The South Side: An Urban Analysis and Design Portfolio

Urban Design Laboratory

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An Urban Analysis and Design Portfolio for the SouthSide Community of Pittsburgh, Pennsylvania

The South Side

completed by the fifth year architecture students of Carnegie Mellon University -- Fall 1991
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This book is a compilation of research and design by students of the senior architecture class at Carnegie Mellon University. The projects illustrated herein were developed as part of two urban design studios. They represent the results of an educational process aimed at teaching accountable design in regards to an existing urban fabric. A great deal of time and effort was spent in order to provide solutions that were based on the real qualities of the environment and the community, yet as with most educational models some issues were idealized to allow for an efficient exploration of the process. As a result, the solutions included herein should not be viewed as professional strategies for development, but rather as a source of inspiration for further study and future planning.

The booklet is divided into sections with consideration to the order in which they were originally completed. The first stage in our process was a response to the RFP (request for proposal) distributed by the South Side Local Development Company. For the purpose of this study the students composed four simulated design firms, each one offering its own response. The next stage involved a comprehensive analysis of the existing qualities of the South Side community. This work was accomplished collectively by the entire group. All the stages that followed were accomplished by the separate design firm groups. The first stage following the analysis was to develop an urban design program, a framework of priorities and intentions. This then became the basis either an overall urban design scheme for the existing area of the South Side or for a design scheme for the LTV Steel site. The last stage of the process involved each student taking a portion of his or her group's design scheme and developing this area to a greater level of detail, of designing an intervention.

The first two stages of our process are illustrated under the headings Response to RFP and Analysis because at these stages the groups were working towards equivalent ends. For the last three stages the process is illustrated under the names of each group in order to illustrate the process of their individual solutions.

The professors and students listed below offer this work to the South Side community in appreciation of the time and energy contributed to this project by them and members of the SSLDC.

Professor Robert Coles
George Schevon
Tim Fleming
Rebecca Gordon
Steven Shaw
Aron Temkin
Lisa Wang
Spencer Welton
Regis Zapatka

Professor David Lewis
Steve Auterman
Louis Faassen
Douglas Franz
Dina Fredrickson
David Goff
Eric Heiman
Robert Kendall
David Scott
Li-Hang Wang
Peter Vonderlieth
Introduction

Related Newspaper Articles

*The South Pittsburgh Reporter*

*This article was written in September at the outset of this project.*
CMU students will study South Side’s riverfront

South Side Local Development Company (SSLDC) and the architecture department of Carnegie Mellon University (CMU) recently announced plans to conduct an Urban Design Study for South Side riverfronts.

The actual study, which will be conducted by the fifth year architecture students of CMU, will show, primarily through illustrations, possible riverfront treatments for the South Side from 9th Street to the end of the LTV Property.

According to Rebecca Flora, executive director of the SSLDC, "The South Side community recently has been faced with many issues which question the appropriate direction for future riverfront development here."

"The formation of the Riverfront Study Committee of the South Side Planning Forum earlier this year is evidence of the growing interest in riverfront development in the neighborhood."

"The South Side Riverfront Plan, set up by the Riverfront Study Committee, should give the students a direction in which to go," says Christine Comfort, co-chairperson of the committee.

The primary objectives for the Urban Design Study are: to use the South Side Riverfront Park as one "anchor" for urban design proposals, including uses, access, landscaping, etc.; to eventually relocate and redevelop industrial uses and to study how the impact of the railroad can be ameliorated without creating a negative impact on the community.

Also, to integrate new developments into the inherited community; to resolve existing and new traffic, parking, and pedestrian access problems and to propose a series of short-term and achievable "interventions," including streetscapes.

The study will be conducted during the fall semester of 1991 and presented to the South Side Planning Forum and the community upon completion.
They were serving pie in the sky on the South Side, and it sure looked good.

Riverfront parks with ribbons of pedestrian trails, riverfront housing for families and senior citizens, new schools and public squares — even a sculpture commemorating the steel industry.

Those are the visions of about 20 fifth-year architecture students from Carnegie Mellon University who were asked to come up with ideas for the South Side riverfront, including 110 acres owned by the LTV Corp.

Pragmatic concerns such as who will develop the projects — and where the money will come from — weren't discussed at a meeting last night of the South Side Planning Forum at the Brashear Association.

"I'd be foolish to suggest that what we've seen here tonight is practical in the real world," said Jack Johnston, director of real estate development for the South Side Local Development Co.

But, he said, "good development ought to start with good visions."

To that end, Johnston released the results of a Neighborhood Assessment Study done at the request of LTV Corp. The purpose of the study, partly funded by a $15,000 grant from LTV, was to find out what the South Side community wants in redeveloping the former steelmaking site.
Along with development, he said, the South Side wants riverfront access, establishment of a gateway or portal to the neighborhood at the eastern end of the site, reuse of the hot metal bridge over the Monongahela River and a streetscape along East Carson Street that is compatible with the existing commercial district.

Johnston said the next step should be the creation of a task force made up of city, South Side and LTV representatives to help LTV develop a master plan for the site.

Harry Henshaw, LTV's director of real estate development, said the study "will be helpful in how we approach redevelopment of the site. The only caveat we'll put on developers is that they work with the community."

About half of the LTV site has been cleared; buildings on the other half will be demolished within 18 months.

The architecture students were led by Professors David Lewis and Robert Coles through an urban design study of the riverfront as a class project.

Among their suggestions was removing truck and through traffic from Carson Street by building a road next to the Conrail tracks that divide the South Side flats and slopes.

The students' drawings will be included in the final draft of the study, to be published next month.

This article was written following the final presentation of urban designs and interventions by each of the studio design groups. The meeting was held on the evening of December 10th, 1991.
URBAN DESIGN PLAN FOR SOUTH SIDE'S RIVERFRONT
REQUEST FOR PROPOSALS
September 13, 1991

The South Side Local Development Company is a broad based, non-profit corporation whose purpose is to promote the economic revitalization and historic preservation of Pittsburgh’s South Side. The SSLDC independently initiates and facilitates responsible and quality business, residential, recreational and industrial development in all areas of the community. The SSLDC also administers the Main Street on East Carson Street program, and the South Side Summer Street Spectacular, an annual community-wide festival.

The South Side community has recently been faced with many issues which question the appropriate direction for future riverfront development in South Side. In response to this, the SSLDC, as technical advisor to the South Side community, plans to undertake an Urban Design Study for a portion of South Side’s riverfront from Ninth Street to the end of the LTV Property. The SSLDC is therefore, requesting proposals from qualified individuals (consultants) to conduct this study and report the findings to the SSLDC and to the community.

SOUTH SIDE HISTORY AND BACKGROUND

The South Side was originally composed of a number of small communities, Birmingham, East Birmingham, Ormsby, South Pittsburgh and Monongahela, which were annexed to the City in 1872. Most of the flats and slopes were originally owned by John Ormsby, whose son-in-law, Nathaniel Bedford, developed a town in the area around Bedford Square.

The area’s economy was based in heavy industry and manufacturing. Because of its proximity to the river and an abundant coal supply, Birmingham became an active industrial center. In the early 1900’s, Birmingham had seventy-six glass factories in operation. These declined after 1860 due to the increase in taxes and the demand for land that accompanied the growth of the steel industry.

The original settlers in the area were Irish and German. With the 1880’s, eastern and southern European immigrants began to arrive. Today, the South Side reflects a rich ethnic heritage which includes residents from Serbian, Slovak, Polish, Russian, Ukrainian backgrounds, as well as a number of other ethnic groups.

The 18-block East Carson Street Business District was selected in 1985, for participation in the National Trust for Historic Preservation and the National Main Street Center’s Urban Demonstration Project. Main Street on East Carson Street was then formed to manage this project. Since it’s inception, the Main Street on East Carson project has led the way for
economic revitalization of Pittsburgh's South Side, an area severely impacted by the fall of the steel industry. Between 1985 and 1990, 110 new businesses started and 28 existing businesses expanded, while only 52 closed in the East Carson Street business district. A total of 131 facade renovations and 64 building rehabilitation projects have also aided in the neighborhood economic development. This economic development has led to the creation of the 373 new jobs on the South Side.

PURPOSE

The two primary goals for the proposed Urban Design Study are:

1. to develop an urban design plan for South Side's riverfront from Ninth Street to the Eastern edge of the LTV property; and,
2. to show the relationship and impact of the Urban Design Study on the South Side community.

OBJECTIVES

The primary objectives for the Urban Design Study are as follows:

1. to use the South Side Riverfront Park as one "anchor" for urban design proposals, including uses, access, landscaping, etc;
2. to eventually relocate and redevelop industrial uses;
3. to study how the impact of the railroad can be ameliorated;
4. to integrate new developments into the inherited community;
5. to resolve existing and new traffic, parking, and pedestrian access problems; and,
6. to propose a series of short-term and achievable "interventions", including streetscapes.

CLIENT

The SSLDC will serve as community liaison and client for the consultant. However, the consultant will also be accountable to the South Side community and the following organizations which the SSLDC serves:

South Side Community Council is a non-profit organization created to promote, improve, further advance and develop a physical, cultural, economic and social condition on the South Side. The South Side Community Council originated in the 1960s.
South Side Chamber of Commerce was organized in February, 1949. Its general purpose is to foster, promote and encourage business growth, commercial activity, economic activity and economic development in the South Side - they currently have 200 members. The South Side Chamber work led to the establishment of the South Side Local Development Company in 1976. The Chamber and the SSLDC, with the public and private sectors have worked together to have the commercial section of the South Side declared a National Historic District. The South Side Chamber of Commerce also serves as an information referral center for business people and visitors to the South Side Community.

South Side Planning Forum (established in 1985) is a community association made up of members from the South Side Community Council, the South Side Chamber of Commerce, the South Side Local Development Company, the Friends of the Library, the South Side Arts, Antiques and Crafts Association, the Brasher Association and representatives from religious, educational and health institutions of the South Side. Its purpose is to aid in the establishment of a community plan for the economic development of the South Side.

The Forum has formed a Riverfront Committee for the purpose of preparing a South Side Riverfront Plan. In addition to periodic meetings with the SSLDC, presentations will made to this Committee as a source of community input, prior to any community-wide presentation.

**RESPONSIBILITIES OF CLIENT**

The SSLDC will be responsible for the following:

1. to make any existing maps, studies, materials available to the consultant;
2. to schedule meetings with Riverfront Committee or community-wide meetings;
3. to be available to meet with the consultant periodically to review progress to-date; and,
4. to assist the consultant in securing funds for the final printing of study document;
Request for Proposals

Rebecca Flora
South Side Local Development Company

PROPOSAL SUBMISSION REQUIREMENTS

The consultant should submit the following which will serve as the basis for awarding of contract:

1. qualifications of study participants, including past education and experience;
2. approach to the study, including a detailed scope of services;
3. work program or schedule for completion of the study, including target dates for progress reviews with the SSLDC, and presentations to the Riverfront Committee and the Community at-large;
4. estimate of hours to complete each task defined in the work program; and,
5. compliance with minority and women participation in project.

The consultant’s proposal and any questions should be directed to:

Ms. Rebecca L. Flora, Executive Director
South Side Local Development Company
1417 East Carson Street
Pittsburgh, PA 15203
(412) 481-0651

RIGHTS OF REFUSAL

The SSLDC reserves the right to reject any and all proposals submitted in response to this request for proposals.
Request for Proposals

Rebecca Flora

South Side Local Development Company

Introduction

SOUTH SIDE
Pittsburgh, PA

HISTORY

The South Side was originally composed of a number of small communities, Birmingham, East Birmingham, Ormsby, South Pittsburgh and Monongahela, which were annexed to the City in 1872. Most of the flats and slopes were originally owned by John Ormsby, whose son-in-law, Nathaniel Bedford, developed a town in the area around Bedford Square.

The area's economy was based in heavy industry and manufacturing. Because of its proximity to the river and an abundant coal supply, Birmingham became an active industrial center. In the early 1900's, Birmingham had seventy-six glass factories in operation. These declined after 1860 due to the increase in taxes and the demand for land that accompanied the growth of the steel industry.

The original settlers in the area were Irish and German. With the 1880's, eastern and southern European immigrants began to arrive. Today, the South Side reflects a rich ethnic heritage which includes residents from Serbia, Slovak, Polish, Russian, Ukrainian backgrounds, as well as a number of other ethnic groups.

COMMUNITY ORGANIZATIONS

SOUTH SIDE LOCAL DEVELOPMENT COMPANY is a broad based, non-profit corporation whose purpose is to promote the economic revitalization and historic preservation of Pittsburgh's South Side. The SSLDC independently initiates and facilitates responsible and quality business, residential, recreational and industrial development in all areas of the community. The SSLDC also administers the Main Street on East Carson Street program, and the South Side Summer Street Spectacular, a annual community-wide festival.

SOUTH SIDE COMMUNITY COUNCIL is a non-profit organization created to promote, improve, further advance and develop a physical, cultural, economic and social condition on the South Side. The South Side Community Council originated in the 1960s.

SOUTH SIDE CHAMBER OF COMMERCE was organized in February, 1949. It's general purpose is to foster, promote and encourage business growth, commercial activity, economic activity and economic development in the South Side - they currently have 200 members. The South Side Chamber work led to the establishment of the South Side Local Development Company in 1976. The Chamber's and the SSLDC, with the public and private sectors have worked together to have the commercial section of the South Side declared a National Historic District. The South Side Chamber of Commerce also serves as an information referral center for business people and visitors to the South Side Community.
SOUTH SIDE PLANNING FORUM (established in 1985) is a community association made up of members from the South Side Community Council, the South Side Chamber of Commerce, the South Side Local Development Company, the Friends of the Library, the South Side Arts, Antiques and Crafts Association, the Brasher Association and representatives from religious, educational and health institutions of the South Side. Its purpose is to aid in the establishment of a community plan for the economic development of the South Side.

1990 DEMOGRAPHICS

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<tr>
<th></th>
<th>Total Population</th>
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<tr>
<td>SS Slopes</td>
<td>5,672</td>
<td>2.2%</td>
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<td>SS Flats</td>
<td>6,177</td>
<td>2.7%</td>
<td>3,572</td>
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<tr>
<td>City</td>
<td>369,879</td>
<td>27.9%</td>
<td>170,159</td>
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KEY PROJECTS

MAIN STREET ON EAST CARSON STREET: The 18-block East Carson Street Business District was selected in 1985, for participation in the National Trust for Historic Preservation and the National Main Street Center's Urban Demonstration Project. Main Street on East Carson Street was then formed to manage this project. Since its inception, the Main Street on East Carson project has led the way for economic revitalization of Pittsburgh's South Side, an area severely impacted by the fall of the steel industry. Between 1985 and 1990, 110 new businesses started and 28 existing businesses expanded, while only 52 closed in the East Carson Street business district. A total of 131 facade renovations and 64 building rehabilitation projects have also added in the neighborhood economic development. This economic development has led to the creation of the 373 new jobs on the South Side.

EDWARDS COURT TOWNHOUSES: The Edwards Court Townhomes project represents the SSLDC's first development project. At a total cost of $1.1 million the project includes new construction of ten townhomes which will be completed in two phases. Construction began in March, 1991, on the first phase with an anticipated completion date for the entire project by Fall, 1991. The units will be moderately priced at approximately $80,000 which allows eligible buyers to apply for Pittsburgh's low interest loan program funds for home buyers. The URA's Site Grant and Construction Loan funds, along with foundation funds and conventional financing have provided the SSLDC with the financing package necessary to construct these homes at a price which is affordable for South Side residents.

EAST CARSON STREET PUBLIC SPACE IMPROVEMENTS: Plans are underway for the implementation of Public Space Improvements along East Carson Street Business District corridor. Phase I of this work will include replacement of sidewalks and curbs, installation of underground utilities and light poles, and street repairs between 10th and 17th Streets. The City has committed $400,000 of CDBG funds to the total $875,000 cost for this first phase. The remaining funds will be sought locally through the utilization of a Business Investment District assessment. This assessment will be marketed to property and business owners by the South Side Local Development Company to seek participation of at least 75% of the owners affected prior to the enactment of city legislation for the formation of this District. Construction is anticipated to begin in 1992.
**LTV STUDY:** The South Side Local Development Company, in response to a request from the LTV Steel Corporation, is undertaking a study to identify and evaluate the community concerns and objectives in relation to the possible redevelopment of the LTV Mill Site. The focus of the study will be the LTV Mill site located on the bank of the Monongahela River to the north of East Carson and to east of 24th Street. Depending on whether portions of the mill are to be reactivated, the area in question could range from 40 to 100 acres.

**MACKINTOSII-HEMPHILL:** The South Side Local Development Company is serving as technical advisor and advocate for the South Side Community in their efforts to preserve the Mackintosh-Hemphill buildings. The South Side Planning Forum nominated the buildings for local historic designation based on their historical and architectural value, and their contribution to the National Historic District which they are located within. The SSLDC has prepared a compromise development proposal which allows for preservation and development of the historic buildings, and construction of the flex-office space development proposed for this site. The proposed flex-office development intends to replace the historic buildings with 30 parking spaces.

**NEVILLE ICE RINK:** With its completion in August of 1990 the Neville Ice Area is the only enclosed ice skating facility in the city of Pittsburgh that is open to the public. The Neville Ice Arena was the effort of the Neville International Development Corporation which received $75,000 of CDIF loan funds from the SSLDC. The total cost of the project was $750,000.

**BIRMINGHAM PLAZA:** The SSLDC assumed the role of project manager in the fall of 1990 for the South Side Planning Forum's Birmingham Plaza Development. The project involved the construction of a paved, landscaped and lighted plaza at the corner of 12th Street and East Carson, a focal point of the neighborhood. The project was completed in 1991 for a total cost of $120,000.

**BIRMINGHAM TOWERS OFFICE AND TECHNOLOGY CENTER:** The Birmingham Towers Office and Technology Center, formally the Gimble's Warehouse, located at 21st and Wharton Streets, was completed in the fall of 1990. The total cost of the project was $7.5 million. It was financed through a $5.5 million construction loan from Union National Bank, a $250,000 loan from the Urban Redevelopment Authority and a $600,000 grant through the State's Industrial Communities Action Program (ICAP). The South Side Local Development Company helped to secure the URA loan and provided technical assistance to the developer, Gustine Company.
Request for Proposals

Rebecca Flora

South Side Local
Development Company

Introduction
Responses to the RFP

Timetable
The time table at left was adopted by all the design groups to direct the design process through several phases of development.
Responses to the RFP

Archisynth Associates

Dina Fredrickson
Doug Franz
Eric Heiman
Rob Kendall
David Scott
Ms. Rebecca L. Flora, Executive Director
South Side Local Development Company
1417 East Carson Street
Pittsburgh, PA 15203

Dear Ms. Flora:

We are extremely honored to have received your offer to submit a proposal for the Urban Design Plan for the South Side's waterfront. With our firm's emphasis on the revitalization, growth, development and expansion of the communities in the Pittsburgh area, such a plan is one which is of extreme interest to our firm. Our very best analysis and design teams have freed up their time to aid in the drive to revitalize the South Side community and waterfront.

For the past two weeks we have had our team on the site, interacting with the community, listening to their needs and interests. Full client, community and architect interaction will enhance the success of this project and with much care we have emphasized this throughout the processes of our proposal. We would like to stress that Archisynth Associates is an equal opportunity employer, and is therefore consistently conscious of, and attentive to, the public's needs.

Yours Truly,

Dina C. Fredrickson, AIA
Project Manager

DCF/def
Introduction

Pittsburgh's South Side represents a cultural and historical background that helps to unify and integrate its inhabitants and structures into a thriving community. Unfortunately, since the decline of industry in the Pittsburgh area, the riverfronts have been left vacant, with little sense of urban renewal. Establishing an urban design plan will help to link the South Side to the Monongahela River, and rejuvenate a setting for economic and social stability. The location of the South Side Park to the west of the Birmingham Bridge provides a starting point for linking the community to the river by using specific urban elements, but the potential was only realized on a small scale. With over half of the old LTV industrial site being cleared and the other half under way of demolition, an opportunity has been formed to truly develop a waterfront that enhances and promotes the community of the South Side. These two elements are only a portion of the possible locations and methods for reestablishing the riverfront and revitalizing the South Side. Once the waterfront has become part of the community, conservation of historic buildings and characters can flourish and reestablish the South Side as a major cultural center in Pittsburgh.

As a design firm based in Pittsburgh, Archisynth Associates has seen the recent changes in Pittsburgh's urban landscape, specifically the riverfronts. The opportunity is at hand to produce a strong urban design for one of the most frequented neighborhoods in this city. South Side's culture and heritage demands access to its riverfront, and we want to provide the best solution for this process. We have been consultants on many redevelopment plans outside Pittsburgh, specifically in the Washington D.C. area, and have the experience of confronting riverfronts. Our work in Georgetown helped to capture the original character of the neighborhood while maintaining residential and commercial rights of way. The South Side represents a fresh opportunity to rediscover the love of a community and its heritage in the landscape, and Archisynth Associates has the perspective to realize that vision.

We see this project as the model for redevelopment of Pittsburgh's waterfront communities, as a link and guideline for enhancing community and landscape. Archisynth Associates would like to develop these parameters through a coherent and comprehensive urban design for the South Side.
Scope of Services

Archisynth will provide a four phase process of in-depth study and urban design generation as a method of developing a comprehensive and coherent plan for the South Side riverfront. These four phases are as follows:

- Analysis
- Urban Design
- Components
- Presentations

Analysis

There are two major parts that affect the collection and content of relevant information in the analysis phase, specifically community inputs and current technical data concerning the South Side's existing and historical conditions.

Community inputs are specifically the goals, issues and priorities established by the residents of the South Side. Questions and interviews will be directed toward both community groups and individuals in the area to develop a broad information base about the interests and concerns of the South Side inhabitants. Information will be gathered by asking such questions as: What do you like best about South Side? What do you feel could be done to make the South Side better? and possibly, How do you use your community? Issues concerning current local security standards and public open spaces will also be addressed.

Technical data will be compiled by analysis of existing conditions and policies that affect South Side. The Major issues to be studied are as follows:

- land use data
- public open spaces
- geometric analysis
- circulation and parking
- infrastructures
- demographics
- zoning
- topography
- security statistics
- real estate values
- historical documentation
- density

This analysis will establish a foundation upon which a synthesis can be made between the technical and policy demands of the South Side in an attempt to make quality recommendations for urban design. This information will be presented to SSLDC and other community groups at the end of the phase.
Urban Design

The material gathered in the analysis phase will be the foundation for the urban design phase. This phase will consist of the following three major parts:

- creation of an urban design program
- generation of two or more alternative urban design schemes
- presentation of the urban design schemes to the SSLDC and other community groups

Components

The components phase will focus on the development of individual pieces of the urban design schemes into a series of architectural or design components. This phase will address the potentials of both public and private development along the riverfront and the impact of such development on the overall urban design schemes. Examples of these components could include the following:

- transformation of the railroads into a public recreation path along the river
- relocate and/or redevelop poorly placed industrial uses along the river
- improve public access to the riverfront
- provide a framework for controlling future development along the waterfront

The components phase will also terminate in a comprehensive presentation to the SSLDC of all relevant material produced during the phase.

Presentation

The presentation phase requires the compilation of all the work completed in the previous phases into a final format to be used for public review. The presentation will consist of two parts:

- a published report
- a formal public presentation to SSLDC and the community
Response to the RFP

Archisynth Associates

ARCHISYNTH Associates Architecture and Urban Design
5000 Forbes Ave. Pittsburgh, PA 15213
(412) 268-2369 FAX (412) 268-3456

Timetable

Archisynth Staff

Principal
Associates/Project
Manager
Professional Staff
Draftpersons

Consultants

Market Economist
Traffic Engineer
Subsoils/Geologic Expert
Historian
Hydraulics Engineer
Landscape Architect

Response Analysis Urban Design Components Presentations
9/16 9/23 10/16 11/14 11/25 12/2,4,6
response to RFP due Presentation to Community Presentation to Community Thanksgiving Presentation to Community
**Personnel**

**DAVID B. SCOTT FAIA:** Principal  
Dave was the valedictorian of his graduating class at Carnegie Mellon, and went on to receive a masters in Real Estate and Development from Columbia University. He is currently a registered architect practicing in the city of Pittsburgh. He has worked on several projects in the Pittsburgh area; South Side Car Showroom, Downtown Movie theater, the Warhol Art Library on the North Side, and several small community improvement projects. He is also involved in many community help boards and currently resides as the head of the community board to improve Homestead.

**DINA C. FREDRICKSON AIA:** Associate and Project Manager  
Dina was born and raised in Pittsburgh. She came to Archisynth in 1980, and has worked on most of the urban renewal projects since then, including the North Shore development. She was valedictorian of her graduating class of the Art Institute of Pittsburgh in 1977. She went on to receive her masters in Urban Design at Carnegie Mellon and became a registered architect in 1984. She currently resides in the South Side and has been a leader in her community for the past seven years.

**DOUGLAS E. FRANZ AIA:** Associate  
Doug joined Archisynth in the 1978. He brings his experience from New York City where he was born and raised. He received his B.A. in Architecture and his masters in Real Estate and Development at Columbia. He was on the city planning commission of Queens for two years and on the city board of New York City for five. Since he has been with our firm, he has also worked on most of the Urban Design projects, as well as the renovation of the Lawrence Paint building, and the South Side Car Showroom.

**ERIC F. HEIMAN AIA:** Professional Staff  
Eric was born in Sharon, PA. and raised in Butler, PA, both very close to Pittsburgh. He has traveled the world over but has settled finally in Pittsburgh. Here he received his B.A. in architecture at Carnegie Mellon and is currently a registered Architect. He has been with the firm for over ten years and has been involved in all of the firms urban improvement projects.

