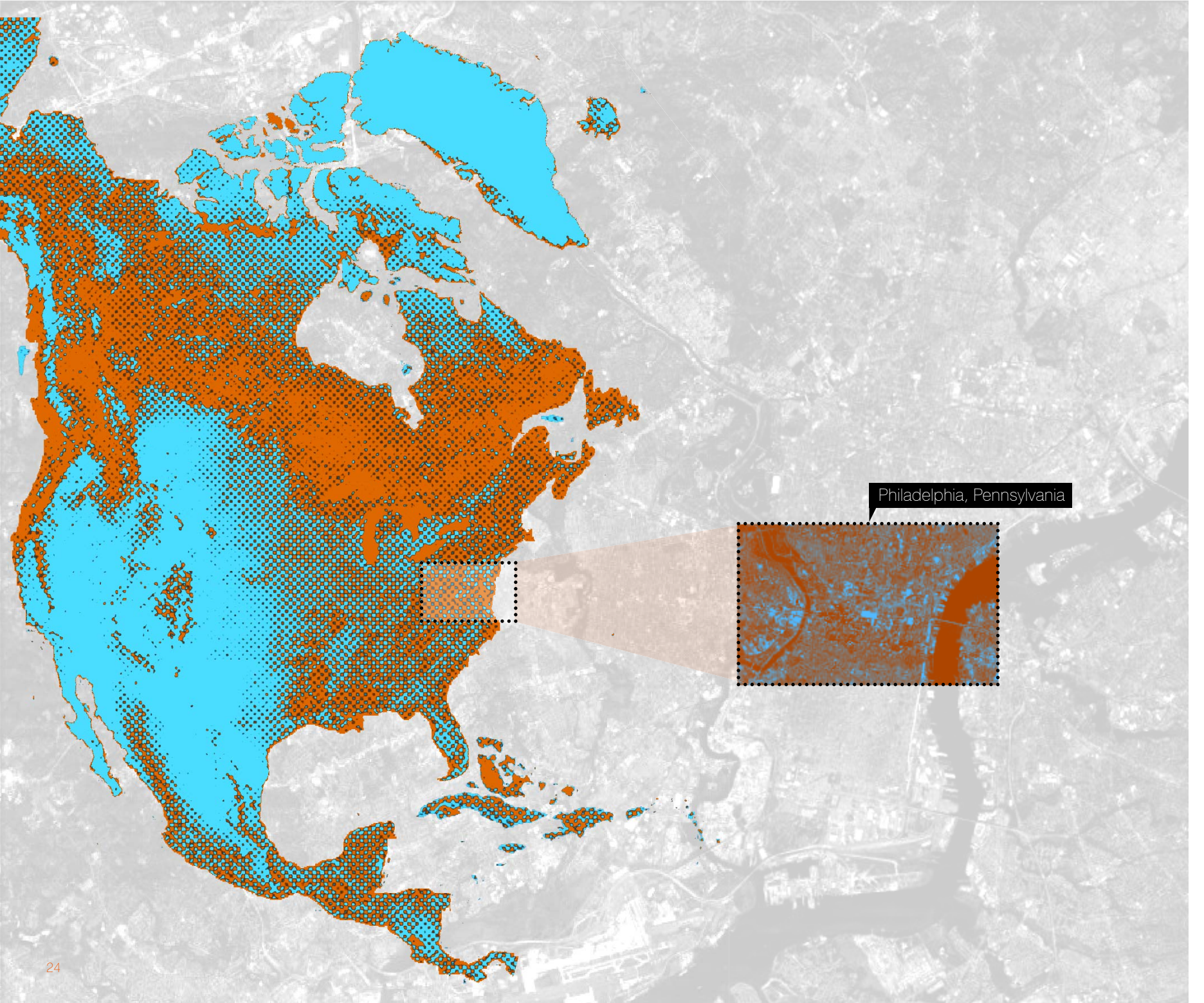
The separate system was designed to reduce interaction between prisoners as a way to prevent the formation of criminal organizations within communal prison environments. This design was also thought to expedite reformation of prisoners by keeping each prisoner isolated and giving him or her time to reflect on what he or she had done. In order to further achieve these goals, prisoners in a separate system prison were only referred to by a number, never by name, and were allowed almost no contact with other prisoners. Even when outside of their cells, during exercises, they would often exercise in individual areas that kept the prisoners from each other.

These individual exercise areas were not always practical and so many prisons that used the separate system would allow prisoners to exer-

cise together wearing hoods that covered their faces. The prisoners would often be attached to a rope that kept each prisoner apart from each other, and were expected to remain silent while exercising. Even during religious services, prisoners were allowed to vocalize by singing only, and were seated in cubicles that allowed the chaplain to see them, but they could not see each other. The separate system has influenced the designs of many modern prisons, though increased numbers of prisoners has made constant isolation impractical.”

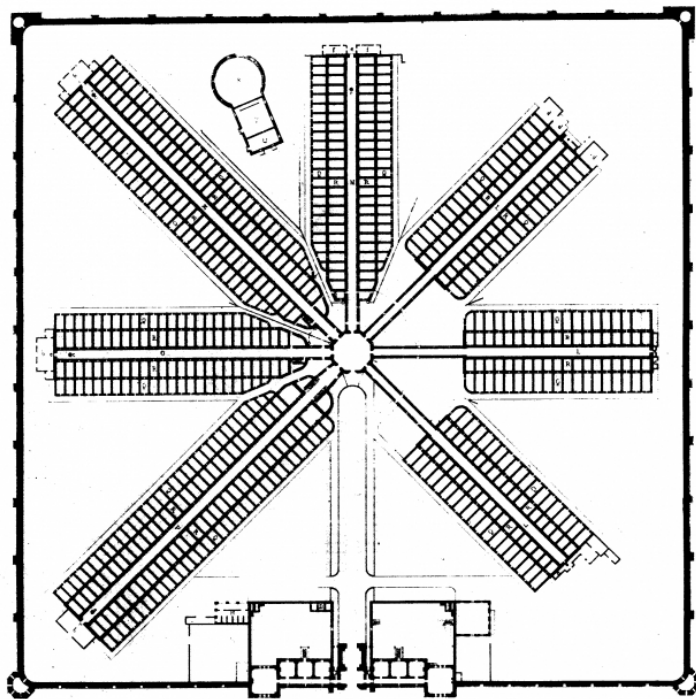
Throughout the years since Eastern State Penitentiary was vacated in 1970 multiple redevelopment proposals were pitched for the looming structure in central Philadelphia. These proposals mostly leaned towards turning the structure into shopping centers, some of which incorporated daycare centers and other residential units. In all of them however the majority of the existing Haviland structure was removed except for the thirty foot wall and used for the development of parking lots and commercial, residential and open park spaces. None of these redevelopment proposals were supported by the surrounding community however, due to the lack of sympathy towards the existing historical structure presented within the designs. It is my hope to now respect the existing structure while bringing new modern materials and uses within the structure that the surrounding community will accept and cherish as a new landmark within their community.

Wiesen, G., and Heather Bailey. “What Is The Separate System?” WiseGeek. Conjecture. n.d. Web. 22 May 2013.

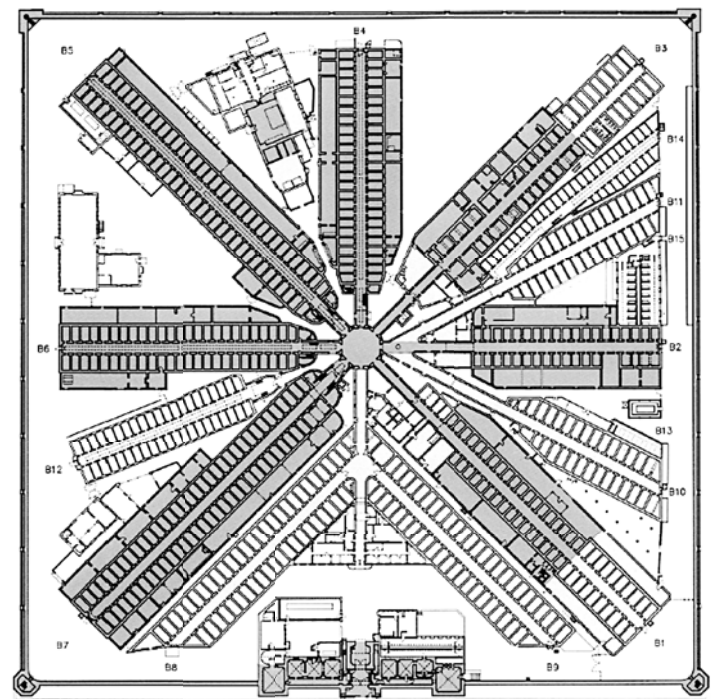


Philadelphia, Pennsylvania

Floorplan, 1836

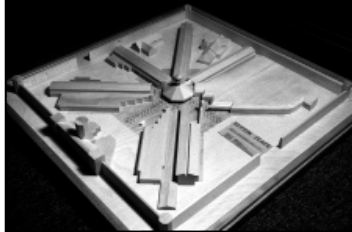


Floorplan, 1950





Breslin Redevelopment | shopping center | 1987



Kode Redevelopment | shopping center | 1987



Weiss Redevelopment | housing+shopping | 1987

Problem Statement

Philadelphia, Pennsylvania houses more iconic and historic pieces of American architecture than arguably anywhere else in the nation. From the Merchant's Exchange building to Independence Hall, the city stands as America's democratic birthplace. However, not all the buildings and histories in Philadelphia are so well known. Although much of the history made there was in regards to freedom and liberty, the opposite exists as well. Incarceration, isolation, and reformation are ideals that caught fire in Philadelphia and spread throughout the world back in the 19th century. These practices took physical shape in the form of Eastern State Penitentiary designed by John Haviland in 1829. The first penitentiary to be constructed based off principles of the Separate System, this radially shaped penitentiary with towering perimeter walls set the standard for prison design around the world at the time. Based on the design of Jeremy Bentham's ideal structure of surveillance, the Panopticon, the architecture and use of Eastern State has stood solid. Throughout the years, Eastern State

Penitentiary continued to house and reform its prisoners based on the Quaker ideals of isolation and reflection up until its closure in 1970. With the building empty and abandoned, redevelopment forces attempted to refurbish and reuse the existing structure, however, none have successfully dealt with and addressed the sites history and more importantly, the societal stigma that comes in tow with that history.

My thesis deals with this unknown; of how to rightfully and respectfully reuse a site, in this case Eastern State Penitentiary, with a stigmatized and specifically negative historic past life. In the midst of one of the most populated urban cities in America this 12-acre site sits abandoned and is currently used as a make-shift prison museum. I would like to show that there is a successful and acceptable way to preserve the history of this historic landmark while still being able to apply new uses and new construction in order to build off this history creating a new consciousness surrounding the site. The community in which

this prison has sat for the past century has only known this site as a past place of punishment, isolation, and incarceration. With my thesis I plan to manipulate this understanding and establish a new positive association and identity with this walled-in fortress, while still catering to the history it has rightfully established.

A few precedents dealing with this topic include South Africa's Constitutional Court, the new Documentation Center Nazi Party Rallying Grounds in Nuremberg, Germany, and the Palencia Cultural Civic Center in Palencia, Spain. The Constitutional Court of South Africa is built on the site of the Old Fort Prison where hundreds were held including Nelson Mandela in apartheid South Africa. Nelson Mandela explained that "Transforming a notorious icon of repression into its opposite, it will ease the memories of suffering inflicted in the dark corners, cells and corridors of the Old Fort Prison." This prison turned modern day justice institution has become a symbol of hope for the South African public and is a testament to the

progression of the country through the struggles and pain of its history. In Nuremberg, Germany architect Gunther Domenig reconstituted the existing Nazi Party Rallying Grounds into a modern museum about the site on which it sits. Lastly, in Palencia, Spain Exit Architects used an existing prison similar in theory to Eastern State Penitentiary and established it as a premier cultural civic center for the surrounding community.

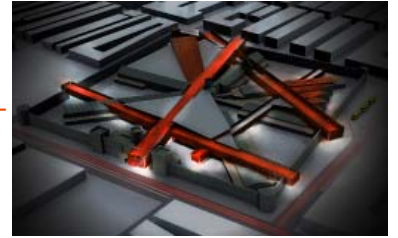
The Eastern State Penitentiary site is large. The prison sits on 12-acres of prime land only a few minutes' drive from downtown Philadelphia. A few blocks to the east lies Philadelphia's Museum of Art while to the south is the city's main thoroughfare, JFK freeway. Immediately surrounding the site, rows of residential units look on to the high walls and towers of this historic site. The site itself, once one enters through the massive gates, is presented as a collection of old and new pieces thrown together throughout the years, not necessarily forming a cohesive piece. The original seven cellblocks radially surround a

central observation tower. These cellblocks are one and two stories tall and at one point in time left ample open space between them for outdoor spaces for prisoners recreational needs. However, over time, the prison needed to expand and, in these large in-between spaces, new cellblocks, administration buildings, and medical facilities were built, essentially filling up the site and distracting from the original radial plan set forth by the original architect, James Haviland. As a part of the reuse of this site I plan to remove these added structures which distract from the original structure, therefore opening up the site to be better utilized as a new destination for the public. New architecture will then be infilled in order to influence this newly held idea that the site should cater to the public and inform the public of its history rather than deter them and remain forever a symbol of pain and neglect.

