



900429

Summary: Stillwater-Houlton Draft Environmental Impact Statement

State Trunk Highway 36

State Trunk Highway 64

From Jct. T.H. 36 and Co. Rd. 15
in Washington County, Minnesota
to

A point on S.T.H. 64 two and one-half miles east of the
St. Croix River, in St. Croix County, Wisconsin

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March 1990

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Prepared by:

3485 Hadley Avenue No.
Oakdale, Mn. 55128

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If you have questions or comments about the material contained in this report, or about the EIS process in general, please contact the following:

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Eau Claire, Wisconsin 54701
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STUDY SUMMARY

INTRODUCTION

This study examines the reconstruction of Trunk Highway (TH) 36 in Washington County, Minnesota, functional replacement of the existing drawbridge over the St. Croix River, and reconstruction of approach highways leading to the bridge in St. Croix County, Wisconsin. The study area termini are the vicinity of County Road 15 in Minnesota, and a point on State Trunk Highway (STH) 64 approximately two and one half miles east of the state line in Wisconsin.

The Wisconsin Department of Transportation (Wisc/DOT) is currently studying the possibility of improving the existing highway from Houlton to New Richmond, 15 miles to the east. This is a separate study, and is based on transportation needs independent of the river crossing analysis. Considerations include expanding the facility to four lanes, and bypassing the central business districts of Somerset and New Richmond. There are no other

major transportation actions by other governmental agencies proposed in the same geographic area.

The function of these interstate highways within the state transportation systems is to serve long distance trips between regions (see figure 1). The type of highway improvements being considered involve extending and/or upgrading existing roadways to four lanes, and replacing existing high volume intersections with grade-separated interchanges. The length of the potential improvements vary between 6.7 and 7.1 miles, depending on corridor and alignment.

Cities and communities that could be directly or indirectly affected by these improvements include the following: the Minnesota cities of Stillwater, Bayport, and Oak Park Heights; Baytown, Grant, and Stillwater Townships in Minnesota; and the community of Houlton, and St. Joseph and Somerset Townships in Wisconsin.

