R/UDAT

THE CEDAR VALLEY COMMUNITIES

REGIONAL
URBAN
DESIGN
ASSISTANCE
TEAM

1989

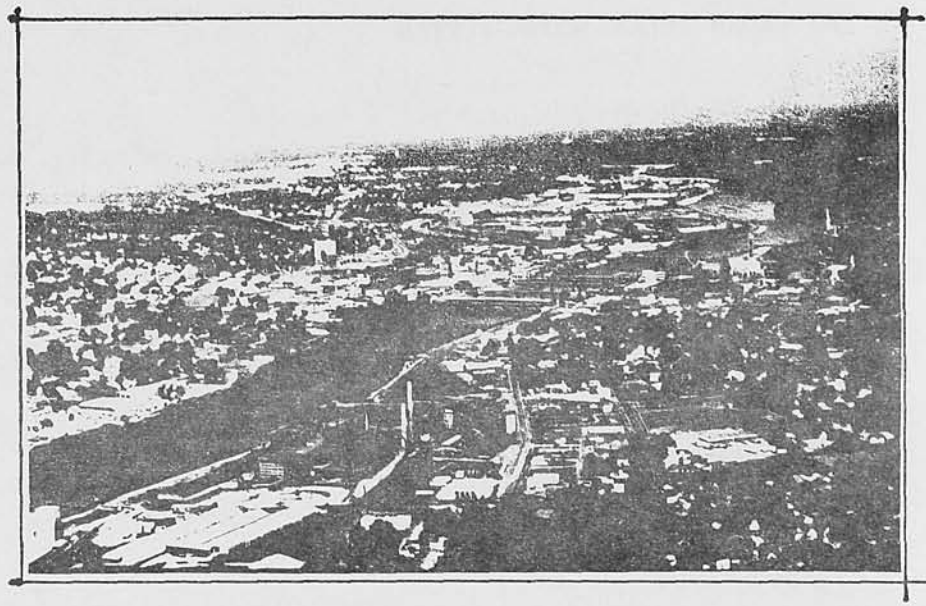
WATERLOO
CEDAR FALLS
BLACKHAWK COUNTY

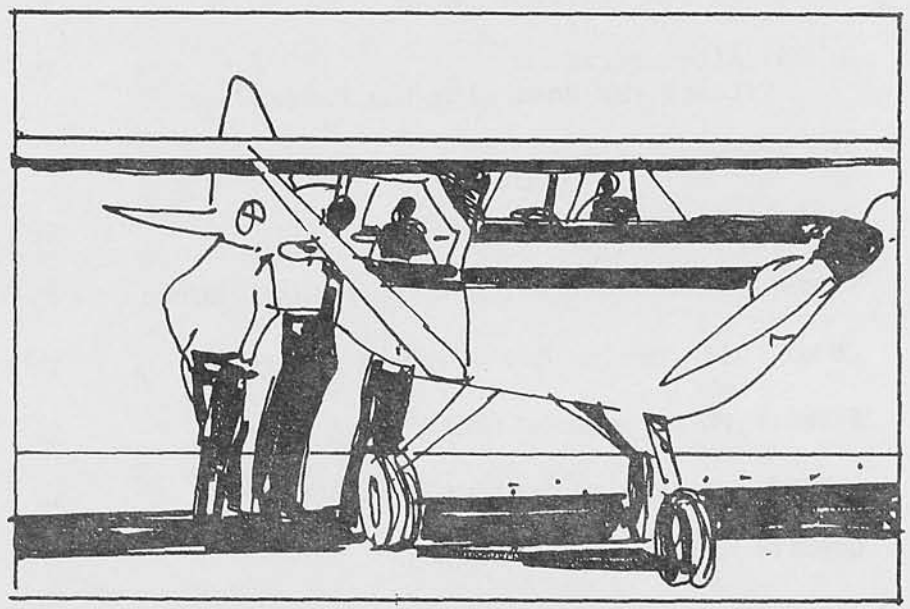
A
PROGRAM
OF
THE
AMERICAN
INSTITUTE
OF
ARCHITECTS

R/UDAT REPORT

THE CEDAR VALLEY COMMUNITIES

TABLE OF CONTENTS





INTRODUCTION

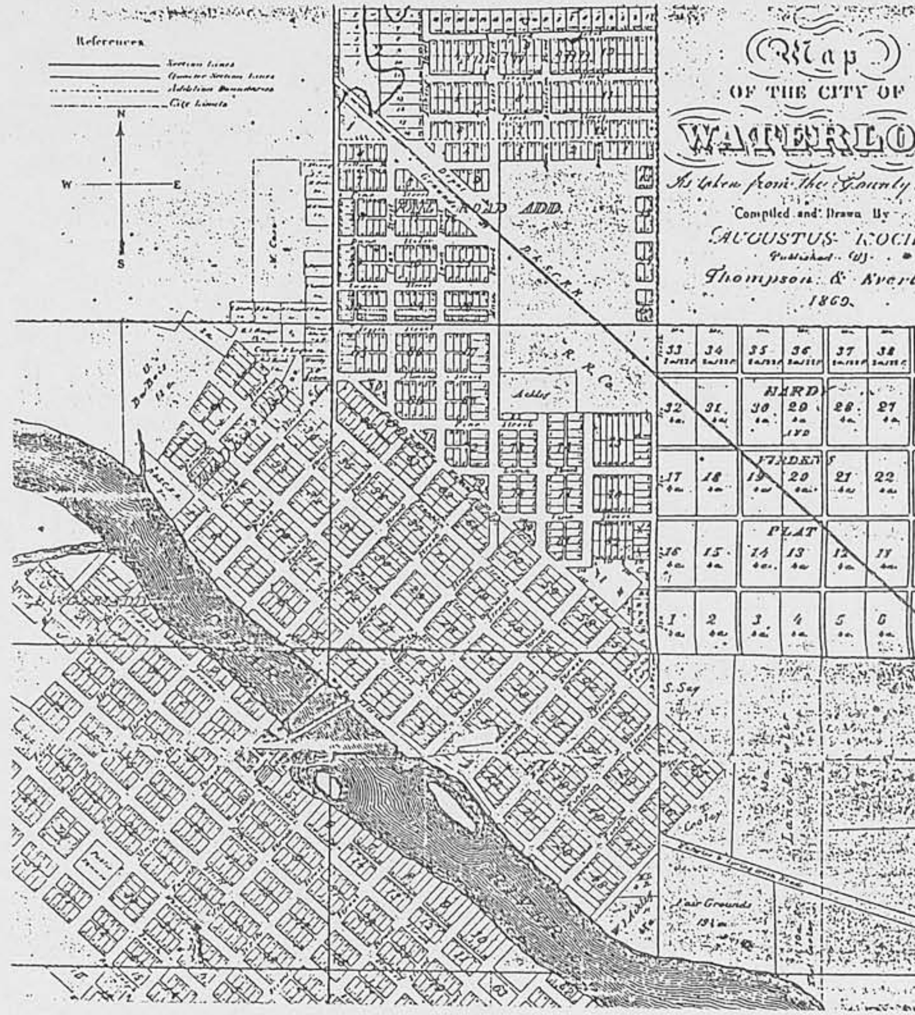
In early 1989, the community of Waterloo, Iowa, requested the assistance of a Regional Urban Design Assistance Team (R/UDAT) of the American Institute of Architects to evaluate the impact of the pending construction of interstate alternate US 218, and to enhance the highway corridor through Waterloo.

After an evaluation of the context and issues relating to the corridor was made by the AIA R/UDAT Committee, a team was assembled to help with these issues. The leaders of Waterloo expanded their request to include similar concerns of Cedar Falls and the Cedar Valley Communities, so that the corridor could be seen in its four-city metropolitan area context. The R/UDAT team was also encouraged to address issues beyond the limits of the US 218 corridor, to include US 58 through Cedar Falls, as well as other urban area concerns within the Cedar Valley Communities.

This report is a result of the R/UDAT Team's visit from July 7 through 10, 1989, and is offered to the Cedar Valley Communities with the Team's respectful appreciation for the warmth, hospitality and care given to its members during their visit. The Team also feels that the Cedar Valley citizens' expressions of "can-do" attitudes is assurance that there can be exceptional accomplishments as they "Leap to the Future".

The R/UDAT Team is aware that there have been many specific issues raised during the visit which are important. In the interest of time, there has been an effort to address what has been perceived as the overriding issues, those which impact the environmental quality for the majority of Cedar Valley citizens.

The Team also feels there are other issues well within the capabilities of citizens or officials to manage, now that they have surfaced. We also would offer numerous comments on how well so many important issues are being handled already, and wish that time permitted that also.


References
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Map
OF THE CITY OF
WATERLOO
Compiled and Drawn By
AUGUSTUS KOCH
Thompson & Everts,
1869.
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HARDY
PLAT
Fair Grounds

HISTORY AND CONTEXT

Agriculture/Industrial/Educational Center

Early settlers to Black Hawk County, Iowa, in the 1840's began establishing their farms and stores on both sides of the Cedar River, attracted by the exceptional climate, soil and water sources. The easiest fording was at Waterloo, but from that point settlement spread northwesterly to Cedar Falls and southeasterly toward Marion in Linn County along Indian trails.

The strong agricultural growth in Black Hawk County attracted railroad connections with markets to the east in the early 1860's. Waterloo boosters encouraged residential and trade development from that time on, and railroads and streetcar lines helped the area grow impressively.

The greatest changes in Waterloo's industrial economy began in the 1890's when agricultural equipment manufacturing began, and the associated foundry and heavy metal works gave stability to this industry for the next hundred years.

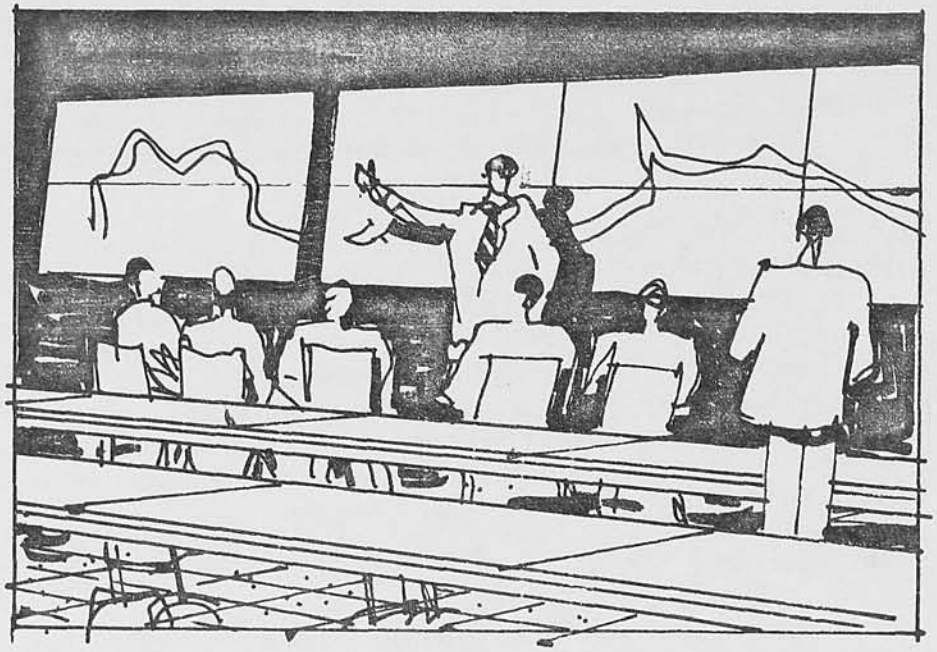
During its period of rapid growth and stable economy, Blackhawk County grew as a strong community of family oriented, hard working citizens. Proud of their values, they demanded and produced excellent schools, including the University of Northern Iowa, which have been a credit over the years.

The farm and cattle base attracted food processing to the Cedar Valley area; steady, diversified growth continued through the late 1970's, exemplified by the John Deere Tractor Plant, Rath Packing Co., and many strong agriculture-related businesses.

In the early 1980's, the farm and farm implement businesses in Waterloo were severely pressed as a result of failing market conditions both nationally and internationally. The two largest industrial employers, Deere and Rath, reduced production drastically. About 10,000 jobs were lost at the Deere factories, and the Rath plant was completely closed, leaving another 4000 Waterloo citizens unemployed. Every Cedar Valley Community business was severely affected.

Recent Recovery

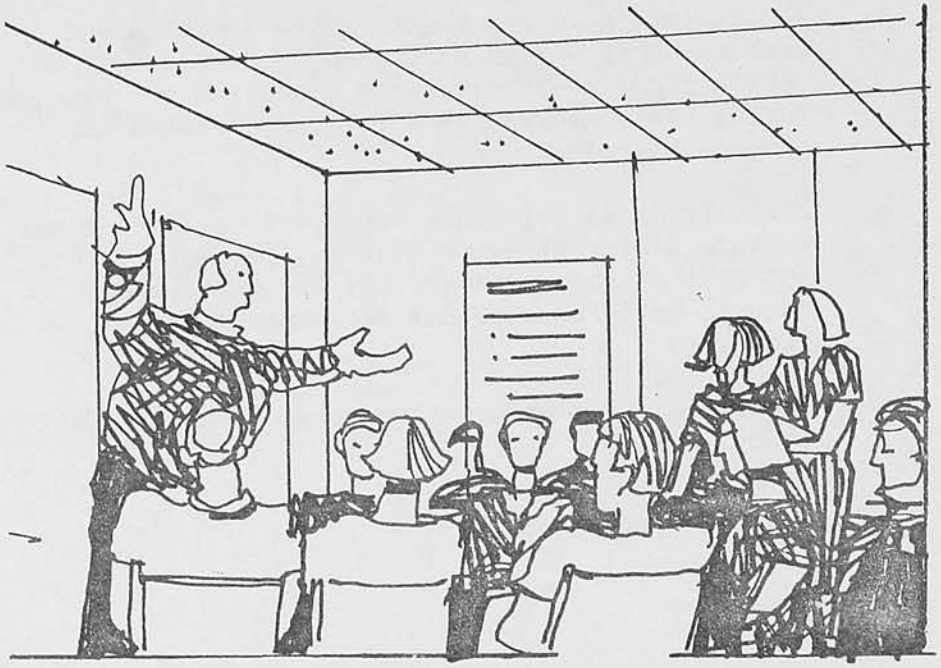
Seeing an opportunity to begin anew, in 1985 the citizens of Waterloo elected an aggressive city administration pledging visionary progress for the city. Since that time, joint efforts have been made by leaders of Cedar Falls and Waterloo to market the metropolitan area for jobs and business growth. Efforts have been successful, and Blackhawk County is now expected to replace those 15,000 lost jobs by the early 1990's. The Cedar Valley Partnership for Economic Development is a singular example of the many intra-city relationships which have been formed to promote and improve both Waterloo and Cedar Falls.



ROAD DESIGN EVOLUTION

Historically, the need for an improved transportation facility between the cities of Waterloo and Cedar Falls has been investigated by the following steps:

- As early as 1958, the need for a freeway facility was identified in the Waterloo metro area in the Automotive Safety Foundation statewide traffic analysis.
- Blackhawk Metropolitan Planning initiated an area wide transportation study in 1963.
- Completed in 1968, The Waterloo Metropolitan Transportation Study by Alan Voorhees verified the need.
- In 1977, Brice, Petrides and Assoc. prepared an environmental impact statement for the extension of I-380 through the same corridor.
- During the early 1980's, through the Interstate Substitution Program, the extension of I-380 was converted to relocated US-218.
- Between that time and the present, engineering by Howard, Needles, Tammen and Bergendoff has proceeded on plans for an expressway facility with controlled access, some at grade and some elevated, for the Iowa Department of Transportation.
- At present, work has begun on the Northern end, most right of way is purchased (some cleared) and contract documents are being finalized for bidding during the summer of 1989 for the elevated portions through Waterloo.
- The City of Waterloo has imposed a moratorium on private sector development being proposed within 300 feet of the corridor, for 180 days (ending in August) until appropriate development policy can be finalized.
- The latter is a principal purpose of this R/UDAT study.



STRATEGIC PLAN - VISION 2000 LEAP TO THE FUTURE

On leap day, 1988, Mayor Bernie McKinley initiated a strategic planning process which has been widely received in Waterloo as the first long range policy generator for the future of Waterloo.

Community issues such as government, human needs, economic development and quality of life have been identified, and strategies developed for their accomplishment.

The broad objectives and strategies contained in the Vision 2000 Plan are seen by the R/UDAT team as ambitious and honorable. An action plan is currently being developed to be released later this year.

GATEWAY COMMITTEE

Because of the strong desire expressed in the Vision 2000 Plan for an improved image of Waterloo, Mayor McKinley has appointed a Gateway Committee to work directly with the R/UDAT team to identify and develop opportunities within the relocated US-218 corridor for image enhancement.

The Gateway Committee has formulated a list of concerns and identified five areas along the corridor for consideration by the R/UDAT. Those areas begin on the North at the Chain of Lakes, and end on the South at the Crossroads Shopping Center.

CITIZEN INPUT

On Saturday, July 8th, the R/UDAT team facilitated a public forum to receive comments and expressions from the citizens of the Cedar Valley Communities. A variety of subjects were discussed.