**ROBERT L. KENDALL AIA:** Professional Staff  
Rob was born and raised a poor child in the suburbs of South Philadelphia. He graduated with honors at Delaware Community College. From there he attended the School of Urban and Public Affairs at Carnegie Mellon and received a degree in Business and City Policy and Management. He has been with the firm for the past seven years and has had a strong interest in the urban improvement projects in the Hill District.
Cost of Services

**Archisynth employees**
- David Scott-Principal-25% of his work to project: $11,220
- Dina Fredrickson-Project Manager/Associate-100% of her work to project: $37,400
- Doug Franz-Associate-50% of his work to project: $18,700
- Eric Heiman-Prof. Staff-100% of his work to project: $59,840
- 3 Draftspersons-25% of their work to project: $16,830

**TOTAL**: $143,990

**Reimbursables**
10% of the employee total
(Includes travel (car), photography, reproductions, report printing and other related expenses)

**TOTAL**: $14,399

**Consultants**
- Market Economist: $8,000
- Traffic Engineer: $8,000
- Subsoils and Geological Expert: $12,000
- Historian: $2,000
- Hydraulics Engineer: $9,600
- Landscape Architect: $8,000

**TOTAL**: $47,600

**GRAND TOTAL**: $205,989
Responses to the RFP

Joint Effort Associates

Tim Fleming
Rebecca Gordon
George Schevon
Spencer Welton
Dear Ms. Flora,

We at JE Associates would like to thank you for requesting a proposal for an urban design project for the LTV site in Pittsburgh. This vacant expanse of cityscape not only can serve to continue and strengthen the existing rich urban fabric of South Side across Carson Street bringing the community closer to the Monongahela, but it can also serve as a model for the entire region as to the importance of respecting this most valuable resource—the riverfront. We are aligned towards The Friends of the Riverfront Association and want to assist them in achieving continuous linear public access along the riverfront to bring the riverfront communities of Pittsburgh closer together, but we also recognize the importance of discovering the cultural, historical, and present essence of South Side to preserve its unique character and maintain its sense of autonomy. With the responsible development of the LTV site, South Side stands to gain increased economic growth, affordable housing, access to the riverfront, and reaffirmation of the character and evolvement of the South Side community.

We would like to assure you that we have physical and organizational means as well as the enthusiasm necessary to carry out a planning project of this magnitude. As a project manager I have headed a team that helped Friendship develop a town center, and our firm is well experienced in the field of urban design. Our combined efforts will help you to gain insight into your problems, assets, and ways of achieving the goals you set. We are looking forward to meeting with you again to discuss further the needs and aspirations of the Community represented by SSLDC. This proposal represents the fruits of our philosophy: we hope you will find it both educational and satisfying. If you have any questions, please contact one of us.

Thank you.

George M. Schevon
JE Associates
Introduction

South Side and Pittsburgh's Waterfronts.

Our proposal began with a comprehensive of all of the waterfront sites surrounding Pittsburgh, including downtown. This included the studying of maps, plans, and pictures, as well as "hands on" visits, which enabled us to draw several conclusions about the priorities involving the site. Our meeting with Friends of the Riverfront also gave us valuable information about plans for the "Heritage Trail" as well as the history and the culture of the LTV area. This also included the South Side, which remains a focus of our studies as a potential urban center for the entire waterfront area along the Monongahela River.

These studies are vital to the success of an urban design project, since a city is composed of people, and it is these people which a city planning firm must interact with, in order to derive an appropriate plan upon which the future of Pittsburgh planning rests. It is vital to consider the ethnic and cultural history of the area, as well as the democratic evolution of the buildings which create the urban form of today.

Our firm has been eager to develop an urban project of this scale in Pittsburgh, for we feel the reborn city has much future potential and a proud history. The projects we have undertaken in the past have been well noted as successful urban designs. The LTV site in particular, contains many elements of a successful urban area, such as its nearby commercial district, proximity to downtown and a promising waterfront.

The Evolution of Policy.

Finally it is important to understand the importance of controlling and amending the written policies which limit and guide the development of Pittsburgh's water front. After thorough examination, we feel that without a complete and accurate riverfront policy, the welfare of Pittsburgh's greatest asset will remain in jeopardy. The security of an effective policy, including zoning and management, will always remain the proper foundation from which all future design projects will spring. If the goals are to be achieved, this policy must be a true representation of the agreements and disagreements of the residents of the community.
Scope of Services

We have broken down our scope of services into four distinct phases. Each phase relates directly to the crucial steps of the urban design process. These are the analysis phase, the urban design phase, the component design phase and our final presentation to the community.

Analysis

The analysis phase is perhaps the most crucial stage of the design process. It is here where we will build the database to be used as the foundation for the planning of the community. This analysis falls into two categories, a community analysis and a technical analysis.

Community

We will gather community input to ascertain what concerns and goals the community finds to be of importance. In this analysis we hope to establish what the goals of the community are, what issues concern them most, where their priorities lie and lastly how and by whom do they feel these points should be addressed.

Technical Data

We will gather any information is relevant to the planning of the community. This information is to be taken from a large variety of existing resources and will include issues such as:

- land use
- public open space
- circulation and parking
- infrastructures
- demographics
- topography
- security
- history
- ethnic characteristics
- zoning
- real estate values
- densities
- geometric analysis
- cultural character

The end result of this phase will be the design of an overall program to be referred to the client and to the community for comment and evaluation.

Urban Design

In the urban design phase we will draw up several overall schemes to meet the goals and priorities of the community. We are proposing to create 3 viable alternatives for the LTV site and 2 more for the site located between the Birmingham bridge and the 9th street bridge.

Components

In this portion of the project we hope to take a much harder look at some of the pieces that make up the community and to address each in a more specific manner. For example, how should we treat the waterfront? How do we pay respect to a historic portion of the community? What can we do to revitalize this residential neighborhood? Or, how should we treat this open space?

The end result of this phase will be specific designs for the urban fabric to be referred to the client and to the community for comment and evaluation.

Presentations

This is the final product of all of our research and planning. It will be presented to the community in the form of complete project documentation, a set of drawings and models, and one or more illustrated public meetings.
Responses to the RFP

Joint Effort

Scope of Services:

Analysis:
1. Community input
   - goals (vision)
   - issues
   - priorities
   - who does what

2. Technical Data (from existing sources)
   - land use
   - public open space
   - geometric analysis
   - circulation and parking
   - infrastructures
   - demographics
   - topography
   - security
   - history
   - ethnic and cultural character
   - zoning
   - real estate values
   - densities

Program to be referred to client and community.

Urban Design:
1. LTV site - three overall schemes
2. Birmingham bridge - 9th street - at least two overall schemes

Components:
Designs for the components of the overall urban design schemes

(Urban design and components to be referred to client and community.)

Presentations:
1. Project Documentation
2. Illustrated Public Meetings
3. Drawings Models
Response to the RFP

Joint Effort

Cost of Services:

The following breakdown of personnel time is a percentage of 40 hours/week over an eleven week period:

1 principal @ 50% commitment
($30/hr) $6,600

1 associate @ 100% commitment
($25/hr) $11,000

1 associate @ 50% commitment
($25/hr) $5,500

2 professional @ 100% commitment
($20/hr) $17,600

3 professional @ 50% commitment
($20/hr) $13,200

2 draftspersons @25% commitment
($15/hr) $3,300

Total payment for personnel $57,200
Total payment to be received for services (3.4 multiplier) $194,480

The above total is to be payed in addition to any reimbursibles and consultation fees incurred during the redevelopment of LTV site. Following is an approximate breakdown for consulting firms:

Market Economist: 3.5 wks. @
$4,000/wk $14,000

Traffic Engineer: 4 wks. @
$4,000/wk $16,000

Landscape Architect: 2.5 wks @
$4,000/wk $10,000

Historian: 1 wk. @
$4,000/wk $4,000

Subsoil: 2 wks. @
$4,000/wk $8,000

Total payment for consultation $52,000

The monies represented above will be billed monthly according to completion. A fund for reimbursibles that is 10% of payment for services will be created and available to Joint Effort Associates as reimbursible expenses occur. All consultation fees will be dispersed by Joint Effort Associates.
Responses to the RFP

New Era Associates

Aron Temkin
Steven Shaw
Lisa Wang
Regis Zapatka
September 23, 1991

Ms. Rebecca L. Flora
Executive Director
South Side Local Development Company
1417 Carson Street
Pittsburgh, PA 15203

Dear Ms. Flora:

We would like to thank you for this opportunity to submit a proposal for the South Side Urban Design Study. As an equal opportunity employer with a vested interest in Pittsburgh’s future, we are very enthusiastic to work with the South Side community and your organization.

New Era is a young firm, eager to improve our city’s urban landscapes and the lives that grace them. We have always felt that this is best accomplished through community involvement in the design process. Due to the potential impact of this project on the South Side community, as well as that of greater Pittsburgh, we are prepared to commit our most creative and dedicated people. Currently, our project schedules are such that the core of the study team would be comprised of myself and three associates, all with urban design experience within Pittsburgh’s neighborhoods. As Project Manager, I look forward to personally insuring that this project will receive all that our firm has to offer in the way of experience and resources.

I hope that we can share our thoughts and our talents with South Side’s aspirations and, together, set new examples for future redevelopment along Pittsburgh’s waterfronts.

Sincerely,

Steven M. Shaw
Having recently completed an extensive study of the relationship between the waterfront and the city, it is particularly clear to us why the development of the LTV site is so important. The future of the waterfront has come to a critical stage in its growth, and in some ways it rebirth, as the steel mills are finally being dismantled. This site is one of the largest tracts of developable land in the city and whatever is placed here will have a significant impact on the overall nature of the South Side. It is our intention to make the most of this potential through an urban plan which will not disrupt what is already a very rich community, but rather will add to this community by preserving its overall character and respect its history.

Our recent study of the waterfront was for another local organization which is interested in creating a heritage trail; a recreational trail to run primarily along the shore of the river. In completing this project we became aware of some of the long term potential for the redevelopment of the South Side. We feel it is very important to try to use this large piece of land, which includes waterfront access, to help bring the river back to the people.

In our initial consideration of this product we thought to look at other cities with strong relationships to their waterfront. Amongst these were modern examples such as the residential projects in Buffalo, New York, Pier 39 in New York City, Seaside, and many of the renovations taking place in Boston Harbor. We also looked to historical examples such as Frankfurt and Paris.

As a result of this evaluation as well as our initial investigation of Pittsburgh we noticed many problems in creating means of access perpendicular to the waterfront. This comes from the way Pittsburgh was originally developed in small settlements along the river which began at the waters edge and moved back, in this case to the edge of the hillside and then straight up. In this way the LTV site offers us a unique opportunity to develop a scheme not only for the waterfront itself, but an system of access and circulation for the development, in all of its layers.

As we stated in our initial letter we feel that community interaction is essential to developing a good urban design. We like to gain input from the community at each stage of our work. Initially we want to make sure that our ideas are not in conflict with the priorities of the current residents. At later stages we think it is important to promote our plans so that the development might become part of the current community; in fact becoming part of the existing fabric.

We are eager to see the results of a subsoil study so that we might better understand the potential within which the site may be safely used. Ideally we would like to create an environment which will attract residents of Pittsburgh on both a daily basis as well as for an occasional visit. This way there might be both a constant level of activity, so the area will always be alive, as well as some variety to its usage, to provide color and vitality.

The four leaders of this project's team studied architecture here in Pittsburgh so we know the city not only as residents, but as architects. It is the character of Pittsburgh which was the basis for our first understanding of urban structure. We are eager for the opportunity to further develop the possibilities for the LTV site and and its contribution to the South Side.
Responses to the RFP

New Era Associates
Services for the South Side Urban Design Study will include the following four components:

Analysis
Urban Design
Interventions
Presentation

Analysis

This component of the study will enable our office to build up a database through which we can arrive at a sufficiently detailed understanding of the various parameters of the existing conditions. This database will be acquired from a two-part investigation.

The first part will gather community input mostly through interviews and meetings with community leaders and local residents. We will be particularly concerned with the community’s goals, priorities, and issues of concern. Other issues which we intend to explore will include:

What happens in the South Side and where does it happen?
How do residents and non-residents use the South Side?
Where are things located and why?
What does the South Side like best? Or least?
How residents view the river?
Local history
What does South Side want?

The second part of the analysis will gather all relevant and necessary technical data. Most of this information will come from existing sources. Here are issues we intend to compile information on:

Land use
Public open spaces
Geometry of the urban fabric
Circulation and parking
Infrastructures
Demographics
Topography
Security
History of settlement
Ethnic and cultural characteristics
Zoning
Real estate values
Densities

The Interim Product at the end of the analysis phase will be a Program for Urban Design which will be referred to the client and community.

*Note: We will seek consultation with sources which will provide ends to the technical data above. We encourage their support throughout all phases of the study including community meetings.

Urban Design

This second phase of the study will focus on the particular site of the old LTV steel mill. Based on the information from the analysis and community feedback on the program, we will explore and compare at least three overall schemes. These alternatives will include such issues as:

- Uses for the site and locations for those uses
- Alternative densities, traffic patterns, and parking solutions
- Alternative ways of relating new development to conservation
- Alternative ways to deal with public open space and riverfront issues

This information will then be reviewed by all parties involved to arrive at a preferred alternative.

This preferred alternative will most likely contain selected elements from more than one alternative.

Intervention

The third stage of our services will consist of taking selected components of our preferred alternative urban design and analyzing them in more detail. Interventions will address the following:

- Three dimensional studies of components
- Drawings of components
- Feasibility of components
- Technical feasibility
- Urban "fit"
- Regulatory issues
- Cost of return on investments
Responses to the RFP

New Era Associates

5845 beacon street
pittsburgh, PA 15213
phone 412.621.2607
fax 412.621.2718
cost of services

Principle: Steve Shaw
Associates: Lisa Wang, Aron Temkin, Regis Zapatka
Professional Staff: Roger Verkhardt, Michael Smith

The following represent the hourly wages of the personnel of New Era Urban Design.

Principle: (35)
Associates: (28)
Professional Staff: (22)
Draftspersons: (16)

Throughout the scope of our services we will allocate 1 principle @ 30% commitment, one associate @ 100% commitment, and two associates @ 50% commitment. We will also allocate 2 architects @ 100% commitment, 2 draftspersons @ 100% commitment, and one draftsperson @ 50% commitment.

We would of course have cost associated with our scope of design services that would fall under overhead. To address these costs we use a multiplier of 3.2 times the cost of personnel.

Cost associated with airtickets, taxis, car mileage @ .25 per mile, parking etc, hotels and meals etc. would fall under reimbursables. Basically any reasonable costs directly associated with the performance of our design services would fall under reimbursables. These costs would also include: developing costs, film etc.

What we typically do is ask the client to set aside a sum, additional to the fee- generally about 10% of the fee- as a fund against which with- draws for reimbursables can be made on a monthly basis.

We foresee our firm putting forth a minimal of 440 hours of services with a ceiling of 500 hours. At this rate a total fee of $58,025 would be expected. This fee does not reflect reimbursals or overhead costs. The cost of consultants will be factored in as an additional cost. These fees we expect to come to about $21,600. This comes to an initial total of $79,025.

The sum for reimbursables should not exceed $2,500. Reimbursables above and beyond this fee will be decided prior to the development of these expenses. This will require client affirmation.
Responses to the RFP

Watermark Design Associates

Steve Auterman
Louis Faassen
David Goff
Li-Hang Wang
Peter von der Lieth
Response to the RFP

Watermark Design Associates

INTRODUCTION

South Side is rich in ethnic culture, historic architecture, and community pride. Our visit to the 18th Street Market found us mingling with the people of the South Side, sons and daughters of immigrants still speaking their native dialects, haggling over produce and sports. Smells of spices, grilled ribs, gyro's and coffee drifted in the evening breeze, carried along with the sounds of traffic and loud conversation. Faded window signs look across the narrow streets to women gossiping from their front stoops. The river flows by, just a block away, unnoticed by passersby. Most of the riverbanks cannot be directly reached due to the active railway, the abandoned mill sites, and residual empty spaces of the broken street grid. Watermarks feels the Monongahela River, the source of South Side's existence, has been neglected. Now the South Side Local Development Company has the opportunity to take a bold new step in rejoining the community and its river.

The success of the South Side riverfront development depends on the interrelation of the categories listed below, as well as their integration with existing conditions of the communities of South Side.

> The 64 acres of open land on the former LTV Steel site
This extremely large site brings with it the possibility of large scale planning and development, tailored specifically to current needs of the South Side community. The successful development and integration of this vast area of the South Side can benefit the local community and the city of Pittsburgh by attracting investors and new residents.

> The interrelation of the community and the waterfront
Developing waterfront access from the communities of South Side to the river will revitalize waterfront activities and regenerate the vivacity of the Monongahela banks.

> The future of the USX site
Similar to the LTV site, future development here can continue previous work and provide room for the South Side to grow. The location of this site makes it vital to the entire proposal.

> The conservation of the community's history, character, and historic buildings and sequences
Maintaining the rich culture of South Side's ethnic communities is important to this proposal as both an autonomous community and as a starting point from which Pittsburgh's future will take shape.

> South Side within the city and region
The success of this proposal will help strengthen South Side's importance within Pittsburgh and the region, giving direction to other riverfront communities.
Timetable

**Week 1 Analysis**
Begin project analysis, make several visits to the site, interview residents and workers in the area, research land use, past policy, historical buildings, demographics and the history of the site. Meet with Rebecca Flora to determine SSLDC's priorities and goals.

**Week 2 Analysis**
Continue community interviews, make survey of physical buildings, continue technical research. Meet with members of the community and community organizations by Friday, October 4 to determine goals and expectations.

**Week 3 Analysis**
Revise analysis according to results of community meetings by Friday, October 4th. Finalize goals and expectations of the project. Determine program for Urban Design.

**Week 4 Urban Design**
Generate ideas for the design of master plan for LTV site and South Side site.

**Week 5 Urban Design**
Begin design of alternative plans. Meet with community groups again to receive feedback about each alternative on Friday, October 25th.

**Week 6 Urban Design**
Revise master plan according to comments received in the October 25th meeting. Determine program for Interventions and begin to develop preferred alternative. Meet with client to review progress on Monday, November 4th.

**Week 7 Interventions**
Identify components of interventions and continue to develop preferred alternative.

**Week 8 Interventions**
Begin finalization of interventions, finish developing preferred alternative. Meet with client on Friday, November 15th.

**Week 9 Interventions**
Finalize component pieces of Urban Design plan, and begin to prepare the final report for community groups.

**Week 10 Presentations**
Continue to prepare final report document and presentation materials.

**Week 11 Presentations**
Present report to community members and organizations.
SCOPE OF SERVICES

Watermark Design Associates have devised a four stage sequence for the realization of the South Side Riverfront Development.

Analysis

A. Community input
Regular meetings between the design team and the community representatives will be scheduled in order to address the goals and priorities for the South Side community. Frequent interviews with citizens will also be conducted in hopes of discovering issues of concern on a closer level.

B. Technical data
The design team will conduct research into the technical issues to understand the parameters of the infrastructure. Some issues listed below:

<table>
<thead>
<tr>
<th>Topography</th>
<th>Public open spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land use</td>
<td>Densities</td>
</tr>
<tr>
<td>Geometric analysis</td>
<td>Circulation &amp; parking</td>
</tr>
<tr>
<td>Infrastructures</td>
<td>Demographics</td>
</tr>
<tr>
<td>Zoning</td>
<td>Security</td>
</tr>
<tr>
<td>Real estate values</td>
<td>History of settlement; ethnicity; cultural characteristics</td>
</tr>
</tbody>
</table>

The above information, gathered from existing data, will be compiled to form a concise program to serve as guidelines for the urban design phase and will be presented to the community as well as the client. Immediate concerns with the program will be addressed at the meeting.

Urban design

WDA will interact closely with the community to arrive at several alternatives. The micro solutions for individual communities will actively link together to form a comprehensive whole for the entire riverfront on the macro scale. WDA will arrive at at least two overall schemes for the LTV Steel site through our design team. At least two schemes will also be presented for the area between the Birmingham Bridge and the Ninth Street Bridge. A cohesive whole will be reached through the assimilation of two preferred schemes at the direction of community members.

Components

Several components on site will be studied at the micro level in order to discover the development potential of each. They are to include: Waterfronts, Historic conservation, Residential, Commercial, Public open spaces, and others. WDA will refer urban designs for each component to the client, the community, and the city.
Watermark Design Associates

Presentation

The culmination of the above will be a fully documented and illustrated report with recommendations to be distributed to each community, the client, and the city. A public presentation of the urban design recommendations will be given with slides, drawings, models, and other related materials for all interested citizens of Pittsburgh. WDA will also hold public meetings at various stages of design development to respond to immediate concerns that may arise. It is in our best interest that all comments and suggestions from the community be properly addressed.
Cost of Services

In order for you to begin planning for the financial needs of this project, Watermark Design Associates has determined the following schedule of costs for work in the Southside Urban Design Proposal:

Personnel:

In projecting costs for the project, WDA has committed several members of its staff for varying lengths of time. A principal will be involved with the project for approximately 25% of the project, to help oversee activity and assist associates in maintaining our high standards of quality. One associate, in turn, will act as project manager with 100% commitment, along with a 50% commitment from two other associates, who will assist in the especially critical analysis and design phases. It is at these points that the greatest number of staff will be involved with the project, and the co-ordinating efforts of the associates will assist greatly in the efficient flow of work. The staff itself will consist of four professionals working at 100%, and a commitment of two staffers at 50%. The partial commitment is made by members of our staff who specialize in historical and in infrastructure analysis. We also will employ two draftspersons at 25% commitment to work on drawings, models, maps etc. Administration and secretarial is figured as a part of overhead. We bill this overhead as a 3.4 multiplier of project cost. The breakdown, then, is as follows.

<table>
<thead>
<tr>
<th>Position</th>
<th>no.</th>
<th>hourly commission</th>
<th>% commit.</th>
<th>% commit. = hourly multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>(1)</td>
<td>$30</td>
<td>25</td>
<td>$7.5 / project hour</td>
</tr>
<tr>
<td>Associates</td>
<td>(1)</td>
<td>$25</td>
<td>100</td>
<td>$25 / p.h.</td>
</tr>
<tr>
<td>Associates</td>
<td>(2)</td>
<td>$25</td>
<td>50</td>
<td>$25 / p.h.</td>
</tr>
<tr>
<td>Professionals</td>
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<td>$20</td>
<td>100</td>
<td>$80 / p.h.</td>
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<tr>
<td>Professionals</td>
<td>(2)</td>
<td>$20</td>
<td>50</td>
<td>$20 / p.h.</td>
</tr>
<tr>
<td>Draftspersons</td>
<td>(2)</td>
<td>$15</td>
<td>25</td>
<td>$7.5 / p.h.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>12</td>
<td>$165 / p.h.</td>
</tr>
</tbody>
</table>
The project is to consist of 55 project days (see Time Table.)

Project days $\times$ 7.5 Hours/day $\times$ Hourly multiplier = Project Personnel Cost

$55 \times 7.5 \times $165 = $68,062$

$3.4 \times $68,062 = $231,412.$

Project Personnel Cost + Overhead Cost = Gross Project Cost

$68,062 + $231,412 = $299,474$

Reimbursibles:
The cost of reimbursibles are to be billed directly to the client and will include all project-related travel costs (to and from site, meetings with clients and contractors) photography, printing, blueprinting and similar related costs. This will not include travel fees made by consultants, which are covered specifically in their billing. Because we are a Pittsburgh based firm, many of these costs will be smaller than outside firms would charge. We therefore are asking for 7% of the design fee to be set aside as a fund from which we may draw reimbursible costs on a monthly basis.

Reimbursible fee: 7% of gross project cost or 7% of $299,474 = $20,963

Consultants:

Though much of our staff is specialized in certain areas of design, to provide design solutions that consider a broad range of issues, WDA employs consultants of several disciplines. We are very familiar with the work of all these consultants and have coordinated extensive work with many of them in the past. The following estimates have been made as a cost to this particular project:

Market Economics Specialists: $8,000
Traffic and Transportation Specialist: $8,000
Landscape Architecture: $8,000
Total Cost Breakdown:

Personnel: $68,062
Overhead: $231,412
Reimbursibles: $20,963
Consultants: $24,000

Total Project Fee: $344,437

Watermark Design Associates

Analysis | Urban Design | Intervention | Presentations

Gather Technical Data
Analyze Technical Data
Sidewalk Interviews
Interviews with Community Groups
Analyze Community Data
Develop Urban Design Program
Meet With Client

Generate Ideas
Create Alternative Solutions
Review Alternatives with Community
Develop Preferred Alternative
Meet With Client

Identify Interventions
Meet With Client
Finalize Interventions

Prepare Report
Public Presentations
Meet With Client
The Analysis portion of this study provides an understanding of the community and its surroundings. With this understanding we define a contextual framework that becomes the basis for an urban design.

At one level the analysis sets out categories of information. Some of this information is what we refer to as "hard" or objective data: demographics, land and building uses; traffic counts; zoning; etc. The rest is what we have called "soft" or subjective data: the input of citizens. Acquired through meetings and interviews, this input provides a valuable insight to the values and aspirations of the community.

