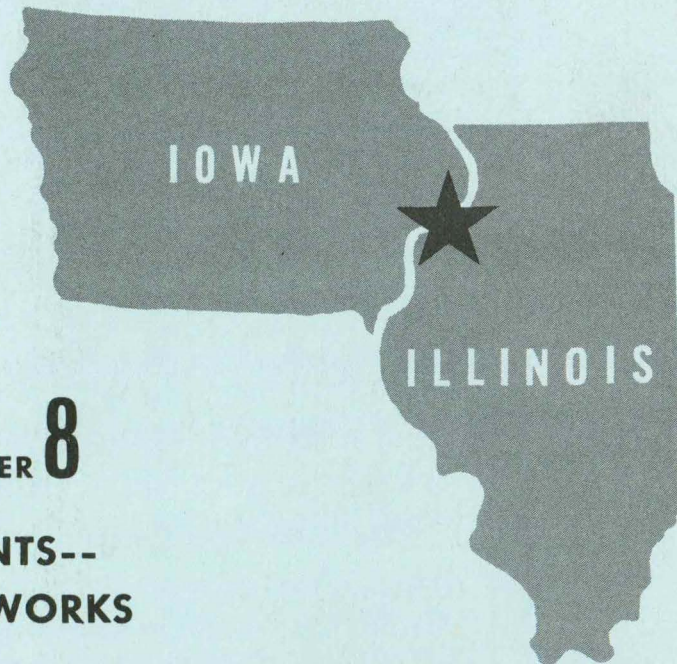


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**DAVENPORT - ROCK ISLAND - MOLINE
URBANIZED AREA TRANSPORTATION STUDY**



INTERIM REPORT NUMBER **8**

**TRIP ASSIGNMENTS--
ALTERNATIVE NETWORKS**

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DAVENPORT-ROCK ISLAND-MOLINE
URBANIZED AREA TRANSPORTATION STUDY

Interim Report Number 8

TRIP ASSIGNMENTS--ALTERNATIVE NETWORKS

Item 1-2

Prepared for

CITY OF DAVENPORT
CITY OF BETTENDORF
TOWN OF RIVERDALE
SCOTT COUNTY

BI-STATE METROPOLITAN PLANNING COMMISSION
IOWA STATE HIGHWAY COMMISSION

in cooperation with the

UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS

NOVEMBER 1969

Prepared by:

DE LEUW, CATHER & COMPANY
CHICAGO, ILLINOIS

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INTRODUCTION

This report presents an intermediate step in the planning process leading up to the final plan.

After the completion of future travel forecasts, the Initial 1985 Street and Highway Network was developed by the Consultant working jointly with the Technical Committee. This network, described in Interim Report Number 7--Transportation Facilities and Travel Pattern Forecasts, accommodated 1985 travel, was physically feasible and appeared to be within the financial means of the area.

The Initial Network was then presented to the various planning agencies, governmental bodies and citizens' groups for their review and comments.

ALTERNATIVES TO THE INITIAL 1985 STREET AND HIGHWAY NETWORK

Out of the meetings with city councils, planning commissions, county boards and technical committee members came suggestions for alternatives to the Initial 1985 Street and Highway Network. These alternatives, listed below and shown in Figures 1 through 5, were submitted to the Consultant for test as to their cost, impact on travel patterns and compatibility with sound transportation systems planning.

BETTENDORF

- B-1 Test the effect of deleting the proposed Kimberly Road extension across I-74 to connect with Tanglefoot Lane.
- B-2 Test the effect of deleting the proposed 29th Street from State Street to Central Avenue and from Lincoln Road to Middle Road and eliminating the jog in 23rd-25th Street.
- B-3 Test the effect of connecting Lincoln Road and Middle Road in Davenport.
- B-4 Test the desirability of locating the extension of Tanglefoot Lane to U.S. 67 along the west side of Panorama Park rather than along Moencks Road.
- B-5 Test the effect of adding the following collector to the network: extension of Parkway Drive north of Middle Road along Duck Creek to Hawthorn (partially existing), along Hawthorn to Summit Hills (existing), and along Summit Hills to Spruce Hills Drive (existing).

DAVENPORT

- D-1 Test collectors along 60th Street from Clark Street to Brady Street and along 65th-67th from Northwest Boulevard to Jersey Ridge Road.
- D-2 Test extension of East Central Park from Eastern Avenue to Forest Road.

- D-3 Test extension of Forest Road north from Middle Road to 32nd Street.
- D-4 Test extension of Jersey Ridge Road from 11th Street to River Drive.
- D-5 Test the desirability of providing right of way for a U-6 facility along Fairmount Street and Waverly Road from Kimberly Road to River Drive near the City Cemetery.
- D-6 Test the desirability of widening Locust Street to four lanes from Fairmount Street to Interstate 280.

EAST MOLINE

- EM-1 As an alternate location of the Illinois Mississippi Riverfront Freeway through East Moline, consider a proposed alignment along the river's edge from 1st Street to the sewage treatment plant and then easterly along 3rd Avenue to intersect with Illinois Routes 2 and 92. An alignment immediately north of East Moline State Hospital should also be tested.
- EM-2 As a supplement to the proposed Riverfront Freeway, test a one-way street system along 16th and 17th Avenues.
- EM-3 Test the 13th-15th-17th Street location as an alternative to the proposed 19th Street facility.

MOLINE

- M-1 Relocation of the planned I-74 - 23rd Avenue interchange northward to 19th Avenue, or development of a "bypass" connection between the 19th Avenue-16th Street intersection and the 23rd Avenue-25th Street intersection. Moline feels that such an alternative would be acceptable only if it did not interfere with the present I-74 construction schedule.
- M-2 Linking Rock Island's 5th Avenue to Moline's 3rd Avenue between 38th Street, Rock Island and 46th Street, Rock Island, then continuing easterly along 3rd Avenue and River Drive within the existing right of way. This alignment, plus the existing one-ways, is to be considered as an alternate to the proposed Riverfront Expressway.

- M-3 Using 7th Street, Moline; or 30th Street, Rock Island; or 38th Street, Rock Island as possible alternates to the proposed 1st Street, Moline alignment--this being contingent on the future of the Riverfront Expressway versus the 5th Avenue-3rd Avenue alignment described in Item M-2 above.
- M-4 Reducing the proposed level of service on 19th and 23rd Avenues, and using an improved and extended system of east-west collectors where possible to accommodate the anticipated 1985 traffic load.

RIVERDALE

None

ROCK ISLAND

- RI-1 It has been determined that the proposed north-south facility in the vicinity of 46th Street in Rock Island and 1st Street in Moline north of Blackhawk Road is not desirable and therefore should be eliminated. Study should be made to test the effect of this deletion on 38th Street traffic as well as on other north-south streets.
- RI-2 Testing should reveal whether or not the extension of 31st Avenue east of 38th Street to 7th Street in Moline is necessary without the north-south street in Item RI-1. In addition, tests should be made to determine if the Rock River crossing could be oriented toward 38th Street (a feasibility study is underway to determine if a toll bridge is possible).
- RI-3 The bridge proposed on Arsenal Island is not acceptable and should be placed adjacent to the Centennial Bridge in the vicinity of 14th Street in Rock Island and Brown Street in Davenport.
- RI-4 It is felt that Rock Island's one-way system (4th, 5th, 6th and 7th Avenues) from 11th Street to the Moline border will serve our needs beyond 1985 with the possibility of improving the eastbound movement near 38th Street by bypassing the 7th Avenue and 38th Street intersection. Study should be made to determine whether a grade separation is feasible to alleviate future congestion. In addition, study should be made to determine the feasibility of creating a new facility in the vicinity of Railroad Avenue from 1st to approximately 12th Street in Moline and east from 12th Street to connect with I-74. This facility could be tied in to the one-way system in Rock Island at 6th and 7th Avenues. The Arsenal Island expressway should be deleted.

- RI-5 Tests should be conducted on the effects of projected 18th Avenue traffic with the following improvements in place:
- a) Extension of 14th Avenue westward to either 11th or 17th Street, with 14th Avenue widened to 44 feet to the Moline border.
 - b) Widen 16th Avenue in Moline to 44 feet and connect with the proposed tie-in with the 23rd Avenue - I-74 interchange in the vicinity of 15th Street.
 - c) Widen 18th Avenue in Rock Island and 19th Avenue in Moline to 44 feet and tie-in to 23rd Avenue as indicated on the Initial Network Map.
- RI-6 The Blackhawk Road extension to 31st Avenue as proposed is not acceptable. We propose widening 9th Street to 44 feet between Blackhawk Road and 31st Avenue or the extension of Blackhawk Road westward across Rock River to interchange with Illinois 199.
- RI-7 To accommodate increased traffic and to facilitate industrial vehicles, it is proposed that Andalusia Road be widened to four lanes from U.S. 67 to Illinois 199.
- RI-8 Test should be made to determine if 24th Street between 17th Street and 14th Avenue should be widened to 44 feet. (If the bridge to Arsenal Island is improved, 24th Street could be extended and widened between 14th Avenue and the bridge.)

ROCK ISLAND COUNTY

- RIC-1 Test a freeway along Illinois Routes 2 and 92 toward Rock Falls (Supplemental Freeway).
- RIC-2 Test an Illinois Route 84 bypass from an improved and extended County Road R, which would connect with the present Illinois Route 84 northeast of Rapids City.
- RIC-3 Test improvement and extension of the present County KK from Taylor Ridge Road to U.S. 150 where it would connect with Henry County Route 10 to Interstate 74.

RIC-4 Test extension of the present Loud Thunder Road as a scenic road west along the riverfront to Illinois Route 92 and County A.

RIC-5 Test extension of 92nd Avenue west to Taylor Ridge Road.

RIC-6 Test extension of Rock Island County's Niabi Zoo Road east to Henry County Route 12.

SCOTT COUNTY

SC-1 Evaluate the desirability of improving West Locust Street (County Route C) from Interstate 280 to County Route L.

SC-2 Evaluate the desirability of extending the Maysville Blacktop (County Route N) south to Iowa 22.

SC-3 Evaluate the desirability of improving County Route H south from Argo to Middle Road and improvement of County V south to U.S. 67.

SC-4 Evaluate the desirability of improving County Route Q east from the Mt. Joy area to connect with Middle Road.

SC-5 Evaluate the desirability of improving Division Street, Wisconsin Avenue, Utica Ridge Road, and Middle Road north from the urban area.

ILLINOIS DIVISION OF HIGHWAYS

IDH-1 Centennial Expressway extension toward St. Louis (Supplemental Freeway) and connection to 92nd Avenue.

IDH-2 Realigned Colona Road from FAS 205 to intersection with Cleveland Road in Green Rock.

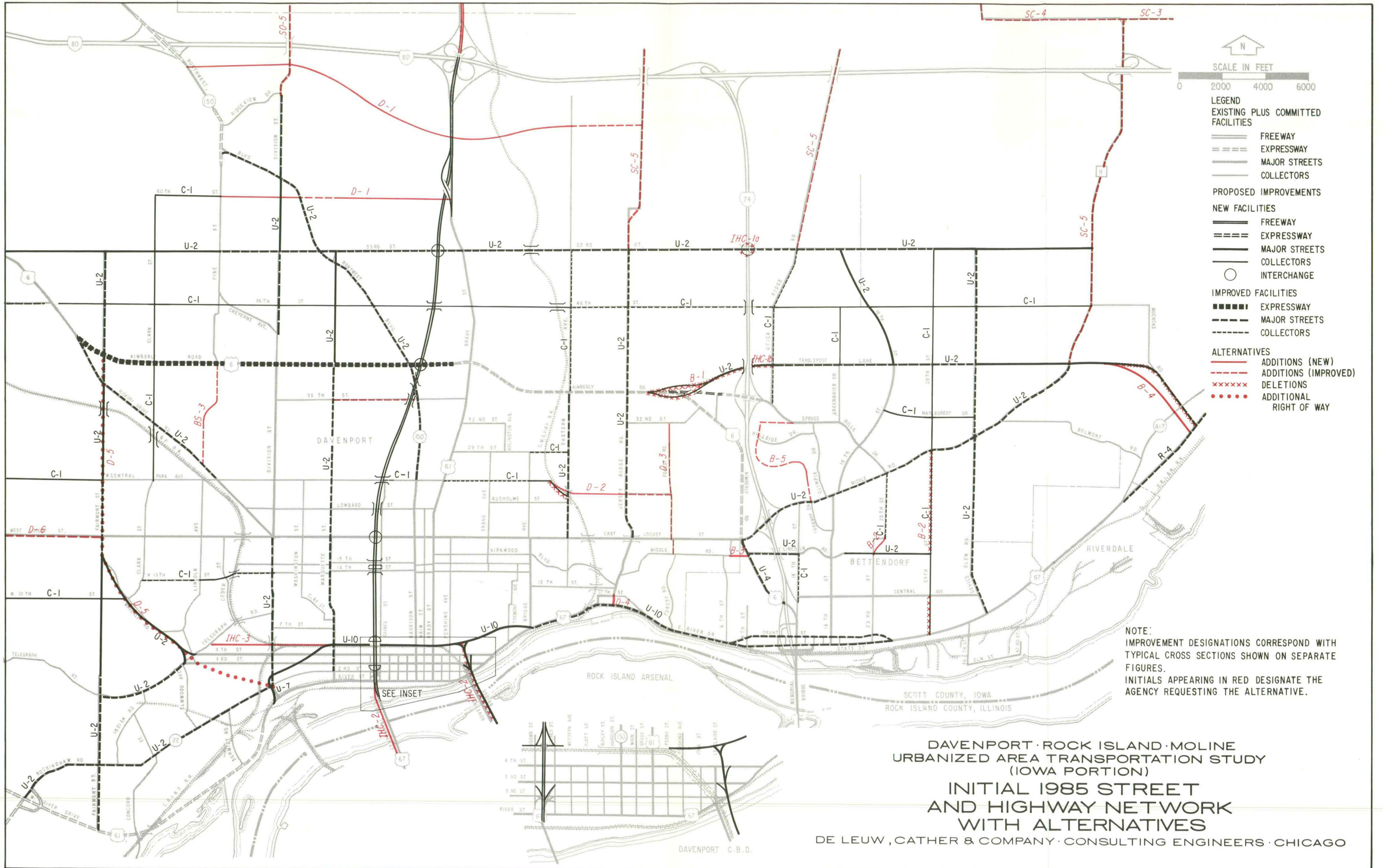
IDH-3 Nineteenth Street, East Moline extended southeasterly to interchange with I-74 and then southerly on CH 12 in Henry County.

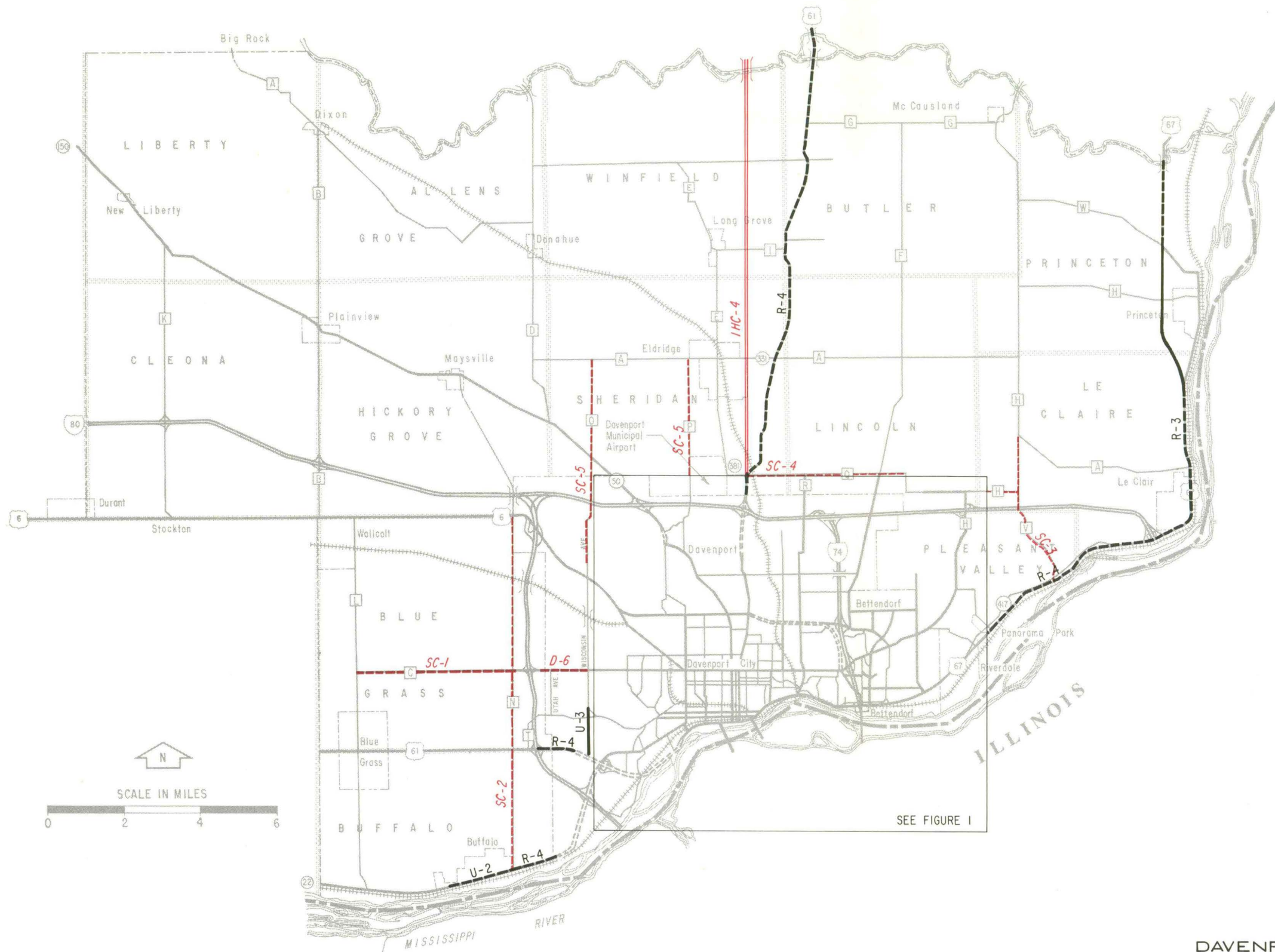
IOWA STATE HIGHWAY COMMISSION

- IHC-1 The Iowa State Highway Commission staff questions the justification of the expenditures required for the interchange of I-74 and 53rd Street and the directional interchange at Kimberly Road with the separation structure on the Tanglefoot Lane connection. They feel that service might be provided better with the Tanglefoot Lane connection east of the Kimberly Road Interchange on I-74 and only a separation structure at 53rd Street.
- IHC-2 Test a toll bridge location proposed by Wilbur Smith and Associates and Howard, Needles, Tammen and Bergendoff in the recent Iowa State Highway Commission toll bridge report. This bridge should be tested in lieu of the new crossing proposed near the Government Bridge.
- IHC-3 Test the extension of the Davenport CBD bypass west to Telegraph Road.
- IHC-4 Freeway 561 should be included in the network extending north from the Brady Street - I-80 interchange.