The program for the site, due to its size, will encompass many different uses and will undoubtedly lend itself more towards a campus type

planning situation. Public programmatic spaces will take form within the walls including a performance hall, educational learning center, and lastly a prison museum showcasing the historic nature and legacy Haviland created with his design for Eastern State Penitentiary. A program that allows for and showcases the juxtaposition between new architecture and the historic buildings will be the strongest and most effective way to reuse the site. The design will react to the urban context around it, influencing and allowing for smooth circulation to and from the site as well as within the building complex itself. Due to the nature of the existing building, drastic adaptations and additions will be made in order for it to become a successful public institution. These changes, however, were made in a way that influences one's personal experience with the site and existing structure, while still supporting the main goal of the reuse in respecting the building's history yet infusing new life within.

New Proposal



Proposed Redevelopment | cultural center | 2013

Palencia Cultural Civic Center

Architects: Exit Architects – Ángel Sevillano, José M Tabuyo

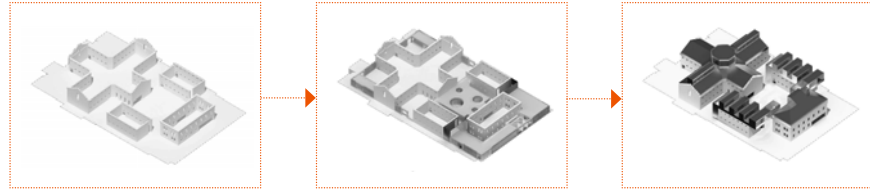
Location: Palencia, Spain

Clients: Ministerio De Fomento, Ayuntamiento De Palencia

Area: 5,077 sqm

Budget: \$12.5 million

Completion: 2011



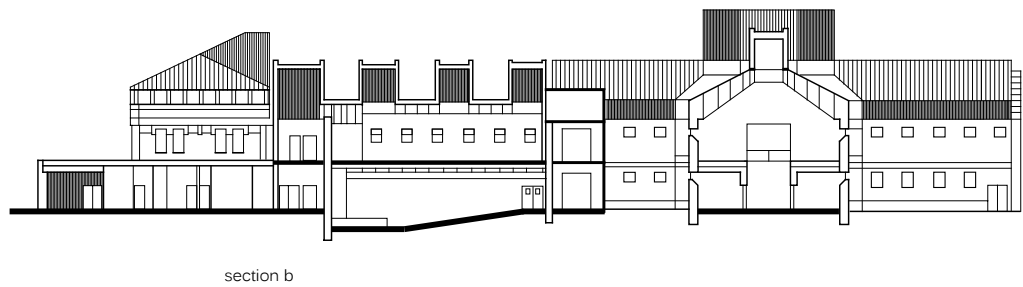
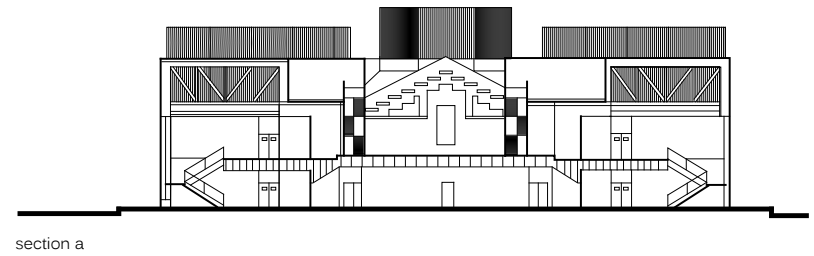
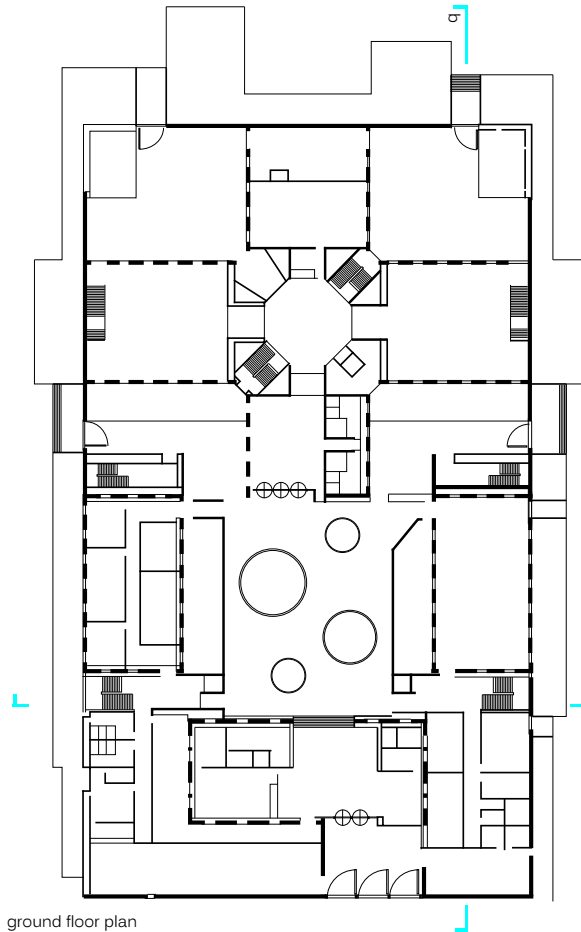
The Palencia Cultural Civic Center in Palencia, Spain is a drastic refurbishment of an existing 19th century prison, taking the building from abandoned historic site to modern day cultural center with hints of its historic character spread throughout. The original building was built of brick bearing walls in a reminiscent form of Jeremy Bentham's idea of the Panopticon. From a central observation tower, four cell blocks, all two stories tall, radiate to create a space that is under constant surveillance. However, in the refurbishment of this former prison, in order to make the building work for modern day civic center purposes, these disparate cell blocks needed to become spaces that could connect and inhabit many different people. Exit Architects, filled in the existing open spaces between the cell blocks as well as the main central courtyard in which prisoners once used as an exercise yard. Through the use of modern materials and a separate structural system, the architects were able to bring this 19th century structure into the modern era.

As with any project, especially ones involving the adaptive reuse of an existing, historic building, there are both positives and negatives to how the architects responded to the problem. Exit architects were successful in utilizing the existing footprint of the prison to build off of and create a space where people could gather. They also retained a majority of the existing brick structure as an ode

to the previous life of the building. However, in the process of repurposing the building, the architects gutted the entire interior and replaced the character laden existing interior with white washed, character-less walls. The enclosing of the existing courtyard helps to establish a circulation hub for people to move through and from, however the use of foreign modern materials throughout the space and use of circular sky-

lights form a disconnect between the existing structure and the new intent, once again. The ideas and methods implemented in this design for circulation are the strongest features of the new building and utilizing those techniques will aid me in my development. However, the material use and total disregard for interior existing fabric is a far cry from the inclusion I aim to provide.





Documentation Center

Architect: Gunther Domenig

Location: Nazi Party Rally Grounds, Nuremberg, Germany

Clients: City of Nuremberg

Area: 4600 sqm

Competition: 1998, 1st prize

Completion: 2001

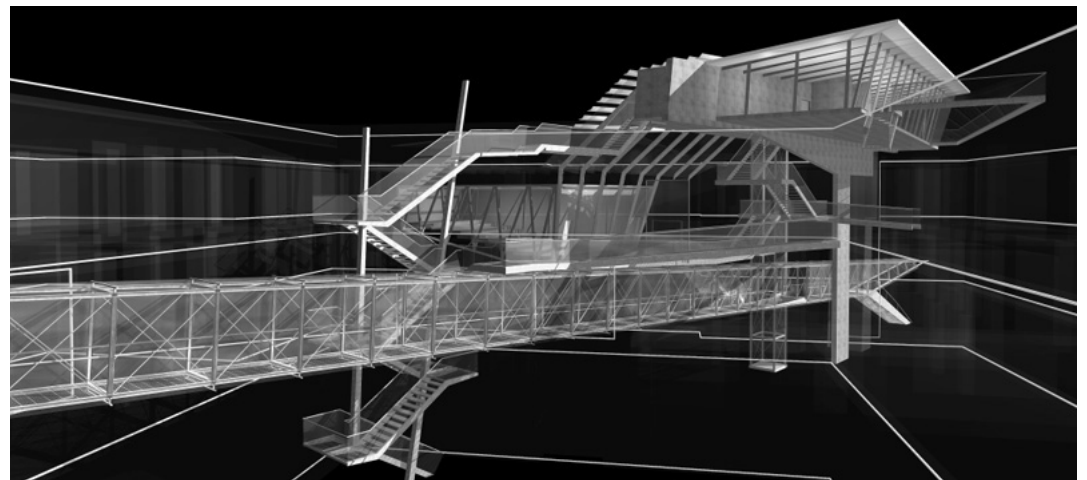
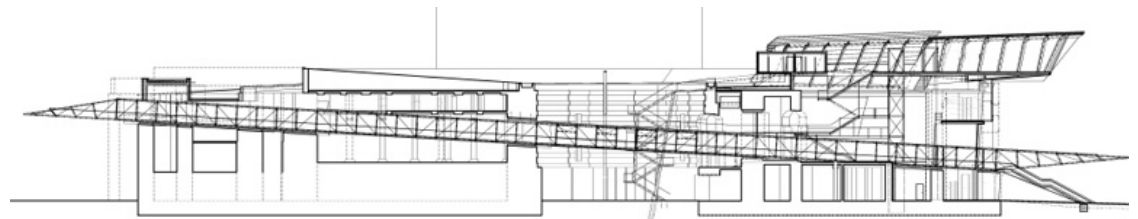
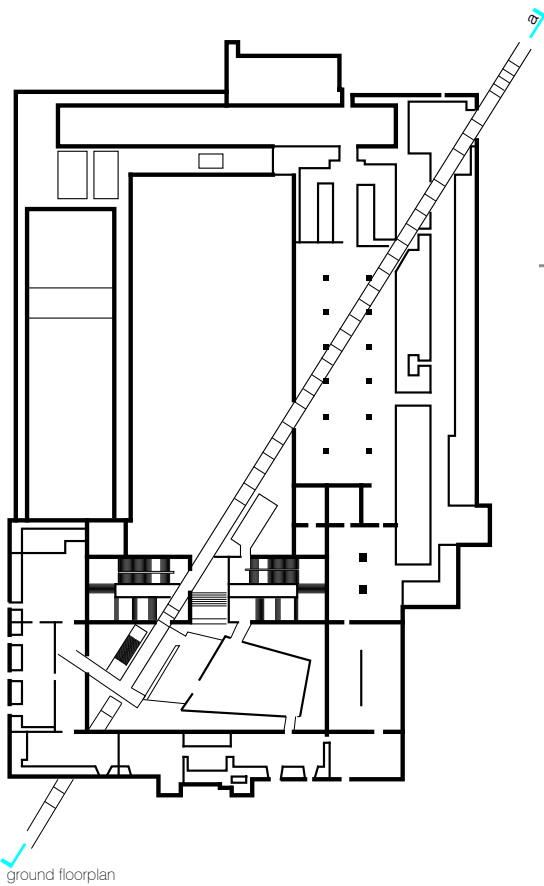
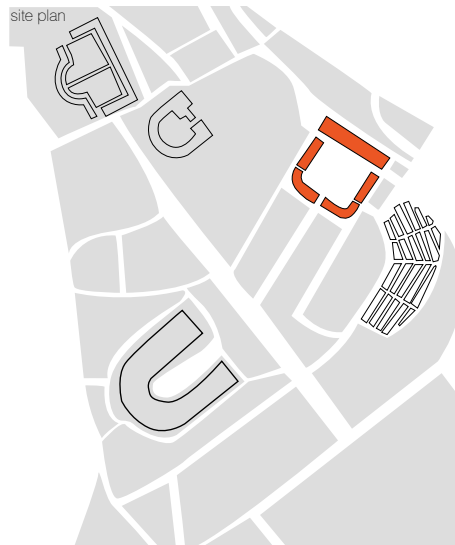
Housed within one of the most historically significant and poignant buildings of modern day mind-sets, the new Documentation Center by Gunther Domenig respects the history of its location, while also providing another understanding and way of looking at what is intended. Domenig has chosen to only utilize a third of the complex of what used to house the Nazi Party Rally Grounds but does so in a way that allows visitors a new way of experiencing the history that has been established there. Instead of following the way people have traditionally entered and moved through the space Domenig bores a spear of glass and metal through the very formal, rectangular masonry structure. The use of these modern building materials pushes for a more drastic, intense experience and juxtaposition between existing and new. In this way, the existing Nazi architecture acts as a new backdrop for this symbolic deconstructivist icon and provides spaces for people to reflect and learn as they interpret their movement through the space along this new axis.