At another level the analysis sets out a context of accountability. The urban designs in this report are offered to the citizens of the South Side and to the city as contributions to the on-going debate on policies for the South Side's future. To be useful they must be responsive to land and building use, zoning, demography, circulation, zoning, and so forth. The Analysis portion of this text provides a framework for understanding this accountability.
Analysis
Analysis

Interviews:
Louis Faassen
Tim Fleming

History:
David Goff
Rebecca Gordon

Demographics:
Dina Fredrickson
Lisa Wang

The Model:
George Schevon
Peter Vonderlieth
Spencer Welton

Figure / Ground:
Steven M. Shaw
Eric Heiman

Building Usage:
Steve Auterman

Abandoned Lots & Blighted Buildings:
David Scott
Regis A. Zapatka

Public Parking, Traffic Direction, Public Transportation:
Douglas Franz

Street Vegetation:
Robert Kendall

Zoning:
Li-Hang Wang
Analysis

Interviews

Louis Faassen
Tim Fleming

Interview with Rebecca Flora:
South Side Local Development Company spokesperson and South Side resident

Positives:
Social:
- strong ethnic heritage
- well organized community
- interest in maintaining community
- community willing to volunteer time
- pedestrian orientation
- limited rental or multi-family dwelling
- houses sold through closed market (church, word of mouth)

Physical:
- proximity to river, Oakland, Downtown
- slopes, and slopes forcing density in flats
- possibility of Monongahela Expressway and Glennwood interchange

Economic:
- East Carson Street
- Station Square
- CDGB funding, grants and low interest loans for facade revitalization
- unique history
- demand for middle income housing ($70,000)
Ex.: Edwards townhouse development. Eight units subsidized sold at $80,000 with no active marketing by SSLDC
- houses can be purchased for $15,000 for renovation
- USX contributes funds to community

Negatives:
Social:
- can't attract families due to urban condition, schools, no yards, few parks
- S.S. High School draws from projects in Arlington so S.S. residents send their children to magnet and private church schools instead of S.S.H.S.; therefore, few children from S.S. are actually being educated there.
- when the mills closed almost everyone, who could leave, left (young, motivated)
- elderly population is against change and growth (noise, parking...)

Physical:
- visual image of river front from across the river (on I-376)
- traffic on East Carson Street (trucks) and parking
- railroad
- environmental contamination
- connection to Eastside, Slopes and Station Square, Liberty Tunnels
- traffic, parking, winter driving conditions on slopes

Economic:
- little connection to Station Square
- cost of USX site due to clean-up
- elderly cannot support neighborhood stores

Proposals:
- improve image of river front from across the river
- river taxi: river mass transit
- connect Station Square to East Carson to increase tourist market (trolley)
- non-rowdy entertainment (outdoor theater in park)
- discourage rental
- housing (middle to high income)
- determine target sites for housing rehabilitation that can continue out from there
- not so much new housing that renovations are forgotten
- overcoming the outside perceived need for 'suburbia' as an environment for children, while providing compatible housing
- incline to unite Slopes and Flats
- wall murals from Station Square on East Carson to shopping district
- urban river front rather than all green Heritage Trail
**Analysis**

**Positives:**

**Social:**
- sort of a “mini-city”
- very stable—long time residents
- well organized community
- history
- Churches and ethnic clubs were very strong
- New strength found in ‘collective’ forum.
- Historical diversity of commerce and people
- Listing in national registry of historic places has helped prevent highway construction in the area, and will continue to help preserve it.
- Open-minded community
- Civic pride. Southside likes having its attributes recognized.

**Physical:**
- Architectural heritage. After examining many neighborhoods in Pittsburgh to re-establish himself, this is the one he chose, largely because of its architectural character.
- Density of the neighborhoods
- Proximity to river, Oakland
- City council backing on MacIntosh/Hemphill site, declaring it a historic area and over-riding mayor’s veto. (Demolition of these sites was requested by a developer who will develop surrounding land as “flex.”)

**Economic:**
- Active Chamber of Commerce

**Negatives:**

**Social:**
- Loss of small commercial characteristic in slopes, (though a gain to the area’s unity.)

**Physical:**
- Traffic. AM/PM gridlock
- Waterfront image
- City visitors don’t know its there. (i.e. those at Station Square.)
- Potential over eagerness to please developers in filling the gap left by steel mills

**Proposals:**
- Be sensitive to traffic that any new development will incur
- Protect ‘sacred streets’ from major development implications
- In developing riverfront, “keep weaving landscape” into proposals
- Also in developing riverfront, maintain a density and mixture of use/building scale while avoiding turning a back to the community
- Re-route trucks off Carson Street
- Links to Station Square could be beneficial. Maybe a shuttle bus or possibly rail
- Limit waterfront connections but increase from what is now. Look for natural links, for instance, the Birmingham Bridge area
- Set up guidelines to insure continuous waterfront access
- Examine ideas of “commons” in housing as an alternative to separate green spaces
- Restored incline is a possibility

**Interviews**

Louis Faassen
Tim Fleming

**Interview with John Martine**

Pittsburgh architect, raised in South Side. Returned to South Side after tour in service and work in California. His father worked in the mills.
Interviews
Louis Faassen
Tim Fleming

**Interview with Mary Jane Schmalstieg**
South Side resident, local historian, Member of Brashear Assn.
Chairperson of Friends of Carnegie Library Committee, Member South Side Hospital Community Advisory Board, Former Committee Woman for 16th Ward.

**Positives:**

- **Strong Community:**
  - Cohesive ethnic communities which preserve and practice their traditions.
  - Residents show strong interest and active participation in community affairs (work closely with South Side Local Development Co.).
  - Revitalization of neighborhoods of high priority. (They put together a catalog, "Searching for a Reusable Past" in an effort to attract middle-income families to the South Side.
  - Many centers provide a place for community interaction. (e.g. Market House)

- **Physical:**
  - Abandoned structures being renovated for new uses.
  - Effective historical preservation accomplished by concerned citizens.
  - Southside has a sense of independence from the rest of Pittsburgh.
  - Wharton Square provides convenient shopping for local residents.
  - Affordable housing and services for senior citizens.

**Negatives:**

- **Social:**
  - Churches and community centers disappearing due to lack of money and population depletion. (eg. Polish Falcons)
  - Common fear that outsiders will erode close community.
  - School system geared towards vocational training rather than academic due to values of past generations.
  - Disappearance of younger generations from community.

- **Physical:**
  - Renovated Birmingham Towers caused parking overload.
  - Existing recreational facilities somewhat isolated from residents.
  - Loss of mom & pop stores catering to local market.
  - Poor connection between slopes and flats.
  - Need for better public transportation link to Oakland.
**Analysis**

**Positives:**

**Social:**
- "It's a damn good community and provides a damn good resource."
- "What survived in the South Side was a low-cost community that does what is doable."
- "Residents of communities like South Side are agents of change."

**Economic:**
- Low cost community. "You can still find a house in South Side that is basically free."

**Negatives:**

**Social:**
- "In 1970, in a grand total of about 10,000 people, 22 people had graduated from college."
- This figure has improved but not as much as it should.
- Some history of skinheads and violence.

**Economic:**
- "Pittsburgh is undergoing a slow and painful death."
- "$4 billion in payroll has not been replaced
- Pittsburgh is not making an economic transition. Ex.: Pittsburgh’s hospitals, though growing, are a misconception as an economic base
- Most of South Side’s open sites have been floating since 1971, and during a time when Pittsburgh was much more prosperous.
- "Economic vitality determines development," and Southside does not have it.
- It cost $1 million/job to save steel jobs in South Side. $350 million were lost in trying to save the steel industry.
- Not enough multi-national corporations moving into Pittsburgh.

**Proposals**

- Try to save what is there today
- Determine what the region can produce and do it
- Mag-Lev is a possibility, "maybe a one in a hundred shot."
- "Unless we deal with economic realities we cannot look at the Waterfront."

**Interviews**

Louis Faassen
Tim Fleming

Studio meeting with Robert Ericson

South Side slopes resident for 20 years. Economics graduate of University of Idaho at Boise, and Urban Design PhD from Cornell.
Analysis

Interviews

Louis Faassen
Tim Fleming

Positives:
- Many recreational facilities:
  Market House (senior center, gym), Armstrong, Oliver Bath House, Ornsby (youth library branch), Neville (skating, tennis), Cory Field, Brashear Community Center
- Community members are politically attuned and know how to use the city.
- Yuppy invasion is overblown
- Strong community organization through Forum—a city and riverfront development plan.
- Community is wary of developers, as developers have taken advantage of the community before, and it is difficult for developers to bypass the community.
- Wharton Square serves the local public need: inexpensive useful goods.
- Local development company and consultants

Negatives:
- No longer a clear vision in South Side residents.
- Carson no longer serves the local community, but is a regional draw
- Fear that Carson commercial district will be pinched out by Station Square and LTV development
- LTV is bigger than the South Side can monitor, especially with the speed of development today.
- Huge amounts of money are necessary to provide adequate infrastructure. (funds are not available)
- Regional uses are inappropriate due to infrastructure.
- Danger of becoming more of a parking lot for Oakland.
- 1 of 5 in South Side drop out of High School. 1 in 3 is functionally illiterate. Some community members are desperate—if a company offered 500 jobs at $12/hr. but it required a great deal of truck traffic, many people would still be willing to make the sacrifice.

Proposals:
- Develop a clear collective perspective
- Access to the river is important, but not necessarily along the entire riverfront
- Community owes it to themselves to think long range primarily
- Mixed use of same scale that provides local jobs
- Study shows 2000 houses, like current density, will fit on site
- Check out the 15 year expansion plan of Station Square (Arthur Ziggler)
The intersection of Nineteenth and Carson Streets at the turn of the century.
The South Side has developed out of a history reflective of the settlement and industrialization of America. Its beginnings trace back to pre-Revolution times when, in 1752, Major John Ormsby was granted 2,000 to 3,000 acres of land along the south bank of the Monongahela River which is now the heart of the South Side. The government awarded this land to him in return for his services in driving the French out of Fort Duquesne and helping to establish Fort Pitt. Ormsby went on to become a wealthy merchant and trader. By 1770, he had established a large estate named Homestead Farms. To link his home with Pittsburgh, Ormsby created the first ferry line across the Mononghela River.

In 1810, a small grid was laid out on the flats by Ormsby's son-in-law, Nathaniel Bedford. He named this town Birmingham after his native city and named many of the streets after Ormsby's children (Mary, Jane, Sarah, and Sidney). By 1818, Birmingham comprised fifty homes and included a glass factory, a foundry, a sawmill, a coffee mill factory, a vice maker, a pottery, a market house, and a place of worship. Washington Pike, now known as Carson Street, passed through the heart of Birmingham and was a major link between Pittsburgh and the national road in Washington PA. This pike was used heavily for industrial transportation and crossed the Monongahela via a covered bridge to Pittsburgh near to what is now the Tenth Street Bridge.

In the early 1800's industrialization began to play a major role in the shaping of the town. Factories thrived in the South Side due to its close proximity to the coal deposits along the south hills, as well as its having direct access to a major river system. The first industry helping to form the South Side was that of manufacturing glass. In 1796, John O'Hara and Isaac Craig established the first glass works near what is now Station Square. The industry blossomed throughout the South Side, and by 1870, there were 68 glass factories in full operation, providing over half of the nation's glass supply. Iron and then steel industries developed up river to form the areas of East Birmingham and Ormsby. Many of the riverfront properties that were used for glass production were usurped by the expanding steel industry. Jones and Lauth created the American Iron Works in 1853, which grew into the gargantuan steel mills of Jones and Laughlin Steel Company.

The South Side's reputation as a major world center for manufacturing attracted immigrant workers from Europe. In some cases, the leaders of industry sent agents to Europe offering immigrants free passage to America in exchange for labor in the mills. Throughout the mid 1800's, famines and political unrest in Europe led to a large growth of immigrant population in the South Side. These ethnic groups retained their European traditions within tight knit communities built up around their places of worship. Much of everyday life, customs, and manners where affected by the dominance of the mills. The lingo of the trade became a part of the household vocabulary. Events of the mill, such as an accident, a strike, or a new mill opening became the main markers of time. A man's position within the community was often determined by the particular department in which he worked, and the role it played within the established mill. A person wasn't known simply as a mill worker, but as a 'puddler,' 'roller' or 'heater.' The skills of the trade were guarded by the old millhands as sacred. Only through a long apprenticeship were these skills passed on to the younger generations as a rite of passage. Achieving a higher rank in the mills meant higher earnings for the workers, and also the possibility of moving their families up to the slopes where the living conditions were better. As the German immigrants were the earliest to arrive in the mills, they were the first to move up to the slopes. Today, many individuals of German descent still occupy some of the most valuable places at the very top of the slopes.

The influx of workers into the South Side continued through both world wars, as the tremendous demand for steel products grew with the modernization and development of the nation. The South Side along with the rest of the Monongehala River valley grew to
become the largest steel production center in the world. This bustling industry polluted the air in which the residents of the South Side carried out their daily lives. The grime and soot which covered every outdoor surface became a symbol of productivity and steady employment for the people of the community. Despite these foul conditions people often met in the streets and at the water's edge for games and recreation. They also saved money to finance the creation of large meeting halls which provided for social gatherings and fostered community pride for the various ethnic groups.

This constant growth and increased livelihood for the South Side continued up until 1981. At this time, foreign competition undercut American steel production and the industry collapsed. With the loss of hundreds of jobs, despair turned to depression as former mill workers found themselves with unusable skills and few employment opportunities. Most families in the South Side were forced into a drastic change of lifestyle. Many workers simply retired while others accepted lower paying jobs. Most of the younger generation, which would have found work in the mills in the past, began to move away to start families in other areas, causing a sharp decline in the population of the South Side.

By the late 1980's, however, the South Side began to experience an economic rebirth. Due to the inexpensive properties and their close proximity to downtown Pittsburgh, many new shops and stores opened along Carson Street. The specialty shops created a regional draw, bringing consumers from downtown and Oakland into the South Side. With the aid of revitalization programs, businesses needing office space have slowly been relocating into the area, helping to form a strong new economic base.

As Pittsburgh transforms from a manufacturing-based to a service-based economy, the South Side will evolve as an important element in the structure of the city. With its strong communities, and concentrated ethnic diversity, the South Side embodies the rich character of a 'village' within the city.
The narrow strip of the South Side across from the point. Houses, a school, and a church are squeezed in between rail lines and the hillside.

Depiction of Pittsburgh around 1874 with Birmingham shown in the foreground.
These three diagrams represent stages in the historical development of the built fabric of the South Side in context of our site. Industry is represented as an important element of this fabric as well as a generator of growth. Transportation is shown to illustrate the various connections South Side made to its surroundings as well as its own internal structure.

**Key to Diagrams**
- Development
- Industry
- Railroad
- Trolley Line
- Mt. Oliver Incline
- Knoxville Incline

**Historical Development - 1815**

This diagram illustrates the original layout of the town of Birmingham as designed by Nathaniel Bedford. A grid was layered over the site in which homes and shops were built. The center of this town was focused around an open market square. At this early stage we can see the first beginnings of industry along the river in the form of a glass factory and a saw mill. Birmingham was linked to Pittsburgh by a ferry line across the Monongahela River. A roadway to the west linked it with an established glass factory located across from the point.
Historical Development - 1872
At this time the site was fully developed and was comprised of three separate townships known as Birmingham, East Birmingham, and Ormsby. Glass Industry had firmly taken hold in the area and occupied much of the land along the riverfront as well as being dispersed throughout the rest of the site. The street grid had spread eastward and ran to the rivers edge. In several locations the land along the riverbank was cleared and used as a roadway. A bridge had replaced the ferry line as a connection to Pittsburgh and a railroad ran through the site to the south. A coal railroad ran down what is now 21st Street to a coal tipple at the river. A trolley line ran along Carson Street and Sarah Street providing internal public transportation.

Historical Development - 1910
By this point in history, the three townships were incorporated into the city of Pittsburgh and the area became known as the South Side. Steel industry had replaced many of the glass factories and occupied much of the land along the river. The two largest mills were the American Iron Works and Jones & Laughlin Steel Co. The network of railroads that developed to service this industry severed all links between the street grid and the river. The South Side made connections to Mt. Oliver and Knoxville by two inclines to the south near 12th Street. An extensive trolley system developed within the area and crossed into Pittsburgh at the 10th Street Bridge and the 22nd Street Bridge.
Analysis

History

David Goff
Rebecca Gordon
Historical Structures

1. Bath House
2. Old School
3. Brewery House
4. S.S. High School
5. Market House
6. Polish Falcons
7. Carnegie Library
8. Brashear Museum
9. Morse School

Churches

10. St. John the Baptist Byzantine Catholic Church
11. Our Lady of Fatima Chapel
12. St. Adalbert's R.C. 1883
13. St. John the Evangelist 1891
15. St. Peter's R.C.
17. Cleaves Temple
18. St. Mary's Russian Orthodox 1943
19. St. Vladimir's 1907
20. St. Casimir's R.C. 1891
21. First Associated Reformed Church of Birmingham 1854
22. S.S. Presbyterian Church 1869
23. Bingham St. Methodist Church
24. Former Jewish Temple
25. Tabernacle of the Union Baptist 1881
26. Walton Church
Analysis

Demographics
Dina Fredrickson
Lisa Wang

The South Side Flats has distinctly changed since the demise of the steel industry. The population, employment, income, education, real estate and crime statistics of the area display a direct relation to the changing economic basis of the South Side Flats.

fig. 1

15203 Zip Code
South Side Flats

Note: All of the 1990 information has been taken from the zip code census tract. This includes portions of the South Side Flats, South Side Slope and Arlington. All of the census information prior to 1990 has been taken from City Planning Census Profile. It solely covers the South Side Flats.

fig. 2.
Population rates and age groups of the South Side Flats from 1940 to 1990. (City Planning Census Profile)

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<th>Year</th>
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<th>% under 18 years</th>
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Population

The population of the South Side Flats has greatly decreased since the steel industry dominated the riverfronts. Today's population of 6,177 people is almost one quarter of that in the 1940's. A drastic increase in the age of the population is also clearly visible. The median population age, has increased to 48 years. These figures primarily reflect the loss of the industrial draw to the South Side area. A slow increase in minority population has occurred on the South Side, from 1.9% in 1940 to 3.4% in 1990. Including the South Side Slopes, the minority population is 5.4%. This figure is well below that of the rest of the city. Almost half of the households in the Flats are single family households.

Employment and Income

In 1990 the South Side Slopes' and Flats' employment rate was 88.5%. The median household income for the whole South Side was $17,400 in 1990 and $10,813 in 1980, 15.4% falling within poverty level. In the South Side Flats area, the median household income was $15,150. On a positive note, there has been a significant decrease in the number of families which fall within the boundaries of poverty level since 1970. The percentage of the workforce which has worked within the city limits has stayed in the range of 80% since the 1970's. The most predominant occupation classification has been that of laborers, services and household workers.

Education

In 1990 the average years of education was found to be 11.2 years, for the whole South Side, 43.3% of the population having graduated from college. In the South Side Flats, there has been a slow increase in the percentage of persons twenty-five years of age and older who have attended college. Yet there is still an alarming 32.5% of the population in 1980 which did not even complete eight years of elementary school education.
In spite of a slow increase, college attendance still remains low due to the outmigration of the young educated population who wish to live and be employed elsewhere. Poorly educated steelworkers of the past, still live scattered about the Slopes and the Flats.

Real Estate Values
(Resource Jack Johnston, Real Estate Consultant, SSLDC)

The South Side Flats is a diversified area. There is no distinct line dividing the wealthier neighborhoods from the less economically developed neighborhoods. One could walk down any street and observe houses that have been recently renovated and a neighboring house could be vacant. At the present time there is no concrete data which one could assess the values of the buildings of the South Side, except through the Real Estate Statistical Service which keeps record of the values of recently purchased buildings. A few observations can however be made about the current values of real estate in the area.

Housing Values
(Average $30,000-$50,000
Low $20,000
High $100,000
(census values)
Average $17,176
Ownership 47.7% 1980 flats
56%1990,15213 zip code

Rents
2 BDR unit
Average $200-$300/mo.
Mid-High $400-$500/mo.
3BD 1890's brick renovated
$700-$800/mo.
2 BDR House
$250/mo.

(census values)
Rental 52.3% 1980 flats
44% 1990, 15213 zip code

Through observation, the buildings on South Side Slopes tend to be of more value than those on the Flats, slightly though the Flats and the Slopes are both part of the South Side.

Crime Rate
(Zone three Police and Fire Station, 18th and Mary, clerk Carl Romano)

Crime rates per 1000: Based on the number of reported incidents of Robbery, Burglary and Theft
1977 1980 1990
49.2 64.8 82.3

Crime rate of the South Side Flats has steadily increased since the mid-70's. This increase could be related to many factors. The integration of new restaurants, bars, industry or other functions which draw people to the South Side, cause a shift away from the self-contained character of South Side's past. The economic downswing of the late 1980's and the early 1990's could also play a major role in the increase of the crime rate.

The incidents which are of most concern to the residents are simple assaults, theft, stolen cars and criminal mischief. There were more than 100 recorded incidents of each of these crimes in the year 1990, theft and stolen cars being the greatest recorded crimes. As with almost any district, more numerous crimes occur between May and December. The decrease in the winter months can be accredited to the harsh weather when the streets are deserted. The 1991 figures display an extreme decrease in crime rate during the summer months compared to those of 1990.

Compared to the surrounding areas, the South Side Flats has a very high crime rate. One factor is that the South Side Flats has a denser population than many of the area which lie south of the Monogahela River.
## Analysis

### Demographics

Dina Fredrickson  
Lisa Wang

---

**fig.1.**  
*Crimes in the South Side Flats 1990*

**fig.2.**  
*Crimes in the South Side Flats 1991*

<table>
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Model of the South Side

George Schevon
Peter Vonderlieth
Spencer Welton
Often, black and white can help us to understand many different shades of grey which are not easily noticed through maps and other types of line drawings. By only representing the figures, or buildings, on a white ground plane, South Side becomes an articulate pattern. Distinct shapes, sizes, and systems of organizations all create the character of this pattern. The general grid of the streets and blocks, the beginning edge of the hillside, the railroad embankments, and the river's edge are all immediately recognizable.

A brief analysis of figure size and density relationships reveals a general layering effect which runs parallel with the river. This layering is, in fact, very similar to that which is illustrated in the zoning map.
Beginning at the river's edge and working our way toward the hillside, we first find a strip of relatively large shapes with relatively large distances between them. We then find an area of small shapes built close together. In some instances, larger shapes, associated with the previous zone, make intrusions. Thin, fairly even-sized rectangular shapes flank either side of a strip of space, in the next zone, and represent a majority of its building forms. Adjacent to this, another band of small shapes may be identified, arranged tightly in fairly regular groupings. This area seems to be more cohesive and "complete" than its previous counterpart closer to the river. Within this strip we can even pick a "typical" grouping or block. Between this zone and the hillside, we again find larger buildings.

What does this all say about South Side? By understanding other data, such as zoning policy, circulation patterns, various economic and social conditions, history, and topography, the pattern makes sense. In this particular figure ground we can actually see where South Side is strong and viable and also where it is weak and, literally, full of holes. It can indicate past attitudes towards the river front, community divisions, and even neighborhoods and help us determine where neighborhoods and houses are stable and where they are threatened.
Analysis

Building Usage
Steve Auterman

RIVER
The maps on this and the following pages represent an analysis of the use types of each building in the South Side. We looked for Commercial, Institutional, Industrial, Park, and three kinds of Residential buildings. From these drawings we were able to see the general areas within the South Side where certain activities are concentrated. The maps reveal that the majority of the industrial buildings are located along the railroad lines both by the river's edge and near the South Side Slopes. Commercial buildings are concentrated along either side of East Carson Street along the entire length of the South Side. Institutional and Park areas are scattered throughout the large Residential areas which comprise the areas between the Industrial and Commercial zones. Each zone is stretched along the length of the South Side, but when walking north or south along the narrow numbered streets, one quickly passes from one kind of use to another.

At left, institutional buildings are shaded dark gray and residential buildings are shaded light gray.
At left, industrial buildings are shaded dark gray and commercial buildings are shaded light gray.
Analysis

Abandoned lots/blighted buildings

David Scott
Regis Zapatka
Analysis

Building Vacancy
David Scott and Regis Zapatka

Outlined areas in map indicate parking lots. Blackened areas indicate vacant lots.

The large eastern area of open space is the former site of the J&L Steel Corporation's South Side facility. Other large vacant areas occur near the river and at the southern end of the site adjacent to the hillside. These areas traditionally had large lots, usually utilized by industry. Smaller vacant lots are located in areas nearer to East Carson Street, and often indicate spots of blight occurring in the South Side as the current building stock ages and population decreases.
Analysis

Public Parking
Doug Franz
Southside is plagued with a limited supply of public parking. The largest problem arises where commercial shoppers or non-residents occupy spaces designated as residential spaces, located on the residential side streets. Those areas which are close to Carson Street are especially susceptible to such problems.

Currently there are three public metered lots (shown in black): on Carson between 19th and 20th Streets, at the corner of 18th and Sidney, and on Carson between 12th and 13th Streets. The 19th and 20th Street lot has 27 metered spaces, the 18th and Sidney has 45 metered spaces, and the 12th and 13th has 36 metered spaces, creating a total of 108 metered lot parking spaces.

Along Carson Street between 11th and 27th Streets, and on the immediate cross-streets (one block north and south), there are a total of 377 metered on-street parking spaces.

Parking can also be found in a few larger lots (shown in light grey), but are not metered and are usually designated for a specific building’s use or function. The largest such lot is found in Wharton Square. The median on 21st Street also acts as a public parking strip, mostly used by commuting hospital personnel. This area of 21st Street is an extreme hazard during rush hour traffic, and is somewhat of an eye-sore.
At left, a tavern on East Carson Street recalls the ongoing influence the steel mills left on the South Side. Several establishments such as this one continue in spite of the gap in industry left by the passing of the steel plants. This tavern occupies a spot directly across from the vacant LTV Site.
Analysis

Public Transportation
Douglas Franz
The Southside is serviced by seven different PAT bus lines, the 54c, 51a, 51b, 51c, 51d, 51f, 51g.