BI-STATE METROPOLITAN PLANNING COMMISSION

- BS-1 Test the extension of 31st Avenue, Rock Island - 34th Avenue, Moline east to 16th Street, Moline in combination with an improved 14th Avenue, Rock Island - 16th Avenue, Moline as an alternative to a six-lane facility on 18th-19th-23rd Avenue.
- BS-2 Test the effect of forming a continuous thoroughfare of U.S. Routes 6 and 150 and Illinois Route 92 by the Quad City Airport and providing direct access to the Airport via Interstate 74.





- LEGEND**
- EXISTING PLUS COMMITTED FACILITIES**
- FREQUENCY
 - EXPRESSWAY
 - MAJOR STREETS
 - COLLECTORS
- PROPOSED IMPROVEMENTS**
- NEW FACILITIES**
- FREQUENCY
 - EXPRESSWAY
 - MAJOR STREETS
 - COLLECTORS
 - INTERCHANGE
- IMPROVED FACILITIES**
- EXPRESSWAY
 - MAJOR STREETS
 - COLLECTORS
- ALTERNATIVES**
- ADDITIONS (NEW)
 - ADDITIONS (IMPROVED)
 - xxxxxx DELETIONS
 - ADDITIONAL RIGHT OF WAY

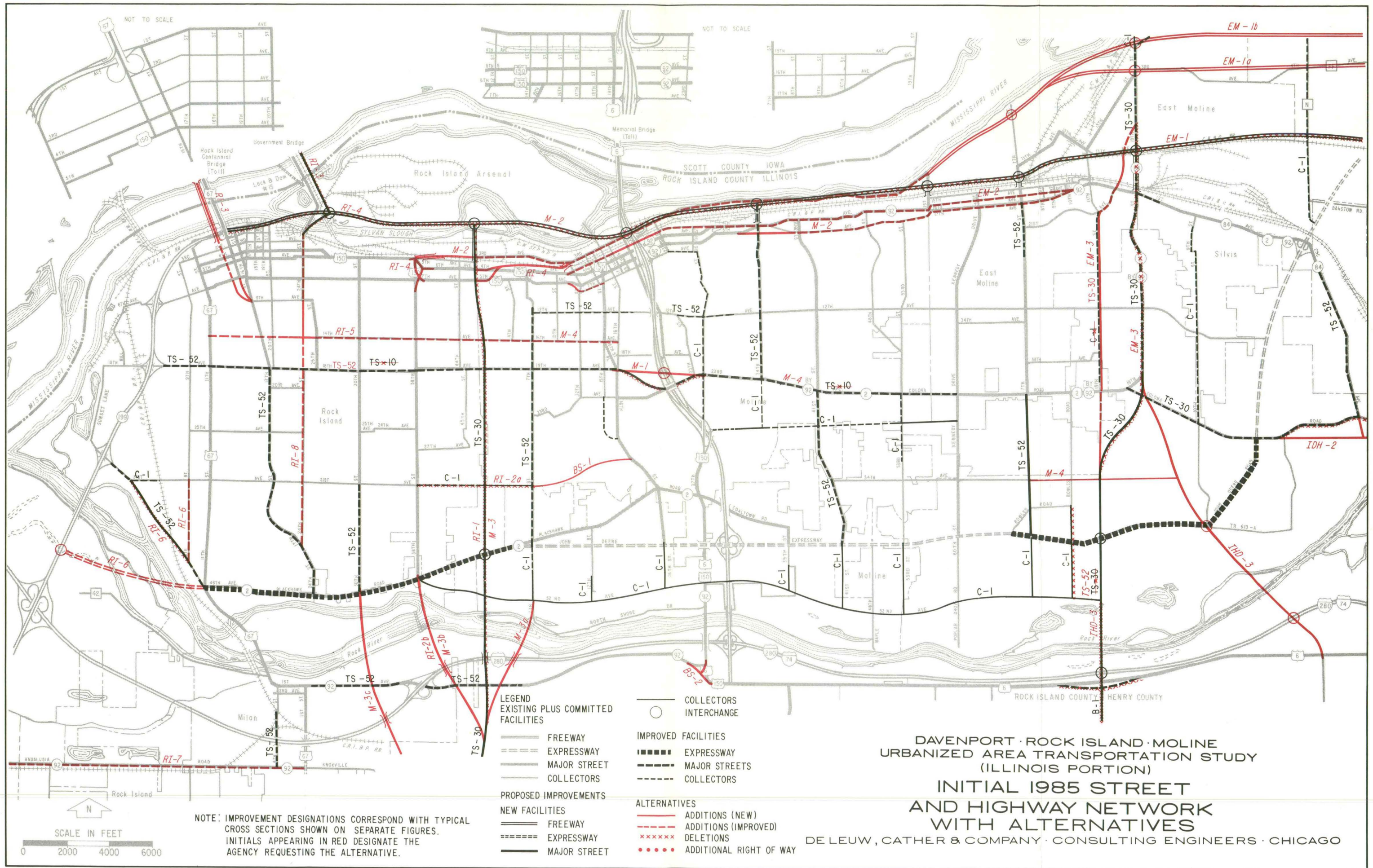
NOTE:
 IMPROVEMENT DESIGNATIONS CORRESPOND WITH TYPICAL CROSS SECTIONS SHOWN ON SEPARATE FIGURES
 INITIALS APPEARING IN RED DESIGNATE THE AGENCY REQUESTING THE ALTERNATIVE.

SEE FIGURE 1

DAVENPORT · ROCK ISLAND · MOLINE
 URBANIZED AREA TRANSPORTATION STUDY
 (IOWA PORTION)

INITIAL 1985 STREET
 AND HIGHWAY NETWORK
 WITH ALTERNATIVES

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NOTE: IMPROVEMENT DESIGNATIONS CORRESPOND WITH TYPICAL CROSS SECTIONS SHOWN ON SEPARATE FIGURES. INITIALS APPEARING IN RED DESIGNATE THE AGENCY REQUESTING THE ALTERNATIVE.

DAVENPORT · ROCK ISLAND · MOLINE
 URBANIZED AREA TRANSPORTATION STUDY
 (ILLINOIS PORTION)
 INITIAL 1985 STREET
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 WITH ALTERNATIVES

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DAVENPORT · ROCK ISLAND · MOLINE
URBANIZED AREA TRANSPORTATION STUDY
(ILLINOIS PORTION)

INITIAL 1985 STREET
AND HIGHWAY NETWORK
WITH ALTERNATIVES

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LEGEND

EXISTING PLUS COMMITTED FACILITIES

- FREEWAY
- EXPRESSWAY
- MAJOR STREETS
- COLLECTORS

PROPOSED IMPROVEMENTS

NEW FACILITIES

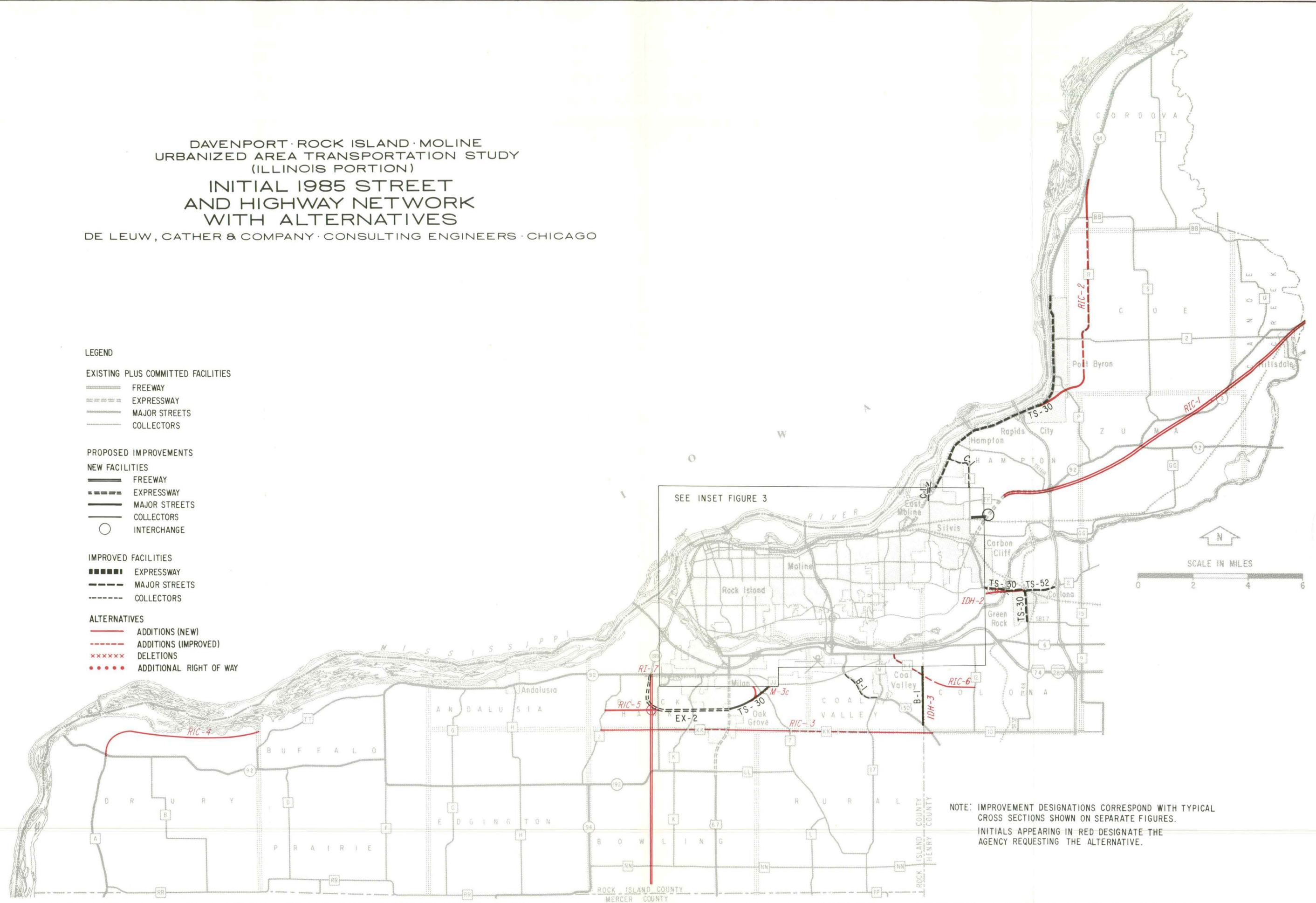
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- INTERCHANGE

IMPROVED FACILITIES

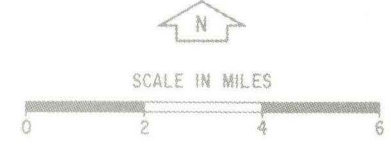
- EXPRESSWAY
- MAJOR STREETS
- COLLECTORS

ALTERNATIVES

- ADDITIONS (NEW)
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- xxxxx DELETIONS
- ADDITIONAL RIGHT OF WAY

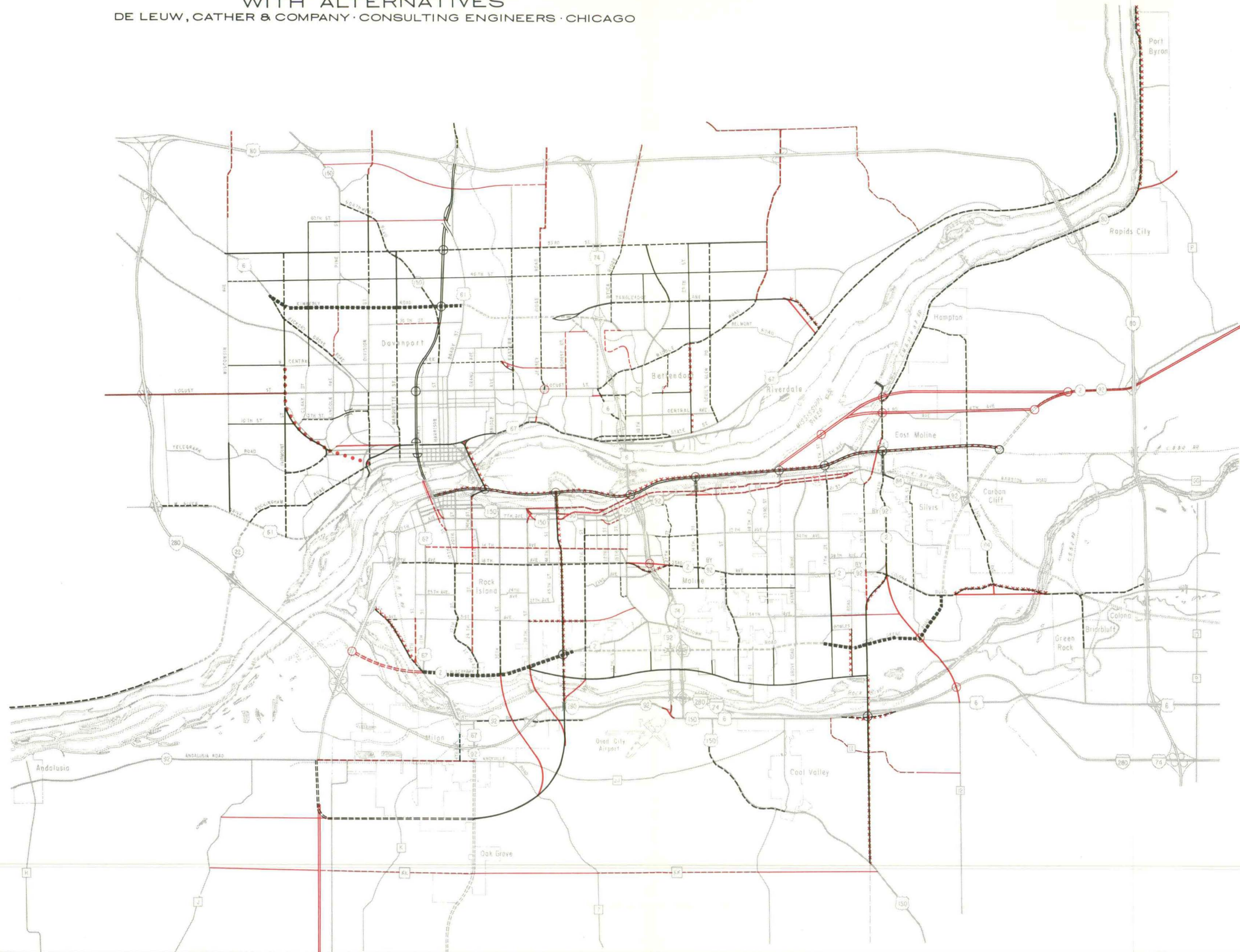


SEE INSET FIGURE 3



NOTE: IMPROVEMENT DESIGNATIONS CORRESPOND WITH TYPICAL CROSS SECTIONS SHOWN ON SEPARATE FIGURES.
INITIALS APPEARING IN RED DESIGNATE THE AGENCY REQUESTING THE ALTERNATIVE.

