moveable marktespace

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THESIS BOOK

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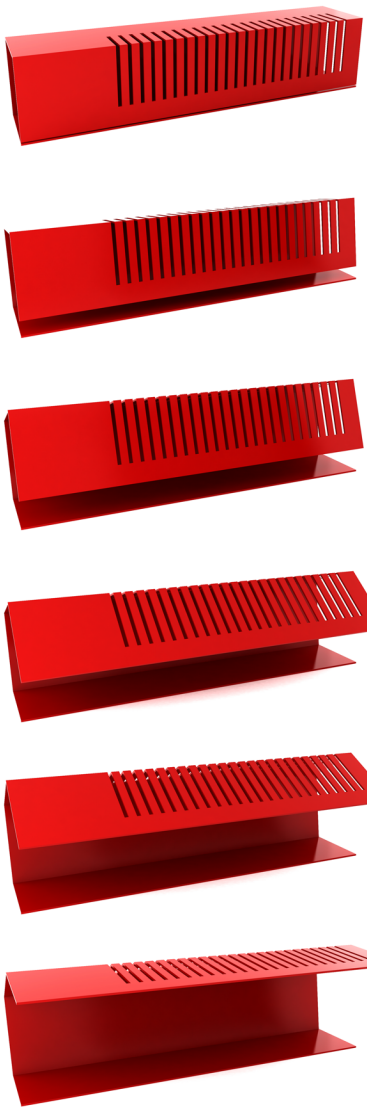

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Professor John Mueller
Term II, 2010

THESIS TITLE

MOVEABLE MARKETPLACE

Christopher Paul Dara
Masters Student
April 29, 2010

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CHAP

TER 1

CHAPTER 1

ABSTRACT

This thesis explores the architectural nuances of relinquished waterfront parcels of land in the city of Pittsburgh, Pennsylvania. Because of deindustrialization in this area the city has been left fragmented in that the waters edge is no longer a branded image of the city; this is because the waters edge condition has become sectioned off by barriers such as the built environment, urban infrastructure and heavy train rail.

The inertia of manufacturing capabilities in many cities (especially along the manufacturing belt) has ceased. Through urban innovation along the waters edge can a city be re-taught how to address its waterfront? Can a shift in the self-image of the city's waterfront be the re-facing needed to ignite investment and future urban development?

The intention of this thesis is to title derelict industrial ports in the city of Pittsburgh as a system of parks and to insert program onto these parks that engage community interaction, to take what is currently unused, abandoned, abused and broken and exploit it into a new branding of the city.

Through this thesis a statement can be made that the revitalization of the waters edge in a city should become the catalyst for future development in the urban environment. Creating design that allows for physical interaction with the

waters edge begins to delicately, place interest in the prospective attributes that the waterfront can begin to offer.

Pittsburgh has one of the most unique water edge conditions along the manufacturing belt. Located between the three rivers, Monongahela, Allegheny and the Ohio, Pittsburgh's lands edge is attenuated with derelict ports and heavy rail tracks, remnants of a glorious industrial past. The train tracks have multiple uses now.

The Strip District in the City of Pittsburgh is a historical preserved market and industrial site. It has become a destination for many in the area, an access to produce and other goods and services. The Strip District is a sustained built environment but its grounding is the Pennsylvania Railroad Fruit Auction & Sales Building. Over 1,400 feet long, this building has become a barrier to the waters edge, so through reuse and redesign the building can begin to dissolve allowing access to the waters edge, while maintaining the existing program.

The project has become an extension to the Strip District, a moveable market-space in that the Market Building will be transformed to allow access to a new outdoor market area close to the waters edge. The train and its fright containers become the container for the market. How the train moves throughout the city and how the fright containers fold + unfold on to each individual, unique site, become a performance. A rebranding of the image of Pittsburgh, a city that understands the quality of produce and the service that farmers hold to the general public; the city will bring the market to its citizens. The extension to the Market Building becomes a catalyst to the idea that, while the Strip District is an experience it does not need to be only accessible via car. Its history is grounded enough through train traffic that establishing a system of nods throughout the city will allow for a significant reduction in vehicular traffic as well as

traffic congestion inside downtown. Pittsburgh is a city where the topography can become a struggle between accessibility to goods, or denial. The Movable Market creates this accessibility, allowing the purchase of groceries to become routine in the daily lives of it inhabitants.

This extension to the Strip District is where the idea of move-ability comes into play with the park scheme in Pittsburgh. The Moveable Marketplace becomes a performance throughout the city. A performance in that when it arrives at its scheduled location the freight containers unfold, this unfolding and dismantling is unique to each individual satellite site.

With the two ideas overlapped, first, that there are multiple sites in Pittsburgh for a park space, and secondly that each park space welcomes the moveable train on a rigid schedule, allows for a constant transformation of the site. A constant repurposing of how people engage and use the site and how the site responds to the waters edge.

CHAP

TER 2

CHAPTER 2

THESIS PAPER

This thesis explores the architectural nuances of relinquished industrial ports; recognizing their connection to heavy rail train infrastructure and how through installing program gives new meaning to the waters edge. It becomes a connective tissue that begins to frame the waters edge development as a public amenity.

Urban imagery, particularly along the manufacturing belt in the U.S. is often influenced, or rather focused on architectural development along the waters edge; the boundary between lands end and the fluid extension to the outside. This fluid connection has changed drastically in the last fifty years as cities are transforming from an industrial and manufacturing market based economy to that of communication and technology. This morphology of the waters edge has become the grounding for a new branding of a city, one that can view waterfront development as a branding of urban imagery rather to that of a derelict and relinquished industrial port.

This transformation can be related to the metaphor of a digital port rather than the existing industrial port. The computational definition of a port is a place where data can pass into or out of a central processing unit, computer, or peripheral. With central processing units, a port is a fixed set of connections

for incoming and outgoing data or instructions.

The digital port, much like a port on a computer, is where information is managed. Information converted from an indecipherable format to a visually comprehensive file that can be read or at least understood. Industrial ports need to begin to alter its function, much like the definition of the word, to begin to be viewed and understood by the public at large. There is currently an undefined vocabulary in that which architects begin to address port districts. To say that all port districts become reused loft spaces, or New Urbanist communities is a terrible assumption to make especially when these parcels of land engage the waters edge. This thesis begins to look at the waters edge condition and the many alterations that industrial port districts can make to become viewed as a public amenity in this new age of providing services.

Even now, these digital ports control more flows of commerce and produce than that of historical industrial port districts, and just with the click of a button. So the question becomes how does a city rekindle this valuable asset with this transformation in mind? How can the water edge be seen as a public amenity, and if it cannot what is the use of having a city located along the waters edge?

With these questions the statement can be made that the revitalization of the waters edge in a city should become the catalyst for future development in the urban environment. Creating design that allows for physical interaction with the waters edge begins to delicately, place interest in the prospective attributes that the waterfront can begin to offer.

In looking at the layouts of port cities, studies can begin to be made regarding the amount of fallow (vacant) land bordering the waters edge. As infrastructure of the city has surpassed any means of controllability there becomes a disconnect between

people, their communities, and the waters edge. This is because of urban barriers such as vehicular arteries, train heavy rail, geographical topography, and the built environment. These "urban barriers" are only traversed via the car. The perspective of the person on foot was not taken into account when these barriers where established. Simply accidental, but terribly overlooked, was the waters edge condition in many cities, leaving these port districts stranded; overtime becoming derelict wastelands.

So through these "urban barriers" can a connection begin to bridge this gap between people and the waterfront? And what type of design strategies can obtain this? Immediately the idea of reclamation comes to mind. Through the thoughtful reduction of urban infrastructure (an urban barrier) would begin to clear certain obstructions between people and the waters edge, allowing a reconnection.

But the question arose. Can this only be obtained through reclamation or can the possibilities of installing new programs onto the existing infrastructure offer new and useful schemes throughout the cityscape? This idea comes from the recognition that in a manufacturing city the urban heavy rail infrastructure has become derelict in that it now lines on the waters edge of the city breaking the once well-woven connection that it had with the water. These unused railways must be altered in some way to be revitalized, or they must be destroyed. To be able to view the waterfront as a branding of the city it would have to be accessible. Accessibility is key to this prospective redevelopment of the waters edge, enabling it to be viewed as a public amenity.

This thesis begins to delve into the possible creation and design of waterfront parks along the waters edge condition, a remediation of the derelict waters edge with the injection of program that uses the existing heavy rail infrastructure.

Although this thesis is currently broad in that it is of sites located along the manufacturing belt, there is a need to now pinpoint a specific site. This site is the waters edge in the city of Pittsburgh. This water edge condition is a mixture of spaces currently addressed and spaces that are totally disconnected. In spaces where the waters edge is addressed it often is the outcome of ripping up the heavy rail train tracks and laying pavement down, calling it rails-to-trails. This is the not a coherent way to address the waters edge condition and it certainly is not the most outgoing and unreserved method architecturally.

Architecture needs to excite the human emotions and earn a response. If the waters edge in a city is going to be viewed as a public amenity it needs to begin to speak “amenity” clearly. How are people going to engage it? What are people going to engage? Is the design going to excite people? Is it going to be safe? Does it need to be safe?

Water is very intimidating, the flow and power behind a river is massive. But it is also calming and soothing, viewed from afar it is gentle and rolling. The architecture and landscaping of these vacant port districts can begin to mimic this. In a response that brings the user to a more intimate reaction to the waters edge. This response can only be awarded to successful use of the waters edge.

Pittsburgh has one of the most unique water edge conditions along the manufacturing belt. Located between the three rivers, Monongahela, Allegany and the Ohio, Pittsburgh’s lands edge is attenuated with derelict ports and heavy rail tracks, remnants of a glorious industrial past. The train tracks have multiple uses now. Some of these uses include light rail tracks, rails-to-trail bike paths, etc. Some of these tracks are derelict and cut off from use. However, all of this space is still city owned. There is no contesting between public and private development.

The Urban Redevelopment Authority of Pittsburgh owns several parcels of waterfront land. They are currently working on future development in certain areas in Pittsburgh on the waters edge. This thesis begins to explore these individual sites as a whole, viewing them as a park system throughout Pittsburgh. The first location that began to develop was the site on the waters edge located by the Strip District.

The Strip District in the City of Pittsburgh is a historical preserved market and industrial site. It has become a destination for many in the area, an access to produce and other goods and services. The Strip District is a sustained built environment but its grounding is the Market Building. Over 1,400 feet long, this building has become a barrier to the waters edge, so through reuse and redesign the building can begin to dissolve allowing access to the waters edge, while maintaining the existing program.

The project has become an extension to the Strip District, a moveable market-space in that the Market Building will be transformed to become a cartridge, a pod, a hub, a shelter, a for a train. The train and its fright containers become the container for the market. How the train moves throughout the city and how the fright containers unfold on to each individual, unique site, become a performance. A rebranding of the image of Pittsburgh, a city that understands the quality of produce and the service that farmers hold to the general public; the city will bring the market to its citizens. The extension to the Market Building becomes a catalyst to the idea that, while the Strip District is an experience it does not need to be only accessible via car. Its history is grounded enough through train traffic that establishing a system of nods throughout the city will allow for a significant reduction in vehicular traffic as well as traffic congestion inside downtown. Pittsburgh is a city where the topography can become a struggle

between accessibility to goods, or denial. The Movable Market creates this accessibility, allowing the purchase of groceries to become routine in the daily lives of it inhabitants.

This extension to the Strip District is where the idea of move-ability comes into play with the park scheme in Pittsburgh. The Moveable Marketplace becomes a performance throughout the city. A performance in that when it arrives at its scheduled location the freight containers unfold, this unfolding and dismantling is unique to each individual site.

With the two ideas overlapped, first, that there are multiple sites in Pittsburgh for a park space, and secondly that each park space welcomes the moveable train on a rigid schedule, allows for a constant transformation of the site. A constant repurposing of how people engage and use the site and how the site responds to the waters edge.

To convey this idea, study models where performed where strings cast into concrete where pulled out in a rigidly timed manner; one string every two minutes. This portrayed the appearance, that over time, making a move alters the urban imagery. At first, the concrete was still very wet. When the string came out, the concrete just refilled the void that was left by the string. About halfway through, when a string was removed from the concrete, it left a mark that held the remembrance of the string that was once there.

This study model was meant to replicate this idea of phasing of a given site. As the train moves throughout the city, site-to-site, each individual time, it leaves behind a more defined image making the location more site-specific. It becomes imbedded in a manner that establishes routine amongst its users.

In viewing each individual site through this methodology creates consistency in several different locations in Pittsburgh. What this accomplishes is defining certain waterfront areas as

waterfront park spaces. This, in turn, establishes a program that for there to be a need for a park space along the waters edge there has to be an attraction. Landscaping becomes the attraction and how the landscape interacts with the waters edge; this will be unique to every individual site.

Making every individual site unique, while juxtaposing the interaction from the train, allows for consistency in design. How the train moves onto the site? How the train turns around? How the train unfolds to the site? How the train interacts with the people and the waters edge? These are all questions that will need to be investigated in a scale relative to the size of Pittsburgh.

The train becomes a performance in this manner. People begin to view the parks as a checklist; “we visited the park in the south side, it was wonderful, but I hear in the Strip District the third from last freight car unfolds into a playground, the children would love that.” These dialogs and narratives can begin to be set up to find unique interest to the specific communities in Pittsburgh.

The train becomes an adaptation to the old uses of railways. Originally purposed to move people and freight now move programs. Some example programs that may become to be installed on the train are all things that might be viewed along the waters edge or in a typical park space setting; swing sets, pools, playgrounds, ice cream stands, a kiosk, but not limited to these. The addition of freight containers becoming marketplaces, hair salons, pharmacies, movie rentals, etc. becomes a critique on the expansion of strip malls, one ever other mile.

The moveable market brings the services to the people in an urban environment where the car should not be use as much as it is. This is a subjective criticism, but research shows that emissions in the city need to be dealt with. By setting up narratives of how fictional people may interact with the movable

market begins to establish the schedule for the train. Is there only one train? What may become the various uses for multiple trains? The idea of one train establishes the simplicity that may be needed for such a program as the movable market. To underpin a rigid schedule for the train and when it arrives at each individual site allows for it to become common knowledge throughout the city. Everyone knows where the Strip District is. Everyone knows where his or her local grocery store is even if it is not in walking distance. People have grocery days where they drive several miles to the urban periphery to purchase their goods. The movable market imagines how things might become if they where brought to you.

Even now, through the emerging technologies of communication and the Internet people are purchasing groceries off the Internet with reasonable shipping rates. The idea of simplifying grocery shopping is appealing to many people who have complex lives. People take comfort in a rigid schedule.

The example of the Movable Market is only one that has been used because the Strip District has become the central nod to the matrix of park places. Farmers flock to this centralized space to sell their produce every Saturday morning. This allows for the train to make one full trip; weekly returning to the Strip District to restock what has not been sold. To then, once again, make its weekly routine throughout the city of Pittsburgh. It becomes a cycle, this extension to the Market Building. However, freight containers can be added or subtracted. New programs con be installed on the train and then uninstalled just like the pace of software on a computer today.

The architecture becomes exciting and engaging, intimately to the scale of the person, architecture that becomes defined by the parameters of a fright container, a modular box, and endless possibilities of interior designs and programs.

The Movable Market allows for the remediation of relinquished industrial ports through the design of simply landscaped parks. How the schedule of the train is set up is influential to the success of the project as well. Much of the success of the Strip District is attributed to the fact that it is only open two days a week. This defines the space as an attraction, a destination that people throughout Pittsburgh schedule on their calendar. This is used also in the Movable Market. It is set up on a schedule so that people can access the serves provided one day a week. This defines the Movable Market as an attraction. It schedule makes the train illusive in that you have to plan when you will attend the program.

The sites will be occupied throughout the week. Unlike the train attending the site on a weekly basis, the landscape will engage the waters edge in a manner that allows this interaction to be viewed as a public amenity.

CHAP

TER 3

HIGH LINE

The High Line design team is a collaboration between landscape architecture and urban design firm James Corner Field Operations, and architecture firm Diller Scofidio + Renfro.

The full preservation of the High Line at the rail yards has long been one of Friends of the High Line's major advocacy campaigns. This is an iconic section of the Line, with breathtaking views to the Hudson River and crosstown to the Empire State Building and the Midtown skyline. It offers a possible connection to the Hudson River Park, as well as a series of open spaces being planned as part of the development of the West Side.

This 26-acre rail yards site is the future location of a massive development project, now being planned by the Related Companies, a private developer that is leasing development rights for the site from the MTA, a State agency. The site is currently home to working train yards, owned by the MTA and serving as a storage area for the Long Island Rail Road trains on their way to and from Penn Station. The developer will build a platform over the yards, with approximately 12 million square feet of commercial and residential space built on top of the platform.

The High Line. Web. 01 Nov. 2009. <http://www.thehighline.org/>.

8350

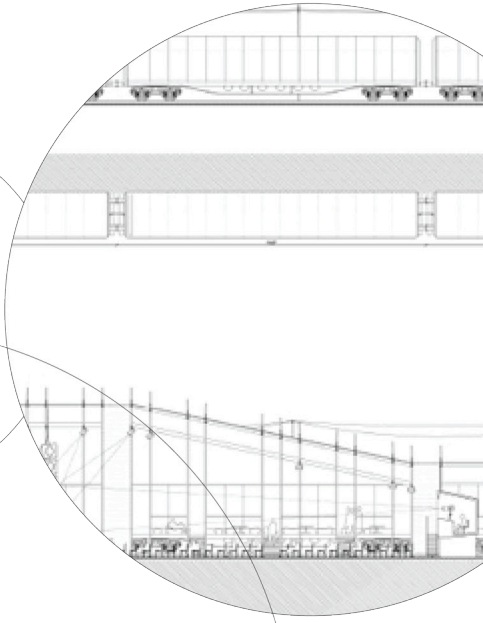
WAGON SCENES

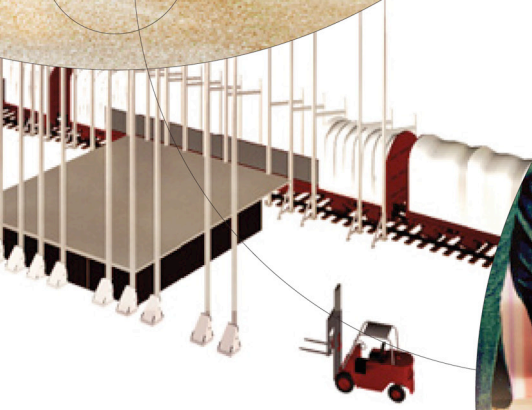
Towns are often more likely to have a station than a theatre. Our proposal, Wagons-scènes, is a tool for regional cultural development, using available railway bases to make up for the lack of cultural facilities. An itinerant on the rail network, this theatre is extended lengthways, along the goods train area, incorporating a five car train and a deserted platform. In a monochrome of reds, a large tent houses the foyer, the stage and the theatre, extending to the train which forms a gallery for the public. Set up within a day, this innovative facility can be used to numerous ends: touring artists, a residence for producing shows, or a complimentary space for festivals.