The 54c travels from Oakland and beyond, across the Birmingham Bridge, down Carson Street, and then to 18th street, south to the slopes. The 51c travels from downtown, across the 10th Street Bridge, down Carson Street, and then south on 18th Street to the slopes. These two buses act as links between the Southside slopes, Carson Street and the urban areas of Downtown and Oakland.

The 51b, 51d, 51f, and 51g follow the same routes into and out of the Southside: across the 10th Street Bridge and down Carson and Sarah Streets to (or from) Homestead. The inbound buses travel the commercial Carson Street, and the outbound buses travel Sarah Street, to the point where east Sarah meets Carson.

The 51a follows a similar route as the other 51 buses, but is limited to Carson Street between 10th and 26th Streets. It travels the 10th Street Bridge, Carson Street, and then turns south on 26th Street to Josephine Street (eastbound).

Essentially these seven buses travel the length of Carson Street between the 10th Street and Birmingham Bridges, linking Downtown, Oakland, and the Southside slopes to the flats of the Southside. Stops occur at almost every block of Carson and Sarah Streets.
Analysis

Street Vegetation
Robert Kendall
Analysis

Street Vegetation
Robert Kendall
Zoning
Li-Hang Wang
INTRODUCTION TO ZONING

The current building zones of South Side, established in 1986, were laid according to the conditions when the heavy steel industry was active along the riverbanks. The M4 zones still designate the mill sites today. Moving south towards the slopes, the building zones are arranged in horizontal fashion, establishing a series of heavy and light industries, commercial-residential associated, and residential layers. The numbers next to the letter of the zones specify the relative density or severity of the zone. For example, only multiple-family residences are permitted in the R-3 zone, and two-family residences are permitted in the R-2 zone.

The Commercial Planned Unit Development District, or CP, was established specifically for Wharton Square, where a shopping plaza was constructed. Any future development in this area need to provide "for a compatible mixture of commercial and related uses," and the entire area "shall be planned and developed as a unit including facilities for parking, pedestrian access, landscaping, building design and orientation, etc."1

The S-Special District, occupies the majority of the slopes sites. Intensive development is not permitted here because of the types of use on or adjacent to the land, the ineffectiveness of providing utilities to the land, or the scenic beauty of the land in its undeveloped or minimally developed state.

Our intention in referencing the existing zones is to examine the implications of our urban planning program. Obviously, areas of our site must be re-zoned according to our design actions. This map represents the current restraints.

A detailed description of each building zone of South Side, including height and area limitations, is attached to the index. The title of each zone is listed below:

A-1 Commercial-residential associated District
CP Commercial Planned Unit Development District
M-1 Limited Industrial District
M-2 Limited Industrial District
M-3 Light Industrial District
M-4 Heavy Industrial District
R-2 Two-family Residential District
R-3 Multiple-family Residential District
R-4 Multiple-family Residential District
S Special District
I-M Industrial-Medical District

1 Taken from the Pittsburgh Code of Ordinance
A-1 Commercial-residential associated District

Purpose:
The regulations of the A1 District are intended to encourage integrated intermixture of residential uses with commercial uses in certain portions of the City where a large degree of such intermixture already exists. Intermixture of residential and commercial uses should be provided for as a part of the comprehensive plan. The regulations hereunder are intended to assure compatibility of uses and avoid detrimental effects associated with indiscriminate mixture of residential and commercial uses.

Permitted uses (As derived from the C3 and R Districts):
A. Conditional uses which are permitted after a public hearing and recommendation by the Commission, and after approval by Council.
   1) Enlargement or reconstruction of any of the conditional uses that is public or nonprofit, when such use is a non-conforming use or nonconforming structure.
   2) Public utility facilities and installations consisting of overhead power lines supported by metal towers.
   3) Unit group building development.
   4) Major excavating, grading or filling, except for strip or other mining of coal or other minerals, excavating of sand or rock and the crushing of rock, sanitary and other fills, recovery of metal or natural resources and similar operations.
   5) Government uses and structures, except housing, and uses and structures of public assisted educational institutions, or unit group building thereof, other than major excavating, grading or filling, and schools which are not educational institutions.
   6) Institutional, educational, or unit group building thereof.
   7) Institutional facility or unit group building thereof.
   8) Housing for the elderly.
   9) Mass transportation company right of way and trackage, except railroads, including private off-street turn-around and layover areas for mass transit vehicles with accessory poles and overhead wires, signal or other operating devises, shelters, and comfort stations incident to the use thereof, and headquarters for operating and maintenance employees.
   10) Adult theater or cabaret, Class A.
   11) Group residence facility.
   12) Group care facility.
   13) Day nursery or kindergarten.
   14) Golf course, except driving tee or range, miniature course or similar use.
   15) Home for nurses.
   16) Public libraries.
   17) Public or nonprofit museums.
   18) Nursing home, provided it complies with all governmental regulations applicable thereto.
   19) Public recreation area.
   20) Multi-family dwelling other than a row dwelling, Class B.
   21) Row dwelling, Class A.
   22) One-family dwelling.
   23) Two-family dwelling.
   24) Day nursery or kindergarten.
   25) Golf course, except driving tee or range, miniature course or similar use.
   26) Public libraries.
27) Nursing home, provided it complies with all governmental regulations applicable thereto.
28) Public recreation areas.
29) Accessory use and structure customarily incident to any of the above uses
   A. Cultivation of plants and plantings as an avocation of occupants of the premises
   B. Fence or enclosure wall other than a wire fence with barbs:
      1. Solid and not exceeding 6.5 feet in height, having two extra feet of height of open
         fencing.
      2. Openwork fencing having a ratio of open to solid portions of four to one to not
         exceed 8.5 feet in height.
   C. Minor garage used exclusively for the parking of noncommercial automobiles,
      recreational boats, and related vehicles and household paraphernalia.
   D. Minor stable and/or shelter for domestic pets.
   E. Signs.
   F. Minor parking for noncommercial automobiles.
   G. Loading space.
B. Uses which are permitted only as special exceptions by the Board.
   1) Churches, cathedral or temple, or unit building thereof.
   2) Extension of a nonconforming use within a nonconforming structure, or the change
      of such use within a nonconforming structure to a conforming use that is determined by
      the Board to be no more detrimental to the neighborhood.
   3) Enlargement or reconstruction of a public or nonprofit nonconforming use or
      nonconforming structure, other than a conditional use.
   4) Moving of a nonconforming structure to a different location on the same zoning lot.
   5) Rehabilitation and/or limited enlargement of a nonconforming structure and extension
      of the use therein.
   6) Automobile and gasoline service station.
   7) Athletic club or social club.
   8) Animal hospital.
   9) Theater.
   10) Small person care residence.
   11) Large person care residence.
   12) Amusement arcade.
   13) Office or clinic that provides counseling service to persons who have been convicted
       of a sexual offense.
   14) Sidewalk cafe.
   15) Beverage distributor, when located within 500 feet of the property boundary of a
       church, cathedral, synagogue, hospital, elementary/secondary school, college/university,
       public playground, public recreation center, drug or alcohol rehabilitation center.
C. Uses which are authorized by the Administrator in conformity with the Exceptions
   provision.
   1) Accessory use and structure customarily incident to the uses permitted in this section.
   2) Minor alterations or additions to a main structure in connection with any of the uses
      permitted in this section.
   3) Radio or television transmission or receiving tower facilities, not including broadcast
      studio or business office, operated under regulations of the FCC.
   4) Automobile repair shop or facility, not including body and fender repairs, when
      necessary to supplement a principal use of the premises and completely housed within a
      main or accessory building.
   5) Community garage or community parking area used exclusively by persons engaged
      in the conduct of establishments in the immediate vicinity of its location, or those for
      whom such establishments are conducted, unless otherwise accepted.
Analysis

Zoning
Li-Hang Wang

6) Major garage including general repairs and major parking area but not including garage or parking area for mass transit vehicles.
7) Temporary structure incidental to the development of land or to the erection of structures.
8) Convalescent home or rehabilitation center providing facilities supplementary to a hospital.

Height limitations:
In accordance to the C3 and R Districts.
Any structure 3 stories 45 feet

Minimum Area Limitations:
In accordance to the C3 and R Districts.
1. Lot area per dwelling unit
   A. Multiple-family dwelling, hotel, boarding house or rooming house
      For each dwelling unit of:
      4 or more bedrooms 1840 square feet
      3 bedrooms 1310 square feet
      2 bedrooms 1100 square feet
      1 bedroom 1000 square feet
   B. Row dwelling
   C. Two-family dwelling
   D. One-family dwelling
   2. Lot area for main uses not listed above
      A. With sleeping rooms not in excess of 40
      B. With sleeping rooms in excess of 40
      3. Front yard depth
      4. Rear yard depth
      When rear of lot
      A. Does not abut a street or a way
         or an R or I District
      B. Abuts a street
      C. Abuts a way
      D. Abuts an R or I District
      5. Side yard width

   5000 square feet, plus 400 square feet for each sleeping room in excess of 3, but not in excess of 30, plus 2420 square feet for each sleeping room in excess of 30.
   None required except where side of lot abuts an R or I District within the same frontage.

   15 feet
   None required except where side of lot abuts an R or I District within the same frontage.
   Sufficient to place the buildable area of the lot 25 feet from the center line of the way.
   15 feet when rear of lot abuts side of lot in an R or I District; 30 feet when rear sides of both lots abut.
When side of lot
A. Does not abut a street
   or way or an R or I District
B. Abuts a street or a way
   None required.
   Sufficient to place the
   buildable area of the lot 25
   feet from the center line of
   the street or way.
   15 feet.

C. Abuts an R or I District
6. Courts: Not required but regulated if provided.
7. Building coverage
   A. Commercial building or commercial
      and residential building
      Maximum permissible
      building coverage shall not
      exceed 80 percent of the total
      zoning lot.
   B. Residential building
      Maximum permissible
      building coverage shall not
      exceed 60 percent of the total
      zoning lot.

CP Commercial Planned Unit Development District

Purpose:
The Commercial Planned Unit Development District is intended to provide locations within
the city for the unified development of land for commercial and related purposes. Such
developments shall provide for a compatible mixture of commercial and related uses, either
in separate buildings or in structures devoted to two or more uses. In CP Districts, the
entire area shall be planned and developed as a unit including facilities for parking and
loading, vehicular and pedestrian circulation, landscaping, areas for pedestrian use, signs,
lighting, building design and orientation. It is the intention of these regulations to
encourage development of areas for shopping and working which are both attractive and
highly functional; to ensure that planned commercial districts are harmoniously related to
adjacent and nearby areas; and to protect the natural environment of the CP District.

Permitted uses:
1) Commercial uses, consisting of retail sales, services, wholesaling and office uses,
   including assembling, compounding, manufacturing, processing or treatment of
   products which is clearly incidental to a retail store or business, and provided that such
   operation is not noxious or offensive by reason of emission of noise, fumes, and air or
   water-carried waste.
2) Automobile repair shop or facility when necessary to supplement a principal use of the
   premises and when completely housed within a main or accessory building.
3) Educational institution.
4) Institutional facility.
5) Landing area for helicopter, autogiro or lighter-than-air craft.
6) Community garage or community parking areas.
7) Minor garage, including general repairs and storage, but not including garage for mass
   transit vehicles; or minor parking area.
8) Mass transportation company right-of-way and trackage, including private off-street
   turn-around and layover areas for transit vehicles with accessory poles and overhead
   wires, signal or other operating with devices, shelters and comfort stations incident to
   the use thereof; and headquarters for operators and maintenance employees.
9) Transportation passenger stations, including railroad rights-of-way, trackage and
   sidings and parking areas for buses.
10) Government uses and structures, other than housing and schools.
11) Hotel or apartment hotel.
12) Utility structures, facilities and installations.
13) Accessory uses and structures customarily incident to the above uses.

Intensity of development:
A. Establishment of Floor Area Ratios in CP Districts.
   Maximum floor area ratio shall not exceed:
   1) The floor area ratio associated with the commercial zoning classification of the CP District prior to its re-zoning; or
   2) The floor area ratio which is the average of the ratios associated with the zoning classification of land which adjoins or is adjacent across a street or way from the CP District according to the procedures set forth in the Land Use Intensity Rating System of the Subdivision Regulations and Standards.
B. Required open space.
   1) In a CP District, not less than twenty percent of the land area shall be improved as urban open space.

Off-street parking and loading requirements:
A. Off-street parking and loading shall be provided.

M-1 Limited Industrial District

Permitted uses:
1) Limited light industry uses, when conducted entirely within an enclosed building, including retail sale of products when such sale is clearly incidental and essential to the permitted industrial use, provided the uses are such that no explosive material or processes are involved, and no smoke, fumes, odors, dust, noise, vibration or glaring light is noticeable form outside any lot in this district.
   A. Assembly of small electrical appliances, small industrial and electrical instruments, accessories and devices, radios and phonographs; including the manufacture of small parts thereof.
   B. Automobile and trailer sales and supply business, marine equipment sales and supply business, including sale of small boats.
   C. Laboratories: experimental, photo or motion picture, film or testing.
   D. Manufacture of pottery and figurines or other similar ceramic products, using only previously pulverized clay and kiln fired only by electricity or gas.
   E. Manufacture, fabrication and maintenance of electric and neon signs, billboards, commercial advertising structures, very light sheet metal products, including heating and ventilating ducts and equipment; cornices, eaves and the like, and also including plumbing, heating, or electrical contracting business.
   F. Manufacture of musical and small precision instruments, watches and clocks, toys, novelties and rubber and metal stamps.
   G. Printing, lithographing, type composition, ruling and binding establishment.
   H. Processing, canning, packaging or treatment of dairy products and any use incident thereto, including distribution.
   I. Storage and distribution of any merchandise or material other than: building materials; contractor's equipment; explosives or inflammables; garbage, offal or dead animals; ice and clod storage, lumber, petroleum and petroleum by-products; rags, paper, metal or junk; and solid fuels; not including terminal warehousing or transfer depot.
2) Landscape gardener's sales area or business, provided no odors, dust, noise or glaring light is noticeable outside any lot in this District.
3) Office, professional or business.
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4) Business, training school limited to instruction in those subjects associated with business offices, such as secretarial training, management training and business machine operation.

5) Accessory use and structure customarily incident to any of the above uses, located within the buildable area of the lot, unless otherwise specified, and including:
   A. Fence or enclose wall.
   B. Loading space.
   C. Minor garage or minor parking areas.
   D. Recreation area, nonprofit.
   E. Signs.

Height limitations:
Any structure
2 stories
30 feet

Area limitations:
1. Front yard depth
   35 feet

2. Rear yard depth when rear of lot:
   a. Does not abut a street or way or an R or I District
   b. Abuts a street
   c. Abuts a way
   d. Abuts an R or I District
   None required.

3. Side yard width when side of lot:
   a. Does not abut a street or a way or an R or I District
   b. Abuts a street
   c. Abuts a way
   d. Abuts an R or I District
   None required.

4. Any yard abutting a major traffic
   None required.

M-2 Limited Industrial District

Permitted uses:
1) Limited light industry uses, when conducted entirely within an enclosed building, including retail sale of products when such sale is clearly incidental and essential to the permitted industrial use, provided the uses are such that no explosive material or processes are involved, and no smoke, fumes, odors, dust, noise, vibration or glaring light is noticeable form outside any lot in this district.
   A. Assembly of small electrical appliances, small industrial and electrical instruments, accessories and devices, radios and phonographs; including the manufacture of small parts thereof.
   B. Automobile, trailer, small boat and marine equipment sales and supply business, including servicing, painting, upholstering, tire retreading or recapping, battery manufacture and the like; but not including automobile and gasoline service station.
   C. Boat building, of only small boats.
   D. Building materials sales establishment.
   E. Cleaning and dyeing establishment using non-flammable cleaning fluids but not including bag, carpet, or rug cleaning.
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F. Distribution plant, including parcel delivery, ice and cold storage plant, bottling plant and food commissary or catering establishment.

G. Killing or dressing and/or packaging of poultry and rabbits.

H. Laboratories: experimental, photo or motion picture, film or testing.

I. Laundry, when no portion thereof is nearer than 200 feet to property classified R District.

J. Machinery sales and display.

K. Manufacture of pottery and figurines or other similar ceramic products, using only previously pulverized clay and kiln fired only by electricity or gas.

L. Manufacture, fabrication and maintenance of electric and neon signs, billboards, commercial advertising structures, very light sheet metal products, including heating and ventilating ducts and equipment; cornices, eaves and the like, and also including plumbing, heating, or electrical contracting business.

M. Manufacture of musical and small precision instruments, watches and clocks, toys, novelties and rubber and metal stamps.

N. Manufacturing, fabricating, compounding, assembling or treatment of articles or merchandise from the following previously prepared materials: bone, canvas, cellophane, cloth, cork, feathers, felt, fiber, fur, glass, hair, horn, leather, paper, plastics, precious or semi-precious metals or stones, shell, textiles, tobacco, yarns, wood but not including planing mill, and paint not employing a boiling process.

O. Printing, lithographing, type composition, ruling and binding establishment.

P. Processing, canning, packaging or treatment of such products as bakery goods, candy, cosmetics, dairy products, drugs, perfumes, pharmaceuticals, perfumed toilet soap, soft drinks, toiletries, and food products not including the following: fish products and meat products other than poultry and rabbits, sauerkraut, vinegar, yeast and the rendering or refinishing of fats and oils.

Q. Veterinary establishment.

R. Wholesale business.

2) Landscape gardener's sales area or business, provided no odor, dust, noise or glaring light is noticeable outside any lot in this District.

3) Mass transportation company right-of-way and trackage, except railroads, including private off-street turn-around and layover areas for mass transit vehicles with accessory poles and overhead wires, signal or other operating with devices, shelters and comfort stations incident to the use thereof; and headquarters for operators and maintenance employees.

4) Public utility facilities and installations for electricity, gas, oil, steam, telegraph, telephone, including telephone exchange building, and water; not including railroads.

5) Storage and distribution of any merchandise or material other than: building materials; contractor's equipment; explosives or inflammables; garbage, offal or dead animals; lumber; petroleum and petroleum by-products in excess of an amount necessary for use on the premises; rags, paper, metal or junk; and solid fuels; not including terminal warehousing or transfer depot.

6) Accessory use and structure customarily incident to any of the above uses, located within the buildable area of the lot, unless otherwise specified, and including:

A. Fence or enclose wall.

B. Loading space.

C. Minor garage or minor parking areas.

D. Recreation area, nonprofit.

E. Signs.

Height limitations:

Any structure 3 stories 45 feet

Area limitations:
1. Front yard depth
   None required except when side of lot abuts an R or I District within the same frontage.

2. Rear yard depth when rear of lot:
   a. Does not abut a street or way or an R or I District
   b. Abuts a street
   c. Abuts a way
   d. Abuts an R or I District

3. Side yard width when side of lot:
   a. Does not abut a street or a way or an R or I District
   b. Abuts a street
   c. Abuts a way
   d. Abuts an R or I District

M-3 Light Industrial District

Permitted uses:
1) Light industrial uses that are not obnoxious or offensive by reason of the emission of smoke, fumes, odors, dust, noise, gas, cinders, vibration, refuse matter or water-carried waste, including retail sale of products when such sale is clearly incidental and essential to the permitted industrial use.
   A. Airplane factory or hanger, not including wind tunnel and testing field.
   B. Automobile, trailer, small boat and marine equipment sales and supply business, including servicing, painting, upholstering, tire retreading or recapping, battery manufacture and the like; but not including automobile and gasoline service station.
   C. Blacksmith shop or horse-shoeing establishment.
   D. Boat building.
   E. Box factory
   F. Building materials sales establishment and storage area.
   G. Building-mover and wrecker's establishment.
   H. Brewery.
   I. Cleaning and dyeing establishment.
   J. Contractor's equipment storage.
   K. Cooperage works.
   L. Distribution plant, including parcel delivery, ice and cold storage plant, bottling plant, and food commissary or catering establishment.
   M. Feed mixing plant.
   N. Foundry, casting of only lightweight nonferrous metal.
   O. Grain elevator.
   P. Iron, steel or other metal, fabrication but not including foundry or drop hammer or punch press over fifty tons' capacity.
   Q. Killing or dressing and/or packaging of poultry or rabbits.
   R. Laboratories: experimental, photo or motion picture, film or testing.
   S. Laundry.
   T. Lumber storage, mill work and sales.
   U. Machine shop.
   V. Machinery repairing, sales and display.
W. Manufacture, fabrication and maintenance of electric and neon signs, billboards, commercial advertising structures, very light sheet metal products, including heating and ventilating ducts and equipment; cornices, eaves and the like, and also including plumbing, heating, or electrical contracting business.

X. Manufacturing, fabricating, compounding, assembling or treatment of articles or merchandise from the following previously prepared materials: bone, canvas, cellophane, cloth, cork, feathers, felt, fiber, fur, glass, hair, horn, leather, paper, plastics, precious or semi-precious metals or stones, shell, textiles, tobacco, yarns, wood and paint not employing a boiling process.

Y. Manufacture, fabricating, compounding, canning, packaging or treatment of such products as bakery goods, candy, cosmetics, dairy products, drugs, perfumes, pharmaceuticals, perfumed toilet soap, soft drinks, toiletries, and food products not including the following: fish and meat products, sauerkraut, vinegar and yeast, except in conjunction with a general food products manufacturing company; and the rendering of fats and oils or slaughter of animals.

Z. Manufacture of: appliances, electrical or mechanical; instruments, electronic, musical, precision or the like: machines, electric or mechanical, for home or office and the like; phonographs, radios, telephones or other instruments or machines for receiving, or transmitting sound; watches and clocks, toys, novelties and rubber and metal hand stamps.

AA. Planing mill.

BB. Printing, lithographing, type composition, ruling and binding establishment.

CC. Processing, canning, packaging or treatment of fish and meat products, sauerkraut, vinegar and yeast, except in conjunction with a general food products manufacturing company; and the rendering of fats and oils or slaughter of animals.

DD. Railroad or other mass transportation company freight and/or passenger and supporting facilities, limited receiving and distribution yards, right-of-way, trackage and sidings with accessory poles and overhead wires, signal or other operating with devices, shelters and comfort stations incident to the use thereof; including private off-street turn-around and layover areas for mass transit vehicles and parking areas for buses, provided the areas shall be enclosed and improved; car houses, yards and headquarters for operating and maintenance employees.

FF. Solid fuel such as coal, coke and wood, storage and sales.

GG. Stable.

HH. Stone or monument works.

II. Storage and distribution of any merchandise or material other than: explosives or flammables; garbage, offal or dead animals; paper, exclusive or rolled newsprint and other similar rolled paper; petroleum and petroleum by-products in excess of an amount necessary for use on the premises; and rags, metal or junk.

JJ. Structure or equipment for landing, mooring, or other like purposes and the use of the same for land or water transportation interchange.

KK. Veterinary establishment.

LL. Wholesale business.

MM. Earthware, china, concrete excluding manufacture of cement, porcelain, pottery, structural clay, terra-cotta tile and similar ceramic materials, products manufacture; provided that smoke controllers, dust collectors, exhaust washers, sediment tanks or similar equipment to prevent escape of smoke and dust are installed and maintained.

2) Dispensary, only with emergency facilities incident to the industry.

3) Landscape gardener's sales area or business, provided no odor, dust, noise or glaring light is noticeable outside any lot in this District.

4) Public utility facilities and installations for electricity, gas, oil, steam, telegraph, telephone, including telephone exchange building, and water; not including railroads.
5) School, industrial trade, when not objectionable due to noise, odor, vibration, dust, smoke or other similar causes.
6) Accessory use and structure customarily incident to any of the above uses, located within the buildable area of the lot, unless otherwise specified, and including:
   A. Fence or enclose wall.
   B. Loading space.
   C. Minor garage or minor parking areas.
   D. Recreation area, nonprofit.
   E. Signs.

**Height limitations:**
Any structure 9 stories 85 feet

**Area limitations:**
1. Front yard depth None required except when side of lot abuts an R or I District within the same frontage.

2. Rear yard depth when rear of lot:
   a. Does not abut a street or way or an R or I District 15 feet when rear of the lot abuts side of lot in R or I Districts; 30 feet when rears of both lots abut.
   b. Abuts a street None required.
   c. Abuts a way 15 feet when rear of the lot abuts side of lot in R or I Districts; 30 feet when rears of both lots abut.
   d. Abuts an R or I District 15 feet when rear of the lot abuts side of lot in R or I Districts; 30 feet when rears of both lots abut.

3. Side yard width when side of lot:
   a. Does not abut a street or a way or an R or I District None required.
   b. Abuts a street None required.
   c. Abuts a way Sufficient to place the buildable area of the lot 25 feet from the center line of the way.
   d. Abuts an R or I District Sufficient to place the buildable area of the lot 25 feet from the center line of the way.