DAVENPORT · ROCK ISLAND · MOLINE
 URBANIZED AREA TRANSPORTATION STUDY
 INITIAL 1985 STREET
 AND HIGHWAY NETWORK
 WITH ALTERNATIVES
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- LEGEND**
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NOTE: IMPROVEMENT DESIGNATIONS CORRESPOND WITH TYPICAL CROSS SECTIONS SHOWN ON SEPARATE FIGURES.

PROCEDURES AND RESULTS OF THE TESTING OF ALTERNATIVES

Procedures followed in testing each alternative were similar to those used in development of the Initial 1985 Street and Highway Network.

Since there were many alternatives and they were widely distributed throughout the study area, it was apparent that a number of the network modifications could be grouped and tested together to determine their effect on traffic distribution. After thorough review of all alternatives involved, it was decided that three basic traffic assignments would be sufficient to analyze each alternative's impact on travel patterns.

The trip table, based on travel times derived from the Initial Network, was assigned to three alternate networks shown in Figures 6 through 9. Traffic volumes from these assignments were used to compare alternatives with the Initial Network. The Index, starting on page 58, indicates which alternate network was used as well as the location of the evaluation of alternatives. In addition, each alternative was evaluated as to its cost and compatibility with the community goals and objectives.

The basic transportation goal as determined by the Citizens' Advisory Committee is to "develop a transportation system in the metropolitan area to provide for the safe, efficient and economic movement of people and goods." The Committee also set forth a general outline of action covering 15 specific areas of concern. Of these, the following are especially pertinent to the evaluation of alternatives described in this report:

1. Provide for the ease of movement within the metropolitan area by coordinating the various local street systems.
2. Develop streets with consideration of the requirements of existing and future land uses being served.
3. Design highways to provide convenient access to and from high traffic generating land uses such as schools, parks, commercial complexes and industrial areas.

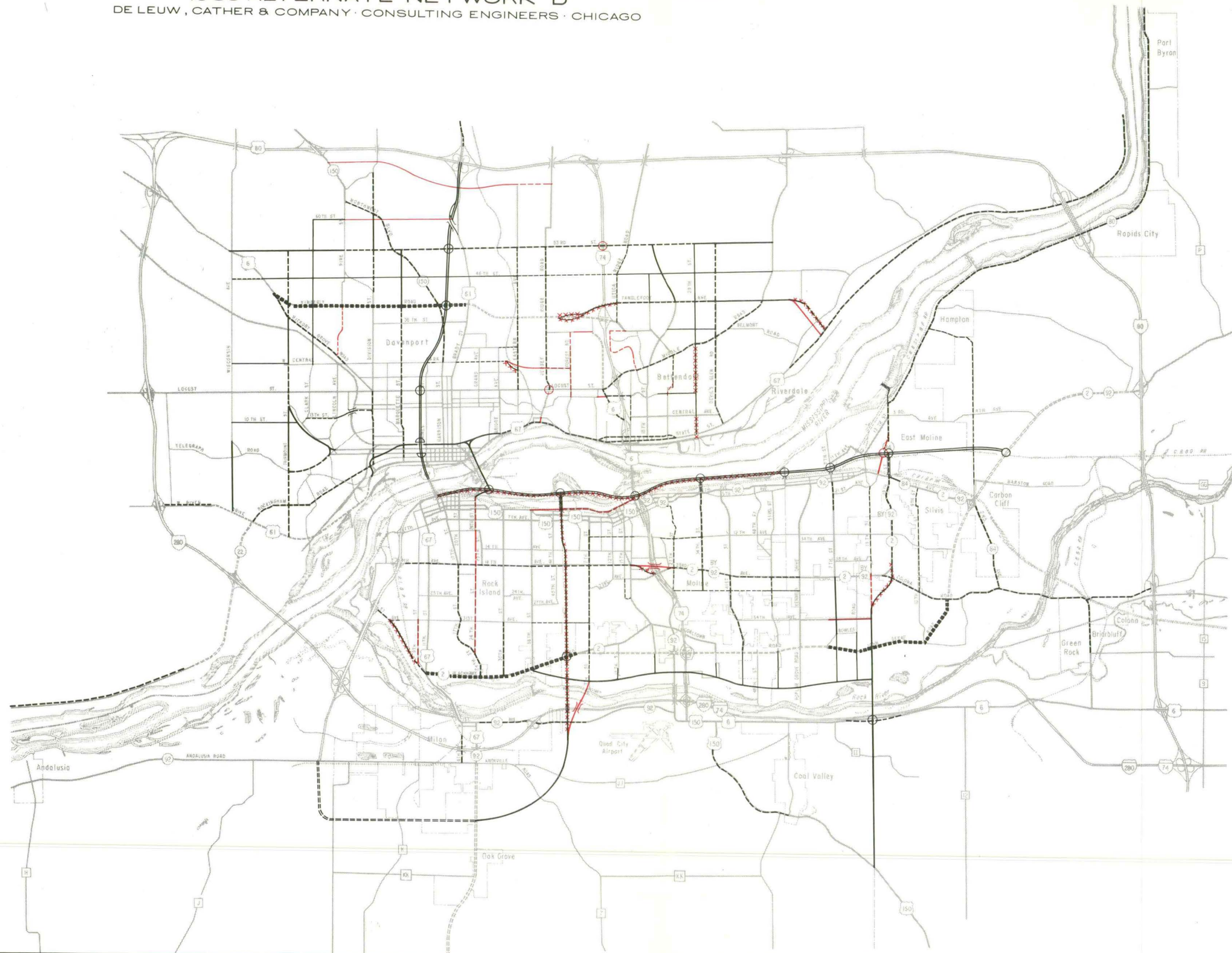
4. Use transportation programs to encourage desired development patterns.
5. Preserve the integrity of residential neighborhoods by discouraging through traffic in such areas.
6. Enhance the central business districts by developing bypasses to carry through traffic around the core of these areas.
7. Provide for the safe and convenient movement of traffic by constructing railroad viaducts and overpasses on highly traveled arteries.

These items as well as others suggested by the Citizens' Advisory Committee guided development of the proposed street and highway plan. They are also referred to in the following sections of this report, in each instance where they were instrumental in evaluating the merits of suggested alternatives.

Major Alternatives

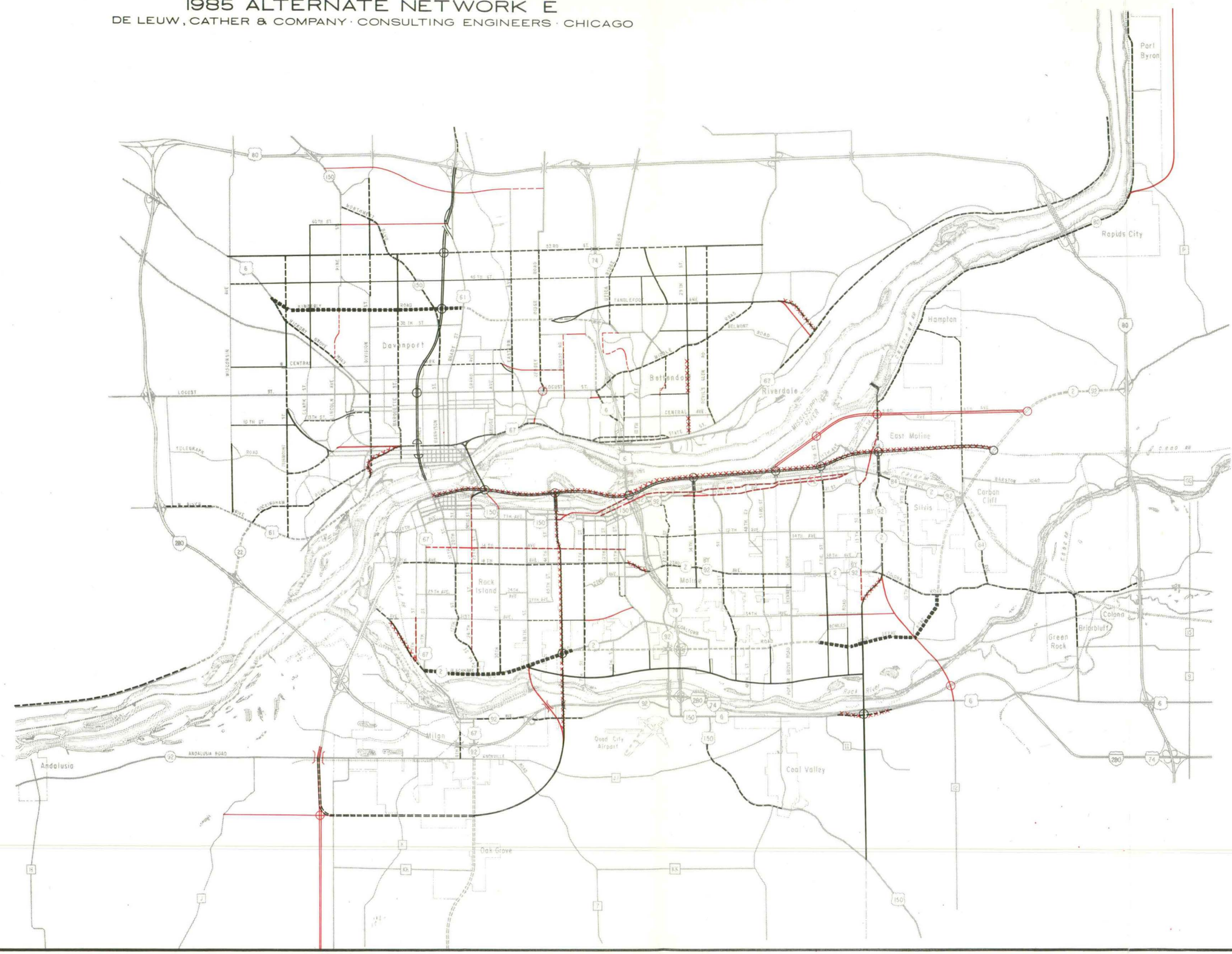
Following is the analysis of major alternatives, separately or in related groups, with a discussion of advantages, disadvantages, areawide implications of each, as well as the Consultant's recommendations.

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 1985 ALTERNATE NETWORK D
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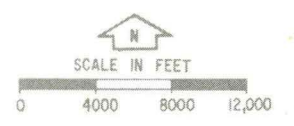
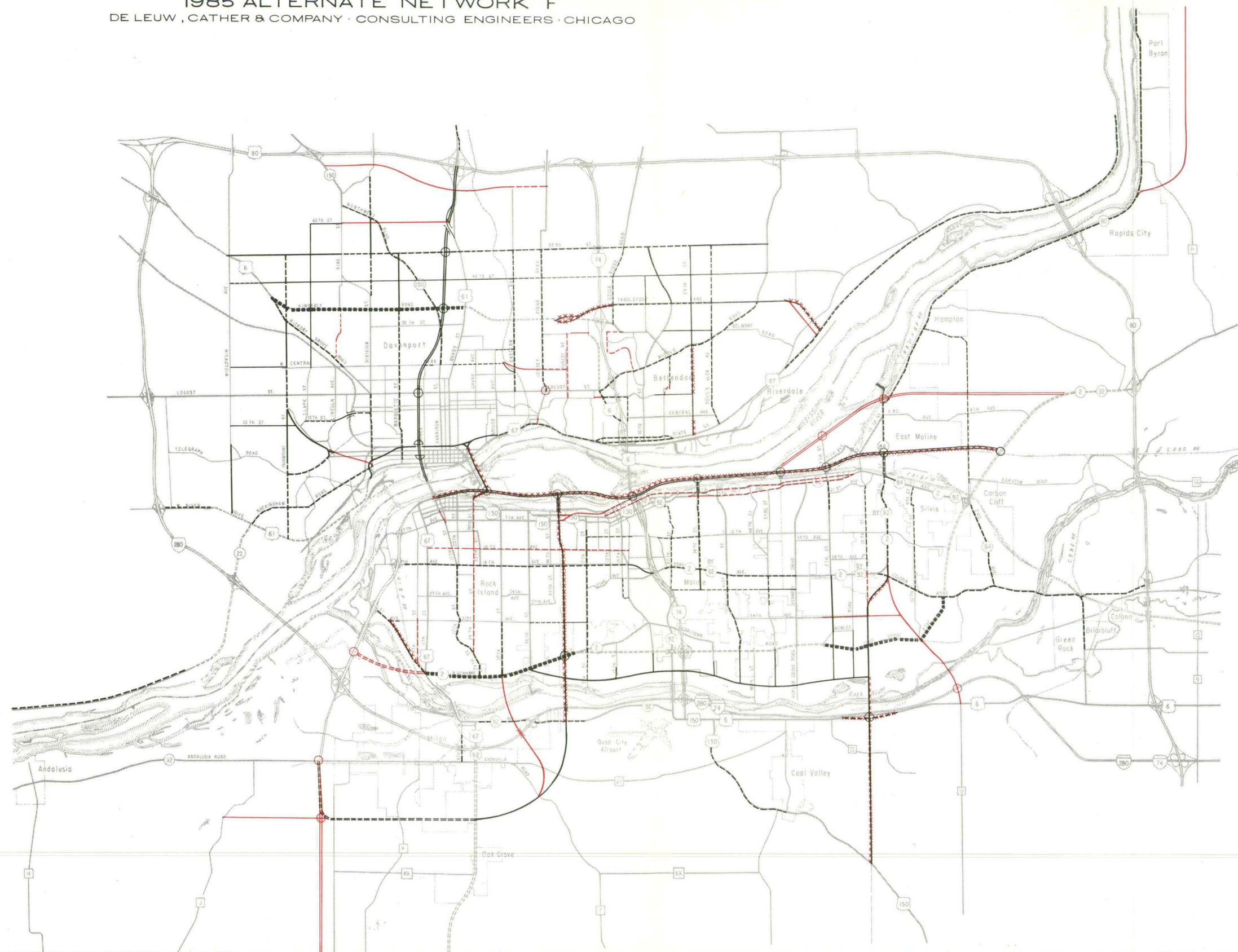
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DAVENPORT · ROCK ISLAND · MOLINE
 URBANIZED AREA TRANSPORTATION STUDY
 1985 ALTERNATE NETWORK E
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- LEGEND**
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DAVENPORT · ROCK ISLAND · MOLINE
 URBANIZED AREA TRANSPORTATION STUDY
 1985 ALTERNATE NETWORK F
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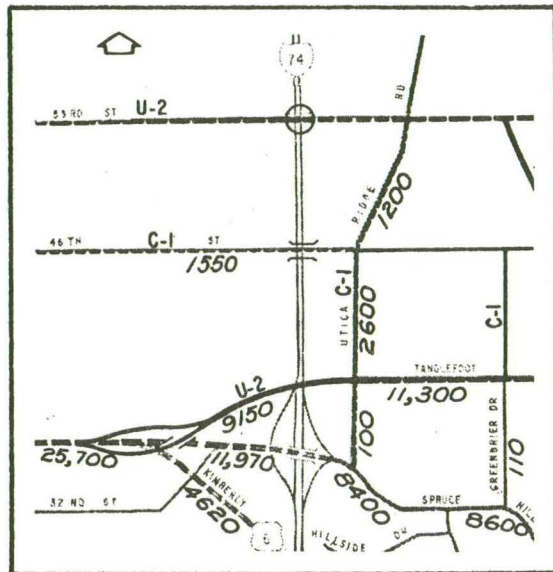
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- ALTERNATIVES**
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 - xxxxxx DELETIONS
 - INTERCHANGE

BETTENDORF

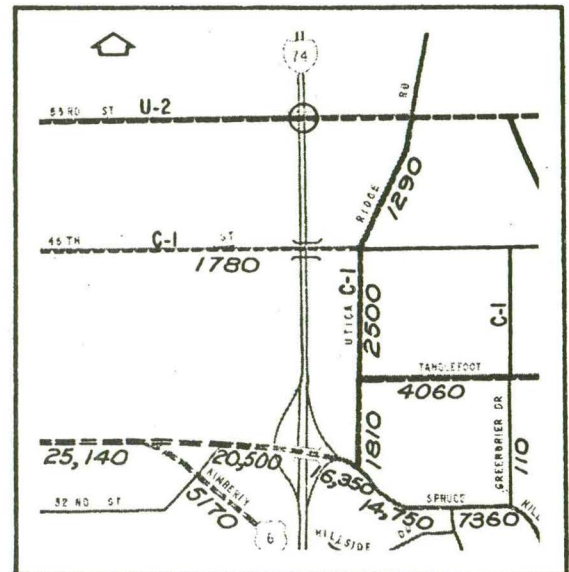
B-1 Test the effect of deleting the proposed Kimberly Road extension across I-74 to connect with Tanglefoot Lane.

IOWA STATE HIGHWAY COMMISSION

IHC-1b The Iowa State Highway Commission staff questions the justification of the expenditures required for the directional interchange at Kimberly Road with the separation structure on the Tanglefoot Lane connection. They feel that service might be provided better with the Tanglefoot Lane connection east of the Kimberly Road Interchange on I-74.



