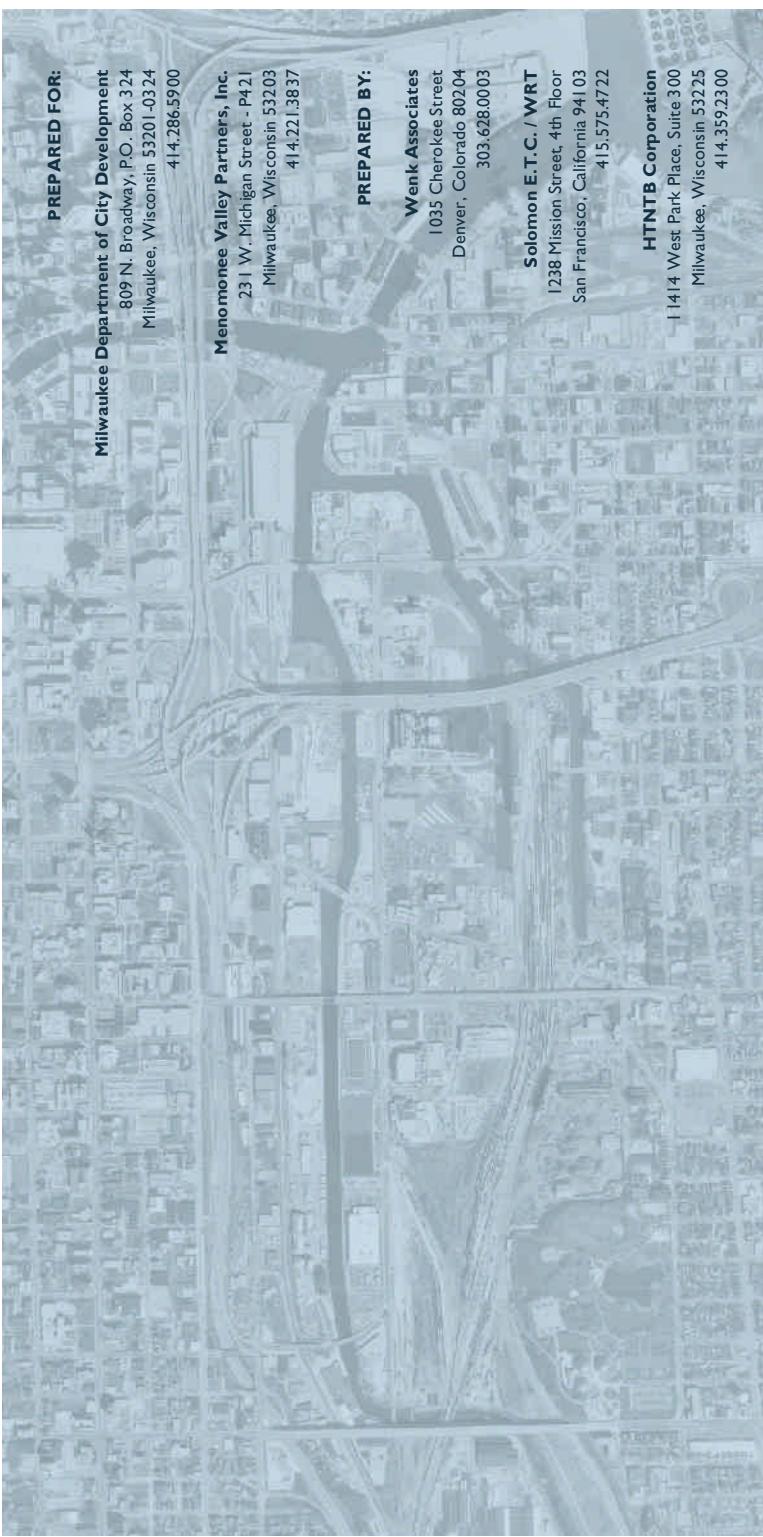


PROJECT NARRATIVE
WORKSHOP I February 20-21
WORKSHOP II April 15-16

The Canal Street Corridor

A FRAMEWORK FOR REDEVELOPMENT



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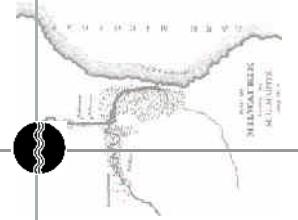
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THE CANAL STREET CORRIDOR

A FRAMEWORK FOR REDEVELOPMENT

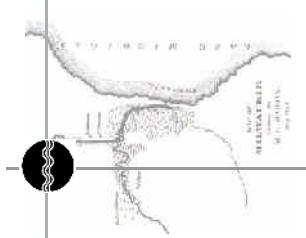


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I. INTRODUCTION

A new era of development will begin with the improvement and extension of Canal Street. This study's purpose was to assure the full potential of the area and address redevelopment, engineering, recreational and environmental concerns as an integrated whole. The project's design focus was to identify the redevelopment potential of significant parcels, develop drainage concepts for Canal Street, propose water quality treatment strategies, and develop options for bike trails and pedestrian connections throughout the valley.

The planning effort for the Canal Street extension and redevelopment expanded over a three-month period beginning in February of 2003. The team sought input from a wide range of stakeholders -- Menomonee Valley businesses and land owners, government officials, local associations and local organizations -- to explore a range of issues in the project area regarding future developments, infrastructure improvements, environmental concerns, and the aesthetic image of the valley.

The study focused on the central portion of the Menomonee Valley from the 27th Street Viaduct on the west, extending eastward to the I-94 high rise bridge. Less detailed attention was directed to the east end of the valley because of an extensive urban design study to be undertaken in late 2003. The rail yards define the boundary to the south, and because of opposition identified in the planning process, the north boundary now expands across the river to Mt. Vernon Avenue (*fig. 1*). The study area is approximately 1.5 miles long by 0.4 miles wide and totals 328 acres. Although the study area has defined boundaries, the design team also considered many outside influences that affect the site, including transportation networks, watersheds, and surrounding neighborhoods and land uses.

The planning effort built on previous studies of the valley developing a clearer understanding of the issues and challenges facing redevelopment in the valley. Through these earlier studies, the design team inherited a wealth of useful information and knowledge, with key issues of particular concern to the study area summarized below:

A physical disconnect between the city and the valley - Connections between city and valley are difficult due to the steep grade changes created by the valley edges. Railroad and highway infrastructure cuts the valley off from adjacent neighborhoods. And finally, viaducts span the valley without providing access into the project site.

Floodplain - Much of the project area sits within the 100-year floodplain.

Contaminated soils - Over a century of industrial use within the valley contaminated soils with industrial wastes.

The Hank Aaron State Trail and other trail options - The proposed alignment of The Hank Aaron Trail goes through the valley; previous studies identify trail options but an exact alignment has not been determined.

Continued Industrial Activity - The Menomonee Valley remains a center of industrial activity in the city and relies on the river and rail lines for the transport of goods. However, certain uses, such as metal recycling and slaughterhouse operations could be a barrier to redevelopment.

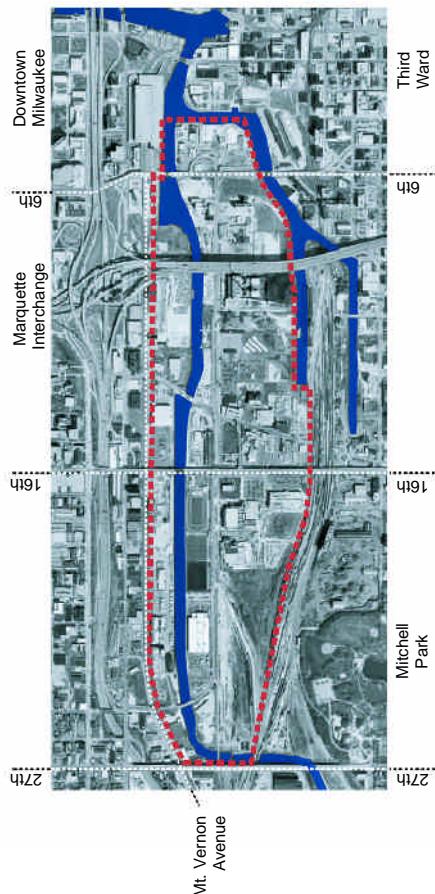


fig. 1 Project study area

The planning schedule consisted of two workshops conducted in Milwaukee and three phases of work:

- 1. Constraints and opportunities** - The design team mapped the area and studied operational, engineering, and related physical opportunities and constraints. The team interviewed key stakeholders and landowners to identify operational requirements for ongoing businesses, and possible goals for redevelopment.
- 2. "Alternative futures"** - In the second phase, the design team explored alternative approaches to development. These "alternative futures" diagrams were the basis for the preparation of framework plan alternatives.

