

Appendix E - UNIVERSITY HONORS PROGRAM
SENIOR PROJECT - APPROVAL

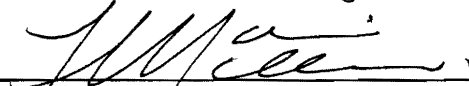
Name: DAVID ALLEN SHIRLEY

College: ARCHITECTURE Department: ARCH

Faculty Mentor: TRACEY MOIR-MCCLEAN

PROJECT TITLE: RE(USE) AN URBAN CULTURE REVITALIZATION

I have reviewed this completed senior honors thesis with this student and certify that it is a project commensurate with honors level undergraduate research in this field.

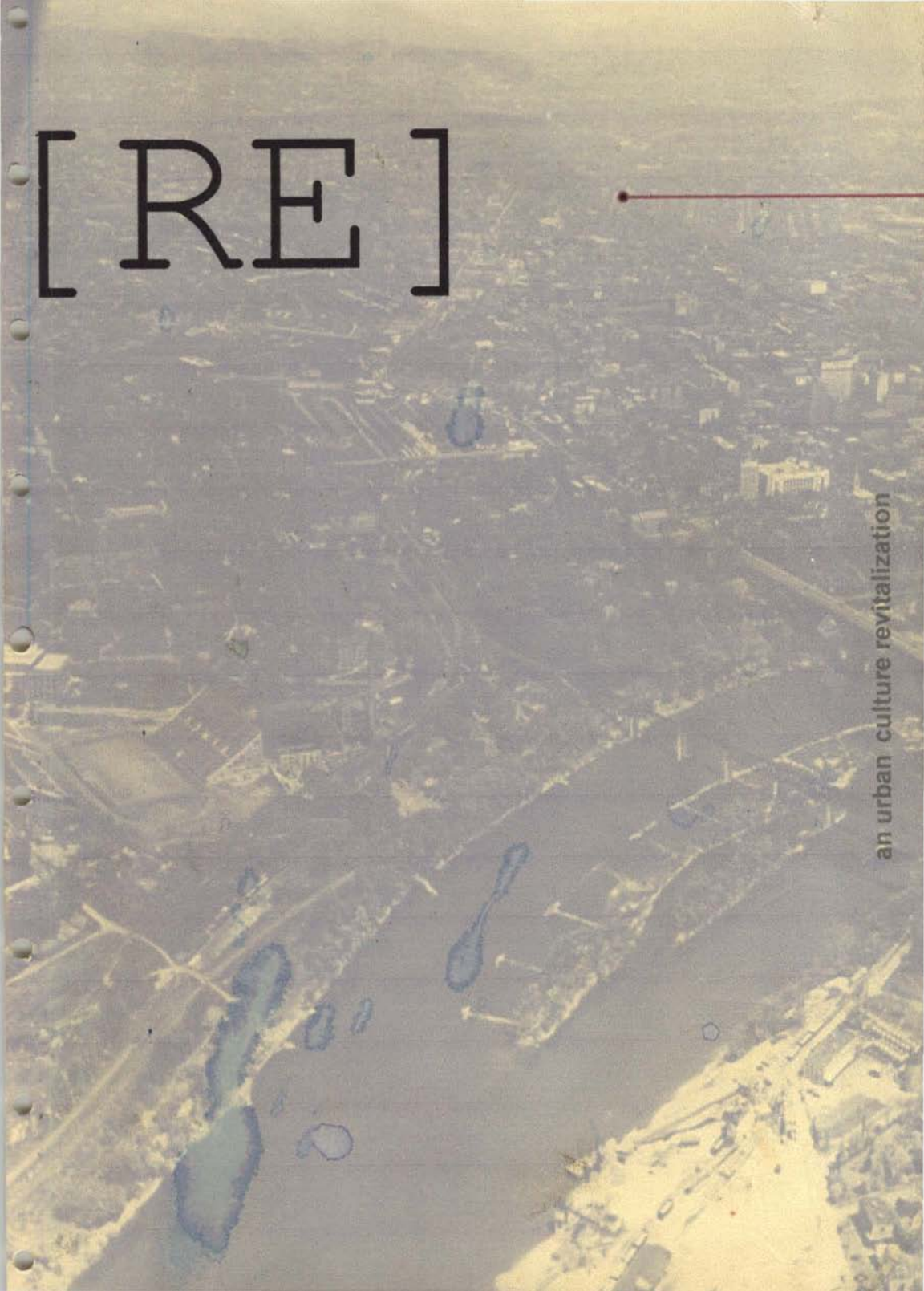
Signed: , Faculty Mentor

Date: 8/21/03

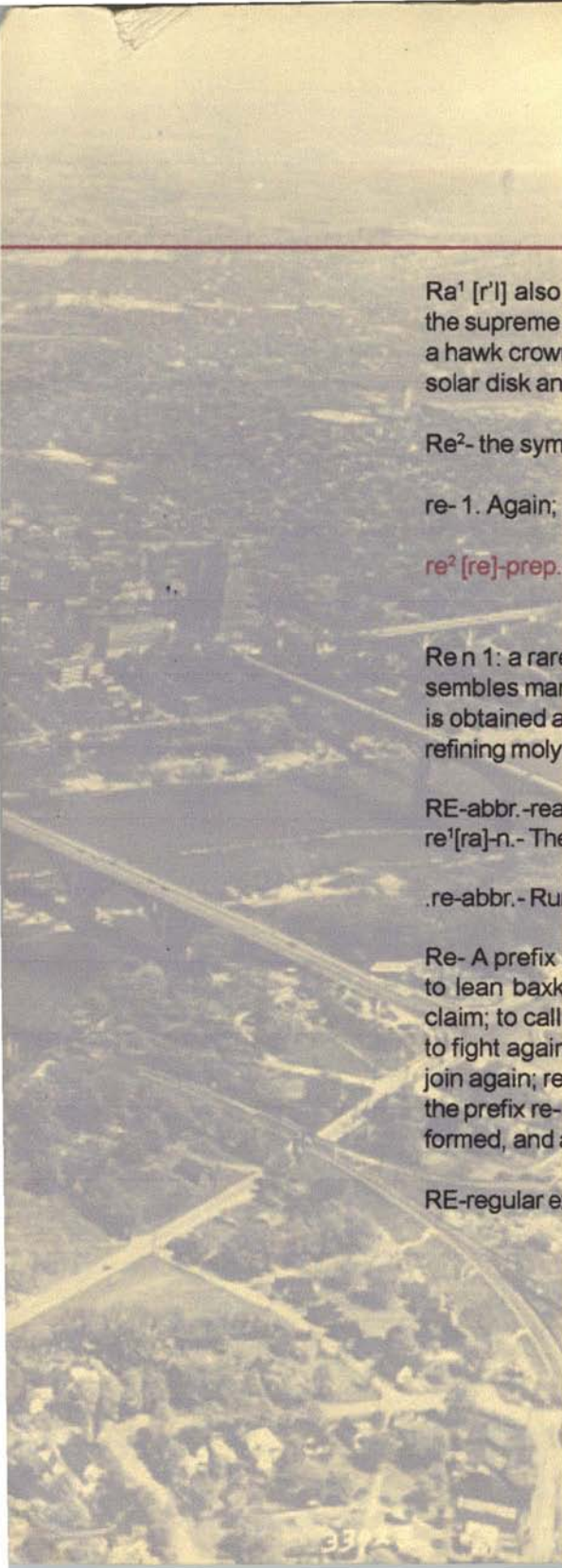
General Assessment - please provide a short paragraph that highlights the most significant features of the project.

Comments (Optional):

[RE]

An aerial photograph of a city, likely New York City, showing a river (the Hudson River) flowing through the urban landscape. The image is in a sepia or aged tone. The river is visible in the lower half, with several islands and peninsulas. The city buildings and infrastructure are visible in the upper half. The text "[RE]" is overlaid in the top left corner.

an urban culture revitalization



Ra¹ [r'l] also Re [ra]-n.- The ancient Egyptian sun god, the supreme deity represented as a man with the head of a hawk crowned with a solar disk and uraeus.

Re²- the symbol for the element rhenium.

re- 1. Again; anew: rebuild.

re² [re]-prep.- In referencr to; in the case of; concerning.

Re n 1: a rare heavy polyvalent metallic element that resembles manganese chemically is used in some alloys; is obtained as a by-product in refining molybdenum.

RE-abbr.-real estate.

re'¹[ra]-n.- The second tone of the diatonic scale in solfeggi.

.re-abbr.- Runion (in Internet addresses).

Re- A prefix signifying back, against, anew; as, recline, to lean baxk; recall, to call back; recede; remove; reclaim; to call out against; repugn, to fight against; recognition, a knowing again; rejoin, to join again; reiterate, reassure. Combinations containing the prefix re- are readily formed, and are for the most part of obvious signification.

RE-regular expression

[RE] an urban culture revitalization

david shirley

senior thesis proposal

professor traci moir-mcclean

2001.2002



introduce

01program introduction

02spatial analysis

03site analysis

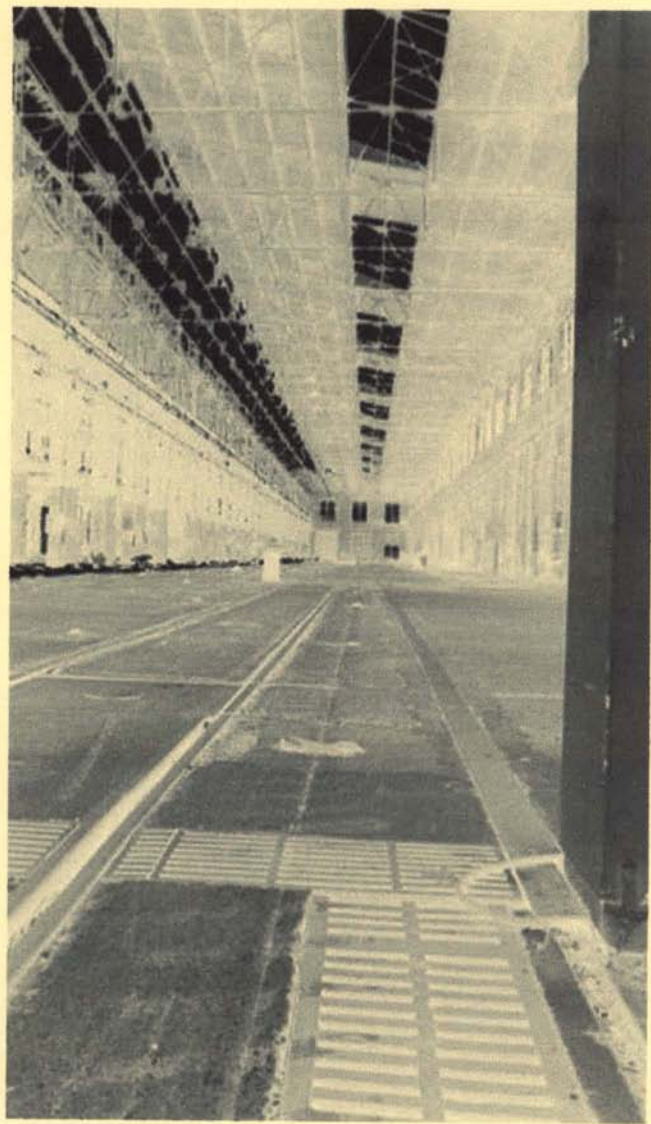
04context analysis

05issue analysis

06design direction



01.03.01.04



[re]investigate

an investigation of urban culture manifested physically in a mixed-[re]use facility. located on Heiskell avenue, the Norfolk-Southern coster shop will serve as the framework for the project both abstractly and concretely. it will be event space.[re]engaging and [re]connecting the urban fabric which contains/en-circles this pocket of space.

a gathering place. both a destination and a gateway building, the urban center will seek to involve and interact with residents and visitors. it will be a cultural experiment, a redefining and revitalization of the urban scape.

issues

city

1. [re]use.
intersection
(dis)connection
threading
island
insertion

site

2. [re]configure.
gathering
nexus
night.day
refuge

building

3. [re]construct.
old.new
structure.skin
interlace
adaptation
parasitic.leech
build.preserve

[re]use

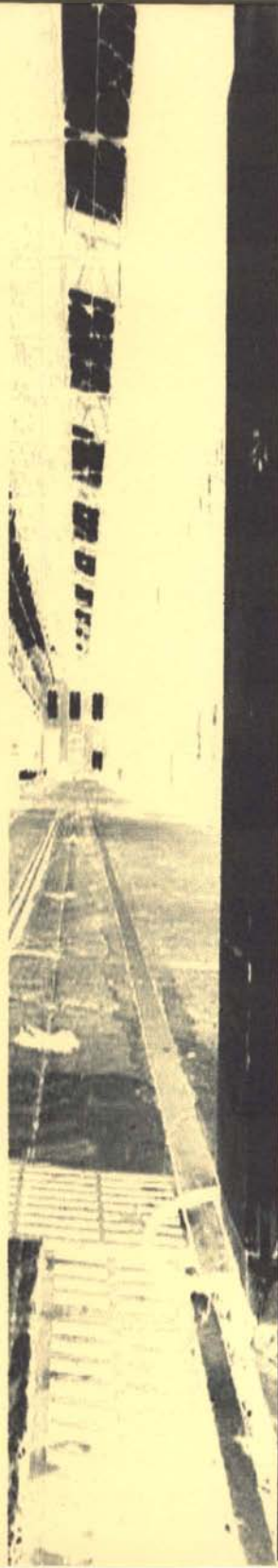
with regard to urban context.
to reconnect to the surroundings.
to once again be a center of activity

[re]configure

within the boundaries of the site.
to address the needs of the community.
a multi-use, adaptable space.

[re]construct

with regard to the physical construction.
to both respect and destroy.
to reach a state of unity through
juxtaposition



02A

shape

01program introduction

02spatial analysis

03site analysis

04context analysis

05issue analysis

06design direction



public spaces

farmers market

theatre

exhibition

multi media

commercial spaces

food

drink

daycare

retail

night club

office space

administration

open

exterior space

parking

loading

greenspace

theatre

entry atrium space

entry atrium space

public spaces

farmers market

theatre

exhibition

multi media

commercial spaces

food

drink

daycare

retail

night club

office space

administration

open

exterior space

parking

loading

greenspace

theatre">

program [re]distribution

entry atrium space _____ 80.000sq.ft

public spaces

farmers market _____ 30.000sq.ft

theatre _____ 20.000sq.ft

exhibition _____ 15.000sq.ft

multi media _____ 10.000sq.ft

commercial spaces

food _____ 5.000sq.ft

drink _____ 5.000sq.ft

daycare _____ 3.000sq.ft

retail _____ 7.000sq.ft

night club _____ 15.000sq.ft

office space

administration _____ 2.000sq.ft

open _____ 7.000sq.ft

exterior space

parking _____ 80.000sq.ft

loading _____ 3.000sq.ft

greenspace _____ variable

theatre _____ 10.000sq.ft

02.05 02.06



relation

The city of Knoxville views the Norfolk-Southern rail yard as an historic landmark significant to the development of Knoxville as an urban condition. Since its closing twenty years ago, the site has remained physically isolated, yet visually dominating the area. The decision to redevelop the site with respect to the current needs and conditions of the area.