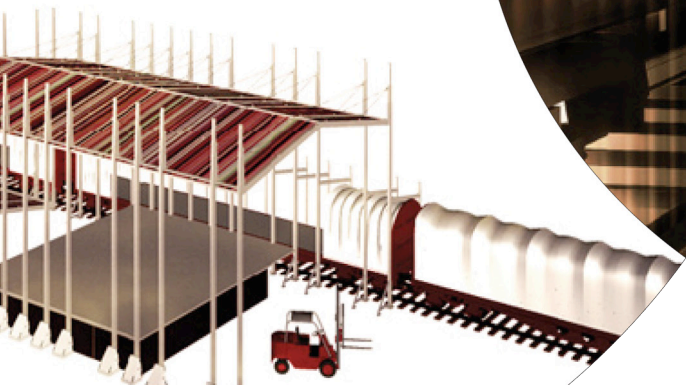
Type: ARCHITECTURE
State: Etudes
Year: 2005
City: France
Area: 800 m²
Budget: 1.2 k€
Team: Encore heureux + Paul-Eric Schirr-Bonnans

"Wagons-Scenes." ENCORE HEUREUX - Architectes Et Collectif Depuis 2001. Web. 2010 Jan.

WAGONS-SCENES







TELOK BLANGAH

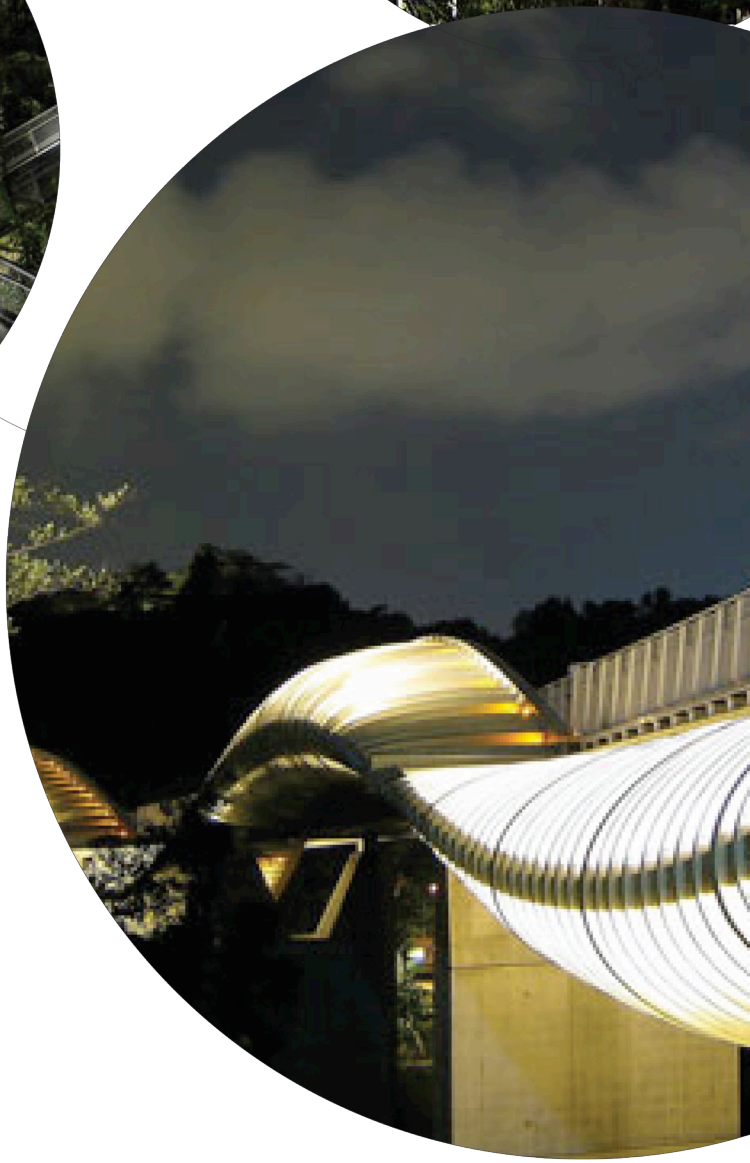
Located in Singapore, Telok Blangah Hill Park's newest addition includes "a fly-over-like infrastructure" that reaches 120 feet above the forest floor. The walkways are a respectful way to view nature as they provide a place for viewers to unobtrusively admire the landscape.

These truly elevated walkways, which are formed like suspension bridges, provide the rare experience of being at treetop level. By elevating the walkways, the park was able to build around the natural surrounding to preserve the forest while also introducing a new relationship between nature and architecture.

The paths form a web-like network running through the dense forest. As people meander along the walkways, some study the creatures occupying the rain forest canopy, while others marvel at the uninterrupted panoramic views of the metropolis.

The open structures permit sunlight to shine on the walkers while natural ventilation can cool the paths. In the night time, some paths are illuminated by a color-changing LED light show.

"Telok Blangah Hill Park | ArchDaily." ArchDaily | Broadcasting Architecture Worldwide. Web. 29 Apr. 2010.



CHAP

TER 4

SITE: WHY THE STRIP?

strip district

The strip district is a sustained industrial and market district on the Allegheny river in Pittsburgh Pennsylvania. This site is home to the Pennsylvania railroad fruit auction and sales building. This produce terminal is the location of the 40-year-old business J.E. Corcoran.

photo essay

strip district

The Pennsylvania railroad fruit auction & sales building Provides produce to 200 clients throughout Maryland, Ohio, Pennsylvania and New York. There is a political debate going on now on what may become of this space. An article in the Tribune-Review stated that the URA wants to invest 8.1 million into this produce terminal to turn it into an open-air market. But this means uprooting J.E. Corcoran, a 29-person business that has been in operation for 40 years. The new open-air market would bring an estimate of 34 new vendors and create 200 new jobs.

DELI
AVAILABLE
IMPERIAL

CHAPTER 4 - photo essay

strip district

The Strip District in the City of Pittsburgh is a historical preserved market and industrial site. It has become a destination for many in the area, an access to produce and other goods and services. The Strip District is a sustained built environment but its grounding is the Pennsylvania Railroad Fruit Auction & Sales Building. Over 1,400 feet long, this building has become a barrier to the waters edge, so through reuse and redesign the building can begin to dissolve allowing access to the waters edge, while maintaining the existing program.

photo essay
OFFICEMART

strip district

The waters edge along the Allegheny river at the strip has become allocated as overflow parking for the strip district. This thesis delves into alternative means in regards to addressing the waters edge condition. The strip district is one of the only accesses to fresh produce in the city of Pittsburgh Pennsylvania. Because of this the strip becomes a central node to access to goods in the city.

photo essay
OFFICE MART
ANTIQUES

strip district

This site is the waters edge in the city of Pittsburgh. This water edge condition is a mixture of spaces currently addressed and spaces that are totally disconnected. In spaces where the waters edge is addressed it often is the outcome of ripping up the heavy rail train tracks and laying pavement down, calling it rails-to-trails. This is the not a coherent way to address the waters edge condition and it certainly is not the most outgoing and unreserved method architecturally.

photo essay

strip district

The Strip District is not the only site, rather just home base to the Moveable Market, a centralized nod to a matrix of satellite sites, which are end destinations for the train. The project has become an extension to the Strip District, a moveable market-space in that the Market Building will be transformed to allow access to a new outdoor market area close to the waters edge. The train and its fright containers become the container for the market. How the train moves throughout the city and how the fright containers fold + unfold on to each individual, unique site, become a performance. A rebranding of the image of Pittsburgh, a city that understands the quality of produce and the service that farmers hold to the general public; the city will bring the market to its citizens. The extension to the Market Building becomes a catalyst to the idea that, while the Strip District is an experience it does not need to be only accessible via car. Its history is grounded enough through train traffic that establishing a system of nods throughout the city will allow for a significant reduction in vehicular traffic as well as traffic congestion inside downtown Pittsburgh is a city where the topography can become a struggle between accessibility to goods, or denial. The Movable Market creates this accessibility, allowing the purchase of groceries to become routine in the daily lives of it inhabitants.

Phone
Heinz
MARKET
OUTLET

CHAPTER 4 - photo essay

strip district

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photo essay

CHAPTER 4 - photo essay

strip district

On one side of the Pennsylvania Railroad Fruit Auction & Sales Building is accessible to car traffic. There is a promenade of garage doors that open to the public during the market hours, which are Saturday and Sunday morning. This foundation to the strip district has been dissolved. The Pennsylvania Railroad fruit auction and sales building does not hold its exact historic purpose today as it did during the great steal age with in the city. There are currently alternative businesses that work out of this.

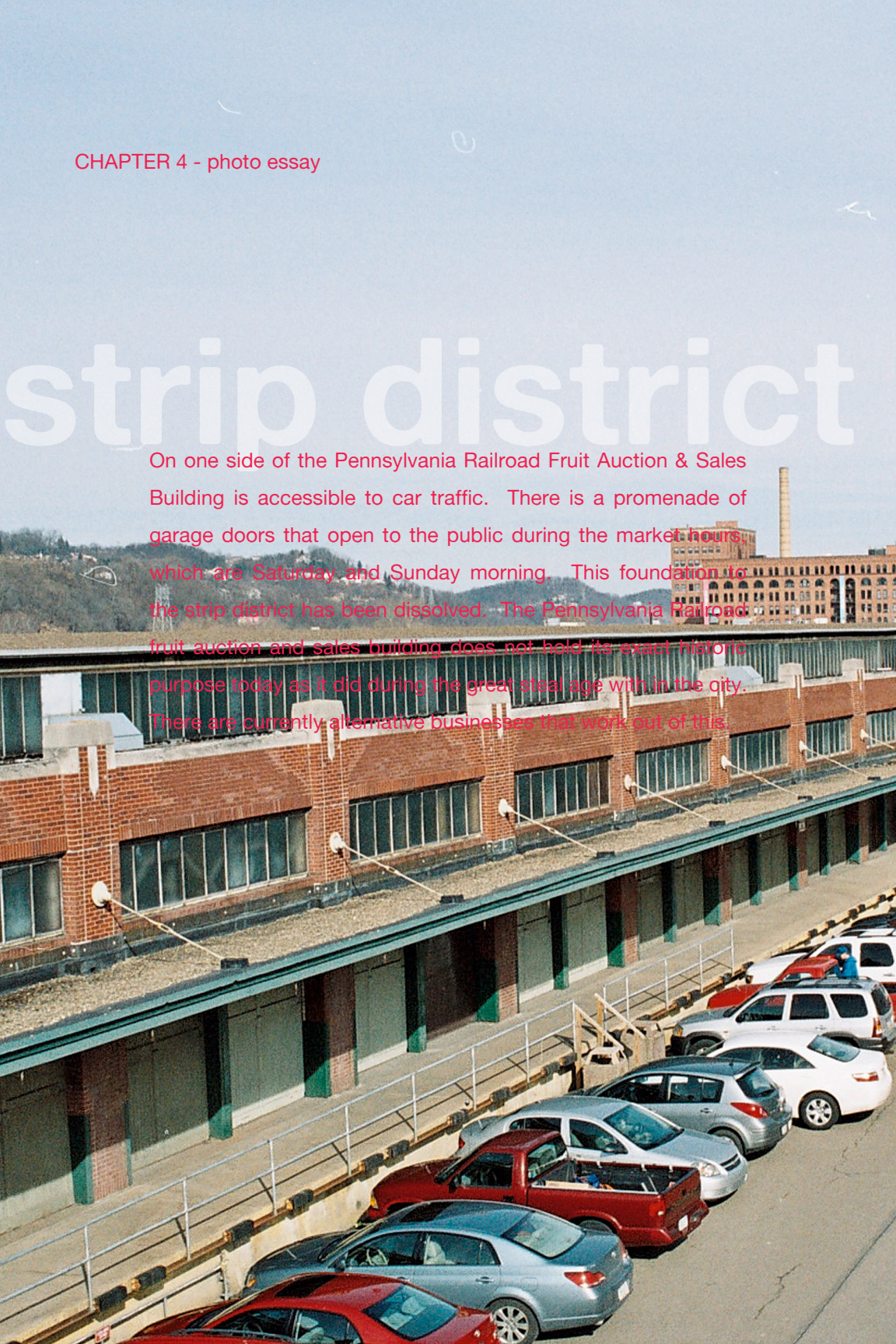

photo essay

strip district

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photo essay

CHAPTER 4 - photo essay

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photo essay

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Making every individual site unique, while juxtaposing the interaction from the train allows for consistency in design. How the train moves onto the site? How the train turns around? How the train unfolds to the site? How the train interacts with the people and the waters edge? These are all questions that will need to be investigated in a single relative to the size of Pittsburgh.

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ACARONI CO.
ESE CENTER
photo essay
Italian
SALAMI
CAPACOLA
PEPERONE
PENNSYL
BARILLA PAS
IMPORTE

CHAPTER 4 - photo essay

strip district

The train becomes an adaptation to the old uses of railways. Originally purposed to move people and freight now move programs. Some example programs that may become to be installed on the train are all things that might be viewed along the waters edge or in a typical park space setting; swing sets, pools, playgrounds, ice cream stands, a kiosk, but not limited to these. The addition of freight containers becoming marketplaces, hair salons, pharmacies, movie rentals, etc. becomes a critique on the expansion of strip malls, one ever other mile.

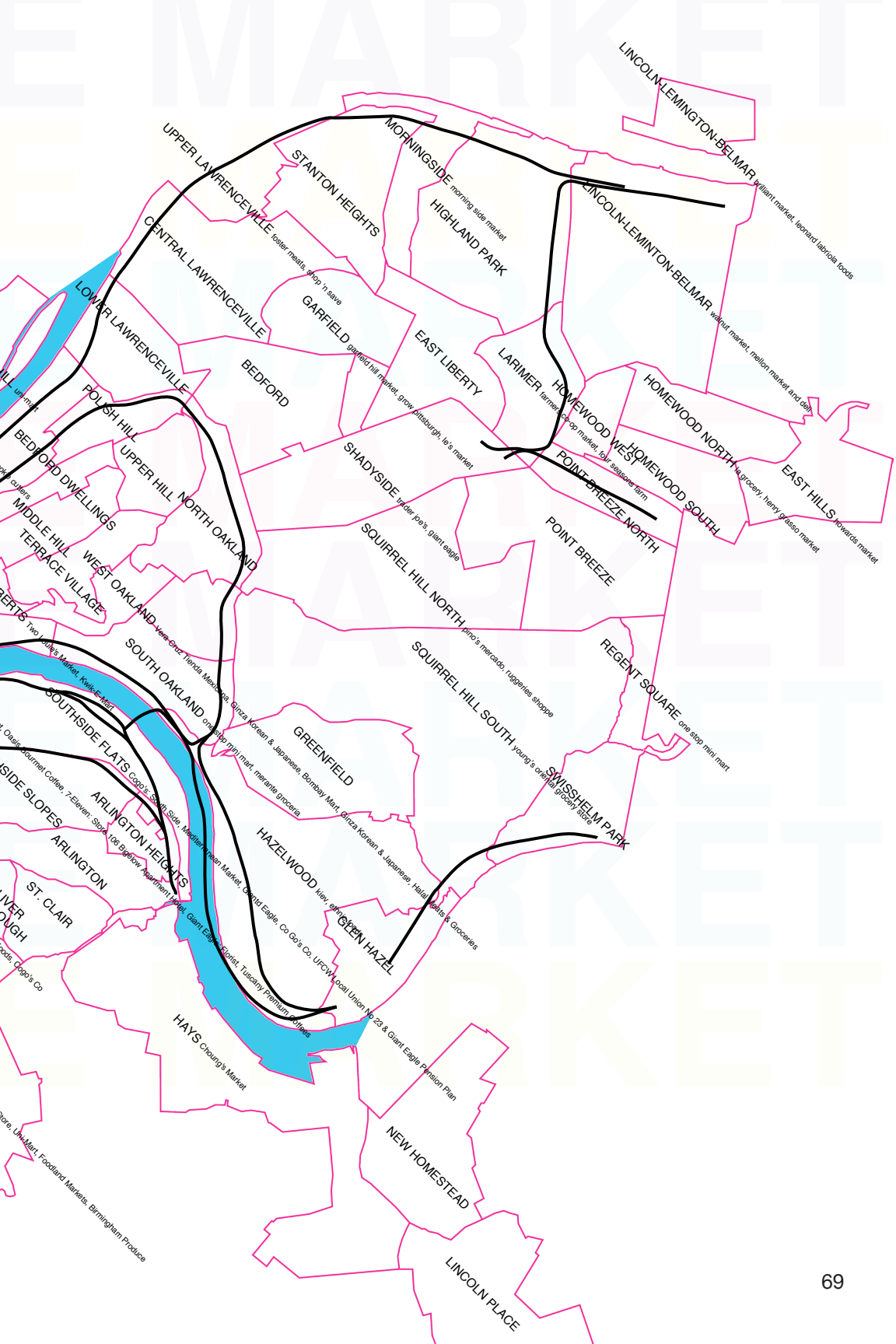
The moveable market brings the services to the people in an urban environment where the car should not be use as much as it is. This is a subjective criticism, but research shows that emissions in the city need to be dealt with. By setting up narratives of how fictional people may interact with the movable market begins to establish the schedule for the train. Is there only one train? What may become the various uses for multiple trains? The idea of one train establishes the simplicity that may be needed for such a program as the movable market. To underpin a rigid schedule for the train and when it arrives at each individual site allows for it to become common knowledge throughout the city.