- 3. Final framework plan and summary report** - The design team prepared final framework diagrams and detailed illustrative plans that describe redevelopment options for private parcels, storm water management, street alignments, pedestrian/bicycle networks, and the potential for public spaces along the river. This document summarizes these alternatives.



A. PURPOSE OF THE STUDY

1. REDEVELOPMENT

Devise plan scenarios that will attract re-investment to the valley.

Throughout the Menomonee Valley's development history, it has seen booming growth and economic drought. At the turn of the century, the Menomonee Valley was the industrial center for the region employing over 50,000 people, most of whom lived in the neighborhoods adjacent to the valley. During the 1970's and 1980's many of the manufacturing establishments went out of business or moved elsewhere, with little care or concern, and the valley continued to deteriorate. However today, interest in the valley is growing with recent investments; Miller Park and the 6th Street Bridge are recent developments that are physically and mentally reconnecting the valley back to the city. Redvelopment goals include attracting private investment and creating up 7,000 family-supporting jobs for community residents who live in the adjacent and nearby neighborhoods.

The design team's objectives were to provide market-based redevelopment scenarios with the goal of attracting new industrial and business developments to the project area while retaining existing industries within the valley. The Menomonee Valley Partners, Inc. (MVP) and the Department of City Development (DCD) identified suitable lands for redevelopment based on current land-use, land ownership, existing conditions, and future considerations surrounding Canal Street's construction through the valley (fig. 2). Identified lands were then divided into parcels based on market analysis to optimize the potential for industrial development on the specific sites.

2. CANAL STREET CONSTRUCTION

Identify options for the alignment and cross-section of Canal Street.

Current decision-making regarding redevelopment in the Menomonee Valley will be accelerated by the reconstruction of Canal Street. Canal Street is part of a larger traffic plan initiative for the city of Milwaukee and will serve multiple roles in the coming years. In the short-term, Canal Street can expect large traffic volumes, as it will act as a major highway into downtown while the I-94/Marquette Interchange is reconstructed. During this period, Canal Street will consist of 4 lanes of traffic, 48 feet wide from curb to curb. Upon completion of the I-94/Marquette Interchange, Canal Street will be reduced to a city street with 2 lanes of traffic with on-street parking.

The design team examined variations in the alignment and cross-section of Canal Street to ensure the most favorable conditions for pedestrian use within the right-of-way, and provide the highest-yield alternatives for redevelopment parcels under Canal Street's two futures.

3. STORMWATER MANAGEMENT

Propose solutions for stormwater quality and management for Canal Street and developable parcels.

The Wisconsin Department of Natural Resources mandates strict quality regulations on the release of stormwater into the environment. At the time of the study issues concerning stormwater management were unresolved for Canal Street and the redevelopment area. Additionally, existing storm water infrastructure is inadequate to handle stormwater volumes that will be created by Canal Street's reconstruction and development. *The design team examined solutions that will treat collected stormwater at the surface instead of conventional methods, such as subsurface piping and large detention basins. These proposed stormwater treatment areas are integrated with bicycle and pedestrian circulation systems within the urban fabric forming a continuous network of activity.*

4. HANK AARON TRAIL AND PEDESTRIAN/BICYCLE NETWORKS

Provide options for bicycle and pedestrian trails through the Menomonee Valley

When completed, The Hank Aaron State Trail will cover approximately seven miles, connecting Lake Michigan with the Oak Leaf Trail in Doyne Park. More than half of the trail length will travel through the Menomonee River Valley. The layout for the trail will have to negotiate waterways, railroad crossings, existing structures and proposed developments as it winds through the valley. In addition, it will require separate negotiations with landowners in the valley so that they may set aside land on their properties for the trail.

The design team provided 4 options for valley trail alignments.

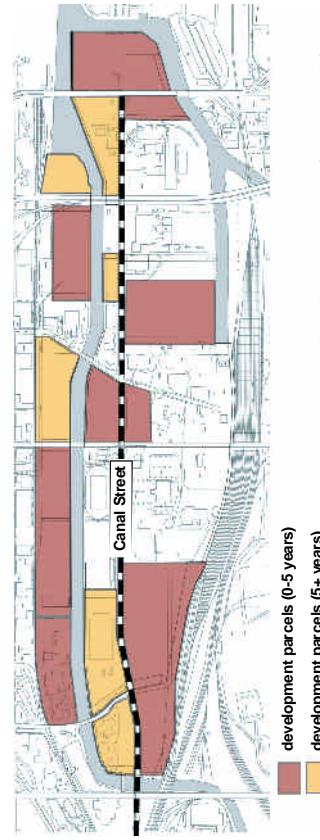


fig. 2 The reconstruction/extension of Canal Street and redevelopment time frames for adjacent parcels.



B. GOALS AND OBJECTIVES

City staff, the consultant team, and the Menomonee Valley Partners staff jointly developed the following goals and objectives. The stakeholders also reviewed, revised, and approved these goals and objectives in the planning process.

1. Optimize the redevelopment potential of Canal Street reconstruction by providing scenarios for redevelopment of adjacent lands.

Evaluate the opportunities for mixed-use development east of 9th Street, at A Street and block level on lands bounded by the Menomonee River and the South Menomonee Canal.

Evaluate the potential for light industrial uses west of 9th Street to the Falk industrial complex at the site layout and building footprint level.

Propose minor variations in the Canal Street alignment at 25th Street as part of rail relocation and redevelopment strategies to optimize redevelopment potential.

2. Understand the transportation and public use opportunities that can be achieved or that would be precluded by improvements proposed for Canal Street.

Evaluate the economic development opportunities east and west of 9th Street in the context of the reconstruction of Canal Street.

Consider the potential for pedestrian connections, including The Hank Aaron State Trail and local pedestrian access, within the Canal Street right-of-way.

Propose a sketch concept for the extension of Canal Street across the South Menomonee Canal to the east.

3. Identify opportunities for pedestrian friendly and environmentally sensitive development.

Identify concepts for regional stormwater management that address issues of water quality and habitat development, and that are integral with public spaces.

Propose redevelopment scenarios that promote a walkable environment.

Evaluate the opportunity for public access along the Menomonee River.

Identify opportunities for regional trail and local pedestrian connections along the river; identify opportunities for neighborhood parks and other public areas along the river and the south canal.

Evaluate the opportunity for the integration of stormwater management and treatment facilities into public spaces.

Evaluate the opportunity to create a combined public access and utility corridor along the river and the south canal.



fig. 3 Existing site conditions



II. DESIGN CONCEPTS

A. DEVELOPING A FRAMEWORK OF "GREEN INFRASTRUCTURE"

Issues surrounding transportation networks, site ecologies, cultural and economic factors are not confined by project boundaries; when creating the framework for Menomonee Valley's redevelopment, the team reviewed these issues in a larger regional context and considered how they might influence design ideas related to the project site.

The concept of "green infrastructure" knits together required stormwater conveyance and quality demands with pedestrian and bicycle networks, forming an interlocking web of activity situated within the urban grid. These areas are landscape corridors in which collected stormwater is released into shallow channels filled with plants, where vegetation cleanses the water of sediment before it is released back into the river. The green infrastructure adds beauty to the urban environment, allowing larger trees and plant communities to thrive, while providing a safe haven for active and passive recreation and enjoyment. These green connections form a grid-like building envelope in which new developments can be situated. New developments will be located adjacent to treatment areas providing valuable public open spaces for an urban workplace. These areas solve stormwater quality requirements for individual property owners; collectively, the treatment areas are an integrated system, working to cleanse stormwater of pollutants to ensure a healthier environment for the entire region (*fig. 4,5*).

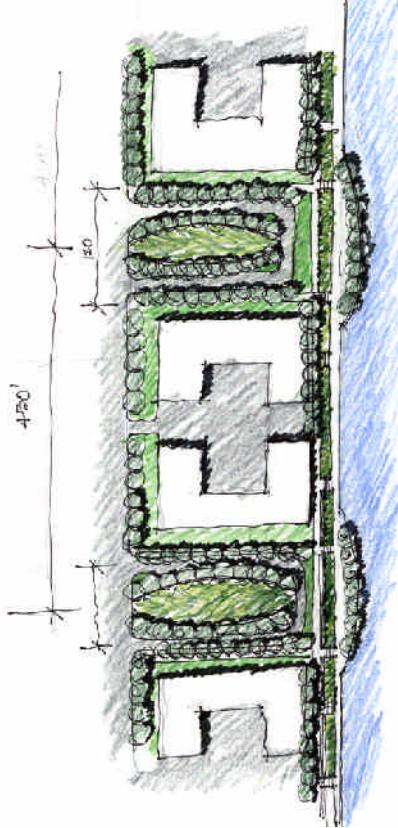


fig. 4 Concept sketch: A framework of "green connections" provides a building envelope in which developments can be situated. They convey and clean stormwater, and remove development areas from the 100-year floodplain in certain areas.



fig. 5 Concept sketch: pedestrian, bicycle, and drainage-ways provide a framework of "green infrastructure". The grid structure of the system places strong emphasis on creating an active river corridor.