Part of the display present for public viewing during the forum were plans for the U.S. 218 Corridor, the Chain of Lakes, and a variety of studies produced for developments along the Corridor. These visual aids had been furnished to the R/UDAT team by officials of the Iowa Department of Transportation, the regional planning staff, the city planning staffs from Waterloo and Cedar Falls.

One common thread among citizens who spoke was the desire for enhancing the image of the Cedar Valley communities. Most expressed the expectation that the development of the U.S. 218 and U.S. 58 would provide such an image enhancement. Some expressed fears that the highway structures, noise walls, signage and lights might adversely affect a positive image. Others expressed concerns that landscaping, screening and aesthetic qualities might not be provided for a quality image.

Several citizens took advantage of the forum to express additional concerns for enhancing the quality of life for all within the community. Concerns for visual and performing arts, places for family and community gatherings, celebrations of the history, resources and

"Do the jobs right!"

Jim Lawrence

"Consider the human element: we want people to look back in history and say, 'Boy, they really did something made for users!"

B.J. Furgerson

traditions--each was sensitively spoken by caring stewards of their culture.

The R/UDAT team was genuinely appreciative of the honesty and candor of the citizens of Cedar Valley. The team feels that because of the depth and quality of these citizen's expressions, that exceptional care is warranted in the treatment of the major issues raised during the public forum.

This fact has moved the R/UDAT team to approach the recommendations made as a statement of the quality of the expectations conveyed to us. We were told to resist compromise, and reach for the preferred standards, and with this lofty charge, we have attempted to identify several choices worthy of these requests made of us.

> "City planning stems from a belief that the people of a city have a right to say what they want their community to be - physically, socially, economically, culturally - and responsibility to go out and achieve those goals."
>
> Allan B. Jacobs, LOOKING AT CITIES

GATEWAY: ENHANCING THE CORRIDOR IMAGE

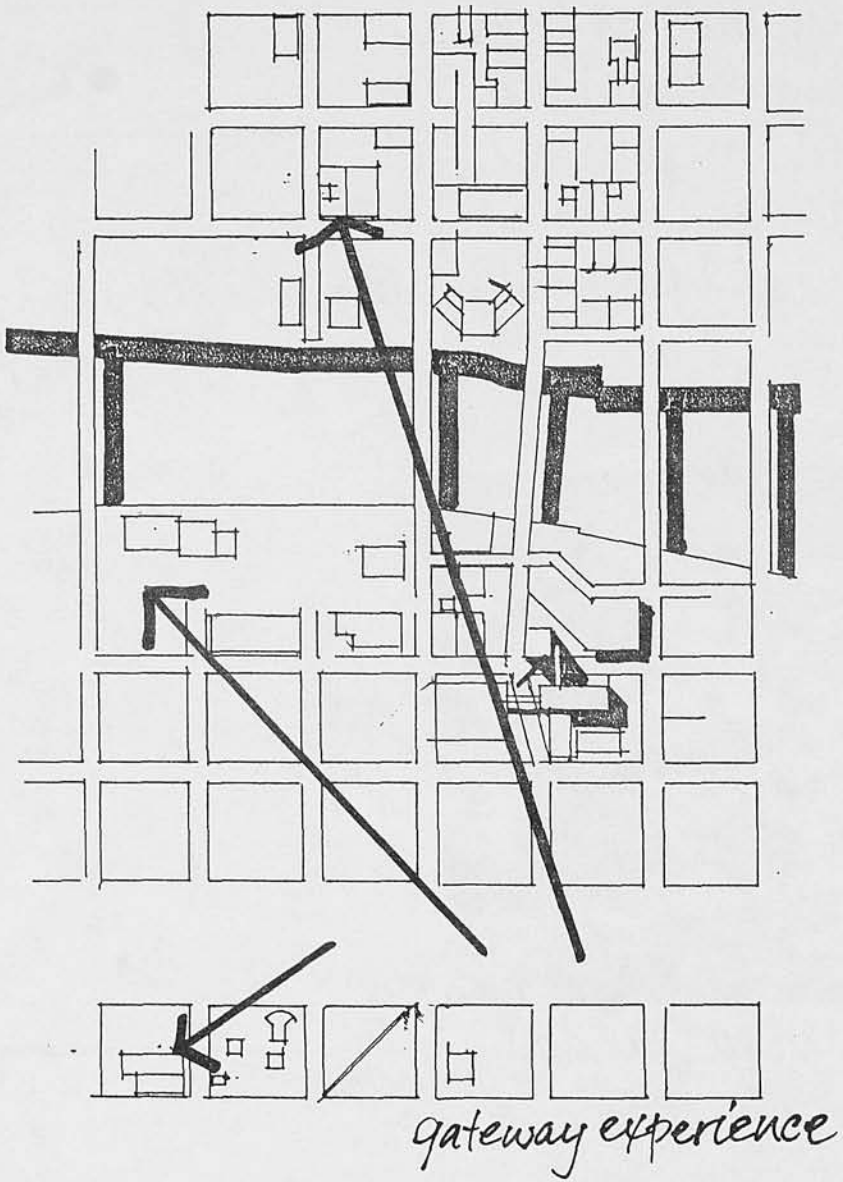
New roadway corridors often do not follow an existing path. They more often than not follow the path of least resistance: along underutilized or abandoned railroad lines, through marginal warehousing or light manufacturing districts and through areas rife with derelict buildings and open lots. As a consequence, drivers arriving in a city on one of these corridors are confronted with the backside of the city and the first visual impression is negative. This is partially true in Waterloo.

The view from the road is diverse in the 218 Corridor; there are different land forms, styles, building massing and land uses. For the first time visitor there is a visual synopsis of Waterloo's history and culture as the roadway passes:

- Open agricultural land
- The Chain of Lakes Recreation Area, George Wyth Park and the Cedar River
- The National Cattle Congress - an expression of Waterloo's importance as an agricultural center
- John Deere - an expression of Waterloo's importance as a manufacturing center
- The historic area including the Grout Museum and Washington Park

"Highways go from one point to another. We need one which doesn't 'take you through', but 'draws people in'!

Margo Dundon



gateway experience

- Rensselaer Russell House
- The Sherwood Park, Edison and Lowell neighborhoods
- The Central Business District

This can be a dynamic and interesting passage and the gateway entrance will benefit from design strategies which direct the driver's attention to those elements which best express the community's values and history.

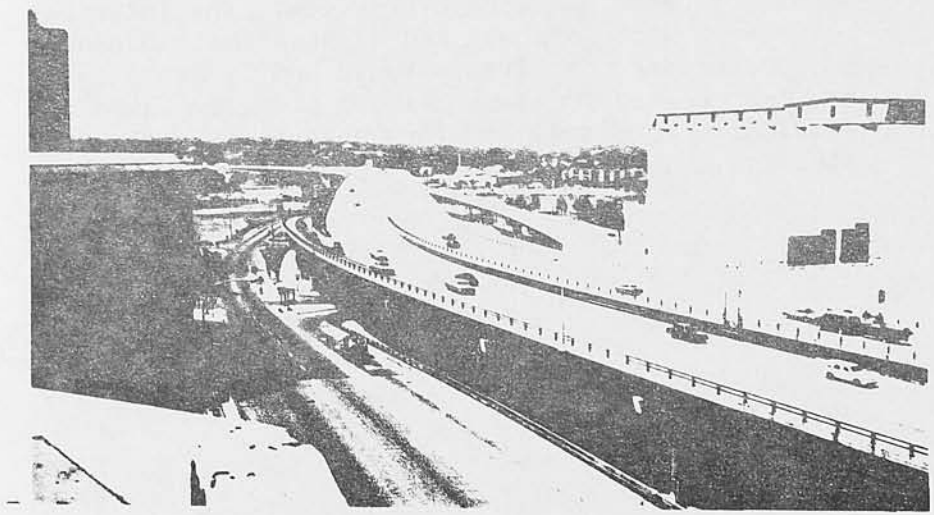
The gateway or entrance experience is not a static, one-moment-in-time phenomena. It is a sequence of experiences which begins with the transition from an open rural environment to the built urban environment, passes through a series of thresholds (over a river, under a bridge, through an interchange or through two very different parts of the city), and ends at the point of arrival with the transition from roadway to city street. The project's design should acknowledge these different phases with strategies which emphasize sequence, orient the driver and make the experience interesting.

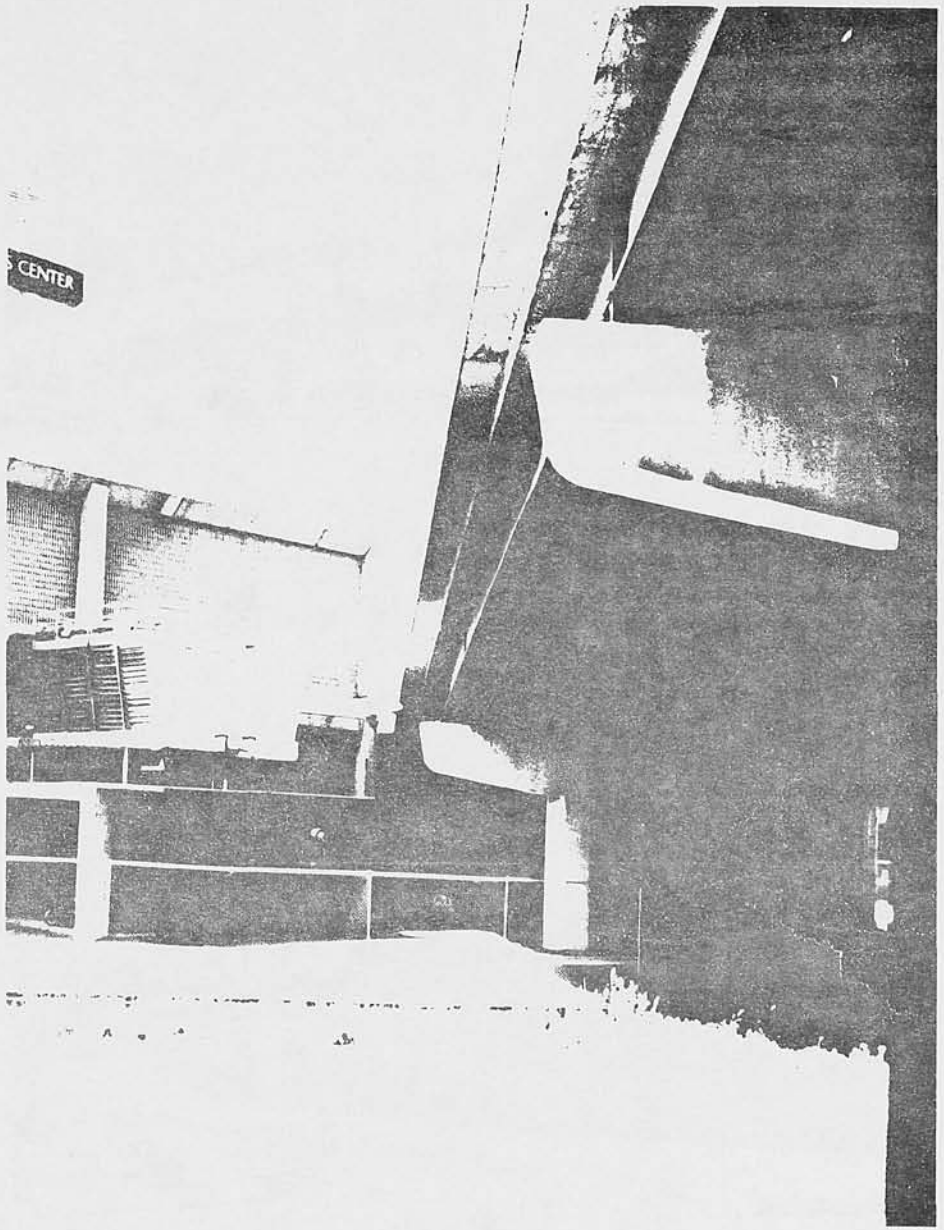
The 218 Corridor is interesting in its geometry and spatial characteristics as well. Unlike many urban corridors it is not a straight path and its many turns and the sequence of open vistas and enclosures add interest to the gateway experience.

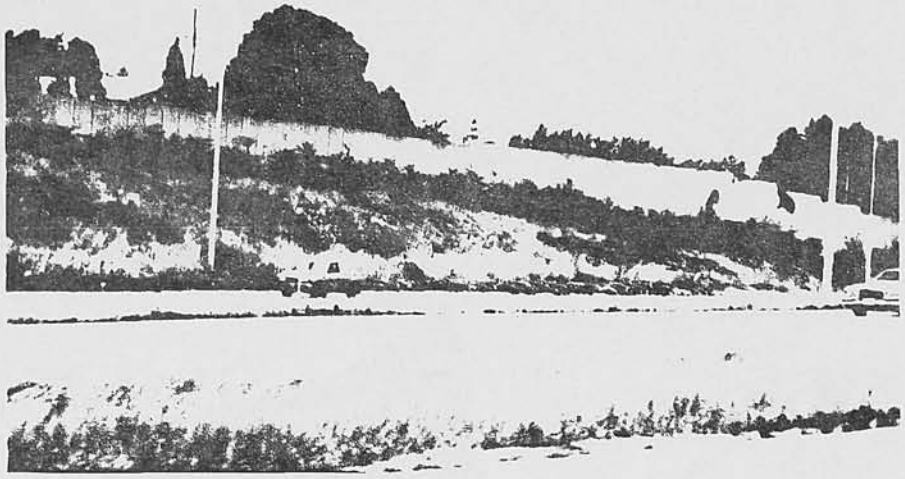
Impacts: The 218 Corridor as Designed

Cities have patterns of streets, blocks and buildings. Cities are visually diverse and richly textured. Expressways are large, unbroken linear elements, uniform in appearance and relatively monochromatic. And although the interstate program has provided better access to and brought economic growth to many communities, a roadway designed to interstate standards is an alien element in any city.

- Scale: The US 218 Roadway is on fill or viaduct for much of its length - often at a height of 20'-25' above grade. Sign bridges can add an additional 30'± and lighting, depending upon the design selected, is 40' or more above the roadway surface. In sum, the roadway is higher than many of the adjacent buildings and towers over some. Its width in some locations approaches 120' including 10 lanes of traffic plus shoulders on the mainline and frontage road.



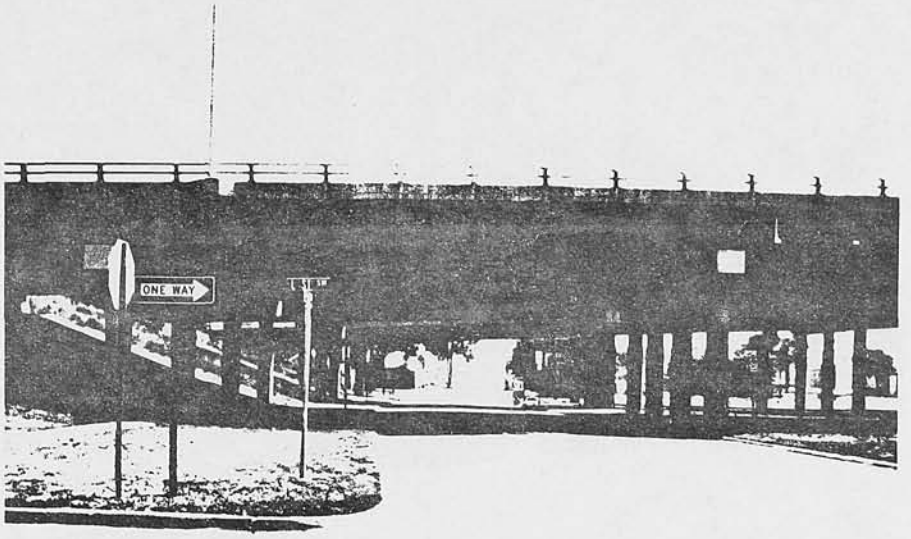


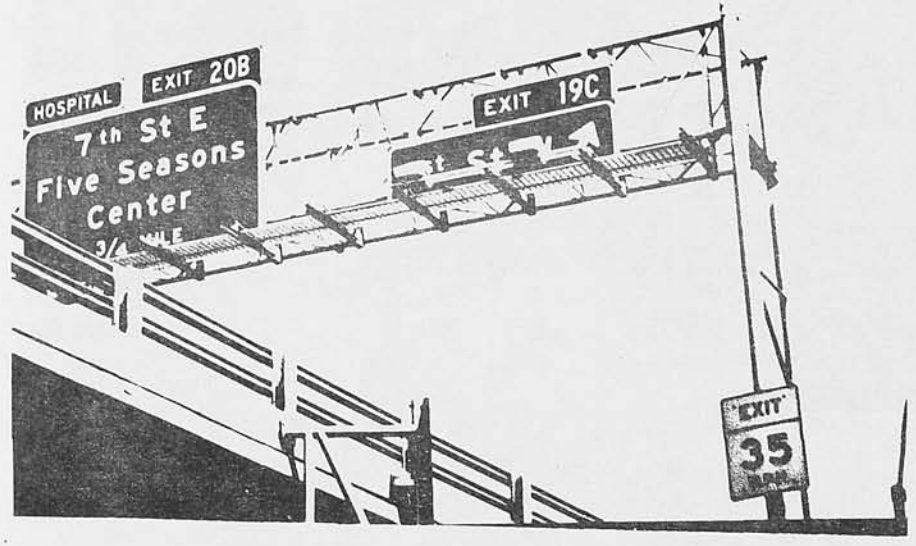


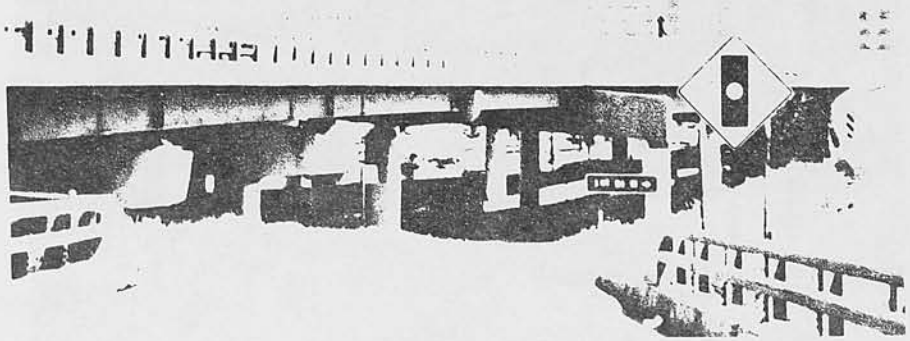
- Dominance: The roadway will be the dominant physical element in its immediate environment. With a uniform linear appearance and restricted crossing, its commanding presence can be compared to that of a river through a city.