METROPOLIS
DOG
Treats
ONE BLOC

CHAP

TER 5

MAP OF MARKETS WITH OVERLAY OF HEAVY RAIL LINE


LINCOLN-LEMINGTON-BELMAR brilliant market, leonard labriola foods
MORNINGSIDE morning side market
UPPER LAWRENCEVILLE
STANTON HEIGHTS
HIGHLAND PARK
LINCOLN-LEMINGTON-BELMAR walnut market, mellon market and deli
CENTRAL LAWRENCEVILLE
foster meats, shop 'n save
LOWER LAWRENCEVILLE
GARFIELD garfield hill market, grow pittsburgh, lo's market
EAST LIBERTY
LARIMER farmers co-op market, four seasons farm
HOMEWOOD WEST
HOMEWOOD NORTH
HOMEWOOD SOUTH
BEDFORD
POLISH HILL
BEDFORD DWELLINGS
UPPER HILL
NORTH OAKLAND
SHADYSIDE trader joe's, giant eagle
POINT BREEZE NORTH
EAST HILLS
MIDDLE HILL
TERRACE VILLAGE
WEST OAKLAND
POINT BREEZE
SQUIRREL HILL NORTH
SOUTH OAKLAND
SQUIRREL HILL SOUTH
REGENT SQUARE one stop mini mart
SOUTHSIDE FLATS
GREENFIELD
SWISSHELM PARK
SOUTHSIDE SLOPES
ARLINGTON HEIGHTS
HAZELWOOD
GLEN HAZEL
ARLINGTON
ST. CLAIR
HAYS
NEW HOMESTEAD
LINCOLN PLACE

pittsburg

This thesis explores the architectural nuances of the relinquished waterfront parcels of land in the city of Pittsburgh that the waters edge is no longer a branded image of the city, this is because the water's edge condition has

The inertia of manufacturing capabilities in many cities, especially along the manufacturing belt, has left them re-taught how to address its waterfront. A major shift in the self-image of the city's

This intervention proposes to title derelict industrial ports in the city

this statement can be made through the re

Creating design that allows for physical interaction with the waters edge, bringing delig

Pittsburgh has one of the most unique waters edge conditions along the mainla

Ohio, Pittsburgh's lands edge is attenuated, with derelict piers and heavy rail tracks

The Strip District in the City of Pittsburgh is a historical preserve of market and industrial

and services. The Strip District is a sustained built environment but its grounding is the

has become a barrier to the waters edge, so through reuse and redesign the building can

The project has become an extension to the Strip District, a moveable market-space in that the Marke

The train and its fright containers become the container for the market. How the train moves through

performance. A rebranding of the image of Pittsburgh, a city that understands the charm of the

The extension to the Market Building becomes a catalyst to the train that, while the Strip District is an

train that establishing a system of tracks throughout the city will allow for a

can become a struggle between accessibility to goods, or denial. The Movable Ma

This intervention to the Strip District is where the idea of move-ability comes into play w

throughout the city. A performance for that when it arrives at its scheduled location the freig

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strip dis

This thesis explores the architectural nuances of relinquished waterfront parcels of land in the city of Pi
that the waters edge is no longer a branded image of the city; this is because the waters edge condition ha

The inertia of manufacturing capabilities in many cities (especially along the manufactur
re-taught how to address its waterfront? Can a shift in the self-image of the city's

The intention of this thesis is to title derelict industrial ports in the city o
engage community interaction, take what is currently used as and

Through this thesis a statement is made that the revitalization of the waters edge
Creating design that allows for physical interaction with the waters edge begins to deli

Pittsburgh has one of the most unique water edge conditions along the manufa
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The Strip District in the City of Pittsburgh is a historical preserved market and industrial site
and services. The Strip District is a sustained built environment but its grounding is the
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project has become an extension to the Strip District's movable market space in that the Marke
The train and its fright containers become the container for the market, how the train moves throug
performance. Rebranding of the image of Pittsburgh's city that understands the quality of produc
The extension to the Market Building becomes a catalyst to the idea that while the Strip District is an e
traffic that establishing a system of nods throughout the city will allow for a significant reduction in veh
can become a struggle between accessibility to goods, or denial. The Movable Market creates this

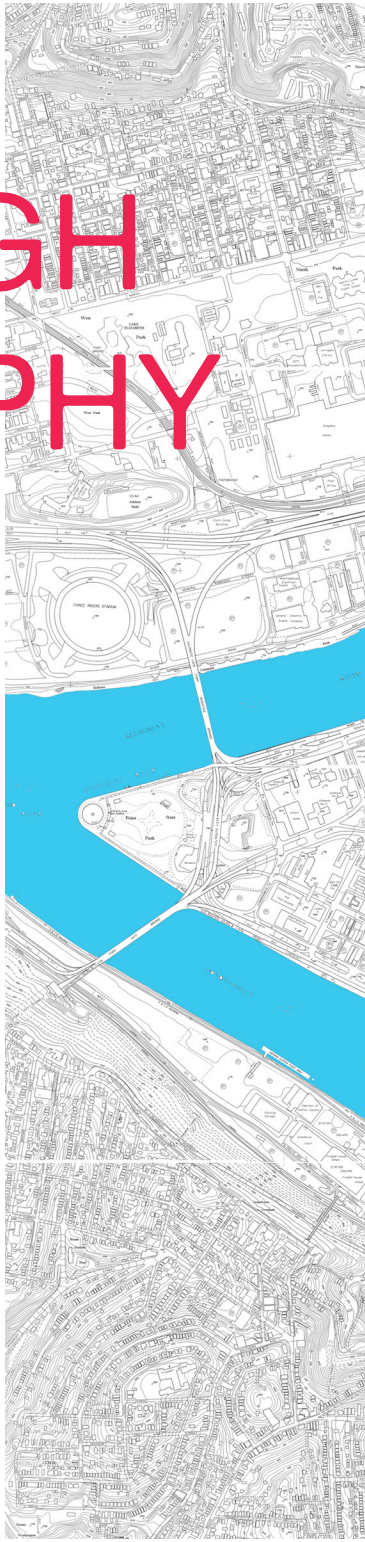
This extension to the Strip District is where the idea of move-ability comes into pl
throughout the city. A performance in that when it arrives at its scheduled location the freig

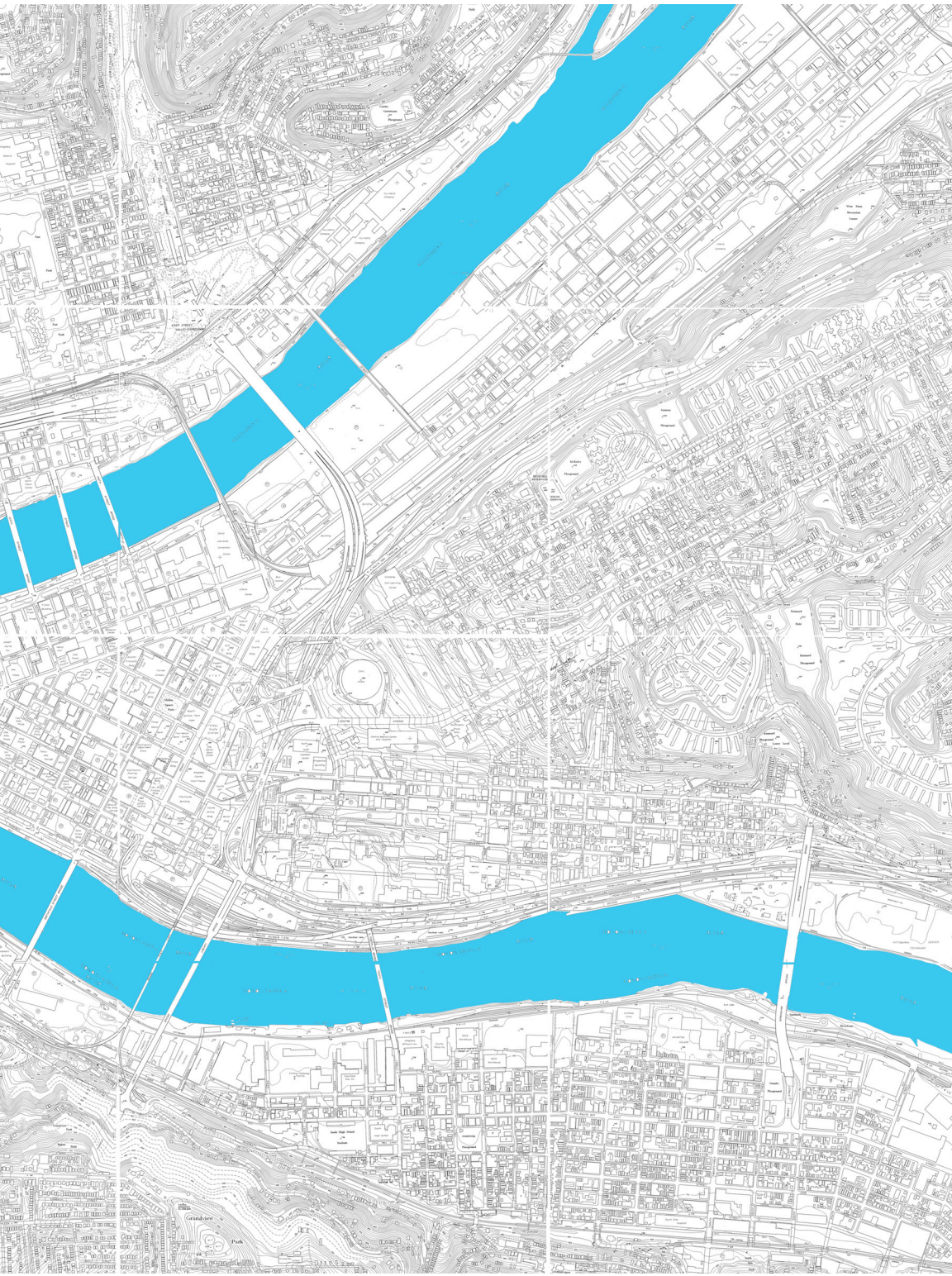
ittsburgh, Pennsylvania. Because of deindustrialization in this area the city has been left fragmented in
sbecomesectionedoffbybarrierssuchasthebuiltenvironment,urbaninfrastructureandheavytrainrail
ing belt) has ceased. Through urban innovation along the waters edge can a city be
waterfront be the re-facing needed to ignite investment and future urban development?
f Pittsburgh as a system of and to insert programs onto these
ned, use and ok exploit it into a new building the
n a city should become the catalyst for future development in urban environment
cately, place interest in the prospective attributes that the waterfront can begin to shape
acturing belt. Located between the three Monongahela, Allegany and the
remnants of a glorious industrial past. The railroad tracks have multiple uses now.
It has become a destination for many in the area an access to produce and other goods
Pennsylvania Railroad Fruit Auction & Sales Building. Over a 400 feet long, this building
egin to dissolve allowing access to the waters edge while maintaining the existing program.
t Building will be transformed to allow access to a new outdoor market area close to the waters edge.
hout the city and how the fright containers fold + unfold on to each individual, unique site, become a
ce and the s armers hol s general public; the city will bring the market to its citizens,
experience ide ed t ble via car. Its history is grounded enough through train
nicular traffic as well as tra co ade downtown. Pittsburgh is a city where the topography
accessibility allow the pur ase of groceries to become routine in the daily lives of it inhabitants.
ith the park scheme in Pittsburgh. The Moveable Marketplace becomes a performance
ht containers unfold; this unfolding and dismantling is unique to each individual satellite site.

strict (+)

PITTSBURGH TOPOGRAPHY

In this chapter the term “urban barrier“ is used. An urban barrier is defined as a barrier to access to, in this situation, the waters edge. In Pittsburgh the topography becomes a barrier to the water in that there are numerous situation where bluffs and cliffs line the waters edge. Also, this thesis is entitled the moveable marketplace. Pittsburgh is a city where the topography can become a struggle between accessibility to goods, or denial. The movable market creates this accessibility, allowing the purchase of groceries to become routine in the daily lives of its inhabitants. The moveable market because of the use of existing heavy rail infrastructure can easily traverse the difficult landscape.



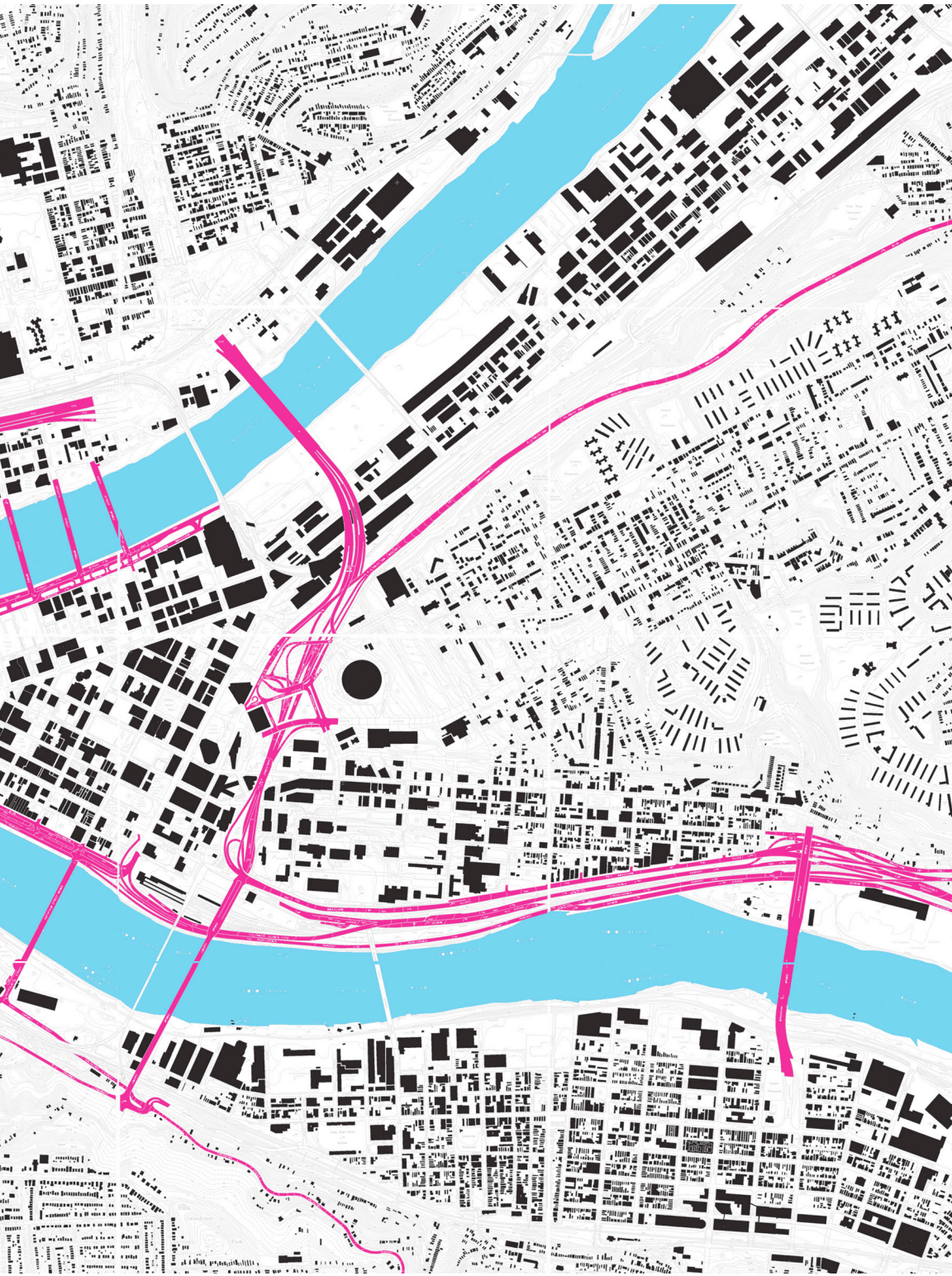


HEAVY RAIL BARRIERS

The waters edge in the city of Pittsburgh is attenuated with heavy rail train tracks; these tracks, whether derelict or in-use, become a barrier to the waters edge in the city. Acting as a wall to viewing the waterfront in many industrial sites as a public amenity. How can these heavy rail barriers begin to be used in alternative manners so that the mobility of the person on foot can more easily traverse the railroad tracks?