1. STORM WATER MANAGEMENT AS PART OF "GREEN INFRASTRUCTURE"

The design team examined solutions that will treat collected urban runoff at the surface rather than conventional methods, such as a subsurface system of pipes and large detention basins. Thus it turns stormwater from a waste product, normally hidden and piped away, into a landscape amenity while avoiding land-intensive detention areas.

The layout of the treatment areas exist on public and privately owned land, and within existing city owned rights-of-way such as underneath the viaducts. The treatment areas will have to be built in several different phases with the cost to be incurred by public and private entities. The design team devised a phasing plan in which some treatment areas will be built as part of Canal Street's reconstruction, with city funds, while others will be built as part of private redevelopment (fig. 6).

The proposed areas for stormwater treatment solves for drainage associated with Canal Street and sites that have been identified by the Valley Land Use Plan. Existing privately owned sites which either meet water quality requirements or were in business prior to adoption of water quality regulations, have not been included in this analysis. It is the understanding of the design team that these sites are exempt from calculations because

they were in operation before water quality regulations were adopted or they currently meet storm water quality requirements.

The design of the treatment areas adhered to strict water quality regulations set by the Wisconsin DNR and the City of Milwaukee, stating that an 80% reduction in Total Suspended Solids (TSS) is required for both new development and redeveloped land within the city. The design of the proposed storm water system is based on treatment of runoff from a 1-year, 24-hour storm, and solves for an 80% reduction in TSS.

The design criteria and computations for this system are as follows:

In Milwaukee, the rainfall depth for this design storm is 2.3 inches. Applying an NRCS runoff curve number of 98 for impervious surfaces (pavement and rooftops), the runoff volume would be 2.1 inches over the drainage area. Applying a runoff curve number of 74 for pervious surfaces (grass in good condition), the runoff volume would be 0.5 inches over the drainage area. These runoff values were used to estimate the total design runoff volume for each particular treatment area. The 100-year water surface elevation for the Menomonee River downstream of 25th Street (Lake Michigan estuary) is 583.7 feet. Therefore the proposed storm water treatment areas had to be above this elevation to prevent resuspension of sediments.

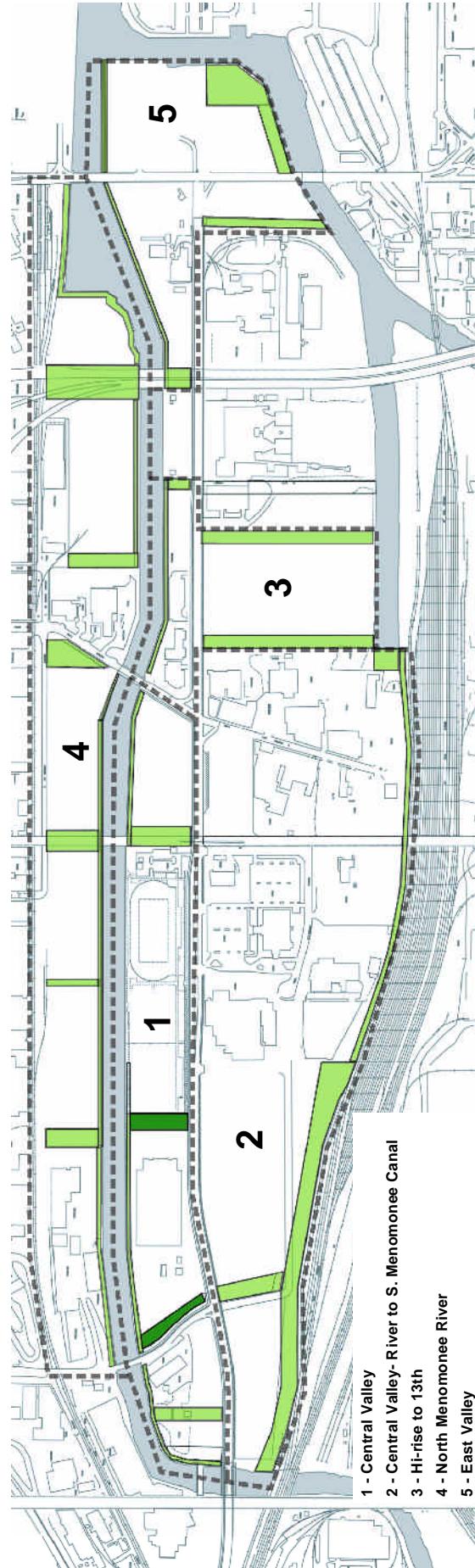


fig. 6 Plan of stormwater treatment areas sub-watersheds



The process of stormwater treatment:

During a storm event, runoff is concentrated in the treatment areas in two ways: surface conveyance from adjacent properties or collected in catch basins and piped to a treatment areas. The design team concluded, through preliminary grading plans, that drainage from Canal Street would be collected in catch basins and concentrated near the proposed stormwater treatment areas (*fig. 7*). Collected stormwater is piped to forebays, located adjacent to Canal Street, on the upland side of the proposed treatment area. Stormwater is then spread out evenly over the treatment area in sheet flow conditions by means of level spreaders. As water naturally flows downslope through the treatment cells, vegetation within the area acts like a filter, cleansing the water from sediments and pollutants. The clean water is then re-concentrated at the end of the treatment area and dispersed into the Menomonee River.

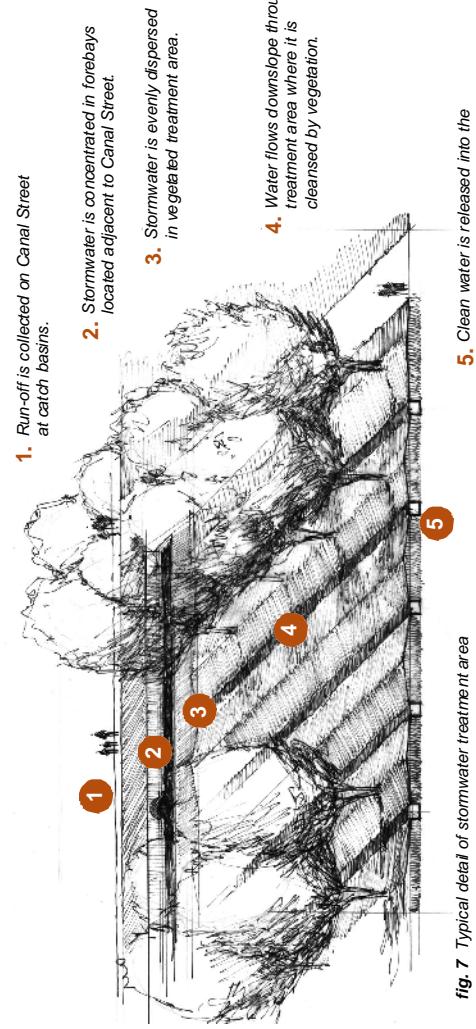
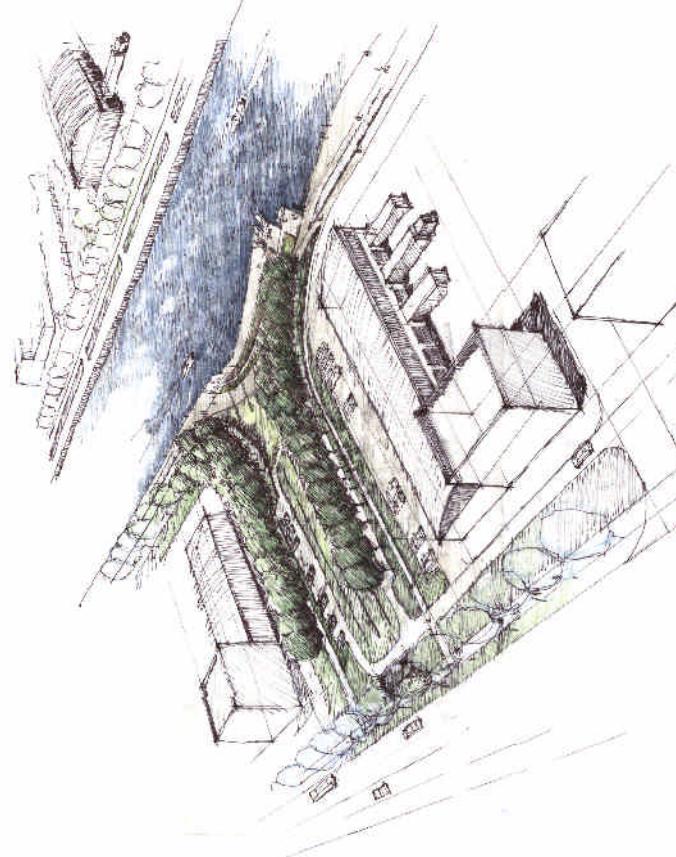


fig. 7 Typical detail of stormwater treatment area

fig. 8 Green infrastructure can accommodate existing zoning requirements for parking lot greenspace, increasing a parcels developable square foot yield and providing businesses and the public with an amenity



2. DESIGNING THE RIVER'S EDGE

The central Menomonee Valley is surrounded by water on three sides and approximately 70% of the study area edge is directly adjacent to water. The Menomonee River and the South Menomonee Canal are the valley's most distinguishable attributes, and the most opportunistic resource for public and business amenities. The design team provided concepts that use the river's edge as an opportunity to provide a combination of active and passive spaces intended to help people return to the valley.