INITIAL NETWORK



ALTERNATIVES B-1 & IHC-1b

Advantages

- Cost saving of approximately \$1,000,000.
- Eliminates one additional major interchange on Kimberly Road.

Disadvantages

- Traffic through I-74 - Kimberly Road interchange nearly doubled.
- Increases traffic through residential neighborhood east of I-74.

Areawide Implications

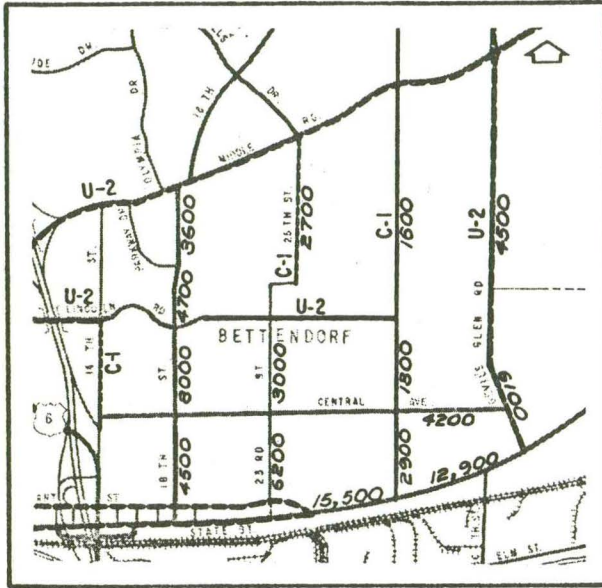
Reduces system continuity in an east-west corridor through the Iowa portion of the area.

Consultant's Recommendation

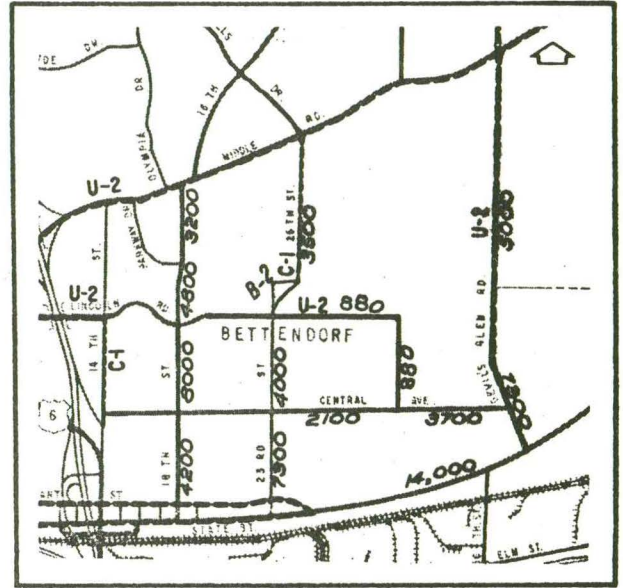
Retain Kimberly Road extension as a late priority item to be reevaluated when further consideration is given to another Mississippi River crossing in the vicinity of Campbell's Island.

BETTENDORF

B-2 Test the effect of deleting the proposed 29th Street from State Street to Central Avenue and from Lincoln Road to Middle Road and eliminating the jog in 23rd-25th Street.



INITIAL NETWORK



ALTERNATIVE B-2

Advantages

Eliminates potential conflict with planned land development.

Disadvantages

Slightly increases traffic on 23rd-25th Streets and Devil's Glen Road.

Less direct routes of travel to gain access to major thoroughfares.

Areawide Implications

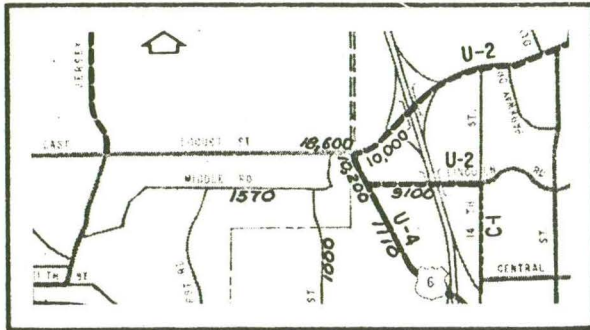
None

Consultant's Recommendation

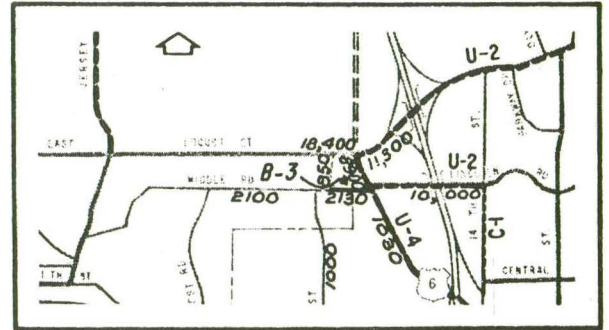
Proposed 29th Street improvement may be deleted from program without serious implications. Cost saving of approximately \$610,000.

BETTENDORF

B-3 Test the effect of connecting Lincoln Road and Middle Road in Davenport.



INITIAL NETWORK



ALTERNATIVE B-3

Advantages

Provides an additional east-west route between residential sections of Davenport and Bettendorf.

Slightly reduces traffic at the intersection of Locust Street and Kimberly Road.

Disadvantages

None

Areawide Implications

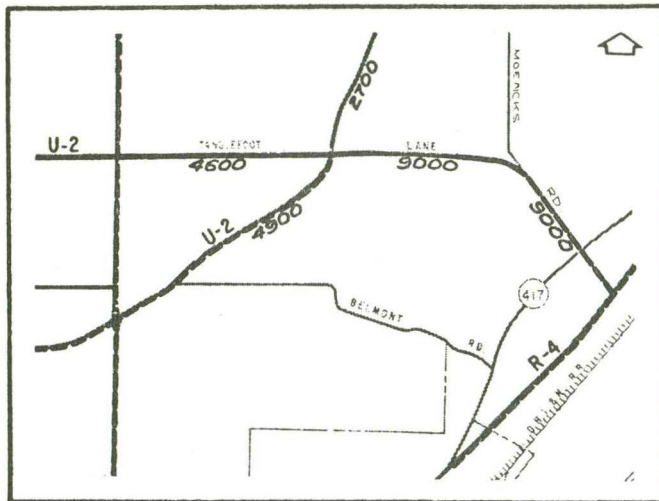
None

Consultant's Recommendation

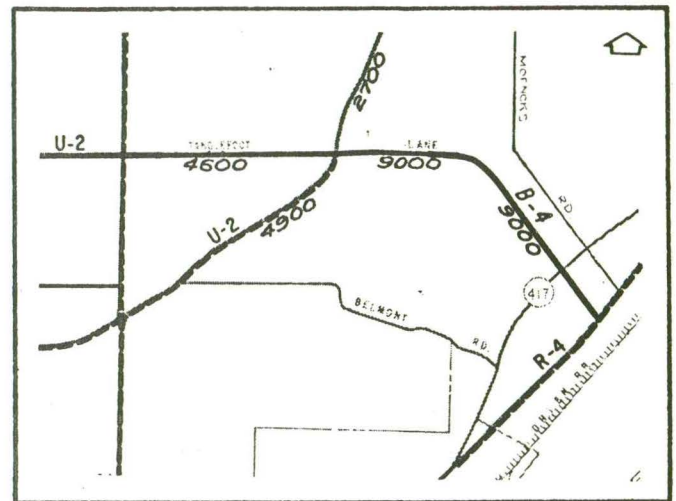
Add connection between Lincoln and Middle Roads to the transportation plan. Additional cost approximately \$125,000.

BETTENDORF

- B-4 Test the desirability of locating the extension of Tanglefoot Lane to U.S. 67 along the west side of Panorama Park rather than along Moencks Road.



INITIAL NETWORK



ALTERNATIVE B-4

Advantages

Location west of Panorama Park is more compatible with Bettendorf Master Plan.

Disadvantages

Additional right of way required.

Areawide Implications

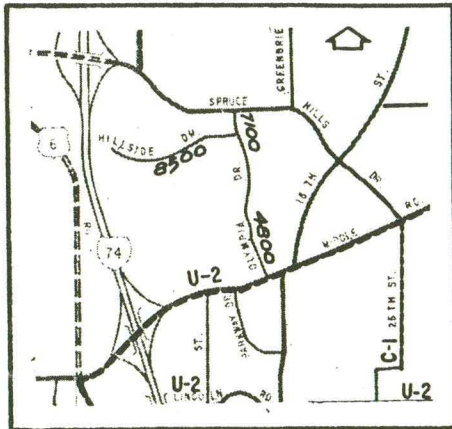
Either location satisfies traffic needs of this portion of the study area. This route may eventually connect with a bridge across the Mississippi River in the vicinity of Campbell's Island. Bridge approaches could be provided, however, at either location.

Consultant's Recommendation

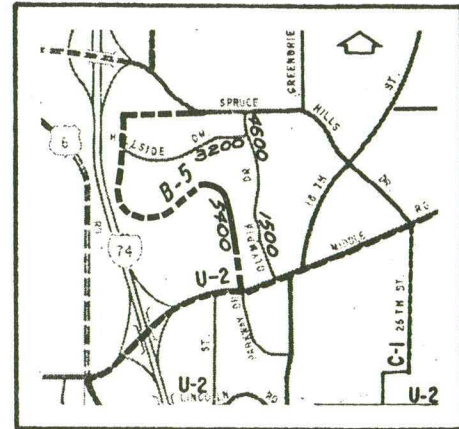
Locate extension of Tanglefoot Lane to U.S. 67 along west side of Panorama Park. Additional cost approximately \$35,000.

BETTENDORF

B-5 Test the effect of adding the following collector to the network: extension of Parkway Drive north of Middle Road along Duck Creek to Hawthorn (partially existing), along Hawthorn to Summit Hills (existing), and along Summit Hills to Spruce Hills Drive (existing).



INITIAL NETWORK



ALTERNATIVE B-5

Advantages

Provides more direct access to major thoroughfares, especially Middle Road.

Disadvantages

None

Areawide Implications

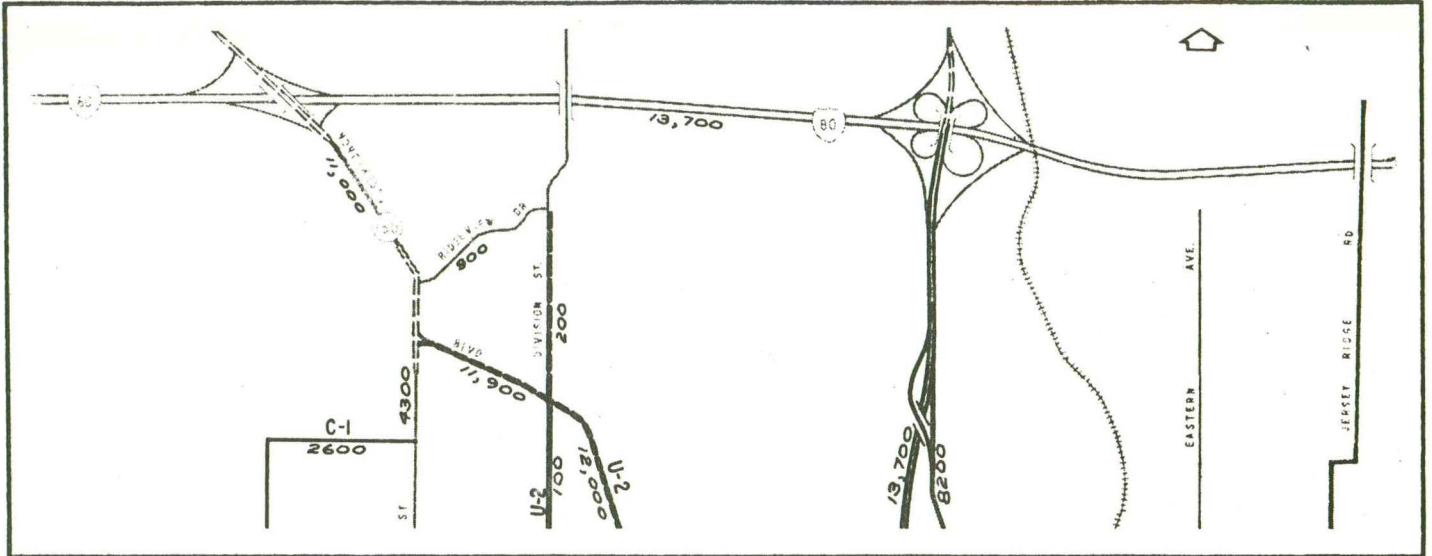
None

Consultant's Recommendation

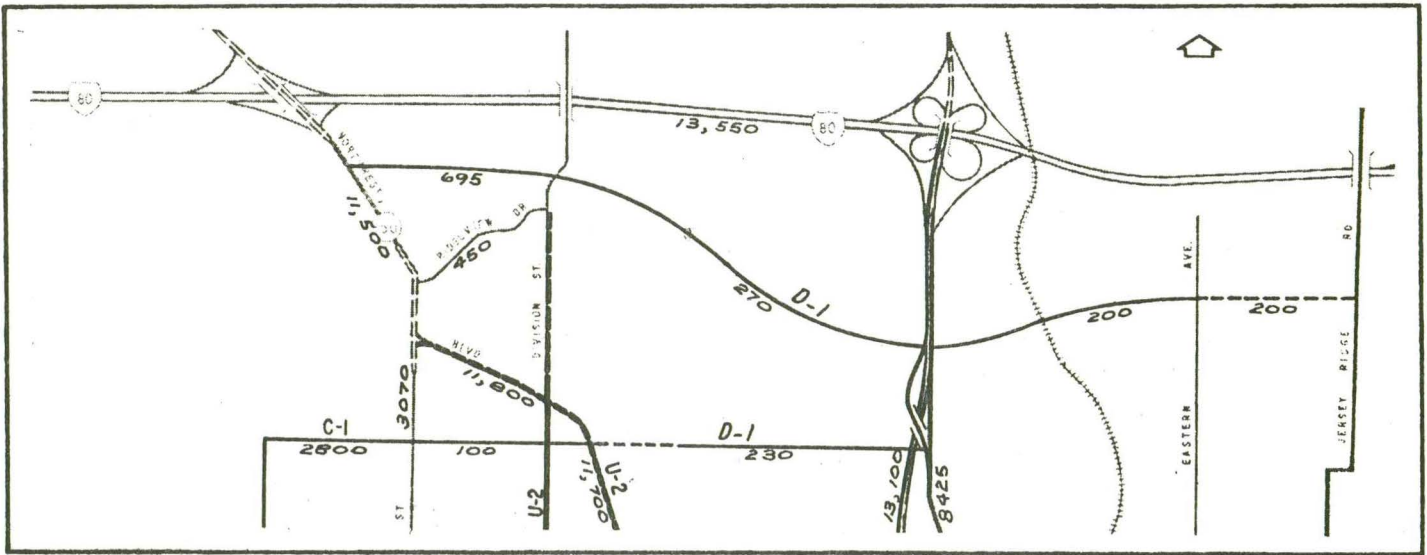
Include Alternative B-5 in the transportation plan. Additional cost approximately \$660,000.

DAVENPORT

D-1 Test collectors along 60th Street from Clark Street to Brady Street and along 65th-67th from Northwest Boulevard to Jersey Ridge Road.



INITIAL NETWORK



ALTERNATIVE D-1

Advantages

Provides east-west local traffic service in area with potential for future growth.

Disadvantages

Carries relatively small volume of traffic.

Areawide Implications

None

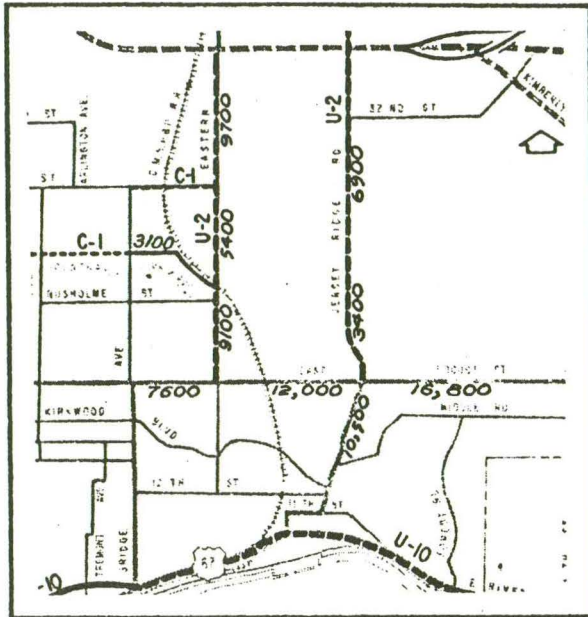
Consultant's Recommendation

Include both suggested alternatives in proposed system. Estimated additional cost \$2,600,000.