Nazi architecture is one of the most powerful reminders of the oppression and destruction that was caused in the midst of World War II. In this case, Gunther Domenig had to approach this adaptive reuse of one of the most ideological Nazi buildings in a way that brought it new life and understanding for its visitors. The use of the establishment of a new axis along which a new entrance and path existed through the building helps to distinguish this

new use from its counterpart in history. Allowing visitors a new way of experiencing an existing place provides them with a way to conduct their own interpretation of the site therefore becoming more involved emotionally and physically. By distinguishing the new construction through the use of harsh modern materials there becomes an emphasis on the experience and symbolic nature of the materials. By also using

them materials in a light, more deconstructivist nature, the new construction allows for the existing building to show through and become an integral part of the experience for the visitors. This is especially important in buildings such as these, where visitors are guided through and allowed to reach their own conclusions of how to respond to the buildings history, the history wasn't extinguished for them prior.





Constitutional Court

Architect: OMM Workshop and Urban Studio

Location: Johannesburg, South Africa

Clients: Department of Public Works

Area: 95,000 sqm complex

Budget: \$56 million

Completion: 2004

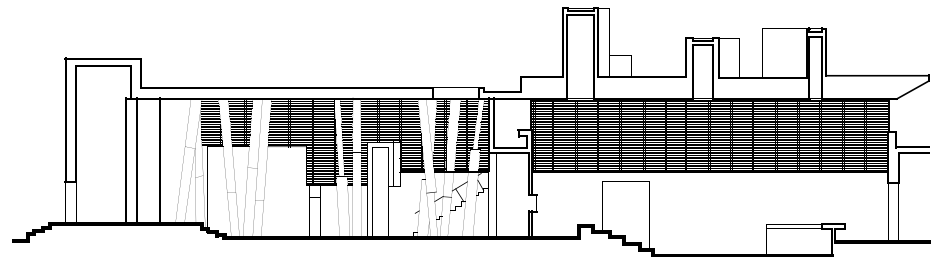
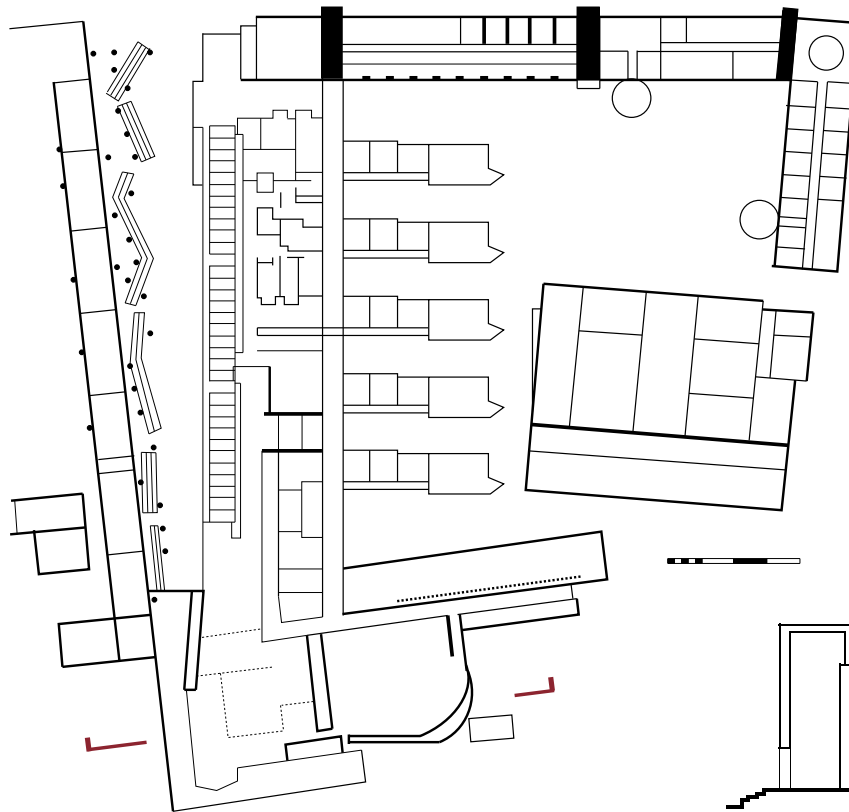
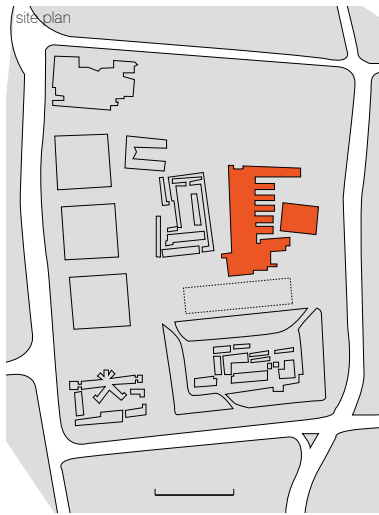
In 1893 a high security prison complex was constructed on what is now the site for South Africa's highest court. The prison housed hundreds of thousands of inmates, black, white, women, men, throughout the years and was recognized as one of the most horrific and terrifying places in Johannesburg. When it was closed in 1983 the prison left a blight on the city's history and retained the painful association it had gained throughout the years as a place of pain and oppression. However, it was for these reasons in the end as to why the judges of the newly declared Supreme Court chose it as the site for what was to become the Constitutional Court and location of the highest court in South Africa. A competition was held and a local architecture firm OMM Workshop along with Urban Studios was awarded the task of reusing the site that held so many oppressive and negative feelings towards citizens of Johannesburg.

South Africa's recent acceptance of a national constitution attributed many symbolic and ideological concepts for the design of the new court. The new court would be built adjacent to the existing prison however, instead of being built into the prison, would be its own structure and representation of freedom and liberty. OMM Workshop built off of these new ideas as it designed the building to be as open and transparent as possible. The inclusion of many different symbolic motifs, such as light towers acting as beacons of freedom and

the transparency of the main court chambers as portraying the accessibility and openness of the national court help to strengthen the intent behind the architects vision of a free and inviting building. The integration into the existing structures of those prison blocks adjacent to the new building could have been better integrated, however the distinction between the two offers a more drastic idea of the separation of the citizens from their past oppressive state. The

inclusion of local artists and thinkers in the design of many interior and exterior exhibits helps to maintain the portrayal of first hand local reactions to what is occurring. While my project may call for a more integrated acceptance of the existing building, the use of symbolic and modern applications and ideas is something that can strengthen the user's experience with the building and also make for a better understanding of what has and is occurring on the site.

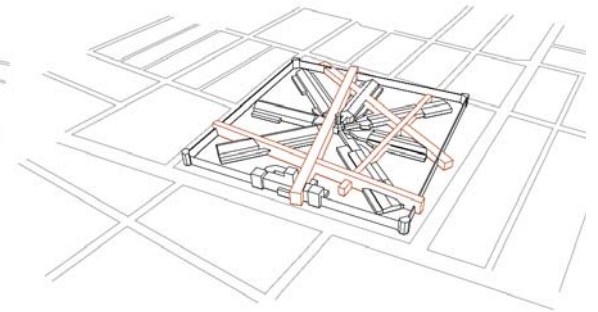
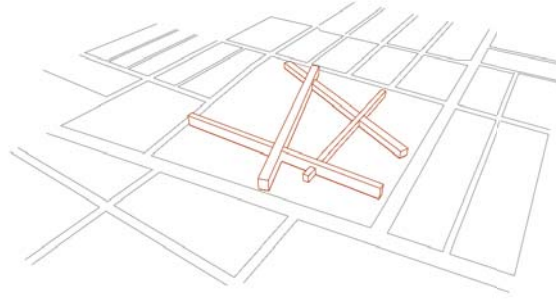
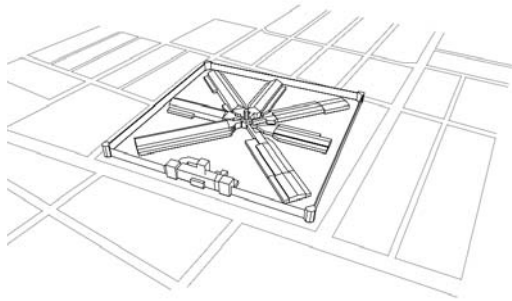




ground floorplan

section a

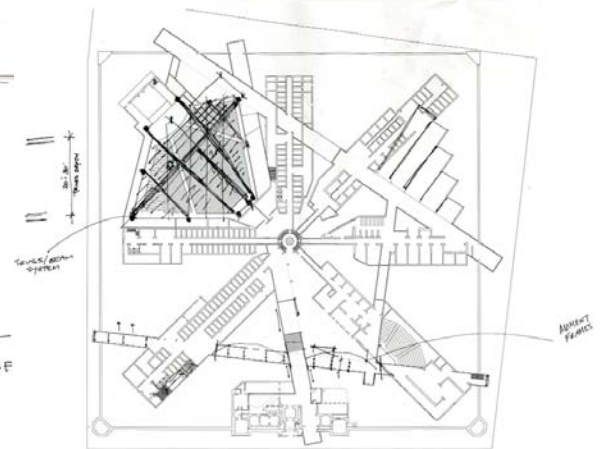
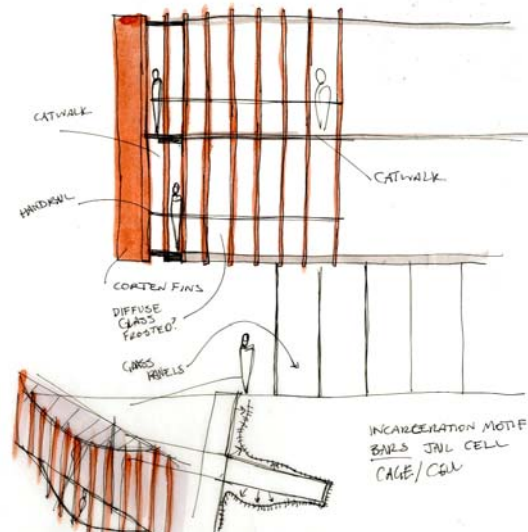
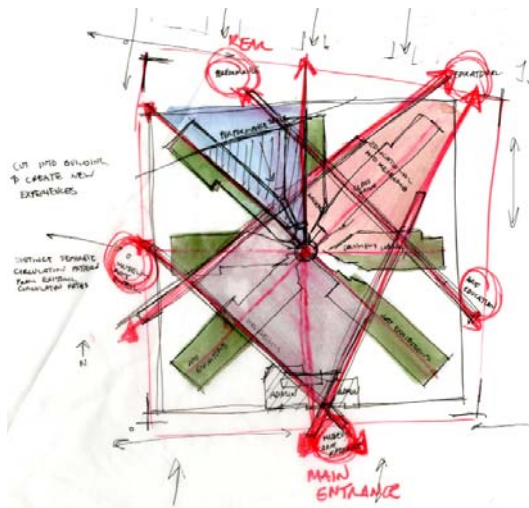