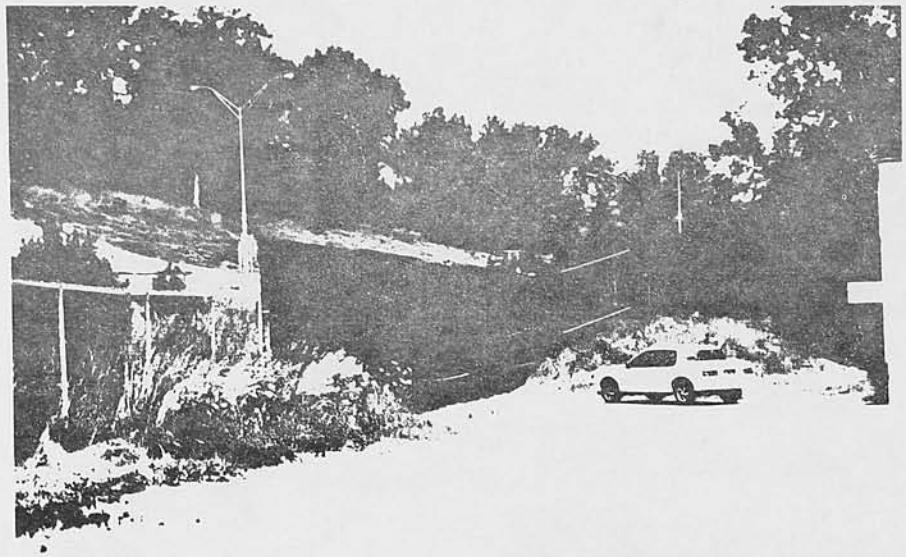
- Edges: Right-of-way takings have altered the edges of some abutting properties. The interface between a major highway and adjacent neighborhoods or businesses is often awkward and, in this case, it has created zones on private property which are difficult to landscape or buffer in a visually pleasing manner.

- Barrier: A number of cross streets have been cut off, but a different type of barrier exists at the edge of the CBD where Fourth, Park, Fifth and Sixth Streets cross under the viaduct. The darkness, lack of activity, and lack of surveillance contribute to a sense that, in addition to being unattractive and unpleasant, it is not a secure place to be. It is a psychological barrier.



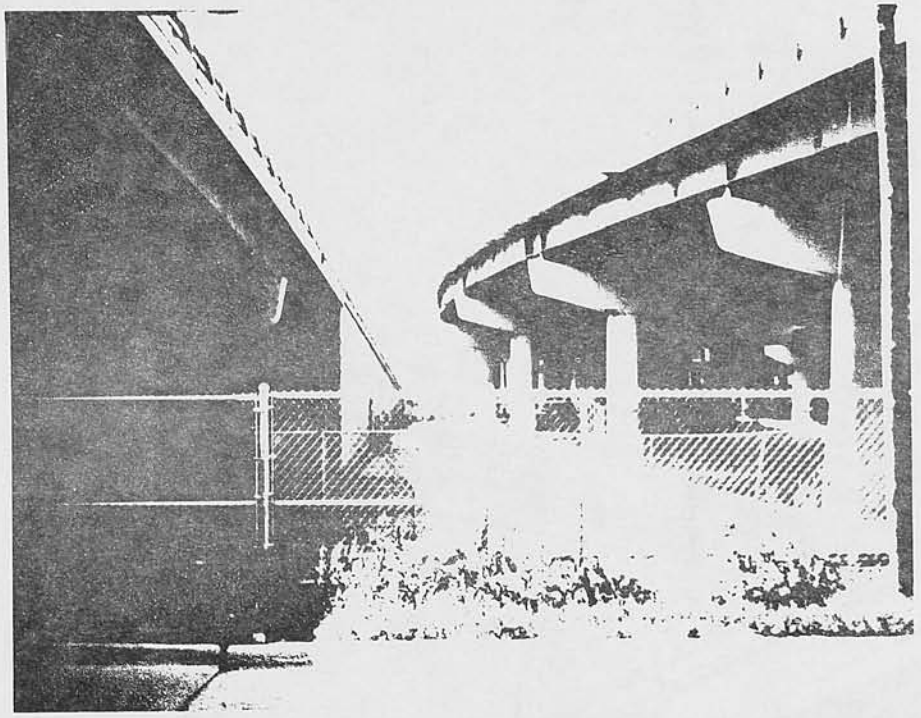




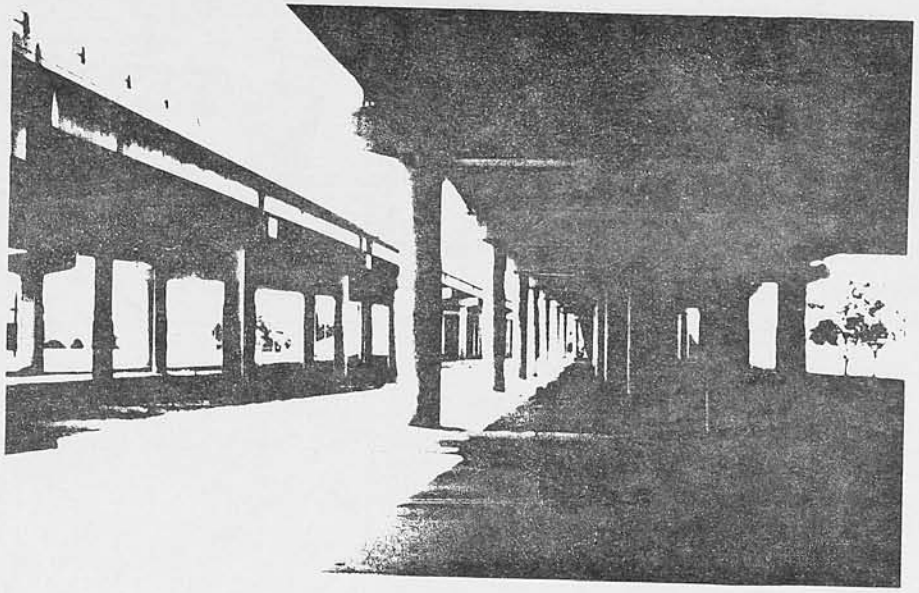


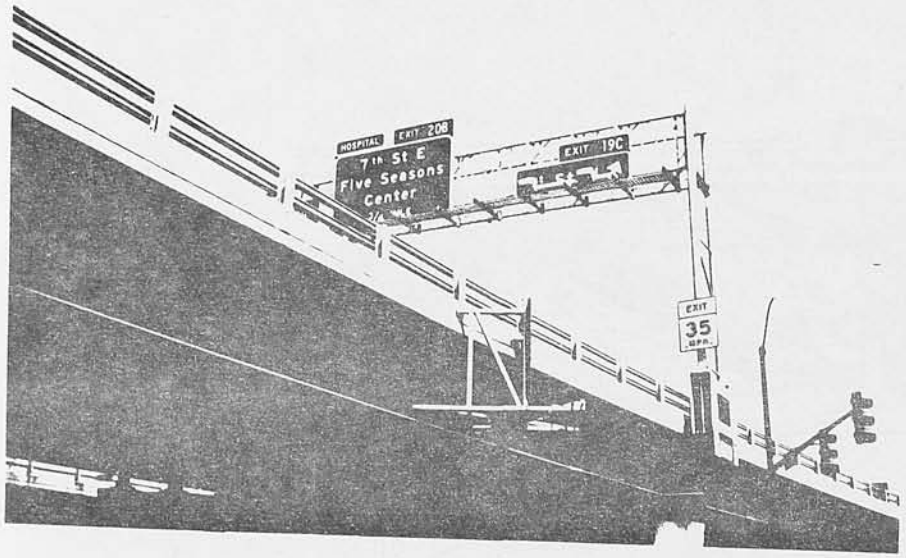
- Lights: Freeway scale lighting is inappropriate in residential areas, but in other locations as well. Because of the elevation of the roadway, moving headlights will be prominent.

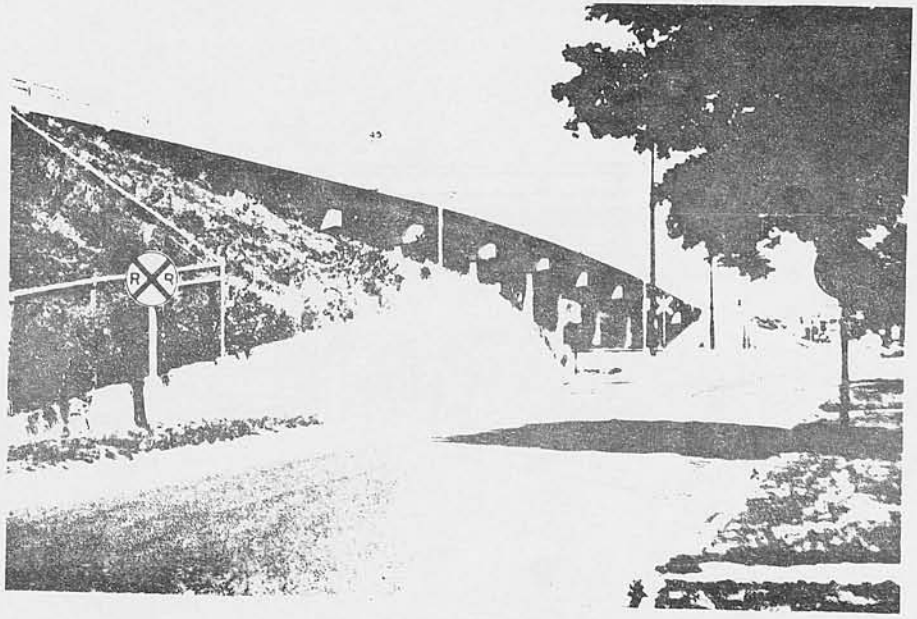
- Views: The roadway's elevation also opens views over building roofs, open lots, parking lots and truncated building walls. The view angle make these difficult to screen.

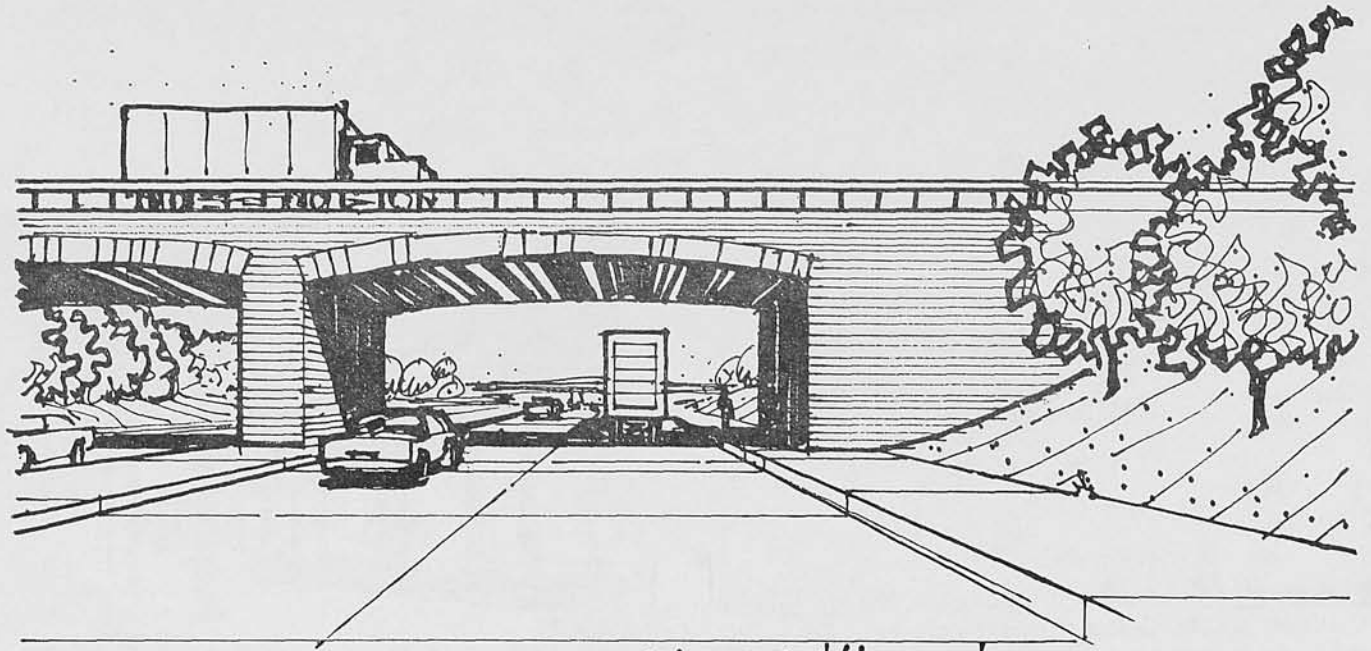


- Induced Development: Limited access, high speed freeways in urban areas have traditionally spawned the types of development and signage considered unsightly and inappropriate as a visual gateway into the city.

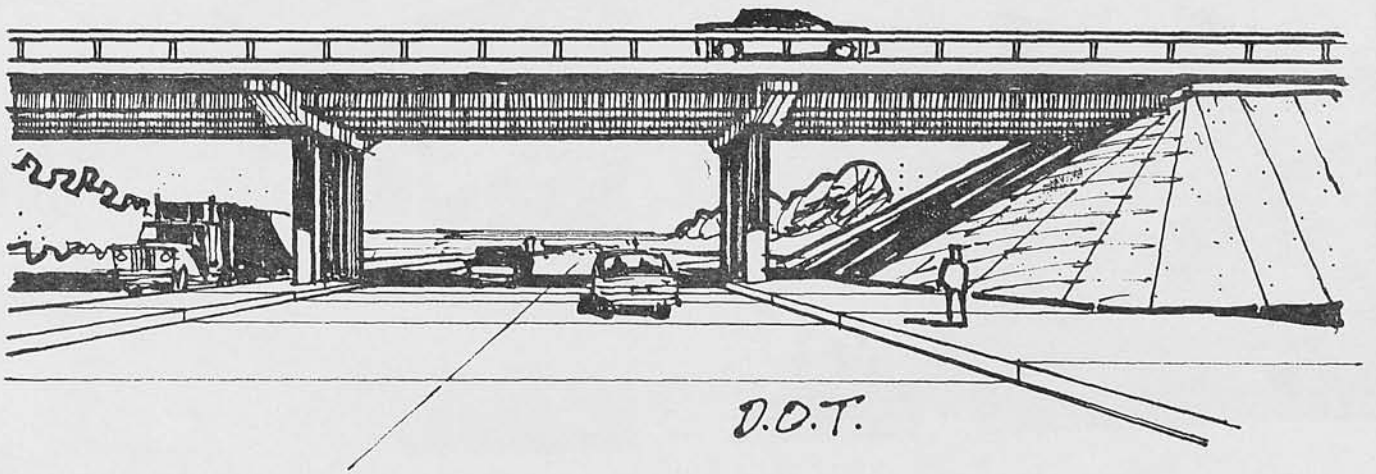








R/UDAT Alternate



D.O.T.

MITIGATION: STRATEGIES FOR IMAGE ENHANCEMENT

Mitigating these visual impacts, both the view from the road and the view of the road, will require a range of strategies.

Lighting, Signing, Fencing

- Sign bridges should not be the standard round metal section truss design. A simple painted or cor-ten square metal section is preferable.

- A review of sign truss locations should be made to coordinate their placement to provide the least impact on the driver's overall view of the area.

- At bridge approaches metal guardrails leading to the jersey barrier sidewalls are not as effective visually as a curved jersey barrier section.

- Lighting fixtures are highly visible elements to the driver and to abutters. There are many aesthetically pleasing fixtures available on the market and care must be taken to select an appropriate fixture. Highmast lighting with a suitable bulb color could be used to illuminate key points, but highmast fixtures are out of scale with many areas. The light should be designed to not spill out into residential zones. Consideration should be given to lighting the corridor through the CBD.