The Menomonee River remains a working canal; barges still regularly enter the valley on the Menomonee River to transport cargo. Design concepts must respect the needs of business in the valley. Building out into the river should not affect current shipping operations; the width of the river is approximately 130 feet, while the width of shipping lanes for barge traffic is estimated at 25-30 feet, which is the approximate width of clearance underneath the new bridge at 6th Street (*fig. 9*).

The design team proposes a series of structures built out into the Menomonee River. These structures become a confluence of design elements allowing a multiplicity of experiences to take place. Here, barges head up the river to deliver goods, recreational boats dock along the edge, bicycles race along the trail, pedestrians sit overlooking the river, and water that is cleansed by the treatment areas pours into the river (*fig. 11, 12*).

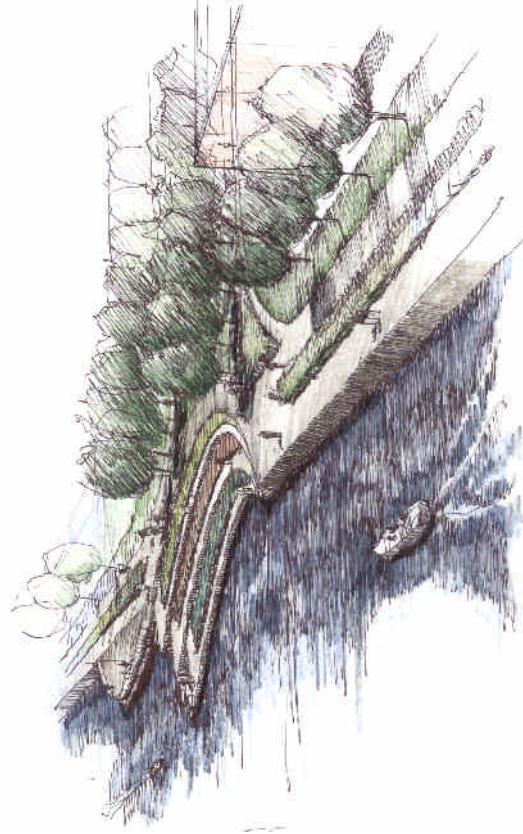


fig. 11 Aerial perspective: treatment areas terminate at the river's edge

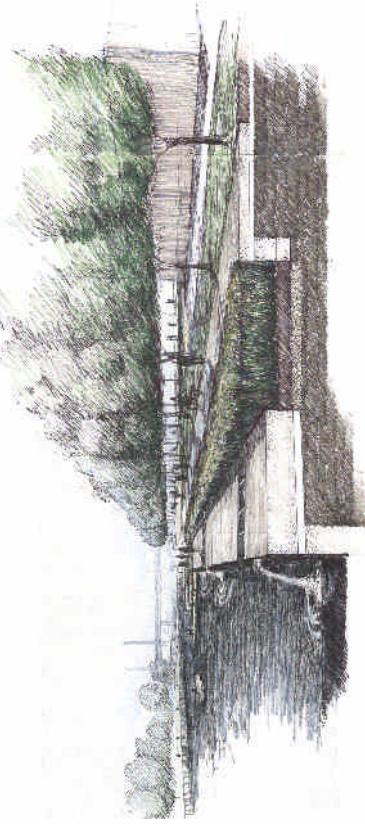


fig. 12 Concept sketch: proposed river edge treatments, integrating multiple activities

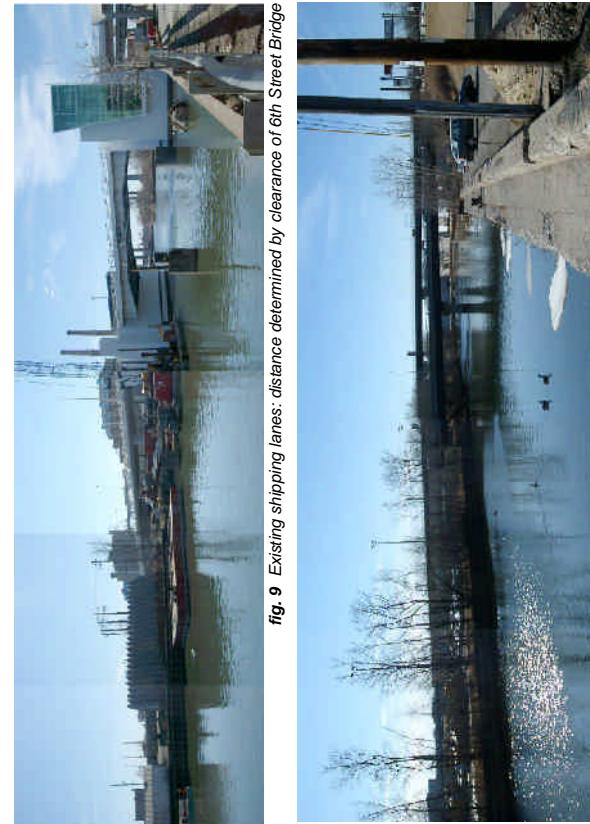


fig. 9 Existing shipping lanes: distance determined by clearance of 6th Street Bridge

fig. 10 Existing river edge conditions



B. CANAL STREET ALIGNMENT AND RIGHT OF WAY

The design team examined variations in the alignment and cross-section of Canal Street to ensure the most favorable conditions for redevelopment, and to create a safe walking environment.

On the westernmost edge of the project area, underneath the 27th street viaduct, Canal Street will enter the project area on a proposed bridge over the Monomonee River. This bridge will consolidate Canal Street with railroad lines and sidewalks, eliminating the need for the multiple bridges currently located at the river crossing. From the new bridge, Canal Street will bend slightly northeast until it meets the Marquette fields, where the street will straighten in a true east-west orientation for the length of the project area. Although outside the scope of this study, the design team concluded that Canal Street should extend eastward beyond 6th Street, crossing over the Monomonee River, and connect with Pittsburgh Avenue. This would provide a much-needed connection to the Third Ward and Walker's Point.

Canal Street's right-of-way varies along the length of the street, with a minimum of 70' and a maximum of 78'. Solving for the minimum width of 70', the plan calls for a 5' tree lawn strip separating vehicular traffic from a 10' pedestrian and bicycle path running parallel to the street on the north side. This path could be designated as The Hank Aaron Trail. If it is determined that The Hank Aaron Trail is located elsewhere, it would be ideal to use this dimension to provide a 9' tree lawn and a 6' sidewalk to create further separation between pedestrians and traffic. On the south side of Canal Street, a 7' wide walk separates Canal Street and adjacent properties (fig. 14). Upon completion of the I-94/Marquette Interchange, two lanes of the street will be converted to on-street parking. Parallel parking at the curbs, along with tree-planted islands, will add a more intimate feeling to the street and assist in creating an attractive, walkable environment (fig. 15).