A cultural center was chosen for this site because of its prominent location and for the opportunities the site offered. The cultural center will attempt to reconnect the surrounding area by offering a variety of experiential, cultural, and historic elements.

The cultural center will involve more than just the immediate community. The city hopes the renovation will attract visitors, acting as a gateway building welcoming citizens to the city.

The coster shop, which at its apex, was the largest repair facility in the south will house the majority of the program. However, in order for the cultural center to actively respond to its context, programming and activities must spill out engaging the site in a larger, urban space. The intention of the center is for it to act as a catalyst, stimulating more growth in the immediate area. Therefore, a basic, preliminary urban plan must be investigated to predict future growth and to lay the foundation for a cohesive urban plan to be implemented as the growth begins to occur.

02.07 02.08



public.gathering space

the main space. the datum. the coster shop is a double height steel shed. the dimensions of the shed lend themselves to an axial arrangement. in addition, the steel trusses and the existing skylights create a visually rich condition. in keeping with the spatial conditions, the market place will be an open atrium space. the interior street will contain a wide variety of exhibits and shops. a farmers market as well as a local appalachian crafts market will be interspersed throughout the atrium, intermingling with public gathering spaces, other commerce and exhibition space.

the gathering place will be defined as a result of connecting to the more individual program elements. It will serve as a connection between the internal / external space. an in-between condition contained under a shelter but possessing spatial qualities of outdoor space. as the main spatial organizer of the project, the space must also connect the old with the new. the historic structure is being reprogrammed and the atrium will try to achieve unity by contrast.

Equip: seating; tables

Connections: Theatre, museum, commercial, offices, restrooms, parking, outdoor spaces, loading zone

02.09 02.10



theatre. indoor

the main function of the theatre will be screen and stage presentation, mainly showing current films and plays. the majority of the use will occur in the evening / night. during the day the theatre can be used as a lecture hall or conference area.

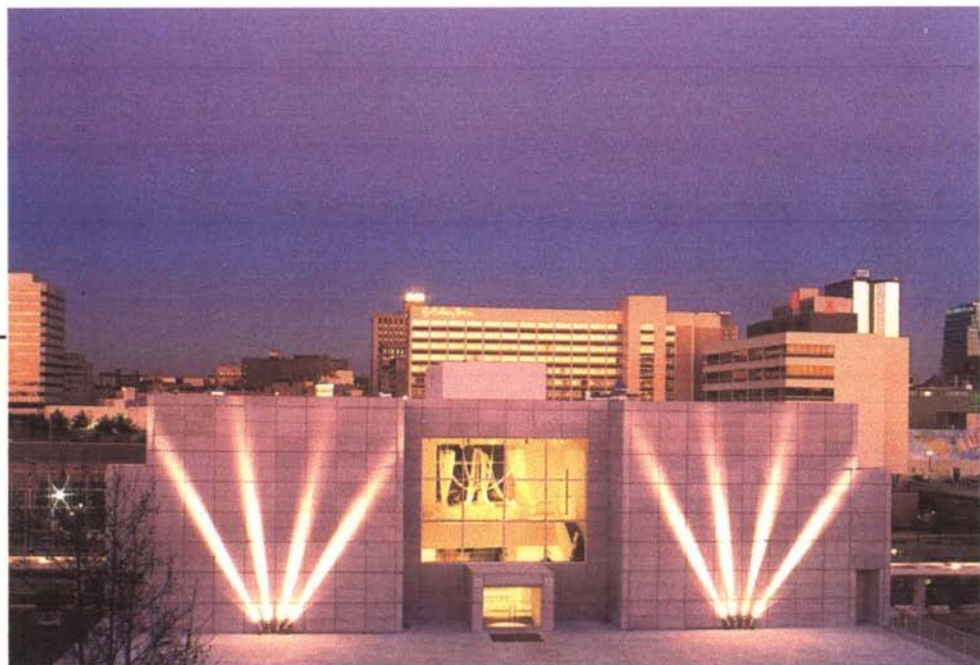
the theatre will also be adaptable to stage theatre serving as a local playhouse that actively engages local residents, hosting plays and workshops as well as children's theatre.

programmatically the theatre requires more privacy than most of the spaces. sound, light and materials are issues that must be given equal weight with the more spatial aspects of the project. In addition, the theatre should occupy a reasonably centralized location with respect to circulation because of the large number of events that will take place. seats, stage and other 'space dividers' should remain independent of the space so that it can be modified and quickly adjusted for new events and productions. the stage / screen area should serve as a connection to the outdoor theatre creating the possibility of performances for both conditions.

Equip: lighting, projection, digital screen, stage equipment, acoustic surface material

Connections: marketplace, outdoor theatre, restrooms, meeting / gathering space, 'backstage', changing facilities

02.11 02.12



museum. exhibition space

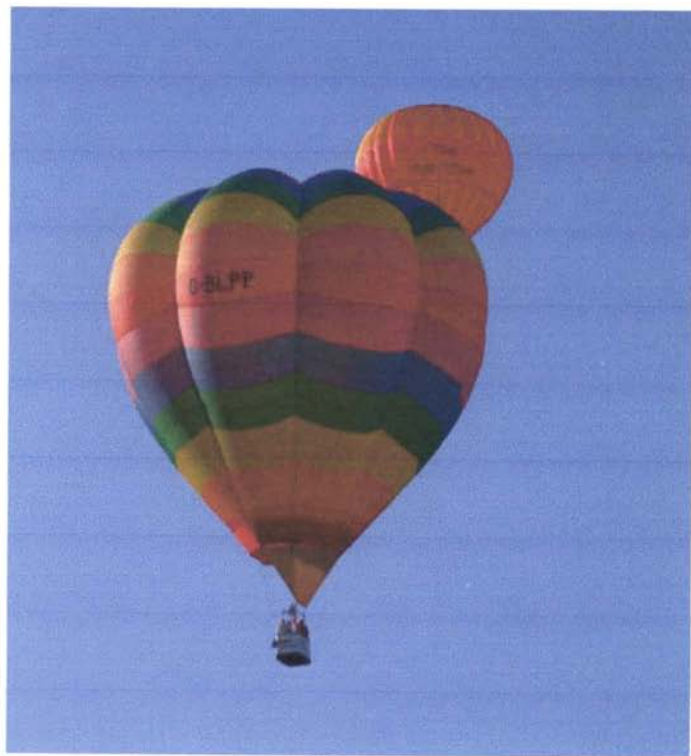
the exhibition space will contain a permanent collection, displaying information regarding the local history of the site, as well as information about North Knoxville. space will not be strictly for art viewing. Industry and commercial exhibitions will be considered when defining the space.

the museum space must remain loosely defined. visitors should be allowed to choose their own course throughout the space, causing interaction with fellow visitors. the spaces should connect with a wide variety of other programs to promote random, highly unique experiences. this also allows for more visual interaction with the passerby. the journey is as important as the destination. lighting control with a variety of spaces is important for facilitating the arrangement of individual exhibitions.

Equip: mobile / adjustable walls, lighting equipment, security elements

Connections: information area, market place, outdoor garden, restaurants, shops, public space, restrooms, and multimedia space

02.13|02.14



multimedia area

an experiential / interactive area. this space will contain computer terminals for both education and recreation. workgroups will be established to address different themes in multimedia. space for children to play games, complete work or explore virtual dimensions will create events centered on a demographic that are largely ignored in cultural centers.

the multimedia area should connect with the exhibition path and should have interactive displays featuring historic information as well as current information.

the virtual work space needs to be flexible in its organization. workstations and displays must be relatively simple to reconfigure, so electrical and other wiring systems must be flexible as well. public spaces such as a small internet café must accommodate workspaces and private spaces for studying or playing games.

Equip: workstations, digital screen, virtual reality simulator, and workstation seating for fifty persons

Subprogram – virtual reality area, café, class room space, image center, display area.

Connections: marketplace, exhibition space

02.15 | 02.16



outdoor spaces

the outdoor spaces are intrinsic to development of the cultural center as a nexus. these spaces will be translation spaces from the edge conditions to the center. the spaces must be thought of as a flow from contact to building, creating a path for all necessary transportation modes and encouraging interaction between the different modes.

parking

in an automobile culture such as knoxville it has become necessary to give the parking spaces significant consideration. spaces for fifty cars as well as spaces for tour busses and school busses will be essential in accommodating visitors. whether the parking is surface or garage, connections to the cultural center as well as to all the vehicular access points.

Equip: lights

Connections: Marketplace. Garden, entrance points,
loading dock

02.17 02.18



loading docks

the loading area needs to be large enough to load and unload large stage equipment and art installations and the food services. the local farmers also need to unload produce quickly and regularly. It should also be readily accessible from both vehicular and locomotive deliveries.

Equip: docks, forklift and other machinery

Connections: parking, marketplace, restaurant, railroad, and exhibition space

outdoor theatre

the outdoor theatre will feature presentations, plays and films during the warm months. cultural presentations, digital exhibitions, and public broadcasting of local events (football, baseball, fourth-of-July) would allow this space to be true event space, altering users and events allows this space to be dynamic. lighting and enclosures will further enhance this dynamic by changing the spatial conditions in relation to specific events the outdoor theatre must be considered as an extension of the internal theatre. formerly, one larger space with the stage area being the center of the space.

Equipment: movable seating, lights, movable walls, audio equipment, digital screen

Connections: garden space, indoor theatre

02.19 02.20



greenspace

the greenspace is one of the largest outdoor elements. It will be an outdoor extension of the market place and the gallery space. Small gardens, a greenhouse, eating assembly area will occupy most of the fixed programmatic areas, with most of the area left open with various spatial conditions to accommodate a wide variety of events. a playground with connections to the daycare facility will also be included in the greenspace.

pragmatically, the greenspace must be placed in relation to both natural conditions and site circulation. the goal of the space will be to create a variation in the mostly industrial surface condition, re-establishing the connection between the divided neighborhoods at its peripherals, or edges.

Subspaces: vegetable gardens, assembly area, playground, field area

Connections: amphitheater, context, marketplace, parking, and exhibition space

02.21|02.22



commercial space

the commercial spaces are to be interspersed with the public spaces. they are private businesses but only rent the spaces from the city. this helps fund the building and by controlling the leases the city can make sure the spaces are occupied and distributed in relation to the other program spaces.

the spaces should be relatively simple and modular to allow for reconfiguring of spaces as time dictates.

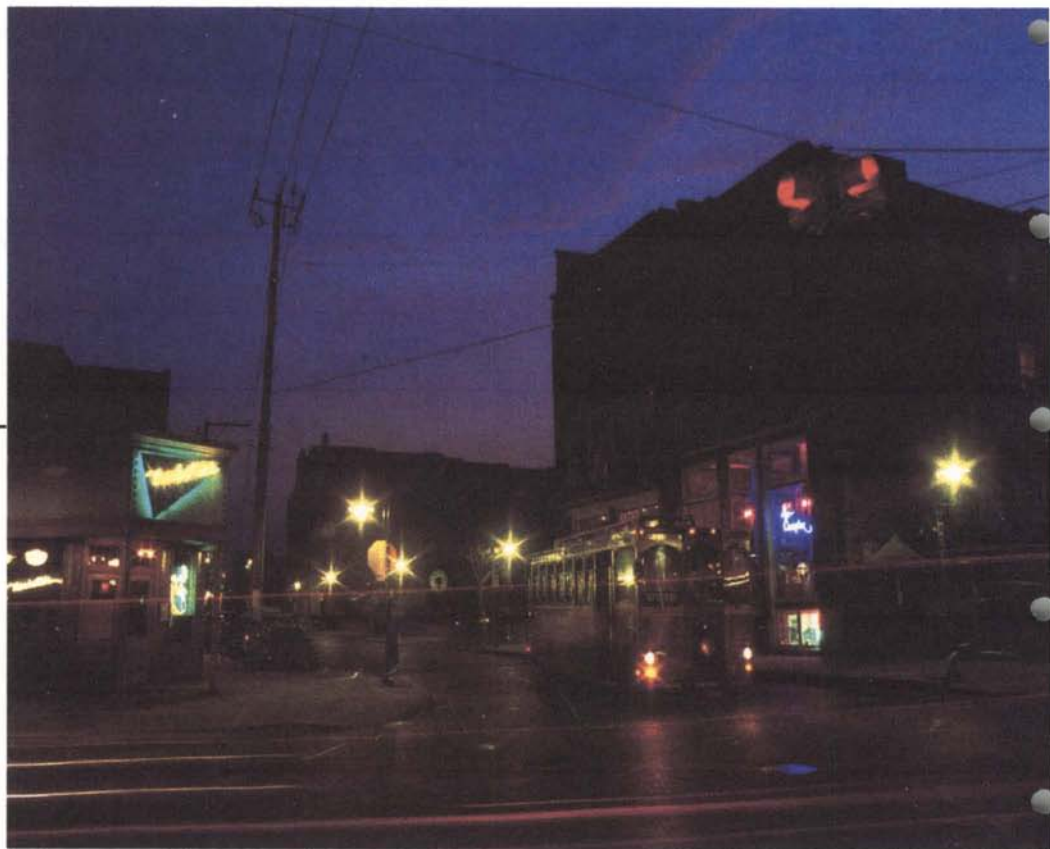
retail

a wide variety of small businesses could occupy the commercial spaces. The design must therefore be flexible to allow for a wide range of different spatial or mechanical conditions. The spaces should have a standard modular structure system to add or remove space as program dictates. However, the challenge will be to create spaces that become highly varied and don't become so unique that they lose relation to the larger space of the coster shop.

Equip: variable

Connections: market place, public spaces, and exhibition spaces

02.23 02.24



restaurant

a place to gather and eat. not necessarily a single area, it could become more of a courtyard offering a variety of food choices. since the space is programmatically indeterminate, an open plan is best suited for commercial spaces; the restaurant must have good light control and connections from the kitchen to the outside, to facilitate transportation of goods.

Equipment: kitchen eq, food services area

Connections: marketplace, nightclub, bathrooms, loading docks

night club

in order to maximize use of the cultural center, events should occur constantly on a twenty-four hour cycle. the nightclub will create an opportunity to include late night cultures to also engage the center. like the restaurant it has no programmatic fixed area, public spaces that hosted farmers market in the morning could become one large dance space with many possibly variations of spatial conditions creating a rich atmosphere for the club. however, the nightclub must be located or contained in a given area relative to spaces which must remain closed for security reasons.