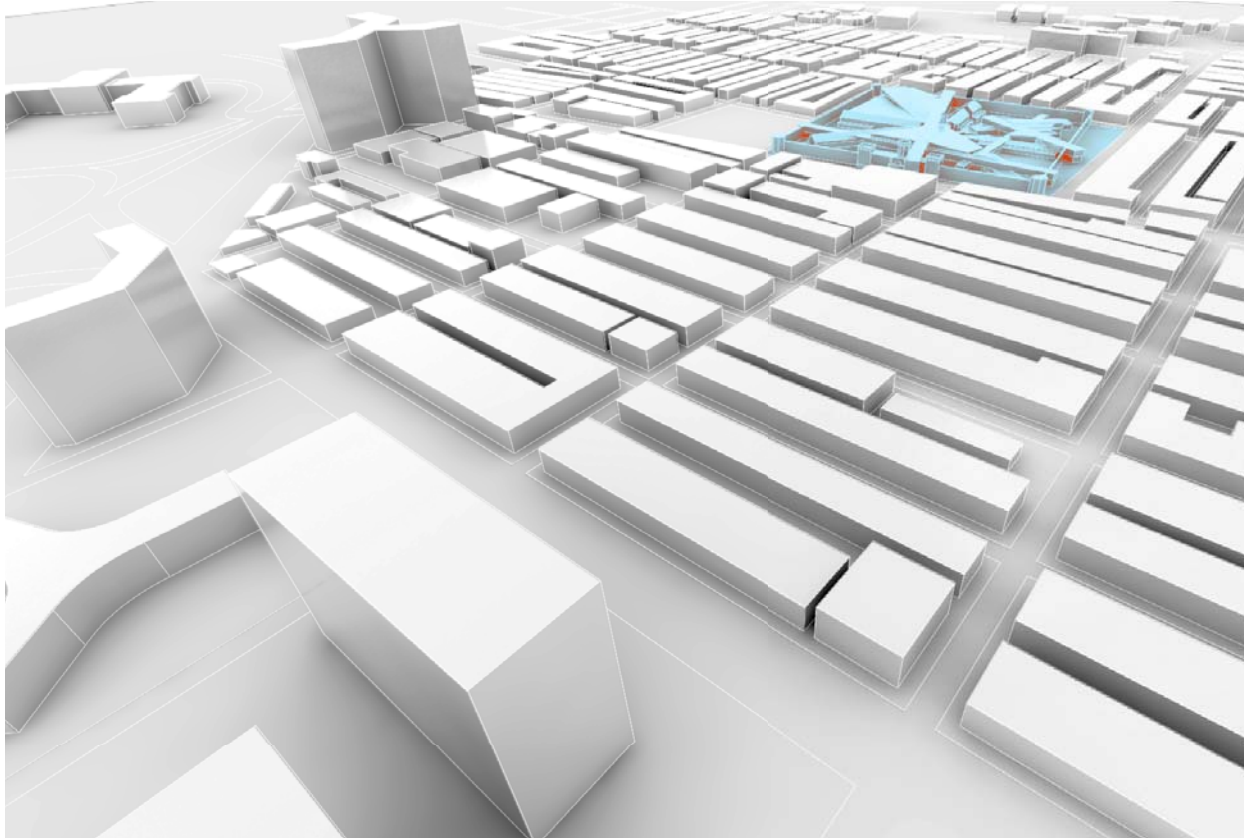


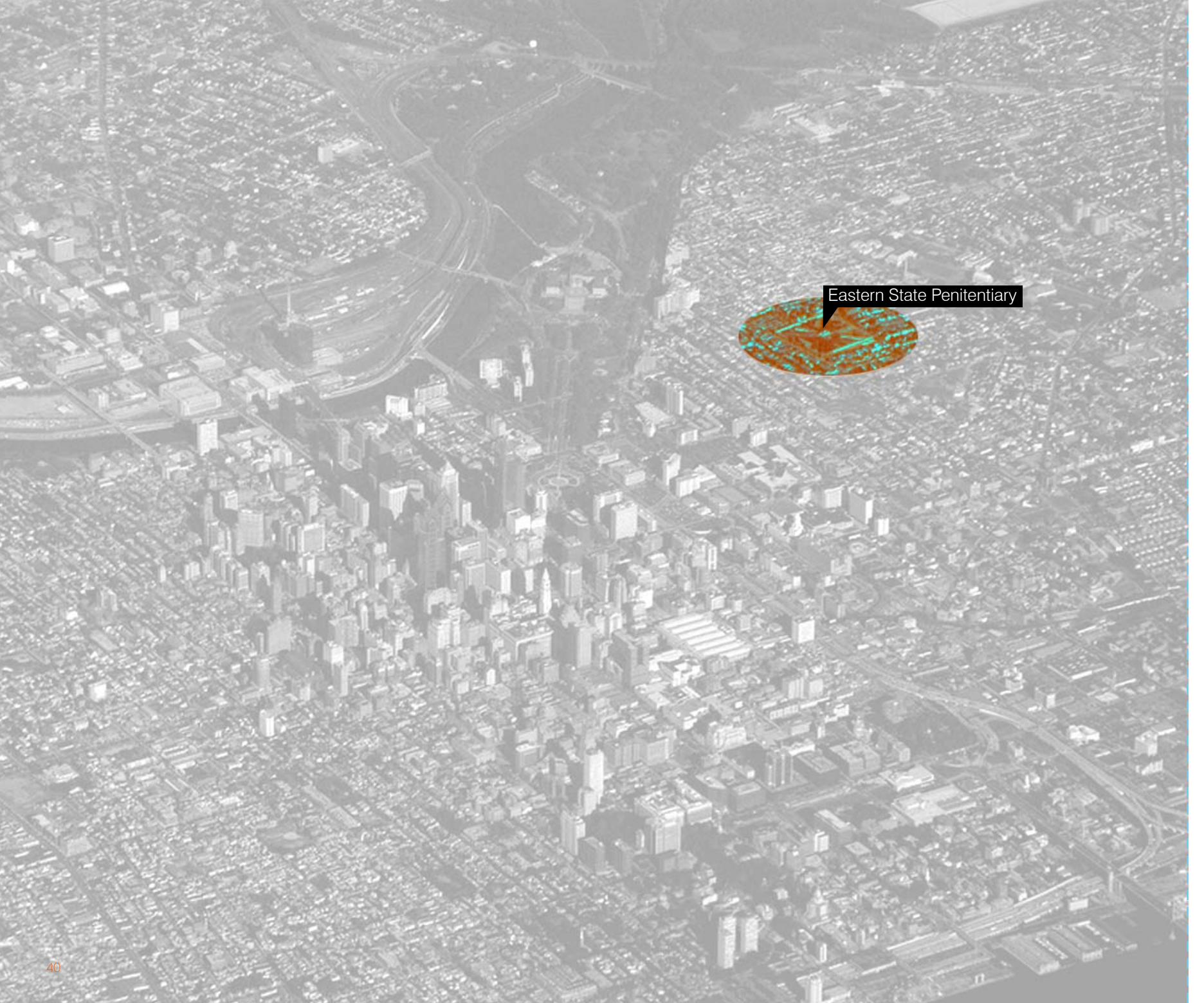
original structure

new circulation cuts

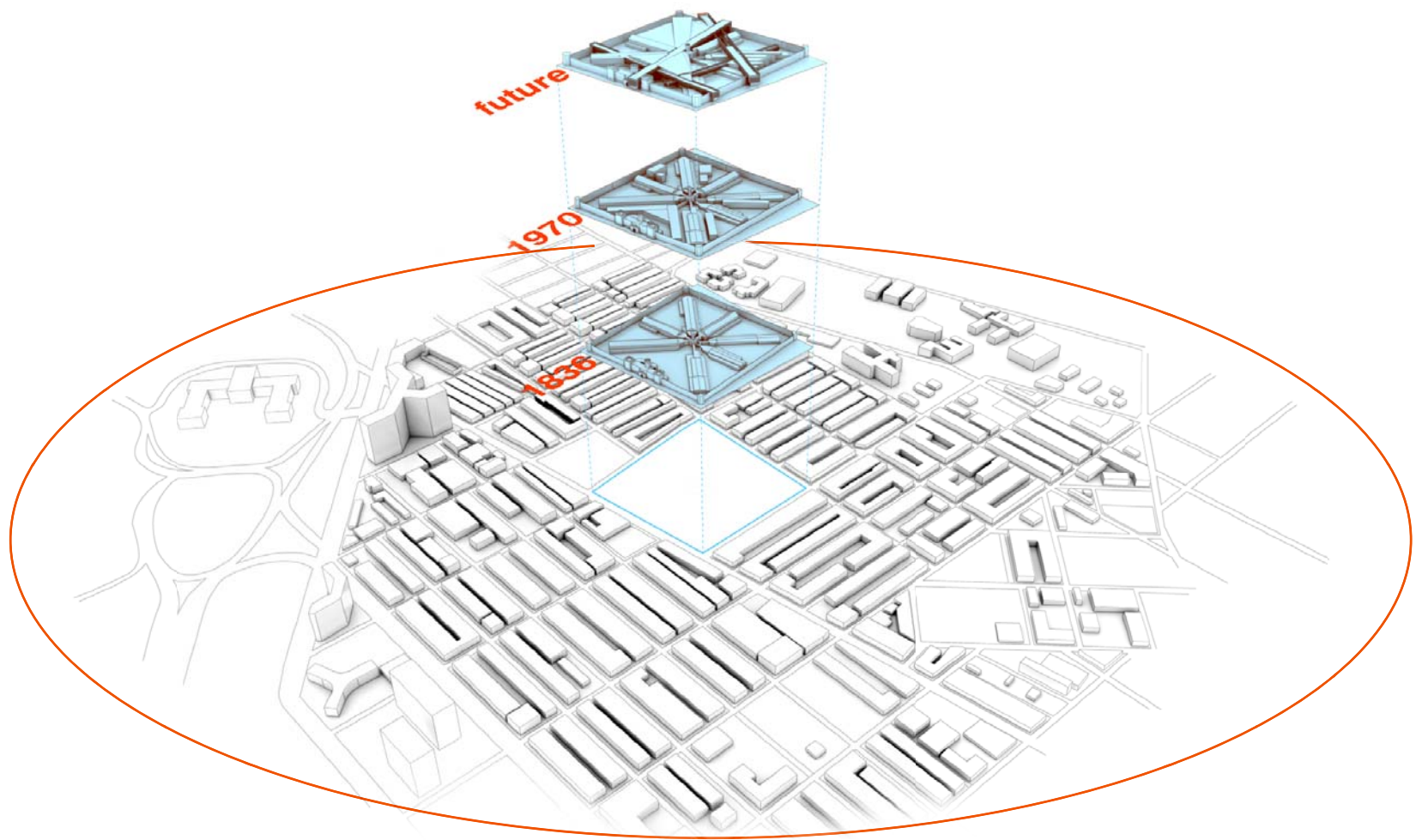
integrated new cuts

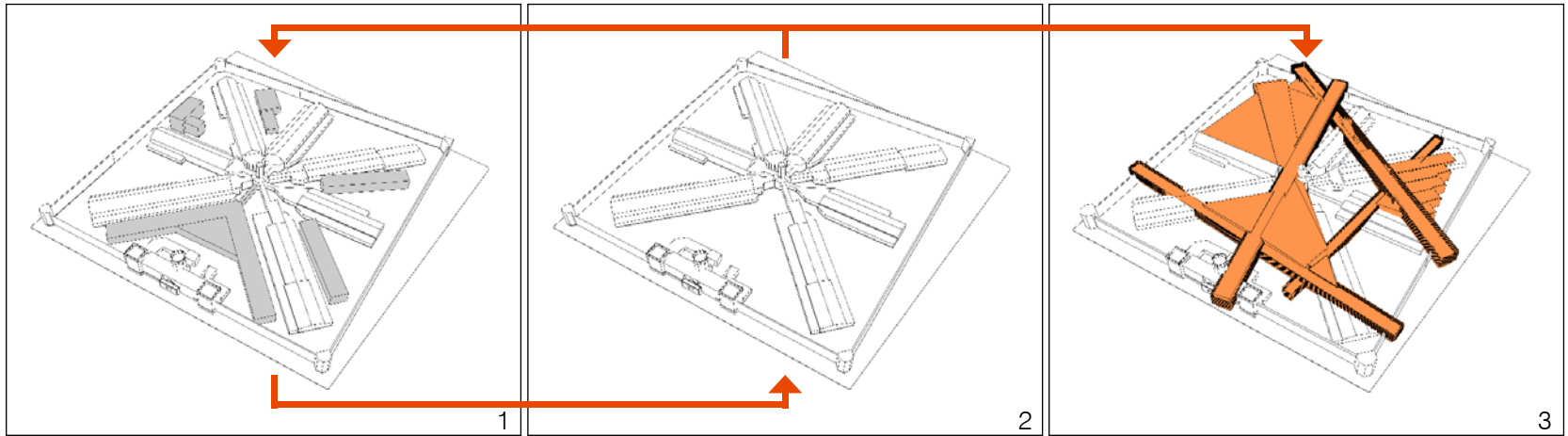






Eastern State Penitentiary





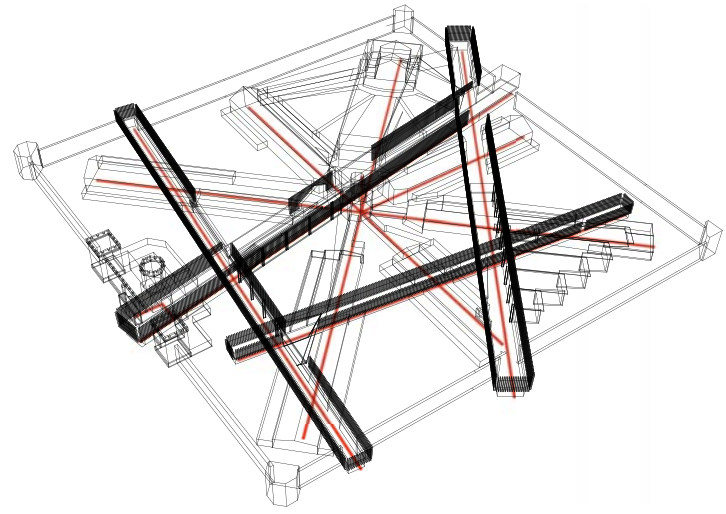
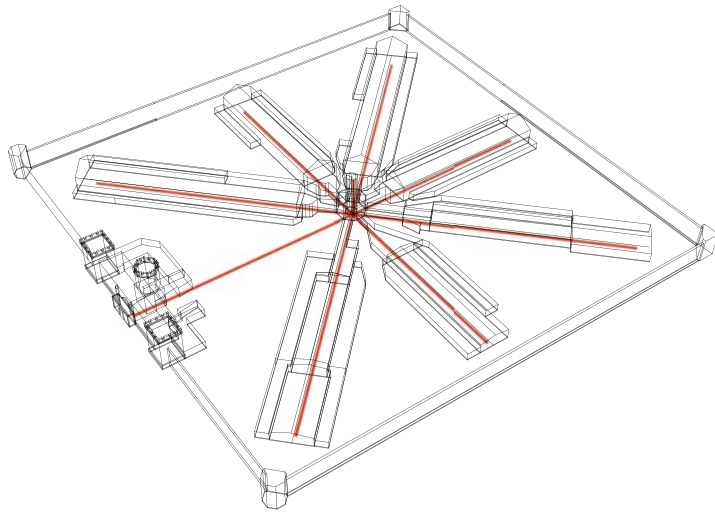
Addition/Subtraction

Throughout the years since its construction in 1821-1836 [2], Eastern State Penitentiary has seen new construction and growth decade after decade. In 1970 the existing prison sat as a dense network of spokes radiating from a central core, with new modern cellblocks constructed in between the existing 18th century structures [1]. As a part of the development proposed here it was the intention to return the Penitentiary back to its original seven-cellblock structure [2] from which to then build and infill the new modern-day programmatic elements [3].