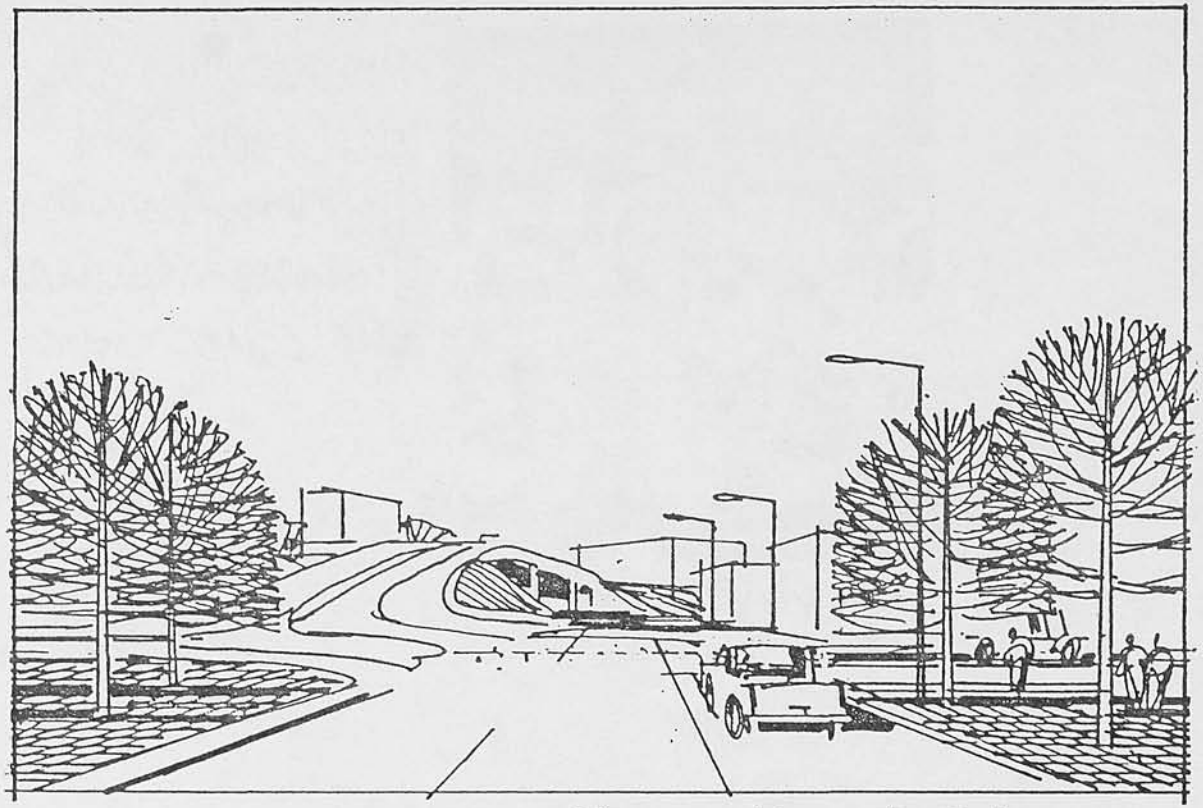
- Fencing should be used only where essential. Consideration should be given to the use of wood, stone, brick or tight mesh black vinyl clad fence in lieu of standard mesh fencing in visually sensitive locations where fencing is required.

- Billboard signing should be restricted to select locations along the corridor. Standardized sign supports should receive appropriate architectural review.

"Downtown, our walls are sort of falling down. They need murals and other things."

Mike Broshar

Chris Robins



Forrestration at Entry

"We've had this image - an ugly, dirty, industrial town. We have a lovely downtown. We could have some prairie vegetation, native hickory groves..."

Landscaping

Selective landscaping represents an enhancement vehicle that should be utilized to its fullest. Plantings along the corridor play an integral role in reducing the sterile highway image. Some general applications which are frequently used include:

1) Mix textures of vegetation, stone, wood, brick.

2) Placing fountains at strategic locations.

3) Using contrasting colors in a vegetation mix.

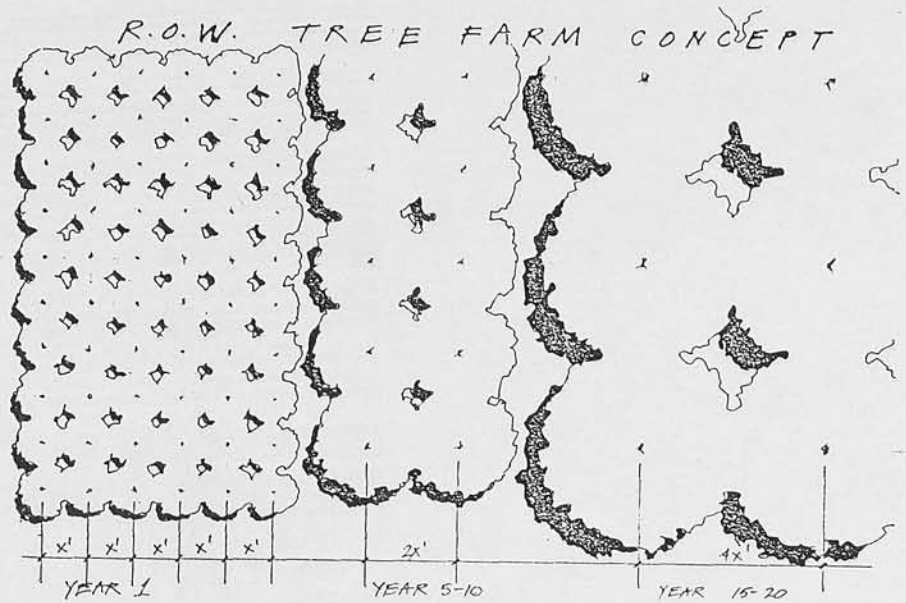
4) Using evergreens in select locations for winter stock.

5) Establishing specific wildflower beds for spring color.

6) Placing landscaping in greenspaces large enough to be visible from roadway or houses.

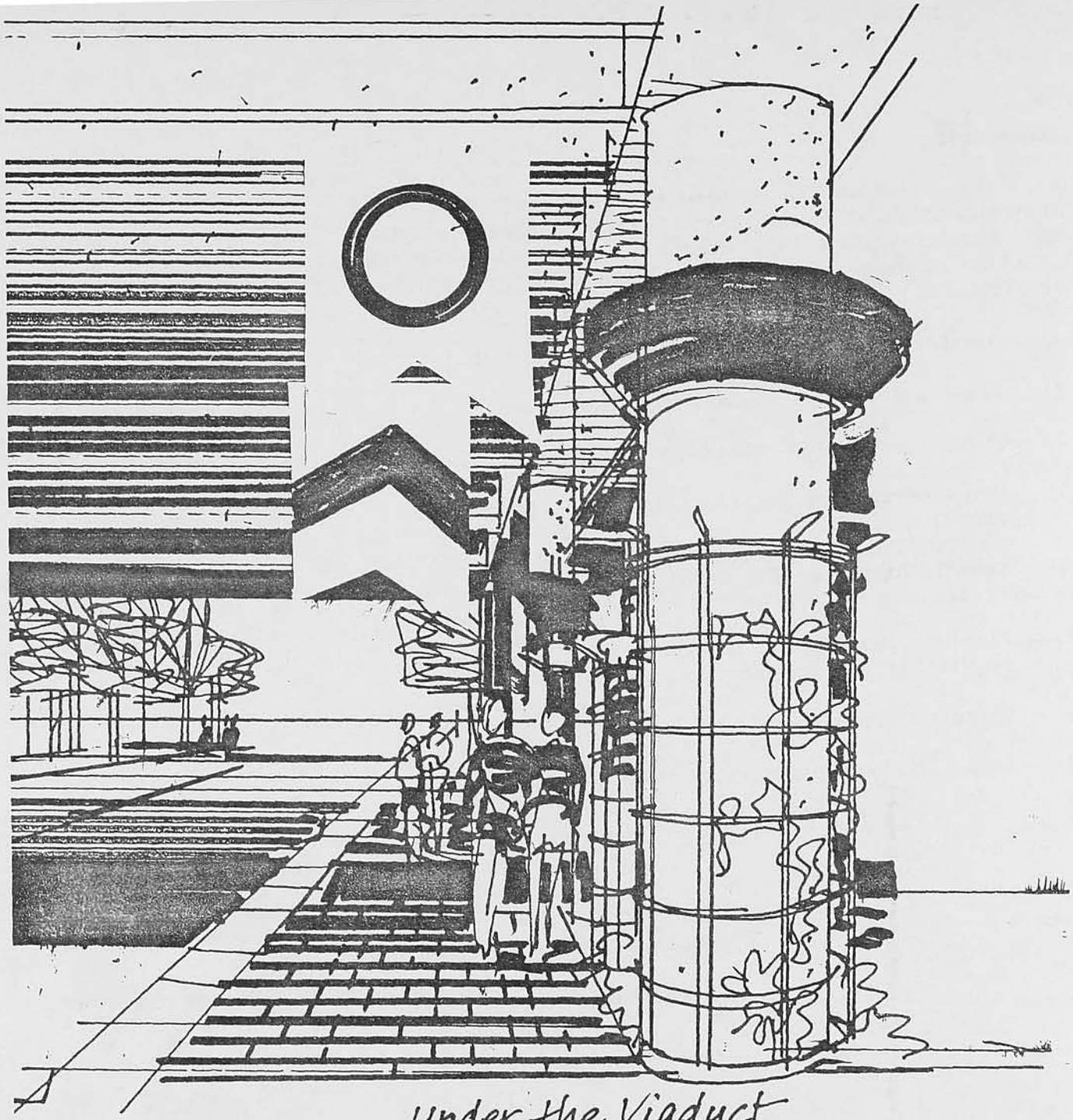
7) Using stone on visible embankments.

8) Reviewing vegetative types with horticulturist.



"We want to build a park that can be a symbol of labor cooperation rather than a strong labor union."

Bill Dotzler



Under the Viaduct

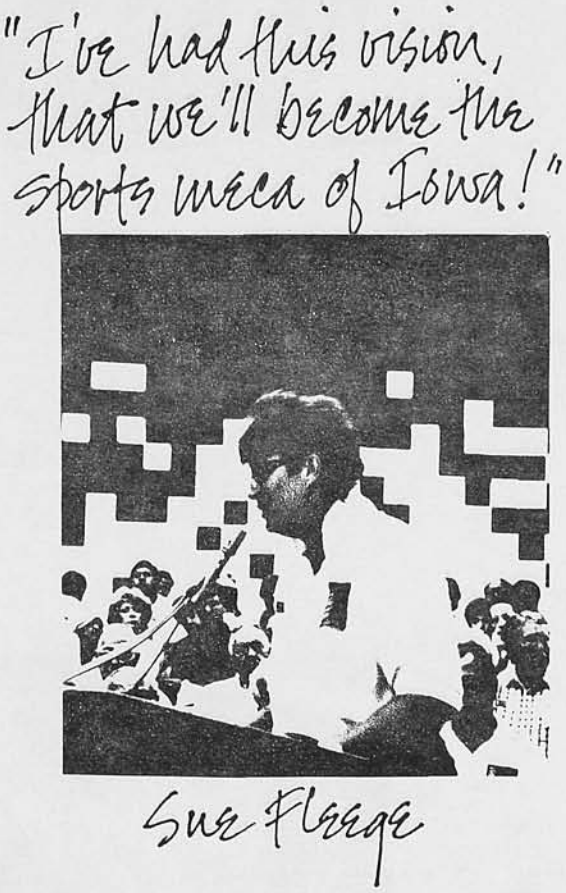
Urban Design Assistance

To assist with the design of these elements, conduct design review of engineering plans and participate in discussions with Iowa DOT and FHWA, we recommend that the City hire an architect/urban designer as a full time employee.

Under the Viaduct

The area under and adjacent to the viaduct between 4th & 6th Streets should be designed in such a way that pedestrians are encouraged to walk through. Motorists on surface streets are clearly oriented to their destinations and drivers on the expressway above are not looking down on the roofs of cars or empty lots. The 4th Street corridor should be developed as the primary pedestrian passageway with lighting in the soffit under the viaduct, pedestrian lighting standards along the passageway, wide sidewalks and streets paralleling the walks on both sides of the viaduct. Fifth and 6th Streets should be the primary vehicular routes. The abutments, columns and viaduct fascia should be painted, clad in brick or stone, or treated as support elements for public art. In brief, the viaduct should read as a passageway, an element linking east and west. These measures will be expensive, but simple measures will not overcome the barrier effect. The parcels under and adjacent to the viaduct should be developed for active use; the Farmer's Market is one possibility. Permanent metal and glass sheds could be designed for the space.

But, whatever the solution, the important principle is that active use provides an inviting environment and a sense of security.



Public Art

A public art program should be integral with the roadway design process: artists should be involved in both the preliminary and final design phases, developing conceptual ideas in the former and exciting finished works in the latter. As the expressway design is complete, this is not possible, but there are several guiding principles for public art in highway environments which are applicable:

- Pieces should be of sufficient scale to compete with the highway; small pieces are dwarfed by the scale of highways.
- Pieces should be placed within the corridor to be integral with the geometry and components of the highway. They should not look as if they were dropped casually into the landscape.
- Pieces which are thematic or symbolic, which reflect the significance of their location or assist in driver orientation are effective in a highway environment. An example would be a large metal sculpture near John Deere which is reflective of the company's history and products.
- Because the highway environment is nearly monochromatic (white, brown, & green), pieces in color are effective in these settings.

- The piece of art may not be kinetic, but the highway is, and pieces in these environments are viewed from different points at varying speeds.

- Public art pieces in highway environments are good candidates for private or corporate sponsorship.

- The use of decorative river bridge crossings is suggested.

- Art should be located in areas where the driver's view is sustained, not fragmented.

- A sculpture design competition should be considered with a dollar prize value and the winner displayed at a select location in the corridor.

At the U.S. Highway 218 public hearing there was a comment to the effect that the corridor could be a linear outdoor sculpture gallery. We believe that this would be one of the most effective ways to enhance the gateway image.

Efforts By Abutters

Landscaping on the edges of some private properties adjacent to the corridor would screen parking lots and other unsightly uses. The Crossroads Shopping Center and John Deere parking lots are two candidates, and the city and/or the Gateway Committee should pursue these and others. John Deere has indicated their willingness to make significant improvements to a prominent building adjacent to the corridor. The city and/or Gateway Committee should identify and pursue other opportunities.

Roadway Slope Treatment

Using elements of the roadway to your advantage in enhancing the corridor can be effected by selecting roadway slope designs that are dynamic rather than static.

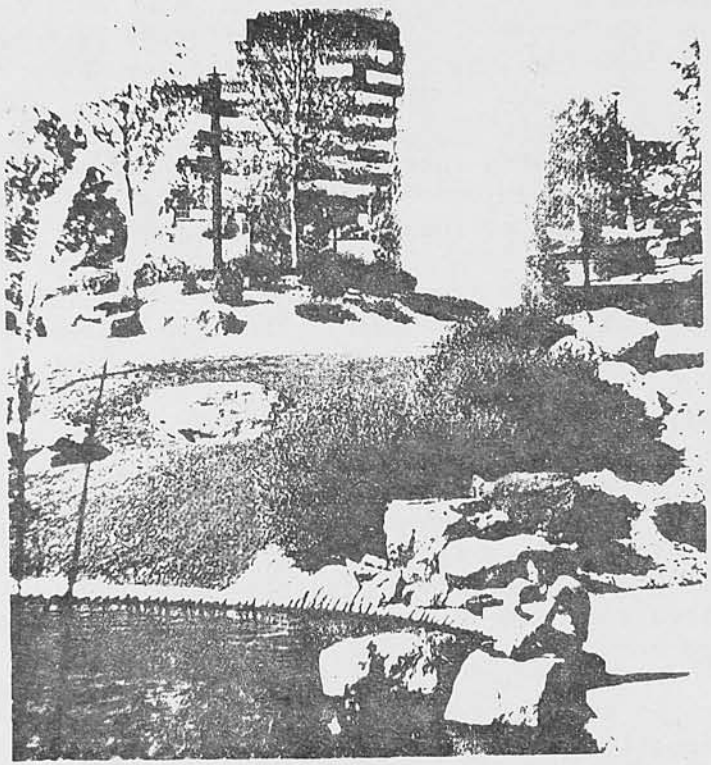
- It is suggested that the Committee investigate the use of reinforced earth walls at select roadway/ramp sections to vary pattern.

- There may be some potential for terracing those areas of the embankment that are allowable in a decorative pattern.

Bridge Structures

Standard AASHTO bridge structures tend to be one of the most difficult elements of the roadway to make aesthetically pleasing. Using present day design standards the structural elements when combined from bulky angular fixtures. Limited mitigating measures suggested are:

- As a short term option, paint superstructure decoratively.



- Consider redesigning the structures to be more aesthetically pleasing.

- Vertical face abatements should be considered versus standard abutments.

- Consider placing a brick facade over exterior girders and around columns.

Detention Facilities

Drainage facilities typically are hidden from view under urban design conditions since they are composed of pipe networks and inlets located beneath the ground's surface. However, today's design practice calls for stormwater management controls that necessitate the use of detention facilities. Suggestions on enhancing their aesthetics are provided below.

- Contour the detention facilities to appear more natural, add plantings along the top of slope to improve the visual impact.

- Expand the boundaries of the facilities and put islands of vegetation in to add aesthetics.