Equipment: lighting, audio / video, small space seating

Connections: bar, marketplace, outside area, restrooms, and security office

02.25 | 02.26



office spaces

the most private of the spaces. mostly containing offices for the administration. a few offices will be leased out to local artists, lawyers, or any group that would like to work in an environment that involves community participation or public activities. the city will house a north knoxville branch of some government services such as post office, tax records, department of motor vehicles, etc.

administrative offices

these offices represent the relatively fixed spaces. the offices need to be organized so that the administration has adequate communication both physically and virtually. offices also need to be visually connected to many public areas so both the employee and visitor relationship is stratified, engaging both groups.

open offices

these spaces will have many of the same qualities as the retail shops. plans must remain open and adjustable to the individual needs of the client. lighting, both natural and artificial, must be readily affordable and mechanical system must remain adaptable

Equip: office furniture, mechanical systems, electronic equipment

Connections: market place, public spaces

02.27 | 02.28

Codes

1994 Standard Building Code
1994 Standard Plumbing Code
1994 Standard Mechanical Code
1994 Standard Gas Code
2000 National Electric Code

Classification

Use group A-2 : Assembly with
stage

Occupancy

100-999 persons

Square Feet per Occupant

Construction

Type I, II

Egress Width per Occupant

.2" for doors, corridors, ramps and
passageways

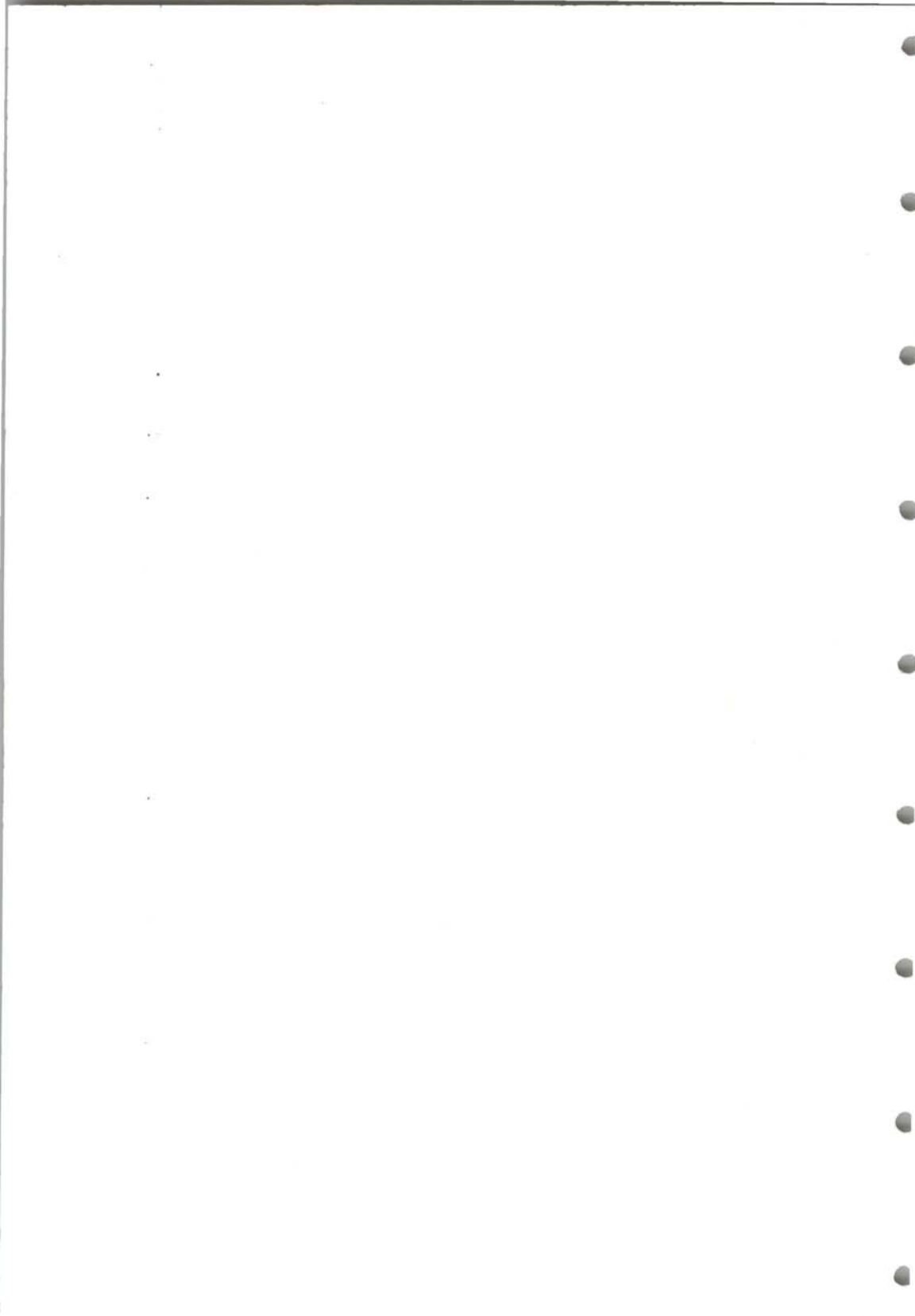
.37" for stairs

Minimum Number of Exits

2 - for 500 person or less persons

3 - for 501-1000 persons

4 - over 1000 persons





site photos 02

[RE]place _____ an urban culture revitalization

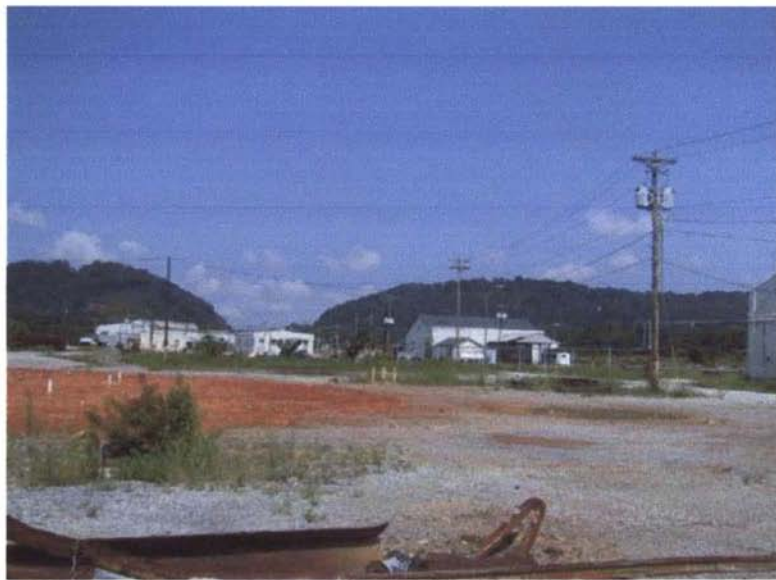
03.22|03.28





site photos 02

03.25 | 03.26





site photos 01

[RE]place an urban culture revitalization

03.23|03.24

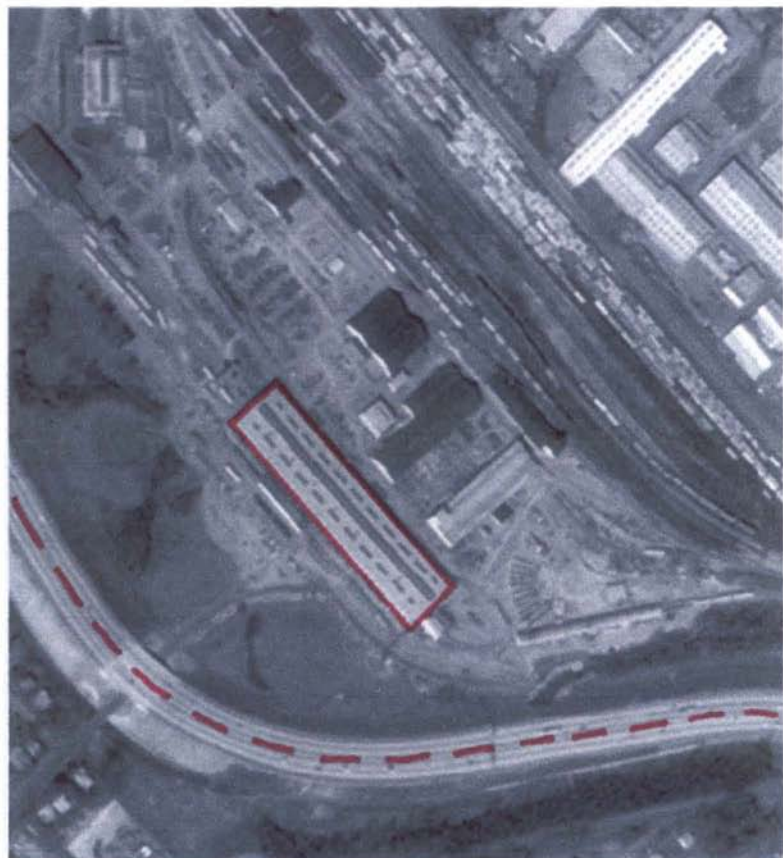


scale

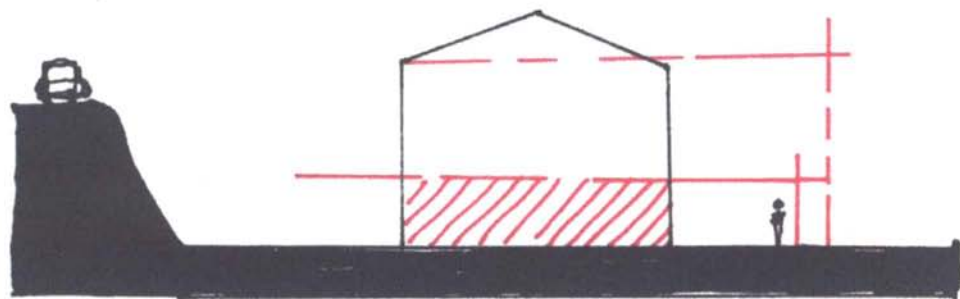
scales of speed. the railyard is surrounded by high speed transportation. trains and cars pass along its boundaries giving the large shed a much smaller feel then when walking around teh site.

design response

the north knoxville cultural center must address both scales. the large form compliments the high speed through traveler but the scale must be lowered down to make it comfortable for the pedestrian.



03.21|03.22

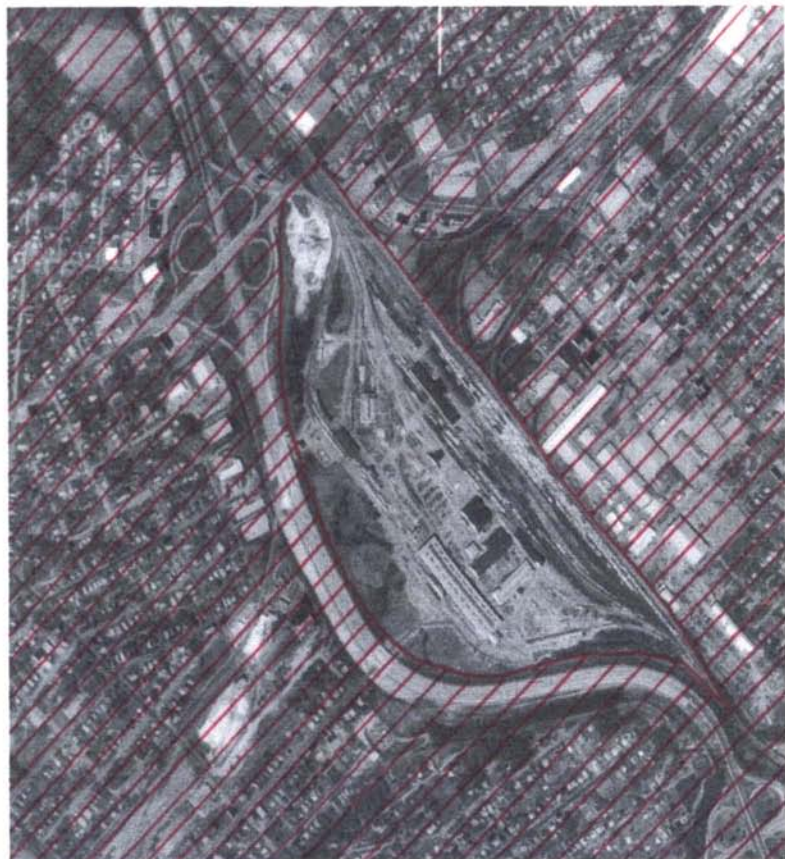


site boundaries

the site is bounded on all sides relatively close to the coster shop. the north side however extends further and merges with other industrial activities before reaching the entrance at heiskell avenue.

design response

the site plan for the cultural center must be tightened to the north. this will prevent the building from becoming an isolated form in the site.



03.19|03.20

circulation

trains move north and south within the site. vehicular access is contained all from the north.

design response

the north-south axis is a clear ordering element that should be used in the new center because of its simplicity and historical and logistical use.

03.17|03.18

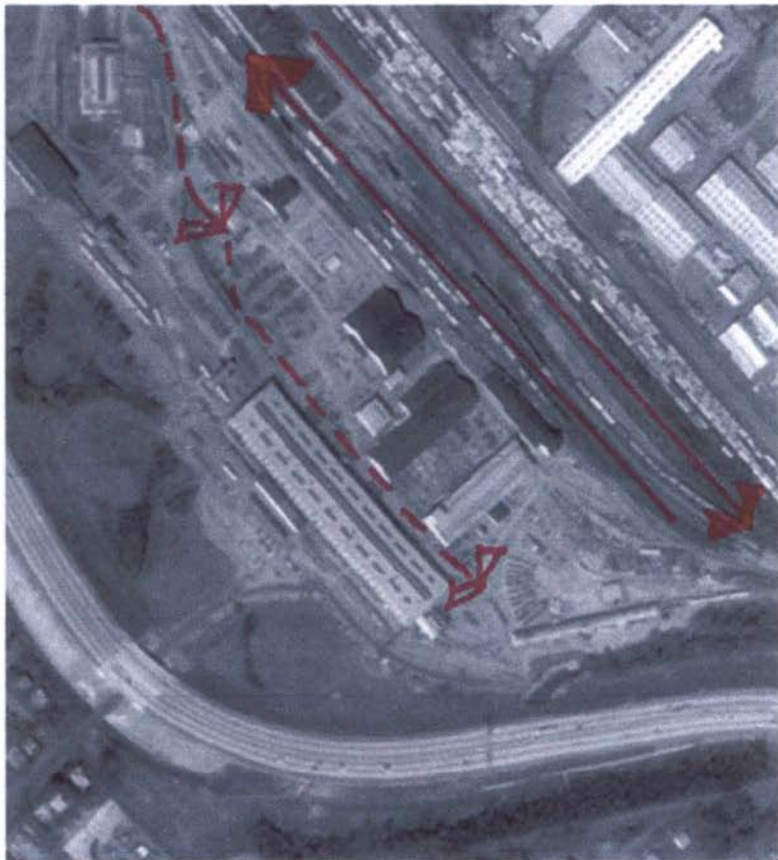
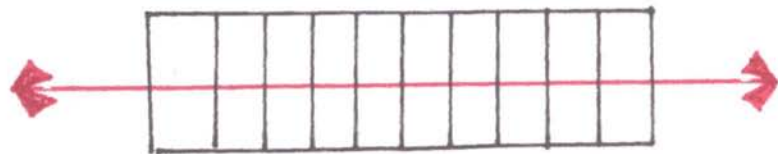


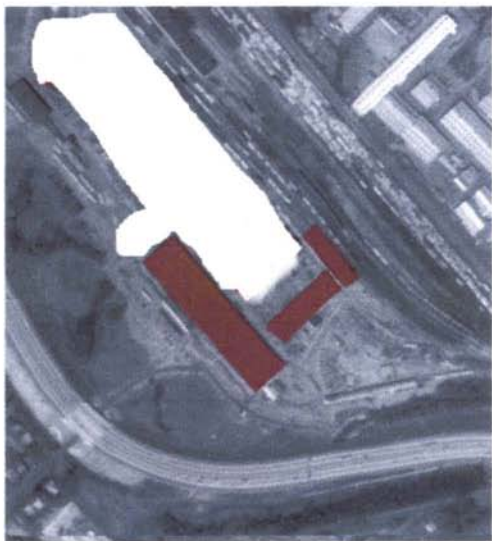
figure.ground

the railyard enlarged over time. as the freight and passenger traffic increased, the yard its working and storage spaces. numerous smaller sheds exist between the coster shop and the depot. office buildings and later other industries began to be built on the site. still the site remains relatively open, mostly due to the scale of the trains and other machinery like cranes, which required a large area in which to operate.

design response

the figure.ground is an important study in relation to this project. new urban spaces must be implimented around the site, if it to truly be a catalyst for future growth. the relationship the cultural center has with its immediate context is vital if it is to reconnect the surrounding areas. the peripheral buildings must be used to strenghten this connection and must be anaylized so not to create too many minor spaces which detract from the cultural center itself.