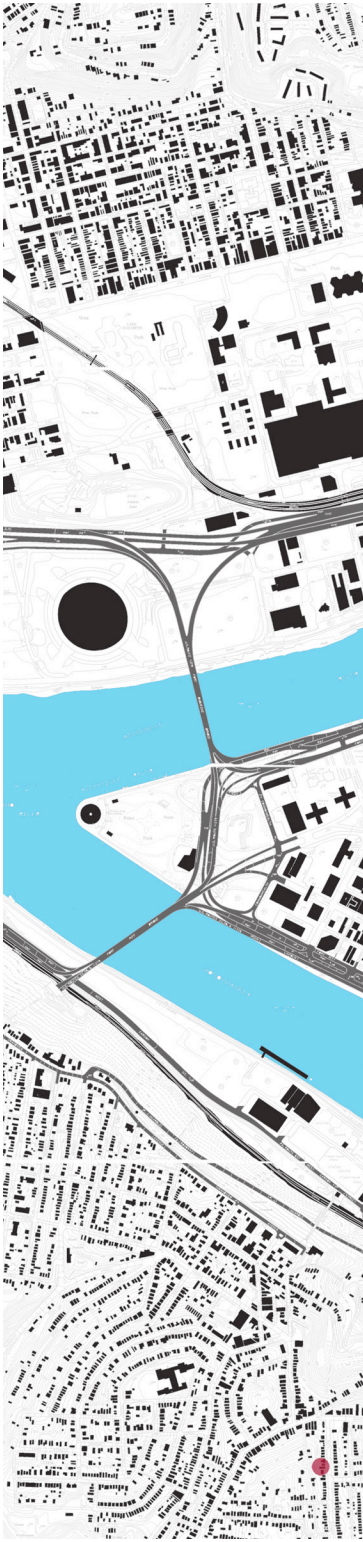
VEHICULAR TRAFFIC

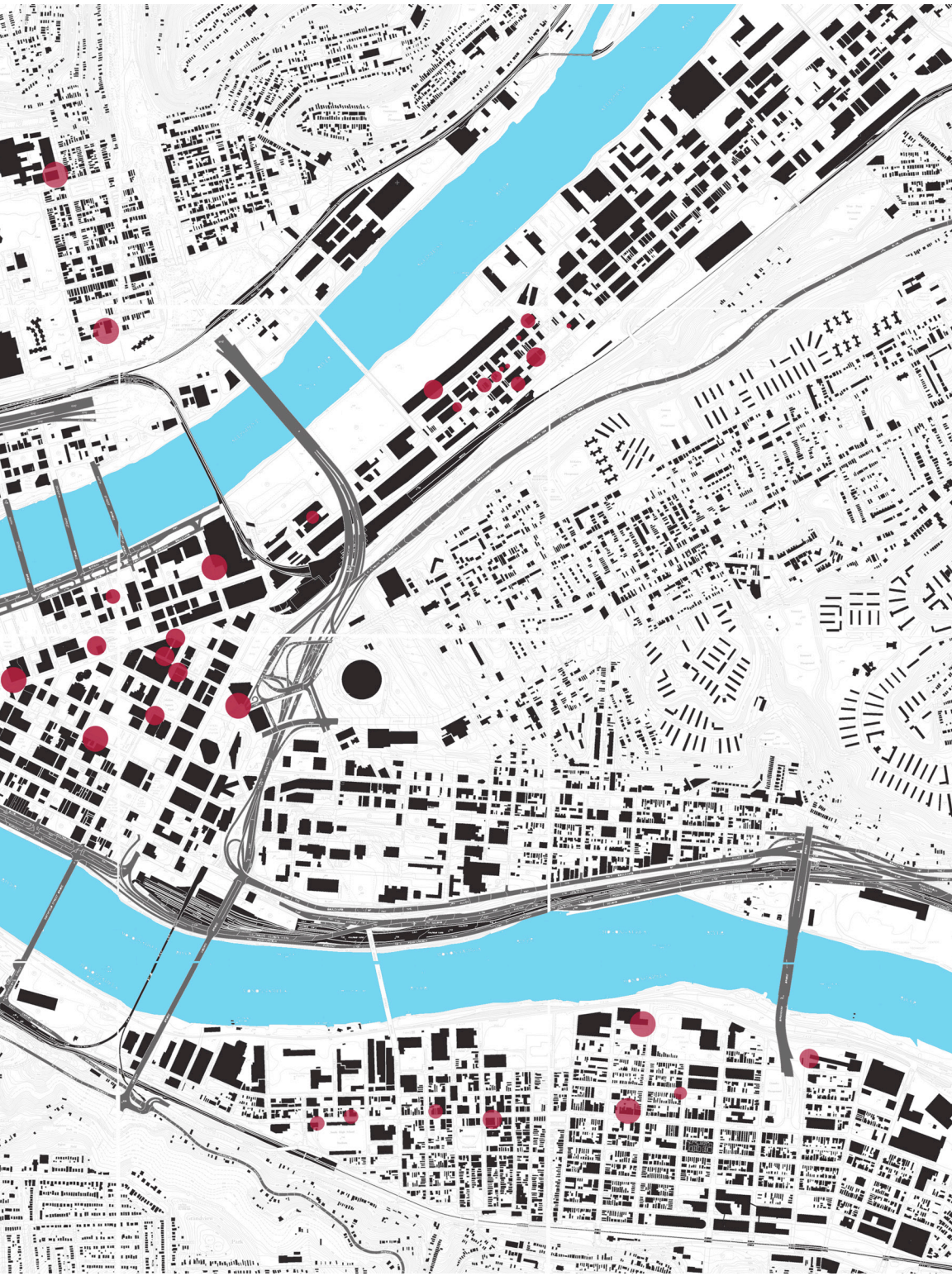
The extension to the market building becomes a catalyst to the idea that, while the Strip District is an experience it does not need to be only accessible via car. Its history is grounded enough through train traffic that establishing a system of nods throughout the city will allow for a significant reduction in vehicular traffic as well as traffic congestion inside downtown. Pittsburgh is a city where the topography can become a struggle between accessibility to goods, or denial. The movable market creates this accessibility, allowing the purchase of groceries to become routine in the daily lives of it inhabitants.



MARKETS

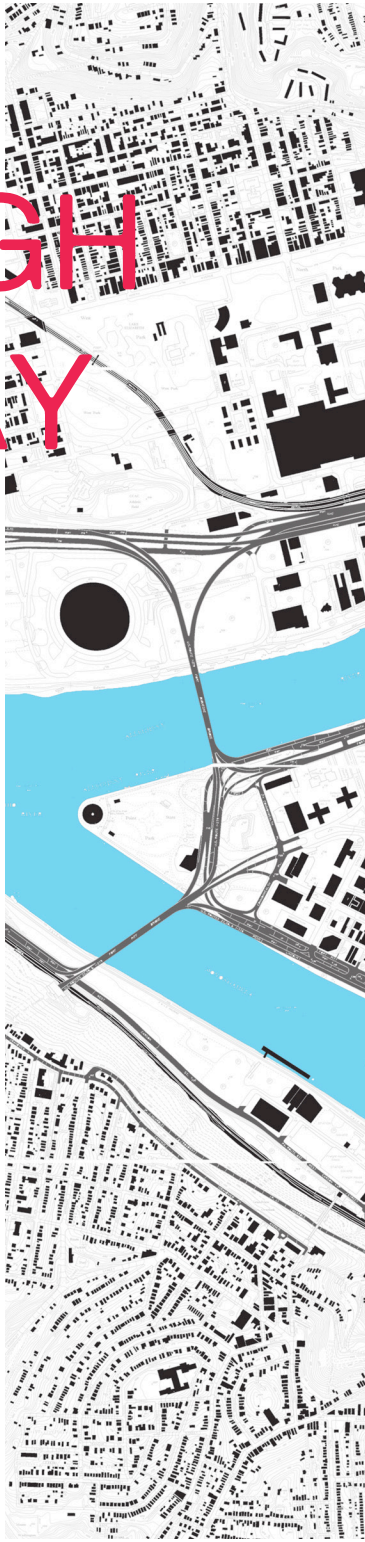
Many of the markets in the downtown area are pharmacies, gas stations, 7-elevens, coffee houses, etc. The Strip District is one of the only accesses to produce in the Pittsburgh area. The markets are mapped out to the right to show the dense clusters of produce in the area of Pittsburgh. The moveable market allows access to produce in areas that cannot easily reach the produce terminal in the Strip District. The moveable market creates accessibility.





PITTSBURGH GREEN WAY

The Pittsburgh green way is a way of thinking of what may become of the moveable market tracts in regards to the expansion of the train. As businesses grow through use of the moveable marketplace there becomes an innate expansion to the Strip District. Business will want to expand where there is access to the heavy rail line that the moveable market runs on so that it is easier for them to join to the moveable market train with an addition of their own car.



CHAP

TER 6

MM DESIGN

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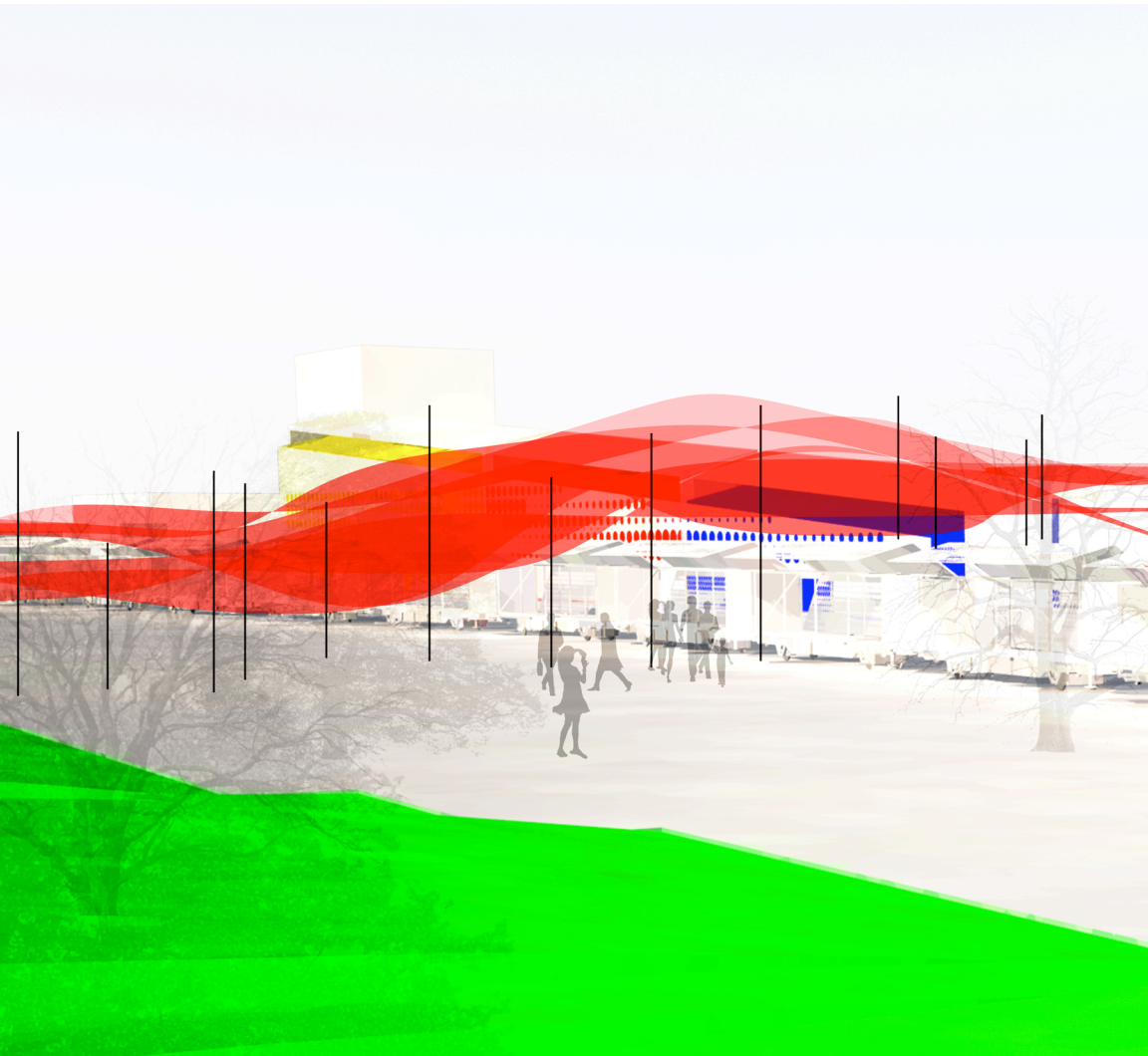


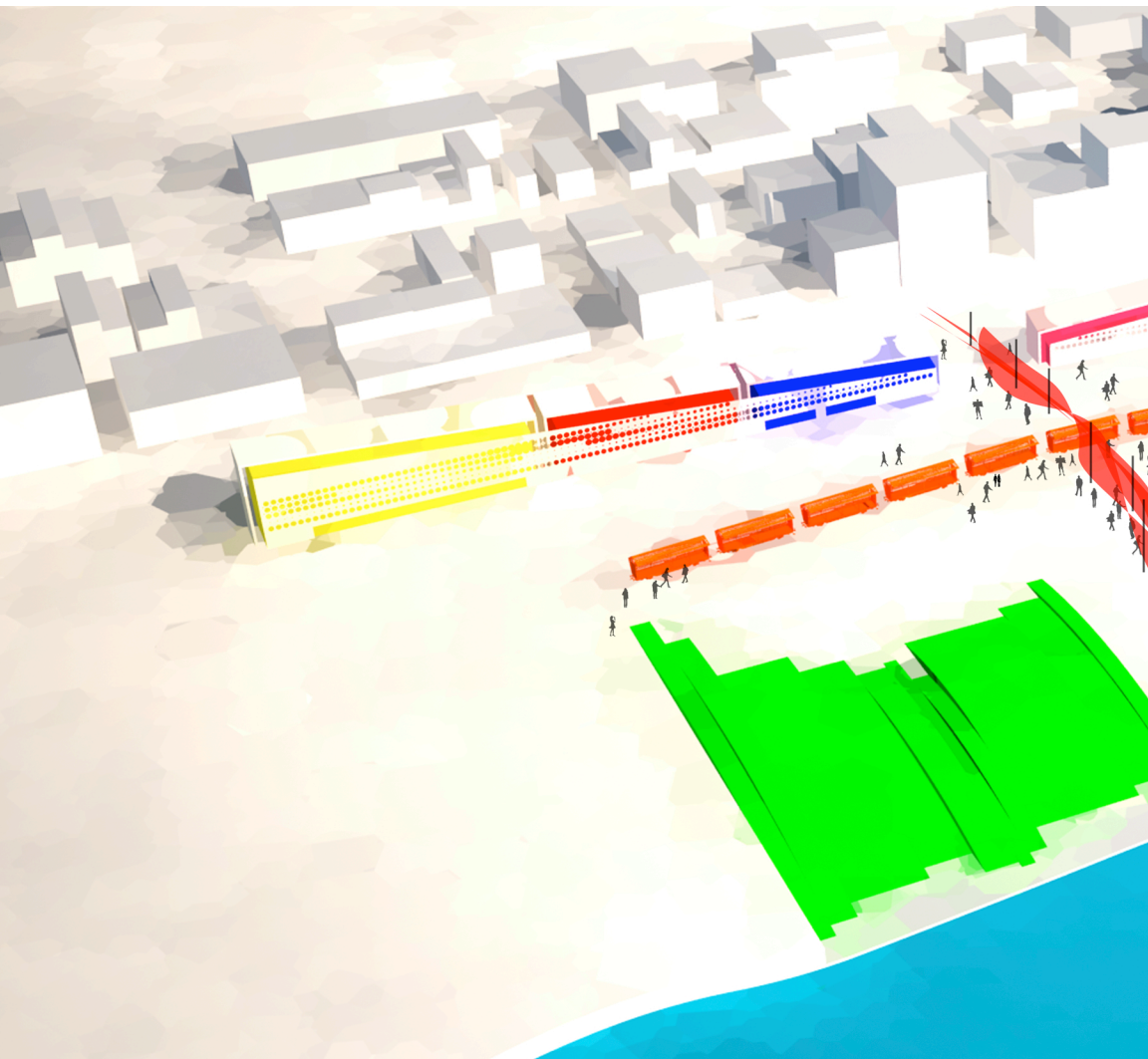
The moveable market canopy flows in-between the cut of the produce terminal allowing access to the dense & vibrant Penn. Avenue to the waters edge along the Allegheny River. This allows a new dynamic flow to the site, a re-purposing of the waterfront.

opy view

CHAPTER 6 - design phase

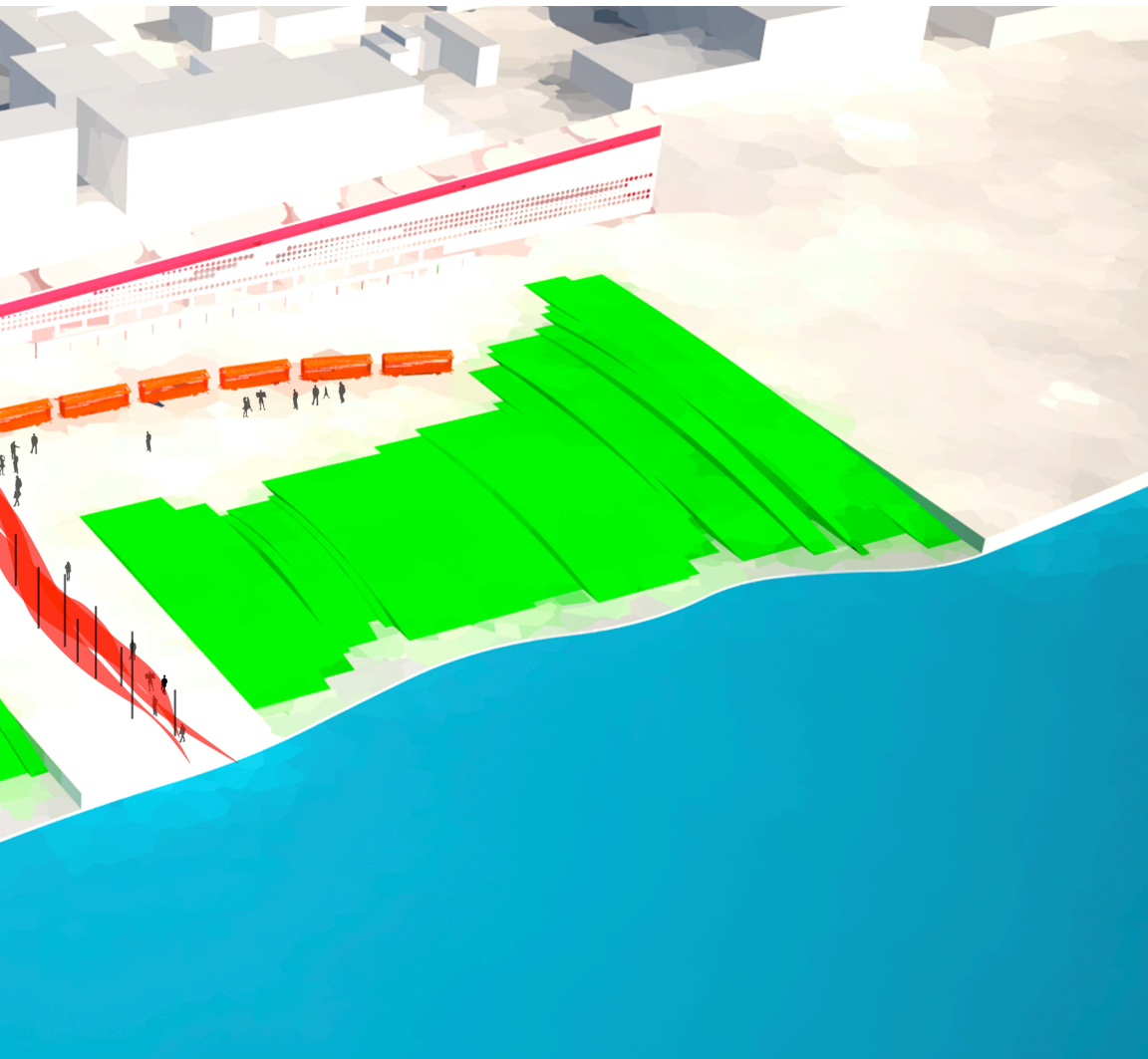
MM DESIGN

mm ari



In the moveable market aerial view you can see the density of the built environment to the waters edge. The undulating landscape brings people down to the boardwalk on the waterfront through a gentle slope. Derelict waterfront parcels now become public.