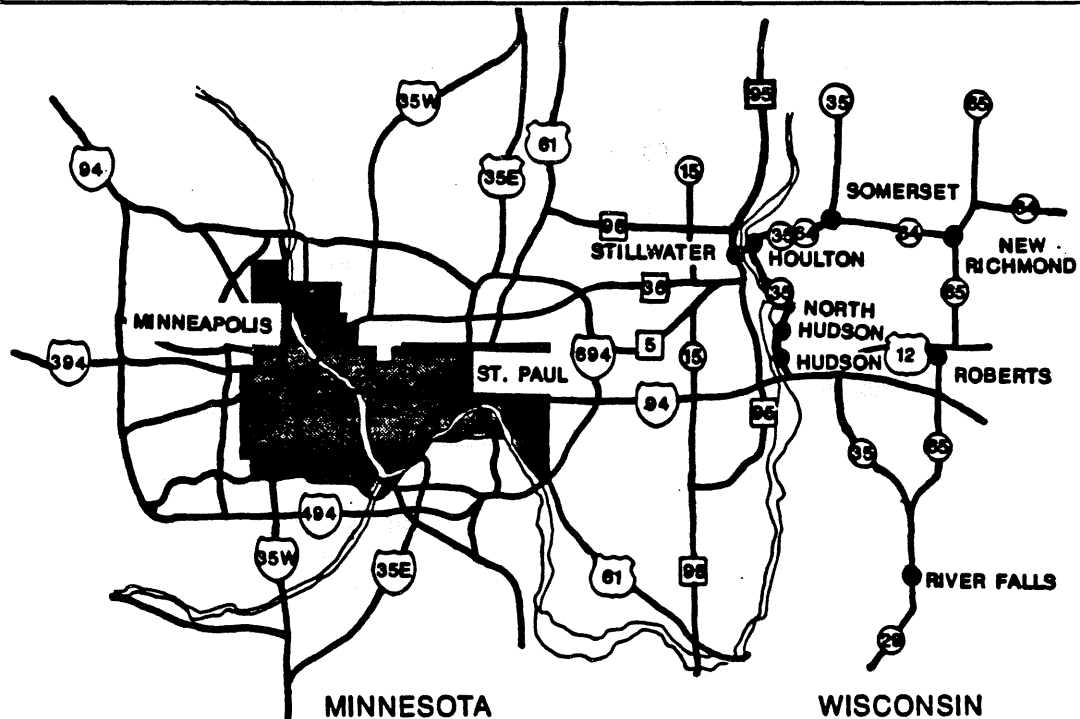


Figure 1
Key Regional Highway Corridors

The purpose of this study process is to evaluate alternative solutions which would improve the existing and future safety and congestion problems in downtown Stillwater, in the vicinity of Houlton, and along the approach highways leading into these areas. The existing drawbridge over the St. Croix River is also the cause of increasing river traffic congestion and safety concerns, in addition to contributing to the highway traffic problems. In the draft EIS, the effects of the transportation solutions (BUILD Alternative options) are compared to the

effects of not implementing transportation solutions (NO-BUILD Alternatives).

In addition to these transportation concerns, there are existing area-wide social, economic, and environmental planning problems that have resulted from the above. The future area transportation network needs to be identified in a timely manner so that the surrounding communities and governmental jurisdictions and agencies can plan effectively for the future.

PROCESS OVERVIEW

The previous document in the evaluation process, the Scoping Decision Document/Final Study Outline, dated January 15, 1987, identified the study alternatives and important local concerns that are included among the evaluation criteria.

The purpose of the draft Environmental Impact Statement (EIS), is to facilitate an informed BUILD location or NO-BUILD decision. The document contains discussions of the location alternatives being considered, and their environmental effects.

Attached to and considered a part of the draft EIS are three additional environmental reports, called Section 4(f) Evaluations. The purpose of these reports is to provide special attention to important publicly owned properties which could be affected by the study alternatives. These properties include the St. Croix River as a designated recreational component of the National Scenic Riverway system, Mile Long Island, and Kolliner Park. According to the Federal Register, responsibility in dealing with these properties is as follows:

1. The Federal Highway Administration may not approve the use of land from a significant publicly owned public park, recreation area, wildlife refuge, or any significant historic site unless a determination is made that:

A.) There is no feasible and prudent alternative to the use of land from the property; and

B.) The action includes all possible planning to minimize harm to the affected Section 4(f) property.

2. Supporting information must demonstrate that there are unique problems or unusual factors involved in the use of alternatives that avoid these properties, or that the cost; social, economic, and environmental impacts; or community disruption resulting from such alternatives reach extraordinary magnitudes.¹

Following publication of the draft EIS, informational meetings will be held in both Minnesota and Wisconsin, followed by formal Public Hearings to solicit public comments and recommendations. After the comments and recommendations are reviewed and addressed, the Commissioner of the Minnesota Department of Transportation, and the Secretary of the Wisconsin Department of Transportation will make the BUILD/NO-BUILD decision. Their charge is that:

Alternative courses of action be evaluated and decisions be made in the best overall public interest based upon a balanced consideration of the need for safe and efficient transportation; of the social, economic, and environmental impacts of the proposed transportation improvement; and of national, State, and local environmental protection goals.²

If the decision is BUILD, then the location of a preferred corridor will also be identified for continued detailed development and analysis.

The report that will follow, the final EIS, will discuss substantive comments received on the draft EIS, and document the decision. If a BUILD decision is reached, the final EIS will also provide detailed design level information pertaining to the preferred corridor alternative, and describe mitigation

¹Federal Register, Vol. 52, No. 167, August 28, 1987.

²Ibid.

measures that are to be incorporated into the proposed action.