03.15|03.16

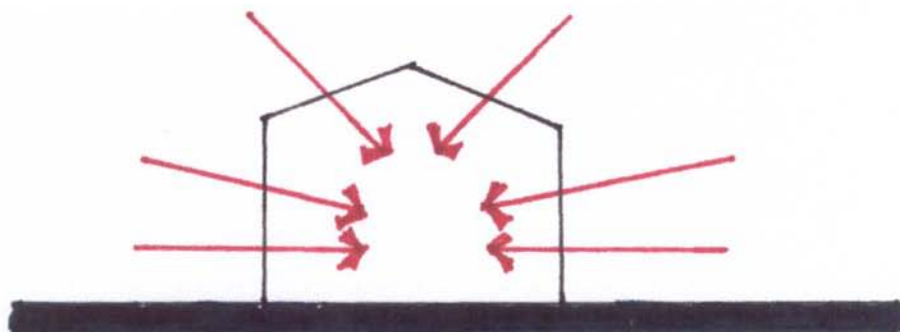
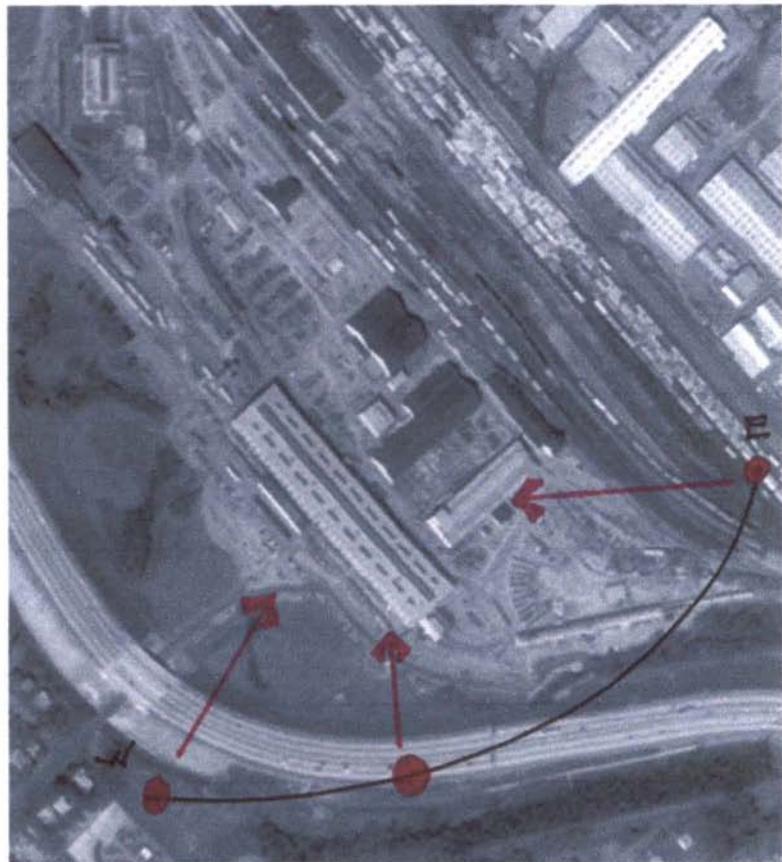


light

because of the steel construction, the cladding was able to be comprised mostly of glass. the long windows and skylights provide ample lighting. this was advantageous to the workers and created a more spacious feel in the coster shop.

design response

program elements will be placed to optimize natural light filtration. this will minimize the need for artificial lighting and will retain the spatial qualities of the shed building.



03.13 03.14

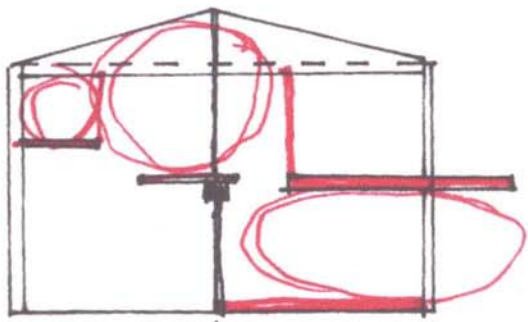
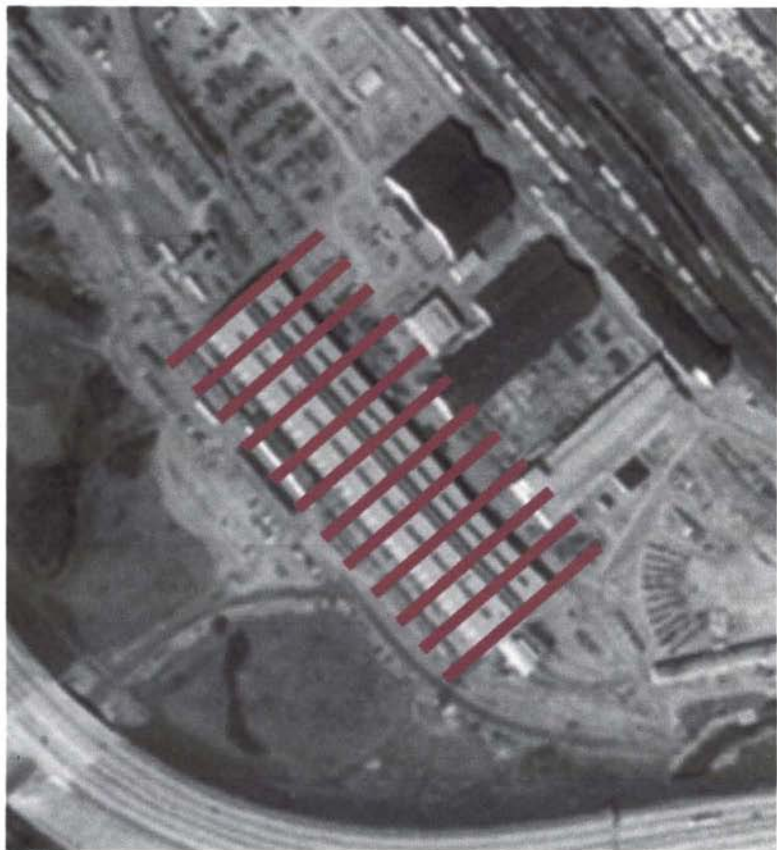
structure

the coster shop design is composed of regular 25 feet bays which are 150 fet wide. supported at the ends and the center by steel columns. the roof is supported by delicate steel trusses. the cladding is brick and glas. the steel structre allows for long window soans on both the walls and the roof, which permits a large amount of light to filter in to the large space contained within the structure.

design response

the stucture allows for a lot of flexibility with the programming of spaces. new structure should be kept to a minimum to allow for maximum reconfigurability as times and needs change. pieces can be hung from existing structure or non-permenant walls should be utilized.

03.11|03.12

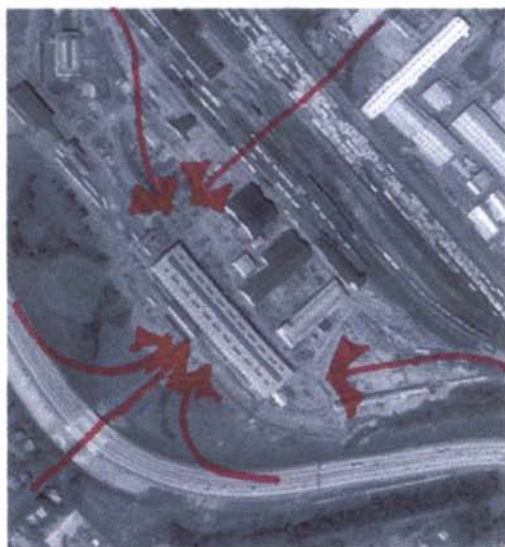
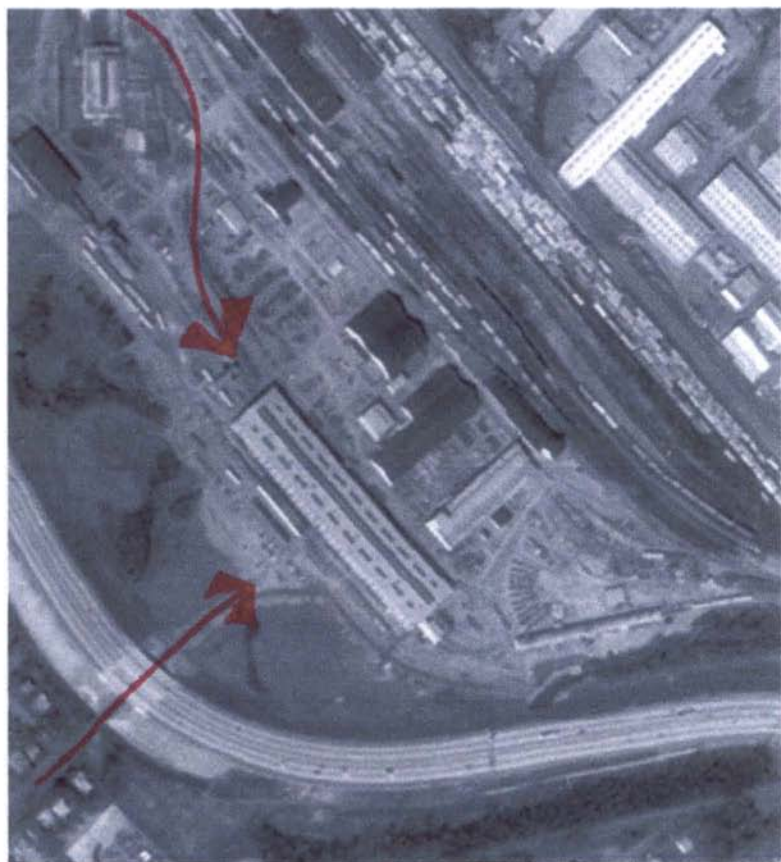


connections

existing entrances are limited to heiskell avenue to the north , tennessee avenue to the west and the railroad. the interstate bypasses the site and the neighborhood to the east are cut off by the rail lines.

design response

for the cultural center to be succesful it must provide easy access to the maximum number of people. the interstate is an important element to consider when (re)developing the site plan. two exits in close proximity to the site entrance should be provided for vehicular access. pedestrian access must also create connections to the surrounding neighborhoods.



03.09|03.10

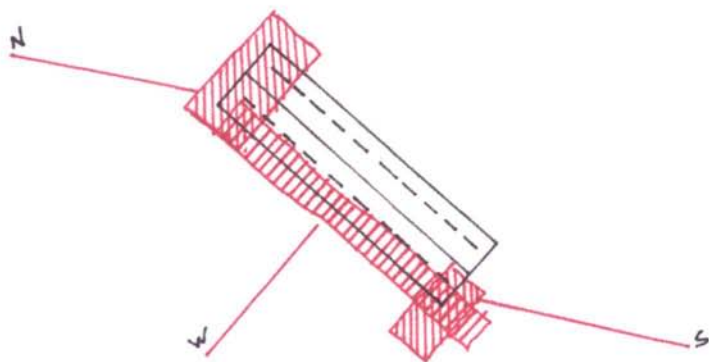
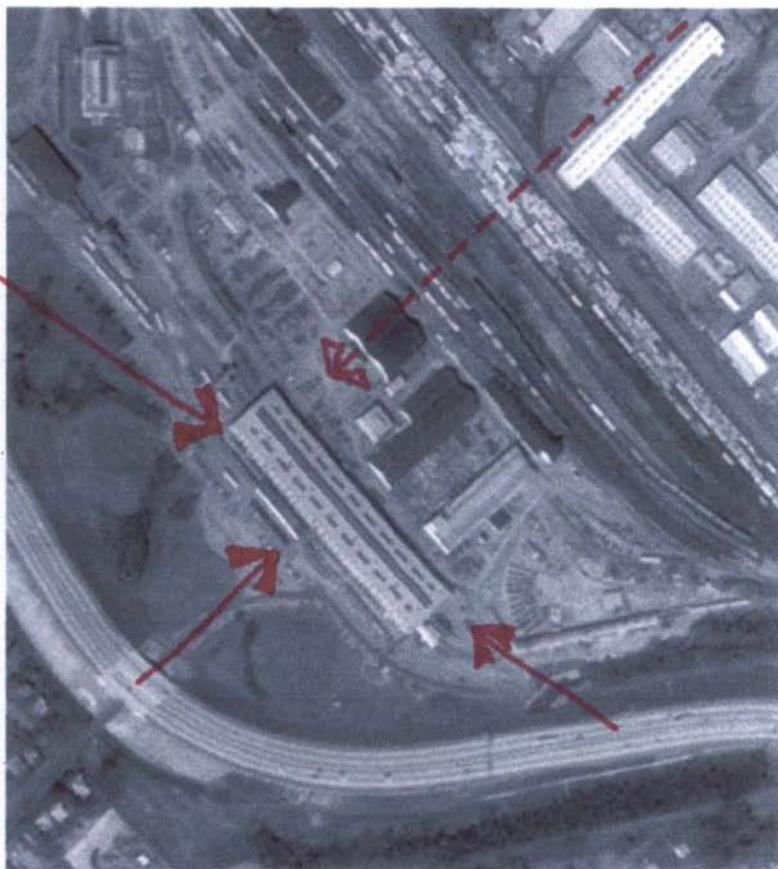
views

the site is mainly visible from the interstate. both from the south and the north the site is revealed suddenly, due to the elevation and direction change. the interstate rises and slides around the coster shop, which provides a chance to view the entire site from the interstate traffic. central street on the east side also has a higher elevation which provides some opportunities to glimpse the site. from the site, sharp's ridge is the most visible landform and the large factory buildings surrounding the site on the east side are also clearly visible.

design response

entrances to the urban center should take advantage of the relatively large elevation changes surrounding the site. vistiors from the north will descend into the 275 corridor through sharp's gap and then the center will quickly come into view. from the south side, visitors will also be elevated above the center. it comes into view around the bend in the road. views both into and from the site must be considered when designing the approach to the cultural center because it can be viewed from many different perspectives depending on the distance from the site.