- Expand the pond boundaries and turn them into small ponds. Add similar ponds on adjacent tracks of property to create a lakes image.

- In the CBD, move the viaduct ponds west to the embankment section. Modify the embankment section slope treatment with a toe walls/retaining wall to accommodate the pond volume requirements.

- Provide offsite detention in a non-visible area.

Noise Barriers

Recent elements added to the design and construction of highway facilities is the noise barrier. This feature represents a remedy to a sensitive environmental condition that results from vehicular noise. Aesthetic mitigation is limited.

- It is suggested the Committee review all available noise barrier construction methods and materials and select the most acceptable system.

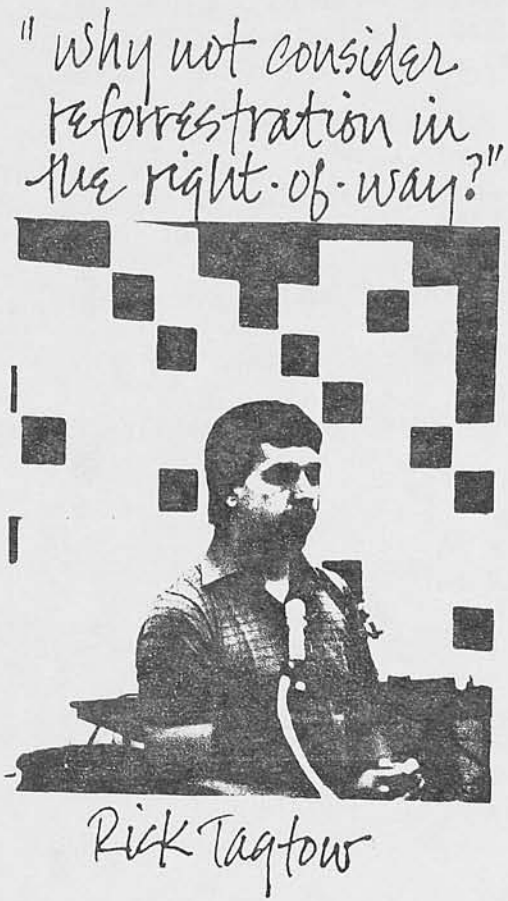
- A noise consultant unaffiliated with project might be consulted to evaluate other options (i.e., extra insulation in homes and air conditioning).

Roadside Maintenance

Roadside maintenance enhancements can best be effected at this time by:

- Reviewing the contractors construction contract to see if there are contract clauses that require certain maintenance activities not presently being performed (mowing, watering, silt fences, etc.).

- The City may be able to establish a short term contract with DOT for any items not provided by the DOT.



IPOD

To protect those areas adjacent to the corridor where new development may occur in a rapid and haphazard fashion the city should create an Interim Planning Overlay District (IPOD) which would take effect immediately and last for a period of two years. At the end of that period a permanent rezoning should be in place.

The IPOD should set forth controls for buildings, lots and signs, and it should establish a design review process. Building controls should include:

- Maximum allowable building envelope
- Allowable land use & FAR
- Access, servicing, night lighting, and garbage storage
- Materials
- Mounted signs
- Landscaping

A two stage design review process should be established, and a permanent design staff should be established within the city to assist in managing this and other design programs.

Interim sign controls should include:

- Size
- Height
- Number of color & typefaces
- Lighting
- Mounting structures

A similar design review process should be established. The IPOD coverage should not flank the corridor at a uniform width but should respond to the specific conditions at each point along the corridor. It should include all of the "soft" areas at a depth of up to two blocks from the highway.

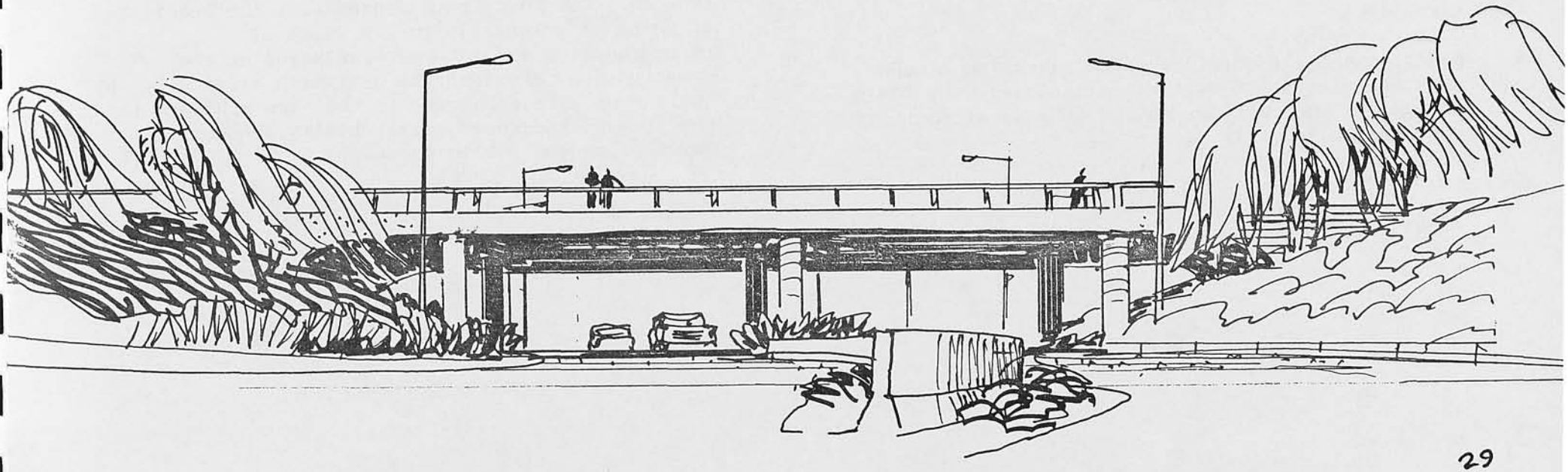
R/UDAT ALTERNATIVE: FITTING THE ROAD WITH THE PLACE

It is a basic tenet of design that the new should fit in with the old, that the new should be sypathetic to the context in which it is placed. In a community it is important that the new be as reflective of historic associations and cultural values as well as the physical context.

We have spent time listening to people express their hopes for the 218 Corridor and for what it can mean to the community; We have spent time examining the highway plans and looking at the corridor and its surrounding neighborhoods. And we have reflected on our own experiences with highway corridors in urban areas and on what we have learned from them.

In post World War II America two federal initiatives, Urban Renewal and the Interstate Highway Program, have influenced physical change in cities in a dramatic way; Jane Jacobs has termed it "catastrophic intervention." The scale of change has been difficult for communities to deal with, and we have observed this process in our own communities and in the cities, towns and neighborhoods for whom we have worked.

Many communities have rejected highway plans, others have modified them and some few are removing elevated structures from the city core - structures built as recently as 30 years ago. Waterloo has taken a bold step in downgrading portions of 218 through the Interstate Substitution Program, but most of the



corridor is to be contructed as an elevated grade separated expressway.

We believe this is a mistake. We believe there is a better way.

This is a judgment based on professional experience, but it is founded on the goals and principles expressed in public meetings and in various published statements. We have learned from you and believe that our proposal reflected your aspirations.

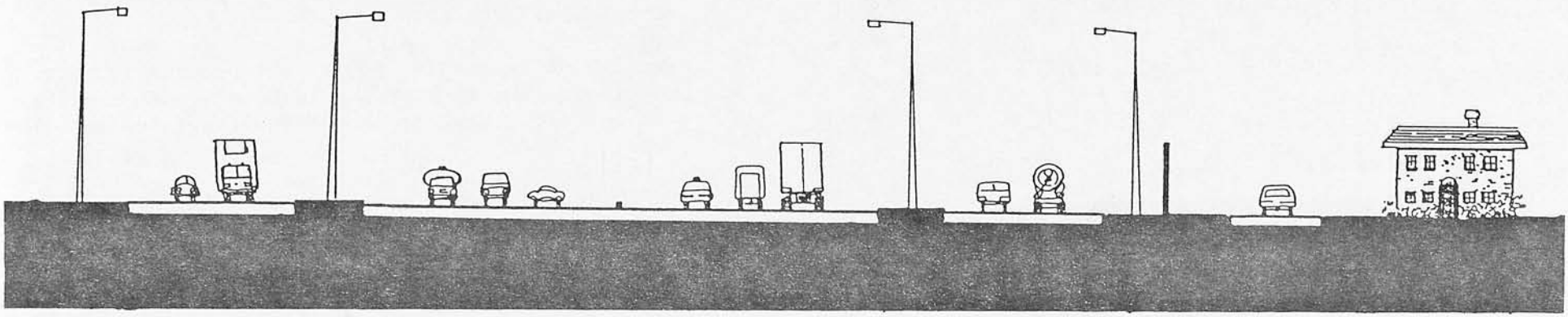
The Goal

A roadway is foremost and above all a means of moving traffic efficiently and safely. The goal is to create a roadway which serves the traffic needs of the future and to create a Gateway into Waterloo which is truly reflective of the beauty of the Cedar River Valley and of the spirit of its residents.

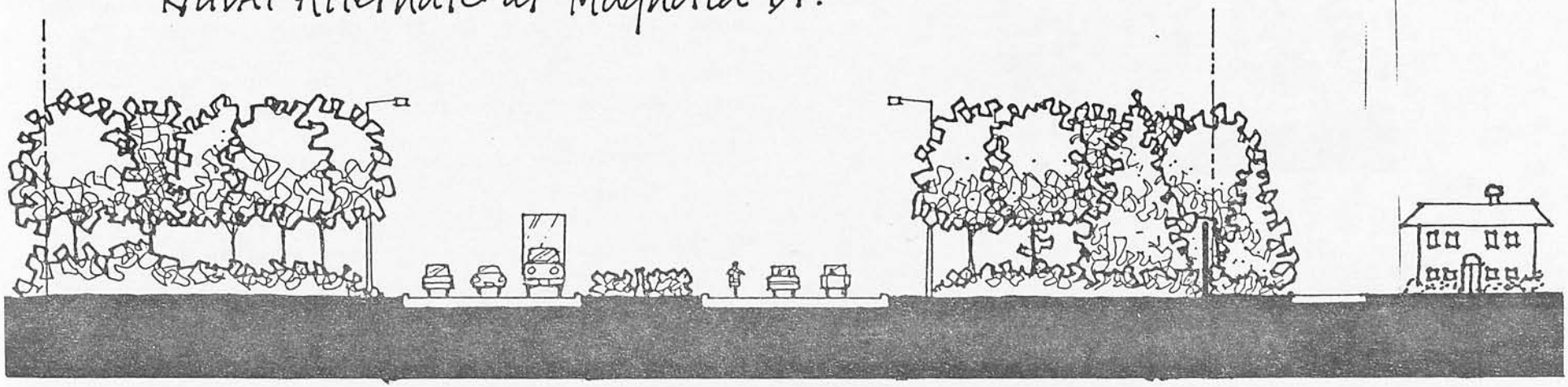
Objectives

- Redesign the 218 corridor as an extension of the existing open space system, particularly the Chain of Lakes. The corridor should be a scenic parkway with is own identity.
- The parkway design should reflect the specific context through which it passes. For example, the Rectilinear Street and Block of the CBD differs from curvilinear form of the John Deer property. The corridor varies in width and the design will vary; the design should reflect the unique qualities of each area through which it passes.
- Maximize opportunities for landscaping.
- Design the Parkway to capture and frame views of landscaped area and significant buildings and building complexes.
- Minimize the barrier effect of a major traffic artery. Emphasize important cross streets in the design (4th Street, for example), so that east-west communication is enhanced by the Parkway design.
- Create a condition where initial capital costs are reduced. Cut costs to a degree that the benefits of doing so adequately covers those of re-engineering and interest inflation on the construction. Realize the net worth created by the quality of life enhancements that are achieved in the form of increased marketability, economic development and public good will.

D. O. T. Section at Magnolia Dr.



R/UDAT Alternate at Magnolia Dr.



"The corridor should be vibrant, lots of things happening, so people can say, 'Gee! Have you been to Waterloo lately? It's really neat!"

Sue Fleege

- Enhance property adjacent to the corridor. Traditionally, urban expressways with limited access contribute to the proliferation of warehouse, fast food operations, gas stations and billboards. The Parkway should be designed as a "front door" street.

- Develop an aggressive public art program for the corridor. The Parkway should be a scenic amenity and outdoor sculpture should be integrated into the design.

- Maximize the participation of the community in the design. Major public roadways are "public works" in the strictest sense of the word.

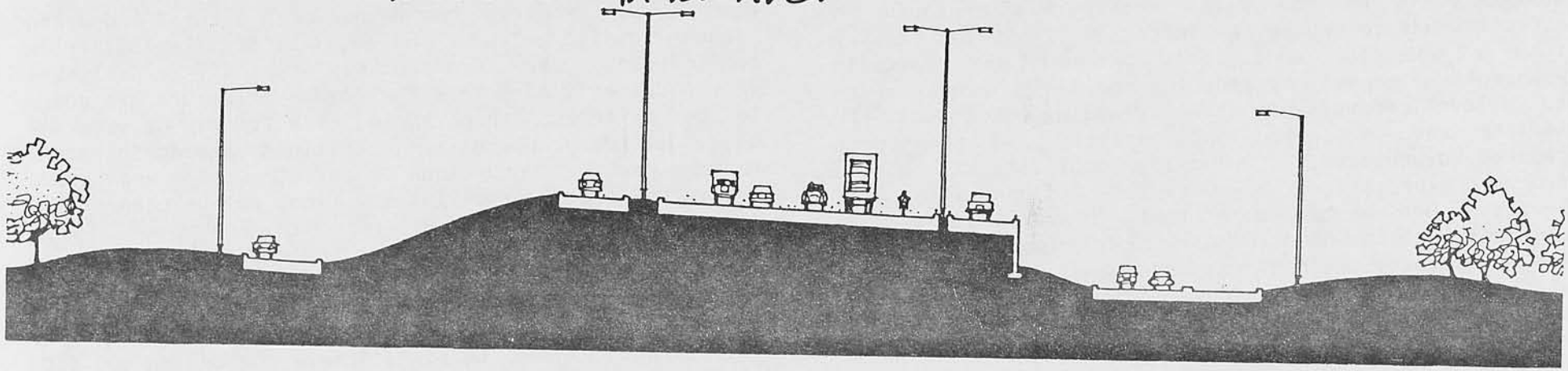
A scenic Parkway can be a dramatic gateway into Waterloo, an experience that people look forward to. Many great cities have such an experience. In the July 8 Public Hearing two speakers expressed sentiments that bear on this proposal.

"We don't want to be the best in the world, but we do want to be the best in the Midwest."

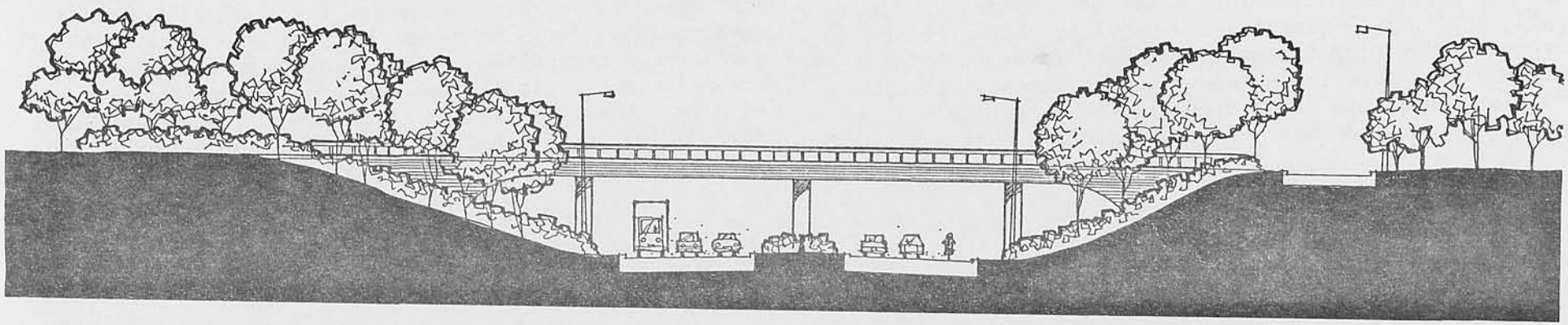
"In a few years, I'd like to hear people say, 'Gee, have you been to Waterloo lately? It's really neat.'"

This alternative is presented in that spirit.

D.O.T. Section at W. Mullen Ave.



R/UDAT Alternate at W. Mullen Ave.



THE PARKWAY CONCEPT

Formulation of the parkway concept was a spin-off action from the interstate program in the 50's by the National Parks Service. Its introduction into the transportation design realm by the Parks Service was to provide an effective way to reduce the intrusion of a major highway into a sensitive ecological, panoramic and typically homogeneous area. By reducing the design requirements to a level conducive to the surrounding conditions, the impacts were mitigated substantially and the costs reduced dramatically. Operating conditions were not to freeway expectations; however, they did meet acceptable levels. One should note that these facilities were generally not intended to carry high volumes of traffic; and therefore, seldom exceeded four lanes in cross section or had grade separated intersections. Access was reasonally well controlled with intersections and medians widely spaced. Their primary purpose was to provide a pleasant driving experience through an area with aesthetic appeal at the rate of speed that would allow for the visual imagery to be absorbed.