Before any construction could begin on a new river crossing, the following Federal permits would need to be obtained:

- * Section 9, U.S. Coast Guard
- * Section 10, U.S. Army Corps of Engineers
- * Section 404, U.S. Army Corps of Engineers

DESCRIPTIONS OF THE STUDY ALTERNATIVES

BUILD ALTERNATIVE

There are three basic BUILD location alternatives under consideration in the draft EIS: the North Corridor, which bypasses the City of Stillwater, Minnesota and Houlton, Wisconsin to the north; the Central Corridor, which uses existing approach roadways in Minnesota and Wisconsin, but bypasses the Stillwater central business district; and the South Corridor, which bypasses Stillwater and Houlton to the south (see figure 2). The following concept design descriptions are provided as general information to illustrate the range of river crossing variations that are available within each corridor (see Appendix for more details).

NORTH CORRIDOR

The North Corridor BUILD Alternative contains two potential river crossing construction options on different alignments. They consist of a 2,500 foot long river bridge with a clearance of 185 feet over the St. Croix, and an estimated construction cost of \$56 million, including approach highways; and an 8,200 foot long tunnel under the St. Croix at an estimated construction cost of \$129-179 million, including approach highways, but not including tunnel support facilities.

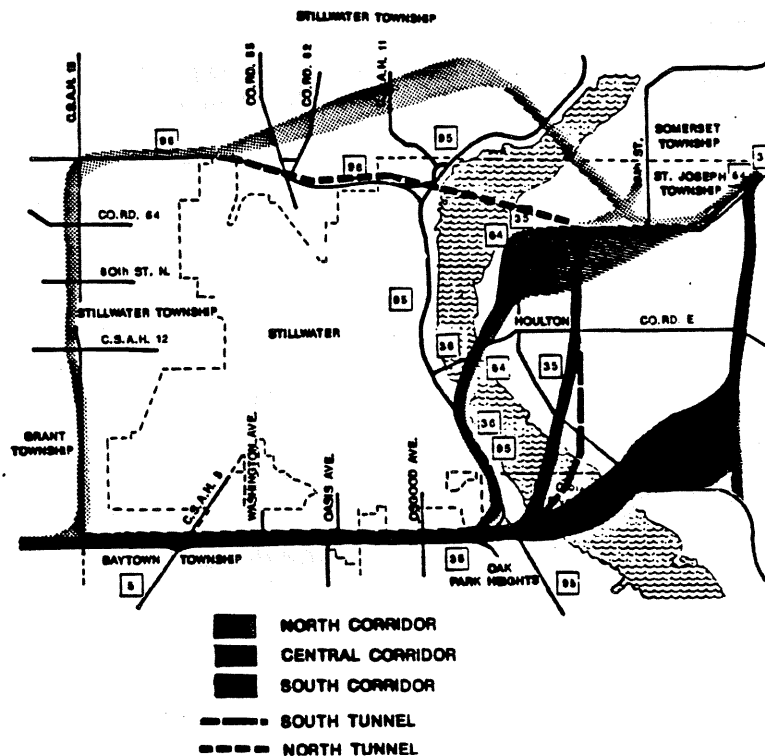


Figure 2
Present Study Corridors

CENTRAL CORRIDOR

The Central Corridor BUILD Alternative consists of a single river crossing construction option involving a bridge, with four potential design variations:

- 1.) a 3,300 foot long river bridge with a 2,990 foot long elevated roadway section over TH 95 in Minnesota, a river clearance that varies between 60 and 70 feet, and an estimated cost of \$86 million;
- 2.) a 2,975 foot long river bridge with a 3,100 foot long elevated roadway section over TH 95 in Minnesota, a river clearance that varies between 41 and 74 feet, and an estimated cost of \$83 million;
- 3.) a 2,650 foot long river bridge with a 3,100 foot long elevated roadway section over TH 95 in Minnesota, a 3,050 or a 4,600 foot long land tunnel beneath the Wisconsin bluff, a river clearance that varies between 19 and 41 feet, and an estimated cost of \$109 to 126 million; and
- 4.) a 4,175 foot long combination river and approach bridge with an integrated TH 95 roadway design in Minnesota, a river clearance that varies between 52 and 65 feet, and an estimated cost of \$68 million.