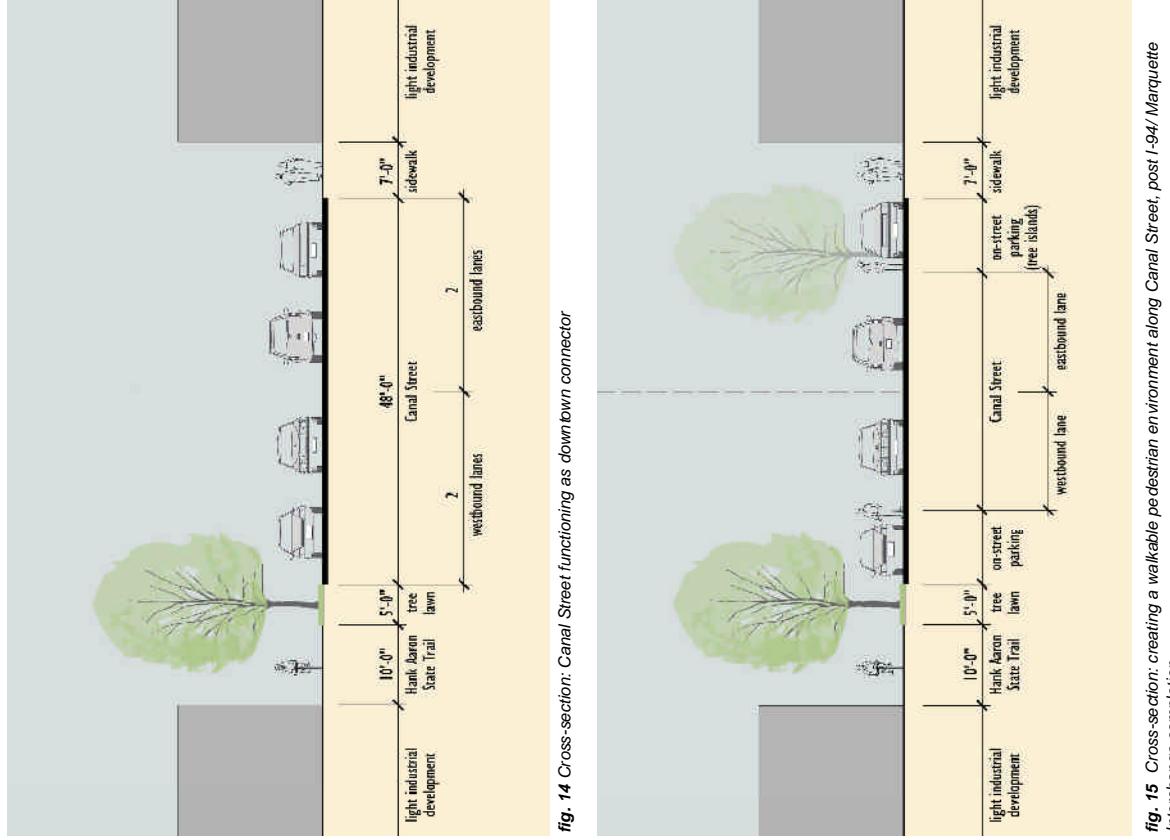


fig. 14 Cross-section: Canal Street functioning as downtown connector

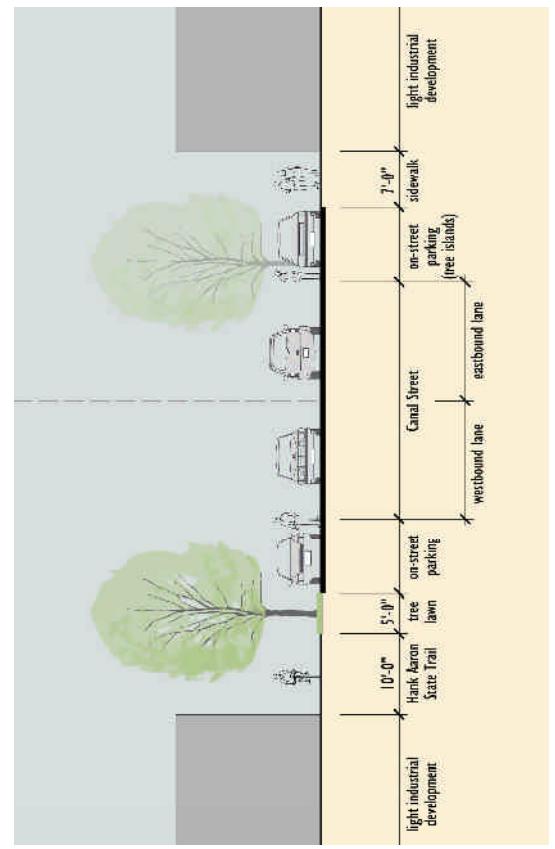
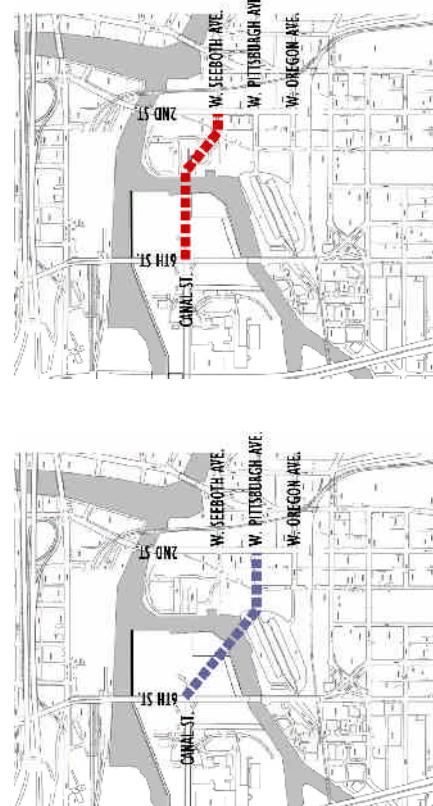


fig. 15 Cross-section: creating a walkable pedestrian environment along Canal Street, post I-94/Marquette Interchange completion.

ALTERNATIVE B

fig. 13 Two alternative connections to the Third Ward were evaluated. Alt. A would be compatible with proposed redevelopment schemes south of the South Canal. Alt. B, while requiring a shorter bridge crossing, would have significant impacts on deep tunnel structures in the MMSD parking lot.



ALTERNATIVE A



C. THE HANK AARON STATE TRAIL

Beginning with the original vision of the Hank Aaron State Trail, several options for valley pedestrian and bike trails have been identified over time. This study outlines four current opportunities. The existing segments of the Hank Aaron State Trail are configured as a 10' wide, paved path for pedestrian and bicycle use. This trail is approximately 7 miles long in its entirety, and over half of its length situated within the valley. How the Hank Aaron Trail traverses the project area will be important; this portion of the trail will be a key piece that provides connections outside the valley to downtown and the lakefront. To date, multiple ownerships and site constraints from existing structures have posed difficulties to finalizing a trail alignment. With the opportunities brought about by Canal Street and impending redevelopment, the design team proposed multiple trail options, each offering their own unique experiences as well as difficulties with implementation (*fig. 16*).

Existing Hank Aaron State Trail Proposal- This proposal is highlighted by an extended length of the trail running parallel with the Menomonee River. The trail turns south at Ember Lane until it meets Canal Street, where it will be confined within the Canal Street right-of-way until 6th Street. A ramp off of the southern end of 6th Street bridge will enable the trail to continue eastward to Lake Michigan.

2 Canal Street Right-of-Way- This option dedicates 10' of the Canal Street right-of-way to a hardscape path. This proposal is the least desirable in terms of user experience, as it will compete with vehicular traffic and multiple curb cut crossings. However it is the best solution in terms of constructability as it could be built as part of Canal Street construction in 2004 and would require no additional negotiations with private landowners.

3 Menomonee River, north edge- This option stretches across the north edge of the Menomonee River. Private ownerships are few along this route, limiting the need for extensive negotiations for purchase. This route never crosses over the river or existing railroad tracks, limiting the need to build new bridges or use existing bridge rights-of-way for connections. This proposal's most difficult hurdle would be resolving its connection to downtown. The trail will have to follow behind the existing post office, or cross the river along 6th Street to complete critical connections.

4 Mainline Freight Tracks- This trail option follows the tracks along the southern edge of the project area. The experience is more secluded, set away from traffic congestion, running parallel to a proposed storm water treatment area. The trail traverses behind two industrial properties before resuming along the South Canal.

Conclusion: The options provided are all real possibilities, each having their own advantages and disadvantages. The design team concludes that all these options are important pedestrian and bicycle connections. Together, they would complete a continuous network throughout the valley (*fig. 17*). One of the options could be identified as the Hank Aaron State Trail, while alternate paths would be constructed in different phases, and of different materials to provide a variety of both active and passive trail experiences.



fig. 16 The Hank Aaron State Trail options



fig. 17 Network of primary and secondary trails



D. 6TH STREET EAST

The district where Canal Street intersects with 6th Street is proposed as a high-density neighborhood containing a mix of industrial, service retail and some residential uses. A fine-grained street grid and 200' x 600' block pattern is proposed. The streets would terminate in a continuous waterfront walkway as part of the proposed green-way network for the whole district. A signature high-rise office building is proposed for the corner site where the river branches, taking advantage of the views towards downtown. A pair of mid-rise residential towers is proposed for the sites east of 6th Street at Canal Street marking the end of the street and framing the views towards downtown. The typical block is intended to contain 2 or 3 levels of mid-block podium parking, lined with either retail or residential townhouses around the perimeter. Above the podium level are corridor accessed residential units 8 stories in height. The proposed pattern of development is intended to create attractive pedestrian-friendly streets with a variety of residential unit types and a dense urban character.