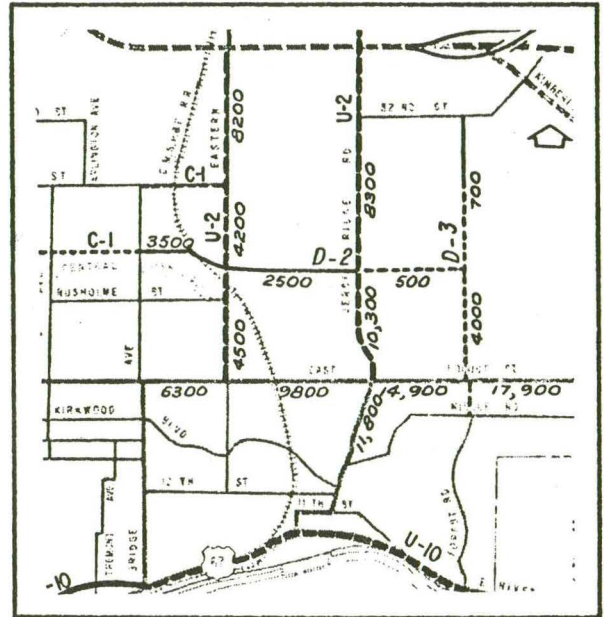
DAVENPORT

D-2 Test extension of East Central Park from Eastern Avenue to Forest Road.

D-3 Test extension of Forest Road north from Middle Road to 32nd Street.



INITIAL NETWORK



ALTERNATIVES D-2 & D-3

Advantages

Provides system continuity where there is no traffic service at the present time.

Reduces traffic volume on portions of Locust Street and Jersey Ridge Road.

Relieves potential congestion at intersection of Locust Street and Jersey Ridge Road.

Disadvantages

None

Areawide Implications

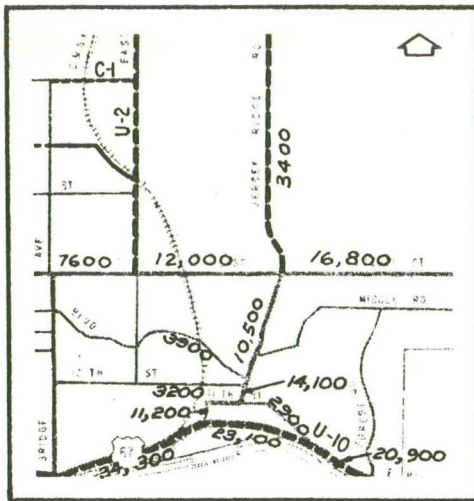
None

Consultant's Recommendation

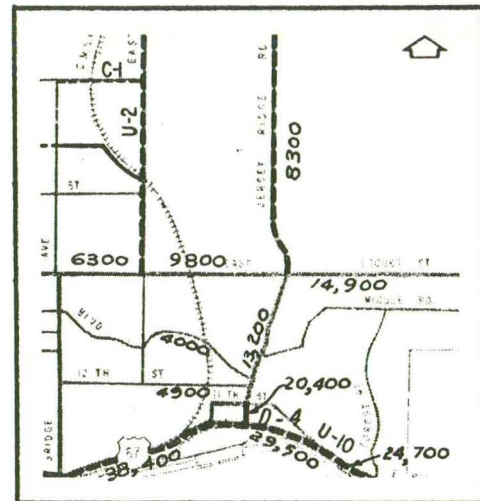
Include both suggested alternatives in transportation plan. Additional cost approximately \$1,000,000.

DAVENPORT

D-4 Test extension of Jersey Ridge Road from 11th Street to River Drive.



INITIAL NETWORK



ALTERNATIVE D-4

Advantages

Direct connection between East River Drive and major north-south thoroughfare.

Eliminates heavy turning volume at 11th Street and Jersey Ridge Road.

Disadvantages

Projected traffic volumes will require high type interchange at Jersey Ridge Road and East River Drive.

Bisects existing City park.

Increases projected traffic on residential section of Jersey Ridge Road.

Areawide Implications

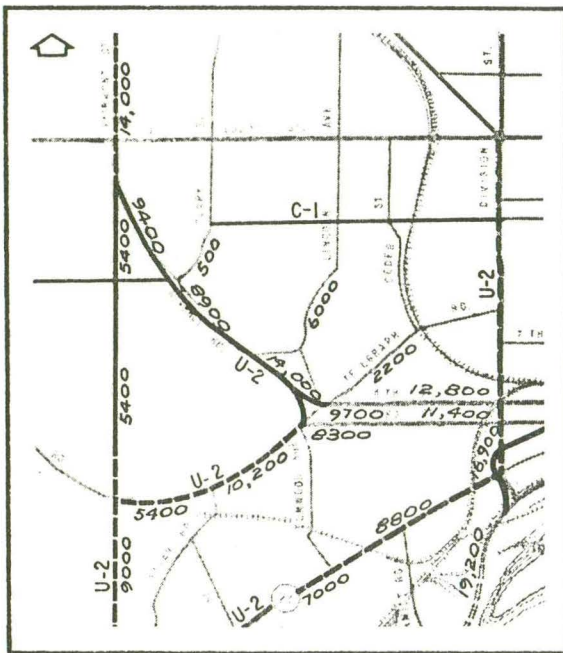
In conjunction with other system modifications, contributes to greater travel on East River Drive and the Memorial Bridge (I-74).

Consultant's Recommendation

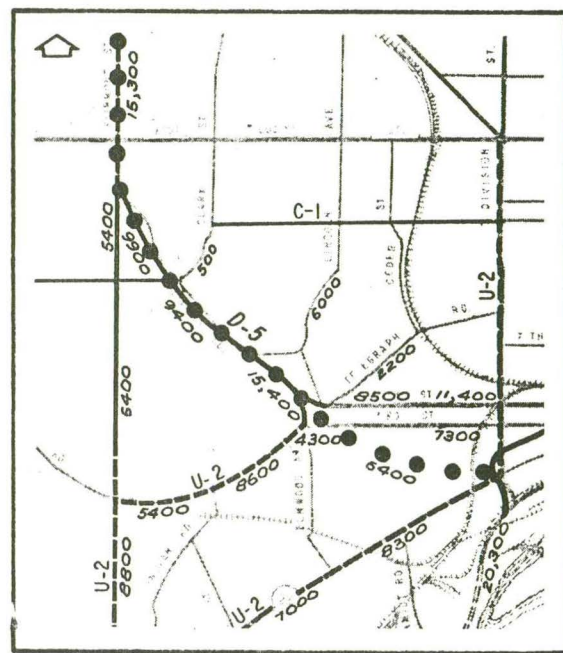
Advantages in terms of traffic service nearly balance disadvantages in other areas. Facility not recommended at this time but should be re-studied later. Estimated cost \$1,300,000.

DAVENPORT

D-5 Test the desirability of providing right of way for a U-6 facility along Fairmount Road and Waverly Road from Kimberly Road to River Drive near the City Cemetery.



INITIAL NETWORK



ALTERNATIVE D-5

Advantages

Provides a slightly more convenient route into downtown Davenport.

Additional right of way on Waverly Road will facilitate future improvement, if required.

Disadvantages

Relatively low projected traffic volume on extension from Telegraph Road to River Drive.

Areawide Implications

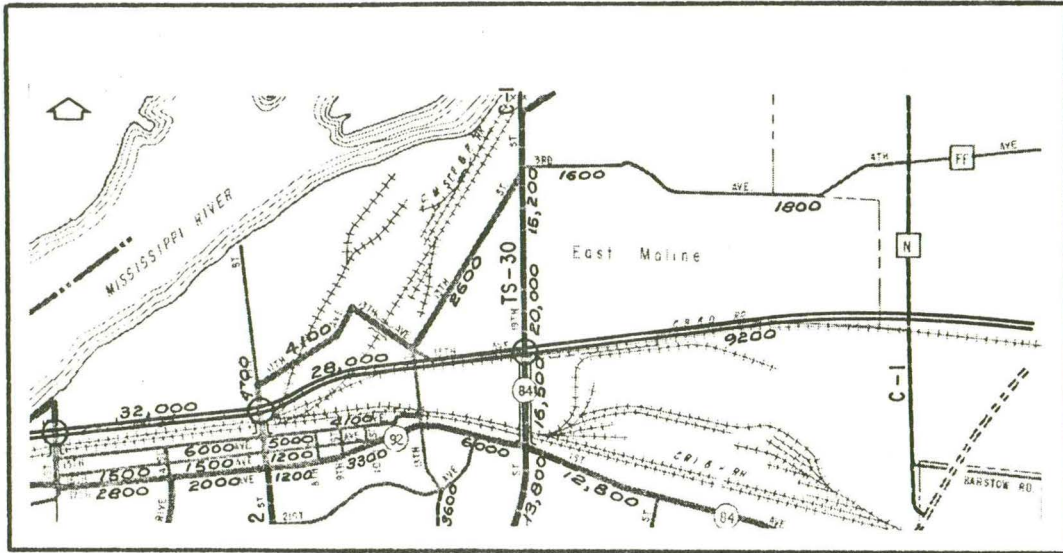
None

Consultant's Recommendation

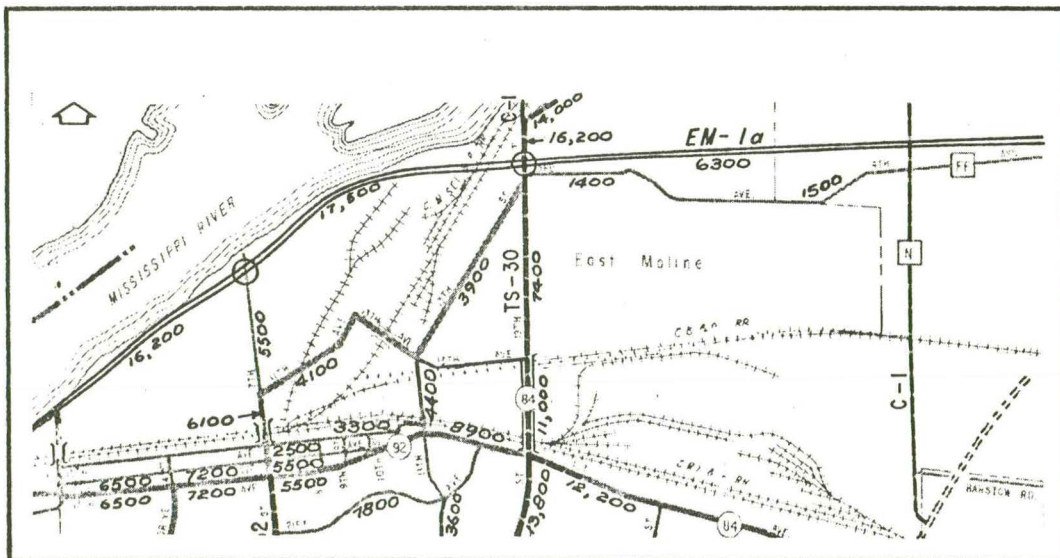
Acquire additional right of way on Fairmont and Waverly Roads from Kimberly Road to Telegraph Road. Improvement of 3rd and 4th Streets, however, together with railroad grade separations would be adequate for future traffic without the suggested extension to River Drive.

EAST MOLINE

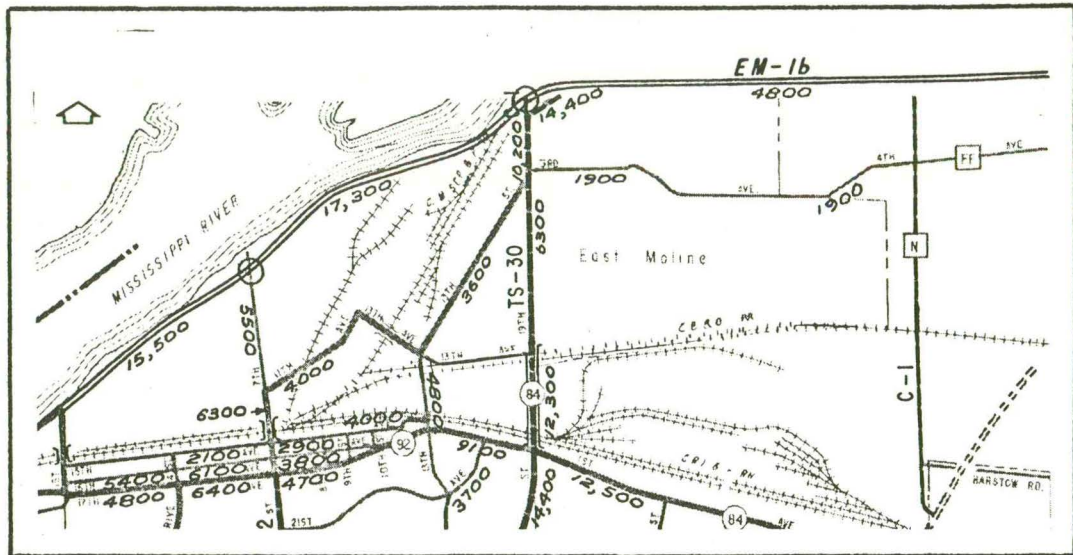
EM-1 As an alternate location of the Illinois Mississippi Riverfront Freeway through East Moline, consider a proposed alignment along the river's edge from 1st Street to the sewage treatment plant and then easterly along 3rd Avenue to intersect with Illinois Routes 2 and 92. An alignment immediately north of East Moline State Hospital should also be tested.



INITIAL NETWORK



ALTERNATIVE EM-1a



ALTERNATIVE EM-1b

Advantages

- Eliminates interference with proposed industrial park.
- Allows possibility of combining highway and flood protection.

Disadvantages

- Forecasted traffic volume decreases as facility is moved north.
- Less direct connections to downtown East Moline.

Areawide Implications

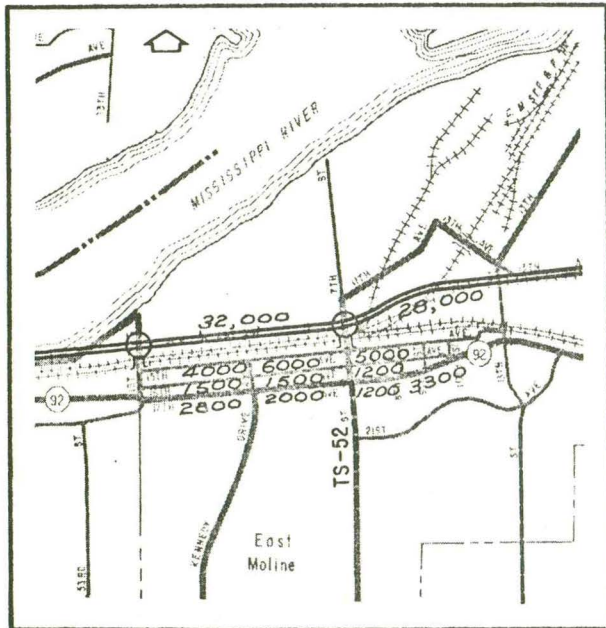
- Travel on other east-west thoroughfares increased slightly.

Consultant's Recommendation

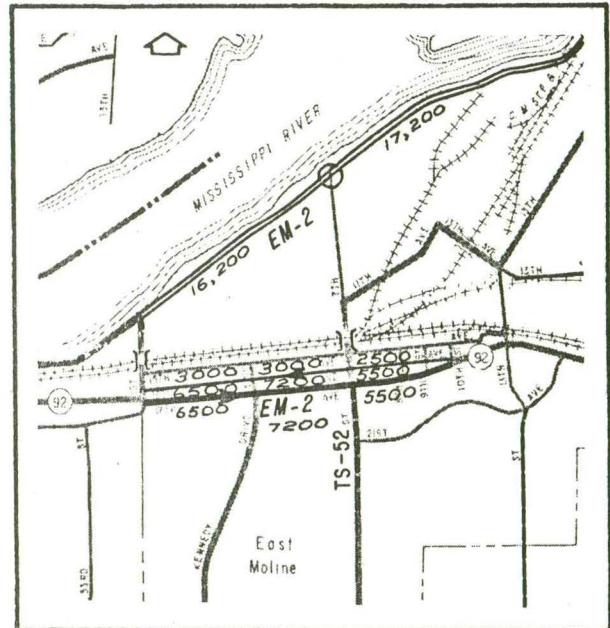
Relocate facility as shown in Alternative EM-1a. Estimated additional cost approximately \$5,000,000. Could be reduced if flood protection is provided and paid for separately.

EAST MOLINE

EM-2 As a supplement to the proposed Riverfront Freeway, test a one-way street system along 16th and 17th Avenues.



INITIAL NETWORK



ALTERNATIVE EM-2

Advantages

- Distributes 17th Avenue traffic to other facilities.
- Connects with suggested one-way street system in Moline.

Disadvantages

- Increases traffic through business district.