The concept took on a second role some years later by urban planners and designers who found that the parkway approach to design added an ambiance to their projects and the urban condition that a standard design approach could not create. The traffic handling characteristics were generally high enough to satisfy driver expectancy. Because the experience was much more pleasant than the sterile conditions of a freeway, the potentially lower level of service was of less concern. Facilities of this nature are in operation in a large percentage of the major metropolitan areas in the United States. Atlanta has the Stone Mountain Parkway... Houston has the Memorial Parkway.

The parkway concept has become both a rural and urban highway design element because of its flexibility in application. The term "parkway" typically establishes in the driver's mind that the roadway elements are going to be different than those of a freeway or arterial where standard operating conditions are anticipated. Under parkway conditions both at grade and grade separated cross street intersections may be present and median openings occur at periodic locations. This flexibility allows the designer to tailor the roadway to the traffic demand conditions, grade conditions and horizontal alignment controls in a less rigid, more dynamic approach. In those situations where right of way impacts would be significant, the median and side slope treatment can be adjusted to form minimum sections and widened in those areas where conditions permit.

Today's urban condition is changing to reflect the present humanistic and environmentally concerned population evolving from results of long term socio/economic and environmental research occurring over the past 20 years. The demand for a more quality life environment can be seen in all sectors: health, education, recreation, etc. This demand is felt most strongly in our urban areas, as can be expected since it is in these locations that the most significant degradation of these elements can occur. More

restrictive building codes, greater emphasis on stormwater control and treatment, more greenspace and parks are similar parts of the program in major metropolitan areas to reintroduce some livable conditions. Parkways are not the answer to all major transportation problems, interstates and freeways, tollways, arterials, collector roadways, etc., are all needed to form the transportation infrastructure. However, strong consideration should be given to the best and highest use of these facilities as with any land planning project.

A parkway type facility, as mentioned previously, can be a combination of several design elements. Under our standard highway functional classification system, the parkway falls somewhere between an interstate/freeway and major arterial. The parkway concept comes the closest to being what is referred to in the transportation planning/engineering field as an expressway. An expressway is typically a controlled access at-grade facility (access only at intersections and major drives) which is median divided. Intersections are on an average one or more miles apart. Under certain conditions interchanges with the cross street are required. In the hierarchy of highway functional classification, the parkway is a major facility rather than a minor; and therefore, should be designed in the urban setting to carry a relatively heavy volume of traffic. Trip lengths should be long rather than short (or local) and access well controlled. It should connect with other major interstate/freeway, expressway and arterial systems and should interface with the local system only at select locations.

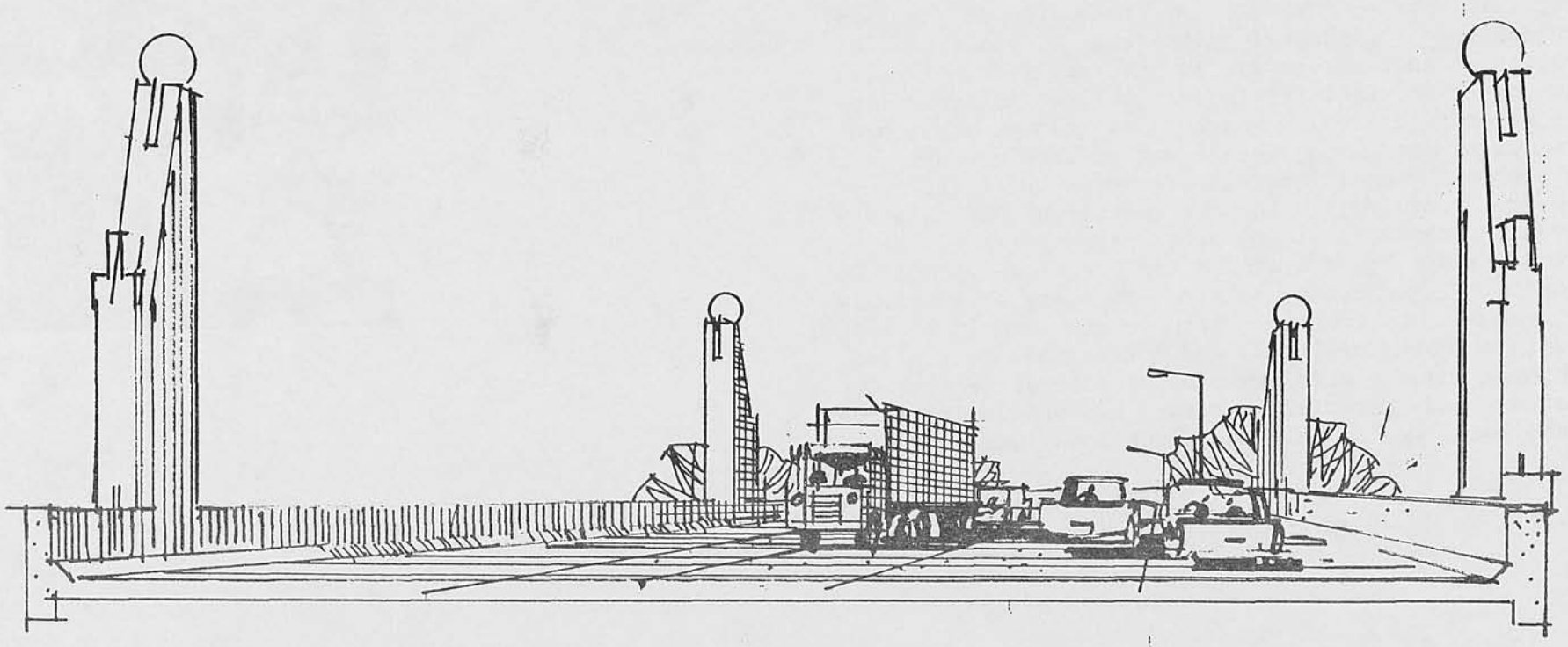
"We need to look at ourselves in a positive fashion and celebrate what is already here."

Bob Fischer

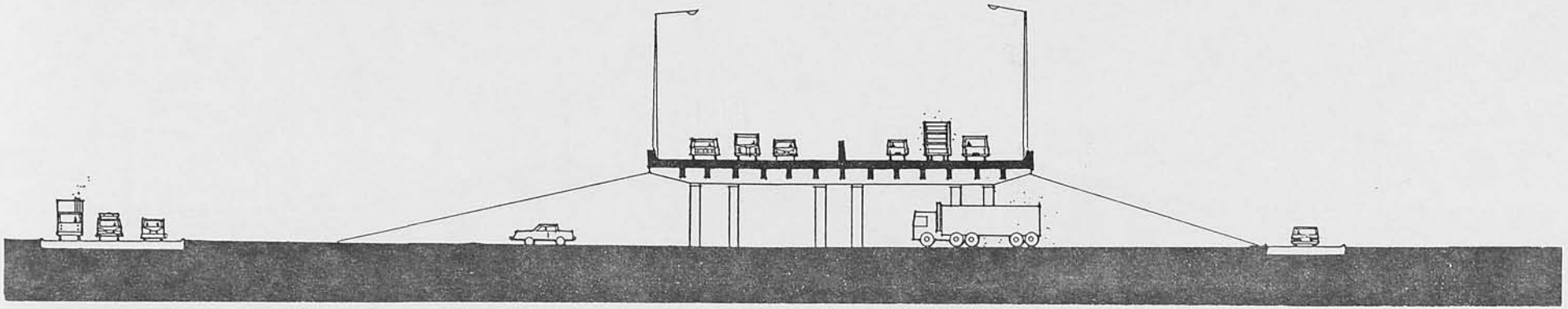
PARKWAY DESIGN ELEMENTS

The specific design features of an urban parkway system are described in the same general terms as any other roadway design project. Typically, a section, profile, horizontal alignment, etc., are all the same key descriptors. The difference is in how these elements are mixed to produce the desired results. In the case of a parkway concept layered into the Waterloo/Cedar Falls metropolitan area, the mix of the design features has the potential to take on many alternatives. One of the tasks laid before the R/UDAT staff was to evaluate the present proposal and provide a professional opinion of the most appropriate way to enhance the improvements.

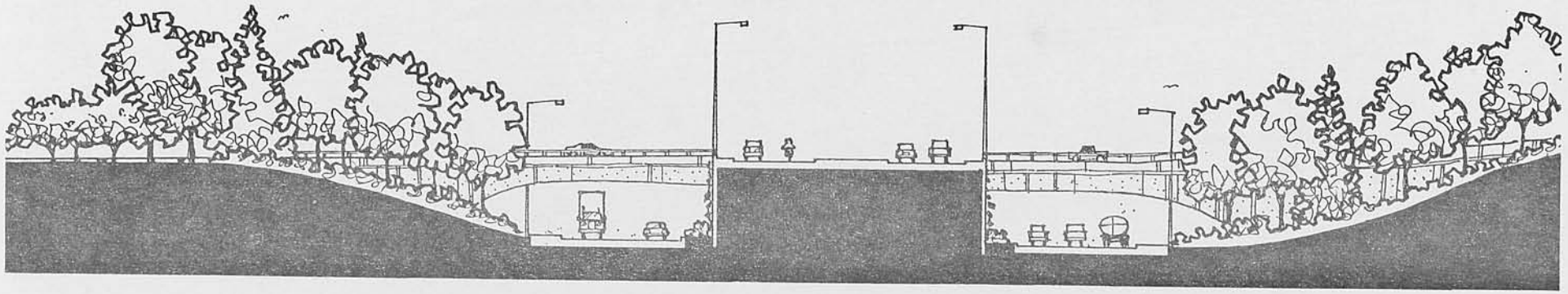
After many hours of deliberation and review of the written and verbal statements provided the team, we concluded that serious consideration should be given to limiting the program, the maximum degree possible, to an at grade urban parkway with highly restrictive access controls (no private curb cuts, select cross street intersections). We recognize that locations with special high traffic generators may require special treatment but in general the parkway concept more nearly fits the tone and image described. By limiting the design as described a chain of lakes/gateway condition can more readily be obtained. Those elements that we feel play a significant role in achieving this opportunity are described below:



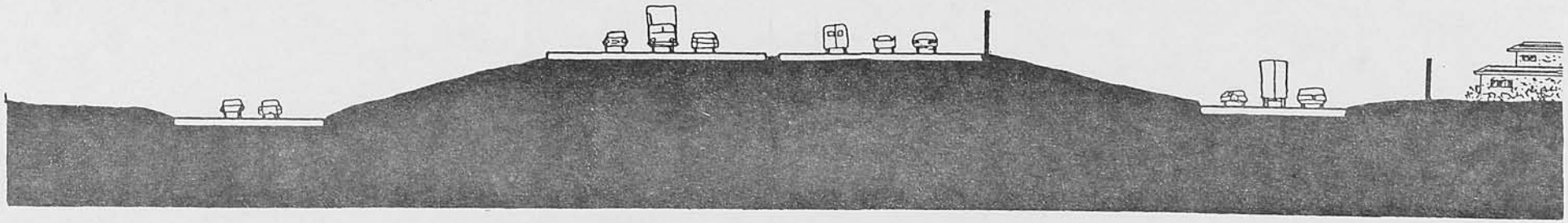
D.O.T. Section at U.S. 63

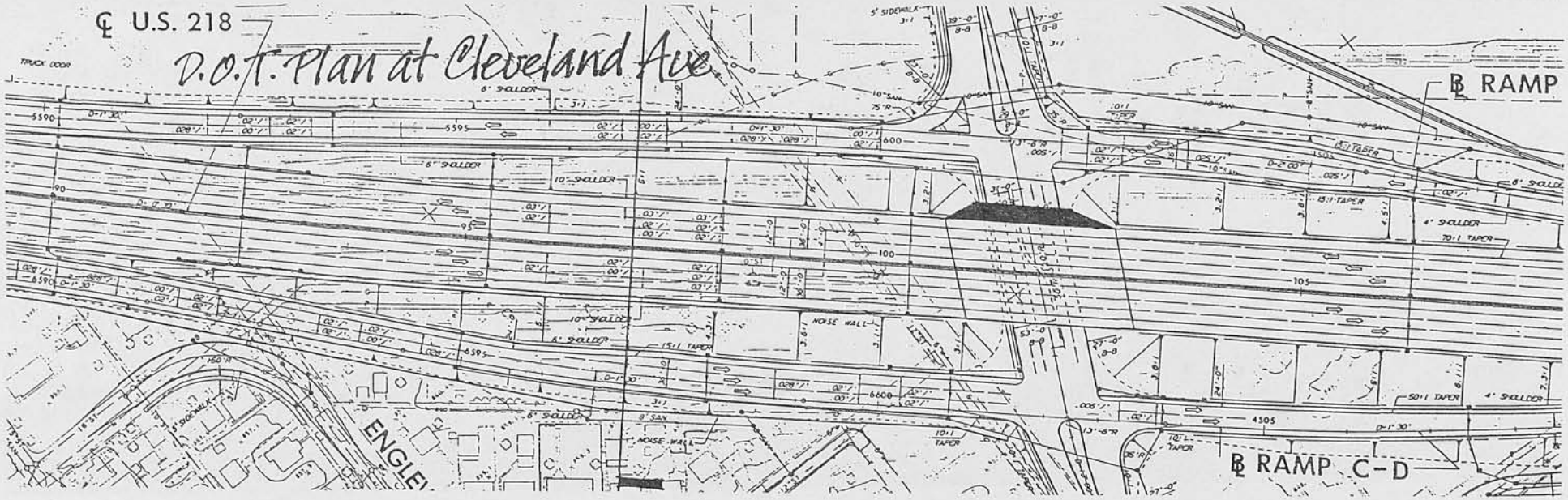


R/UDAT Alternate at U.S. 63



D.O.T. Section at Cleveland Ave.





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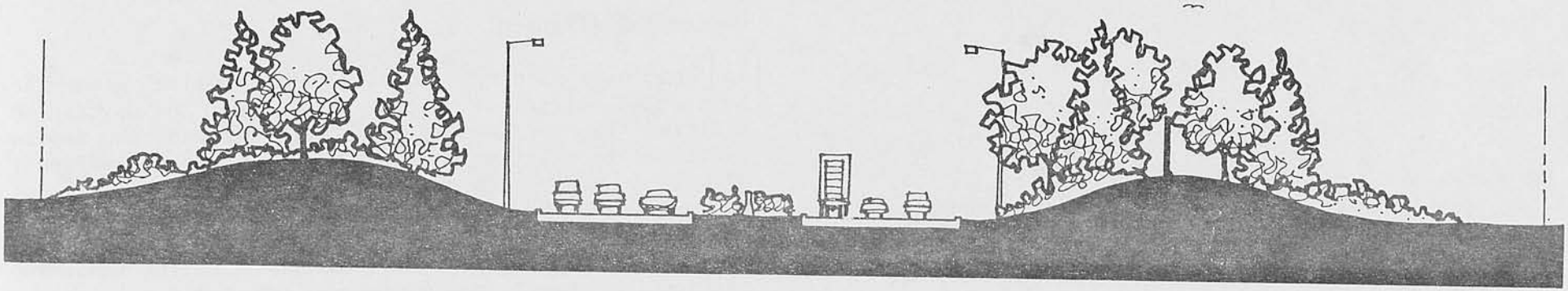

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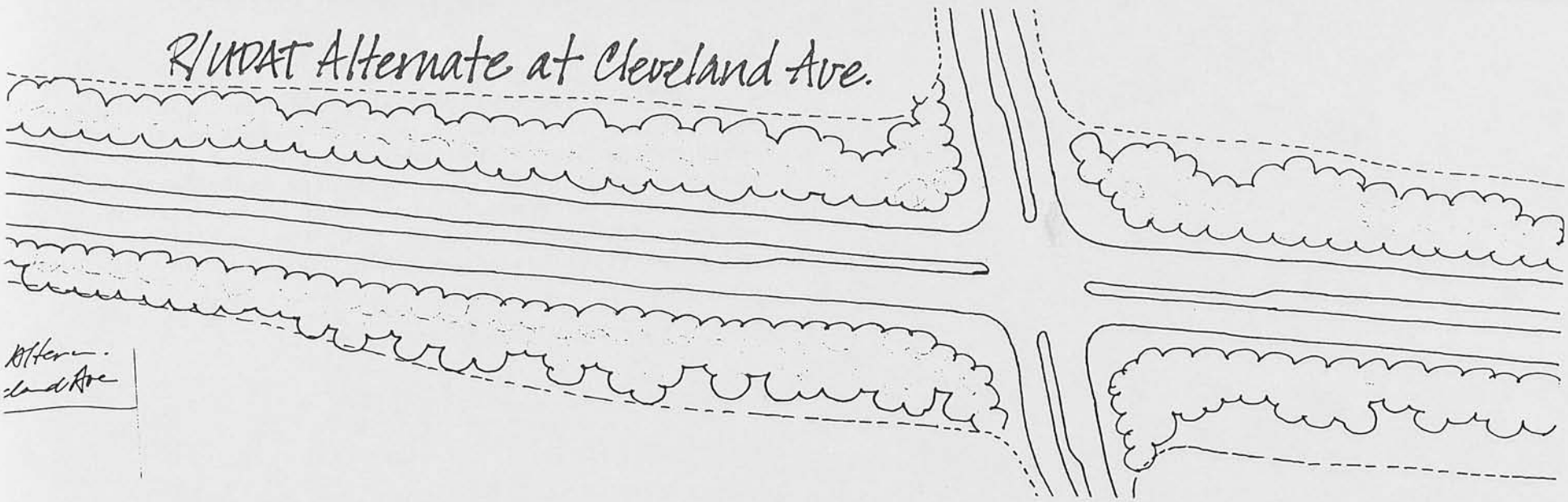


Profile Grade

By minimizing the number of vertical curves along the corridor more visible green spaces can be developed. The visible intrusion (vertically) can be significantly reduced, roadway drainage can be more easily accommodated, green space can be planted, ponds created, etc. At grade or near at grade conditions can be accommodated along a significant portion of the remaining unconstructed section.