SOUTH CORRIDOR

The South Corridor BUILD Alternative consists of three potential bridge crossing alignments, involving eight different design variations. An additional South Corridor alignment consists of an 8,800 foot long tunnel under the St. Croix River. With approach highways, this option would cost an estimated \$123-173 million, not including tunnel support facilities.

The various South Corridor bridge options include the following:

South Corridor, Northern Alignment:

- 1.) a 4,900 foot long bridge with a river clearance that varies between 53 and 105 feet, and estimated cost of \$76 million; and
- 2.) a 4,900 foot long bridge, a 900 foot long land tunnel beneath the Wisconsin bluff, a river clearance that varies between 53 and 105 feet, and an estimated cost of \$86 million.

South Corridor, Central Alignment:

- 1.) a 5,100 foot long bridge with a river clearance that varies between 70 and 157 feet, and an estimated cost of \$79 million;

- 2.) a 4,925 foot long bridge with a river clearance that varies between 45 and 113 feet, and an estimated cost of \$78 million; and

- 3.) a 4,925 foot long bridge, a 920 foot long land tunnel beneath the Wisconsin bluff, a river clearance that varies between 45 and 113 feet, and an estimated cost of \$88 million.

South Corridor, Southern Alignment:

- 1.) a 5,900 foot long bridge with a river clearance that varies between 60 and 100 feet, and an estimated cost of \$87 million;

- 2.) a 5,900 foot long bridge with a river clearance that varies between 31 and 108 feet, and an estimated cost of \$86 million; and

- 3.) a 6,200 foot long bridge with a river clearance that varies between 126 and 143 feet, and an estimated cost of \$98 million.

NO-BUILD ALTERNATIVES

There are three basic variations of the NO-BUILD Alternative under consideration in the draft EIS:

1.) No-Action:

The No-Action option consists of allocating no resources to address the existing or future transportation problems, other than continued maintenance of the highway facility. It is used as basis of comparison for all of the BUILD alternative options. It projects existing conditions and their effects to a point in time 20 years into the future.

2.) Transportation System Management (TSM):

The TSM option describes a range of partial solutions designed to optimize the safety and service capabilities of the existing roadway system at relatively low cost.

3.) Replacement-On-Site:

The Replacement-On-Site option is, in essence, a location decision without action. Selection of this NO-BUILD option would defer replacement or rehabilitation of the existing river crossing until the bridge becomes unsafe for continued transportation use. Since the remaining useful life of the bridge is estimated to be 5 to fifteen years, this option lies outside the scope of this environmental documentation process. Therefore, when the bridge becomes unsafe, an additional environmental process will be initiated that will evaluate bridge replacement and rehabilitation options at its existing location.

SUMMARY OF MAJOR BENEFICIAL AND ADVERSE IMPACTS

Under a NO-BUILD decision, Average Daily Traffic (ADT) over the existing draw bridge is predicted to more than double between 1986 and the year 2014. During busy summer weekends, traffic on both sides of the existing bridge can back up several miles when the lift is up. The study area segments of Minnesota TH 36 and Wisconsin STH 35/64 have higher accident rates than other roadways with similar designs (see figure 3). A new river crossing is expected to reduce these problems.

In addition to major transportation service, safety, and congestion improvements that will occur with the construction of any of the BUILD Alternatives, there are several beneficial social, economic, and environmental impacts which will also result. The most important of these is resolving what the future area transportation network consists of, and where

it will be located. Eleven study area communities and political jurisdictions are seeing the results of outdated and overcrowded transportation facilities causing haphazard and misdirected growth and development in many parts of the area. With a BUILD decision and timely commitment of capital investment funds in the regional transportation infrastructure, the St. Croix Valley communities will be able to plan and design their integrated futures in an informed and meaningful manner.