al view



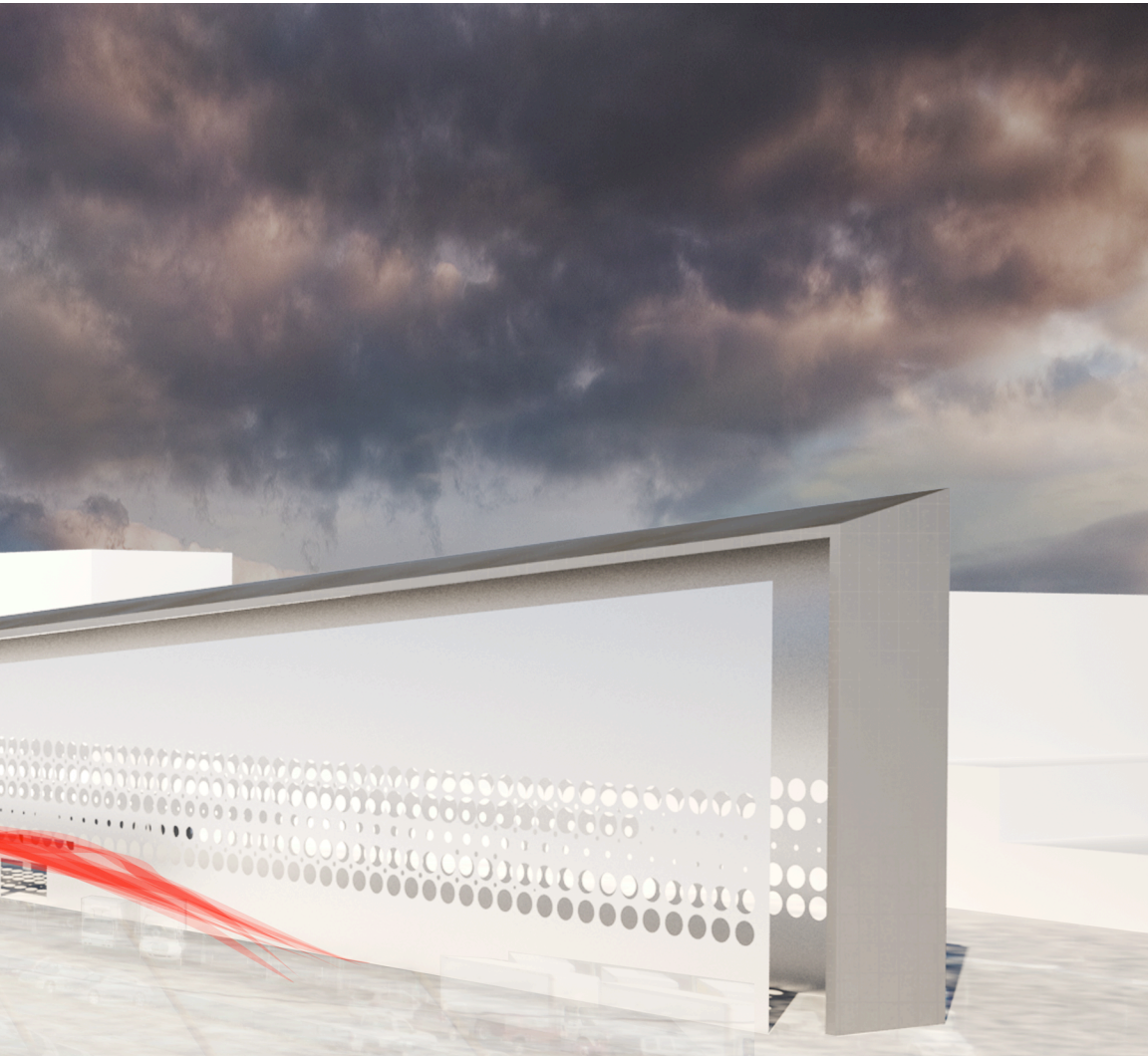
CHAPTER 6 - design phase

MM DESIGN

produce

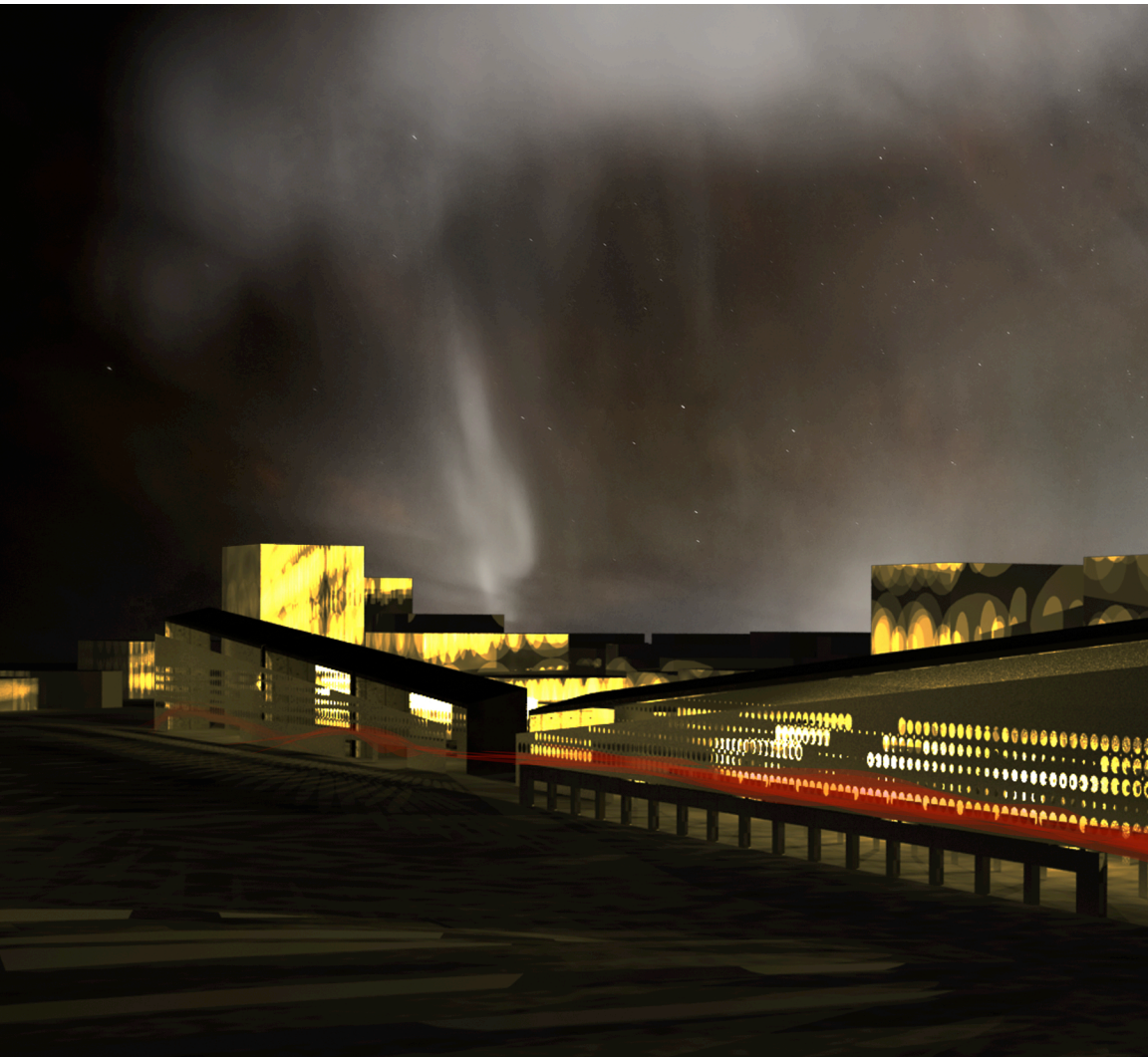
The architectural movement to the Pennsylvania Railroad Fruit Auction & Sales Building is to leave much of the existing. Through adding perforation to the clearstory allows for a new branding of the cities image, an abstraction of waters fluidity.

terminal



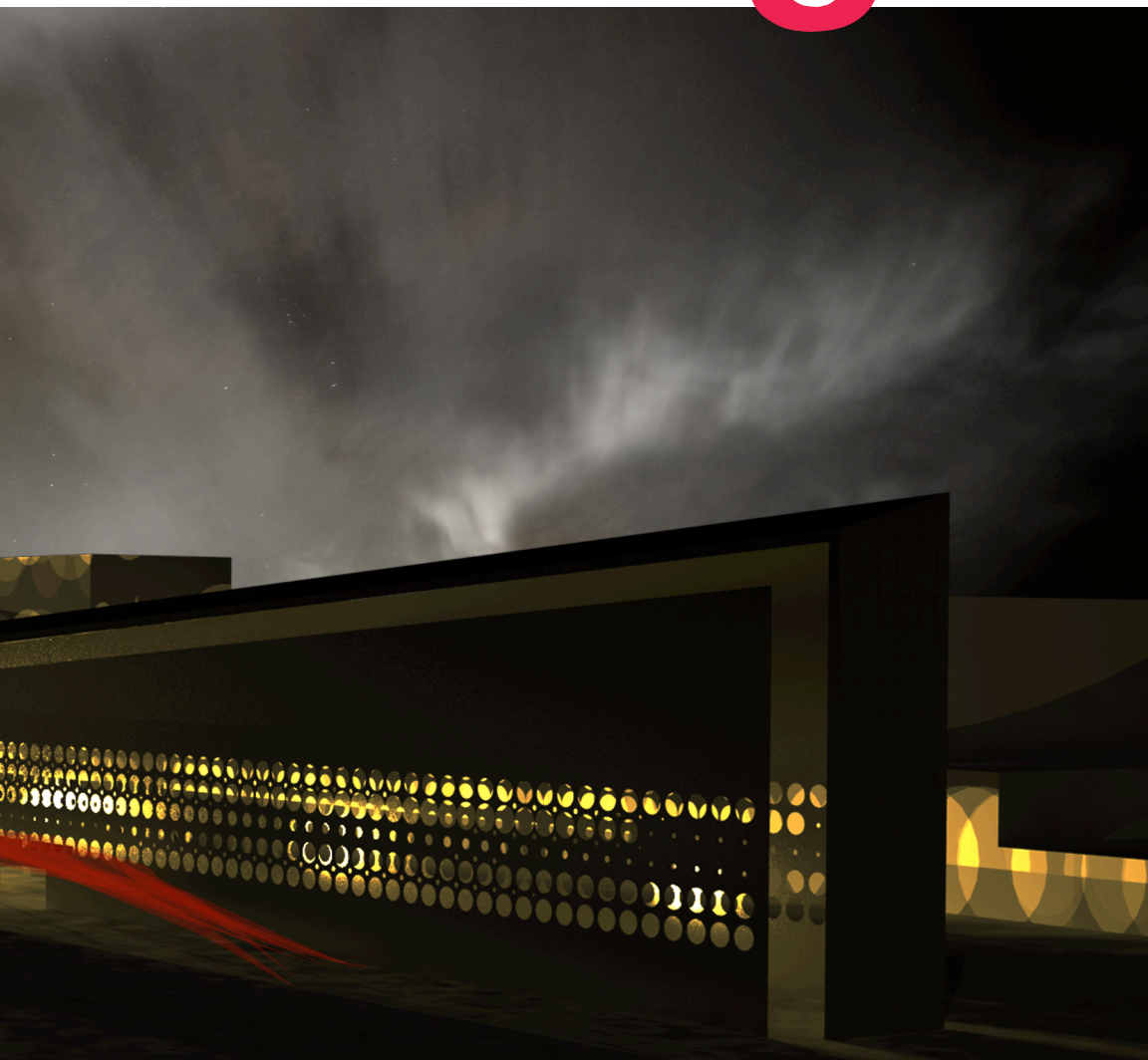
CHAPTER 6 - design phase

MM DESIGN terminal



In this night rendering, the clearstory begins to dissolve, much like the transparency of water. The building becomes a lighthouse to the city of Pittsburgh. Located near to the convention center, the produce terminal also becomes iconic.