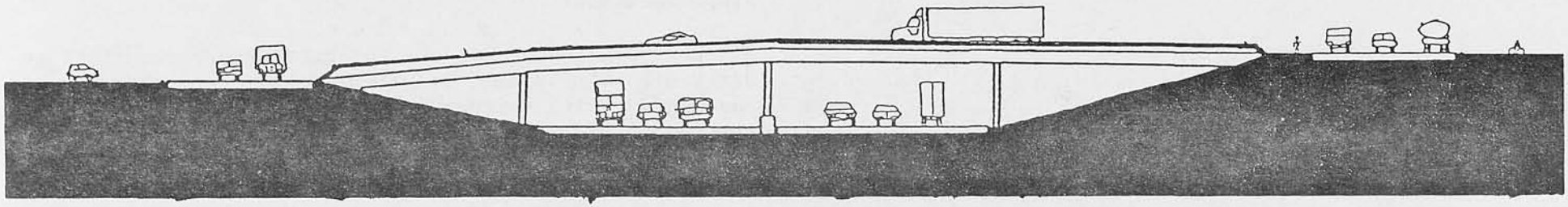
Horizontal Alignment

In combination with reducing the profile grade the horizontal alignment within the right of way can be modified to more easily expand and contract the median width. By varying the median a more curvilinear alignment can be achieved providing greater aesthetics. In addition, horizontal alignment adjustments can be used to minimize impacts on adjacent properties. Adjustments to the horizontal alignment on the remaining section can be effected along most of corridor.

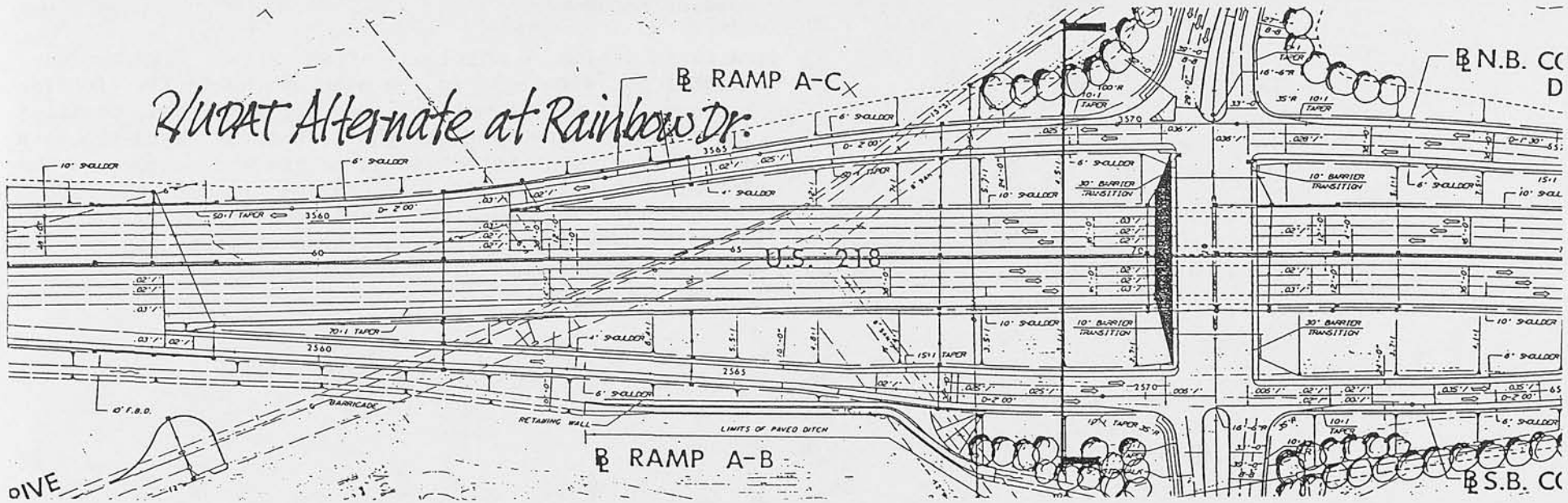
Typical Section

A thorough review of recent socio-economic (SE) data, SE trends for the area, and its effect on the traffic assignments, plus a review of the level of service (LOS) analysis using 1985 Highway Capacity Manual methods, may result in a decrease in the number of lanes required to achieve an acceptable LOS on the facility. In most major metropolitan areas a LOS D under urban conditions

D.O.T. Section at Rainbow Dr.



RUDAT Alternate at Rainbow Dr.



is acceptable. By reducing the number of lanes required, the cross section is reduced. A reduced cross section allows more room for green space and mitigates residential and business impacts. In addition to laneage changes, an urban parkway can be developed with either a rural or urban section (open drainage vs curb and gutter). Changing the section properties will allow one to change the section width.

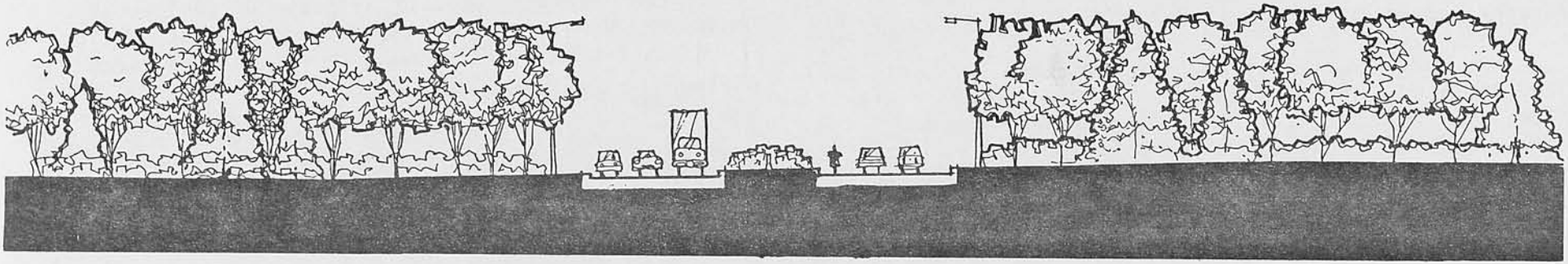
Slope Treatment

Parkway conditions allow for greater opportunities to alternate the slope treatment away from the edge of pavement. With either a rural or urban cross section the clear zone can be reduced (lower design speed, lower functional classification). By reducing the clear zone, more right of way is available for treatment.

Roadway Hardware

Parkway design conditions often allow the hardware (lighting, signing) to be more aesthetically pleasing because it can be more strategically located, modified in slope, color and height. Roadway hardware is a necessary element in providing safety and comfort to the driver; however, it generally is at the least nondescript and more often obnoxious to the sight. By allowing for more variation, these elements can be more readily blended into the street scape.

R/UDAT Alternate at Rainbow Dr.



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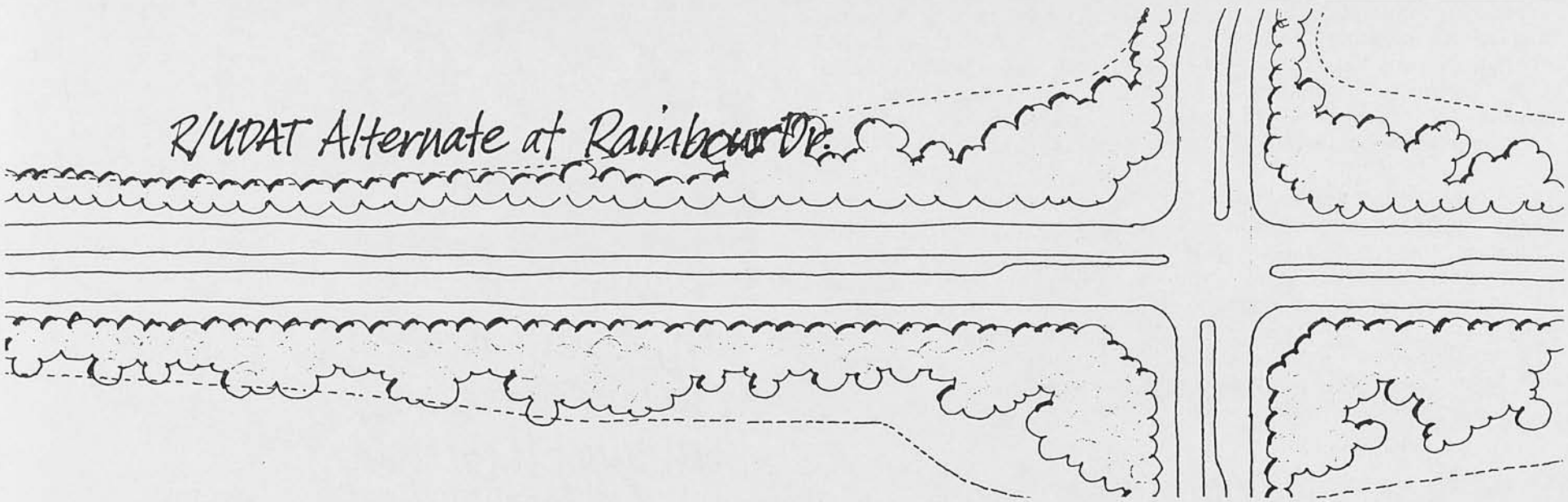


Drainage

Whether using a rural or urban section, the runoff from a parkway design as described can be handled in a drainage system that is much less complex and detention can be more easily provided within the available right of way. Detention ponds can be contoured and planted so that they appear to be part of the natural terrain.

System Upgrading

The parkway concept, if properly planned and designed, can be modified in future years to function more nearly like a freeway system with interchanges at appropriate crossroads. System demands can be monitored and if the system needs and/or traffic warrants the changes can be made. The benefits derived in this case are twofold. First, if traffic conditions do not warrant the improvements for a long period of time, a return on the capital expenditures under a higher cost benefit analysis is money better invested, and second, the real and perceived benefit of the aesthetic treatment adds to the immediate quality of life. An example of this application may be between the ramp gores west of Rainbow Drive and east of Cleveland Avenue.

The ramps and collector/distributor system can set the first phase construction with minor modifications. The infield can be landscaped as part of the chain of lakes/gateway treatment. The remaining construction can be provided once the demand is generated. This approach provides the Waterloo/Cedar Falls communities an opportunity to evaluate another element of the gateway and help solidify opinions on the concept.

The thoughts and processes provided in this R/UDAT proposal are by no means meant to be all inclusive or undesirably exclusive of other options. Rather it is an avenue for discussion on a way the Gateway Committee, through its will and determination, may be able to enhance the concepts already embraced.

The Gateway Committee must evaluate options as if they were the developer of a prime piece of real estate. It must be developed to its best and highest use for the greatest return. All avenues should be considered.

Betty Jean Furgerson

"We want people to say, "Some wise decisions were made; they must have had good leadership!"

CONNECTION AND EXTENSION TO COMMUNITY FABRIC

Fortifying a number of linkages will enable the new highway corridor to be better integrated into the existing community. These linkages concern the highway corridor's relationship to a variety of surrounding physical and social elements.

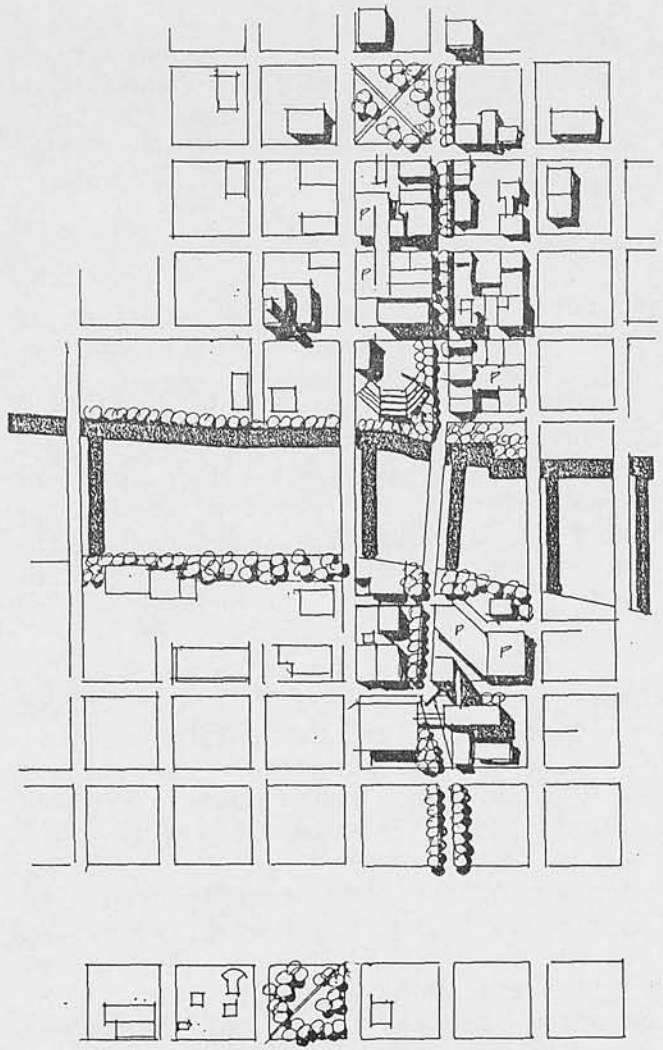
Linking Northeast and Southwest

Highway 218 will serve an important function as a part of the "Golden Triangle" formed by Interstate 20 and the planned extension of Highway 58. However, the roadway itself, by virtue of its size and its location parallel to the Cedar River, will tend to reinforce the division of Waterloo similar to the way the River does.

Fourth Street

Fourth Street is the primary connecting link between the northeast and southwest portions of Waterloo, forming the main entrance to the Central Business District. It is the central spine through the downtown CBD, bounded on both ends by Lincoln Park and Washington Park. Fourth Street has landmarks such as the City Hall along its axis, and its mixture of uses makes it a multi-function street that embodies the community's richness and diversity.

A strategy for intensifying and concentrating activity along Fourth Street would strengthen it as a unifying element. Additional class A office and entertainment



uses, as well as specialty retail, should be encouraged along Fourth Street. Infill development should be promoted, and the Fourth Street corridor area should be tightly bounded so that activity remains focused along the streetfront.

Focus on the Central Business District

The commercial and retail core downtown is important as a center of activity and a focal point of the community.

Retail activity should be concentrated in a particular part of the Central Business District (CBD) to achieve a strong activity level in a defined retail district. If necessary, a business relocation program should be considered as a tool for achieving this. Because of its centrality, Fourth Street is the logical focus for pedestrian activity.

Farmers Markets were mentioned in community meetings as a popular Saturday morning activity. A downtown location would be excellent for expansion on this concept, with facilities to accommodate additional festival market activities; these could cover a broader range of activities and take place more frequently.

Finally, there exists a need for Class A office space in the CBD. Filling in available spaces with relatively low-rise office structures would be preferable to isolated large buildings; however, they should be designed to accommodate fairly large businesses as tenants.

Enhancing Water Links

The Cedar River and the chain of lakes are strong elements of the landscape of the Cedar Valley communities, providing many visual benefits and opportunities for recreational use. Areas along the river are excellent "people places" suited to pedestrian, bicycling, and other recreational activities. In the CBD area, riverfront design can emphasize this variety of uses and activities, providing multiple tiers and areas for sitting, walking, cycling, skateboarding, and other pedestrian uses.

Vehicle access and automobile-oriented areas should be incorporated into the mix of use areas, with attention paid to the experience of motorists as they travel along the river corridor at vehicle speeds.

Overlay and Historic Zones

Incentives and controls that promote particular kinds of development and activities in specific, important areas will aid in preserving and enhancing their identity and distinct place characteristics.