The selection of a BUILD decision is especially important to the city of Stillwater, the most populated community and urban hub of the region. The city has depended on the existing highway for continued social and economic viability from the early 1900s until about the late 1960s, when increasing congestion precipitated the first major study to ex-

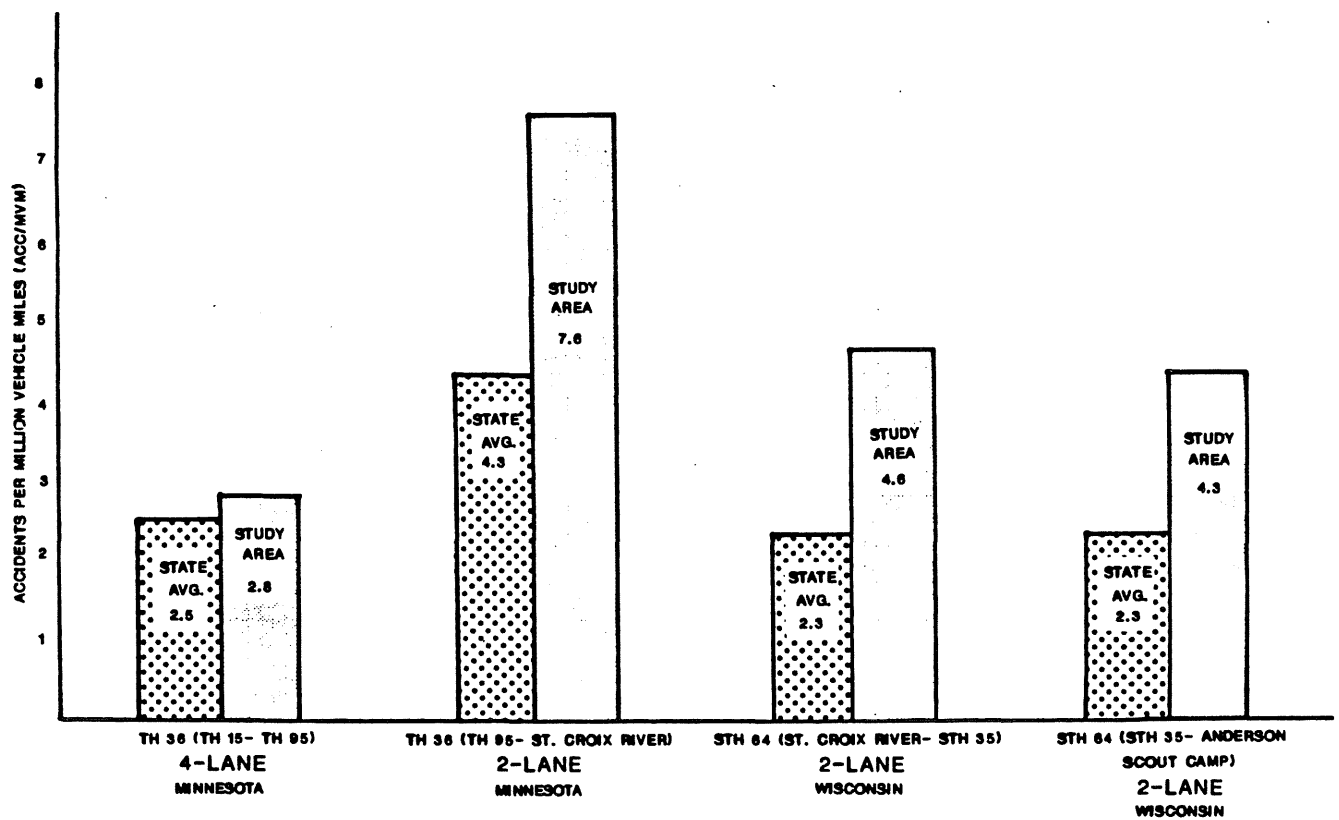


Figure 3
Study Area and State Wide Accident Rates

amine replacement river crossing locations. Now, through the Stillwater Downtown Plan, adopted in October, 1988, the city has identified that its future viability is connected to removing interstate traffic from its downtown streets and concentrating efforts on reviving its historic connections.

A number of environmental benefits will result from constructing new facilities to handle the large volumes of interstate traffic. Included among the advantages are improved air quality, less energy use, and reduced traffic noise. In addition, water quality will be improved as a result of new sedimentation ponds designed to filter out pollutants before they enter the river.