Areawide Implications

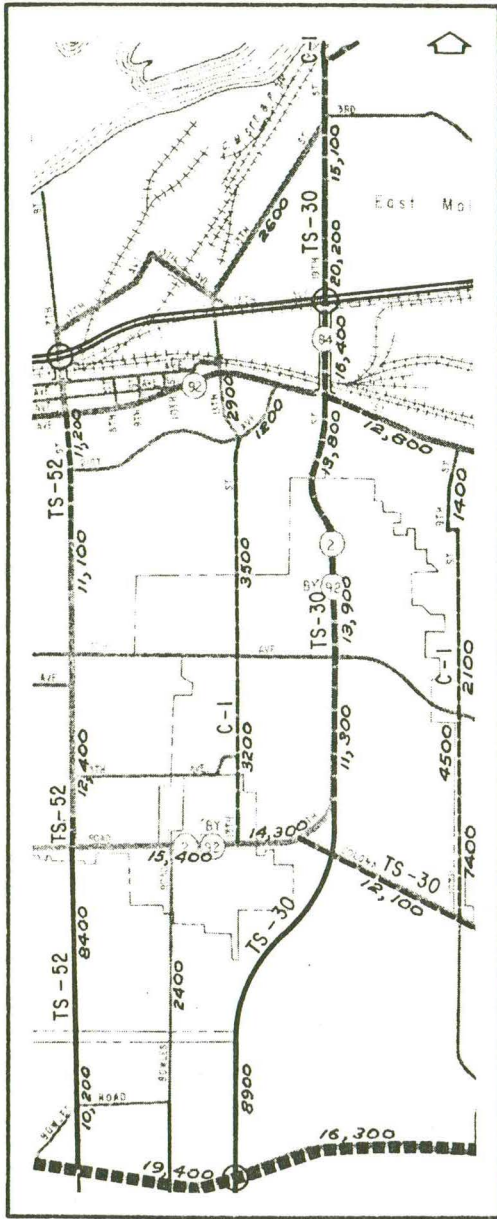
None

Consultant's Recommendation

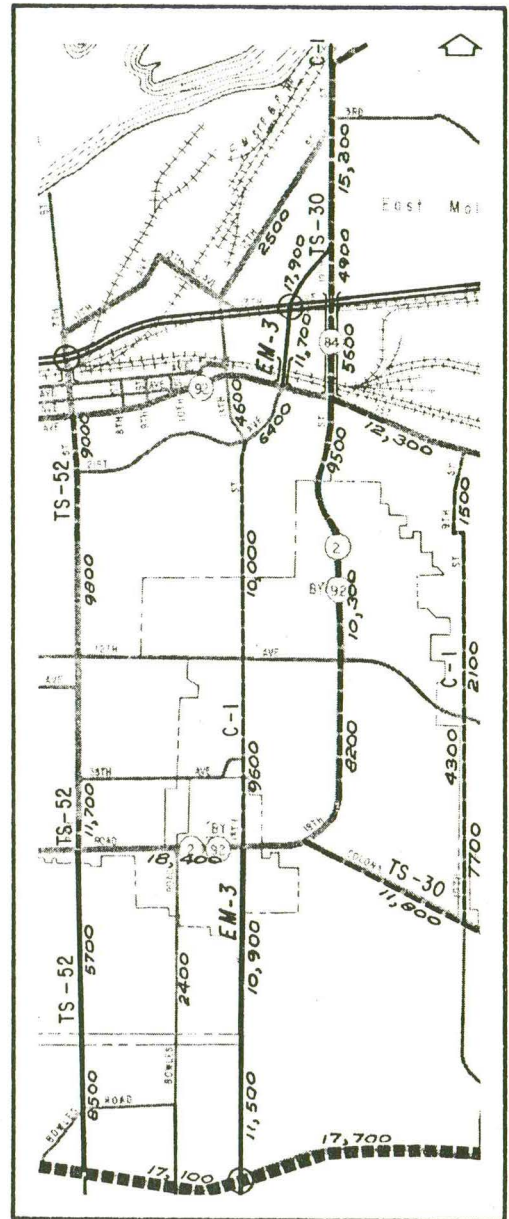
Not required in transportation plan. Could be implemented as a traffic operational improvement before relief is provided by construction of riverfront expressway.

EAST MOLINE

EM-3 Test the 13th-15th-17th Street location as an alternative to the proposed 19th Street facility.



INITIAL NETWORK



ALTERNATIVE EM-3

Advantages

None

Disadvantages

Increases traffic on 13th Street which is more residential than 19th Street and abuts several schools.

Areawide Implications

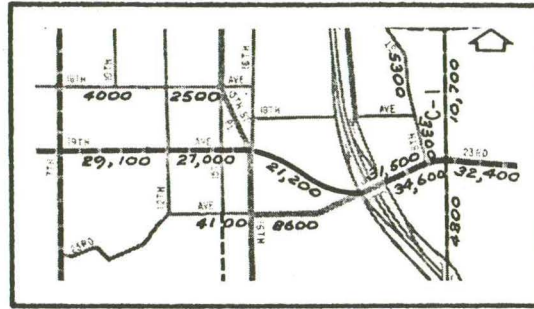
Less compatible with recommended plan for East Rock River crossing (see Alternative IDH-3).

Consultant's Recommendation

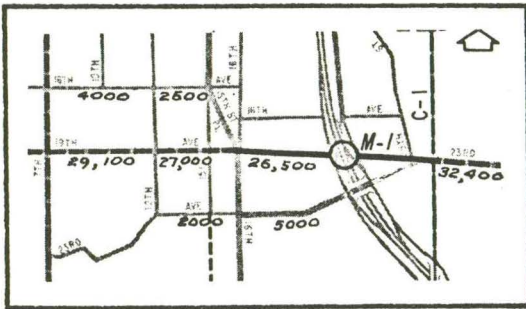
Retain 19th Street location as shown in initial network.

MOLINE

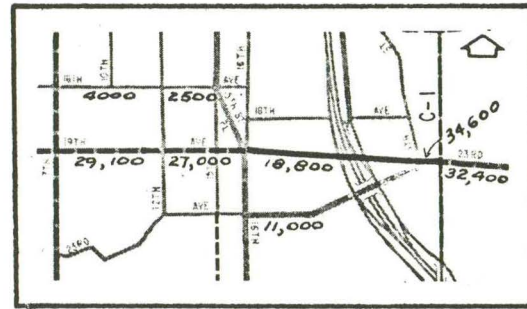
- M-1a Relocation of the planned I-74 - 23rd Avenue interchange northward to 19th Avenue.
- M-1b Development of a "bypass" connection between the 19th Avenue - 16th Street intersection and the 23rd Avenue - 25th Street intersection. Moline feels that such an alternative would be acceptable only if it did not interfere with the present I-74 construction schedule.



INITIAL NETWORK



ALTERNATIVE M-1a



ALTERNATIVE M-1b

Comments

The bypass suggested in Alternative M-1b would be difficult and costly to construct. It would also involve a five-pointed intersection at 23rd Avenue and 27th Street.

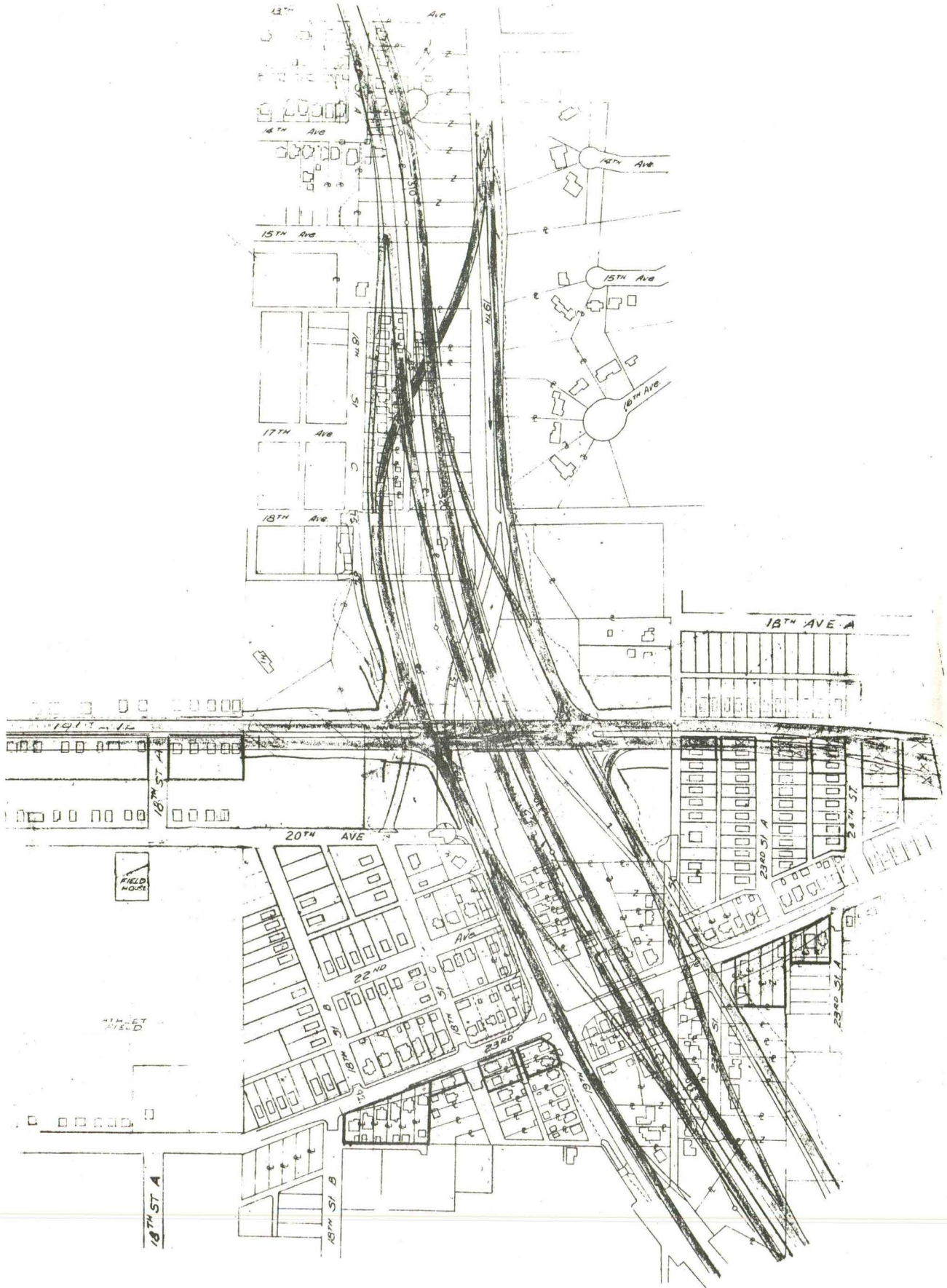
The interchange could be relocated, as shown, northward to 19th Avenue with very little additional right of way required for initial construction. Approximately 50 residences would have to be acquired, however, to provide satisfactory approaches in the future.

Construction would probably be delayed for re-design and acquisition of additional right of way.

Consultant's Recommendation

The interchange location at 19th Avenue is superior to that presently planned at 23rd Avenue. If the governmental agencies are willing to endure further delay of construction, the interchange should be relocated.

ALTERNATIVE M-1a
(continued)



Comments

Portions of Alternatives M-2 and RI-4 must be considered jointly.

Both proposals attempt to provide a high-type, continuous east-west facility to replace the previously proposed riverfront expressway.

The Moline proposal is more direct, but would not make full use of the present capacity of existing 6th and 7th Avenues in Rock Island. This proposal would require taking one large industrial building at the corner of 5th Avenue and 38th Street.

The Rock Island plan would involve acquisition and demolition of numerous residences in Moline.

Cost of either alternative from I-74 to 38th Street, Rock Island, would be nearly the same--\$3,000,000.

Widening of River Drive, together with extension and improvement of existing one-way streets (4th and 5th Avenues) in Moline, would provide adequate capacity for projected east-west traffic in this corridor.

Consultant's Recommendation

Eliminate proposed riverfront expressway between I-74 and the Centennial Bridge. Extend 3rd Avenue, Moline to 5th Avenue, Rock Island as shown in Alternative M-2. Cost saving over initial proposal approximately \$20,000,000.

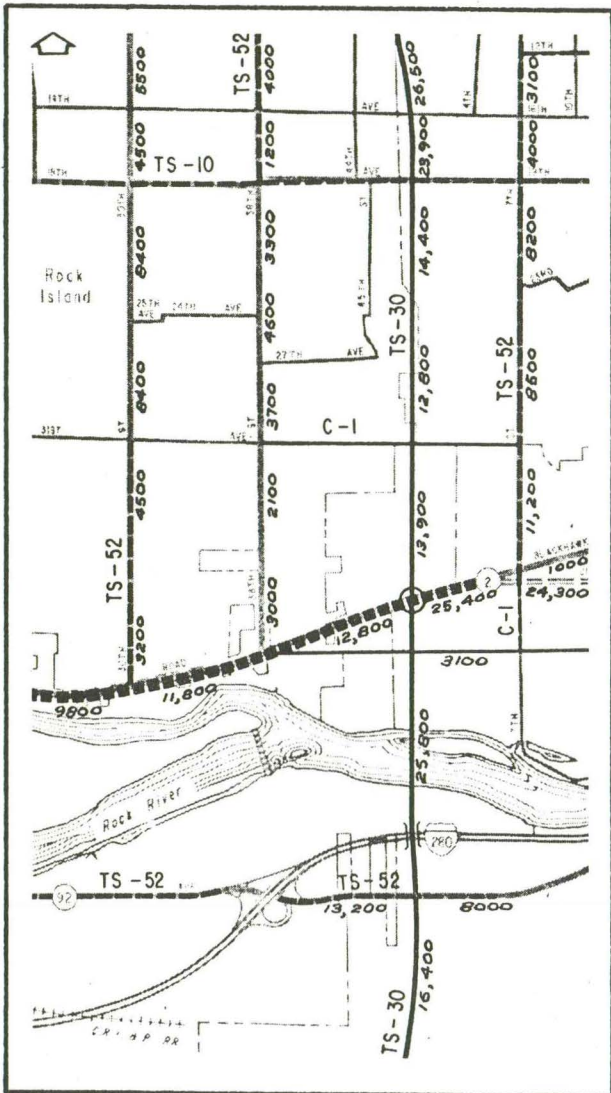
Defer near-term consideration of the riverfront expressway between I-74 and East Moline, using widened River Drive together with 4th and 5th Avenues as alternatives. This segment of the expressway should be re-evaluated in the first study update. Cost saving over initial proposal approximately \$6,000,000.

MOLINE

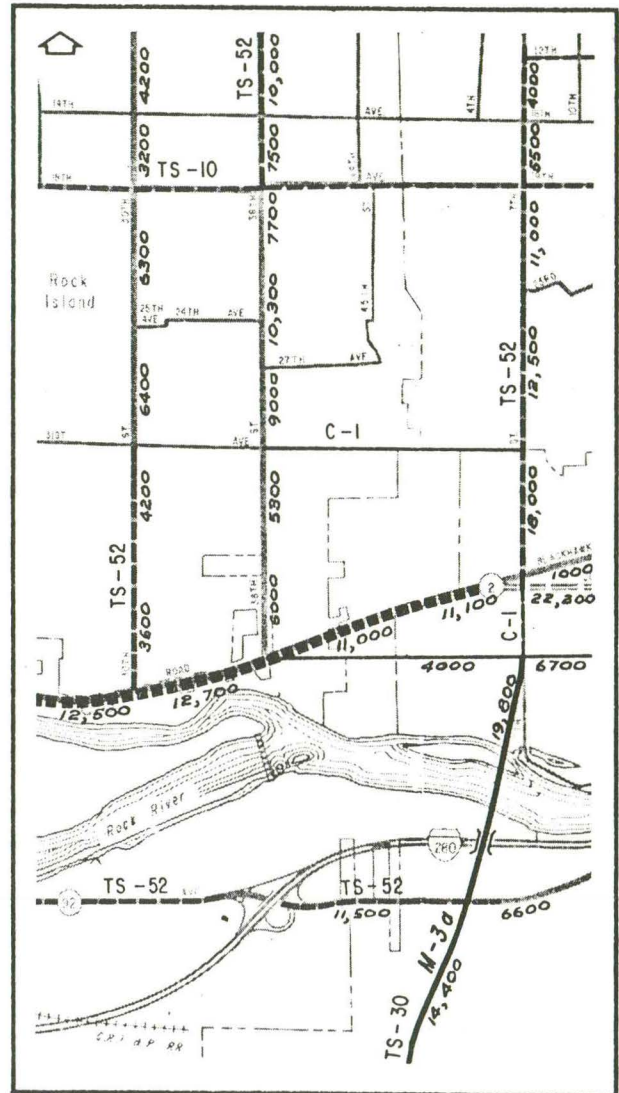
M-3a Test 7th Street, Moline as possible alternate to the proposed 1st Street, Moline--this being contingent on the future of the Riverfront Expressway vs. the 5th Avenue-3rd Avenue alignment described in M-2.

ROCK ISLAND

RI-1 Study should be made to test the effect of deleting the north-south facility in the vicinity of 46th Street, Rock Island and 1st Street, Moline.