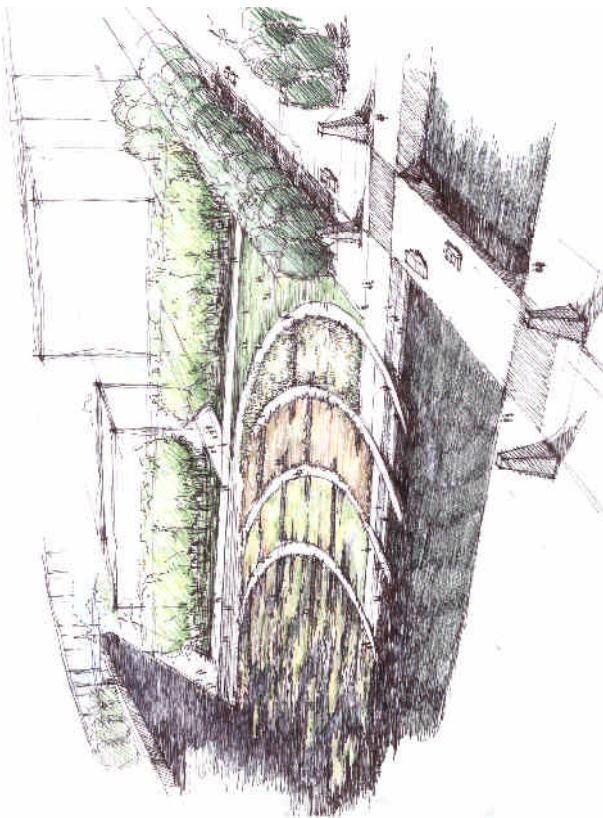


fig. 19 Concept sketch: storm water treatment area functioning as an urban park

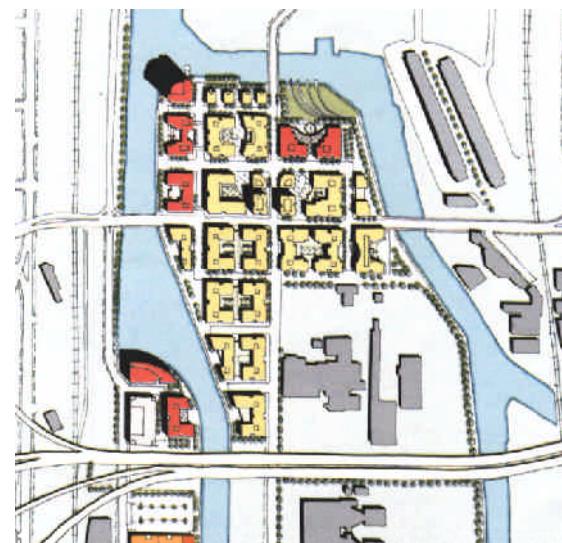


fig. 18 Concept plan: infill development at 6th Street



E. PATTERNS FOR REDEVELOPMENT IN THE CENTRAL VALLEY

The Canal Street Corridor proposals for redevelopment include design recommendations to transform the district into a unified urban neighborhood to accommodate light industrial uses along its length. In addition, the plan proposes development along the north shore of the Menomonee River with a new access road occupying land alongside the existing railroad right-of-way on the south edge of the site. Green Connections extending from Canal Street to public spaces along the river make the Canal Street Corridor an attractive address for employers.

Parcelization

The design team identified suitable lands for redevelopment based on land ownership, existing conditions, and future considerations surrounding Canal Street's construction through the valley. These were then divided into parcels based on market analysis, performed by The Menomonee Valley Partners, to optimize the potential for industrial development on the specific sites. Recommendations conclude that development parcels ranging from 3 to 5 acres with 30,000 - 60,000 sq. ft. building size, are optimal for the Milwaukee industrial market.

Building Typologies and Standards

The light industrial building prototype maintains a strong urban street-wall by locating commercial or administrative spaces facing the street or river. The prototype provides a secure truck-loading zone within the central void of the buildings. These spaces accommodate on-site surface car parking and remain hidden from Canal Street. (*fig. 6.7*)

Land Use

Light industrial uses are permitted throughout the length of Canal Street with a potential commercial zone located on the parcel south of Canal Street adjacent to the off-ramp from the 16th Street Viaduct if the area proves poorly configured for contemporary industrial use.



fig. 20 (Above) Typical light-industrial development on sites north of the Menomonee River; administrative spaces front the river, truck loading areas located within a central void created by the buildings.

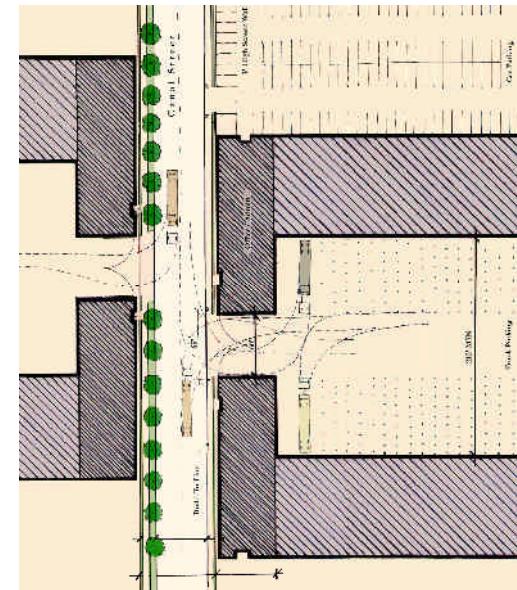


fig. 21 (Left) Typical light-industrial development along Canal Street; administrative spaces from Canal Street to create a unified urban street wall.



The following design guidelines are proposed:

Canal Street. The prototypical light industrial building provides a secure truck area with loading bays on either side of a central drive arranged at right angles to the street. Offices and administrative areas to be located facing Canal Street. (*fig. 22*)

Menomonee River. Similar to the Canal Street prototype, offices and administrative areas face the waterfront trail on the north side of the river. (*fig. 23*)

Build-To Lines. In order to maintain a continuous street wall along Canal Street and a continuous frontage on the north side of the Menomonee River, a Build-to-Line is proposed at the property line at the edge of the street right-of-way and along the edge of the Hank Aaron Trail. All new buildings must be built to these lines with minimal openings to truck bays and parking areas. Parking should be screened from the street and river frontages by walls or plantings, not less than 3ft. high.

Truck Areas. All truck entrances from the street shall be wider than 60 feet between

adjacent buildings. All truck areas must be screened from the street or stormwater treatment area parks by 6 ft. minimum plantings, walls or buildings.

Building Entrances. Property owners are encouraged to locate their primary building entrance on the street. All building entrances should be accessible from car parking areas. Building entrances directly off the street are encouraged.

Surface Parking. Two options are shown for comparison (see plan illustratives, *fig. 24-27*): 3 cars per 1,000 square feet of development (a typical suburban ratio), or 1.5 cars per 1,000 square feet of development (a typical urban ratio). Parking should be located at the rear or side of buildings rather than in front along Canal Street. A continuous wall or vegetative buffer, not less than 3' in height, shall screen surface-parking areas adjacent to the street, the riverfront, or adjoining parks. If lower parking ratios can be achieved through some combination of traffic demand management, satellite parking and shared parking facilities, the industrial district will accommodate more employment and be more cohesive physically, than a district that devotes a large portion of its land resource to surface parking.



fig. 22 Axonometric drawing: typical development along Canal Street

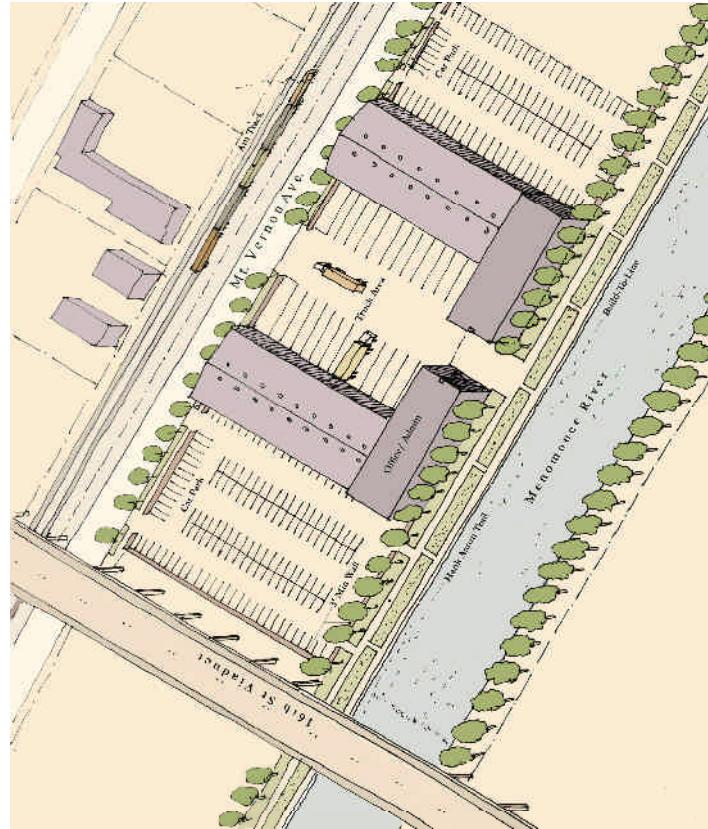


fig. 23 Axonometric drawing: typical development north of the Menomonee River.