**M-4 Heavy Industrial District**

**Permitted uses:**
1) Airplane factory or hanger.
2) Alcohol manufacture.
3) Ammonia, bleaching powder or chlorine manufacture.
4) Asphalt manufacture or refining.
5) Automobile, trailer, small boat and marine equipment sales and supply business, including servicing, painting, upholstering, tire retreading or recapping, battery manufacture and the like; but not including automobile and gasoline service station.
6) Automobile wrecking.
7) Blacksmith shop or horse-shoeing establishment.
8) Blast furnace or coke oven.
9) Boat building.
10) Boiler works.
11) Box factory
12) Building materials sales establishment and storage area.
13) Building-mover and wrecker's establishment.
14) Brewery.
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15) Brick, tile, or terra cotta manufacture.
16) Chemical manufacture.
17) Cleaning and dyeing establishment.
18) Concrete or cement products manufacture.
19) Contractor's equipment storage.
20) Cooperage works.
21) Cotton gin or oil mill.
22) Distribution plant, including parcel delivery, ice and cold storage plant, bottling plant, and food commissary or catering establishment.
23) Drop forge industry manufacturing forgings with power hammers.
24) Feed mixing plant.
25) Grain elevator.
26) Hospital, only with emergency facilities incident to the industry.
27) Iron or steel or other metal manufacture or processing, foundry or fabrication plant and heavy weight casting, including galvanizing and other treatment.
28) Killing or dressing and/or packaging of poultry or rabbits.
29) Laboratories: experimental, photo or motion picture, film or testing.
30) Lampblack manufacture.
31) Landscape gardener's sales area or business.
32) Laundry.
33) Lumber storage, mill work and sales.
34) Machine shop.
35) Machinery repairing, sales and display.
36) Manufacture, fabrication and maintenance of electric and neon signs, billboards, and commercial advertising structures, sheet metal products including heating and ventilating ducts and equipment; cornices, eaves and the like, and also including plumbing, heating, or electrical contracting business.
37) Manufacturing, fabricating, compounding, assembling or treatment of bone, canvas, cellophane, cloth, cork, feathers, felt, fiber, fur, glass, hair, horn, leather, paper, plastics, precious or semi-precious metals or stones, shell, textiles, tobacco, yarns, wood, or articles of merchandise made therefrom.
38) Manufacture, fabricating, compounding, canning, packaging or treatment of such products as bakery goods, candy, cosmetics, dairy products, drugs, perfumes, pharmaceuticals, perfumed toilet soap, soft drinks, toiletries, and food products, including the following: fish and meat products, sauerkraut, vinegar and yeast, but not including the following: fish smoking, curing or canning, rendering of fats and oils or slaughter of animals.
39) Manufacture of: appliances, electrical or mechanical; instruments, electronic, musical, precision or the like: machines, electric or mechanical, for home or office and the like; phonographs, radios, telephones or other instruments or machines for receiving, reproducing or transmitting sound; watches and clocks, toys, novelties and rubber and metal hand stamps.
40) Oilcloth or linoleum manufacture.
41) Ore reduction.
42) Paint, oil including linseed, shellac, turpentine, lacquer or varnish manufacture.
43) Paper and pulp manufacture.
44) Petroleum products manufacture or wholesale storage of petroleum.
45) Planing mill.
46) Potash works.
47) Printing, lithographing, type composition, ruling and binding establishment.
48) Public utility facilities and installations for electricity, gas, oil, steam, telegraph, telephone including telephone exchange building and water.
49) Quarry, stone mill or slag crusher.
50) Railroad or other mass transportation company freight and/or passenger facilities, right-of-way, trackage and sidings with accessory poles and overhead wires, signal or other operating devices, shelters and comfort stations incident to the use thereof; including private off-street turn-around and layover areas for mass transit vehicles and parking areas for buses, provided the parking areas shall be enclosed and improved; car houses, repair shops, yards and headquarters for operating and maintenance employees.

51) Railroad repair shop, receiving, distribution and classification yards and supporting facilities.

52) Repair shop.

53) Rock, sand, slag, or gravel distribution.

54) Rolling mill.

55) Rubber or gutta-percha manufacture or treatment.

56) Salt works.

57) School, industrial trade.

58) Soap manufacture.

59) Sodium compounds manufacture.

60) Solid fuel such as coal, coke and wood, storage and sales.

61) Stable.

62) Stone or monument works.

63) Storage and distribution of any merchandise or material other than: explosives or flammables and garbage, offal or dead animals.

64) Stove or shoe polish manufacture.

65) Structure or equipment for landing, mooring, or other like purposes and the use of the same for land or water transportation interchange.

66) Tar distillation or tar products manufacture.

67) Tool manufacture.

68) Veterinary establishment.

69) Wholesale business.

70) Wool pulling or scouring.

71) Accessory use and structure customarily incident to any of the above uses, located within the buildable area of the lot, unless otherwise specified, and including:

A. Fence or enclose wall.

B. Loading space.

C. Minor garage or minor parking areas.

D. Recreation area, nonprofit.

E. Signs.

**Height limitations:**

Any structure

9 stories

85 feet

**Area limitations:**

1. Front yard depth

None required except when side of lot abuts an R or I District within the same frontage.

2. Rear yard depth when rear of lot:

   a. Does not abut a street or way or an R or I District

   None required.

   b. Abuts a street

   None required except when side of lot abuts an R or I District within the same frontage.

   c. Abuts a way

   Sufficient to place the buildable area of the lot 25 feet from the center line of the way.

   d. Abuts an R or I District

   15 feet when rear of the lot abuts side of lot in R or I Districts; 30 feet when rears of both lots abut.

3. Side yard width when side of lot:
a. Does not abut a street or a way or an R or I District: None required.
b. Abuts a street: None required except when side of lot abuts an R or I District within the same frontage.
c. Abuts a way: Sufficient to place the buildable area of the lot 25 feet from the center line of the way.
d. Abuts an R or I District: 30 feet when side of the lot abuts rear of lot in R or I Districts; 15 feet when sides of both lots abut.

R-2 Two-family Residential District

Permitted Uses:
1) Two-family dwelling
2) One-family dwelling
3) Golf course, except driving tee or range, miniature course or similar use.
4) Public libraries.
5) Public recreation areas.
6) Accessory use and structure customarily incident to any of the above uses.
   A. Cultivation of plants as an avocation of occupants of the premises, within the zoning lot.
   B. Fence or enclosure wall other than a wire fence with barbs:
      1. Solid and not exceeding 6.5 feet in height, having two extra feet of height of open fencing.
      2. Openwork fencing having a ratio of open to solid portions of four to one to not exceed 8.5 feet in height.
   C. Minor garage used exclusively for the parking of noncommercial automobiles, recreational boats, and related vehicles and household paraphernalia.
   D. Minor stable and/or shelter for domestic pets.
   E. Signs.
   F. Minor parking for noncommercial automobiles.
   G. Loading space.

Height Limitations:
Main structure 2-1/2 stories 35 feet in height
accessory structure 1 story 15 feet in height

Minimum Area Limitations:
Two-family dwelling 3000 square feet lot area per dwelling unit
One-family dwelling 5000 square feet lot area per dwelling unit
Front yard depth 30 feet
Rear yard depth 30 feet
Side yard width, each of two 30 feet abutting a street; 10 feet when not required Two-family dwelling
required Two-family dwelling
One-family dwelling not exceeding 30 feet abutting a street; 5 feet when not
1-1/2 stories or 20 feet in height abutting a street.
One-family dwelling exceeding 30 feet abutting a street; 5 feet when not
1-1/2 stories or 20 feet in height abutting a street.
One-family dwelling exceeding One corner lot, 30 feet abutting a street; 5 feet
1-1/2 stories or 20 feet in height when not abutting a street. On interior lot, 10
feet on one side, 5 feet on other side.
Other than a one-family dwelling or 30 feet abutting a street and 20 feet when not
a two-family dwelling abutting a street.

R-3 Multiple-family Residential District

Permitted uses:
1) Multi-family dwelling other than a row dwelling, Class B.
2) Row dwelling, Class A.
3) One-family dwelling.
4) Two-family dwelling.
5) Day nursery or kindergarten.
6) Golf course, except driving tee or range, miniature course or similar use.
7) Public libraries.
8) Nursing home, provided it complies with all governmental regulations applicable thereto.
9) Public recreation areas.
10) Accessory use and structure customarily incident to any of the above uses
    A. Cultivation of plants and plantings as an avocation of occupants of the premises
    B. Fence or enclosure wall other than a wire fence with barbs:
        1. Solid and not exceeding 6.5 feet in height, having two extra feet of height of open fencing.
        2. Openwork fencing having a ratio of open to solid portions of four to one to not exceed 8.5 feet in height.
    C. Minor garage used exclusively for the parking of noncommercial automobiles, recreational boats, and related vehicles and household paraphernalia.
    D. Minor stable and/-or shelter for domestic pets.
    E. Signs.
    F. Minor parking for noncommercial automobiles.
    G. Loading space.

### Height limitations:

- One-family dwelling: 2-1/2 stories, 35 feet
- Accessory structure: 1 story, 15 feet

### Minimum Area limitations:

1. Lot area per dwelling unit
   - A. Multiple-family dwelling other than a row. For each dwelling unit of:
     - 4 or more bedrooms: 3000 square feet
     - 3 bedrooms: 2100 square feet
     - 2 bedrooms: 1800 square feet
     - 1 bedroom: 1600 square feet
   - B. Row dwelling: 3000 square feet
   - C. Two-family dwelling: 3000 square feet
   - D. One-family dwelling: 5000 square feet
2. Lot area for main uses not listed above
   - A. With sleeping rooms not in excess of 30: 5000 square feet, plus 500 square feet for each sleeping room in excess of 3, but not in excess of 20, plus 3450 square feet for each sleeping room in excess of 20.
   - B. With sleeping rooms in excess of 30: 1600 square feet for each sleeping room.
3. Front yard depth: 25 feet.
4. Rear yard depth: 25 feet abutting a street; 30 feet when not abutting a street.
5. Side yard width; each of two required
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A. Multiple-family dwelling other than a row

B. Row dwelling
   a. When having no dwelling unit fronting a side yard
   b. When having any dwelling unit fronting a side yard

C. Two-family dwelling

D. One-family dwelling not exceeding 1-1/2 stories or 20 feet in height

E. One-family dwelling exceeding 1-1/2 stories or 20 feet in height

F. Other than uses listed for side yard width

R-4 Multiple-family Residential District

Permitted uses:
1) Multi-family dwelling other than a row dwelling, Class B.
2) Row dwelling, Class A.
3) One-family dwelling.
4) Two-family dwelling.
5) Day nursery or kindergarten.
6) Golf course, except driving tee or range, miniature course or similar use.
7) Home for nurses.
8) Public libraries.
9) Public or nonprofit museums.
10) Nursing home, provided it complies with all governmental regulations applicable thereto.
11) Public recreation area.
12) Accessory use and structure customarily incident to any of the above uses
   A. Cultivation of plants and plantings as an avocation of occupants of the premises
   B. Fence or enclosure wall other than a wire fence with barbs:
      1. Solid and not exceeding 6.5 feet in height, having two extra feet of height of open fencing.
      2. Openwork fencing having a ratio of open to solid portions of four to one to not exceed 8.5 feet in height.
   C. Minor garage used exclusively for the parking of noncommercial automobiles, recreational boats, and related vehicles and household paraphernalia.
   D. Minor stable and/or shelter for domestic pets.
   E. Signs.
   F. Minor parking for noncommercial automobiles.
   G. Loading space.
### Height limitations:
- **Main structure**: 3 stories - 45 feet
- **Accessory structure**: 1 story - 15 feet

### Minimum area limitations:
1. **Lot area per dwelling unit**
   - **A. Multiple-family dwelling other than a row**
     - 4 or more bedrooms: 1840 square feet
     - 3 bedrooms: 1310 square feet
     - 2 bedrooms: 1100 square feet
     - 1 bedroom: 1000 square feet
   - **B. Row dwelling**
   - **C. Two-family dwelling**
   - **D. One-family dwelling**

2. **Lot area for main uses not listed above**
   - **A. With sleeping rooms not in excess of 40**
   - **B. With sleeping rooms in excess of 40**

3. **Front yard depth**
4. **Rear yard depth**
5. **Side yard width; each of two required**
   - **A. Multiple-family dwelling other than a row; or home for nurses; or library; or museum; or rooming house; when the same are:**
     - a. 3 stories: 25 feet abutting a street; 15 feet when not abutting a street.
     - b. Less than 3 stories: 25 feet abutting a street; 10 feet when not abutting a street.
   - **B. Row dwelling**
     - a. When having no dwelling unit fronting a side yard: 25 feet abutting a street; 10 feet when not abutting a street.
     - b. When having any dwelling unit fronting a side yard: 25 feet abutting a street; 30 feet when not abutting a street.
   - **C. Two-family dwelling**
   - **D. One-family dwelling not exceeding 1-1/2 stories or 20 feet in height**
   - **E. One-family dwelling exceeding 1-1/2 stories or 20 feet in height**

On corner lot, 25 feet abutting a street; 5 feet when not abutting a street. On interior
F. Other than uses listed for side yard width

lot, 10 feet on one side; 5 feet on the other side.
25 feet abutting a street; 20 feet when not abutting a street.

S Special District

Purpose:
The S Special District land is not suitable for intensive development because of physical characteristics of land; due to the type of use on or adjacent to this land; because essential public utilities, facilities and services cannot be provided efficiently or economically to this land; or because the land in an undeveloped or minimally developed state serves a purpose such as the scenic beauty provided by wooded hillsides or the neighborhood identification provided by undeveloped tracks of land. The S District encompasses primarily hillsides, parks and cemeteries.

Permitted Uses:
1) Cultivation of plants and plantings, when not involving retail sales, or advertising or sales on the premises.
2) Recreational area, public or operated by nonprofit organization.
3) Accessory use and structure incident to any of the above uses
   A. Fence or enclosure wall other than a wire fence with barbs:
      1. Solid and not exceeding 6.5 feet in height, having two extra feet of height of open fencing.
      2. Openwork fencing having a ratio of open to solid portions of four to one to not exceed 8.5 feet in height.
   B. Minor parking area used exclusively for the parking of noncommercial automobiles.
   C. Signs.

Height limitations:
Main structure 3 stories 35 feet in height
Accessory structure 1 story 15 feet in height

I-M Industrial-Medical District

Permitted uses:
A. Conditional uses which are permitted after a public hearing and recommendation by the Commission, and after approval by Council in conformity with the Exceptions provisions.
   1) Enlargement or reconstruction of any of the conditional uses under Exceptions that is nonprofit, when such use is a nonconforming use or nonconforming structure.
   2) Government uses and structures, or unit group building thereof, other than housing, major excavating, grading or filling and schools.
   3) Public utility facilities and installations consisting of overhead power lines supported by metal towers.
   4) Unit group building development.
   5) Major excavating, grading or filling, except for strip or other mining of coal or other minerals, excavating of sand or rock and the crushing of rock, sanitary and other fills, recovery of metal or natural resources and similar operations.
   6) Clinic or laboratory, medical or dental, including out-patient clinic.
   7) Hospital, or unit group building thereof.
   8) Medical buildings for certain uses auxiliary to a hospital.
   9) Medical center group building.
10) Nursing home.
11) Office, for physicians and dentists.
12) Pharmacy.
13) Railroad or other mass transportation right-of-way and trackage including railroad passenger station and private off-street turn-around and layover areas for mass transit vehicles, with accessory poles and overhead wires, signal or other operating devices, shelters, and comfort stations incident to the use thereof, and headquarters for operating and maintenance employees.
14) Financial institutions.
15) Helipads.

B. Uses which are permitted only as special exceptions by the Board.
1) Churches, cathedral or temple, or unit building thereof.
2) Extension of a nonconforming use within a nonconforming structure, or the change of such use within a nonconforming structure to a conforming use that is determined by the Board to be no more detrimental to the neighborhood.
3) Enlargement or reconstruction of a public or nonprofit nonconforming use or nonconforming structure, other than a conditional use.
4) Moving of a nonconforming structure to a different location on the same zoning lot.
5) Rehabilitation and/or limited enlargement of a nonconforming structure and extension of the use therein.
6) Helistops.

C. Uses which are authorized by the Administrator in conformity with the Exceptions provision.
1) Accessory use and structure customarily incident to the uses permitted in this section.
2) Minor alterations or additions to a main structure in connection with any of the uses permitted to this section.
3) Radio or television transmission or receiving tower facilities, not including broadcast studio or business office, operated under regulations of the FCC.
4) Community garage or community parking area.
5) Major garage including minor repairs; and major parking area; not including a garage or parking area for mass transit vehicles.
6) Temporary structure incidental to the development of land or to the erection of structures.
7) Use of land by a public utility corporation in a suitable location for public utility purposes.

Height limitations:
Main structure
9 stories
85 feet
Accessory structure
1 story
15 feet

Minimum area limitations:
1. Lot area
A. Use with sleeping rooms not in excess of 600
B. With sleeping rooms in excess of 600
2. Front yard depth
A. Structure over 3 stories or 45 feet in height
3. Rear yard depth
25 feet plus sufficient to place the buildable area of the lot 200 feet from any property in an R1-A or R1 District and 100 feet from any property in an R2 District.
Analysis

Zoning
Li-Hang Wang
From here on...
The following section consists of the work of four separate design firms which were created by the students in David Lewis and Bob Coles' studios. The work is broken down into three phases.

The first of the three stages is the urban design program phase. Each firm further bisected and analyzed their site, South Side and the LTV site, in order to determine a framework of rules and regulations with which to base their urban designs. Design areas were established and program guidelines for restoration and preservation were created.

The second phase is the Urban Design Phase. Here each firm took their previously established guidelines and created an infrastructure for urban design. Areas of outdoor space, community space, housing, and commercial spaces were integrated with the existing South Side. The two South Side firms dealt with issues which began to revitalize South Side. The two LTV site firms began with a vacant lot and created their own new infrastructure.

The third phase is a set of interventions which take a closer look at the proposed urban designs. Detailed elevations plans and perspectives have been created by each firm to display the urban designs on a personal and detailed level. These phases are a product of the entire analysis of South Side which took place throughout the entire semester.

All of these phases concentrate on the integration of architecture and the community which will utilize and give life to the new urban designs. South Side has a richness which should be addressed in a manner which will preserve and conserve their existing values.
Our goal is to re-establish a positive “image” for the South Side community and provide a framework for city-wide riverfront development.

Urban Design Priorities

1. Link the South Side to the Waterfront
   A urban design for the riverfront development must be made. To succeed in creating this urban design, the railroad which divides the water and the community must be addressed. Along with the railroad, the building edge which does not address the water, limited public access, the lack of view corridors and zoning must be taken into account.

2. Preserve Pedestrian Movement and Character
   To preserve the pedestrian movement within the South Side many obstacles must be overcome. The traffic within the network of the flats has created congestion in various areas, primarily on Carson Street and at the intersections of Carson Street and the bridges which access the South Side. Better pedestrian circulation in these areas will make for a safer community.

3. Maintain Architectural Characteristics
   To maintain the present architectural characteristics of the South Side, a balance must be created between the current architecture which exists and regional development which will occur in the area. Zoning Laws and monetary factors must be analysed to achieve an architectural image appropriate to the South Side.

4. Build a Community Employment Base
   To build a stronger employment base for the South Side one must take into account the community layout of the South Side and its highly concentrated commercial district. Zoning Laws will become an issue in attempts to establish stronger and new zones of commerce and industry.

5. Recognition and Definition of Neighborhoods and Zones
   Internal to the South Side there are numerous subdivisions of communities and neighborhoods. Through design implications, aids and amenities can be created for these communities and neighborhoods.

6. Solve Transportation and Congestion Problems
   Due to the truck routes, commuter traffic and community traffic, the South Side has become very congested. Poor integration of internal and external transportation systems must be overcome through the integration of more efficient parking systems. Zoning and lack of space maybe the two largest obstacles, simply because the South Side has a very high density and the community does not always welcome parking areas into their neighborhoods.

7. Attract New Families
   In the attempts to attract new families to the South Side, attention must be brought to the schools and parks. Greater attention must also be brought to the security of the area and the linking of communities. The attitudes and opinions of the current community are a primary factor in establishing a connection between the present community and new families.

8. Link the “Slopes” and the “Flats”
   To link the slopes to flats one must overcome the obstacles of the railroad, the winter road conditions and the lack of pedestrian access.

Archisynth has taken these urban design priorities and further analysed the South Side. Many aspects must be preserved and others must be conserved in order to achieve a cohesive urban design. These priorities have been applied throughout our urban design plan.
Identifiable and Distinct Areas

The South Side Flats can be divided into many distinct areas. There are many factors which cause these zones to be both separate and yet interdependent of each other.

Waterfront

The waterfront is one of the most important locations where a visual image can be created for the South Side. These images can be perceived from the northern side of the Monongahela, primarily the city. Links must be made to the waterfront. Pedestrians internal to the community, outside visitors and waterway visitors must be able to reach to waterfront without disturbing the community. A “draw” must be integrated so as to attract users internal and external to the community.

Commercial District - Carson Street

Carson Street can be analyzed in three main zones, 8th Street to 17th Street, 17th Street to Birmingham Bridge and the Bridge to 25th Street. The main focus of Carson Street is the pedestrian movement. The current industrial and commuter traffic raises many problems of safety and congestion. The re-routing of such traffic could create a stronger community based circulation in the Carson Street zone. Options for more efficient parking must be created. The cross-axis which intersect Carson Street must be emphasized. Failing commercial areas must be identified and redeveloped and a more elderly friendly environment must be created. A stronger commercial areas must be established on the ends of Carson Street.

Wharton Square

Though this square has a very different architectural image than that of the rest of the South Side, it has become an integral part of the daily life of many residents of the South Side. More fluent pedestrian movement must be established within Wharton Square and to the riverfront and Carson Street.

Bridges

The main obstacles concerning the bridges is the congestion that is created from the flow of traffic which circumvents the bridges. The current traffic must be redistributed. The problem of excess commuter and industrial traffic could initially be solved at this location where the traffic arrives. Pedestrian friendly zones must be created in this area through links to the city, Oakland, waterfront and the community.
Bedford Square

Bedford Square is one of the strongest architectural and community areas within the South Side. To strengthen its current character, links to the riverfront and Carson Street can be clarified. The area has qualities which could be further enhanced through a stronger outdoor atmosphere, enabling the area to become a possible location for a pedestrian vehicular free zone, focusing on its original market flavor.

School

By strengthening the image of the South High School and Phillips Public School, links between educational resources and the community can be made. Safety issues must be improved and parking must be addressed. Improvements which are made to the school zone will more likely create a more positive image for new families which wish to enter the community. Expansion of the present school system is always a solution to the probable population increase.

Big Buildings

To the southern corner of the South Side Flats there exists a highly industrial area, which consists of a Hospital, Brewery and warehouses. This area is very much a community within itself. Since many of the residents of the South Side are employed here, a user friendly atmosphere must be created within the area and at the edges of the zone. Adaptive reuse must be applied to those warehouses which are currently vacant. Through this process an emphasis must be made on the industrial aspects of the area.

Links to the Flats

Links between the Slopes and the Flats should be established. These links can be made in the form of inclines, trolleys, busses and pedestrian paths. These links are one which can be carried out from the Slopes all the way to these riverfront. Along these links locations which become part of the community can be created and existing landmarks can be emphasized. These links could aid in the reduction of the traffic congestion in the Flats and the development of the pedestrian movement.

Housing

The main focus which exists within the housing zones of the South Side community, is the strengthening of the existing neighborhoods. Many of the neighborhoods on the South Side have lost their centers or their edges. Through community and neighborhood design implementations a greater internal focus can be created in these zones. Through design implications within the other zones better pedestrian movement, traffic conditions, and linkages in the housing zones.
With the goal in mind ArchiSynth offers a number of recommendations in order to re-establish a positive "image" for the South Side. A new commuter roadway is recommended along the railway tracks to the south of the site. This will remove some of the congestion which exists on Carson Street. The railway lines which line the river are to be re-distributed to the lines to the south of the South Side Flats. This will remove one of the boundaries which lies between the community of the South Side and the riverfront. The industry which lines the riverfront will also be slowly removed from the riverfront and redistributed to the brewery zone and to other locations outside of the South Side. This will enable to a full force redevelopment of the South Side Riverfront. The area will be zoned to residential/light commer-
cial from the present industrial zoning. This development of the riverfront will enable room for an extensive waterfront park development which connects the South Side to the riverfront. The Heritage Trail and other landscaping will line the river's edge.

Interventions were done in five distinct areas of the South Side. Carson Street has been analyzed in attempts to address many of the priorities of the South Side. New Housing has been created which lines the riverfront. A new community center which supports the existing community and the residents which will occupy the new housing units has been located within the new housing. A redevelopment of Bedford Square has been recommended. A Wharton Square Food Court which addresses the waterfront has been analyzed.
Interventions

Carson Street  
New Commuter Roadway  
Robert Kendall

Housing / Park  
David Scott

Community Center  
Eric Heiman

Bedford Square  
Douglas Franz

Wharton Square - Food Court  
Dina Fredrickson
When people think of the South Side, one of the first images that come to mind is that of Carson Street. Much of the life of the South Side comes from the stores and the movement which exist along this main artery. Cars crowd the street and people dash from sidewalk to sidewalk stopping in the stores and waving to their neighbors.

Land use and Zoning Proposals

For Carson Street, there will be a height and weight limit put on vehicles allowed to drive on the street. All other zoning restrictions should remain the same.

Conservation vs. New Development

Conserve - Strengthen pedestrian character
- sidewalks
- crosswalks
- trees
- benches
- median strip

New Development
- remove all traffic
- limit the types of vehicles allowed on Carson
- the creation of an alternative route/throughway
Traffic, Parking, and Pedestrian Movements

Traffic will be improved by the new throughway in two ways; the removal of large trucks, and the removal of most through traffic. Parking will be kept along Carson st. but will be improved visually through the adaptation of intended sidewalks. Pedestrian movements will be improved through the better design of the street corners. The street corners will jut out from behind parked cars along the street to improve the visual path of the drivers and the pedestrians. The crosswalks will be made easier to see and distinguish from the street. Also the addition of sound to the "walk" and "do not walk" signs will help the elderly and the visually impaired.