There are also adverse effects that will occur with the selection of a BUILD Alternative. In addition to the commitment of a large amount of public funds, there will also be negative social and environmental consequences.

The most important negative social consequence will result from the displacement of between 30 and 60 households, depending on the corridor selected and final roadway alignment. There will also be a substantial loss of productive agricultural land.

The most important negative environmental consequence will result from the addition of a new bridge or tunnel in the St. Croix River Valley, which is a component of the National Wild and Scenic Rivers Program. A North Corridor bridge would pass over Mile Long Island, a popular recreation site on the Lower St. Croix. The tunnel alternatives could result in substantial, short-term water quality impacts on the St. Croix River. The North Corridor tunnel would have a serious impact on the lower portion of Brown's Creek, located north of Stillwater. An additional concern is the Higgins' Eye Pearly Mussel, a species of clam found in the St. Croix River and included on the Federal Threatened and Endangered Species List.

POTENTIAL AREAS OF CONTROVERSY AND UNRESOLVED ISSUES

During the EIS study process, considerable concern has been expressed by several agencies, environmental and historic preservation concern groups, and individuals regarding the potential construction of a new major river crossing of the St. Croix River. Primarily, these concerns involve potential conflicts among national and state transportation, environmental, and historic preservation goals. The focus of the transportation goal is to provide safe and efficient interstate transportation services between Minnesota and Wisconsin. The focus of the environmental goal is to preserve the St. Croix River and its environs, as a component of the National Scenic Riverway System. The focus of the historic preservation goal is to preserve historic structures and archaeological sites located in the Stillwater and Houlton area, including the existing drawbridge, which was recently listed on the National Register of Historic Places.

No study alternatives are being considered which would require the removal of historic resources, although a North Corridor bridge could affect at least one archaeological site. The transportation agencies are not proposing to remove the existing bridge as a part of this EIS process; the future of the

draw bridge is a separate issue which will be decided when the structure becomes unsafe for further transportation use.

Alternatives which comprehensively address the transportation problem without constructing a new crossing of the St. Croix River have not been identified. The BUILD Alternatives will cause varying degrees of negative riverway impacts. Therefore, the transportation agencies have proposed mitigation to be included with any of the BUILD Alternatives. The mitigation includes a commitment to initiate a participatory process to select a compatible and cost-effective river crossing type and design which will minimize aesthetic and recreational impacts.

None of the potentially conflicting goals have absolute precedence over the others. It is the responsibility of the process decision-makers to arrive at a solution which reflects a reasonable balance of these important public goals. Coordination and discussion with concerned environmental agencies, groups, and individuals will continue throughout the remainder of the EIS process.