INITIAL NETWORK



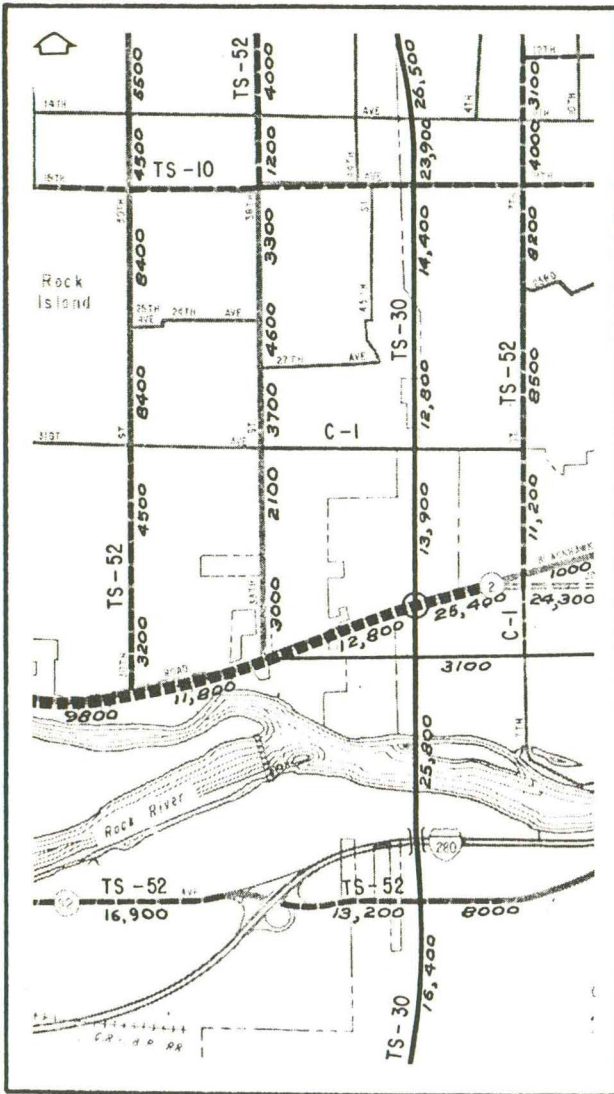
ALTERNATIVES M-3a & RI-1

MOLINE

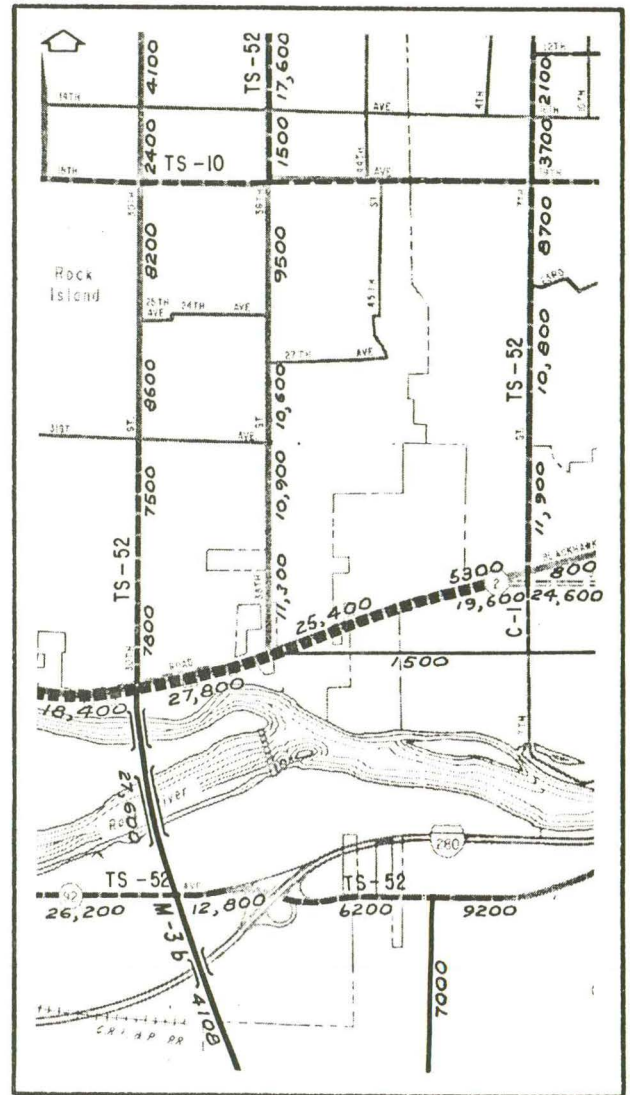
M-3b Test 30th Street, Rock Island as a possible alternate to the proposed 1st Street, Moline.

ROCK ISLAND

RI-1 Study should be made to test the effect of deleting the north-south facility in the vicinity of 46th Street, Rock Island and 1st Street, Moline.



INITIAL NETWORK



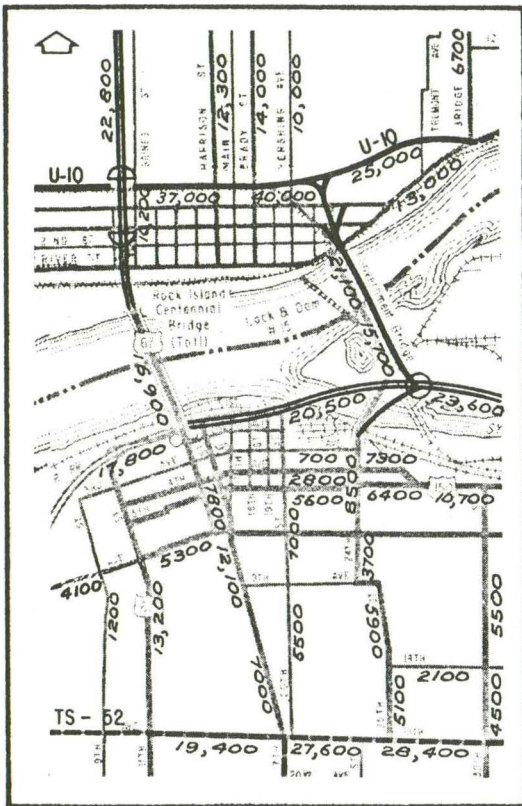
ALTERNATIVES M-3b & RI-1

IOWA STATE HIGHWAY COMMISSION

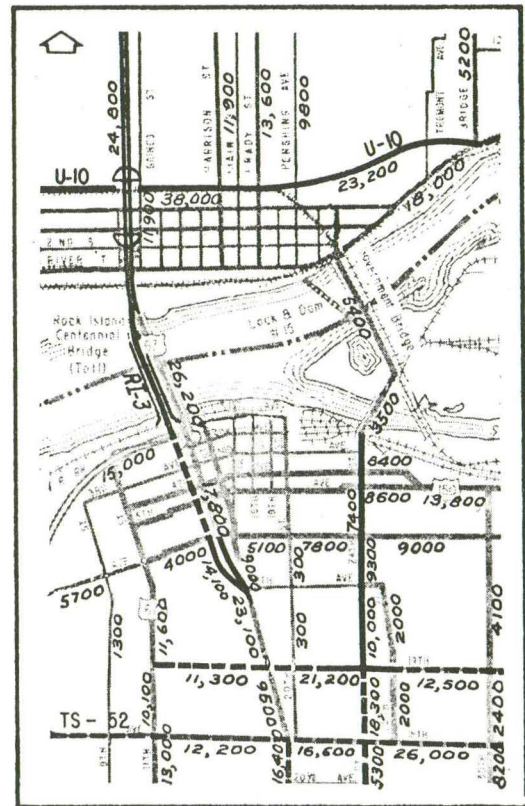
IHC-2 Test a toll bridge location proposed by Wilbur Smith and Associates and Howard, Needles, Tammen and Bergendoff in the recent Iowa State Highway Commission toll bridge report. This bridge should be tested in lieu of the new crossing proposed near the Government Bridge.

ROCK ISLAND

RI-3 The bridge proposed on Arsenal Island is not acceptable and should be placed adjacent to the Centennial Bridge in the vicinity of 14th Street in Rock Island and Brown Street in Davenport.



INITIAL NETWORK



ALTERNATIVES
IHC -2 & RI-3

Comments

The existing Government Bridge is in an excellent location to serve downtown Davenport. While structurally sound, the bridge is old and its design does not meet today's standards for a high-volume facility. There are also numerous delays due to opening of the span for river traffic. Approaches to the bridge are inadequate for present traffic volumes.

The Centennial Bridge is also well located to serve the downtown areas of both Rock Island and Davenport. In contrast to the Government Bridge, this facility is in good condition, has excellent approaches and is high enough above the water level to clear all river traffic.

The existing Government Bridge cannot be expected to provide satisfactory traffic service in the long-range plan. The present highway structure must be replaced either at its present general location or somewhere else.

Consultant's Recommendation

Consideration should be given to construction of a new bridge in the vicinity of the existing Government Bridge. This will assist in distributing traffic flow in both Davenport and Rock Island.

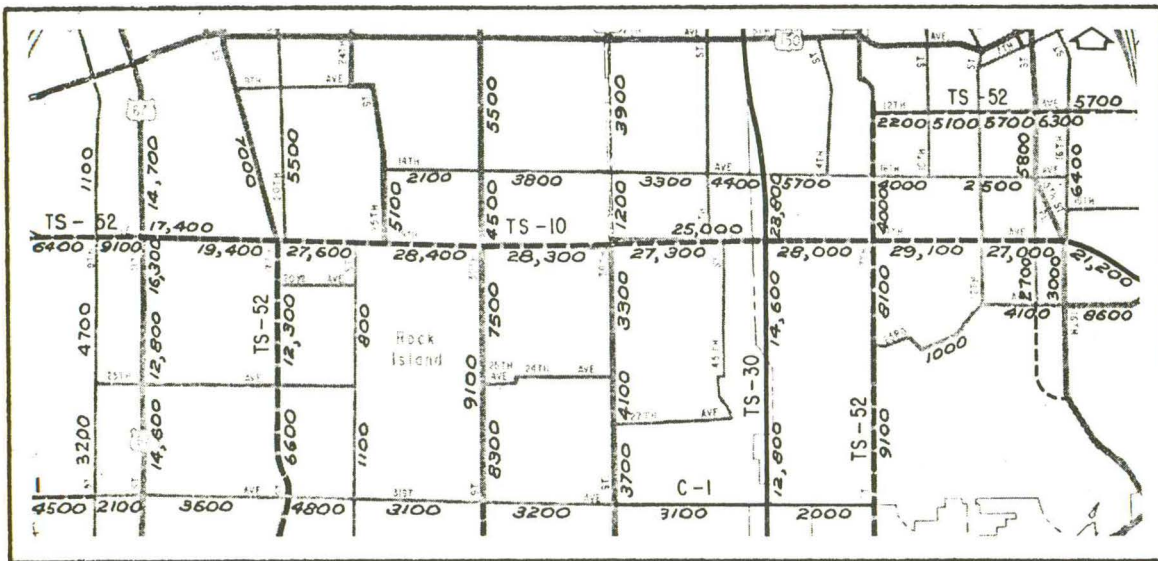
A second span adjacent to the Centennial Bridge should be evaluated upon completion of the I-280 bridge as well as I-74 connections to the Memorial Bridge.

Finally, consideration should be given, in the continuing planning process, to another river crossing in the vicinity of Campbell's Island. On the basis of 1985 land use and activity forecasts, there would be insufficient traffic justification for this facility, but potential changes in development patterns could alter projected travel patterns.

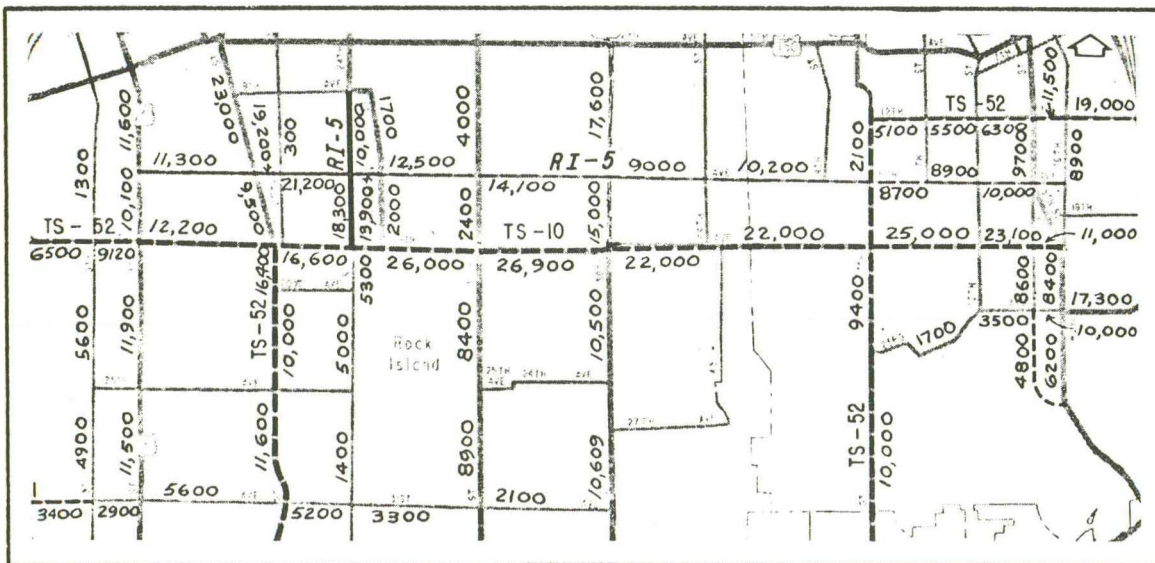
ROCK ISLAND

RI-5 Tests should be conducted on the effects of projected 18th Avenue traffic with the following improvements in place:

- a) Extension of 14th Avenue westward to either 11th or 17th Street, with 14th Avenue widened to 44 feet to the Moline border.
- b) Widen 16th Avenue in Moline to 44 feet and connect with the proposed tie-in with the 23rd Avenue - I-74 interchange in the vicinity of 15th Street.
- c) Widen 18th Avenue in Rock Island and 19th Avenue in Moline to 44 feet and tie-in to 23rd Avenue as indicated on the Initial Network Map.



INITIAL NETWORK



ALTERNATIVE RI-5

ALTERNATIVE RI-6a

Advantages

Avoids disruption of residential development and potential industrial area.

Makes better use of existing streets.

Disadvantages

Less direct connection between Blackhawk Road and Centennial Expressway.

Areawide Implications

None

Consultant's Recommendation

Improve 9th Street and 31st Avenue between Blackhawk Road and Centennial Expressway. Saving over initial proposal approximately \$800,000.

ALTERNATIVE RI-6b

Advantages

Direct connection to Centennial Expressway.

Reduces traffic on U.S. 67.

Disadvantages

Nearly impossible to locate another interchange between the two closely-spaced existing interchanges at I-280 and 31st Avenue.

Areawide Implications

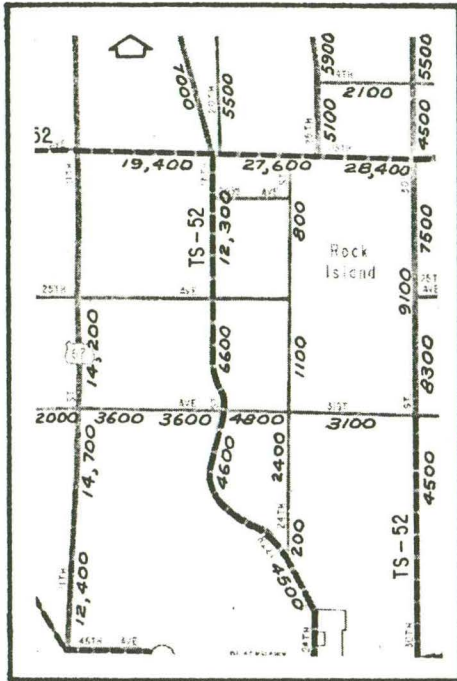
None

Consultant's Recommendation

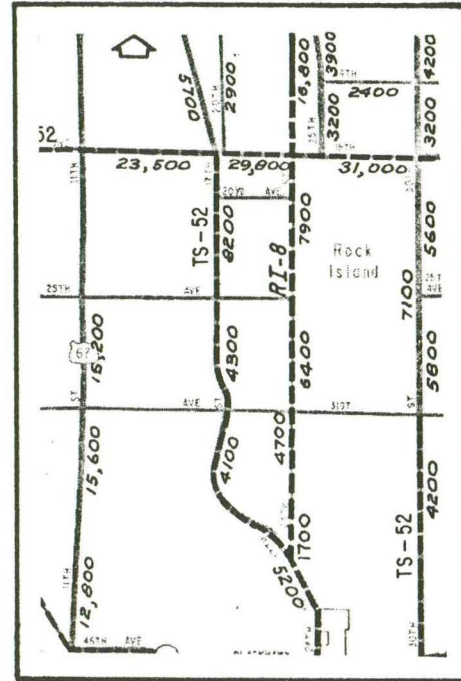
Extension not justified by projected traffic demand and would reduce efficiency of Centennial Expressway. Estimated cost \$10,000,000.

ROCK ISLAND

RI-8 Test should be made to determine if 24th Street between 17th Street and 14th Avenue should be widened to 44 feet. (If the bridge to Arsenal Island is improved, 24th Street could be extended and widened between 14th Avenue and the bridge.)