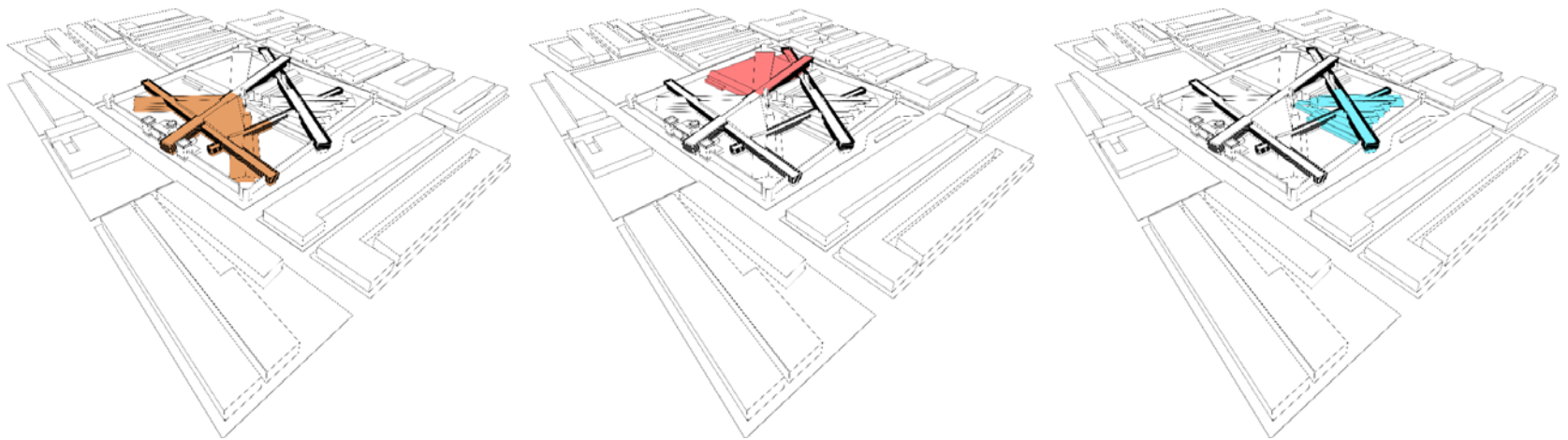
Form Generation

In determining the forms for the new Eastern State Cultural Center the juxtaposing grid of the city compared to the North-South grid of the Penitentiary was further explored. When the original Penitentiary was constructed in the late 18th century the existing grid of the city was based off a true North-South axis. However, as modern day Philadelphia was constructed around the structure the city was built on a skewed grid of about 10 degrees off true North. It is this new modern day grid that supplies the basis of the development of the new modern day slices cut through the original structure allowing for new circulation patterns and experiences.



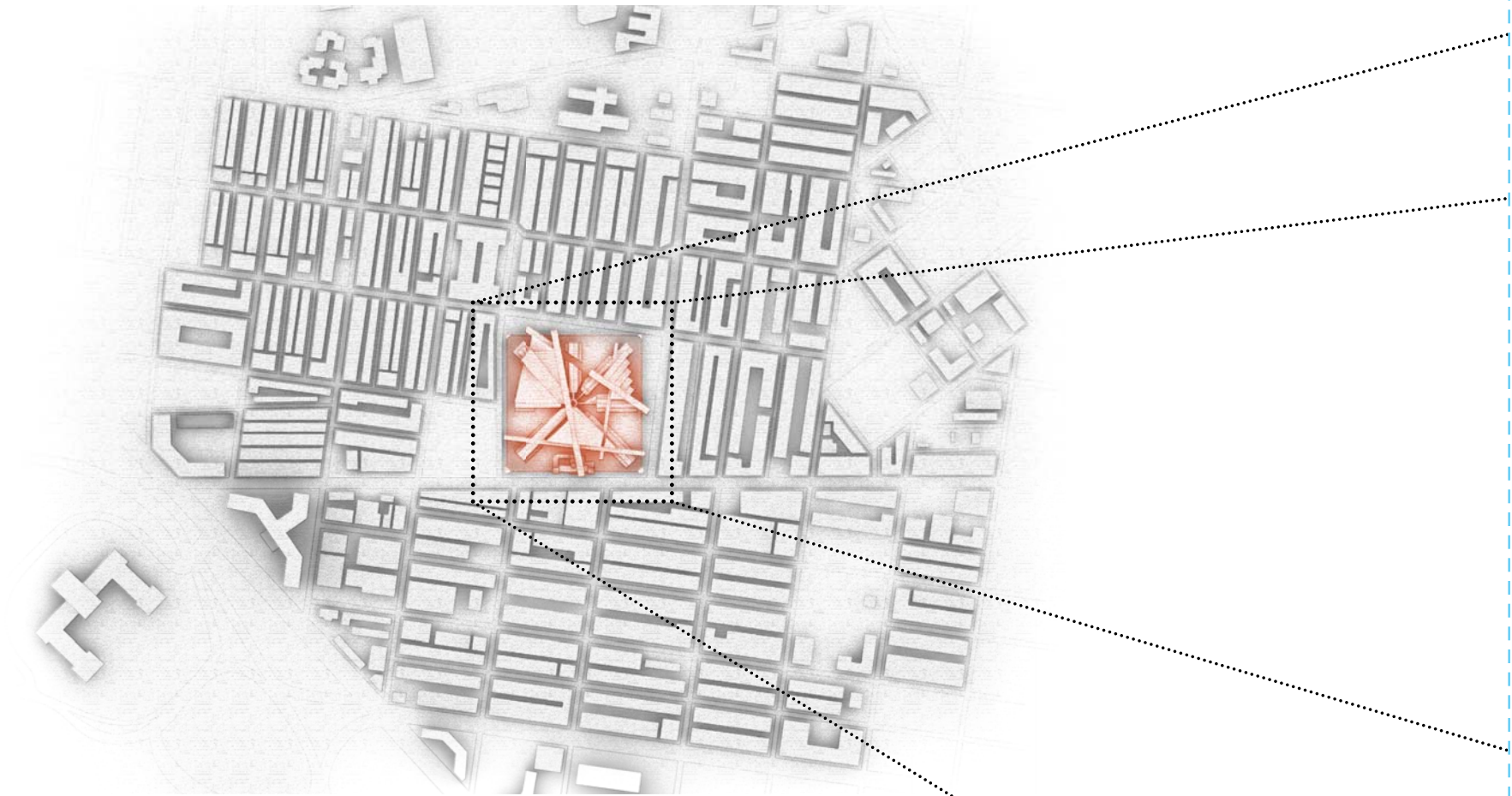
Circulation

Eastern State Penitentiary was built off of the idea of the Separate System which in turn was developed from Jeremy Bentham's Panopticon. The Panopticon comes from the idea of a complete surveillance society, in which every one is watched unknowingly 24/7. This idea developed the radially designed penitentiary where circulation was accessed from the center spoke of the pinwheel and went outward into the cellblocks. The new design takes this idea and implements new circulation paths throughout the existing radial corridors. The new circulation corridors allow for modern visitors to experience the building in a new way than the inmates did prior.



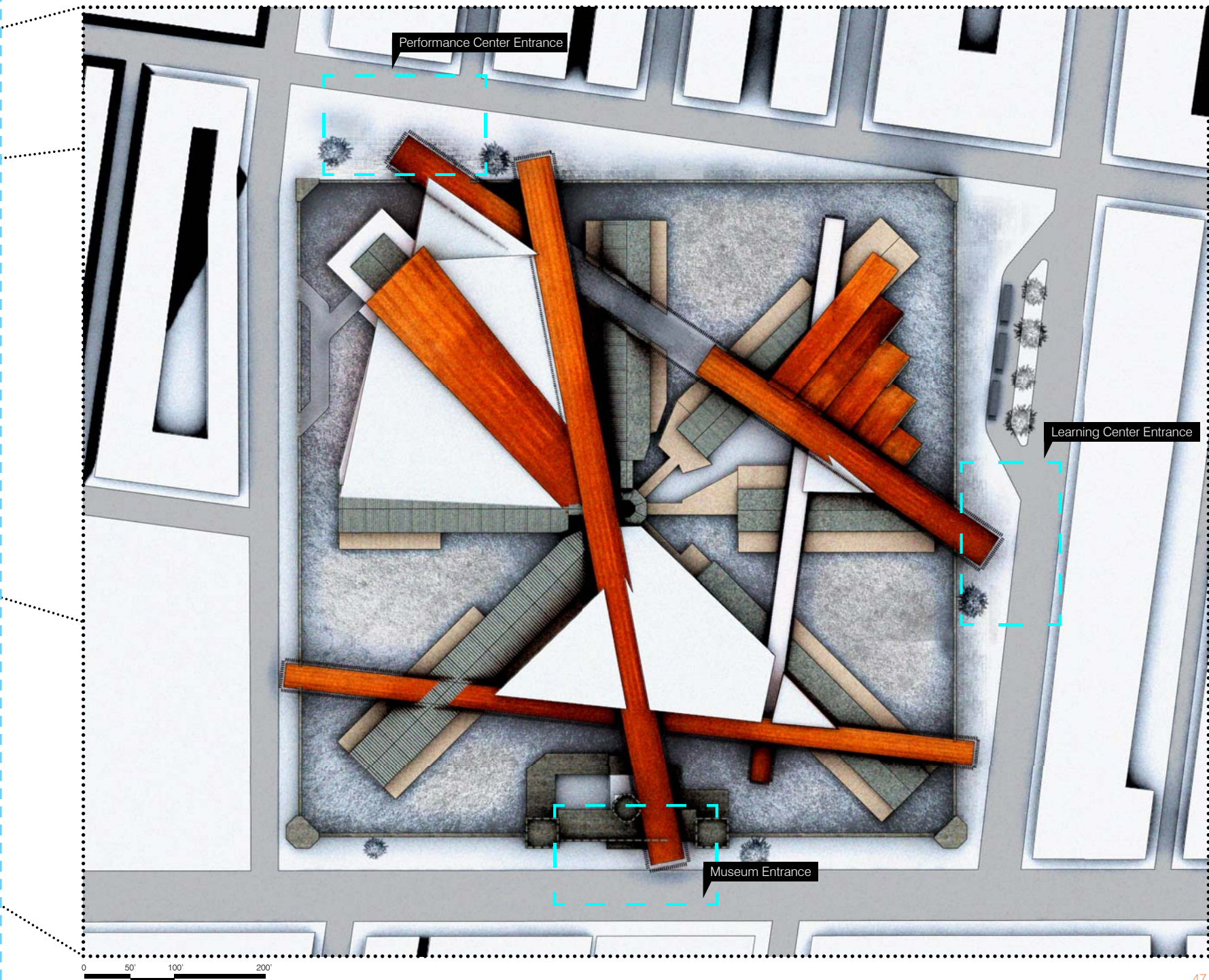
Program Disbursement

The proposed redevelopment will add three new programmatic elements to the existing prison structure. Through the use of the new corridor slices through the existing structure programmatic separations have been developed allowing for separate functions to exist within the same structure while allowing or disallowing movement amongst them. These new functions include a new **prison museum** in the southern sector, a **performance hall** in the north eastern sector, and lastly a **children's learning and interpretive center** within the north western sector.