03.07|03.08

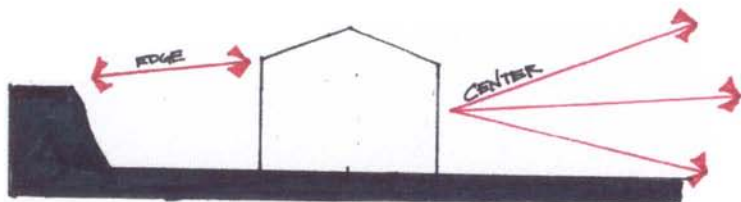


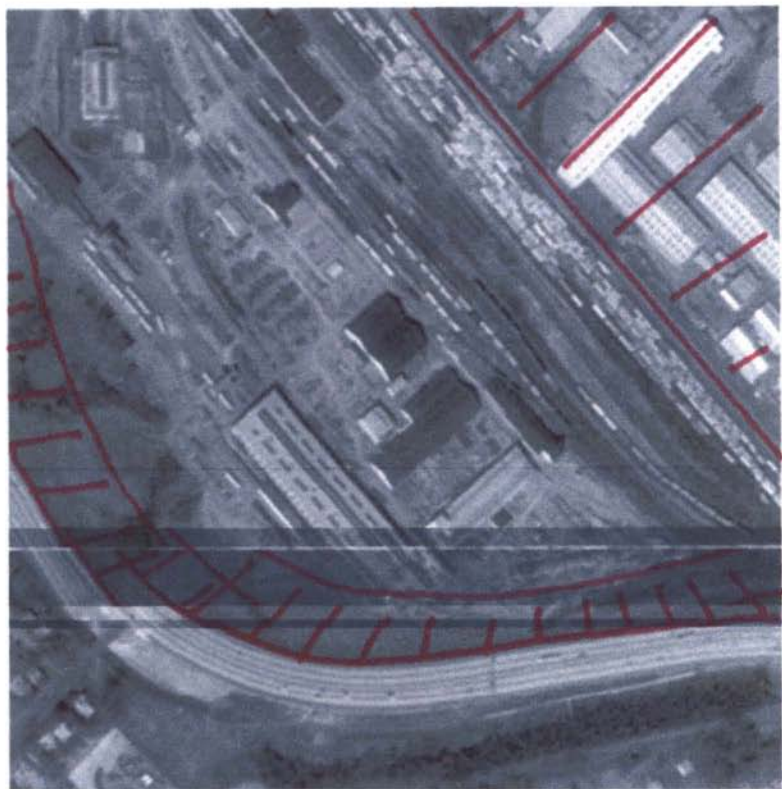
contours

the majority of the site is contained on level ground. the peripheral edge condition is significantly higher all around, creating a small valley condition. the coster shop sits with the west elevation facing an artifical enbankment created by the interstate. the east elevation faces the majority of the railyard, which is on level ground.

design response

the coster shop sits at a intresting place within the site. it lies on the edge of the railyard and in the center of "site" created by the surrounding infrastructure. this provides an opportunity for the project to make connections to both edge and center conditions which can serve to reengage the surrounding context.spf



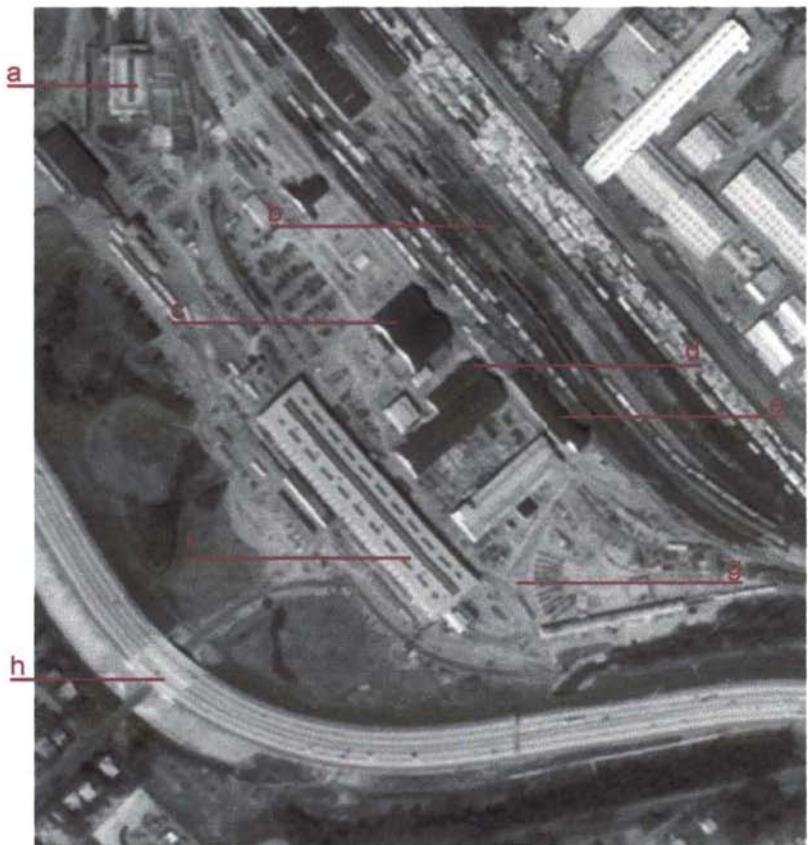


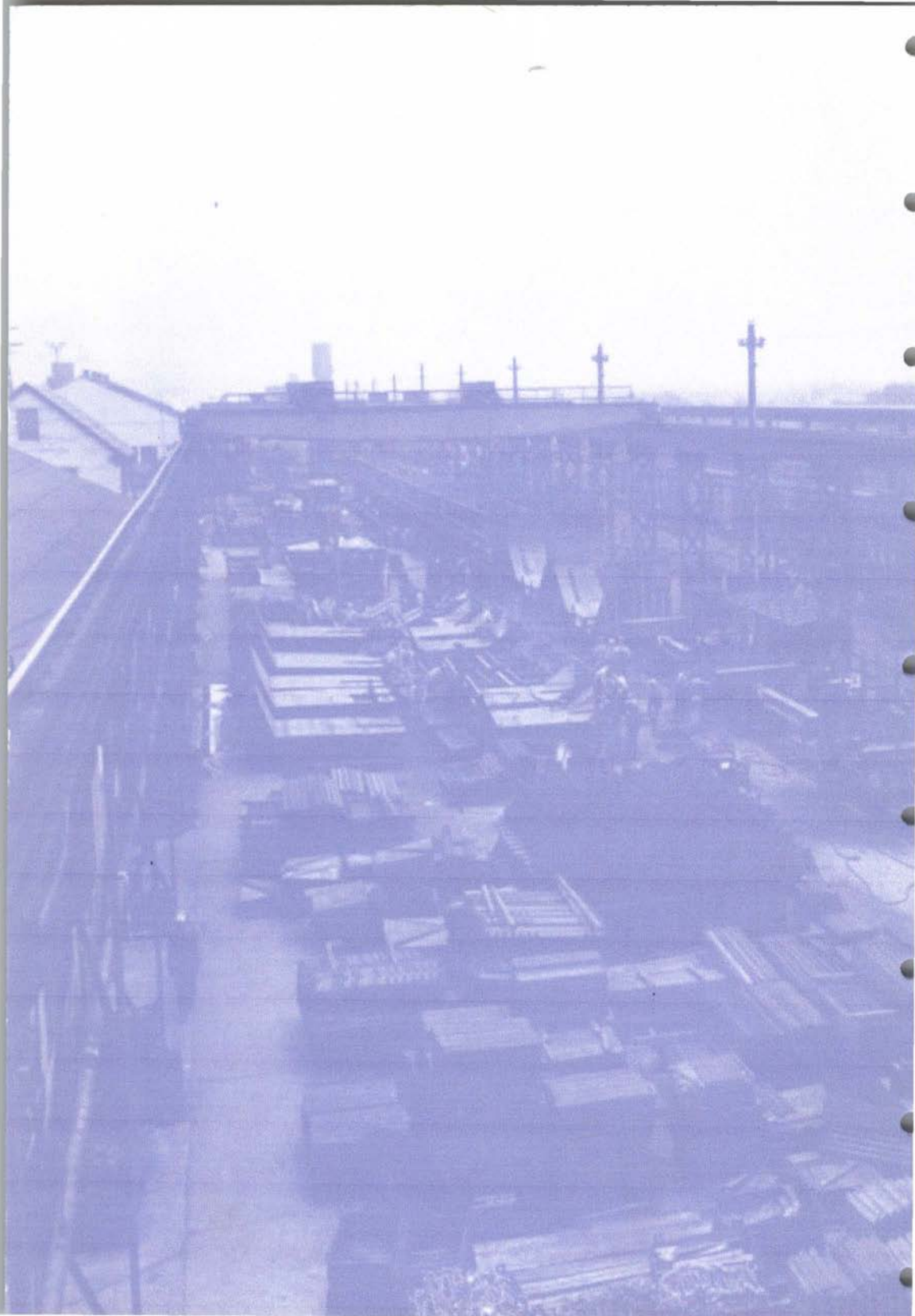
03.05 0306

site plan

- a. main office
- b. rail loading.unloading
- c. storage+ surplus
- d. smaller repair sheds
- e. depot
- f. main coster shop
- g. storage yard
- h. interstate 275

03.03 03.04





place

01 program introduction

02 spatial analysis

03 site analysis

04 context analysis

05 issue analysis

06 design direction

04A

connect

01program introduction

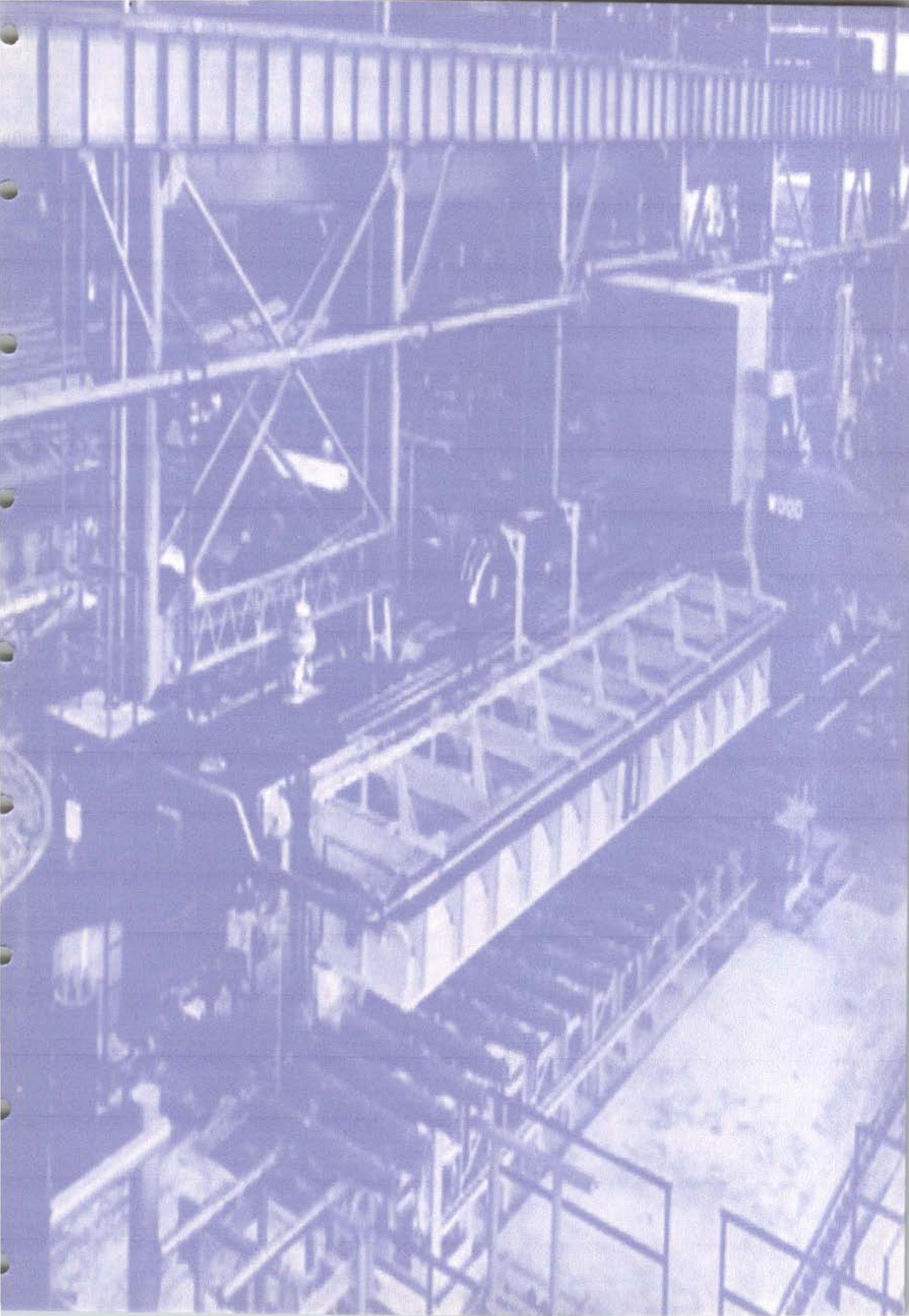
02spatial analysis

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place

the site is located at a dynamic curve on along interstate 275. which links downtown with i-75 north, eventually leading to lexington. 275 when built in 1949 was designed to maximize speed of flow of vehicular traffic from the city center to 75. the interstate cuts a straight line between the center and edge, creating a corridor from the north, tearing of the existing urban fabric. no concessions were made. the automobile was given preference over urban conditions.

the site is an exception to this. at the time of the interstate, rail transportation was still a large economic competitor with the auto. money creates power and the southern railroad [now norfolk-southern] was the only one with enough of both. the interstate was forced to make an extremely sharp curve [for interstate standards] and was raised to allow uninterrupted movement by the various converging transportation modes.

as the balance of power transferred to the auto, the raised highway was rebuilt as a elevated system filled with earth to create an infrastructural ridge, isolating and more firmly establishing the interstate as an edge condition to the west. all views and connections to the industrial and residential areas to the west were severed, except for a tiny gap in the ridge where a road still passes underneath the interstate.

to the east the site had long been defined by the railroads. the rail lines did not sever the fabric like the interstate. as knoxville expanded it did so along the rail lines originating in the center. as the cities continued to grow the densities around the lines increased steadily. still a dividing element, growth occurred in relation to this line.

to the north the site bottlenecks where rail and high-

way have to both squeeze through sharp's gap, coming to a point at the intersection of heiskell avenue and the railroad . to the south it tapers to a point where the interstate and railroad join to occupy the same access corridor, headed towards the city center.

the site is an island, surrounded and disconnected from the urban fabric on all sides. however the site is intricately linked to movement and time, an in-between space created by the divergence of two related conditions. connected and divided.

the project will attempt to address both conditions; reconnect the urban fabric of the isolated areas surrounding the site and engaging the between space becoming a gateway building, welcoming people to knoxville. a reconnection of the divided and an engagement of the in-between.



interstate



railroad



urban connectors

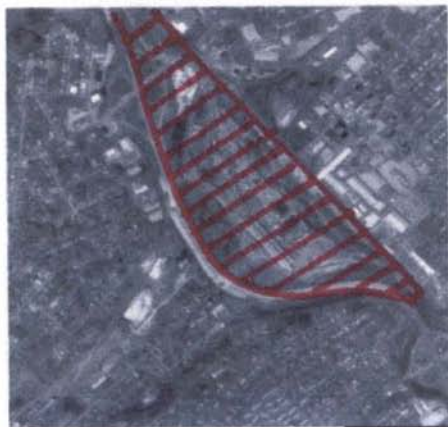


pocket of space.

a site defined at its edges. the railroad tracks and interstate envelop the site creating a space which stands alone. visible from both conditions. for long spans it is visually and physically contained in the inbetween zones. links to destination points.

design response

the site now has use to engage the interstate as well as the railroad. the project will establish connection points with both modes, becoming a gateway. a mediator of in-between space.



pocket: a small often isolated area or group

pocket

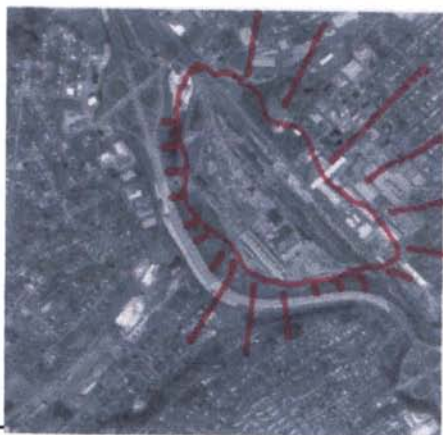
greenway



ridges



valley



scapes.

natural and artificial conditions of the urban fabric.
contrasting components that form the complex dynamics of
the site and context.

design response

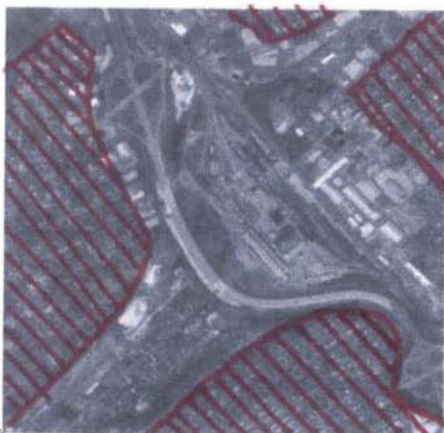
responding to the scapes will be vital in anchoring the
site to its context and reconnecting the urban fabric. many
complex conditions surrounding the site must be analyzed
in order to reach a solution which response to all of them.