Vistas and View Corridors
Due to lack of visual contact to the river from Carson street, the addition of stone markers with an iron emblem will mark the way to the river.

Summary of the life and future of Southside
In an effort to unify the Southside, the revitalization of Carson Street, through the beautification of its basic pedestrian components, will create a strong axis designed to tie the community together. There is an effort to enhance the economic and sociological values associated with Carson St., through the strengthening of the local heritage.

Interventions
Carson Street
New Truck Route
Robert Kendall

Plan of New Wide and Narrow Portions of Carson Street.

Detail of New Lights for Carson Street.
Interventions

Carson Street
New Truck Route
Robert Kendall

Plan of Intersection of Birmingham Bridge and Carson Street.

Plan of New Truck Route and Their Intersections with Carson Street.
Interventions

Carson Street
New Truck Route
Robert Kendall

Carson Street.
The housing and park intervention are designed both to respond to the existing structure and character of Southside housing and to make the riverfront more attractive and accessible, while offering amenities that do not exist in Southside. The street system maintains the two existing grids which meet at the proposed Community/Arts Center. The north/south streets terminate at the park providing vistas of the city and the river and the east/west streets unify the different elements of the entire urban design scheme.

The park is intended to serve both a new housing development and the existing Southside community and will eventually fit into a future system of regional riverfront parks. It will feature a riverfront walking and biking trail that can be integrated into the Heritage trail system. A variety of playgrounds, playing fields, picnic areas, trails, boat launches, vistas and an amphitheater will also be offered.

The housing intervention for the area along the southside riverfront, between the Birmingham Bridge and the 10th Street Bridge, consists of four major city blocks of roughly the same size and character. Two blocks flank either side of the proposed community/arts center and face a new riverfront park running the full length of the site.

The housing is intended to address two primary community goals. The first is to maintain a high owner occupancy rate which exists in most of the Southside housing stock. This is essential in attaining the second goal which is to attract families to the Southside.

The nature of the housing is intended to roughly maintain the scale and street character of Southside housing, while offering new amenities, that for the most part do not exist on the Southside. This includes the architectural edge, street corridors and buildings of the same size and scale of the existing fabric.
Each of the four housing blocks consists of both townhouses and single family detached houses. The townhouses will provide both owner and renter units for families, couples and individuals. The houses will be owner occupied two, three and four bedroom units. Parking will be provided on the interior of the block with one space per units. Individual houses will have spaces on their respective sites while townhouse parking will be in the central lot. Each owner unit will have a private green space that will be maintained by the occupants.
Interventions

Housing / Park
David Scott

Axonometric of New South Side Housing.
Plan of New Housing Neighborhood.
The USX Site intervention is one piece of the comprehensive urban design plan to integrate the South Side with the Monongahela River and to the city of Pittsburgh as well. The design is a combination of concentrations on making it “fit” into the context of the community and to provide an image for the South Side from across the river and beyond, as well as in the community itself. This was done by taking a lot of things into consideration — utilizing the existing grids and geometries, considering the climactical factors, developing vistas to the river, Oakland, and the downtown, respecting the scale and architectural characteristics of the area, and maintaining and enhancing the pedestrian nature of it, as well.
Program

Community Arts Center—would include places for community meetings, leisure areas, classrooms or studios, areas for display of artwork, offices for community leaders, etc., parking beneath, and anything else the community might wish to have there—they are a fundamental part of the programming. This would be a center for the entire South Side, not just the people living near the site.

Outdoor Amphitheater—would include seating for about 400 people, could accommodate various performances and stage set-ups, and could provide for a possible portable screen to show movies and such.

Interventions
Community Center
Eric Heiman

Axonometric.
Community Center and Outdoor Amphitheater.

Plan of Community Center and Outdoor Amphitheater.
Interventions

Community Center
Eric Heiman

Perspective of Outdoor Amphitheater.
Proposal

The USX site is a centerpiece to the whole urban design armature, as it lies almost directly in the center between the Birmingham and 10th Street bridges.

The main idea tying this proposal together is the pedestrian “corridor” that starts on Muriel Street and proceeds north all the way to the river, linking community areas along it, which include the community arts center and the amphitheater as well as smaller areas of activity. It also solves the private/public adjacency problem occurring on 16th and 17th Street by internalizing the activity on the site, rather than competing with the residential activity that will occur on these streets. It also provides a strong cross-axis to the river, against the direction of Carson Street, a strong community desire.

The first step in the procession as one moves north towards the river from Muriel Street is an ascent towards the entrance to the community arts center, flanked by a small parking area, and a green space for community use, with the vista of the river and what lies across it always in view. The corridor then “splits” the center into two buildings creating a civic space in between that can be used by anyone in the community to eat their lunch talk, just pass through, whatever. It is also a possible connection to the parking underneath. This makes the center less citadel-like, and more accessible to the members of the community. This reason also accounts for the extreme glazing on the facades facing the corridor, to “open” the center up even more by being able to see into parts of it as well.

Interventions

Community Center
Eric Heiman

After moving through the community arts center area and passing another parking/green space area one reaches our “park” road. It will be strongly crosswalked, and on certain days will be closed off between 16th and 17th to accommodate community activities like bazaars, flea markets, car washes, whatever.

One then moves into the riverfront park area, and eventually reaches the outdoor amphitheater which steps down into an open area surrounded by trees and vegetation. The walking axis to the river is “forked” at the onset of the theater so one may chose to bypass it on the way to the river, or watch the performance that may be occurring. But the visual axis is maintained all the way to the river. This area could be used for community events like a place to meet that is outdoors, Christmas caroling in the winter, or just a place to “hang out”, as well as traditional performances of plays and screening of films. It is enhanced by the gorgeous vista across the river that will always be in view.

The corridor then crosses the riverfront path, and terminates in a lookout point that would also include a piece of sculpture (chosen by the community of course—I suggest a competition, perhaps) pertaining to the history or future of the South Side.
In the Rejuvenation and Renewal of the Southside, Bedford Square is an key element in the re-establishment of a Market Square environment for the Southside residents. The character of Bedford Square will be conserved to address the pedestrian quality of street life, balancing both urban and pedestrian scale. The Market Building will be a transition element between Carson Street and the Monongahela River, acting as a point of visual and pedestrian link between the riverfront and all of Southside. The function of this market will focus on community use, but will also act as a local draw for the economic enhancement of the Southside.

An Urban Design Policy is established to address these issues, based on:

Conservation and Preservation:
- Bedford Market House will be preserved, redefining its use as an open, public market house
- Carson Street commercial shops will remain, scale will be maintained in building heights for infill structures to establish a continuous street front
- Historic structures south of Bingham Street will be preserved, specifically those facing the Market House
- All structures north of Bingham will be removed between 10th and 13th Streets

Traffic and Parking:
- Vehicular traffic will flow in a one-way counterclockwise direction around the Market House
- Street parking be found along 11th and 13th Streets, Bingham and Muriel Streets and on the east and west sides of the Market House, on 12th street (across the street from the Market)
- A two-story parking structure will be found between 10th and 11th Streets, north of Bingham Street.
Interventions
Market Square
Douglas Franz

Axonometric. Shows Building Scale and Massing from Carson Street to Riverfront.

Perspective from Carson Street Looking Down 12th Street to Market House.

Perspective from East Side of Market House Looking Down 12th Street to Riverfront.

Perspective from 12th Street at the Market Looking to the Riverfront.
Interventions
Market Square
Douglas Franz

• A parking lot will be located between Bingham and Muriel Streets on the market complex, between the smaller retail and market buildings, and can be accessed from 11th and 12th Streets (approx. 50 spaces)
• An additional lot will be located between 11th and 12th Street at the riverfront park to service the Monongahela water-taxi (approx. 75 spaces)

Vistas and View Corridors:
• The change in building scale from Carson to the Riverfront will allow for an opening of vistas to and across the Monongahela River
• From the northern edge of the Market House, views to the riverfront will occur in different areas, at different, but will be enhanced through a decrease in built scale to the riverfront
• The main vista to the Riverfront will occur along 12th Street, north of the Market House, in a sequence of discovery moving into the market square from west, south or east streets or walkways

Climate Issues:
• Northern, and north-western winds will be blocked and redirected through the use of trees and building fronts to avoid cold gusts in the market complex during winter months
• Riverfront vending will only occur during the summer months, in the winter these spaces will be vacant for pedestrian movement and vistas
• Summer winds will come from the south-west and should filter through the spacing of built structures, and their low heights, to penetrate the open market
• Building heights will be regulated to avoid strong shadows in the Market Square during peak hours
• Riverfront structures will have direct solar access

From the Urban Design Policy, the new Market Square is designed, focusing on:

Building Use and Structures:
• Bedford Market House preserved to open market house
• Commercial/retail on Carson Street conserved/rejuvenated
• Between 10th and 11th Streets:
  - two-story parking structure
  - three-story office structure
• Market Square will have:
  - specialty retail, two-story shops
  - restaurants and small deli-type stores
  - small office structures, with retail base (also two story)
  - three-story office/business structure
• Along Muriel Street there will be two-story market houses, facing each other, they will be open on the ground floor, with such elements as awnings and market stands, mostly to be family-run businesses
• Five townhouse structures, between the market buildings and the riverfront (approx. 45 units)

Riverfront Development:
• At the river's edge, there will be a Water-taxi dock and service tower, as a waiting and information area
• There will also be a natural landscape park, where the river will be cut-back into the landscape with rock formations and various vegetation
• A pedestrian path will continue along the river's edge
• A public plaza will exist between the water taxi dock and the housing edge, to be used as an open market and gathering place
Market Environment:
• Street vendors and small farmer's market stands will be set-up along 12th street to the riverfront three days a week - Tuesday, Thursday and Saturday
• The outdoor vendor structures located between the market house and the riverfront, will be permanent structures during summer-use and removed during other seasons
• Pedestrian only streets will be restricted to Market use during regular business hours, and specially designated holidays or community events

It should be restated that the concepts presented here are only recommendations based on an ideal study of the Southside. The issues which were addressed, however, are real and should be considered in re-establishing the Southside as a vital Pittsburgh neighborhood.
The Wharton Square intervention is one piece of the urban design plan, which intends to integrate the South Side with the Monongahela River and the city. This design is a synthesis of elements which makes better use of the land to the north of Wharton Square, extends and builds upon the present zoning, and makes major improvements to the circulation of the area. This is all done through utilizing the current grids and geometries, respecting the climate, articulating the vistas to the city, river and Oakland, and also respecting the scales and architecture which currently exist in the South Side.
**Program**

**Entrance Hall and Gallery** - seating, exhibit spaces for work of students, 4H, Girl Scouts, Boy Scouts and any other community groups.

**Food Court** - 20-30 restaurants, primarily fast food and foods of the heritage of the South Side.

**Indoor Support Facilities**
- Seating and Dining Areas
- Child Playground Sculpture - indoors
- Restrooms and Appropriate Storage Facilities

**Outdoors Support Facilities**
- Seating and Dining Areas
- Water Pool / Ice Rink

**Adjacencies to the Site**

- Wharton Square Plaza - Giants Eagle Grocery Store, and other smaller craft, clothing and shoe stores.
- Housing - Existing Housing to the South of the Site, New Proposed Housing to the South West of the Site.
- Water Facilities - Boat Launch (East) with adjacent parking for trailers, Water Taxi Stop (East) with parking.
- Business/Offices Zone - Expansion of Birmingham Towers (South East), Office Parking for both Facilities.

The New Wharton Square Food Court Facility is seen as an element which will further articulate the character of the South Side along with creating facilities which will enhance and support the existing infrastructure. The entrance of the facility is alined with the main axis of Wharton Square. The Entrance Hall and Gallery is seen as a space which acts as a draw for the Food Court. Children and adults of the community will exhibit projects and artwork which openly display the life and spirit of the community. Architecturally the space has an image of an indoor street, with a character very similar to that of Carson Street, but protected from the elements. Trees and architectural elements, which display the character of the South Side, will enhance the space.

One passes down the entryway to find themselves at the intersection of another street. This street is lined with ethnic restaurants which emit smells of warm, fresh food into the air. Images of the South Side are again perceived along this street. An indoor playground, which is another draw for the food court gives life to the intersection of these two streets. This playground lies in the foreground of an encompassing view of the river, the City and Oakland. Seating and dining areas not only line this area but flow into another indoor space which allows one to view the Monongahela River in its entirety.

**Interventions**

Wharton Square - Food Court
Dina Fredrickson

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*Entrance Hall and Food Court Playground.*
Interventions

Wharton Square - Food Court
Dina Fredrickson

*Interior Food Court.*

*N-S Section Elevation of Internal Entrance of Food Court.*

*E-W Section Elevation of Internal Facade of Food Court.*
To the north of the Food Court is a great terrace which is directly accessed from the food Court. During pleasant weather the tables and chairs are brought outside. People also are found eating picnics on the lawn area. A water pool which is occupied by ducks and geese, flows from the Food Court. Trees and vegetation are scattered about the terrace, shading and sheltering the passers. During the winter months, this is scattered with children and adults skating on what used to be the water pool but now is frozen over, and taking in the great view which can be seen from the South Side.
Users

There is a variety of people who will be possible users of the new Wharton Square Food Court Extension. From within the community there will be families, children and adults, who live within the existing infrastructure of the South Side, along with the families which will inhabit the new proposed housing, will be users. These people are seen as the regular users of the existing Wharton Square Facilities. Local and non-local users of the waterfront and its facilities will be users of the Wharton Square Expansion. Business workers form the Burmingham Towers and the new Business / Office Zone will be users of the new facility. Also resident of the Slopes will be drawn to the new facility.
Joint Effort

Urban Design Program

Tim Fleming
Rebecca Gordon
George Schevon
Spencer Welton
Joint Effort

Urban Design Program

Program: Evolutionary Infill

Introduction:
We here at Joint Effort Associates are proud to present our Urban Design. We have worked with the residents and civic leaders of South Side and are confident that our proposal will meet the future needs of South Side. This presentation is composed of our own urban analysis, the subsequent urban design armature, and four detailed interventions.

South Side has developed over many generations. One can read the history of South Side in the architectural landmarks embedded in the community. These anchors of the community vision, primarily churches and community centers, didn't happen overnight, nor were they completed by one profit motivated developer. In order to utilize and preserve the incredible potentialities of the LTV site, we propose that the L.T.V. site must be given back to the community as positive and useful land. The implications of the development of such a large piece of land dictate a need for an urban design, or the creation of an architectural framework which may provide guidance for many different developers over time. The urban design defines concepts and standards to help ensure that a cohesive new urban environment interlocks with the old urban environment. A careful mix of uses and building scales are determined in the urban design in order that the new development on the LTV site enhances the character of the South Side, without depleting the resources that support it.

One striking quality of the South Side community is its potential to be pedestrian dominant. The South Side is laid out with reasonable walking distances so that people do not have to depend on cars, yet still have a great deal of mobility through public transportation. In the bygone days of the mill, workers used to live very close to their jobs, and also springing up near their jobs were general stores, workers clubs and open spaces for recreation, thus creating a dense concentration of activities and many opportunities for people to meet. The abandoned mill on the LTV site is symbolic of this old society, which still lives in the memory of many South Siders.

The potential exists to recreate the positive attributes of a ‘mill’ community with its interdependencies, but these attributes could be adapted so that they form an attractive community in the twenty-first century. This requires a specific attitude towards access, considering that the influx of traffic from outside regions generated by development on the LTV site will have a profound affect on the success of the extension of the South Side community. One of the main functions of urban design being to ensure good results in the long run, Joint Effort Associates proposes an urban design which is highly restrictive to motor vehicles. Rather than allowing the car to dominate the design, we have decided to reduce its presence significantly, while increasing the efficient operation of other forms of transport. People using the future LTV site may see the river and walk to it via pedestrian routes, which also connect them to their house, school, place of work, and their parking spot, if they need one. They may connect to the banks across the river via water taxis, and seeing the skylines of Pittsburgh, they may choose to hop on the light rail system which connects them to downtown and beyond.

The underlying intention of the urban design proposal is to set up a precedent which insures the preservation of the existing community while allowing for South Side’s integration into the larger metropolitan area. As urban designers we are wary that a person develops a cognitive map of his or her surroundings, and we have attempted to make memorable places that may be easily mapped by both the everyday user and the visitor. For the new places we have envisioned on the LTV site we will use the term ‘interventions.’ The interventions, as dictated by the needs of the South Side community and the surrounding regions, will be phased into the urban framework as they become economically feasible and needs arise.
New Urban Framework Components & Objectives

Transportation Networking

1. Light rail system: Extension of Pittsburgh system. Carson St. too long to walk from LTV to Bedford Sq. Reduce car traffic while increasing shopping accessibility. Historical precedent. Reduce pollution and noise in the future. Increase pedestrian activity.

2. Public Park & Lock: Publicly owned garage at LTV tip (cover contamination) to accept traffic from regions east of South Side overloading Carson St. Connect to light rail system.

3. Incline connecting slopes to Carson St.: Give slope residents easy access to Carson St. and riverfront. Realization of South Side community wish. Historical precedent.

4. Hot metal bridge renovated for pedestrian traffic: Connection to Oakland and Pittsburgh Technology Center. Sensory connection to the water and historical uses.

5. Water Taxi/Public Transportation System: Increase the use and acknowledgement of the river.

6. Reroute Trucks: Possible paving of rails at foot of slopes for truck traffic with a few restricted access points to Carson St. for local deliveries.


Waterfront:

1. Greenspace: South Side riverfront park extension as a precedent for the treatment of the riverfront.

2. Improve Access to waterfront and visibility: submerge railroad to eliminate barrier to water or possibly relocate to existing, abandoned tracks above the south side.

3. Boathouse to foster community activity/recreation along river. Perpendicular access to waterfront (and to hot steel bridge from Carson street.)

4. Urban Architectural Edge: where the high river wall exists.

5. Relate to Opposite Bank: draw users' dollars across river. Treat the river space as an urban room. Treat the technology center and LTV industrial site as one complete unit.

Housing:

1. Revitalize community population: attract middle-high income families. Does not affect existing low income housing market. Market provided by proposed link to the tech center. Middle-high income households bring more money into community.

   (1b. More Secure Homes for Senior Citizens: Possibility of retirement community)

2. Housing Near River: Maintain green space at waterfront. River views. River access through the community without interference. Possibility of a marina for housing residents.

3. Maintain existing fabric and character: Keep same scale, massing and even type of existing South Side housing. Maintain the layer of residential (perhaps substituting green space for the industrial layer).
Commercial, Industry & Public Facilities:

1. No interference with Existing Businesses on Carson: Concern has been voiced that the development at L.T.V. site and Station Square could squeeze out existing commercial activity on Carson. Our focus to develop no regional commercial activity on Carson on the L.T.V. site.

2. Services and Goods for Locals: We wish to provide for local services to be integrated into the future housing on L.T.V. Evenly disbursed open markets and convenience stores within walking distance of future residents.

3. Creation of Jobs: Light manufacturing, recycling (steel), hydroponic production, crafted objects, building materials and office space that does not close the riverfront to the community: perpendicular access to River from E. Carson.

4. Continue/Connect Architectural Edge Along Carson: Continue the character and scale of commercial area on Carson with a productive uses rather than commercial services.

5. Marina Restricted to Residents of South Side: This could act as a magnet for new residents, and would foster water recreation for the community without the hassles of regional use.

6. Large Scale Gym: Adaptive reuse of steel mill as indoor track and community recreation, that acts as a unique historical landmark.

7. Steel Workers Memorial: Walking memorial along Hot Metal Bridge dedicated to the workers of the industrial legacy.
Joint Effort

Urban Design Proposal

Housing
Pedestrian Pocket
High Tech Manufacturing Complex
Recreation Island
Urban Plan

The following site plan consists of four main elements which were divided into separate interventions. Our primary intention was to develop a complimentary addition which remains tightly connected to the existing urban fabric of South Side. The Housing serves to continue the intimate urban residential character while establishing a more suburban density with which to enjoy the waterfront. The Recreation Island serves as a symbolic end to Carson St. as well as a public commercial zone and additional housing to attract higher income wage earners. The High Tech Office Park serves as a gateway to Southside as well as provides an economic source of stability for the new development as well as the rest of Southside. All of these nodes are subservient to the Public Plaza which anchors all three developments as well as exists as a regional connection with surrounding areas. The square contains a community serving program of larger structures and a large public plaza although remaining low in density.
Joint Effort
Urban Design

Urban Design Development
for L.T.V. Site
South Side, Pennsylvania

J.E. Associates
Tim Fleming • Rebecca Gordon • Spencer Wilton • George Schervin

MASTER PLAN
Interventions

Housing
Rebecca Gordon

Pedestrian Pocket
George Schevon

High Tech Manufacturing Complex
Tim Fleming

Recreation Island
Spencer Welton
1.0 Intention

1.1 To attract local residents and family oriented newcomers to meet, explore and experience all year round, the variety of cultural, recreational and educational, commercial and industrial activities that are developed on the LTV site as an extension of the South Side.

1.2 The housing development is respectful of the history of the LTV site as an industrial waterfront and the ethnic heritage of the South Side Community at large. The scale, materials an style of South Side is conveyed through the architectural elements.

Axonometric of new housing complex lining the Monongahela river on the LTV site. (riverside view)
2.0 Objectives of the Plan

2.1 To foster a variety of housing units.
2.2 To create an environment that will be attractive and accessible to people of all ages and incomes and encourage tenant involvement to personalize/activate their space.
2.3 To emphasize the maritime experience of the Mon. River in the activities, buildings, and open spaces.
2.4 To develop the housing as urban infill which connects the South Side neighborhoods to the public amenities on the LTV site via pedestrian routes.
2.5 To extend the waterfront park along the edge of the housing and provide isolated extensions of the park within the housing blocks that serve as respites along the pedestrian dominant pathways through the housing to the waterfront.

2.6 To use lively, diverse streets and open spaces to link pedestrians to an urban park, i.e. the main public plaza.
2.7 To provide public access to the waterfront in a variety of ways using landscape architecture.
2.8 To respect the need for people's direct access by private automobile, while restricting access of the car so that it is not visible from the waterfront pathways.
2.9 To explore alternative means of access through the site as a way of reducing the negative impact of excessive vehicular traffic and parking.
2.10 To limit the extent of retail to those uses that are of a market type where sales are confined to goods produced on the premises.
Joint Effort

Interventions

Housing
Rebecca Gordon

3.0 The Site

3.1 The site is comprised of about six existing South Side blocks in addition to the park along the river. It is in close proximity to both downtown Pittsburgh and Oakland.

3.2 The following is a summary of the amount of built and open spaces targeted for the plan.

<table>
<thead>
<tr>
<th>Land Area</th>
<th>Units per Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Roads</td>
<td>surround 300'x380' blocks</td>
</tr>
<tr>
<td>2) Open Parking</td>
<td>40 spaces</td>
</tr>
<tr>
<td>3) Fountains</td>
<td>1</td>
</tr>
<tr>
<td>4) Public Open Space</td>
<td>20%</td>
</tr>
<tr>
<td>5) Leased Open Area</td>
<td>20%</td>
</tr>
<tr>
<td>6) Buildings</td>
<td>60%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water Area</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Floating Structures</td>
<td></td>
</tr>
<tr>
<td>2) Open Water Area</td>
<td>common width of river</td>
</tr>
</tbody>
</table>

Perspective of new housing lining the Monongahela River. The park lines the river and downtown Pittsburgh is seen in the background.
4.0 Mix of Uses

4.1 Table of the amount of space for each type of use:

Proposed Land Use
1) Industrial Manufacturing
2) Arts & Crafts
3) Institutional
4) Maritime
5) Community & Recreation
6) Market
7) Performing Arts
8) Restaurants & Entertainment

9) Retail
10) Office
11) Residential
12) Hotel
13) Parking
14) Temporary Use

Proposed Water Use
1) Floathouse Residential
2) Barge (Community & Recreation)
3) Private Moorage
4) Public Moorage

Interventions

Housing
Rebecca Gordon

Plan of new housing complex which lines the Monongahela River, on the LTV site.
Joint Effort

Project Background

Traditionally, during Southside’s industrial era, the residents of the flourishing community lived around the comforts of such places as Bedford Square: a market, a meeting place, a place to drink and dine and greet other members of the community. Then they would walk among the many small businesses of Carson Street on their way to the barber, the clothing shop or just waiting for the Trolley which would bring them downtown or to the many communities around Pittsburgh.

Today, Carson St. still flourishes, however only to the speeding automobiles on their way to and from their workplaces downtown or in the surrounding areas. Bedford Square, although converted into a Senior Citizen’s Center, now has the air of a deserted ghost town.

To restore the pedestrian sensitive, community oriented character of southside, we must create a place which accommodates all of these characteristics. In designing the town center or “Pedestrian Pocket” as I have appropriately named it, I had four
goals which guided the resolution of my intervention.

• create a safe, pleasant pedestrian atmosphere which encourages walking as much as possible

• reduce dominance of automobile

• provide a memorable experience for both the pedestrian and the automobile

• to link the proposals for Waterfront Housing, the Recreation Island and the High Tech Center as well as the surrounding regional areas of Oakland, Downtown and Homestead
Jo int Effort

Interventions

Pedestrian Pocket
George Shevon

Perspective of public square which becomes a pedestrian pocket on the LTV site.
Axonometric of pedestrian pocket zones on the LTV site.
AXONOMETRIC
Scale 1" = 100
Program

- The Tower represents something of an icon for Southside. The scale of it parallels the pattern seen in instances such as the Cathedral of Learning in Oakland and 5th Avenue Place downtown. It could be used for local government offices, a power station to replace the existing one on the LTV site, or a more public oriented function. I purposefully hesitated to give the structure a concrete function due to the importance of its appropriate use being decided by Southside.