Vicinity + Site Plan

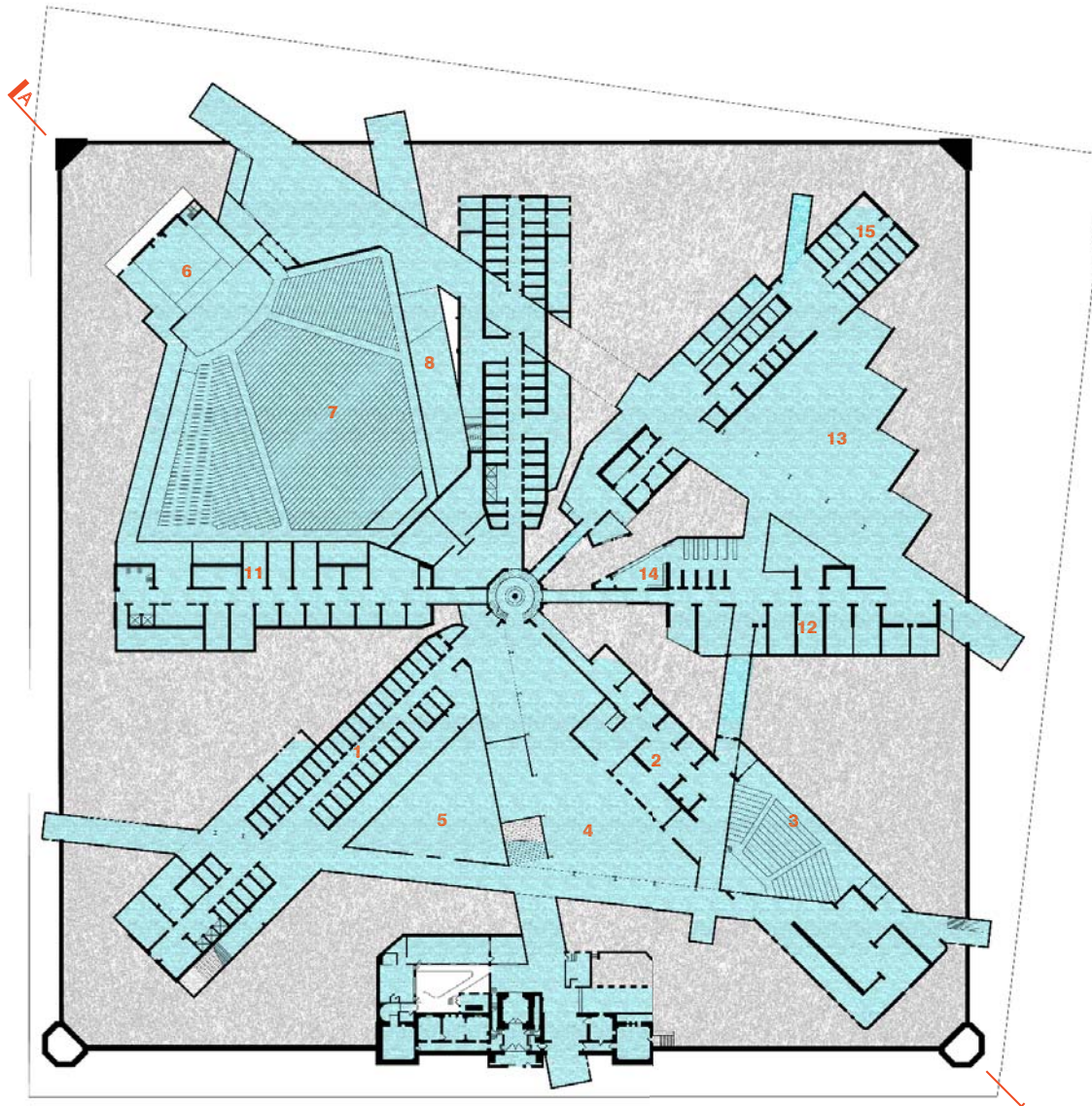
Located within a residential neighborhood in the Arts District just north of downtown Philadelphia, Eastern State Penitentiary's 30 foot walls have become a landmark for the city and its people. The introduction of new programs within the existing walled structure will allow for that same 30 foot wall to be dissected and opened up, allowing the public to finally see what lies beyond. The cuts were made strategically to act as separate access points for the three new programmatic elements introduced with the new design. To the south at the Penitentiary's main entrance is the new access point for the museum. This cut follows through all the way to the northern end of the site to allow for a new entrance to the performance hall being introduced. Lastly cuts towards the East provide access for the educational learning center and also provide for bus parking along the eastern edge of the site.



Floorplans

The floorplan for the new Eastern State Penitentiary is divided into three distinct programmatic types. The first of these is the prison museum in the southern wing, then the performance hall within the north-western wing, and lastly the children's educational center located in the north-eastern wing. Within each of these programmatic spaces modern day amenities are provided to rejuvenate the existing structure and allow for these new uses to be successful.

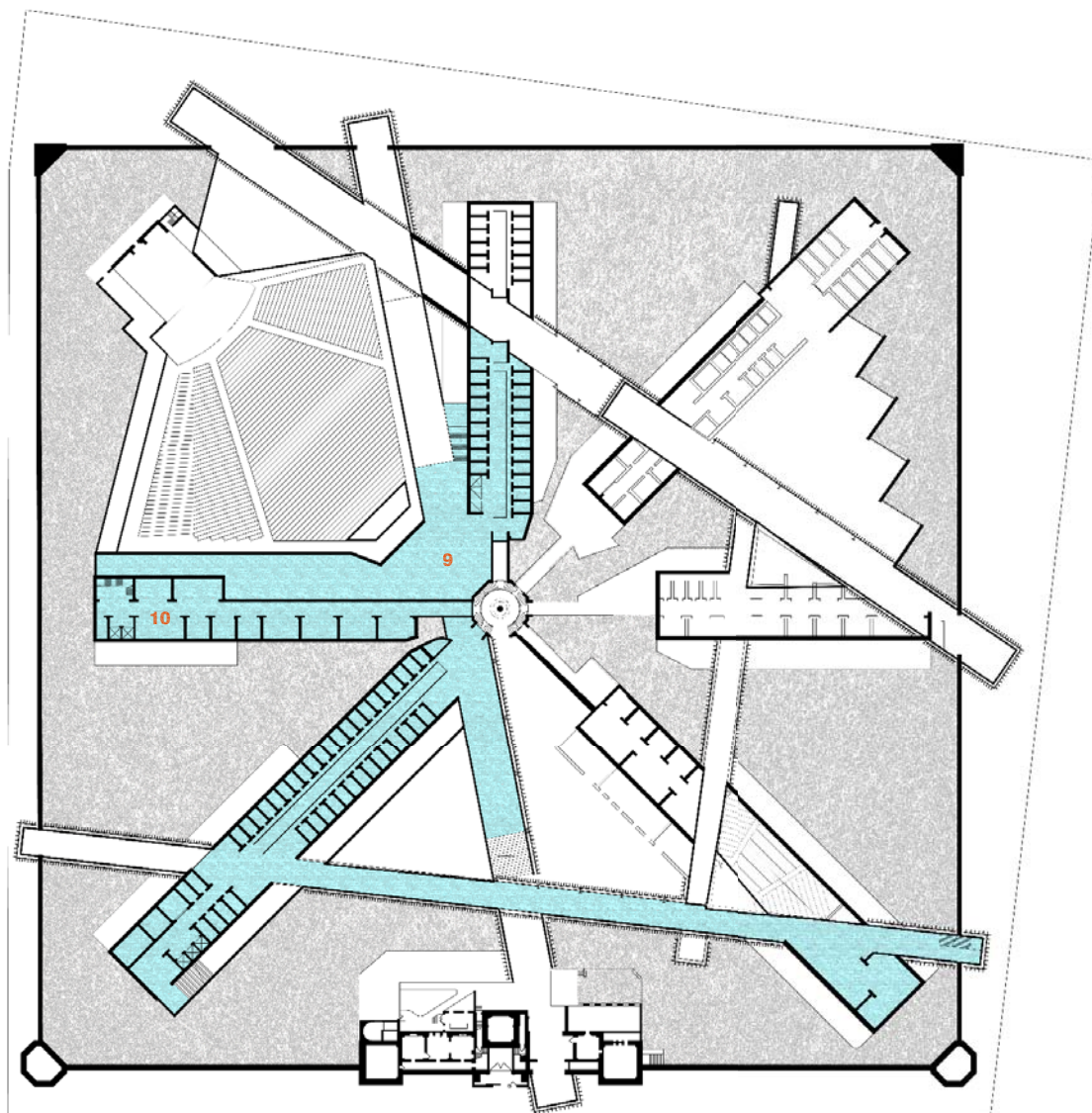
Within the prison museum the current existing cellblocks are converted into exhibit spaces [1] that will house displays for the museum as well as act as historical remembrances of the past use. Certain cell blocks are expanded by the removing of interstitial masonry walls, allowing for larger exhibit spaces [2] for people to enter and enjoy. Within cellblock seven a new lecture hall [3] has been created between the crux of two of the new circulation corridors allowing for small visiting lectures and presentations for the museum patrons as well as the community. Individual cell walls as well as the recreation cells were expanded to allow for this space to be achieved. Located in the once interstitial outdoor space between cell blocks one and seven new infill construction has been developed to act as the museum lobby [4] and main vertical circulation. Along with the museum lobby a new temporary exhibit space [5] has been created to allow for traveling exhibits to display their work. The museum incorporates a two story circulation bar running East-West allowing for access to the second story exhibits in cellblock seven as well as a mezzanine space overlooking the lobby.



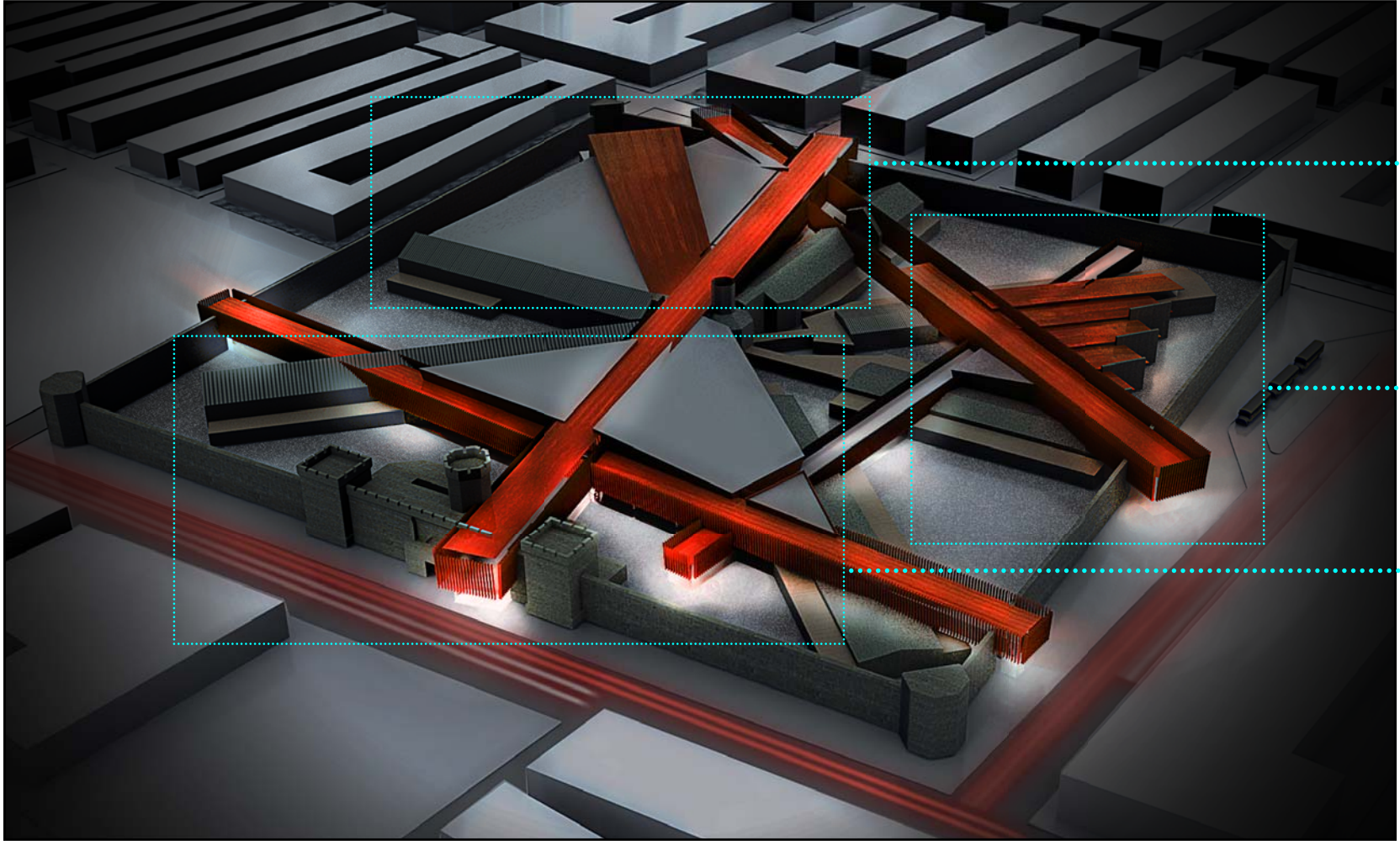
Ground Floor Plan
0' 20' 50' 100'

The performance hall utilizes the once outdoor spaces between cellblocks 4, 5, and 6 as well as takes over cellblock five. The stage for the performance hall [6] incorporates the existing cellblock five and utilizes it as the back of house as well as the main stage for the hall. The audience seating [7] takes up the majority of the interstitial space between cellblocks four and six. The main circulation corridor that acts as the main division cut for the museum follows all the way through to the performance hall acting as the main circulation corridor [8] for patrons to access their seating as well as prefunction space [9] on the second floor of cellblock six. Cellblock six also acts as performance center administration [10] halls as well as back of house spaces for performers [11] such as green rooms, dressing rooms, hair and makeup, etc.

The final programmatic space of the educational center allows for a space for local students and teachers to visit and learn about the historical past of the structure in which the center exists as well as learn about the history of incarceration within the United States. Interactive classrooms [12] are developed within existing cells that have been expanded to accommodate for larger occupancies. A large open space [13] located in the interstitial space between cellblocks two and three allow for large gatherings of students to have hands on workshops, lectures, and learning experiences. A resource library [14] is also located in one of the cellblocks to allow for in-house research and data finding to occur. Spaces for educational center administration [15] are located at the rear end of cellblock three in previous inmates cells.