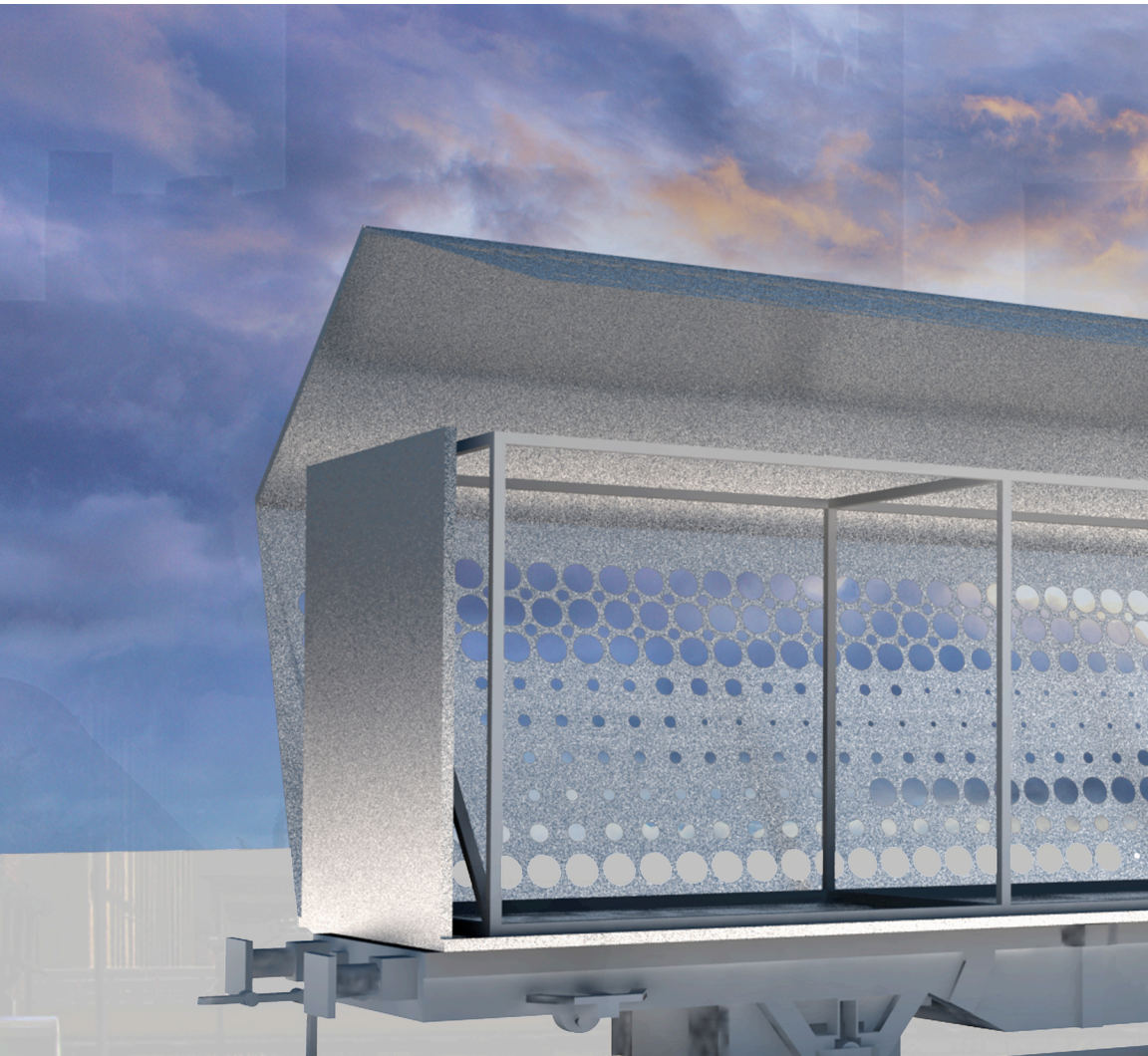
night



CHAPTER 6 - design phase

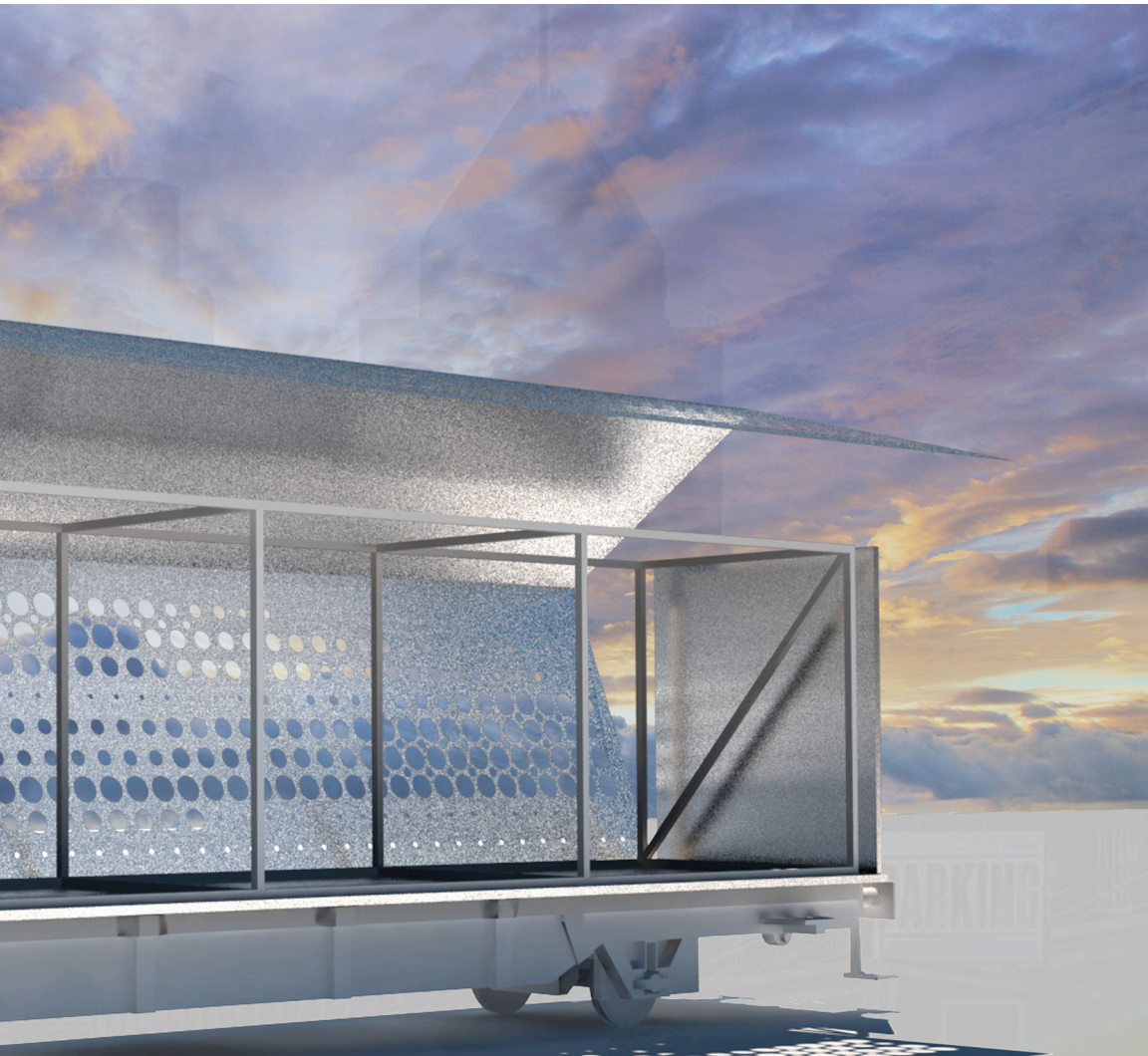
MM DESIGN

fold &



The containers for the moveable market are reused freight cars that become restructured so that they are able to fold and unfold. This unfolding is unique to each individual satellite site. The floor plan is designed to be open so customizing is encouraged.

unfold

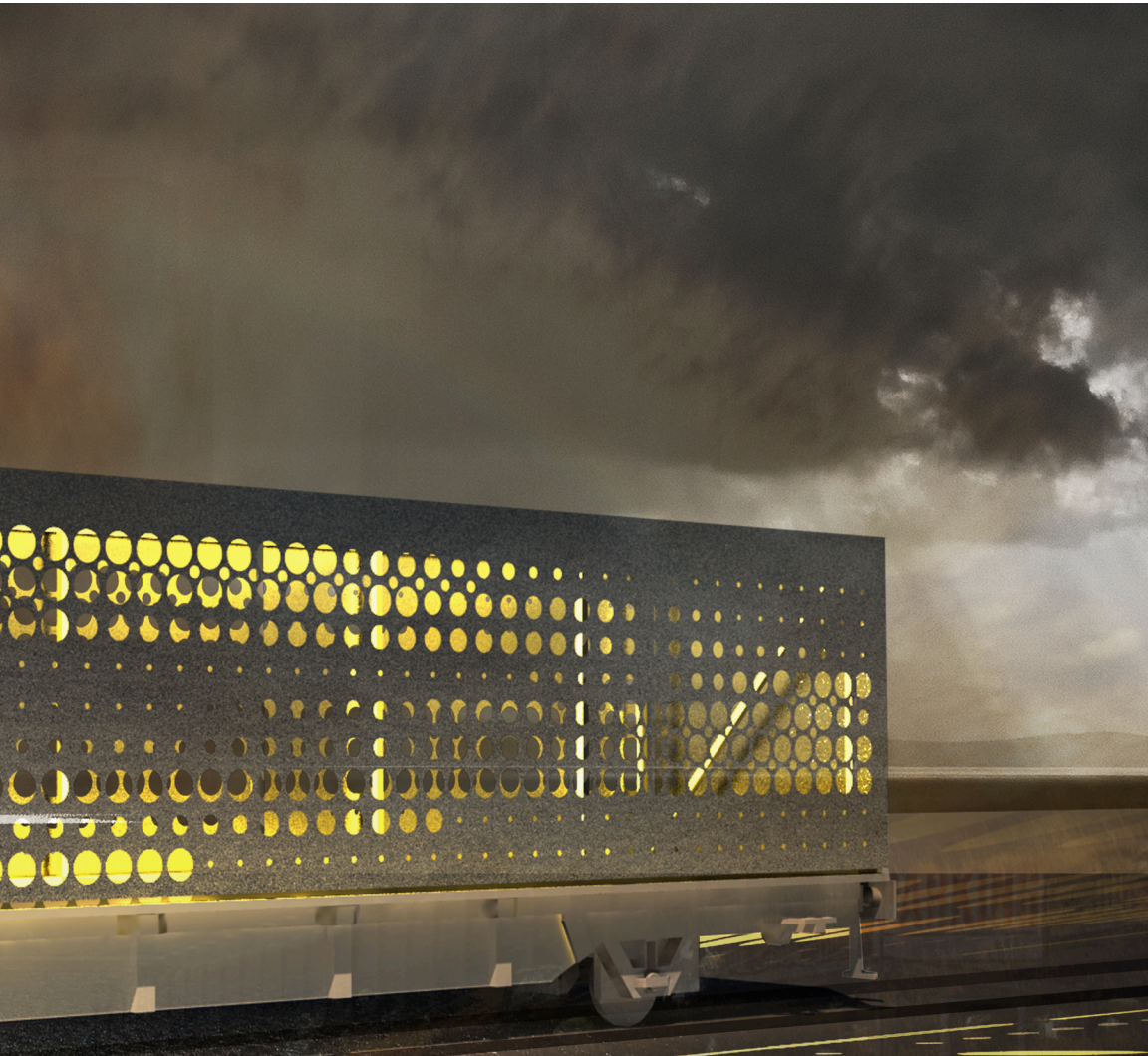


MM DESIGN

mm perf

As the train moves through the city, night and day, its design is fluid in nature relating it back to the waters edge. The circular perforations are an abstraction to how light reflects off of water opaque vs. transparent, solid vs. void, dense vs. light.

formance



CHAP

TER 7

CONCRETE CASTINGS

The concrete castings are a series of models that studied not only the removal of string from setting concrete but also the additional dimension of time and its rendered effect. Strings where cast into concrete and removed in a rigid manner, one string every three minutes. At first the strings where easily removed from the concrete because it was still very liquid. As time progressed the string was more difficult to remove rendering a different effect.

Imported Vintage Long Filler
Sun Grown Cuban Seed Wrapper

CONCRETE CASTINGS

The first strings, when removed, concrete just refilled the empty void that the string once held. Towards the end of the removal of string the concrete set and would leave more of a gap in the surface of the piece.

This can be related to the satellite sites that the moveable market visits. Each site and how the moveable market unfolds onto the site can be treated in a different manner. Also, as the train moves through the city and visits each site, every visit rendering a different effect. How does the physical site react like the concrete? As the train rips through the undulations of earth throughout time much like that of the string through the concrete.

One discernible effect would be that of throughout time the train will become more ingrained into the surface (branded image) of the city; the urban fabric, becoming torn, rendering, eventually curing.

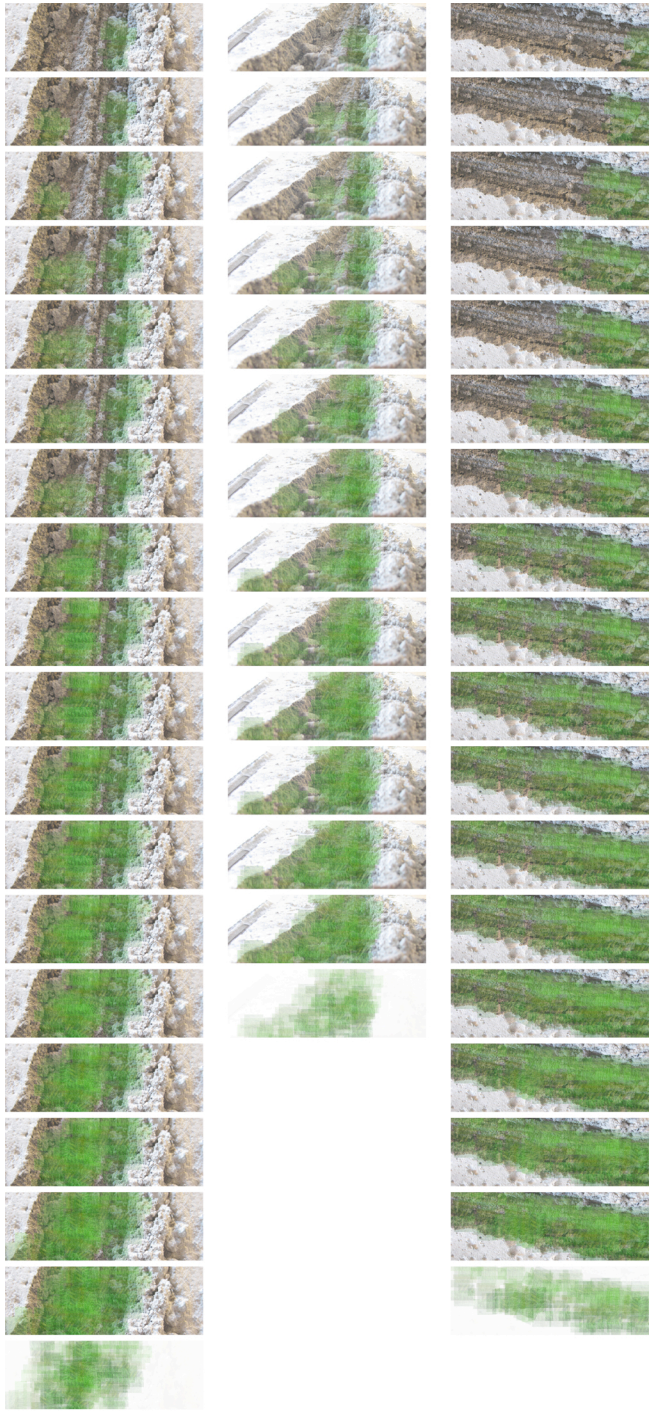
CONCRETE CASTINGS

In these images, it becomes a representation of the phasing of urban infrastructure in Pittsburgh. Taking the concrete urban infrastructure and re-imaging how people may engage it in a manner that addresses the waterfront as a public amenity.

The lessons learned from the concrete casting were carried throughout future studies and investigations in this moveable market thesis.

Investigations where also preformed making cuts through un-galvanized steel panels using an acetylene torch. The cuts were designed to become an abstraction to the urban barriers such as heavy train rail and vehicular arteries. These cuts through steel set up visual imagery that in fact the infrastructure in a city is a cut; a cut that does not take into effect the person on foot.

A cut in the city fabric, in Pittsburgh's case, steel.



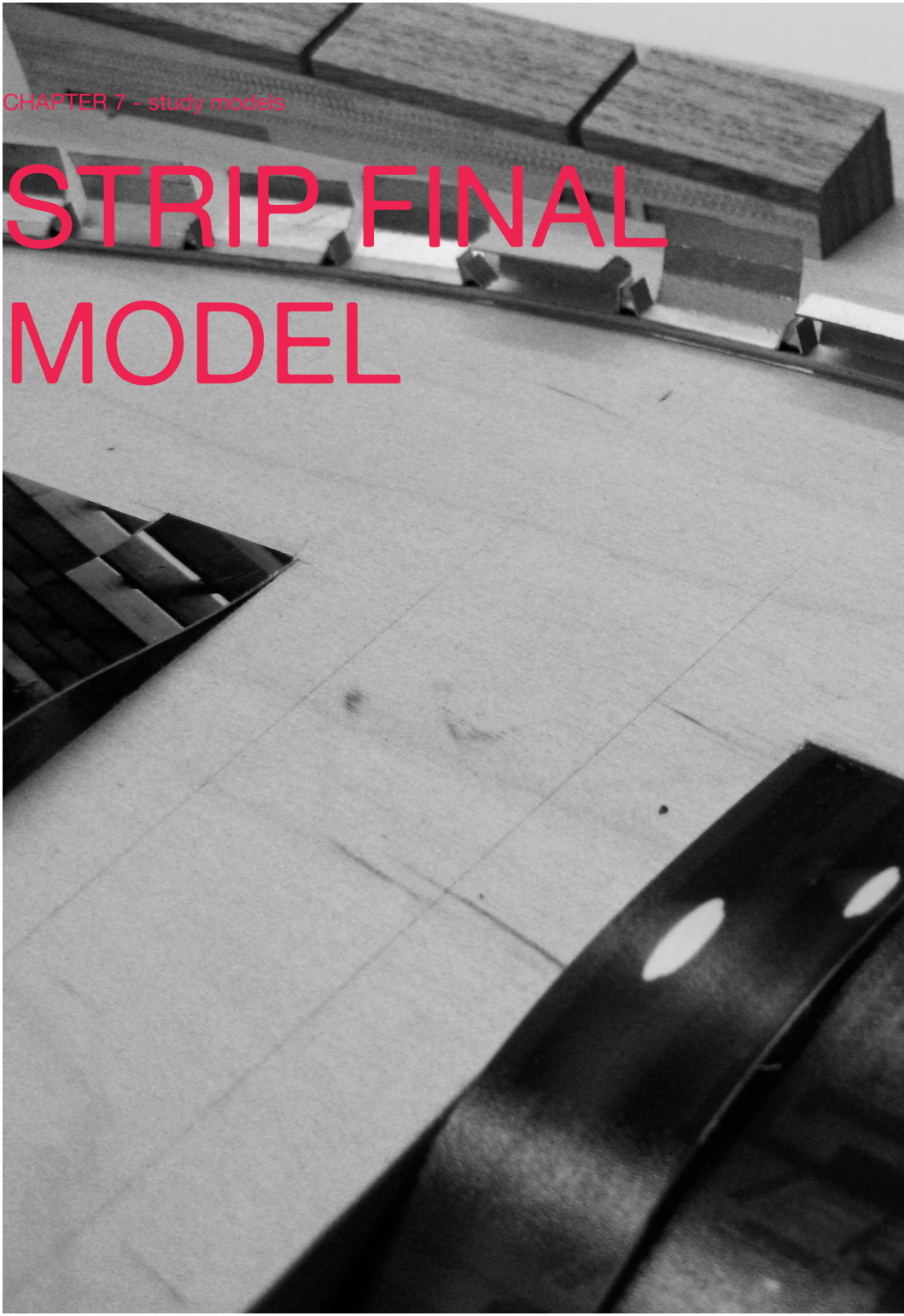
Christopher Dara
Concrete:
PHASING of Urban Infrastructure