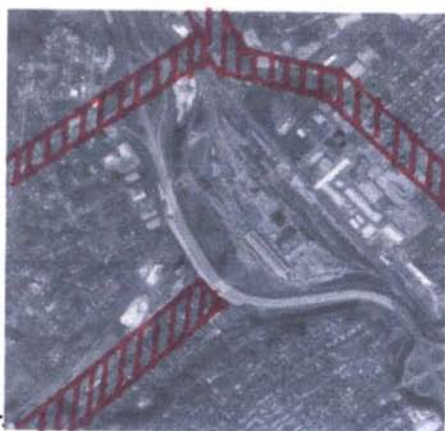
scape: a view or picture
of a scene

urban scapes

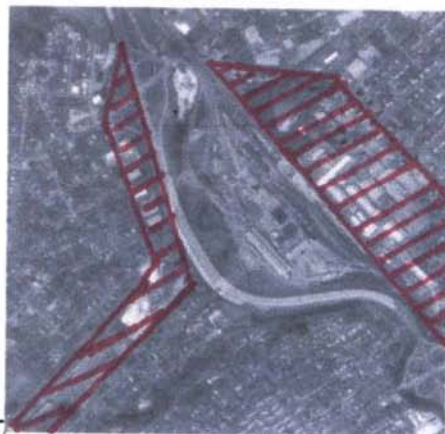
residential



commercial



industrial

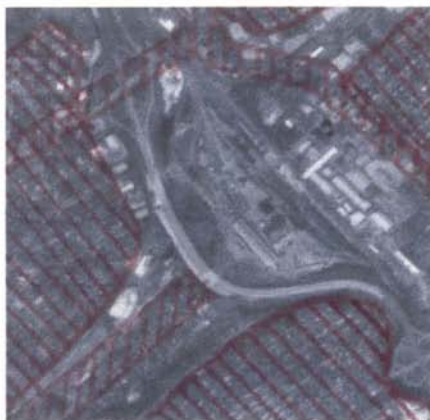


zones.

the area around the site is comprised of different zones which frequently overlaps. the site exists in the center of these zones. all three have relationships to each other and the railyard.

design response

the existence of all three comes in in such a small area surrounding the site creates an opportunity and a challenge to become the mediator between the zones. to form a nexus.



zone: one of the sections of an area or territory created for a particular purpose

nexus

04.11|04.12

pedestrian



vehicular



rail



modes.

the site exists in between different modes of transportation. cars and trucks dominate the roads, which articulate conflicting grids which converge on the site. train travel is still a major presence in the area, but is now used for freight transportation. pedestrian circulation is minimal however residential space occupies the majority of the area, which illustrates an inverse relationship inherent in many urban conditions.

design response

the project will attempt to incorporate the various modes, bringing them together forcing them to interact at the same speed.



mode: a manifestation, form, or arrangement of being; *specifically* : a particular form or manifestation of an underlying substance **b** : a particular functioning arrangement or condition

interaction

04.13 04.14

morning



afternoon



evening



cycles.

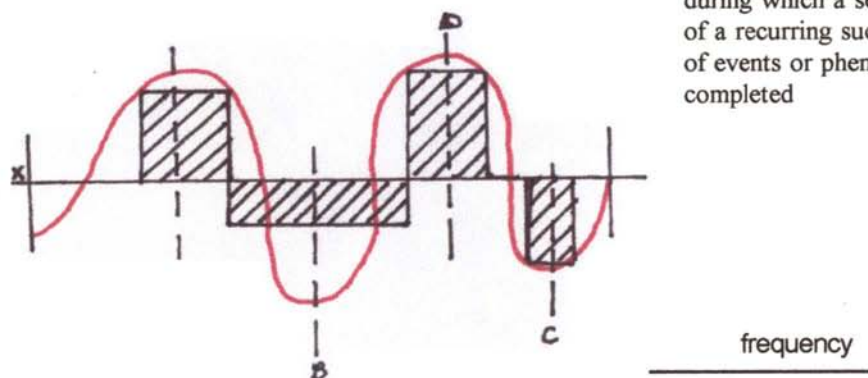
time-movement investigation. various demographics exist here. many different kinds of labor, commercial and agriculture conditions, create a 24 hour cycle. farmers begin at dawn, children have school schedules, and shops operate all day and into the evening and many social events occur during the night time.

the cycles overlap and none are fixed constants, but slowly change as innovations and social practices influence duration and frequency of the cycle.

design response

the goal of the cultural center will be to maximize use by all cycles. program elements as well as pragmatic decisions should reflect as many groups as possible.

cycle: an interval of time during which a sequence of a recurring succession of events or phenomena is completed



infrastructure



agro-urban



strip semiotics



typology



urban culture



culture : the integrated pattern of human knowledge, belief, and behavior that depends upon man's capacity for learning and transmitting knowledge to succeeding generations

b : the customary beliefs, social forms, and material traits of a racial, religious, or social group





05A

search

01 program introduction

02 spatial analysis

03 site analysis

04 context analysis

05 issue analysis

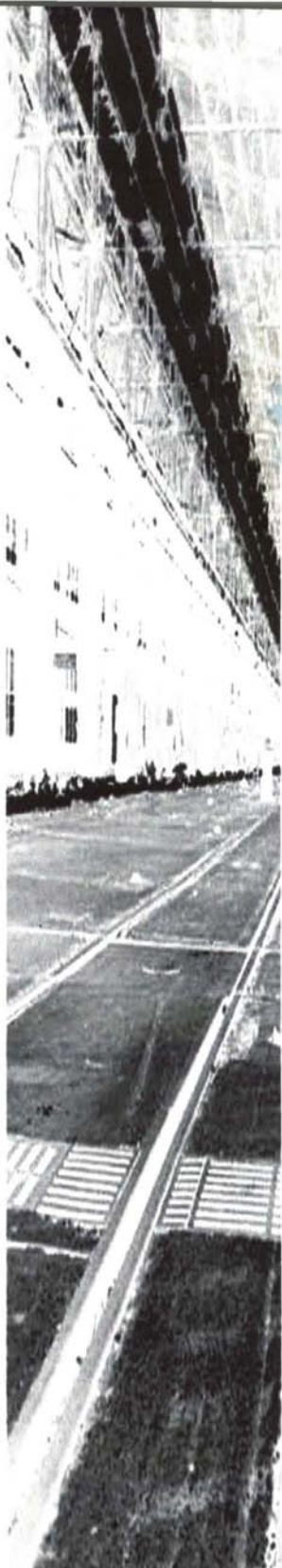
06 design direction





[re]use.

The urban landscape in Knoxville is defined by its interstate system. the vast stretches of concrete cut through the urban fabric. sometimes over, occasionally under, but most frequently straight through. simultaneously cutting off + redefining urban spaces. Knoxville is contained for the most part within the boundaries of the interstate. in some places however, there is an inverse relationship. the urban space defines the interstate, forcing this spatial divider to bend around the existing context. Interstate 275 is such a situation. Both a corridor from the north + a bridge between the center and peripheral road system, it slices through the north Knoxville district in a straight line, frequently disconnecting entire neighborhoods. However it was forced to circumnavigate the Southern rail yard and coster shop, a well established transportation center. the interstate still divided the area, but it created a pocket of space between the railroad tracks and the interstate. it is this pocket of space that will try to re-establish a connection with the area surrounding the coster shop. the use of the area has been industrial, commercial, and residential. all three conditions are dispersed with considerable diversity, creating a multi-zone area. the re-use of the Norfolk-southern coster shop and rail yard will reconnect + strengthen the urban culture by utilizing the three conditions + creating a nexus, or center of activity.



05.05 05.06



[re]configure.

the norfolk southern railyard was laid out for the trains. at its peak the most common + economical way to move people + goods. the coster shop was beautiful in its simplicity. large open floor plan with plenty of room to operate on the large engines + freight cars that were being constantly used.

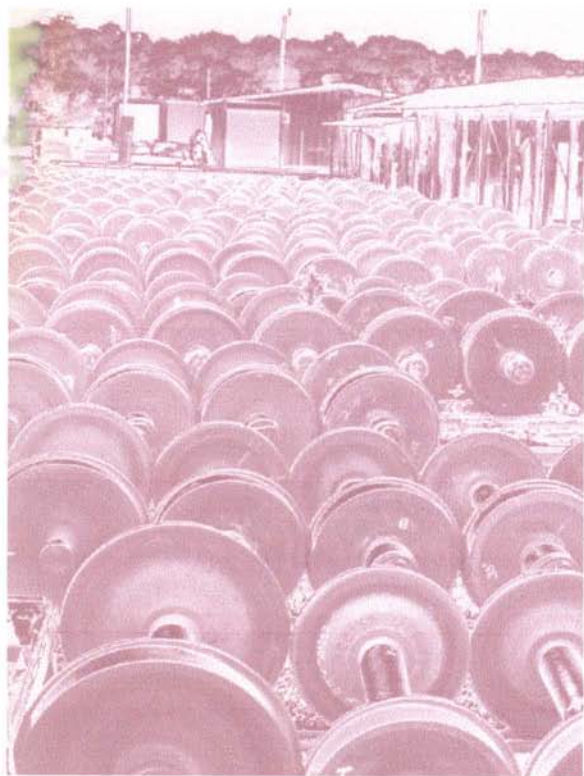
as times changed and america movede towards more oeivare modes odf transportation, the site lost much of its power. the events that enlivened the space ewased to have such a presence. eventually the coster shop had to close permanently. shutting the doors where for over half a century, man's ingenuity was tested and repaired.

the urban context surrounding the site has changed, no longer strictly a rail dominated area, various other industry, residential, commercial programs have emerged. the coster shop needs to be reconfigured so as to address the current needs of the area. the spaces no longer should serve a introverted, private ly held program. instead the building must now accept various different programing and must be conceptualized as a renovation of the entire area, with the coster shop now becoming a cultural center, engaging and involving the area.

in this century the automobile has replaced the train as the major means of transportation. I-275 was forced to go up and around the site, but now the site must respond to this interstae in the same way it was linked to the railroad.

the site is still a gateway, teh northern corridor, bringing people and goods into the city center. in this way the site is still engaged in its roots. it was a destination and a exchange srea. the cultural center must aspire to both of these qualities. to be a place for people to gather and serve as a gateway building for knoxville, welcoming visitors. the site + context must be redefined and reanalysised to enliven this event space. to once again have constant activity in the railyard, the program+layout will shift in response to the new parameters, but the character and esece of this dynamic area must be retained.

05.07 05.08

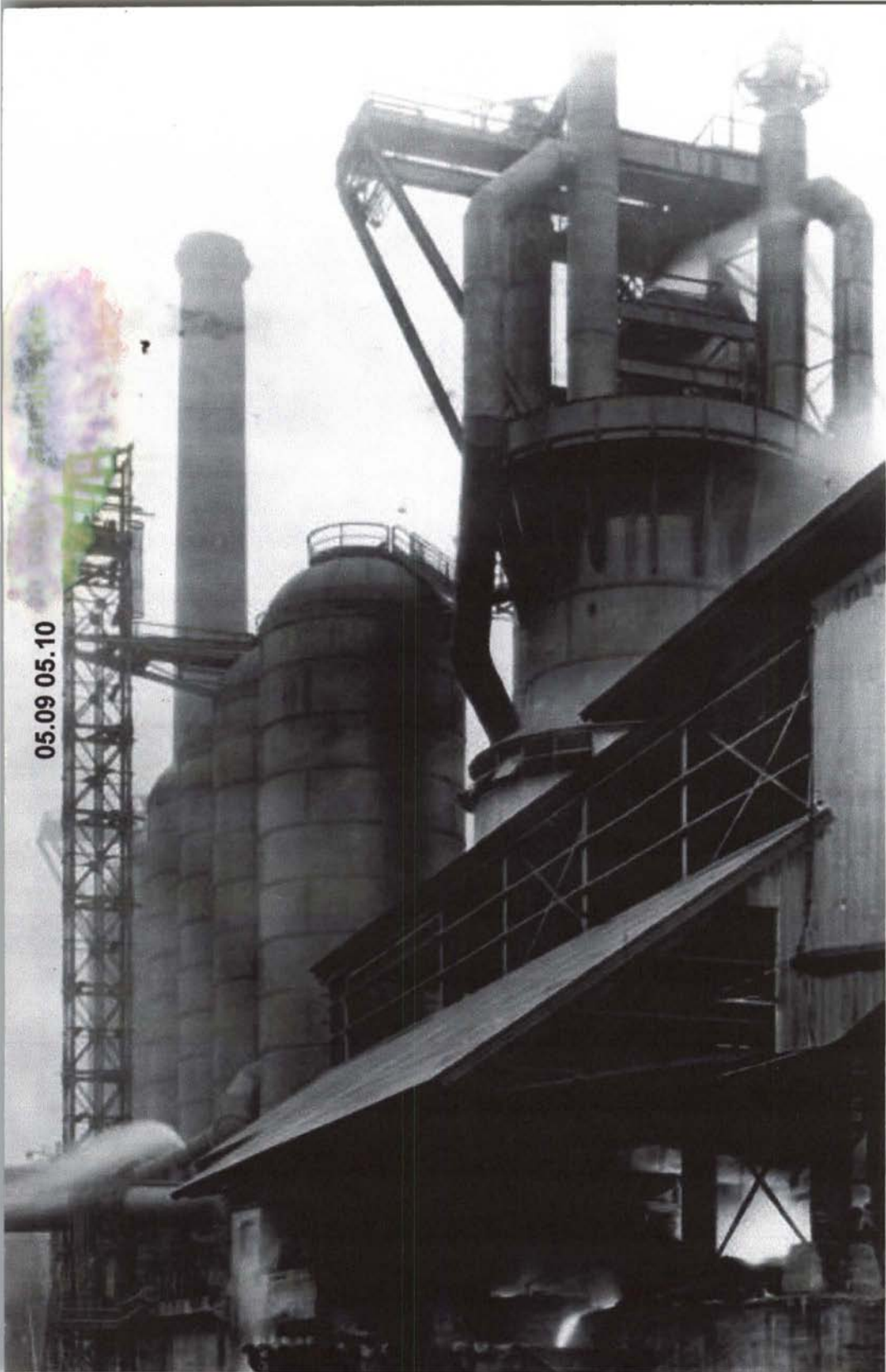


[re]construct.

in an adaptive reuse project, the relationship of old and new is always an important aspect. the site and existing buildings are rich with history and cultural significance. the intangible qualities of the space are in some respects more evident than the physical ones, both are important to the project. what must be determined is how will the new cultural center adapt and interlace with the old. the large space enclosed by steel and brick defines a large open space, but one that can be added to and modified without detracting from the shed like, industrial simplicity.

how to respect/preserve the building. the cultural center must alter significantly the space in order to re-engage the community, but must retain the essence of the coster shop. the construction reflected the program. the regular, repetitive bays make for clear structural concepts. the structure and skin are interdependent of each other but used together. the coster shop is a engineered structure, the cultural center must respond to these details. materiality, light, and enclosure all must be considered and ultimately the way the building was constructed must influence how the building is reconstructed.