- The Open Plaza is the organizing element used to encourage pedestrian experience and minimize the domination of the automobile as well as provide a meeting place for the community.

- The Library can be used as a general education center including child care and special education classes to promote community welfare.

- The Hotel is also a main trolley stop with a restaurant with a view of downtown. This serves both residents of Southside as well as passing commuters and visitors.

- The Market and Community Gym is vital to the success of the plaza, as it encourages pedestrian use for the open area.

- The Parking Garage provides a convenient method for storing the vehicle in order to take the trolley or roam the plaza. A Loggia extends from the garage to the trolley stop to protect pedestrians from the elements.

- The Senior Citizen's Housing/Center is located slightly removed from the business of the square toward the Waterfront Housing development to enhance community welfare and togetherness.
With the closing of the LTV Steel mill in South Side, many residents have lost more than jobs. The mill has occupied the industrialized riverfront since the early 1900's providing a center for labor and economic vitality. Now that this large industrial site is in a state of abandonment, South Side has the ability to retool to face demanding future of production, as well as clear the environmentally contaminated riverfront for public use.

During the Remaking Cities Conference, many future uses were suggested for the abandoned mills. Some of these suggestions are: Hydroponic flower or vegetable production, recycling (steel, glass, paper, plastic...), medical supply, building materials supply, technical services, craft (arts) production. Residents of South Side probably have other ideas as to what could carry its economy for another century--something they would like doing.

South Side needs a large scale employer, so that families feel economically safe. This can unite the community, as its members work together and begin communicating desires and anxieties with one another. The steel mills lunch breaks and unions meetings served as a common meeting ground deepening the political awareness and power of workers. A place where many can work together and interact, can hold the fabric of South Side together. Families can maintain residency if the children have the promise of future employment as motivation.

The steel mill of the South Side fell behind the highly competitive world market because the technology of the factory fell behind. A high technology factory will produce usefull products with the highest known environmental, material and production efficiency. Research and development is necessary to maintain the economic edge derived rom high tech production. South Side has the man power, motivation and need to renew its economic base. A High Tech Manufacturing Complex provides the highest probability of usefullness, environmental cleanliness and marketability.
To fully satisfy the needs of South Side, this technology center should consist of the following programatic elements.

Educational facility to assist in re-education of South Side residents so that they may acquire jobs at all skill levels, expertise and education
- educational facilities for advancement
- class rooms
- administration for classes
- lecture hall (auditorium) lectures that are open to public take place here
- distant from the activity taking place in the square (edge of development)
- windows looking out into natural setting—trees and water
- on job training

Light Manufacturing to Boost economy
- high tech production: recycling, hydroponics, technical or craft oriented production, assembledge of building materials
- first floor on river front side of complex
- direct access to outside
- limited to clean production (environmentally)

Offices for Administration
- second floor
- access to roof atrium and terrace

Axonometric of High Technology Manufacturing Complex, (riverside).
Joint Effort

Research and development
- four floor towers at center of complex
- 16' floor to floor height with raised floor system
- public terrace over first floor
- sun angle for South 68 degrees

Internal parking, truck access, and storage
- parking for all workers within complex
- truck access all underneath second floor with loading docks ramping to basement
- all storage is in a basement floor

Natural and hard edge public riverfront
- natural external setting next to canal (island):
  public open space, built in seats, tables, lights, river walk and bike paths near (20') canal
- paved edge of building facing river with plantings, built in seats, tables, lights
- lively fountain sculpture garden separating natural park setting to paved edge

"Gateway" to South Side (Pittsburgh)
- historically preserving the east facade of existing steel mill
- barrier with some penetrations to E. Carson: central view corridor between two towers with view of bridge while at Sarah and Carson intersection. Smaller “gate ways” at smaller intervals under second floor overhang.
- access by secondary road of E. Carson with 20' tree lined buffer

Gateway to the South Side, Preserved LTV steel mill facade on West Carson Street.
Interventions

High Tech Manufacturing Complex
Tim Fleming

Perspective towards the Monongahela River of intersection of Sarah Street and Carson Street.
This is the fourth in a series of interventions based on the goals and ideas of Joint Effort's urban design scheme for the LTV site. This specific proposal is for a mixed use recreation island to be located on the south bank of the Monongahela River in the South Side.

The scheme mixes housing, commercial facilities and parkland to provide public riverfront access, waterfront living, and a riverfront commercial facility, programmed to include items such as restaurants, small shops and nightclubs.

The scheme begins by cutting a canal into the bank of the river, thus isolating a piece of land which is to become the recreation island.

To relate the island back across the canal, two visual connections are established from the town center. The first connection is set on axis with the proposed pedestrian path, which is created to extend Carson street onto the LTV site. Located along this axis is the visual element which visually connects the island to the LTV site and acts to draw pedestrians onto the island from across the canal. The second connection is also visual in nature. Along with being yet another pedestrian bridge, it acts to form a pedestrian loop from the square, onto the island and then back to the square. The loop functions in either direction. By establishing this pedestrian loop, the island and square act together as the node for the South Side.

Vehicular traffic is limited to the islands residents and to delivery vehicles necessary to support the commercial facilities. By concluding the drive midway in the island (in a traffic circle that uses one of the visual nodes as its center) vehicles are not allowed to interfere with pedestrian movement.
The LTV site recreation island: context and circulation diagram, axonometric, elevation of housing, cross-section and elevation of commercial facilities.
Joint Effort

Interventions
Recreation Island
Spencer Welton

Housing
The Housing is grouped in "courts" of ten units, five on either side of the road. The dwellings are to be single family units. On the south of the island the housing fronts a boardwalk and the canal while on the north of the island the housing fronts a park and the Monongahela River. The housing is able to isolate itself from the public park through an elevational change which clearly defines the boundary of the housing.

Commercial
The commercial section of the island is organized between the two visual connections which relate back across the canal. Along these established nodes the main spine of the building is located. The center of the commercial structure then is an open atrium like element. The individual programmatic elements then are located on either side of the atrium/circulation spine allowing for their visual access to the water.

Park
The park is set apart from the activities of the commercial and housing by a retaining wall which strongly defines the park boundaries.

Character
The character of the architecture draws upon the forms and materials of the LTV steel mill that once occupied the site. However the scale of the architecture relates, especially in the housing, to the existing fabric of the Southside. This is done in an effort to make a more user friendly environment while still retaining the memory of the LTV mill.
Joint Effort

Interventions

Recreation Island
Spencer Welton

The LTV site recreation island: plan and perspective views of housing with commercial in distance, view of commercial facility along major circulation spine/atrium space, view of commercial traffic circle.
New Era

Steven Shaw
Aron Temkin
Lisa Wang
Regis Zapatka
New Era

Urban Design Program

Steven Shaw
Aron Temkin
Lisa Wang
Regis Zapatka
Overall Themes
The intent of this development is to enhance the character of the South Side without redefining it. The project should build up from existing strengths within the community. The development should provide only those elements which are needed either by the community as a whole or become necessary to sustain the development itself. Care should be taken to ensure that the addition of new services does not strain existing services without appropriate ameliorative steps. In response to the pedestrian nature of the community, this development should respond to the needs of the pedestrian first and foremost.

The Relationship to the River
Our proposals for new development are intended to extend the community to the river. The riverfront park is to be retained along most of the water's edge. Easily accessible links to the river and a riverfront park should provide for three scales of user movement; 1) from new neighborhoods, 2) from the South Side community, 3) from Greater Pittsburgh. A bicycle and jogging trail should extend along the riverfront in order to provide a continuous recreational link to other parts of the city.

Circulation
Appropriate roadways must be provided within the development to handle internal traffic and to allow safe means of pedestrian circulation. The impact of increased traffic within the community must also be provided for; either by adapting Carson Street or devising another major artery. If flex space is provided within the development then a means of intermediate arteries must be explored in order to handle trucking. The existing LTV bridge should be incorporated to provide vehicular, pedestrian, and bicycle links to Oakland, Squirrel Hill, Route 376, and Schenley Park.

Public Spaces & Services
Public green spaces are to be provided on a variety of scales including areas for the whole community as well as those intended to serve individual blocks and neighborhoods. There should be a public “commons” to include an open air theater and a marketplace.

Relationship to Neighbors
It should be understood that the scope of this project will include the neighboring residents and businesses on the south side of East Carson Street. Considerations must be made for the relationship between urban design on the LTV site and possible urban renewal in this area. Extreme sensitivity should be given to the existing residents and their concerns.

Residential
There should be approximately 400 residences. They should maintain the character of individual units in order to be consistent with the existing residential scale. Wherever possible, residential areas should be heterogeneous, including individuals of different age groups and economic status. Each neighborhood should provide a small example of the community as a whole.
Commercial and Business
Retail stores should be located within the residential fabric of individual neighborhoods. This is to maintain the existing scale and character of retail space within the community. Development should include flex space and some light industry. Newly created employment opportunities can both draw new residence into the community and provide reasons to commute to the South Side. As stated before, any flex space or light industry must be situated in such a way that will not threaten pedestrian circulation or cause heavy traffic to move through residential areas. A system of ground level retail and upper level offices should be considered as a solution for the adjacent portion of Carson Street.

Views
Views should be provided within the development looking out onto the river, looking towards downtown, and looking up onto the hills. The objective is to capture the beauty of the surroundings while providing people with a frame of reference and a sense of place.

Environmental Response
Urban design studies, as well as the more detailed interventions, should carefully consider environmental assets and liabilities of the site's macro and micro climates. Without compromising other issues of urban design particular to this site, energy efficiency will be a fundamental concern.
New Era

Urban Design Program
Response to the Urban Design Program

In our urban design proposal, we have provided new development which takes its cues from the existing character of the South Side community. Three hundred new housing units with a local market, neighborhood stores, public green spaces, and a new elementary school are main features which will help preserve the family nature of this area.

A major emphasis of the design response is the development’s ability to give the riverfront back to the people of the city. By relocating the lower freight rail track, we are able to provide safe and continuous public access to the river. A riverfront park will extend along the full length of our site and will include such attractions as a floating restaurant, an outdoor public theater, playgrounds, a public hiking and biking path, and a sports/recreation facility.

The major circulation plan for the development is two-fold. We have modified existing thru-traffic patterns both by relocating the lower rail tracks away from the riverfront and by removing heavy thru-traffic from East Carson Street. The railroad tracks would move next to and parallel to the upper, hillside track. Since these two rail companies are the only ones operating on this side of the river, public pressure and financial incentives will hopefully force cooperation between them. This relocation is an important feature since the railroads have traditionally acted as a barrier between the community and the river. Also parallel to the upper tracks, we have proposed a light rail transit system with numerous stops in the South Side and connections to downtown, Monroeville, and other parts of the Pittsburgh area. The raised foundation upon which the upper freight track is currently running is wide enough to accommodate two freight rail lines and two light rail commuter lines.

The removal of heavy thru-traffic from East Carson Street is to be accomplished by a new thru-traffic express route utilizing Josephine Street and providing easier connections to the Liberty Bridge and Tunnel, downtown, Station Square, and beyond. This new route is also necessary to accommodate the additional traffic from new residences and businesses.

A major aim in our internal site design is controlling the vehicular traffic to prevent the formation of a major thruway. Our primary intention is to provide an ammenable environment for pedestrians and local residence. Centralized parking configurations, connections to mass transit, public green spaces, and neighborhood businesses are implemented to encourage pedestrian activity.

The drawing to the right illustrates the plan of the urban design in the context of the existing community.
At the northern end of the development is a small public green and a site dedicated to a major civic or religious building.

The intention with the residential blocks is to create two rows of housing with yards along the backside and a common pedestrian path down the middle. The drawing to the right illustrates the character of these spaces.
Interventions

Riverside Square & South Side Plaza
Regis A. Zapatka

Light Rail Station & Parking Facility
Steven Shaw

Mixed use development to the south of Riverside Square
Aron Temkin

Riverfront Park
Lisa Wang
New Era

Intervention
Riverside Square is a magnificent space, filled with the vibrant quality of people coming to and from buildings and to and from the Square, either by foot or auto. But the magnificence of the square rests in the fact that the spaces can be closed off to automobile traffic and even broken down into various sub-spaces to accommodate pedestrians: the residents of the South Side, of Pittsburgh, and Visitors. The square could be host to Classic Car shows, Nationality Fairs, Festivals, Carnivals, The Pittsburgh Boat Show, and Conventions. Pittsburgh does not have many open paved areas such as Riverside Square, and certainly none with the character and amenities of adjacent built forms such as found in Riverside Square.

Areas adjacent to the Square, to the south, would be the Jones and Laughlan Mill and South Side Plaza; a mixed use development with service, retail, institutional, professional and residential areas. Areas in the buildings adjacent to the square on the east and west would again be mixed use, but with greater emphasis on residential, professional and institutional developments. Retail and service areas would be located largely at level one in these areas. This could include restaurants, printing facilities, printing companies, galleries and travel related facilities.
Intervention

Regis A. Zapatka
Riverside Square & South Side Plaza

In this plan the shadows are indicated as they would appear in the summer and winter equinox. The pedestrian areas of the square and plaza are indicated with vertical stripes. East Carson Street runs vertically on the right hand side of the plan.
This axonometric shows the scale and adjacencies of the proposed development. The diagonal street running from the right hand of the page to the top of the page is East Carson St. The development that is part of Riverside Square and South Side Plaza is drawn bold. The axonometric includes the heritage trail which runs along the Monongahela River.

The massing of the buildings is designed so that shadows would be minimized. This is accomplished through matching building setbacks such that the juncture of the wall and roof plane of each setback falls along a twenty two degrees angle of ascent, the winter sun angle for Pittsburgh. Building setbacks on all buildings occur at levels four and up on most building facades fronting pedestrian areas. The building heights are set such that all views to the City of Pittsburgh and across the river are maximized.
This space is the most public and pedestrian of the spaces within the square. The character of the South Side and the Pittsburgh region would be especially apparent in this space. In this space clowns would sell balloons, vendors would bring their displays, musicians their instruments, artists their work, and magicians their magic. Human chess tournaments, public speeches, and other functions associated with a public plaza might occur here. People would gather to be entertained, socialize, shop, and view a movie at the Foreign Film Theater. Shops would be at levels one and two around the South Side Plaza and in the Jones and Laughlan Mill with professional and institutional offices located at levels 3 and 4 of the mill. Residential areas would be at the highest level of both the Jones and Laughlan Mill and areas surrounding the South Side Plaza. This space would be a vibrant 24-hour space of workers, shoppers, visitors, and residents coming to and from adjacent buildings.

The colors, materials, textures and forms would be in accordance with the character of the South Side and Pittsburgh. Adjacent built forms would not have to copy the existing structures of the area; rather, they would be in character with the surrounding built environment.
These sections indicate the views, adjacencies, and massing of key pieces within the development of Riverside Square.
The desirable location of this park-like space within the development would result in users’ occupying it in seasonable weather from sun-up to sun-down. The park-like space has strong visual connections to the city of Pittsburgh and physical connections to the adjacent Heritage Trail. The building to the right of this space would house restaurants, a few shops and two bars. The spaces would be readily accessible from the Square and its parking areas, other areas within the development, and the University Technology center across the Monongahela River.

In this park-like space there would be seating, flowers, trees, bicycle parking, and handicap amenities. Changes in the ground pattern’s texture, material, and size would indicate the ‘special significance within the square. Antique lights, banners, a fountain, and adjacent stores would add to the character of this space.
While this intervention is not actually on the LTV site, it constitutes an imperative link between our proposed light rail line and the new development on the LTV site. Such a station would also encourage revitalization of the area between East Carson Street and the existing rail line. Presently, much of this area is deteriorating. The residential area is bordered by an aging power switching facility, abandoned parking lots, and vacant properties. The proposed light rail station would act as both a catalyst for development and a physical edge to this sensitive neighborhood.
Intervention

Steven Shaw
Light Rail Station & Parking Facility

The primary components of this intervention include a light rail station, parking facilities, a pedestrian link to development on the LTV site, and a buffer zone between the light rail station and the adjacent neighborhood. The axonometric drawing highlights these components.

Light Rail Station

This passenger facility would operate easily for traffic flow in both directions. An underground pedestrian link to the neighborhood on the south side of the tracks is provided in order that people living on the hill are not forced to cross the proposed thru-street. A tower will act as an axis termination, a landmark, a functioning clock, and an elevator shaft. Taxi, bus, and newsstand facilities will be located in the station component located on Sarah Street.
Parking Facilities

These include a three level parking deck and adjacent ground parking. The deck and lot are meant to serve a park-and-ride utility as well as providing for local businesses. Kiss-and ride facilities, or passenger drop off and pick up, occurs between the deck and the station. The deck and lot would be able to accommodate up to 1000 automobiles.
Pedestrian Link

The pedestrian link is actually a pedestrian avenue on axis with the proposed plaza and the hot metal bridge. As is proposed in the master plan, this historical, axial movement, perpendicular to the river, becomes re-emphasized. Textured pavements, benches, and trees all add to the pedestrian experience. As the shaded plan points out, the buildings on either side of this avenue are vital to this intervention. They would therefore represent a first phase of urban infill in this area.
Considerations were made concerning the different levels and scales of activity between the station and the neighborhood. A colonnade of trees and a fish pond represent the major pieces of this buffer zone. It is a place perceived to be both part of the station and part of the neighborhood.
Intervention

Aron Temkin
Mixed use development to the south of Riverside Square

This intervention deals with the southern half of the site, beyond the central square. The program includes residential, institutional and light industrial uses. The intent of this intervention was threefold: to enhance the pedestrian qualities of the community, to provide the community with connections between East Carson Street and the riverside, and to provide a rational framework for the mixed use of the development.

The buildings of the development are presented as linear modules which extend perpendicular to the river. This is in contrast to the traditional bands of the community which run parallel to the river. Historically these parallel bands have acted as walls between the riverfront and the community. This is particularly evident where industrial buildings still line the riverfront. This intervention opposes that order to allow the community both visual and physical interaction with the river.

In response to the pedestrian nature of the community the intervention includes wide sidewalks with a minimum number of intersections. Four arbored walkways are created perpendicular to the river, encouraging residents to come towards the river and make use of the riverfront park. The paths are connected to the park bridges leading to towers which descend directly into the park.
New Era

Intervention

Aron Temkin
Mixed use development to the south of Riverside Square

**light industry**

The three densest blocks along East Carson Street are intended to house light industry. This is in response to two issues. The large public square which acts as the focus for the development is also the apex of retail buildings. The development of light industry is a response to this need for a change of character beyond the square. This light industry would then go on to provide new jobs for residents of the community.

**the town houses**

The intervention includes 46 units of housing. They are designed as multi-story townhouses which are intended to reflect the existing residential scale of the community. Although the houses are designed as clusters they are usually offset to maintain a sense of individual units, an issue of particular interest to the community. In the northern half of the development the units maintain direct connections to the major pedestrian paths. The two western blocks of residences are of equal height while the easternmost block is slightly shorter.
Mixed use development to the south of Riverside Square

The riverfront block of the residences is set atop an existing riverfront wall. Reaching twenty five feet at its extreme height, the wall provides for a grand view of the river. The townhouses along these blocks are designed in response to this unique setting. On the riverside of each unit, the houses include a large terrace and lawn to promote recreational activity along the river. The roof gable faces toward the water providing the maximum opportunity for views at each level of the residence. Underground parking facilities assure a maximum number of units. These units are shorter than those of the preceding blocks to provide their neighbors with a view of the water.

the research institute

Located at a critical point within the development, the research institute provides a transition in the physical scale of the buildings on Carson Street between the light industry to the South and the retail buildings to the north in the square. It also provides a transition between the public nature of the industry and the private nature of the residential units. As an institute with certain facilities open to the public, the building can act as a small social center, as well as providing a small secluded square for the members of the institute and the residential community.
Aron Temkin
Mixed use development to the south of Riverside Square

The southern end of the site along the riverfront is ideal for office buildings. The site offers an outstanding view onto the river and the park to the east. Its vicinity to light industry could be very convenient for a firm with close manufacturing ties. These office buildings would be easily accessible due to their close relation to major paths of automotive circulation. Viewed from across the river they also provide an opportunity to improve the community’s image.

It is the intention of this sculpture to act as a landmark by which people will recognize they have reached an edge of the community. Designed as a conglomeration of parts recovered from the steel mills, the sculpture is intended as a reminder of the rich heritage of the community. As an art object it is intended to enhance the image of the community.
In response to our urban design program, the riverfront park is designed to provide extensive public green space for the use of the community. The arrangement of built elements and paths associated with the park provides strong physical and visual axes to the riverfront. Paths are included to promote access both from the community to the park and from the park to the community. Along the length of the park there are various focal points to encourage its use. These attractions include an amphitheater, ice skating and swimming facilities, playgrounds, and a restaurant boat. Pavilions are located frequently throughout the park for seating and family barbecues.
upper right corner: perspective looking down the running and cycling track

center: plan of the riverside park to the south of Riverside Square

lower left corner: perspective looking down the park towards the health club
New Era

Intervention

Lisa Wang
Riverfront Park

plan of the park to the north of Riverside Square

diagram of the park to the north of Riverside Square

perspective looking towards the development from across the Monongahela
In preparing an urban design for the South Side out of the analysis, our group attempted to identify specific areas for consideration. The priorities and aspirations that grew out of this consideration are listed below as our goals for the urban design. These priorities set the framework for individual interventions and serve to draw these interventions together to mutual purposes.

1. Strengthen the Image of the South Side
   A. Extend the existing Riverfront Park and create new recreational nature areas.
   B. Preserve existing churches and cultural centers including ethnic meeting places.
   C. Revitalize sidewalks throughout the South Side with mature trees, planters, curbcuts and seating.
   D. Redirect traffic off Carson Street.
   E. Develop cross streets (numbered) into visually exciting avenues.
   F. Mix local and regional commercial businesses to encourage interaction of both.
   G. Define clearer boundaries to the community.

2. Establish Stronger Links Between the South Side Slopes and Flats
   A. Strengthen the image of the South Side Slopes as a part of the South Side through visual connections at cross streets and the rear rail road bridges.
   B. Revitalize linkage streets (numbered cross streets especially 21st, 18th, and 12th Streets) to establish a pedestrian nature through landscaping and green spaces.
   C. Orient shopping and cultural centers as destination nodes for local residents of both the Slopes and the Flats.
   D. Promote family housing along these linkages.
   E. Reinstitute inclines as a public transportation link.

3. Create Stronger Connections to the River
   A. Reinroduce the visual connection to the river at the cross streets.
   B. Develop park spaces in a manner which will promote a positive image for the riverfront.
   C. Develop the Birmingham Bridge area as public space providing pedestrian access and visual connections to the river.
   D. Use the Riverfront Park as a destination point for residents of both the South Side Slopes and Flats.

4. Orient Development to Serve the Local Community
   A. Advocate a zoning policy geared towards local commercial needs and cultural centers.
   B. Develop commercial areas with both local and regional magnets.
   C. Use professionals with sensitivity towards local needs to develop and follow a master plan.
   D. Identify and promote areas of historical significance in the South Side's heritage.

5. Improve the Pedestrian Nature of Carson Street
   A. Improve sidewalk plan with plantings, better lighting, seating and safer curb cuts at corners.
   B. Create pedestrian nodes along the length of Carson Street to provide seating and resting places.
   C. Provide connections between Carson Street and the waterfront trail at main linkage avenues (i.e. 21st, 18th and 12th Streets)
   D. Encourage public transportation and encourage pedestrian nature for any light rail or boating stations.
   E. Establish pedestrian connection between eastern and central South Side via a walkway beneath Birmingham Bridge.
6. Strengthen the South Side’s Link to Other Communities
   A. Provide better bus lines and connections to other communities besides downtown and the single line to Oakland.
   B. Create new modes of public transportation (i.e. light rail, inclines, river ferries).
   C. Extend city light rail system to the South Side.

7. Resolve Parking Issues
   A. Concentrate nonresident parking into a minimal number of garages off Carson Street in the east, west and central sections of the South Side.
   B. Institute residential permit parking.

8. Institute Historical Conservation
   A. Promote the historical heritage of the South Side by developing and designating landmark areas.
   B. Revitalize western historic district by renovating the Bathhouse, the old school house, and the north end of Bedford Square and markethouse.
   C. Renovate brewery as a mixed used development to create a central link between the Slopes and the Flats.
   D. Find viable uses for unused churches that would conserve their architectural nature.
   E. Examine and develop program to revitalize deteriorating housing stock.

9. Provide Employment Opportunities
   A. Promote community oriented business development.
   B. Reorient existing local industry to preserve existing employment base.

10. Attract More Young Families
    A. Upgrade schools and promote community involvement in school activities.
    B. Provide new affordable housing.
    C. Create more open green spaces.
    D. Develop new housing with access to the riverfront park.
Urban Design
Comprehensive 12 - Point Plan for the
South Side area between 10th Street and the
Birmingham Bridge

1. Farmer's Market and Bedford Square Revitalization.
   Li-Hang Wang
2. Community College and Educational Center.
   David Goff
3. Community Center and Civic Area. David Goff
4. Waterfront Housing Community. Louis Faassen
5. Riverfront Park. Peter Vonderlieth
6. Former Stroh's Brewery Rehabilitation.
   Steve Auterman
7. Street Improvement. Steve Auterman
8. Re-introduction of Incline Station to Slopes.
9. Light Rail Stop.
10. Combination Light Rail Line and Carson Street Bi-
    Pass.