INITIAL NETWORK



ALTERNATIVE RI-8

Advantages

Provides additional needed traffic service between Government Bridge and 18th Avenue.

Serves traffic on east limits of Rock Island CBD.

Disadvantages

Traffic demand south of 18th Avenue can be accommodated on existing streets.

Areawide Implications

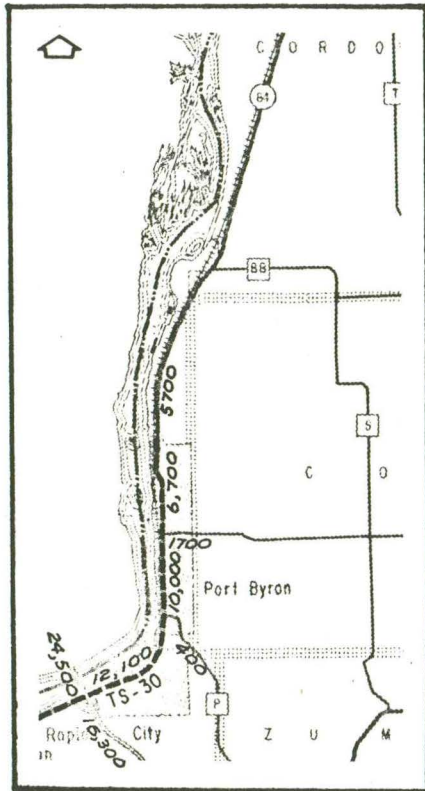
None

Consultant's Recommendation

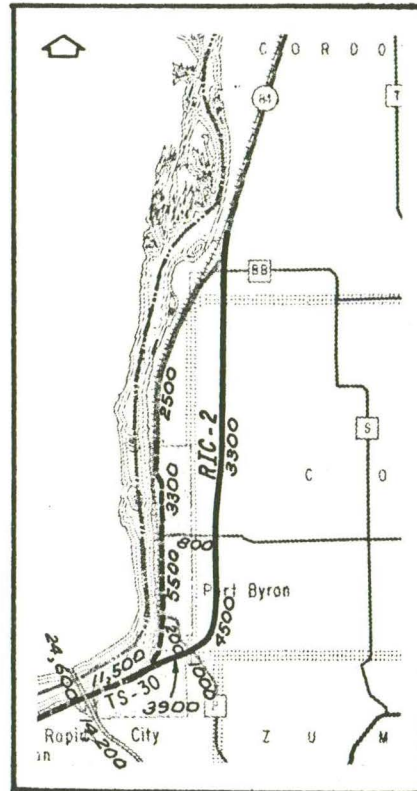
Extend and improve 24th Street from 18th Avenue to Government Bridge. Estimated cost approximately \$600,000.

ROCK ISLAND COUNTY

RIC-2 Test an Illinois Route 84 bypass from an improved and extended County Road R, which would connect with the present Illinois Route 84 northeast of Rapids City.



INITIAL NETWORK



ALTERNATIVE RIC-2

Advantages

Provides through traffic bypass around built-up areas.
Eliminates need to take residential and commercial property along existing Illinois Route 84.

Disadvantages

None

Areawide Implications

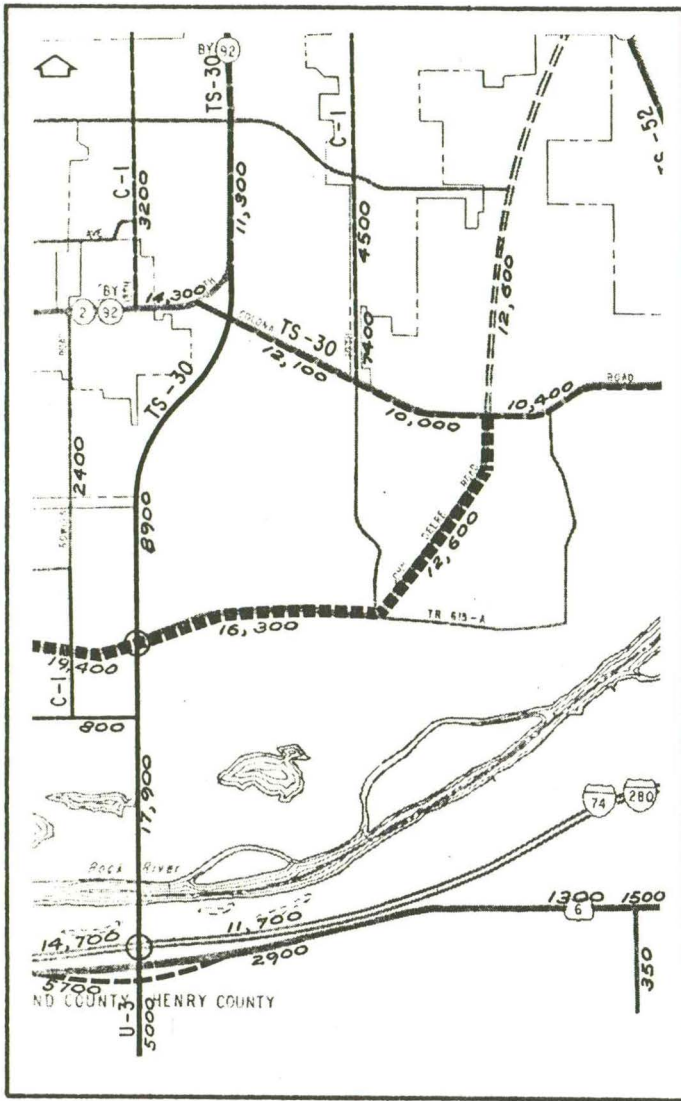
None

Consultant's Recommendation

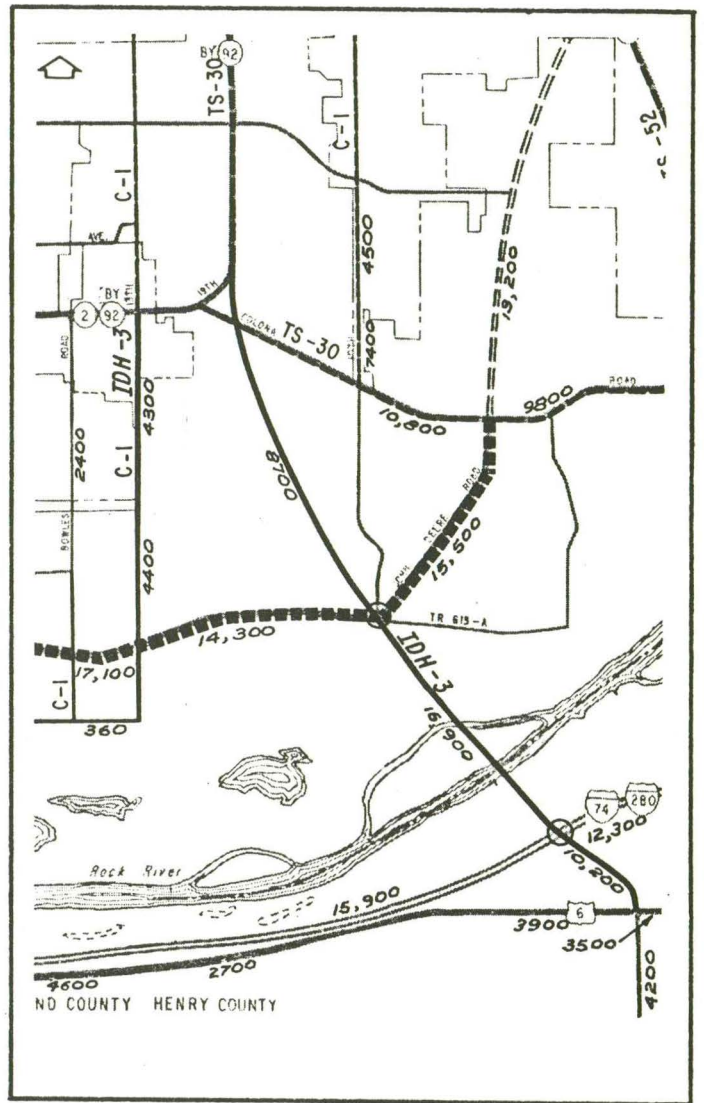
Relocate Illinois Route 84 as shown in Alternative RIC-2.

ILLINOIS DIVISION OF HIGHWAYS

IDH-3 Nineteenth Street, East Moline extended southeasterly to interchange with I-74 and then southerly on CH 12 in Henry County.



INITIAL NETWORK



ALTERNATIVE IDH-3

Advantages

Better location for interchange with I-80.
Provides direct access to Henry County.

Disadvantages

Less direct service to Coal Valley.

Areawide Implications

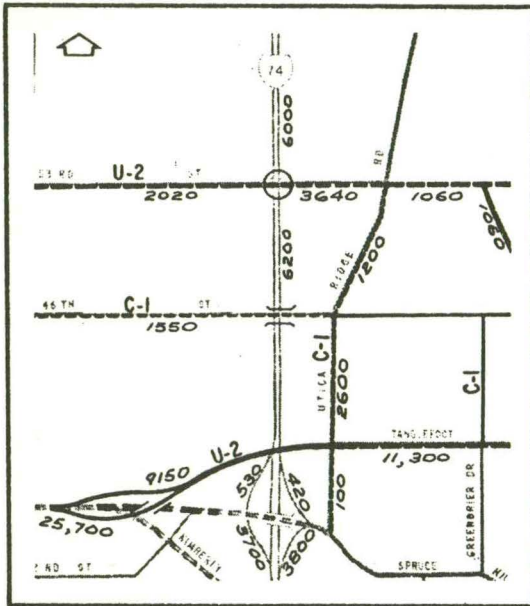
None

Consultant's Recommendation

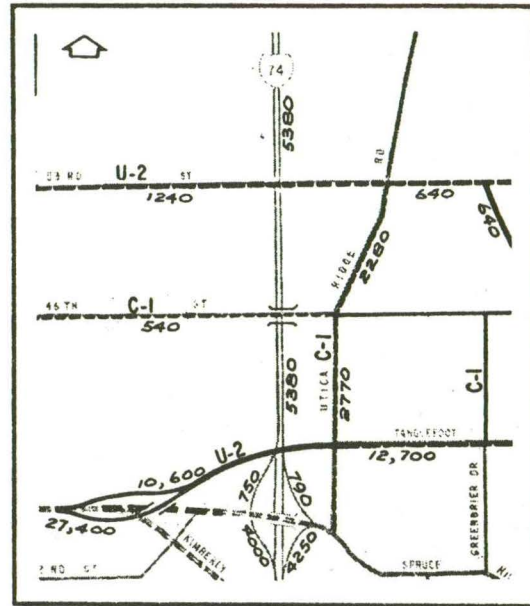
Extend 19th Street, East Moline southeasterly as shown in
Alternative IDH-3.

IOWA STATE HIGHWAY COMMISSION

IHC-1a The Iowa State Highway Commission staff questions the justification of the expenditures required for the interchange of I-74 and 53rd Street and only a separation structure at 53rd Street.



INITIAL NETWORK



ALTERNATIVE IHC-1a

Advantages

Cost saving only.

Disadvantages

Reduces usefulness of I-74 in carrying local traffic.

Increases traffic volume on north-south streets as well as at I-74 interchange with Spruce Hill Drive.

Areawide Implications

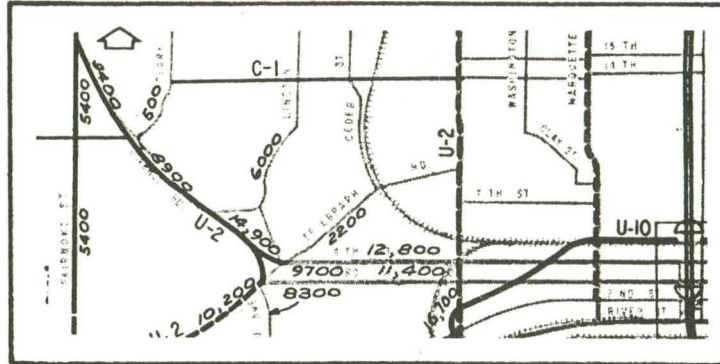
Decreases efficiency of 53rd Street as a major east-west route to serve future development.

Consultant's Recommendation

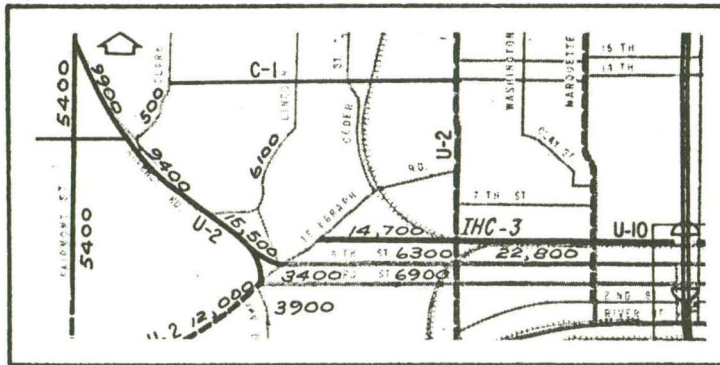
Retain proposed I-74 interchange with 53rd Street as a late priority improvement. Estimated cost of interchange approximately \$660,000.

IOWA STATE HIGHWAY COMMISSION

IHC-3 Test the extension of the Davenport CBD bypass west to Telegraph Road.



INITIAL NETWORK



ALTERNATIVE IHC-3

Advantages

Improved east-west traffic service in west Davenport.

Disadvantages

Does not fully utilize existing one-way streets.

Areawide Implications

None

Consultant's Recommendation

Retain alignment of Davenport CBD bypass as shown in initial plan. Extension might be warranted if later study shows the need for a new facility connecting Telegraph Road with Iowa Route 22.

Other Alternatives

These alternatives are all of either a special nature or are improvements of existing streets and highways. In addition, many of the proposals are located outside of the internal study area. As such, they did not require changes in the traffic assignment network for testing.

Three of the alternatives are supplemental freeways which will provide improved access to and from the Bi-State metropolitan area. Each of the supplemental freeways connects with existing or proposed major thoroughfares in the urbanized area. It is the Consultant's recommendation that they be included in the proposed transportation plan.

Other alternatives proposed in the Iowa portion of the study area are improvements of existing city streets and county highways on the fringe of the urbanized area. These facilities are major streets or their extensions in the County. They either provide access to the Interstate freeway system or route continuity with grade separations at limited access facilities. Improvement of these facilities should be included in the transportation plan.

In the Illinois portion of the study area, there are a number of improvements and additions proposed to the county highway system. All of these improvements--County Highway KK, extension of 92nd Avenue, Niabi Zoo Road, and the extension of Loud Thunder Road--are desirable for route continuity. A number of other special projects in the Illinois portion of the study area have also been proposed. Heavy truck traffic on Andalusia Road creates the need to widen that facility to four lanes. Rapidly growing air traffic will require improved access to the Quad-City Airport to be accomplished by realignment of US 6 and 150 and Illinois Route 92. Colona Road should be realigned upon construction of a new Rock River Bridge to be located near the existing structure. All of these projects are recommended for inclusion in the transportation plan.

INDEX

Location of the evaluation of alternatives and the network used to test each alternative.

<u>Alternatives</u>	<u>Alternate Networks</u>				<u>Page Number</u>
	<u>D</u>	<u>E</u>	<u>F</u>	<u>NA*</u>	
<u>Bettendorf</u>					
B-1	x				18
B-2		x			19
B-3	x				20
B-4		x			21
B-5	x				22
<u>Davenport</u>					
D-1	x				23
D-2			x		25
D-3			x		25
D-4		x			26
D-5			x		27
D-6				x	57
<u>East Moline</u>					
EM-1a		x			29
EM-1b			x		30
EM-2		x			31
EM-3	x				33
<u>Moline</u>					
M-1a		x			35
M-1b	x				35
M-2	x	x			37
M-3a	x				40
M-3b			x		41
M-3c		x			42
M-4		x			47

*-Not Applicable--Alternative was either located outside the cordon line or it did not affect the travel pattern.

INDEX -- Continued

<u>Alternatives</u>	<u>Alternate Networks</u>				<u>Page Number</u>
	<u>D</u>	<u>E</u>	<u>F</u>	<u>NA*</u>	
<u>Rock Island</u>					
RI-1	x	x	x		40-42
RI-2a		x			47
RI-2b		x			42
RI-3			x		44
RI-4		x			38
RI-5			x		46
RI-6a	x				49
RI-6b			x		49
RI-7				x	57
RI-8	x				51
<u>Rock Island County</u>					
RIC-1				x	57
RIC-2		x			52
RIC-3				x	57
RIC-4				x	57
RIC-5				x	57
RIC-6				x	57
<u>Scott County</u>					
SC-1				x	57
SC-2				x	57
SC-3				x	57
SC-4				x	57
SC-5				x	57

*-Not Applicable--Alternative was either located outside cordon line or it did not affect the travel pattern.

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<u>Iowa State Highway Commission</u>					
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*-Not Applicable--Alternative was either located outside the cordon line or it did not affect the travel pattern.

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