Second Floor Plan





Performance Hall



Learning Center



Museum





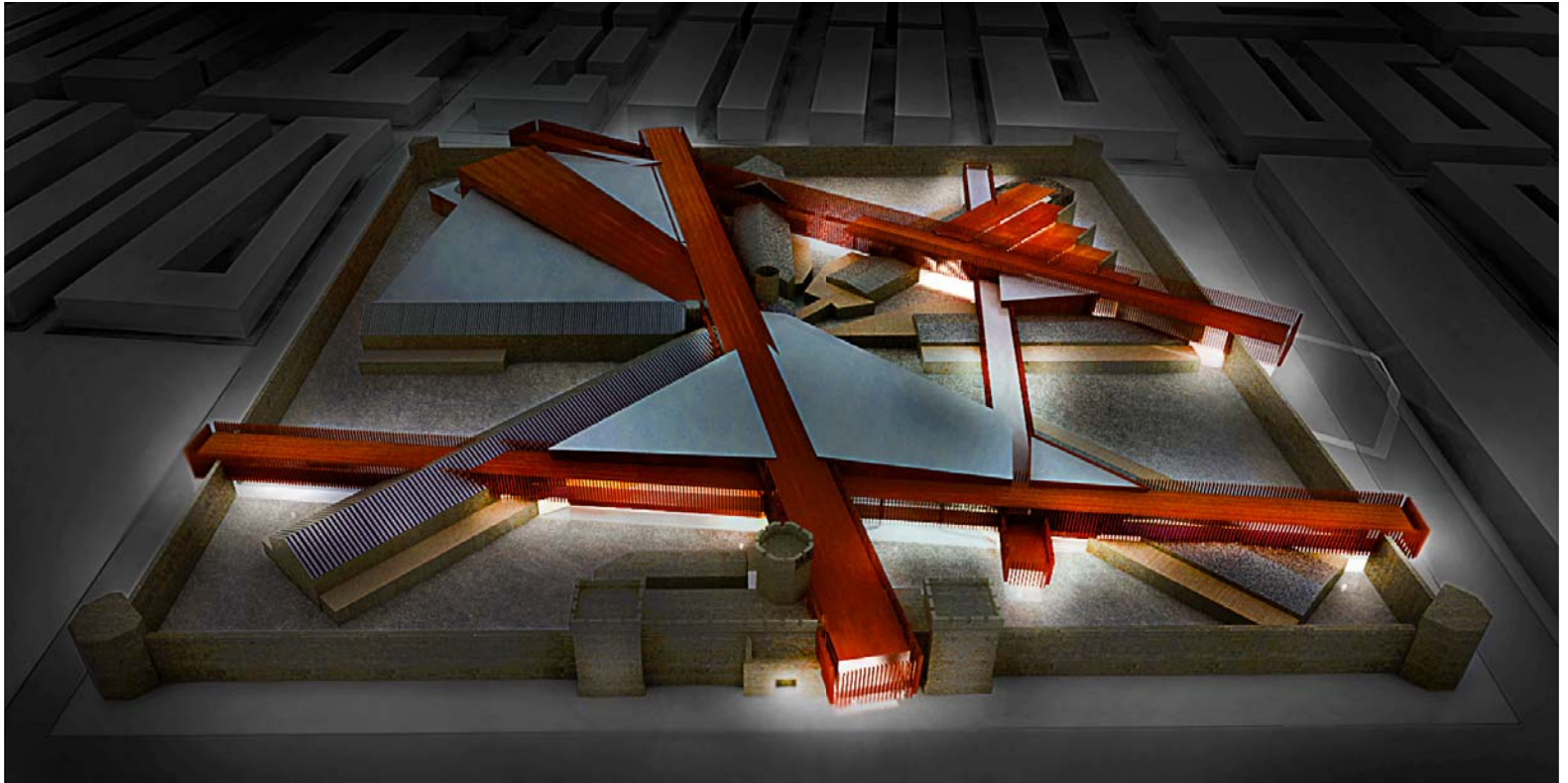














Front Elevation
0' 4' 8' 50'

Main Prison
Museum Entrance

Learning Center
Entrance

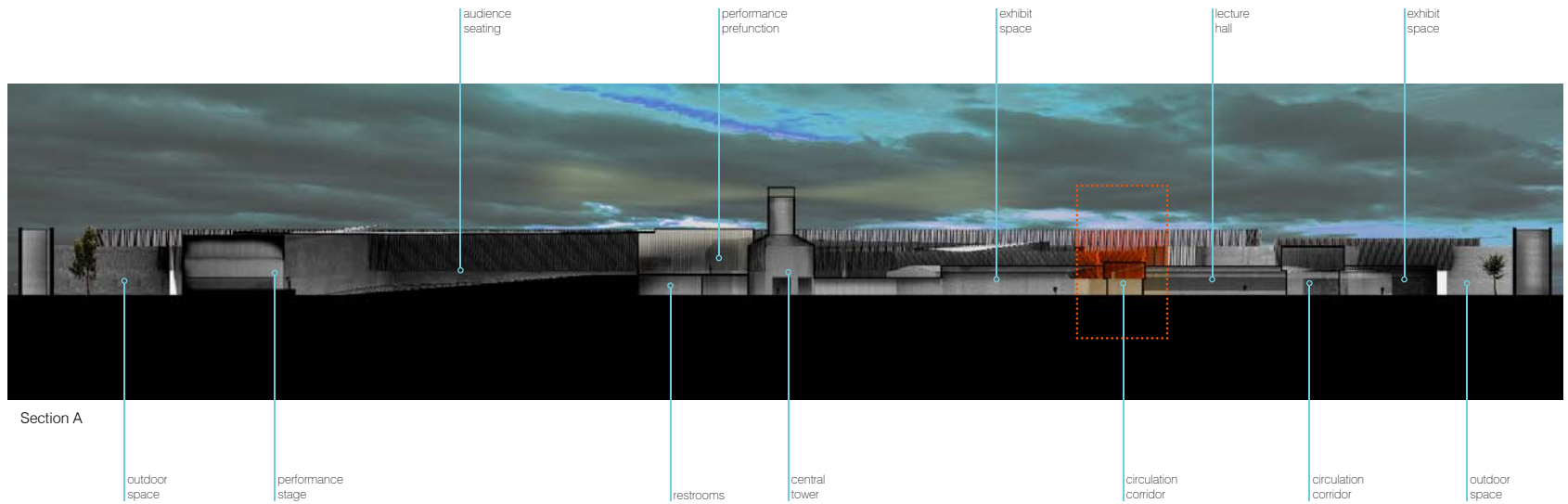
Learning Center
Entrance

Performance Center
Ticket Booth



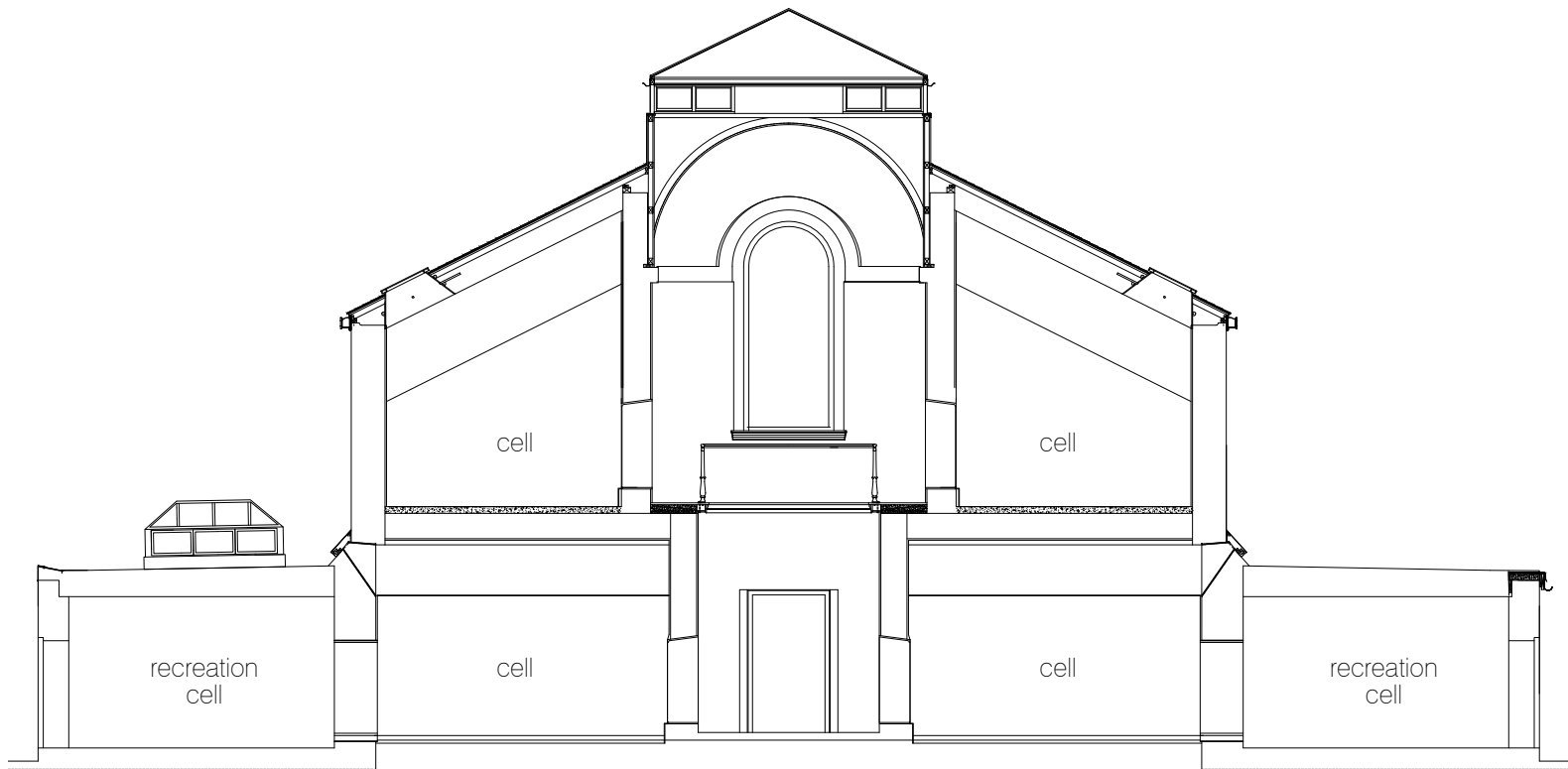
Rear Elevation
0' 10' 50'