F. PHASED BUILDOUT SCENARIOS

The following four figures illustrate the potential for redevelopment in the central valley.

Figures 24 & 25 represent application of concepts discussed previously for those parcels that could be available within the next five years and **figures 26 & 27** over the longer term. (See **fig. 2** for parcel location.)

There is a strong desire on the part of the city to see the area redevelop as a pedestrian friendly environment, which suggests a denser pattern of development and less parking.

However, given the unknown potential for instituting in-valley circulator buses that would access off-site parking, (such as the ball park lots), or the nature of public transit that could off-set the need for parking ratios more typical of auto-oriented suburban developments, two alternative scenarios for redevelopment were prepared.

Figures 24 & 26 assume a parking ratio of 1.5 cars/1000sf of building floor area, a ratio that would result in a walkable environment, but would require transit to augment the less available parking.

Figures 25 & 27 assume a ratio of 3 cars/1000sf of building floor area, a more typical parking to building ratio that would result in widely dispersed buildings that discourage alternative modes of access and that are out of character with surrounding districts.

THE CANAL STREET CORRIDOR; A FRAMEWORK FOR REDEVELOPMENT

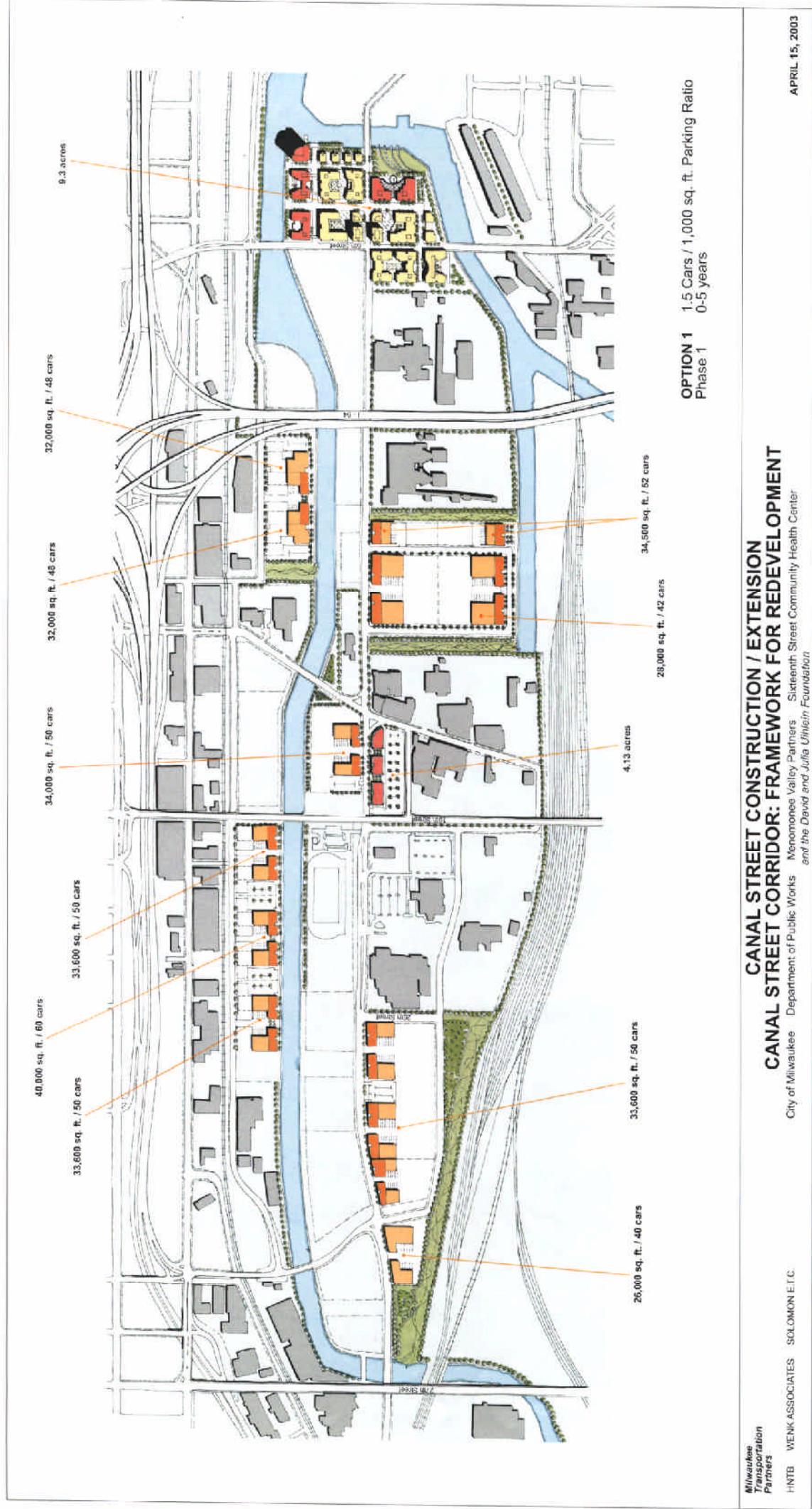
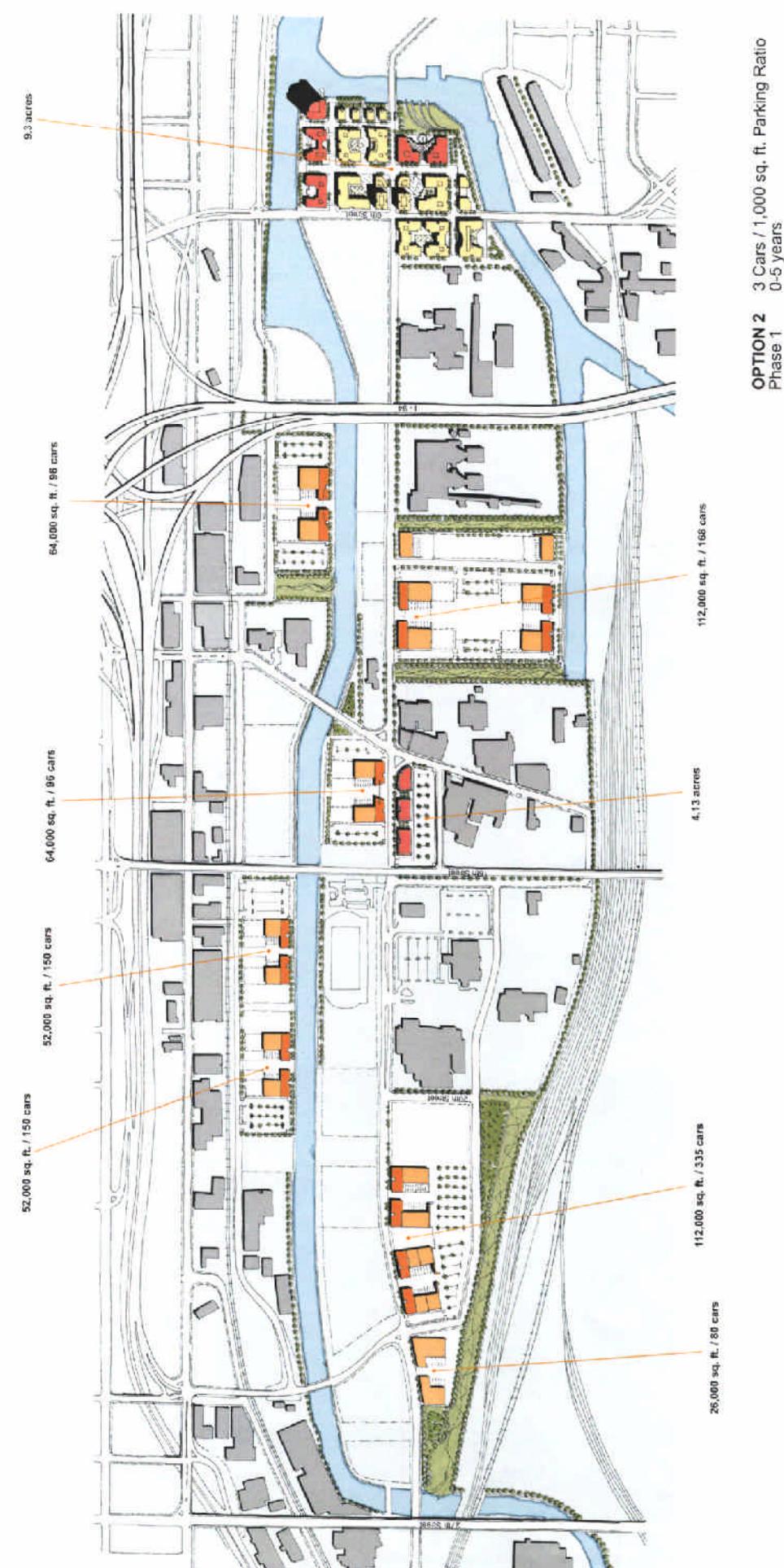


fig. 24

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THE CANAL STREET CORRIDOR; A FRAMEWORK FOR REDEVELOPMENT



Milwaukee
Transportation
Partners
HNTB WENK ASSOCIATES SOLOMON E.T.C.