PRELIMINARY RECOMMENDATIONS BASED ON DRAFT EIS ANALYSIS

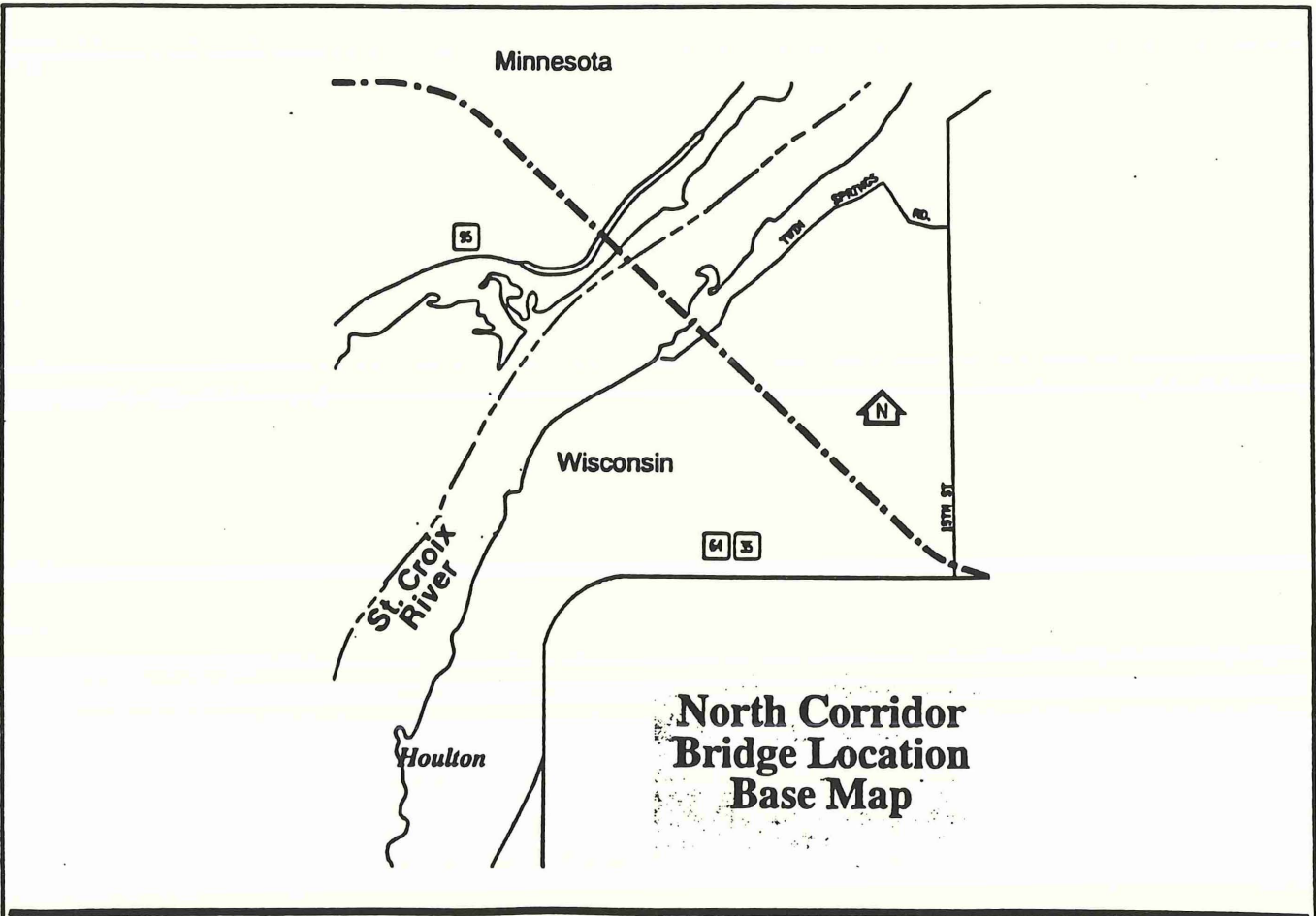
1.) No TSM option, or combination of TSM options that have not previously been incorporated into the existing system, has been identified that would adequately address the transportation problems.

2.) A BUILD/NO-BUILD decision has not been made, and will not be made until after public and agency reviews, additional informational meetings, formal public hearings, and after all written and oral comments presented at the hearings are addressed. However, the transportation agencies feel that the

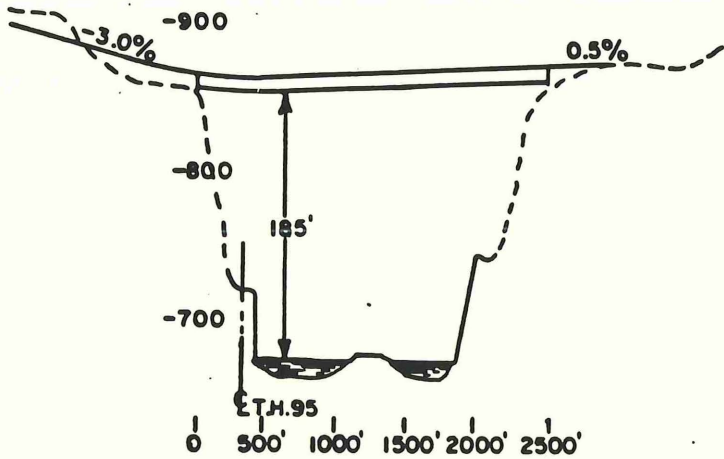
information analyzed for the preparation of the draft EIS indicates that the North Corridor bridge and tunnel options, the Central Corridor land tunnel options, and the South Corridor river tunnel would not represent reasonable selections for further development. Significant new information would have to be presented during the remaining public and agency review period before these options would be selected for further development.