Performance Center
Entrance



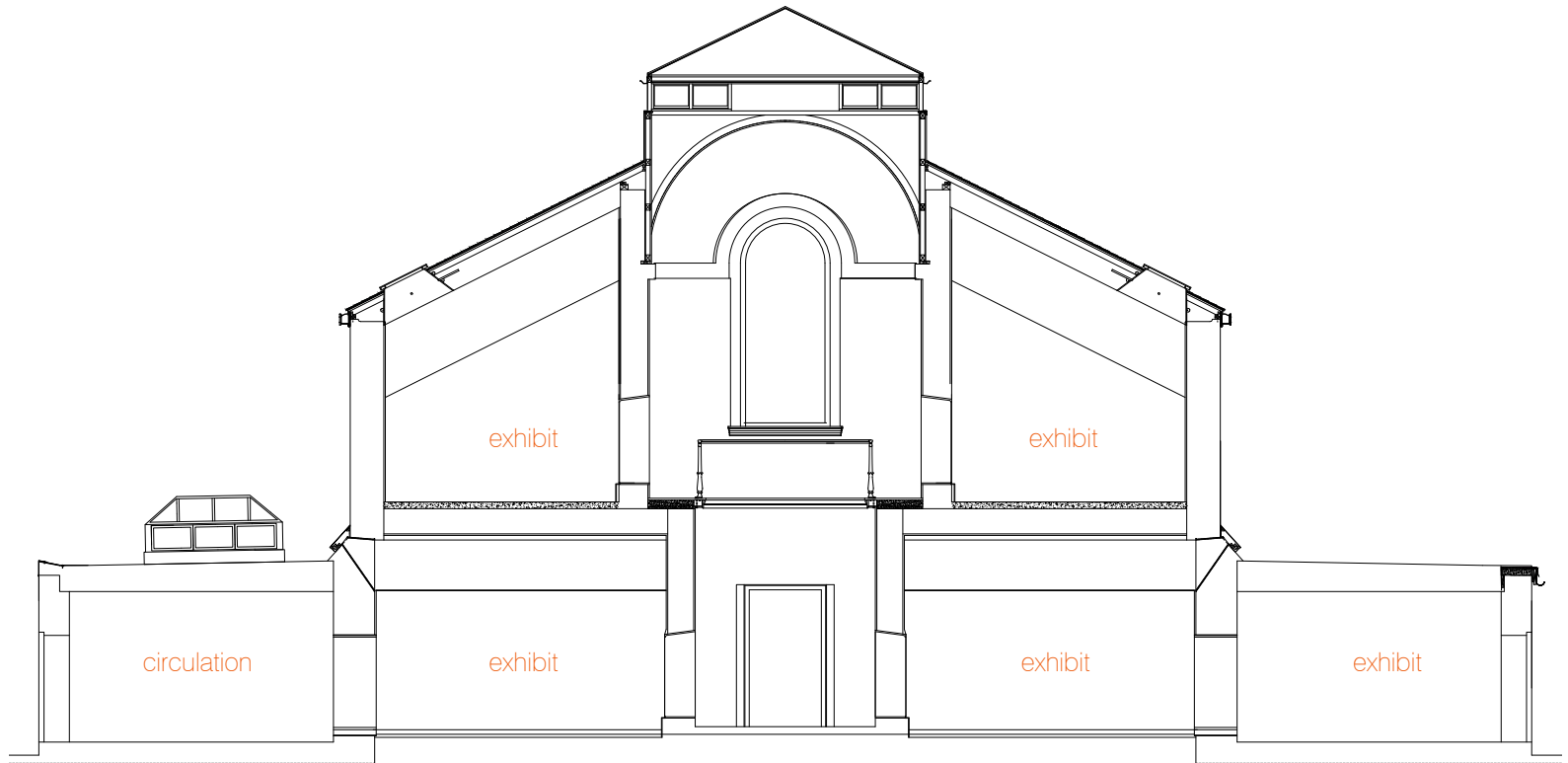
Circulation Corridor Section

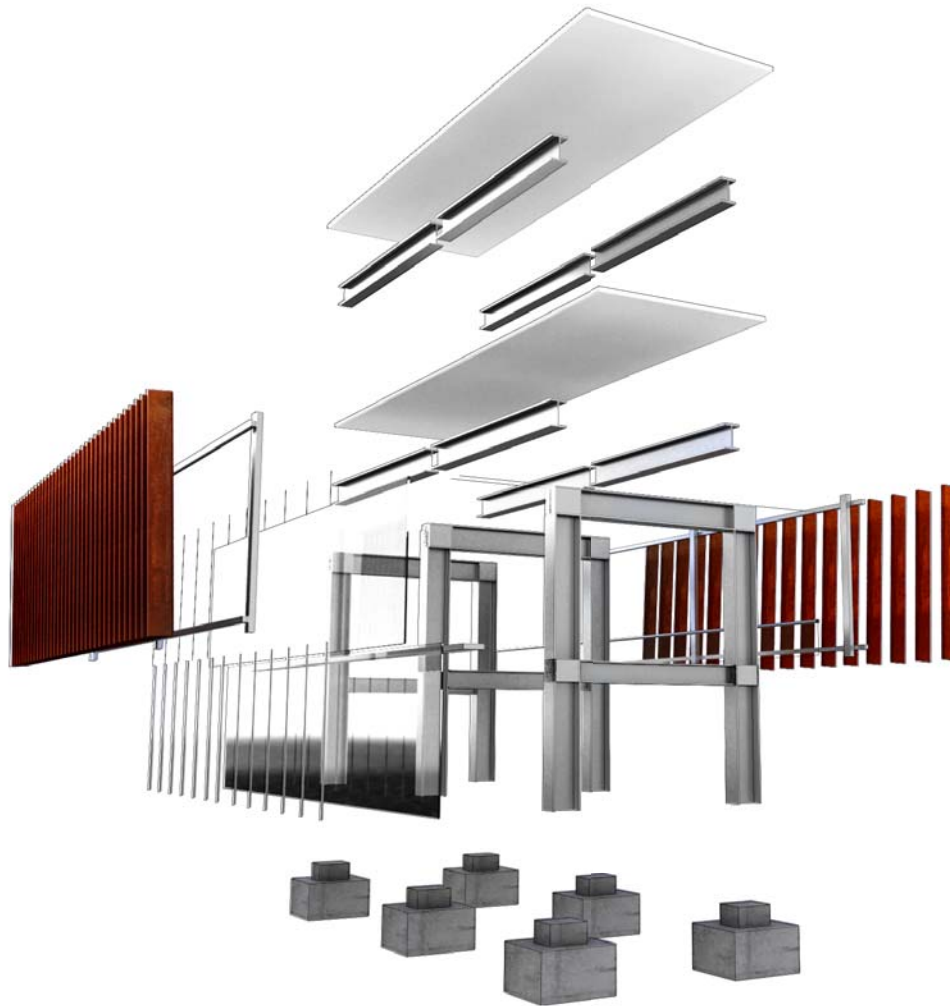




Typical Cellblock Section







Material Selection

The existing Eastern State Penitentiary structure is a masonry bearing-wall construction with timber roof structure. Throughout the years of weathering and neglect the interior plaster finishes have become decrepid and unsafe. It is the intention of the new structure to strip this unusable plaster off of the masonry walls exposing the solidarity of the stone work beneath. This heavy masonic structure will serve as the background for the new, light, steel and glass structures constructed slicing through the building. The new cuts through the building will bring light into the existing structure as well as bring new modern materials within the space allowing for new user experiences within. Steel moment frames and truss systems will be utilized throughout the structure with a new open glazing system spanning the circulation corridors allowing for light penetration. Cort-Ten steel fins will be utilized as a facade system to manage sun infiltration as well as to add a new modern material that juxtaposes yet complements the state of the existing decrepid structure.





Published Sources

Approaches for the Reuse of Buildings with Negative Pasts

- 1 Leach, Neil. "Resisting the Erasure of History: Daniel Libeskind Interviewed by Anne Wagner." *Architecture and Revolution: Contemporary Perspectives on Central and Eastern Europe*. London: Routledge, 1999. 131-38. Print.
- 2 Schneekloth, Lynda H., Marcia F. Feuerstein, and Barbara A. Campagna. *Changing Places: Remaking Institutional Buildings*. Fredonia, NY: White Pine, 1992. Print.
- 3 Rosenfeld, Gavriel David. *Munich and Memory: Architecture, Monuments, and the Legacy of the Third Reich*. Berkeley: University of California, 2000. Print. p 79.
- 4 *ibid.*
- 5 Leach, Neil. "Erasing the Traces: The 'denazification' of Post-revolutionary Berlin and Bucharest." *The Hieroglyphics of Space: Reading and Experiencing the Modern Metropolis*. London: Routledge, 2002. 80-91. Print.
- 7 Rosenfeld, Gavriel David. *Munich and Memory: Architecture, Monuments, and the Legacy of the Third Reich*. Berkeley: University of California, 2000. Print.
- 8 Rosenfeld, Gavriel David. *Munich and Memory: Architecture, Monuments, and the Legacy of the Third Reich*. Berkeley: University of California, 2000. Print. p 267
- 9 *ibid.* p. 82.
- 10 *ibid.* p. 199.
- 11 Rosenfeld, Gavriel David. *Munich and Memory: Architecture, Monuments, and the Legacy of the Third Reich*. Berkeley: University of California, 2000. Print.
- 12 Hine, Thomas. "The City's Landmarks Deserve Better Fates." *Philly.com*. *The Inquirer*, 17 Apr. 1988. Web. 07 Nov. 2012. <http://articles.philly.com/1988-04-17/news/26250830_1_historic-buildings-taliesin-west-new-formula/2>.
- 13 King, Anthony D. *Buildings and Society: Essays on the Social Development of the Built Environment*. London: Routledge & Kegan Paul, 1980. Print.
- 14 Schneekloth, Lynda H., Marcia F. Feuerstein, and Barbara A. Campagna. *Changing Places: Remaking Institutional Buildings*. Fredonia, NY: White Pine, 1992. Print.
- 15 Hine, Thomas. "How To Avoid Present Fiascos When Developing Eastern State." *Philly.com*. N.p., 22 Nov. 1987. Web. 07 Nov. 2012. <http://articles.philly.com/1987-11-22/entertainment/26172992_1_shopping-malls-new-building-new-downtown>.
- 16 Schneekloth, Lynda H., Marcia F. Feuerstein, and Barbara A. Campagna. *Changing Places: Remaking Institutional Buildings*. Fredonia, NY: White Pine, 1992. Print..
- 17 *ibid.*
- 18 Hine, Thomas. "How To Avoid Present Fiascos When Developing Eastern State." *Philly.com*. N.p., 22 Nov. 1987. Web. 07 Nov. 2012. <http://articles.philly.com/1987-11-22/entertainment/26172992_1_shopping-malls-new-building-new-downtown>.
- 19 Smith, Terry. *The Architecture of Aftermath*. Chicago: University of Chicago, 2006. Print. p. 98
- 20 Smith, Terry. *The Architecture of Aftermath*. Chicago: University of Chicago, 2006. Print. p. 135.
- 21 Nobel, Philip. *Sixteen Acres: Architecture and the Outrageous Struggle for the Future of Ground Zero*. New York: Metropolitan , Henry Holt and, 2005. Print.
- 22 Smith, Terry. *The Architecture of Aftermath*. Chicago: University of Chicago, 2006. Print. p. 160
- 23 Cathleen McGuigan, "Out of the Rubble," *Newsweek*, October 8, 2001, 12.
- 24 Smith, Terry. *The Architecture of Aftermath*. Chicago: University of Chicago, 2006. Print. p. 166
- 25 Nobel, Philip. *Sixteen Acres: Architecture and the Outrageous Struggle for the Future of Ground Zero*. New York: Metropolitan , Henry Holt and, 2005. Print. p 20.
- 26 Smith, Terry. *The Architecture of Aftermath*. Chicago: University of Chicago, 2006. Print.
- 27 Michael J Lewis "All Sail, No Anchor: Architecture after Modernism." *New Criterion* Vol. 27, no. 4, December 2003: 4-17
- 28 Herbert Muschamp, "Balancing Reason and Emotion in the Twin Towers Void." *New York Times*, February 6, 2003.
- 29 Wyatt, Edward. "Rebuilding at Ground Zero: Overview; Practical Issues for Ground Zero." *New York Times* 28 Feb. 2003. Print.
- 30 Nobel, Philip. *Sixteen Acres: Architecture and the Outrageous Struggle for the Future of Ground Zero*. New York: Metropolitan , Henry Holt and, 2005. Print. p 14.

History

Wiesen, G., and Heather Bailey. "What Is The Separate System?" *WiseGeek*. Conjecture, n.d. Web. 22 May 2013.

Image Sources

- Cover**
Pacana, Abe. "Dark Chambers." Photo. <http://abrahampacana.wordpress.com> 4 June 2012
[<http://abrahampacana.files.wordpress.com/2012/06/esp3-bw1.jpg>]
- Page 1**
Public Domain.
- Page 2-3**
J. C. Wild; printed by Wild & Chevalier, 1838. Historical Society of Pennsylvania. Lithograph
- Page 7**
The Library of Congress, American Memory
The Library of Congress, American Memory
The Library of Congress, American Memory
- Page 9**
The Library of Congress, American Memory
The Library of Congress, American Memory
The Library of Congress, American Memory
- Page 10**
Dorothea Lange photograph, National Archive
september_11_ground_zero
Chang, Erica. "Skid Row, Los Angeles, USA." <http://www.panoramio.com>. 3 February 2011.
[<http://www.panoramio.com/photo/58495504>]
- Page 13**
Jennifer. thenorthwardroute.wordpress.com. 7 March 2012. [<http://thenorthwardroute.files.wordpress.com/2012/07/nazis.jpg>]
- Page 14**
William Vandivert—Time & Life Pictures/Getty Images
- Page 15**
KODE Redevelopment [<http://www.easternstate.org/explore/tour-guide-chronicles/25th-anniversary-saving-esp>]
- Page 16**
Public Domain.
- Page 17**
Ewing, James. One World Trade Center, Skidmore Owings, & Merrill. Photo. <http://www.jamesewingphotography.com>. 2011. [<http://www.jamesewingphotography.com/index.php#mi=2&pt=1&pi=10000&s=3&p=15&a=0&at=0>]
- Page 18**
Associated Press (AP). www.dailymail.co.uk.
- Page 19**
Associated Press (AP). www.dailymail.co.uk.
- Page 20**
Public Domain.
Public Domain.
- Page 22**
Public Domain.
- Page 25**
Public Domain.
- Page 26**
Breslin Redevelopment. [<http://www.easternstate.org/explore/tour-guide-chronicles/25th-anniversary-saving-esp>]
KODE Redevelopment. [<http://www.easternstate.org/explore/tour-guide-chronicles/25th-anniversary-saving-esp>]
Weiss Redevelopment. [<http://www.easternstate.org/explore/tour-guide-chronicles/25th-anniversary-saving-esp>]
- Page 28-29**
images © fernando guerra, Exit Architects
drawings by Christopher Mojo
- Page 30**
Nazi Party Rallying Grounds. Public Domain.
- Page 31**
Documentation Center Entrance. © Gerd Dollhopf
Section. Digital Model. Domenig-Wallner [<http://www.domenig-wallner.at/projects/503/>]
Digital Model. Domenig-Wallner. [<http://www.domenig-wallner.at/projects/503/>]
- Page 32**
Public Domain
- Page 33**
Public Domain
- Page 34**
The Library of Congress, American Memory
- Page 67**
Public Domain
- Page 68**
The Library of Congress, American Memory

Eastern State [Redux]

An adaptive reuse solution for the historic Eastern State Penitentiary