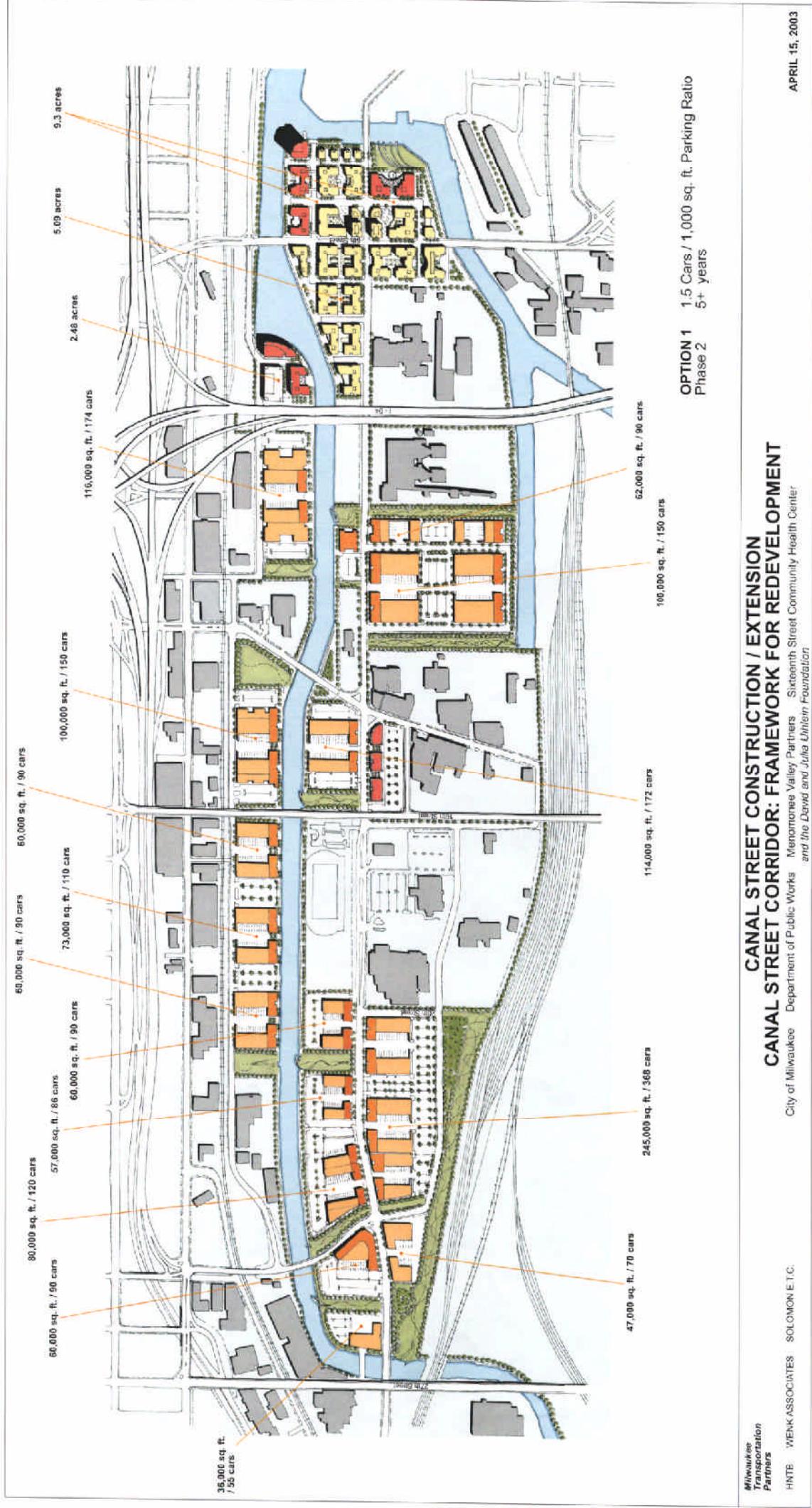
CANAL STREET CONSTRUCTION / EXTENSION
CANAL STREET CORRIDOR: FRAMEWORK FOR REDEVELOPMENT
City of Milwaukee Department of Public Works
Menomonee Valley Partners Sixteenth Street Community Health Center
and the David and Julia Uihlein Foundation

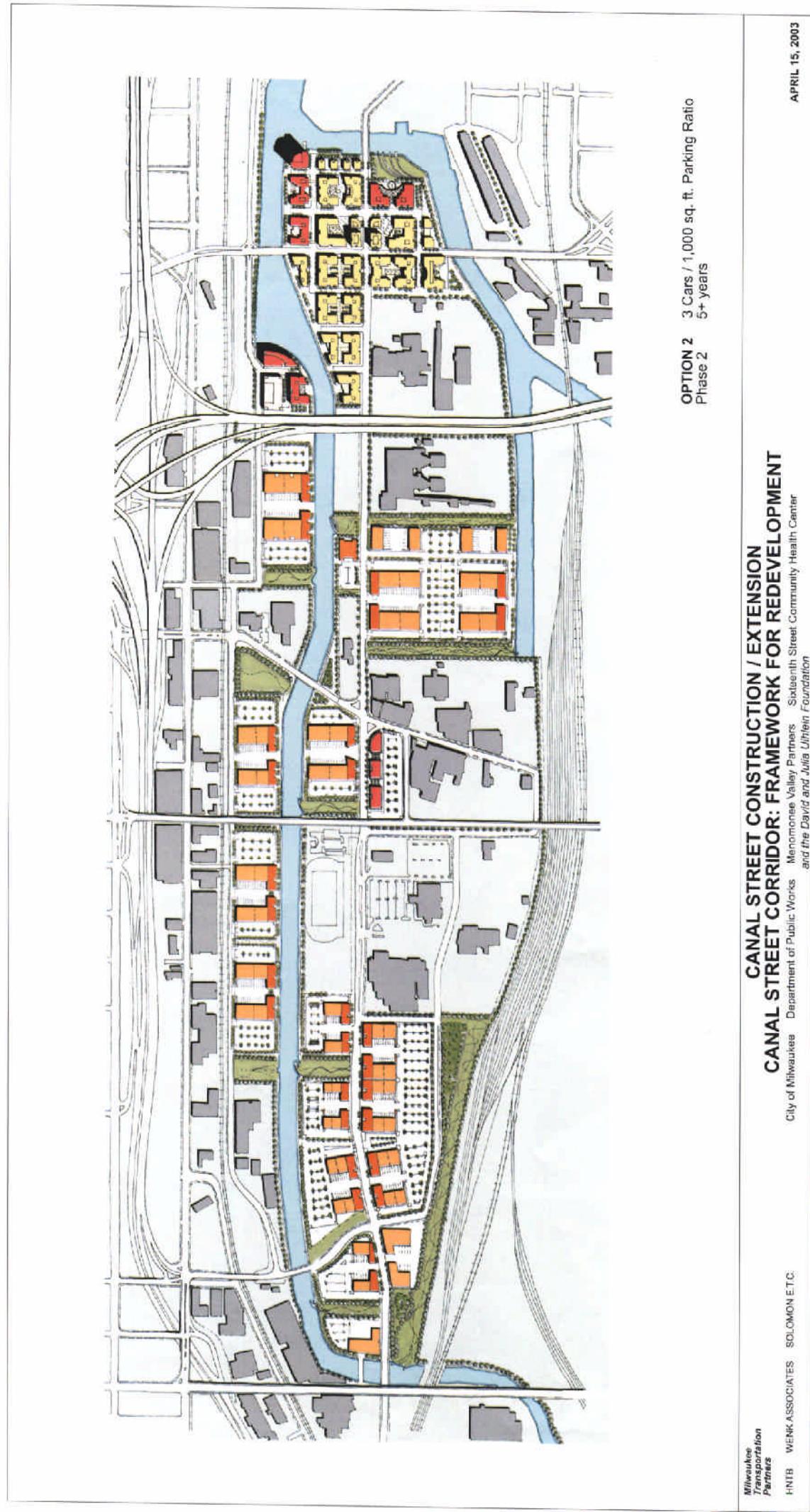
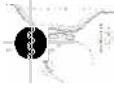
APRIL 15, 2003

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fig. 25

THE CANAL STREET CORRIDOR; A FRAMEWORK FOR REDEVELOPMENT







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