Parts of the city with a strong historic character should be preserved through extablishment of historic zoning districts that provide a set of design standards for projects within their boundaries. These standards should emphasize preservation of the indigenous character of some very old neighborhoods that still

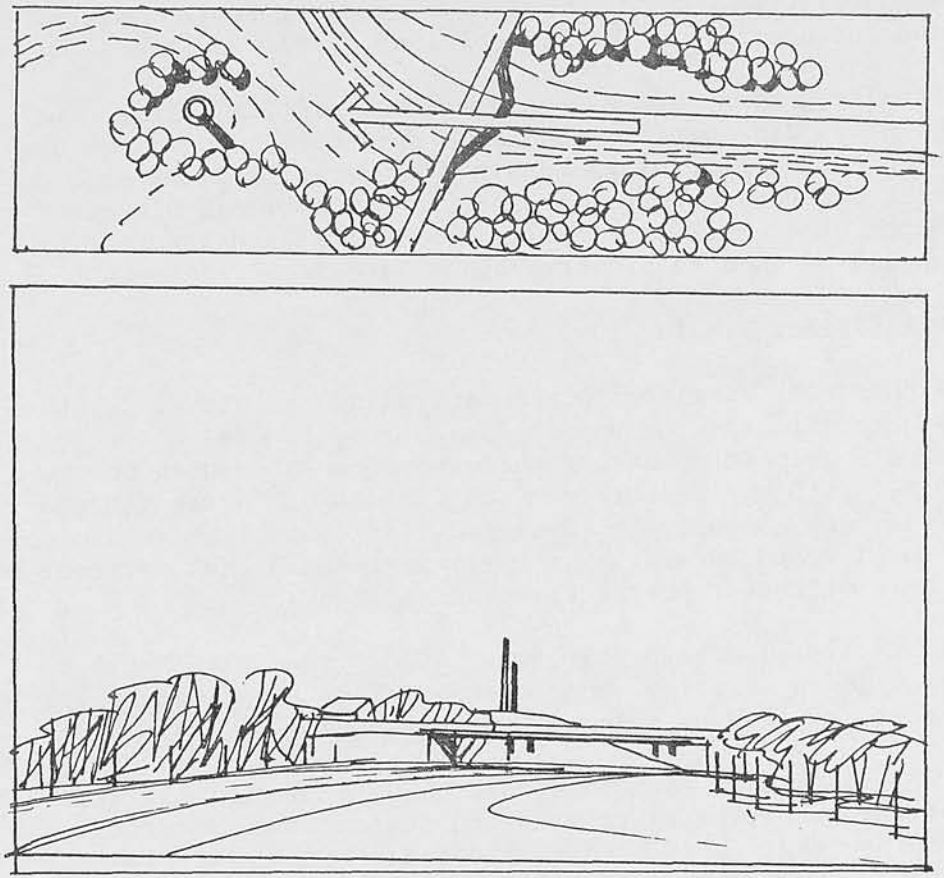
exist in Waterloo: homogenous historic neighborhoods create a stronger impression of the old town form. Design review of proposed building projects can be matched with historic district programs, providing incentives for property owners to meet community objectives for adaptive reuse or preservation in building additions or repairs. This will require the establishment of a design review board.

Similarly, a downtown district calling for design controls and review, matched by incentives for projects that enhance the character of downtown, will further efforts to revitalize the area.

The six-month moratorium placed on development in the Highway 218 corridor has been an excellent policy, enabling the community to examine alternatives and prevent new development that might have been subject to adverse impacts. The moratorium should be continued within the Highway 218 corridor while the community develops an overlay district for the 218 corridor, including a set of design standards for use by the design review board. A timetable of perhaps six months should be developed for this effort.

PUBLIC ART PROGRAM

Public art was an interest expressed by some citizens. The R/UDAT Team strongly encourages public art projects. Artist and site selection should be a local process, done by a committee composed of artists, art curators, design professionals and citizens. Initial efforts



Establish View and Vista Corridors for Public Art

should focus in the downtown core along Fourth Street, and secondarily in the 218 corridor overlay district.

Finally, open space conservation efforts along the Highway 218 corridor should be used to enhance views of downtown. Ramp alignments and landscaping plans should seek to provide vistas of the Central Business District. Along the parkway itself, easements and landscaping should be used to preserve and create focal elements.

Hiker/Biker Trails

With the corridor plans including a bicycle path adjacent to the roadway in many areas, special attention should be paid to making the experience of riding on the bike path a celebration of cycling. Screening and landscape should be designed for both the vehicle traveler and cyclist in the parkway, taking into account their different perspectives and speeds.

A Cyclists' Center located along the bike path to provide a resting and meeting place for riders would add to cycling as a family recreational activity.

The bicycle path network should definitely take advantage of the river area, as suggested in alternative routes that have been considered in community planning for bicycle paths. A bike route along the river or the parkway should not become the primary choice; both should be included. Especially in the CBD areas of the river, bicycling along the river would be a very pleasant and sociable experience.

Opportunities to reallocate monies available for a bike path within the highway should be pursued, in order to allow the funds to be used for a route along the river.

"John Deere is a neighbor to this highway. We want to do our bit to help our community."

Cecil Delange

Vistas and Visual Elements

The interaction of color, shape, texture, tone and contrast are the visual elements of a scene that make it alive to the eye and mind. The image of a City is tied to the impressions left on the mind when these elements are viewed in some perspective from the ground or the air. They can take on a totally different perspective under the influence of light and dark. It is because this image is so consuming that it must be managed with great care. Management tools that the Cedar Valley communities can utilize to develop a living vista are provided here.

- Add more color diversity to the CBD skyline.
- Add architectural enhancements with neon borders, towers, dormers, roof-top art.
- Produce "false fronts" for building backsides with facia treatment.
- Relocate historic, architecturally significant buildings/houses to lots adjacent to corridor and refurbish.
- Clean, mow and clear City properties visible from the corridor.
- Coordinate with utility companies to put utility lines underground in critical vista areas.
- Provide/help develop low interest loan/grant programs for corridor businesses to use to remodel, repaint, resurface or clean buildings and grounds.
- Clean and repair existing street brickwork.
- Add new street brickwork in strategic locations with patterned designs.

"We're not trying to be New York, or to be Chicago. But we are trying to be the Best in the Midwest!"

Doug Sharp

CEDAR FALLS DESIGN CONCERNS AND OPPORTUNITIES

As expressed at a resource conference with the R/UDAT team on Friday, July 8, Cedar Valley planning officials described several urban design issues which they face in the near future. A planning schematic for the U.S. 58 corridor through Cedar Falls was described, and the plan was received as a sensitive and yet straight forward treatment of landscape, bike paths, links with adjacent neighborhoods and termination at the Chain of Lakes. Note was made of the citizen input which provided guidance for the eventual corridor location plan.

Additional issues were raised relating to development North and East of downtown Cedar Falls, as well as the preliminary considerations being given the proposed Performing Arts facility on the University of Northern Iowa campus.

Plans are being preliminarily considered for a continuing education retreat facility located in a wilderness environment west of U.S. 218 as it extends north of Cedar Falls. The area under consideration was described as east of older housing which is reportedly in poor condition.

Additionally, an effort was described to develop an industrial park on the west side of U.S. 218 adjacent to the Waterloo airport.

The R/UDAT team recommends that appropriate care be taken to protect the valuable resources being developed in the Chain of Lakes area with appropriate buffering and transitional land uses south of the industrial site. Similar concern should be exercised with the wilderness area west of such an industrial site.

It would be anticipated that the same degree of citizen involvement would be involved in the planning of these developments, and that the long term and comprehensive policies be reached based upon thoughtful and sensitive planning, as demonstrated in the U.S. 58 corridor planning.

It also has occurred to the R/UDAT team that the Chain of Lakes might lend themselves to the joint Cedar Falls/Waterloo development of a resort and conference center. Such a center could become a focus for recreational events, cultural activities as well as its value as a regional marketing tool for the Cedar Valley partnership.

Amenities which would seem appropriate are those such as the continuing education retreat and the Music and Performing Arts Center, along with a 200 room conference hotel. Given the number of organizations who desire such an environment for their annual meetings, the R/UDAT team feels confident that such an up-scale complex would be feasible.

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"Aha! This is the place!"

Doug Sharp

"What we do now should be seen as a vital piece of heritage, to be preserved."

Rosalyn Middleton

SUMMARY OF RECOMMENDATIONS / NEXT STEPS

Next Steps

In the history of every city there are pivotal moments - key decision points - that chart the future for 50 to 100 years. The 218 Corridor development is such a moment. The roadway design and its affect on access and development patterns will influence the quality of life in Waterloo more profoundly than any foreseeable event in this century.

We believe this. And we have heard this from you. We share your concern for the environment, the quality of life and the image for this corridor to the community and to the outside world. Accordingly, we recommend these actions:

- A six-month moratorium on the letting of highway construction should be imposed.
- The City - or the Gateway Committee with support from the City - should retain a multi-disciplinary design team to evaluate the scenic parkway alternative. The team should be composed of civil engineers, traffic engineers, landscape architects and urban designers. The study should take no more than three months and should include an evaluation of the HNTB at-grade parkway scheme, modifications to that scheme, and the development and evaluation of new parkway schemes.
- The creation of a public participation process to insure full community review of the designs.
- The City should retain a full-time design staff member to oversee this study process.

At the end of this effort, the City, the Gateway Committee and the community should decide on the alternative and proceed. We believe that the savings possible with a Scenic Gateway alternative will pay for the study, for design and contract documents for the new alternative, and for construction inflation costs caused by the delay, and will result in a significant transfer of funds to the city for local projects, under the terms of the Interstate Substitution Program.

Our visit here has shown us that Waterloo is truly "a city that cares about itself." That is why we were invited here - and that is why we feel compelled to urge reconsideration of the 218 corridor plan.

APPENDIX

DESIGN REVIEW:

Any motorist who drives the route frequently knows the quickest, most convenient way to get from Dulles International Airport to downtown Washington, D.C. Except during rush hours, this is to use the Dulles Access Road and then simply to follow the signs linking it with I-66, the limited access urban highway that snakes through the close-in suburb of Arlington to connect with the Theodore Roosevelt Bridge across the Potomac River. But when he wants to impress a first-time visitor from Tokyo, Paris or Seattle with the beauty of the landscape and of the approach to the national capital, this self-same motorist will detour to an older route, taking a zig along the eight-lane Capital Beltway and a zag to the George Washington Memorial Parkway. From an aesthetic point of view, few driving experiences are more refreshing than to cruise the green Virginia edges of the Potomac palisades as the sharp tip of the Washington Monument peaks white through breaks in the trees. As stated by Christopher Tunnard and Boris Pushkarev, "A freeway cannot be aesthetically satisfying unless it is designed to belong where it is put, and not to look like a foreign body in a landscape or cityscape."

"This highway was designed to mean something to people," landscape architect Simonson said of the George Washington Memorial Parkway, "its vistas designed to facilitate something called 'making pictures as you drive.'"

One oft-recommended step in this direction is to wrest control of highway decisions away from the exclusive jurisdiction of highway engineers and transportation planner. Just as the classic parkways were team efforts, leavened and often shaped by the multidisciplinary sensibilities of landscape architects, so should our new roads (and our "improved" older ones) reflect higher aesthetic standards.

Their long-term value is as precedents for expanded planning and refinded decision-making processes whereby concerns broader than simply getting cars from point A to point B are taken fully into account.

Roads, after all, are crucial parts - but only parts -of this environment, and if they're generally displeasing and usually crowded, of what consists their utility?

There is no secret technique. It is our patterns of development that need serious revision. Single-use districts, be they downtown office clusters or office parks in the suburbs, cul-de-sac residential developments of attached or detached homes, vast segregated apartment complexes, commercial centers where one has to drive from one side of the street to the other, parks that require huge parking lots - each of these patterns encourages the exclusive and multiple use of automobiles for transport by the great majority of citizens. But if one makes the mental switch from physical segregation and isolation to integration and interconnection, then it becomes possible to imagine paths that are meaningful and pleasant, because of the places they connect. Possible, also, to foresee in certain instances a rebirth of the parkway.

Quoted from Benjamin Forgey, "Parkway Design: A Lost Art?", in Landscape Architecture, April, 1989. Benjamin Forgey is the architecture critic for the Washington Post.

"The strength of Waterloo is its people."

Nancy Shower

Credits

GATEWAY COMMITTEE

Bob Bortle
Iowa DOT

Hugh J. Copeland

Cecil DeLange
John Deere Component Works

Susan L. Fleege
Display Outdoor, Inc.

Russ Garling

Jan Guthrie

Don Irwin
Schreurs & Associates

Linda Klinger
R. J. McElroy Trust

Dr. Charles L. Means

Donna Nelson
Nelson Insurance Agency

Fedon Petrides
Brice Petrides - Donohue

Ray Richardson

Craig Ritland
Ritland Landscape Architect

Renata Sack
Cedar Arts Forum

Craig Shirey, Chairman

Wayne Snyder
Thorson Brom Broshar Snyder

Wayne Sunday
Waterloo Construction Office

Roosevelt Taylor
U. A. W. Sub Regional Office

Larry Winninger

"We're taking things away from those walls, and we're exposed. We have the opportunity to moon the world. Let's show our best side."

Bob Broshar

RUDAT COMMITTEE

Co-Chairmen - Wayne Snyder
Don Temeyer

Finance - Craig Shirey

Professional Committee -
- Geoff Grimes
- Bob Stevenson
- Rod Larsen
- John Page
- Bob Broshar
- Daryl Andersen
- Craig Ritland
- Fedon Petrides
- Hugh Copeland

Citizen Participation -
- Neighborhood Committee - Renata Sack

Public Relations - Sue Fleege
- Press - Mary Kainer
- Logo - Laurie Griffin
- Novelties - shirts, caps, etc.
- Tabloid

Arrangements - Michelle Temeyer
Printing/Secretarial - Michelle Temeyer

Photography - Daily Film Processing - Randy Fratzke
Report Prints

Team Accommodations -
Hotel - Jan Guthrie
Meals - Linda Klinger

Materials/Supplies -
Drafting Supplies - Dan Channer
Panels - Marty Holst

Facility Accommodations - Rec Center - Tom Reardon

Student Participation - Michael Underhill

Follow-up Committee - Implementation - Chuck Means

Technical Committee - John Page, Chairman
Dave VanDee
Rod Larsen
Frank Coyle
Bob Bortle
Doug Sharp

TECHNICAL PRESENTATIONS

IDOT - Bob Bortle, District Engineer
Dennis Smith, Project Engineer
Wayne Sunday, Resident Construction Engineer

INRCOG - Sharon Juon, Executive Director
Rod Larsen, Transportation Director

City of Cedar Falls - Jon Crews, Mayor
John Page, City Planner

University of Northern Iowa -
Dr. Leland Thomson, Director Planning

City of Waterloo - Bernie McKinley, Mayor
City Planner - Bob Stevenson
Planning and Development Director - Don Temeyer
Waterloo Redevelopment Authority - Dave VanDee
Cedar Valley Partnership - Doug Sharp
Cedar Valley Lakes - Rick Young

R/UDAT TEAM MEMBERS

J. J. Champeaux, FAIA

Mr. Champeaux, an Architect and City Planner from Lake Charles, Louisiana, is Principal in the firm of Champeaux Landry, Inc. He has been chairman of R/UDAT's in Wichita Falls, Texas; St. Louis, Missouri; Jersey City, New Jersey; Hillsboro, Oregon; Bethel Island, California; and Ogden, Utah.

Gary D. Bellomy, ASLA

Gary is a landscape architect/urban designer with EDAW, Inc. His practice includes projects dealing with all facets of the urban environment and has ranged in locale from Texas and Oklahoma to Florida, Tennessee, the Carolinas, Saudi Arabia, Bahrain, and Africa. Mr. Bellomy is a graduate of Texas Tech University, and is a member of the American Society of Landscape Architects and the American Institute of Architects.

Howard B. "Skip" Christy, Jr., R. A.

Mr. Christy, an Architect, Planner, and Development Consultant, is Principal of Land Planning and Development Associated Consulting Services in Houston, Texas. His firm is devoted to architecture, planning and development, and project administration. The firm provides consultation in conceptualization, programming, design, financing and execution of projects, and management of building and development ventures in the Houston area primarily. The scope of projects includes speculative home building, condominiums, townhomes, shopping centers, public agency facilities, and large scale new community developments.

Neil A. Kantner, P. E.

Mr. Kantner is a Director of Preliminary Design Studies at Transportation Consulting Group in Orlando, Florida. He has provided professional engineering services to both the public and private sectors for 12 years. His professional background as a transportation planning/design engineer has been developed through service to the Louisiana Department of Transportation and Development, the Florida Department of Transportation, Mississippi State Rail Commission, the Walt Disney World Companies, various central Florida local governments, and various private land developers.

Thomas Laging, AIA

Mr. Laging is a professor of Urban Design and Architecture at the University of Nebraska at Lincoln.

Mr. Laging's area of special expertise is urban design. He has lead major efforts for the cities of Phoenix, Arizona; Detroit, Michigan; Boise, Idaho; and Farmington, New Mexico. He has chaired the Mayor's Design Committee and the Redevelopment Advisory Committee in Lincoln, Nebraska, and has recently provided advice for Lincoln's strategic planning effort.

H. H. Smallridge

Mr. Smallridge is Manager of Urban Design and a senior associate with the multi-disciplinary design firm, Wallace-Floyd Associates, in Boston, Massachusetts. He is currently managing the architectural and urban design effort for Boston's 4.4 billion dollar Central Artery Project. Prior to joining Wallace-Floyd Inc., he was Director of Urban Design for the Central Transportation Planning Staff and Senior Project Architect for the Boston Redevelopment Authority.

STUDENT MEMBERS

Dean Botes

Mr. Botes is a graduate student in Architecture at Iowa State University.

Shabana Hameed

Ms. Hameed is a graduate student in Planning at Iowa State University.

Lee Leighton

Mr. Leighton is a graduate student in Planning at the University of Nebraska - Lincoln.

Kevin Nordmeyer

Mr. Nordstrom is a graduate student in Architecture at Iowa State University.

Eric Ritland

Mr. Ritland is a junior in the Architecture program at Iowa State University.