05.09 05.10



precedents.

_____ urban
redevelopment of de kerkbrink.
artist space.
station square.

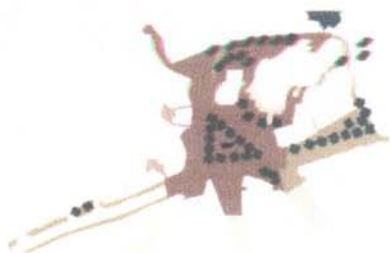
_____ building
multi media corridor.
port terminal.
educatorium.

_____ site
radical reconstruction
anderson + anderson.



[RE]search _____ an urban culture reevaluation

05.11 05.12





response:

the coster shop is sited in a large open site, tightly encompassed by various urban conditions. the railyard can be conceived as a modern urban square with various scales and modes. the coster shop and rail yard must attempt to do for this complex context what the redevelopment did for the DeKerkbrink and do it in something as simple as possible

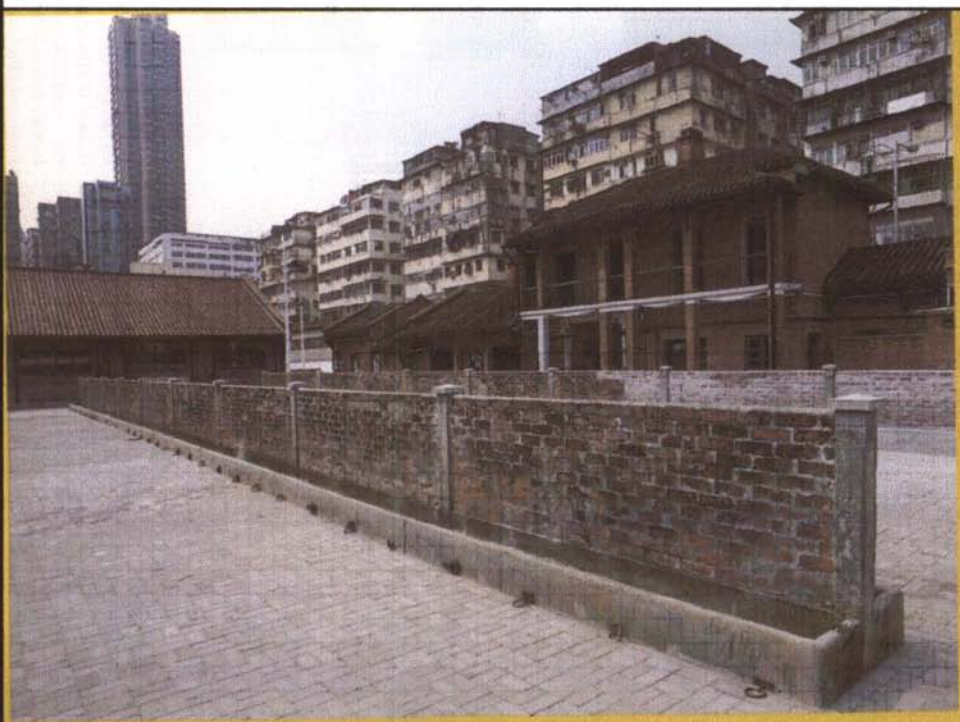
redevelopment of DeKerkbrink
hilversum, netherlands

ds lar
1997.1

search

an urban cu

05.13 05.14



research:

located in an old meat packing district, the artist spaces are an attempt by the chinese government to provide space for cultural events in a city where real estate is a precious commodity. After some renovation and effort by local artist, it is now a thriving artist community.

response:

more remarkable for its creative re use of the spaces than for any architectural merit. the artist spaces show how cultural activities can be used to re engage the surrounding connect and encourage local interac-

various groups

artist space

1999.2000

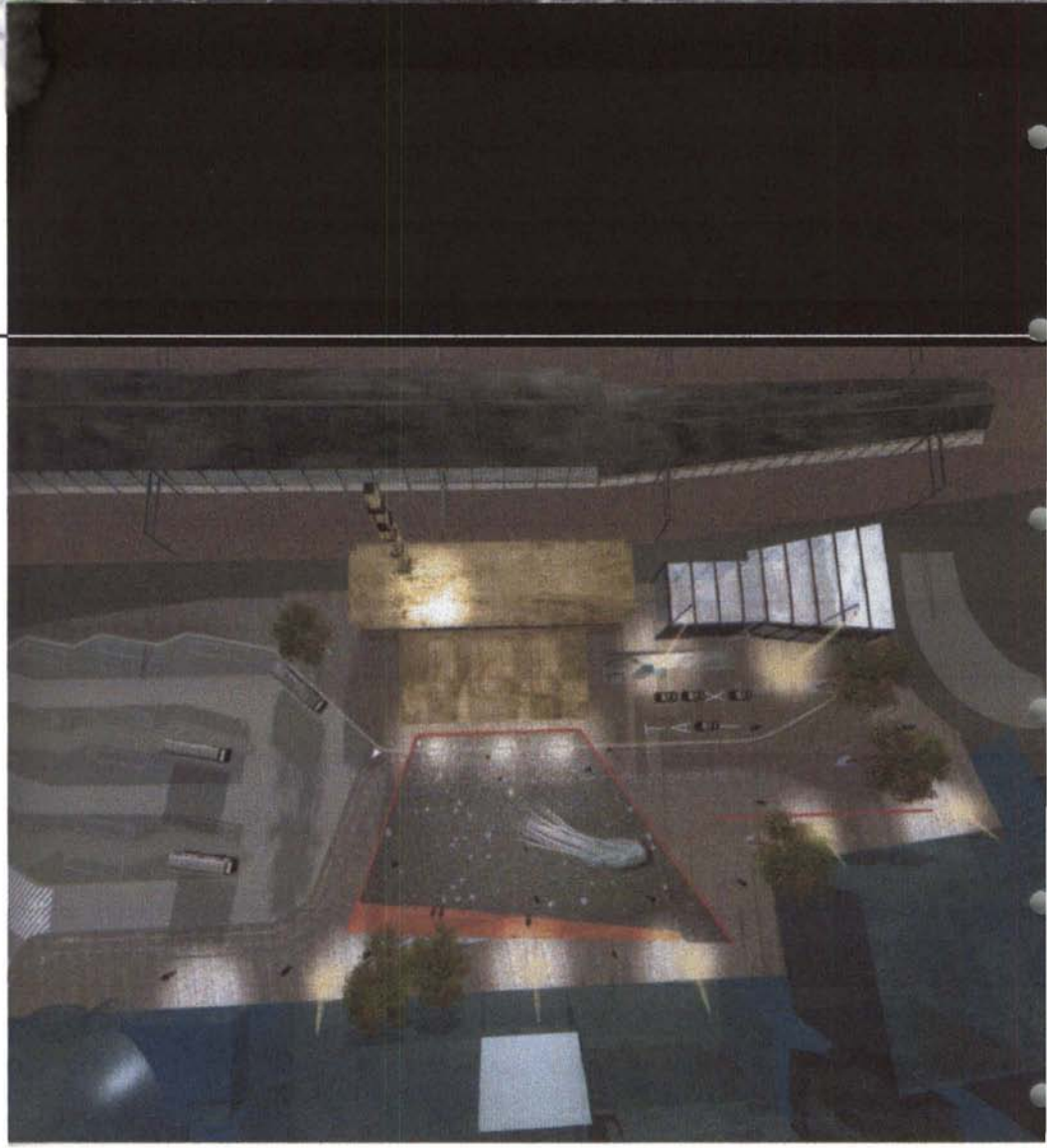
hong kong, china

[RE]search

an urba

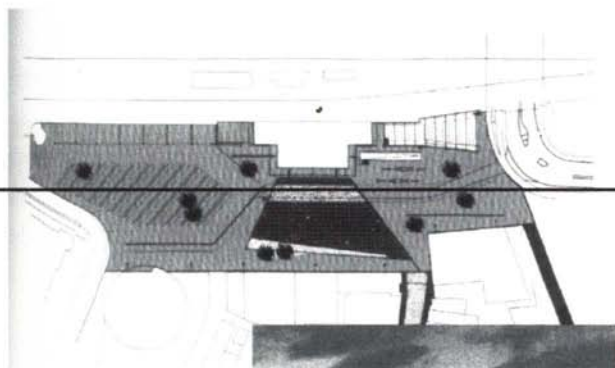
05.15|05.16

Urban Design



research:

constant movement. imparting order and calm amidst a flow of pedestrians, cyclists, buses and taxis was the goal in this square. it was achieved by placing a gently inclined, trapezium shaped plane in front of the main building. the plane consists of slate interspersed with illuminated epoxy flagstones and a horizontal jet of water



response:

the asymmetrical form and its slight elevation change creates a space that contrasts to the surrounding area. this has a two fold effect; it causes the circulation groups to cross and interact at the same scale of movement and it serves to bring the entire public space together, breaking down the scale of space.

the railway yard has similar complex circulation patterns. cars, trains, pedestrians, cyclist and commercial trucks. Henglo addresses the issue by bringing the scale down to the pedestrians and allowing the patterns to cross. similar investigations should be done with the railway yard, so that all different modes are engaged in a similar manner.

station square
henglo, netherlands
juulink+geluic
1997.2000

[RE]search

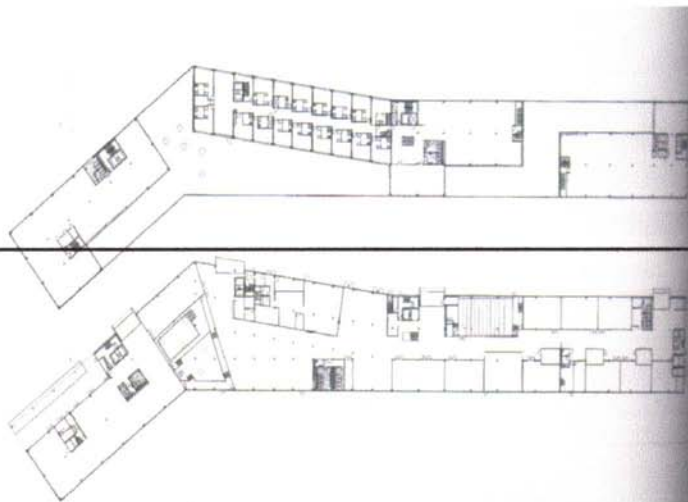
an urban culture revitalization

05.17 05.18



research:

the hotel zaltbommel; multi-media corridor occupies a typical interstate location. yet with its extreme simplicity and size this glass complex is not a typical interstate building. two office buildings and a hotel are linked by a continuous plinth at ground level. this contains a program of convention spaces, meeting rooms, restaurants and a fitness center. all these programs are adequately suited for the 24 hour economy of the interstate.



response:

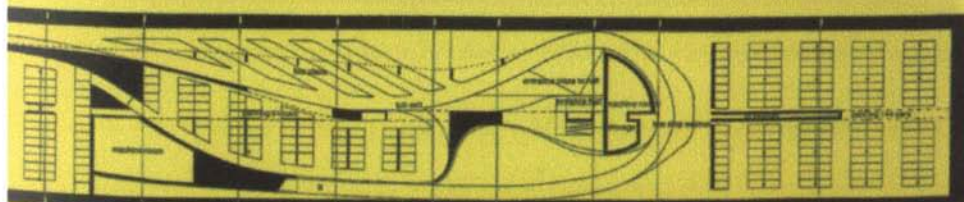
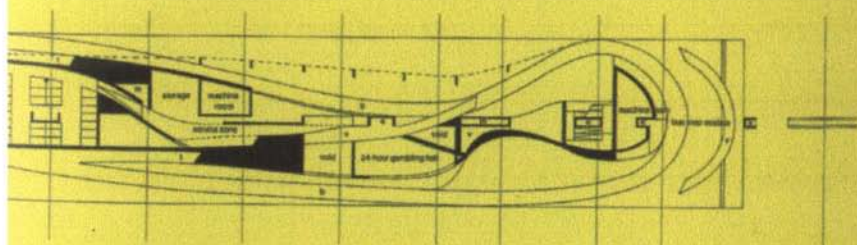
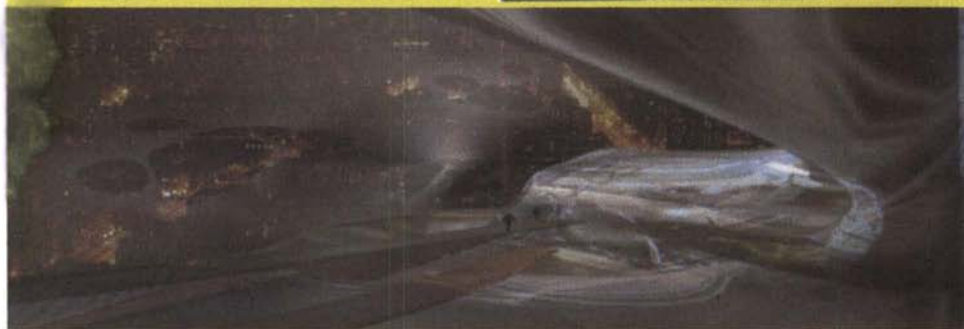
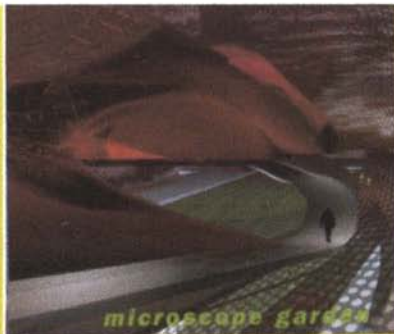
like the multi-media corridor, the coster shop is linked to a 24 hour economy, both by the interstate and the urban context. programatically it must reflect the needs of a 24 hour society. the center should provide a place of refuge for all its possible visitors, it must work on a 24 hour cycle.

juulink+geluic
1997.2000

multi-media corridor
henglo, netherlands

[RE]search

an urban culture revitalization



research:

constant flow of spaces and interchangeable program. circulation between different transportation zones are linked in the most direct and sineous manner.

response:

the large form closely mirrors the coster shop. circulation patterns and program spacing are the logics which dictate the design. similar studies and logic sets should be used when designing the culture center.

port terminal
yokohama, japan
ben van berkel
1997.2000

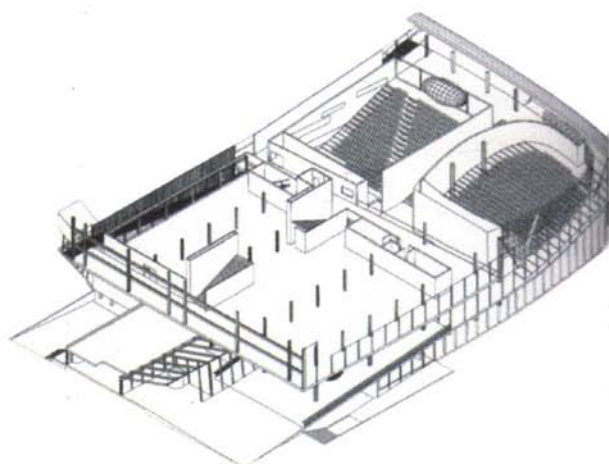
[RE]search [] an urban culture revitalization

05.21.05.22



research:

continuum of spaces. this office building was designed to promote interaction between employees. the architectural moment is the sloping floor plane which curves into the roof plane. this has the effect of creating a space which flows together, becoming one space.



response:

similar in some aspect of programming, the strongest idea that can be taken from the educatorium is the study of building design and human interaction. aspects which are key to the success of the project.