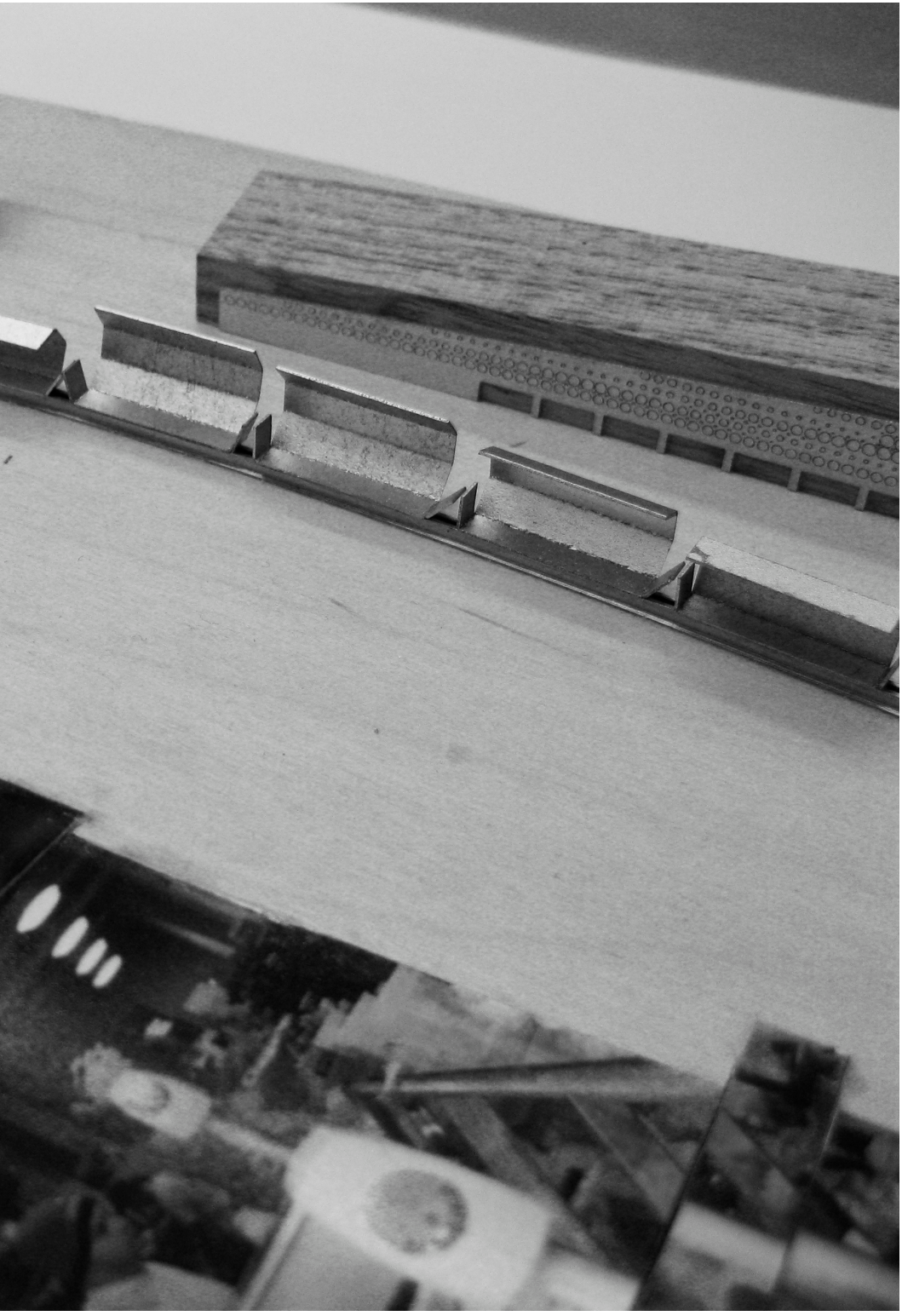
CHAPTER 7 - study models

STRIP DISTRICT

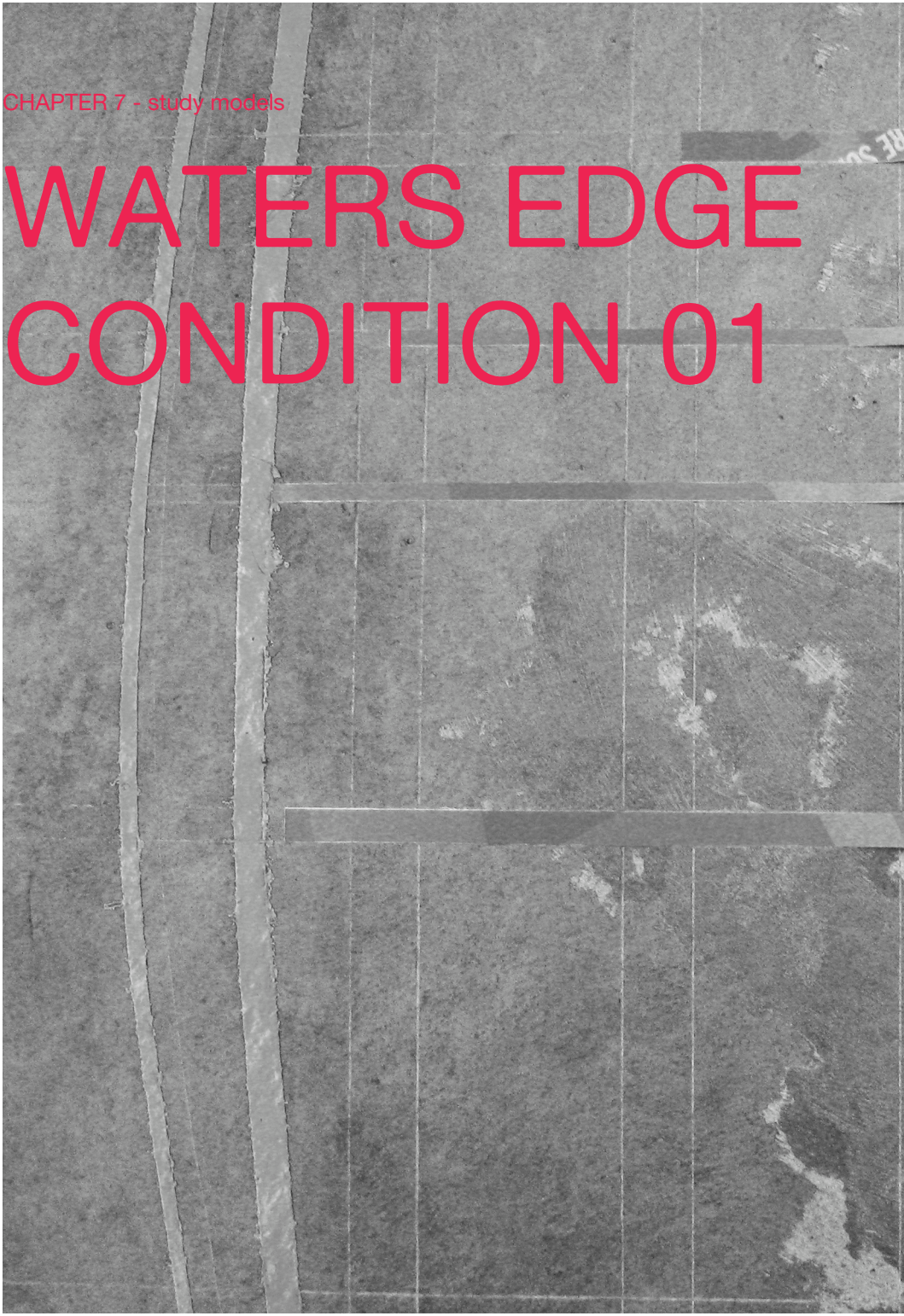
STRIP FINAL MODEL

STRIP FINAL MODEL





WATERS EDGE CONDITION 01



TRANSDISCIPLINARY APPLICATION
2008 | 2009 Funded Lecture Serie

WATERS EDGE CONDITION 02

Lakes Fabricators
Lecture Series
Urban Hood
Corporation

CHAPTER 7 - study models

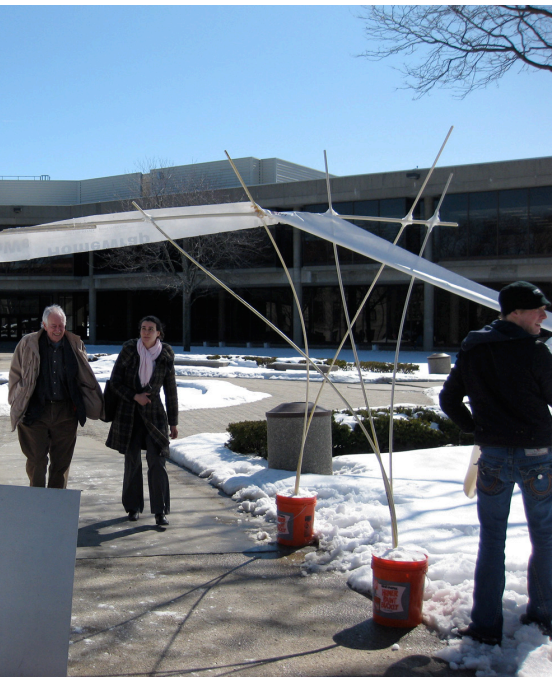
VEHICULAR BARRIERS

HEAVY RAIL BARRIERS

CHAP

TER 8

MARKET INSTALLATION



MARKET INSTALLATION

CHAP

TER 9

FINAL BOARDS

PITTSBURGH PENNSYLVANIA

thesis focus
a. access to water-edge parcels
b. thru utilizing existing train heavy rail
c. creating public park amenity

The inertia of manufacturing capabilities in many cities (especially along the manufacturing belt) has ceased. Through urban innovation along the waters edge can a city be re-taught how to address its waterfront? Can a shift in the self-image of the city's waterfront be the re-facing needed to ignite investment and future urban development? The intention of this thesis is to title derelict industrial ports in the city of Pittsburgh as a system of parks and to insert program onto these parks that engage community interaction, to take what is currently unused, abandoned, abused and broken and exploit it into a new branding of the city.

FINAL BOARDS

PRECEDENT STU

the high line

The High Line design team is a collaboration between landscape architecture and urban design firm James Corner Field Operations, and architecture firm Diller Scofidio + Renfro.

The full preservation of the High Line at the rail yards has long been one of Friends of the High Line's major advocacy campaigns. This is an iconic section of the Line, with breathtaking views to the Hudson River and crosstown to the Empire State Building and the Midtown skyline. It offers a possible connection to the Hudson River Park, as well as a series of open spaces being planned as part of the development of the West Side.

This 26-acre rail yards site is the future location of a massive development project, now being planned by the Related Companies, a private developer that is leasing development rights for the site from the MTA, a State agency. The site is currently home to working train yards, owned by the MTA and serving as a storage area for the Long Island Rail Road trains on their way to and from Penn Station. The developer will build a platform over the yards, with approximately 12 million square feet of commercial and residential space built on top of the platform.

wagons-scè

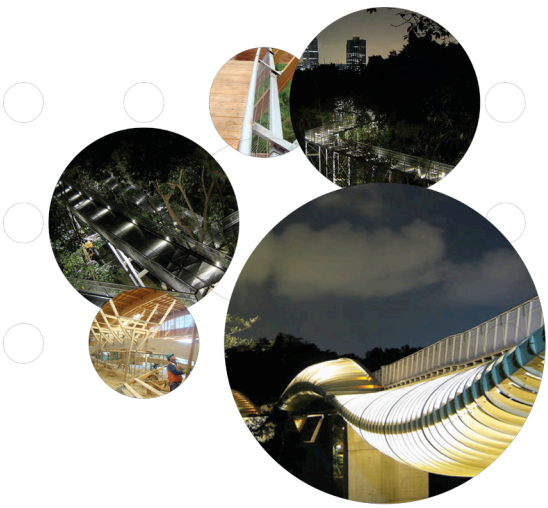
Towns are often more likely to have a station than a theatre. Our proposal, t
railway bases to make up for the lack of cultural facilities. An itinerant on t
area, incorporating a five car train and a deserted platform. In a monoc
extending to the train which forms a gallery for the public. Set up within a
a residence for producing shows, or a complimentary space for festivals.

Type: ARCHITECTURE
State: Etudes
Year: 2005
City: France
Area: 800 m²
Budget: 1.2 k€
Team: Encore heureux + Paul-Eric Schirr-Bonnans

DIES

nes

Wagons-scènes, is a tool for regional cultural development, using available
he rail network, this theatre is extended lengthways, along the goods train
hrome of reds, a large tent houses the foyer, the stage and the theatre,
day, this innovative facility can be used to numerous ends: touring artists,



telok blangah hill park

Karen Cilento

Located in Singapore, Telok Blangah Hill Park's newest addition includes "a fly-over-like infrastructure" that reaches 120 feet above the forest floor. The walkways are a respectful way to view nature as they provide a place for viewers to unobtrusively admire the landscape.

These truly elevated walkways, which are formed like suspension bridges, provide the rare experience of being at treetop level. By elevating the walkways, the park was able to build around the natural surrounding to preserve the forest while also introducing a new relationship between nature and architecture.

The paths form a web-like network running through the dense forest. As people meander along the walkways, some study the creatures occupying the rain forest canopy, while others marvel at the uninterrupted panoramic views of the metropolis.

The open structures permit sunlight to shine on the walkers while natural ventilation can cool the paths. In the night time, some paths are illuminated by a color-changing LED light show.

FINAL BOARDS

STRIP DISTRICT

Pittsburgh has one of the most unique water edge conditions along the manufacturing belt. Located between the three rivers, Monongahela, Allegany and the Ohio, Pittsburgh's lands edge is attenuated with derelict ports and heavy rail tracks, remnants of a glorious industrial past. The train tracks have multiple uses now. Some of these uses include light rail tracks, rails-to-trail bike paths, etc. Some of these tracks are derelict and cut off from use. However, all of this space is still city owned. There is no contesting between public and private development.

This extension to the Strip District is where the idea of move-ability comes into play with the park scheme in Pittsburgh. The Moveable Marketplace becomes a performance throughout the city. A performance in that when it arrives at its scheduled location the freight containers unfold, this unfolding and dismantling is unique to each individual site.

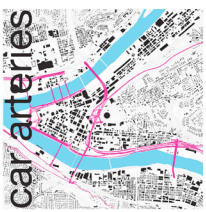
With the two ideas overlapped, first, that there are multiple sites in Pittsburgh for a park space, and secondly that each park space welcomes the moveable train on a rigid schedule, allows for a constant transformation of the site. A constant repurposing of how people engage and use the site and how the site responds to the waters edge.

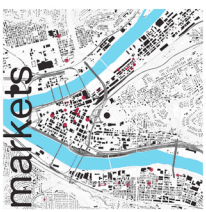
As the train moves throughout the city, site-to-site, each individual time, it leaves behind a more defined image making the location more site-specific. It becomes imbedded in a manner that establishes routine amongst its users.

In viewing each individual site through this methodology creates consistency in several different locations in Pittsburgh. What this accomplishes is defining certain waterfront areas as waterfront park spaces. This, in turn, establishes a program that for there to be a need for a park space along the waters edge there has to be an attraction. Landscaping becomes the attraction and how the landscape interacts with the waters edge; this will be unique to every individual site.

Making every individual site unique, while juxtaposing the interaction from the train, allows for consistency in design. How the train moves onto the site? How the train turns around? How the train unfolds to the site? How the train interacts with the people and the waters edge? These are all questions that will need to be investigated in a scale relative to the size of Pittsburgh.

the pennsylvania fruit auction & sales building (1400') in the strip district becomes an urban barrier to the waters edge.



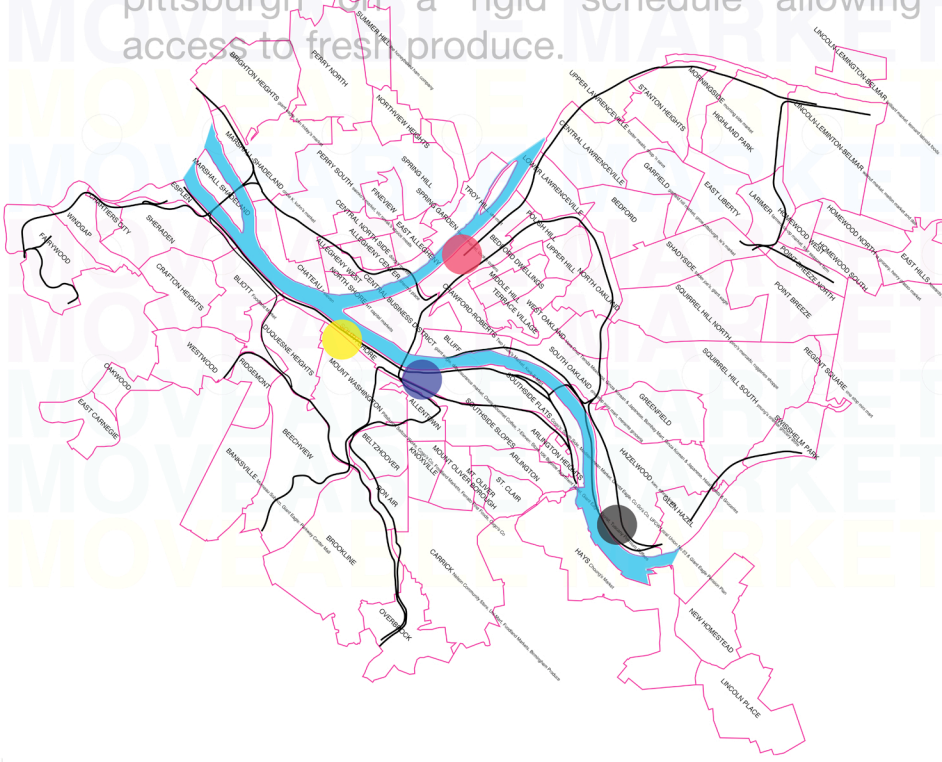


strip district program
a. moveable marketplace
b. society for contemporary craft
c. pennsylvania railroad fruit auction & sales building
d. workshop for contemporary craft
e. urban redevelopment authority of pittsburgh
allegheny river

FINAL BOARDS

MM SCHEDULE

the moveable market travels throughout pittsburgh on a rigid schedule allowing access to fresh produce.