(See following pages for Intervention Descriptions)
From the preceding priorities, WDA sought out specific design solutions for a comprehensive urban design. The specific goals which evolved are described hereafter, and depend largely on an armature of transportation. We cited three key north-south streets as drawing the community together: 12th, 18th and 21st Streets. In addition, Light Transit and a South Side bypass are to be introduced to alleviate current traffic problems, while encouraging the viability of this community.

The specific interventions cited here represent planning on many levels. Five of the following areas of consideration were chosen, one for each member of the team, for additional development during the remainder of the semester. These included: Bedford Square, a Vocational and Educational Center, Riverfront Housing, a Riverfront Park, and a Rehabilitation of the former Stroh's brewery buildings.

Bedford Square:

Watermark Design Associates intends to return the Market House in Bedford Square to its original use as a market and to extend this to the buildings facing Bedford Square.

Revitalization and/or rehabilitation is proposed for 30, two to three story buildings into retail shops and markets ranging from clothing and art/real estate to groceries and used furniture. An approximately 2 1/2 block area on the north end of Bedford Square will be considered for the majority of this work.

Repaving of Bingham Street, Twelfth Street, and Bedford Square in the four block area immediately adjacent to the Market House will provide a pedestrian only environment, allowing outdoor cafes during the summer months, and vehicular traffic during the winter months. Current usage of this facility may be redirected in the new community center area.

New Farmer's Market:

To be located in the two large blocks immediately north of Bedford Square (north of Muriel Street), on either side of Twelfth Street.

Several permanent canopies are to be built on either side of Twelfth Street to function as covered stalls for 100-150 farmers/merchants to take part in weekly or daily market fairs. Produce, fruit, homemade craft items, and meat/poultry are to be the main focus.

Behind these stalls on either side are several buildings which may house year-round spaces for the weekly markets, as well as permanent shops for food, household items, artist studios or galleries, or restaurants. Possible locations include the corners of 11th and Muriel, 13th and Muriel, and the 1000, 1100, and 1200 blocks facing the riverfront park.

Treeplanting and small greenspaces are encouraged, 12th Street will be paved in a similar manner to Bedford Square. The terminus of 12th Street is one entryway into the Extended Riverfront Park.

Between the New Farmer's Market and the 10th Street Bridge, a municipal parking garage serving up to 450 cars will be constructed to satisfy new parking requirements.

Vocational and Educational Center:

From 13th to 16th Streets, m north of Muriel and meeting the southern edge of the extended Riverfront Park, WDA proposes an educational campus geared towards educating and helping those who are currently unemployed as a result of the steel industry's decline in the recent years. As an extension of Community College of Allegheny County, this institution will serve to aid the residents of the South Side in improving the skills needed in an increasingly service economy. Parking for commuter students will be provided in several areas, as well as an on-campus connection to the South Side Trolley and eventually to the PAT Transit T. Set back from the Riverfront Park and Railroad, the campus'
open space can serve as a casual and informal extension of the park. The campus plan will include several buildings set closer to the southern edge of the site.

Community Center:

Set between 16th and 17th Streets adjacent to the Vocational and Educational Center, we envision a consolidation of several community services and a community meetingplace into one building with riverfront access to the north as well as an outdoor performance or gathering space to the south. This will act as another focal point of community activities with the amenities of riverside adjacent.

Continued Residential Development:

Straddling 18th Street from Muriel and Wharton Streets to the north, we plan an extension of the existing housing of the South Side. Encompassing approximately six full blocks, a total of 150 single or duplex family units will be built with attention to the size, scale and character of some of the existing homes throughout the South Side. The north end of this new development comes within 250 feet of the river's edge. The pedestrian promenade on 18th Street, in addition to the scale of this housing, will reinforce the private atmosphere that characterizes much of the South Side today.

Wharton Square:

WDA intends to leave much of Wharton Square to its current condition, with the possible exception of additional retail space in the west end of the Square. The shops are intended to act as a buffer for new housing to the existing parking lot.

Park and Recreation Fields:

We propose a complex of baseball, softball, basketball, swimming and other recreational activities to be located near the end of 21st Street near the Birmingham Bridge, with these park spaces to be continued into the existing Riverfront Park. Playgrounds and sports recreation become the focus of this end of 21st Street and this main entrance into the Riverfront Park. A parking area accommodating 200-350 cars will be constructed beneath the Birmingham Bridge area to serve this region of the South Side, and will act as one edge to a passageway beneath the bridge from the east to the west.

Riverfront Park:

Along the entire edge of the Monongahela River from the 10th Street Bridge to the Birmingham Bridge and beyond to the LTV site, WDA proposes an extension of the existing Riverfront Park. At its narrowest point, the park will span the width between the P&LE railroad tracks and the river's edge. In some areas closer to the Vocational and Educational Center and the Bedford Square Farmer's Market, the park will be much wider, taking in scenic land on both sides of the tracks.

WDA has taken the attitude that the location of the railroad tracks presents the opportunity for the Riverfront Park to highlight one of the major roleplayers in the Pittsburgh heritage. In several locations the train can become a sculptural object passing through the park environment or becoming a backdrop and creating an excitement for adults and children alike. We see this as a great opportunity to bring forth an image of vitality for the South Side, setting an atmosphere within the community and enhancing the character perceived from across the river.

Also along the length of the Park we propose the extension of the Heritage walking and biking trails. A path will wind through the park, sometimes above the water's surface upon existing walls, sometimes brought down to the River's edge. Biking paths would run parallel, farther south along the length of the park around bends and trees. Occasional benches and tables will provide areas to relax and eat lunch while feeding the ducks along the shore.
Near the 10th Street Bridge, we propose a water taxi dock to link the South Side with other river points within the city. Possible uses might include a marina or boat docking area, with boardwalks to enjoy the waterfront. The portion of the waterfront supports activities such as eating at a restaurant overlooking the river and downtown, strolling along a boardwalk by the handicraft shops, or grabbing a bite to eat from a sidewalk vendor.

Closer to the Birmingham Bridge, the recreational sports such as frisbee, jogging, playing catch, or walking a dog begin to predominate activity.

Between these areas, however, along the new residential district and educational and community centers, a more private, leisurely and restive atmosphere is intended. Private sitting areas, large shade trees, and tiny overlooks pocket the landscape.

Almost all of the proposed park land between the tracks and the river is already clear to the extent that only modest grooming and planting would be needed to make it into the park we propose. Major entrances into the park are seen to take place at the terminations of 12th, 18th, and 21st streets to allow ease of access to all of the South Side community.

Former Stroh's Brew House:

This complex of four buildings between 21st and 23rd Streets towards the south are intended to be re-used. The southwest building is to be converted into apartments or artists studios. It is currently being used residentially without City approval. The northwest buildings, formerly a mattress factory, are intended to be rehabilitated into retail commercial, restaurant, dance club, and/or office spaces, becoming something like an urban mini-mall, with mixed local and regional consumer orientation. The two buildings to the east are to be re-used as light industrial which, coupled with warehouse buildings further east, may serve as future homes for some industrial services displaced by the riverfront development. A scheme of 35 apartments/studios, 8-12 commercial spaces, 4 floors of offices, and 10 floors of light industrial use is foreseen.

The reuse of these buildings as a mixed-use development will go far to bolster the image of the South Side regionally because of its architectural prominence and clocktower, while localizing the activity so that the existing nature of the community is preserved. The location may also prove to be a point of common ground between both the South Side Slopes and the Flats, linking these two areas in more of the manner that once existed. The light rail stop proposed adjacent to this complex will help to allay problems created by an additional influx of people to the South Side, while making the facility convenient.

Boulevards:

WDA proposes tree planting, sidewalk refurbishing, new curbs and improved maintenance of four major pedestrian boulevards: East Carson St., Twelfth Street, Eighteenth Street, and Twenty-First Street. Special attention will be paid to these streets to identify them as pedestrian promenades, major links from the Slopes to the Flats, from the south to the north, and from the residential areas to the Riverside Park. Improvements along 21st Street include center strip tree and grass plantings. East Carson Street will take advantage of several small sitting areas which will act as nodes of greenspace along the length of Carson Street.

It is our hope that these crosslinks and periodic greenspaces will continue further along in either direction, becoming something like milestones marking the scale of the South Side.

Inclines:

Our scheme calls for the reintroduction of the 12th Street incline, from a site along the Conrail line up to the tops of the slopes, (complete with the world's only bend in the track). The station will serve as an easy transpor-
tation for the residents of the Slopes as well as a possible attraction for sight-seers.

South Side Trolley:

Two rubber-tire trolley bus routes have been planned to run along several of the major boulevards, Carson Street, along Bedford Market Square and Wharton Square, the Riverfront Park, the Brew House, the Inclines, and residential districts. This internal transportation system is intended as a measure of convenience for current residents in an effort to minimize traffic and encourage community involvement throughout the area.

PAT Transit Light-Rail System:

We propose the existing Conrail line between the Slopes and Flats be acquired by PAT Transit as an extension of the existing light-rail line from Downtown to Station Square, to be continued to the South Side Station at 21st Street and beyond to Homestead or Oakland via the LTV bridge.

PA Route 837 Bypass:

WDA also intends the incorporation of a Thru-Traffic bypass of East Carson Street immediately adjacent to the PAT Transit Light-Rail System, with entry/exit points at 24th and 27th Streets such that the disturbing and damaging effects of around-the-clock truck traffic on Carson will be alleviated. This will give Carson Street the chance to revitalize itself and get rid of some of the rush-hour traffic, and will provide easy maneuvering for trucks servicing the light industrial area near the Brew House with only one potential stoplight for through traffic.

Churches and Schools:

WDA encourages innovative reuse of existing churches and schools where diminishing congregations make adaptive reuse necessary to retain these landmarks of architecture and heritage. Projects such as the City Theater relocation and potential Senior Centers or artistic offices (galleries, architecture offices, etc.) pay close attention to preserving these important structures without leaving them to ruin or demolition. Most likely private development, but closely scrutinized development, should be encouraged.

Old Bathhouse:

Located just west of the Bedford Square in the 900 block of Bingham Street is the Old Bathhouse and an unused school. We propose that these structures be revitalized as a community pool and recreation center (in the case of the Bathhouse) and as apartment residences or a bed and breakfast facility (in the case of the school). The intent is to cap a decaying historic district and set the precedent for ongoing revitalization of this rich area of the community.
Street Improvement and Revitalization of former Stroh's Brewery
Steve Auterman

New Waterfront Housing
Louis Faassen

Community College and Vocational Education Facility with Community Center
David Goff

Market Square Revitalization and Farmer's Market
Li-Hang Wang

Riverfront Park
Peter Vonderlieth
The South Side Brewery buildings occupy four city blocks between 18th and 20th Streets on either side of Mary Street. In the last several years many of the brewery and mattress factory uses in these buildings have been abandoned, and residence has been taken up by several local artists and businessmen in the large loft spaces. A coalition of these residents has been formed to promote and maintain a mixed-use development of the existing residences and some commercial and industrial uses. I have proposed a similar development which will bolster the local economy while preserving much of the architecture and dramatic living conditions which exist now.

Program for redevelopment of Old Stroh's Brewery buildings:

Convert Southeast building into 3 story parking garage holding approximately 450 cars

Convert Northeast building into mixed-use retail and light industrial building:
• West end of building will be built up to 3 stories to contain retail spaces on the first and second floors, with possible office space on the third floor
• East end of building will be one to two floors containing light industrial manufacturing
• bridges connect to the parking garage and the NorthWest building on the second floor

Convert Northwest building into mixed-use retail, restaurant, and office space:
• the first two floors will contain retail and restaurant spaces
• restaurants will be concentrated on the north end, with partially covered patio space to the north for summertime dining
• floors three and above would serve as office or
storage spaces, with a possible lookout at the level of the Clocktower.

- bridges connect to the NorthEast building, Mattress Factory, and West building

Convert the middle Mattress Factory building into retail, café and nightclub space:

- nightclub area will be concentrated along the curved glass wall to the south
- café dining and small clothing retail will be concentrated along the north edge on two levels
- bridges connect to the NorthWest building on the second floor

Adapt the small electrical building at the corner to serve the new electrical needs:

- install new electrical switching equipment
- convert the exterior of this structure to new lighting and signage for the entire Brewery complex

Convert the West building into office spaces

Convert the SouthWest building into retail/office and apartment units:

- convert the first two levels into retail or office spaces
- revitalize third story and above as apartment or studio spaces
- develop underground parking for residents to the south of the building where currently stands a earthen wall to serve 150 cars
- develop Subway station along rail line at 21st street to serve as the South Side stop of the expanded subway line and South Side Trolley
- connect via footbridges to the Mattress Factory building

Below: Footbridge over 21st Street
Watermark

Intervention
South Side Brewery
and Street Improvement

Steve Auterman
Street Improvement

To improve the pedestrian access and environment of the South Side we recommend a program for upgrading the sidewalks along Carson Street and the three main numbered streets which pass from the Slopes to the riverside. It is hoped the foot travel from one point to another within the South Side would become even more pleasurable than it is already.

Program for redevelopment of sidewalks and tree plantings on Carson St., 12th, 18th, and 21st Streets:

- On all streets, install a single row of trees on either sidewalk edge, with occasional flowerbeds or shrubs. Trees planted are to be of at least 10 years maturity, with dirt and grate covers. Sidewalks will be rebuilt with herringbone brick patterns and standard handicap/bike curbcuts. Occasional sitting benches will be installed. New lighting fixtures with globe light cover and horizontal rods for attached banners and flags at an interval of 150-200' on each side of the street. Install center boulevard strip on 21st, plant with flowers and double row of trees.
Housing in the South Side context

The 'house' has always held a special place within the field of architecture. It is a symbolic and actual center of human existence. It defines and is defined by the lifestyle and character of its inhabitants. Housing in any context, then, requires special considerations by the architect both on the scale of urban design and in individual houses. Through the semester, the studio discovered the strong degree by which housing defines a community, and in the South Side, housing proved to be one in which a consideration of many issues was desired:

- the history and pattern of South Side's existing housing pattern
- South Side's demography and inhabitants
- community goals and priorities for future development
- transportation and infrastructure
- housing as a means to maintain the tradition of family living
- the waterfront environment
- interaction with adjacent uses

Existing Housing

South Side's housing reflects several patterns. The typical South Side house fronts immediately on the street, often with no yard, and with a small stoop. The door is raised off the ground by three or four steps, and is covered by a small canopy often made of aluminum. The residents hang plants and bird feeders in these stoops, the streets themselves being generally bare of all but scattered, thin trees. Sidewalks are a collage of old and replacement red pavers in herringbone pattern, cobblestones and concrete. Few grass curbs exist in Southside.

Plan (lower right)
Houses are typically tightly spaced, with narrow fronts to the street and long sides set next to their neighbors. Tiny sidewalk alleys lead to backyards protected and claimed by the buildings that enfront them. The true home life of the South Side typically occurs not on the street but behind the house front and in backyards in the summer. Streets of housing show little deviation from a two or two and a half story height.

The housing for the waterfront scheme is meant to consider many of these issues and incorporate design factors that currently exist in South Side.

The Future of Housing:

The need for new housing has been suggested by the phenomenal success with smaller housing projects conducted by the SSLDC, though some caution is anticipated due to community concern to keep restoration viable. The proposal by Watermark Design Associates was to consider for development seven blocks near the riverfront on 18th Street for future housing. The density (or number of houses per block) is relatively high in the South Side and will be maintained at around 15 to 20 units per block. Similarly, new housing will maintain a general height of about two and a half stories, except in the low rise apartment units.

To encourage the influx of permanent residents desired in the South Side, units should generally be built for ownership, and may include some subsidized housing for lower incomes. Above all, a mix of income groups and backgrounds is to be encouraged.

Policies:

One philosophy at work in the plan for new housing is that houses are built for specific people or chosen by people as a place to live for certain individual merits. Toward this end, a certain degree of flexibility is desired for housing rather than to repeat identical houses for every plot in the manner of many suburban

Diagrams at far left illustrate figure ground (or space/void) relationships, and pedestrian environments.
developments. In order to allow this flexibility without alienating the site from the character of the rest of the South Side's neighborhoods, a pattern book which informs and dictates allowable size, scale, and type of elements is to be developed. All these factors will borrow from the consistencies of the neighborhood housing mentioned above, and may be considered in future design solutions.

In the analysis phase of this project, a desire to overcome the lack of a suburban image emerged, the reason being that new families might lose interest in settling in the South Side. Part of the perception of suburbia that was noted was the image of lacking greenspace, particularly for children. New housing, then is to be organized so that the density of new development matches that which currently characterizes the South Side, while still providing green space open to the streets.

Houses are set off in groups with a common entry yard in order to foster security and a sense of a local community of neighbors. The space is intended to match the intimacy of the narrow ways that run east-west throughout the existing neighborhood, while opening spaces for sunlight and minimizing the crowded feel of the streets. The grid for future housing utilizes the existing grid of the South Side to integrate this neighborhood with established housing patterns.

Another possible type of development that may be integrated into future housing plans is a low rise apartment tower, marking the center of the community.
Maintained at under 60 feet in height, the tower is small enough not to obscure views by any of the residents, while still providing an alternative for a mix of resident lifestyles. The tower works with waterfront housing to induce an investment in the South Side by new residents, and will work to build on South Side's image as a vital community in Pittsburgh.

The transportation systems that run within the urban design scheme provide service to the neighborhood via trolley stops on Wharton Street. The Wharton Square shopping area currently has parking facing the area for housing development, which may be treated so as to put a kinder face to the new community. New shops with an architectural frontage onto 17th Street and rehabilitation of existing buildings would be encouraged. Traffic within the community is to be minimized to local residents by maintaining only one through connection. On-street as well as corner-lot parking is provided. All streets terminate in pedestrian connections with the waterfront.
Perspective at upper right shows waterfront housing from a proposed catwalk. The existing rail line is to be maintained as an active focus within the waterfront.

Section below shows potential street scale with planting and architectural elements at a low-rise housing center.
College Campus

This college campus represents the introduction of institutional buildings to the riverfront development scheme. Envisioned as a regional campus for the Community College of Allegheny County, this college would specialize in vocational training for adults in the areas of Mechanical Systems, Computers and Electronics, Language Skills and Word Processing, along with Culinary Arts.

An axis was created to link the end of Wharton Street to the east, with the new market area to the west. This takes the form of a covered street which passes through the site. It functions as a pedestrian way as well as a trolley roadway. In this way the college is linked directly to the community as well as to the greater Pittsburgh mass transit system. At the center of this axis is the main entrance and trolley stop for the campus in the form of an old railroad roundhouse. This links the mechanical classrooms and shops to the northeast, the computer and electronic classrooms to the southeast, and the language skills classrooms to the southwest together at one central hub. A visual link is made to the culinary school which is located to the northwest of the site. This school will specialize in ethnic cooking as reflective of the ethnic diversity of the South Side. Its location allows it to interact with the new market area as a part of its educational process. A series of ethnic restaurants run along the railroad from the market on into the campus. These would be run by the culinary school as part of its program. Also in this area is a raised plaza under which is located student lounges and cafeterias which face out into a small courtyard.

The east node of the axis is linked to a large auditorium/assembly hall and a community center. The auditorium is to be used by the college as well as by the community for large gatherings such as concerts and dances. The community center would house smaller meeting rooms as well as public services such as employment offices and counseling centers. These
Watermark

Intervention
Community College Campus

David Goff

Plan of Campus
buildings are oriented to respond to the change in the urban grid at this location.

In order to address the riverfront as well as to provide continuity, the undulating walls from the housing to the east are carried through the site. Behind the auditorium they separate to create a natural outdoor amphitheater. The lower wall ends while the upper wall passes beneath the mechanical shops to carve into the campus as reflective of the carving action of the river. The site to the south of the retaining wall is built up to remain level with Muriel Street. This allows for a large underground parking structure to be located under the campus. The site drops down fifteen feet to the north of the wall to create a semi-enclosed courtyard and a continuation of the riverfront park.

This campus is a response to the need to create a public area along the riverfront which in conjunction with the market will create a balance with Wharton Square to the east in helping to establish a riverfront area for the South Side.
Intervention
Community College Campus

David Goff

Circulation Diagram

Depicts major zones of circulation (hatching) as well as trolley line and underground parking.

Figure Ground Diagram
The existing active railroad lines which travel through the South Side riverfront are utilized within this scheme to provide a theme which generates form, function, and experience.

Trains have always been a featured element of the South Side community. Years ago railroad tracks occupied whatever portion of the South Side Flats which were not occupied by industry. Trains would deliver and receive goods as the circulatory system within the industrial machine, and linking it to the country. Today trains no longer service local mills, but they continue to remind one of the industrial activity that was, and that which still is.

In this proposal for a riverfront park in South Side the park visitor experiences the travel of the train through this area in a variety of ways. The three major elements which convey this theme within the park are: Stations, Paths, and Axes.

Axes:

The main entrances to the park are along three mains axes which travel through the South Side to slopes, in an effort to link the slopes with the riverfront. The axes become elements of the park serving as an interchange element as well as a place unto themselves. The axes pierce through the linear fabric of the park allowing one to transfer from one path to another, and extends the realm of the park into the river itself.
Paths:

The linear paths which move through the park are a morphosis of the many tracks which once occupied the site. The spaces formed by the paths each take on a different character, some formal, others informal, some passive, and others active. The movement along these paths provide a series of different experiences similar to what one experiences when traveling on a train. The paths also create different scenarios for observing the trains which travel through the park, sometimes visual and at other times just audible. The paths move linearly through the park and may continue beyond the South Side in either direction, they are accessed by the axes crossing through the site.

Stations:

Stations mark the entries of the park at each axis and are linked by paths. They take on elements associated with each of these previously discussed elements by providing the interchange of information to the park visitor, and as a place along the path which posses a different experience for the visitor. Each station is a pavilion unique to itself but linked to each other by the path and by function. In addition to housing services to the visitor such as restroom facilities, a snackbar, or information, the stations house artifacts of railroad history for the visitors to view. Each station becomes a gallery in essence, displaying different information about the railroads in different ways. The stations will encourage people to use the park, as the park encourages people to explore the rich history of the railroads.
Watermark

Intervention
Waterfront Park

Peter Vonderlieth

Axonometric
Intervention
South Side Waterfront Park

Peter Vonderlieth

Elevations
Description

As the last intervention on the western end of the riverfront, Watermark Design Associates proposes the implementation of an open air market as an expansion to Bedford Square. The proposal calls for the rearrangement of buildings surrounding the Bedford market house, and the construction of a new open air market between Bedford and the riverfront. The existing light industries on site will be removed to areas west of the Tenth Street Bridge. In order to promote the pedestrian nature of SouthSide, vehicular access to both blocks will be restricted only to service vehicles behind buildings. Parking on Muriel and Carson streets will be moved to the new parking structure under the Tenth Street Bridge. Only pedestrians will be allowed to access the fronts of the buildings within both addition, they will serve as possible open air markets or outdoor dining areas for future restaurants. Watermark proposes the re-introduction of the farmer's market on the first floor of the market house, and the removal of the senior citizens' recreational center into the bath house buildings to the west.

Traffic lights, pavement patterns, fences, and other elements of streetscape along the sidewalks of Muriel Street between the two blocks will help control vehicular traffic on Muriel and maintain a safe pedestrian crossing. A pavilion at the entrance of the open market will serve as a waiting area as well as an information station for upcoming events to be held in the market. The new SouthSide trolley system will also drop off passengers here.

The buildings surrounding the open market serve three purposes. One, to maintain a sense of enclosure. Two, to frame an axial view towards the river. Third, to serve as an appropriate ending to Watermark's series of interventions while promoting activity between the market and the adjacent vocational/technical school. To
implement the last goal, several small ethnic restaurants have been set up near the riverfront to be occupied by the cooking school of the college. The buildings shift to continue a pedestrian path from the institute. Besides serving as residences for store owners and operators, the second floors of the buildings surrounding the open market are also designated as student housing for the college. On the first floors of some market buildings, a covered loggia will shield visitors from inclement weather. The geometries of the facades of the market buildings reference historical South Side, divided into three distinct zones with arched windows and openings.
The open market is completely paved, and steps down in three stages to reach the river. Patterns in the pavement, along with lamp posts, benches, and plantings give the plaza variety while enforcing the three design goals. Watermark intends the plaza to host other activities besides being an outdoor market. Community gatherings such as craft fairs and musical performances can also take place here.

The open market’s linkage to the river is through a paved walk and a series of steps going down to the round pier. This will serve as a landing for the future water taxi service, as well as a boat dock for private owners. The walk brings visitors across the train tracks, through the riverfront park, and down to the pier. Stations serving the riverfront park are set up on both sides of the walk in front of the railroad tracks. Refreshments, as well as ticket sales for the water taxi are provided here.

Riverfront:

A water landing will serve a number of functions. As a lookout spot, it will attract market shoppers to be closer to the river. As a boat dock, it will allow boat owners to stop and visit the market. Finally, it will serve as a station for the proposed water taxi service linking the communities on the Mon.
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Open Market:

Ethnic groceries, bakeries, and restaurants will occupy the buildings surrounding the square. They will reflect the heritage of South Side as a representation of the many ethnic communities. Apartments for store owners, as well as dormitories for the adjacent college will be placed on the second floors of these buildings.

The paved plaza is to be occupied as an outdoor farmers’ market, similar to the current one on Sidney Street. However, its use is intended to be very flexible, also serving as a community recreational/gathering place.
Program

Bedford Square:

Restaurants, catering to both local and regional interests. These will include cafes, eateries, delicatessens, etc.

Shops specializing in fine crafts, gifts, and creative arts will also be placed here.

The recreational center on the first floor of the Bedford market house will be moved to the bath houses west of the Tenth Street Bridge. The old covered market will be restored in its place.
Watermark

Intervention
Riverfront Market House

Li-Hang Wang