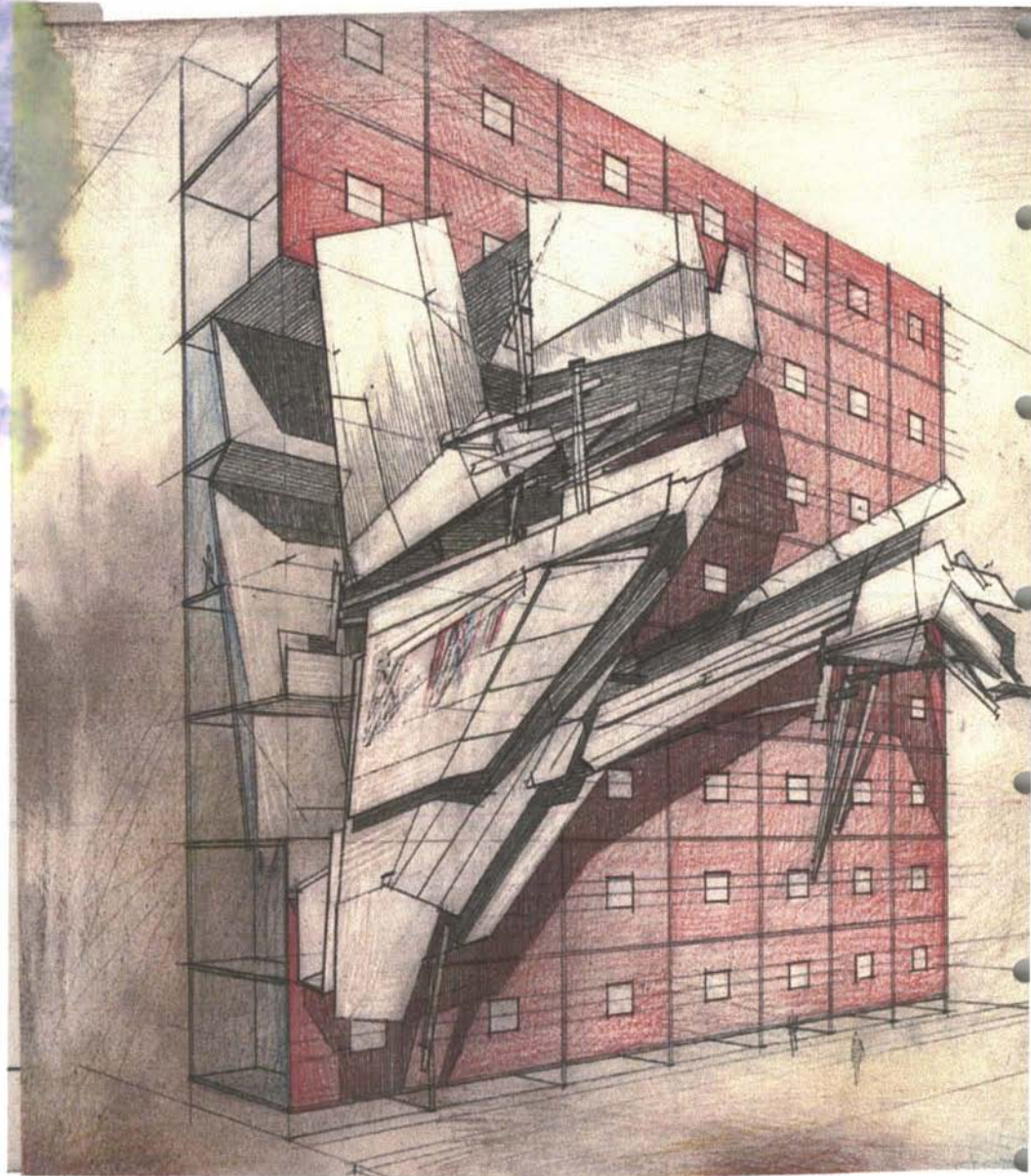
oma
1997.2000

educatorium
henglo, netherlands

[RE]search

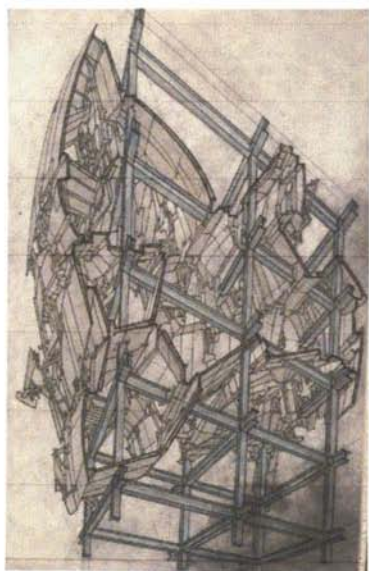
an urban culture revitalization

05.23 05.24



research:

rebuiding by redefining and juxtaposition of new and old. not using traditional renovation techniques but by questioning habitable spaces and how they can be reconceived.



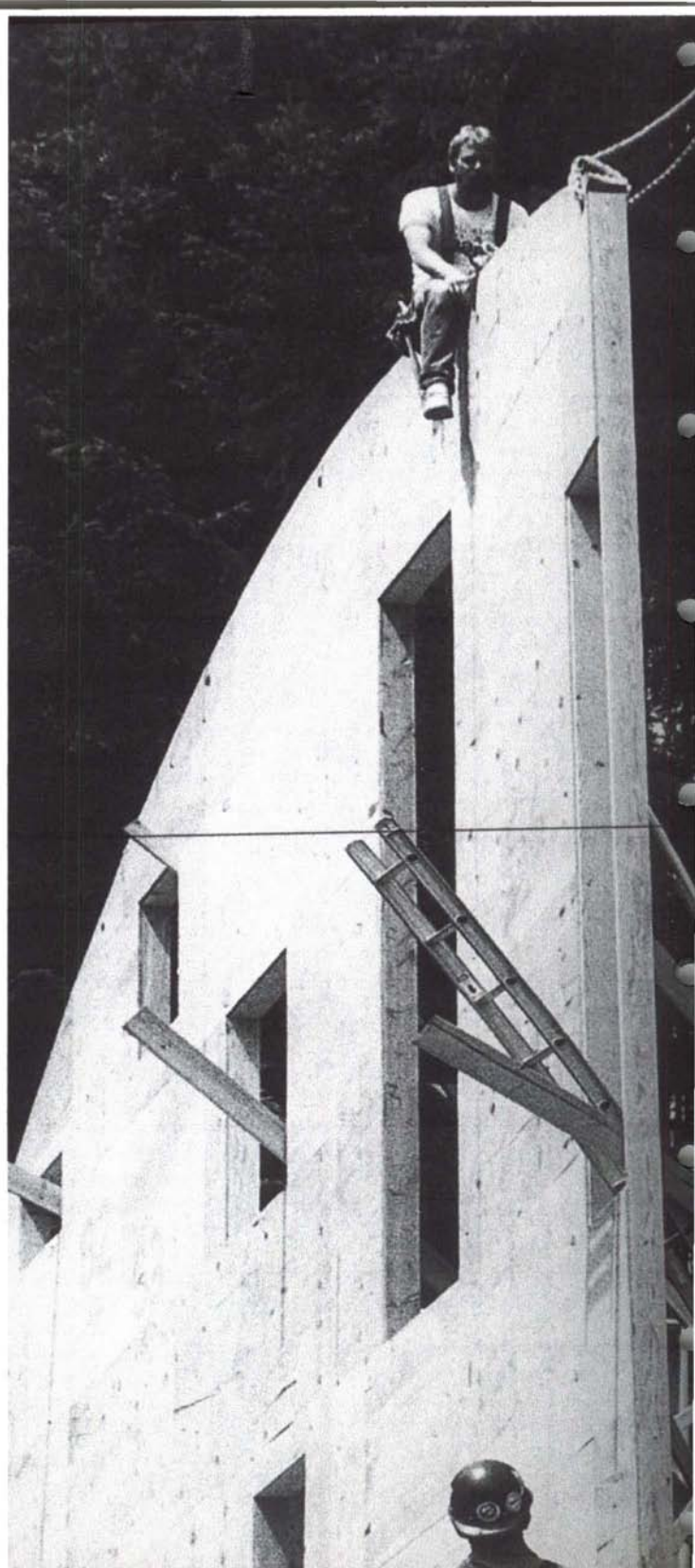
response:

the cultural center spaces will achieve unity with the historical structure by juxtaposition. the spaces will not try to blend but attach themselves to the host building.

radical reconstruction
various locations
lebbius woods
1994, 1997

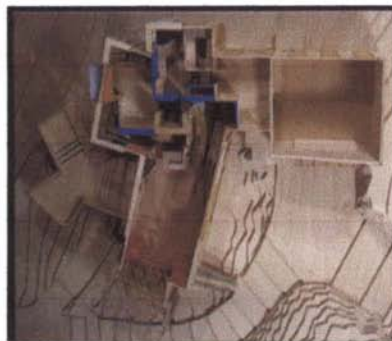
[RE]search

an urban culture revitalization



research:

quality and attention to detail. anderson+ anderson is a design build firm which designs a project on all levels, from the site development to the bolt connections. mostly using local materials they experiment and innovate as they build. the firm constructs elegantly crafted buildings.



response:

for the design solution to be complete the structure and materiality must be worked out. detailed connections, especially with regards to the old and new structures

collected works anderson + anderson
washington. usa 1994.2001

[RE]search

an



direct

01program introduction

02spatial analysis

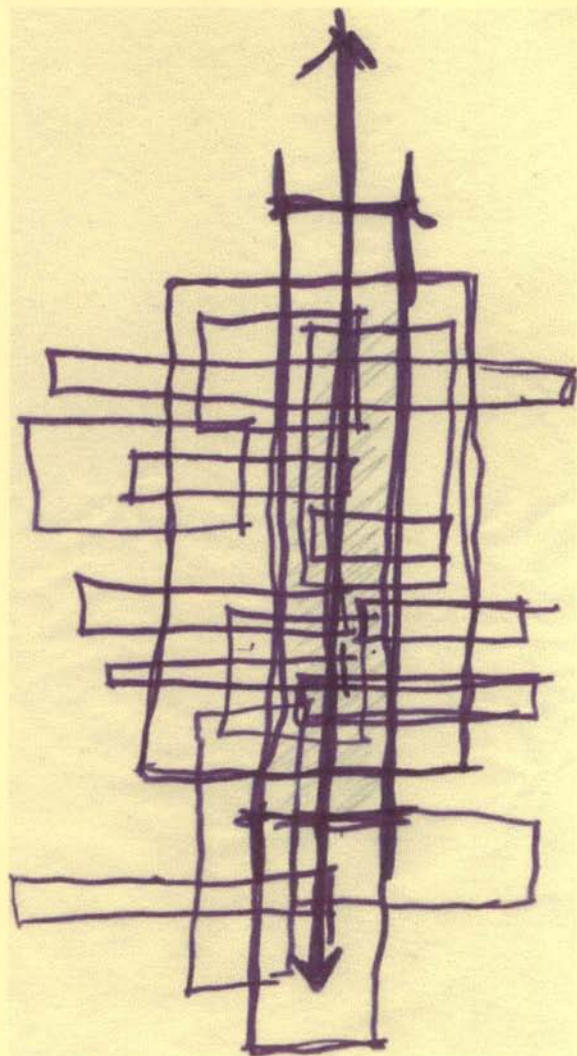
03site analysis

04context analysis

05issue analysis

06design direction

06.03 06.04



city

1. [re]use.
intersection
(dis)connection
threading
island
insertion

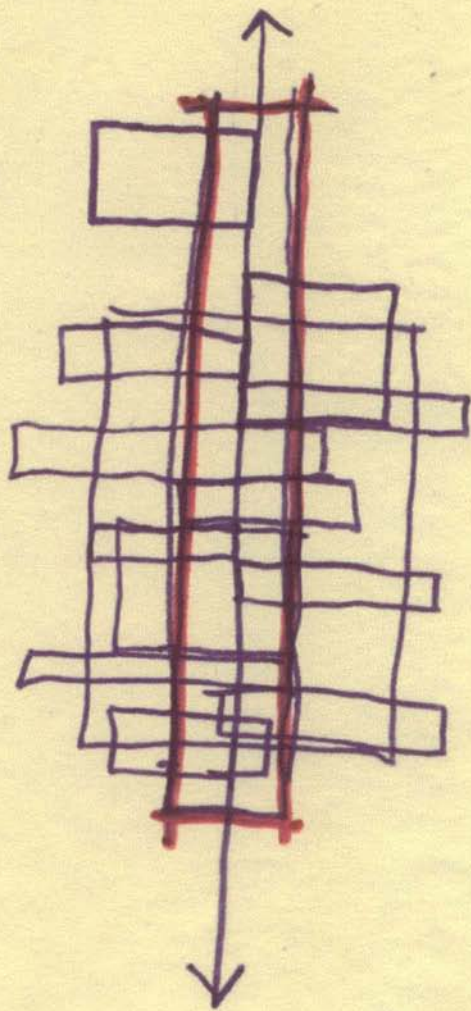
site

2. [re]configure.
gathering
nexus
night.day
refuge

building

3. [re]construct.
old.new
structure.skin
interlace
adaptation
parasitic.leech
build.preserve

06.07.06.08



bibliography