SUMMER HILL
OBERTON HEIGHTS
PERRY NORTH
NORTHVIEW HEIGHTS
MARSHALL-SHADELAND
PERRY SOUTH
SPRING HILL
SPRING GARDEN
TROY HILL
CENTRAL LAWRENCEVILLE
UPPER LAWRENCEVILLE
CENTRAL NORTHSIDE
CENTRAL NORTH
FINEVIEW
EAST ALLEGHENY
ALLEGHENY WEST
ALLEGHENY CENTER
PERTH
CHATEAU
MANCHESTER
CENTRAL NORTH
CENTRAL BUSINESS DISTRICT
CRAWFORD-ROBERTS
BLUFF
CENTRAL LAWRENCEVILLE
REDEVELOPMENT AUTHORITY
UPPER HILL
UPPER HILL NORTH OAKLAND
TERRACE VILLAGE
WEST OAKLAND
SOUTH OAKLAND
ACRISURE STADIUM
ALLEGHENY RIVER
ALLEGHENY WEST
ALLEGHENY CENTER
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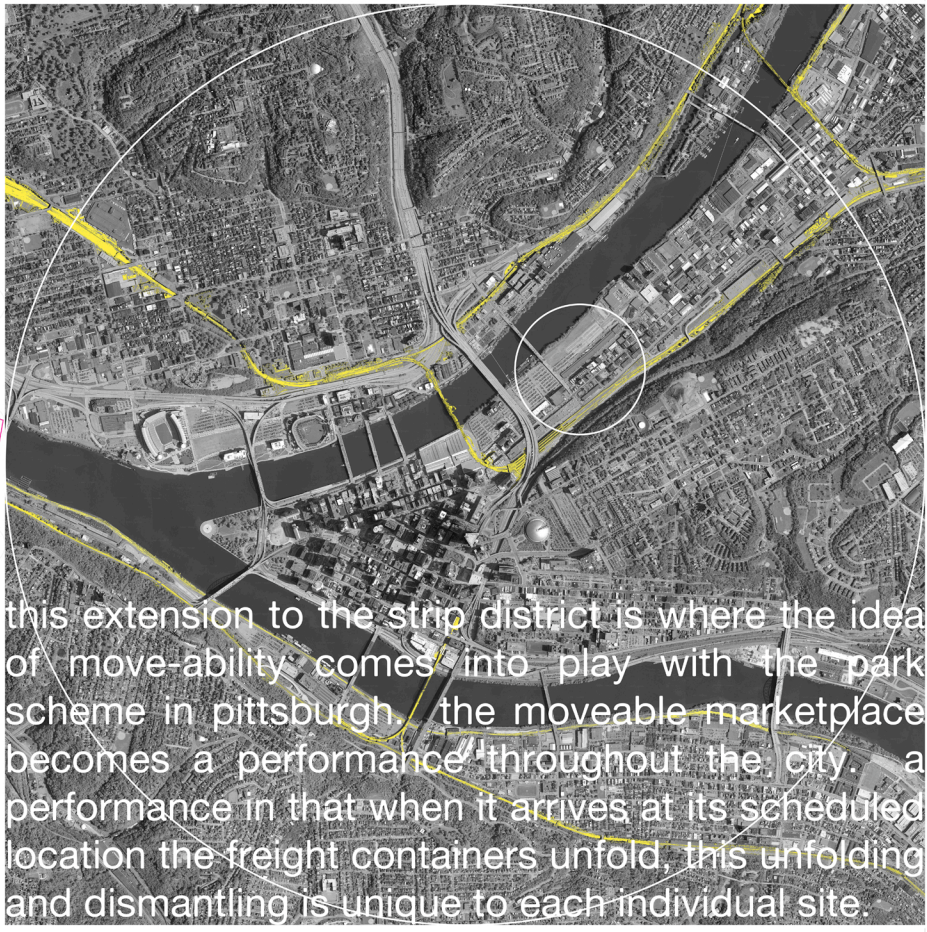
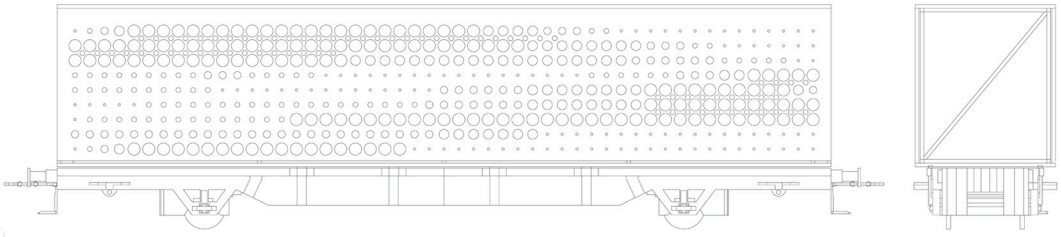
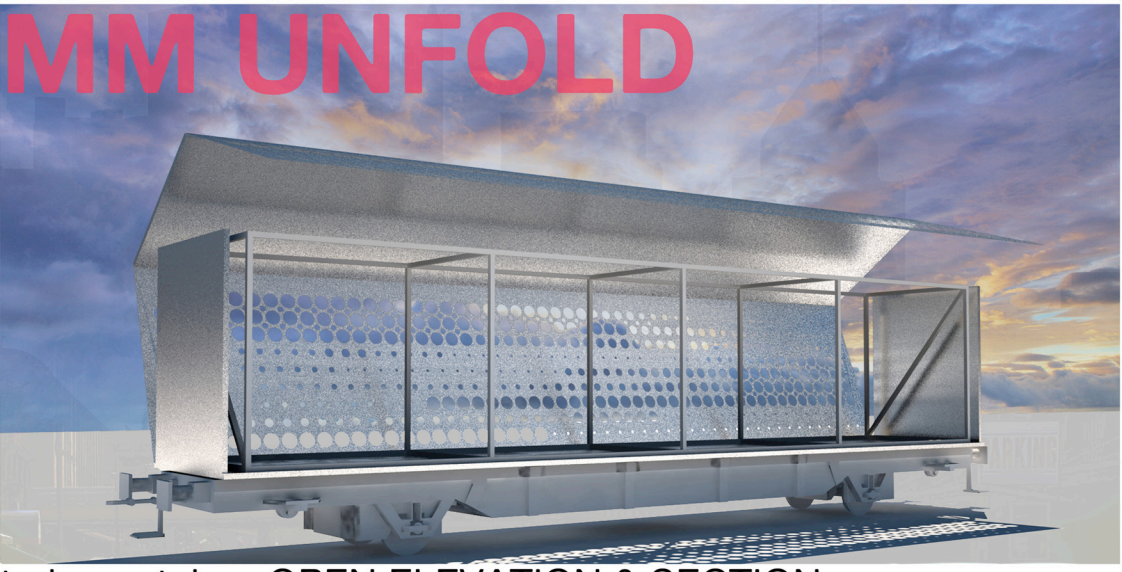


this extension to the strip district is where the idea of move-ability comes into play with the park scheme in pittsburgh. the moveable marketplace becomes a performance throughout the city. a performance in that when it arrives at its scheduled location the freight containers unfold, this unfolding and dismantling is unique to each individual site.

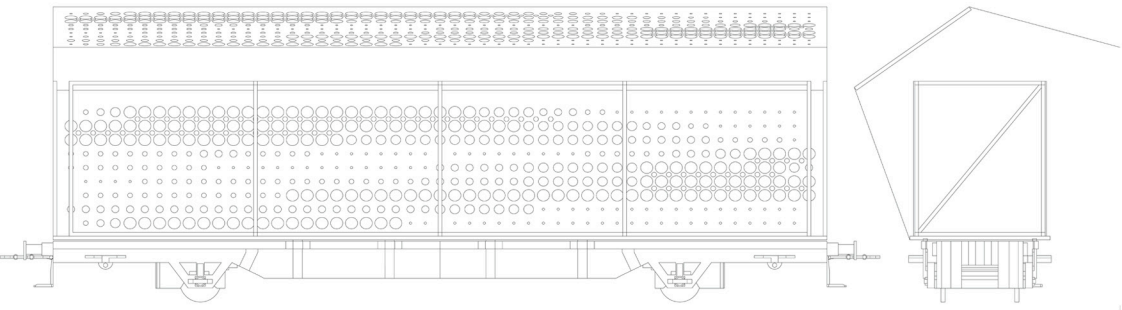
FINAL BOARDS

train container CLOSED ELEVATION & SECTION
scale 3/8”-1’0”

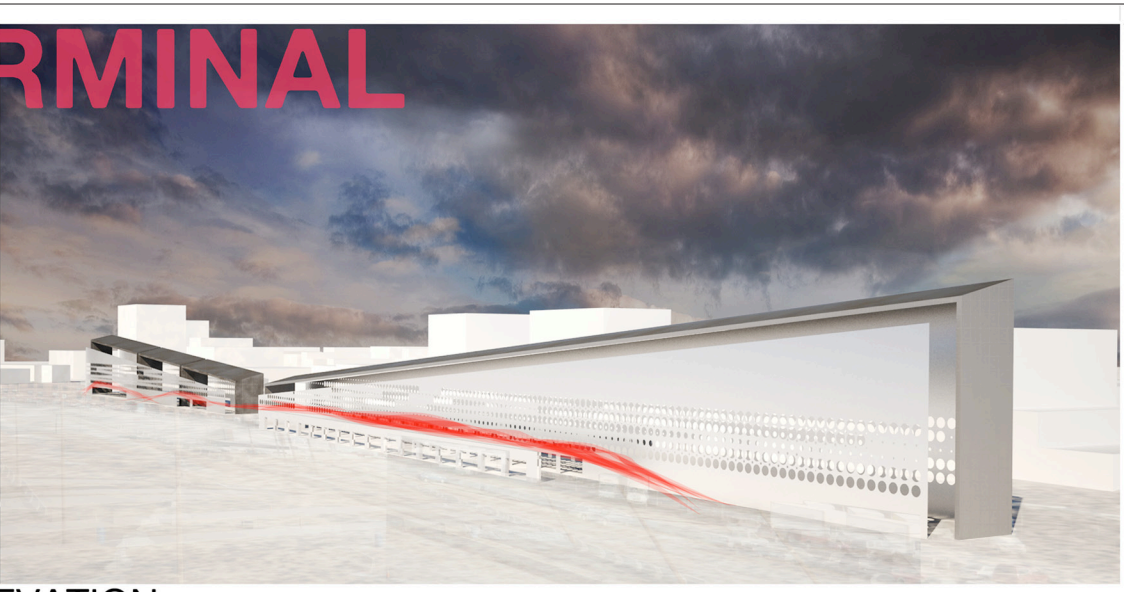




train container OPEN ELEVATION & SECTION



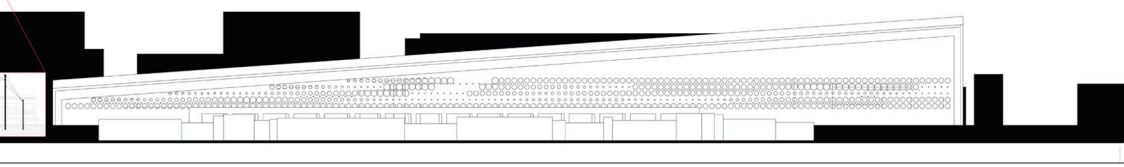
FINAL BOARDS



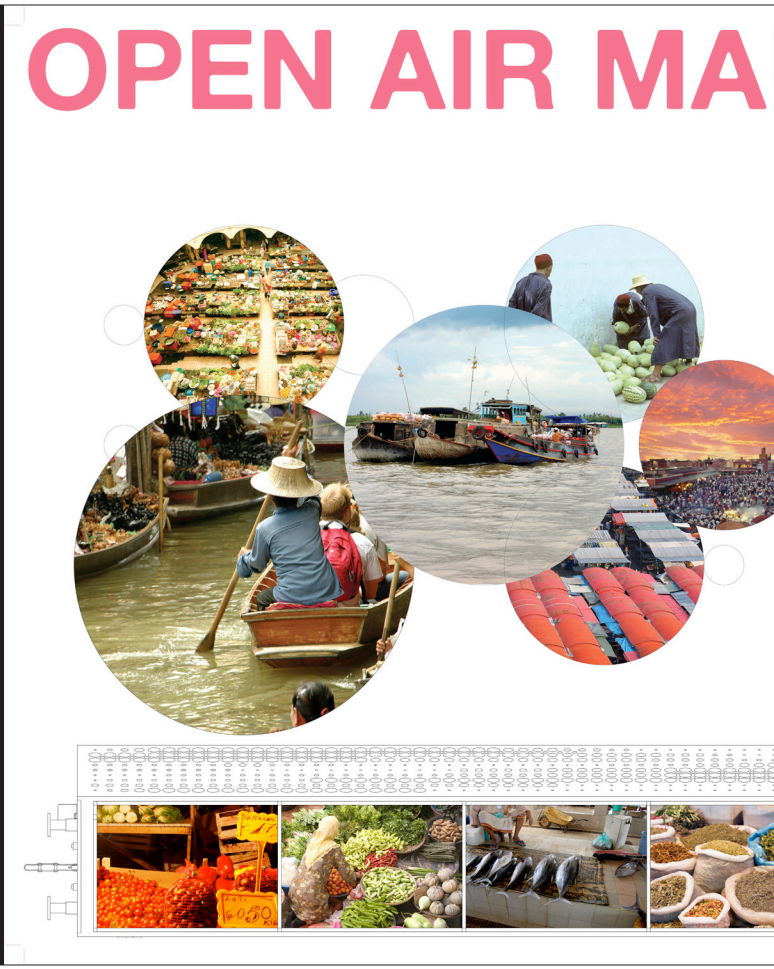
EVATION

Produce Wholesalers Oppose Shop Plan
Jeremy Boren, Tribune-Review
Saturday, August 11, 2007

The no-frills wholesalers of the Strip District's produce terminal building are afraid a haute marketplace concept could destroy 90 years of fruit-and-vegetable-fueled tradition. Much of the iconic Pennsylvania Railroad Fruit Auction and Sales Building -- the long, one-story building along Smallman Street -- could become the Strip Market Hall, a 45,000-square-foot public market and restaurant space. That's if nonprofit group Neighbors in the Strip can convince the Urban Redevelopment Authority to embrace the idea and fend off protests from the building's successful produce wholesalers, who don't want to relinquish space for an untested business venture. "They don't realize what they're taking away from us here," said Linda Sasinoski, of Shaler, co-owner of J.E. Corcoran, which has been in her family 40 years. As the largest tenant in the building, J.E. Corcoran employs 29 people and does $23 million worth of business a year. It receives 3,000 tractor-trailers of produce each year and supplies 150 to 200 clients, many of them restaurants and other wholesalers in Maryland, Ohio, Pennsylvania and New York. Corcoran and other tenants routinely have renewed 5- to 7-year leases with the URA, which has owned the building since 1981, after the first year of the agreement. "We've been asking for extensions for a year now and have not received them," Sasinoski said. The lease expires at the end of 2009. The refusal to renew the leases is the most ominous sign to Brad Kokowski, 50, of Shaler, who has run Superior Produce for 16 years. "There's no space for this marketplace right now without expelling people who are here," Kokowski said, although he's not ruling out a compromise that would "keep the integrity of the building" and allow development nearby. Becky Rodgers, president of Neighbors in the Strip, said she believes a place for the produce vendors can be found to make way for the public market. "Produce has historically been a very important part of the neighborhood," she said. "But it's changed a little over the years. It used to be a lot bigger than it is now." Rodgers' group argues the terminal could be used more efficiently and that an $8.1 million investment in it would leave space for 34 small vendors and create 200 jobs. Money for the renovation would come from a combination of state and local grants, Rodgers said. The high-cost items would be installing an air-conditioning and heating system into what is essentially an open-air warehouse, and making the building accessible to those with disabilities. Pittsburgh Mayor Luke Ravenstahl said he's still listening to tenants' concerns. "I think the job for me is to facilitate and determine what's in the best interest of the community," he said. "We haven't made any determination, as an administration, as of yet." Jay Miller, 57, of Zelienople, has run Premier Produce Co. for 20 years. It has 13 employees and does about $18 million in annual business. He said the politics at play will doom the space that his company and nine others occupy. "They're going to take a thriving business, throw people out of here and set up a bunch of small vendor shops," Miller said. "Does that make sense to you?"



FINAL BOARDS



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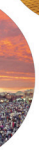
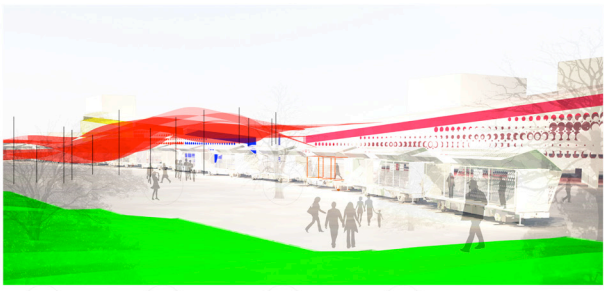
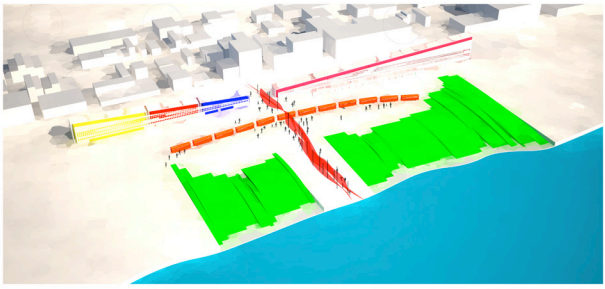




The example of the Movable Market is only one that has been used because the Strip District has become the central nod to the matrix of park places. Farmers flock to this centralized space to sell their produce every Saturday morning. This allows for the train to make one full trip; weekly returning to the Strip District to restock what has not been sold. To then, once again, make its weekly routine throughout the city of Pittsburgh. It becomes a cycle, this extension to the Market Building. However, freight containers can be added or subtracted. New programs con be installed on the train and then uninstalled just like the pace of software on a computer today.

The architecture becomes exciting and engaging, intimately to the scale of the person, architecture that becomes defined by the parameters of a fright container, a modular box, and endless possibilities of interior designs and programs.

The Movable Market allows for the remediation of relinquished industrial ports through the design of simply landscaped parks. How the schedule of the train is set up is influential to the success of the project as well. Much of the success of the Strip District is attributed to the fact that it is only open two days a week. This defines the space as an attraction, a destination that people throughout Pittsburgh schedule on their calendar. This is used also in the Movable Market. It is set up on a schedule so that people can access the serves provided one day a week. This defines the Movable Market as an attraction. It schedule makes the train illusive in that you have to plan when you will attend the program.



FINAL BOARDS

ction & sales building
hallman street
penn ave.
spring way
18th street
19th street
20th street
21st street
22nd street

CHAPT

TER 10

CHAPTER 10

CONCLUSION

The moveable marketplace in Pittsburgh provides a new way of access to produce. The freight cars provide a new way for local businesses in the Strip District to sell merchandise. It is understood that the Strip District is an experience, a historically preserved market and industrial site and in no way does the moveable marketplace intend to take from this context. Rather, to add a new dynamic to the environment, and extension to the Strip District.

When deciding a site in the city for home base for the moveable market train Pittsburgh was picked because of the Pennsylvania Railroad Fruit Auction & Sales Building. This 1400' produce terminal is 40% vacancy and becomes a barrier to the waters edge; overflow parking, and rails to trail bike path on the north side of the building. Through making a cut in the structure allows a new access and a chance to re-purpose the site on the waters edge.

During the final presentation of the movable marketplace, the freight containers and how the move through the city from the strip district (home base) to locations like Larwenceville, South Side Works, Station Square, etc (satellite sites) were praised. The main critique on the site was how the produce terminal was cut.

The idea that the produce terminal should be cut was not argued, rather, how the produce terminal was cut.

Originally the building was cut at mid-point where there is a slight shift in angle. There was one cut made where people could move easier from the south side of the produce terminal to the north side where there is new access to the waters edge.

The moveable market, becoming stocked at the produce terminal, moves through the city becoming a performance, a rebranding of the city and how people engage a produce terminal. When the train arrives at a satellite site it pulls through the undulating park landscape and unfolds in a unique manner to each individual satellite site.

The satellite sites address the waters edge in each situation that mirror that of the Strip District. Undulating landscaping, perpendicular to the waters edge bring people to the waters in a gentle incline. All the way to a board walk along the waterfront where boaters can tie up, a new way to access produce.

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