APPENDIX

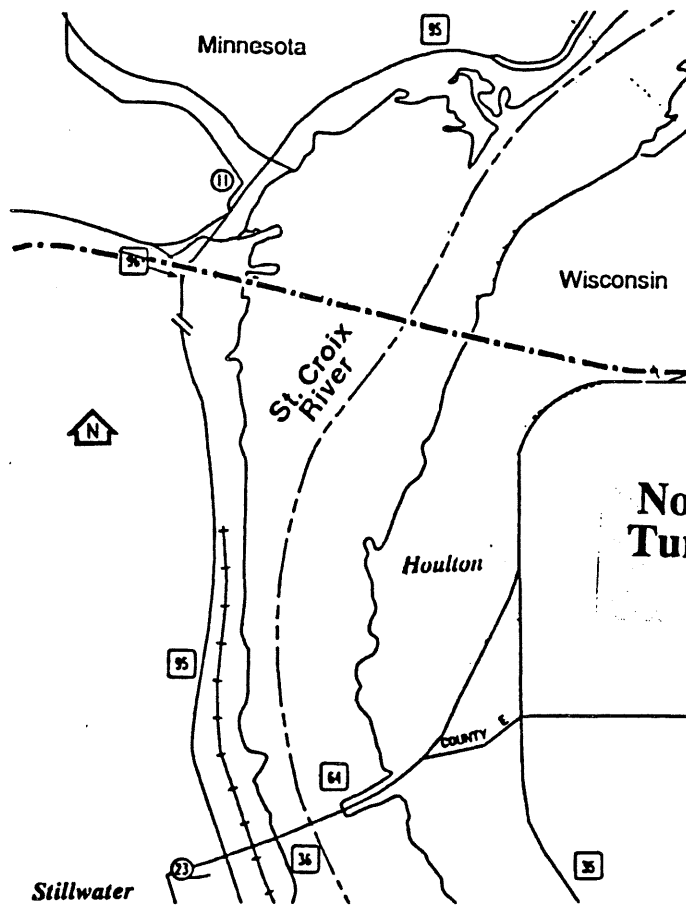
STILLWATER-HOULTON BRIDGE and TUNNEL CORRIDOR LOCATION MAPS and PROFILES



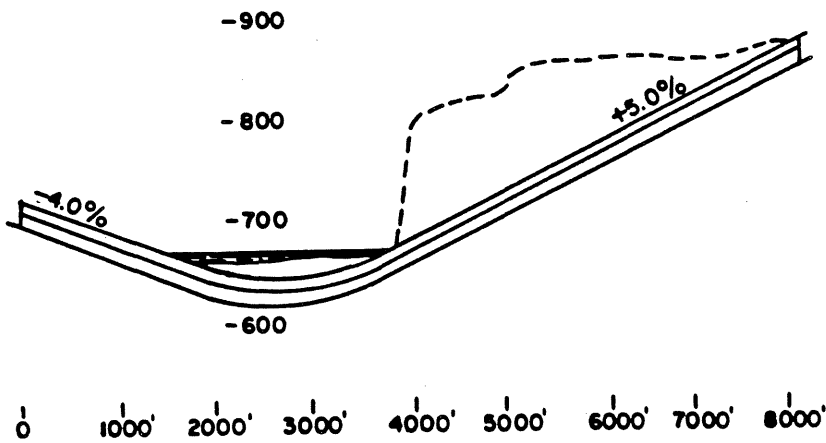
North Corridor Bridge Profile



- Cost: \$56,771,000**
- Br. Length: 2,500 ft.**
- Elevation: 185 ft.**
- Br. Grade: 0%**



North Corridor Tunnel Profile

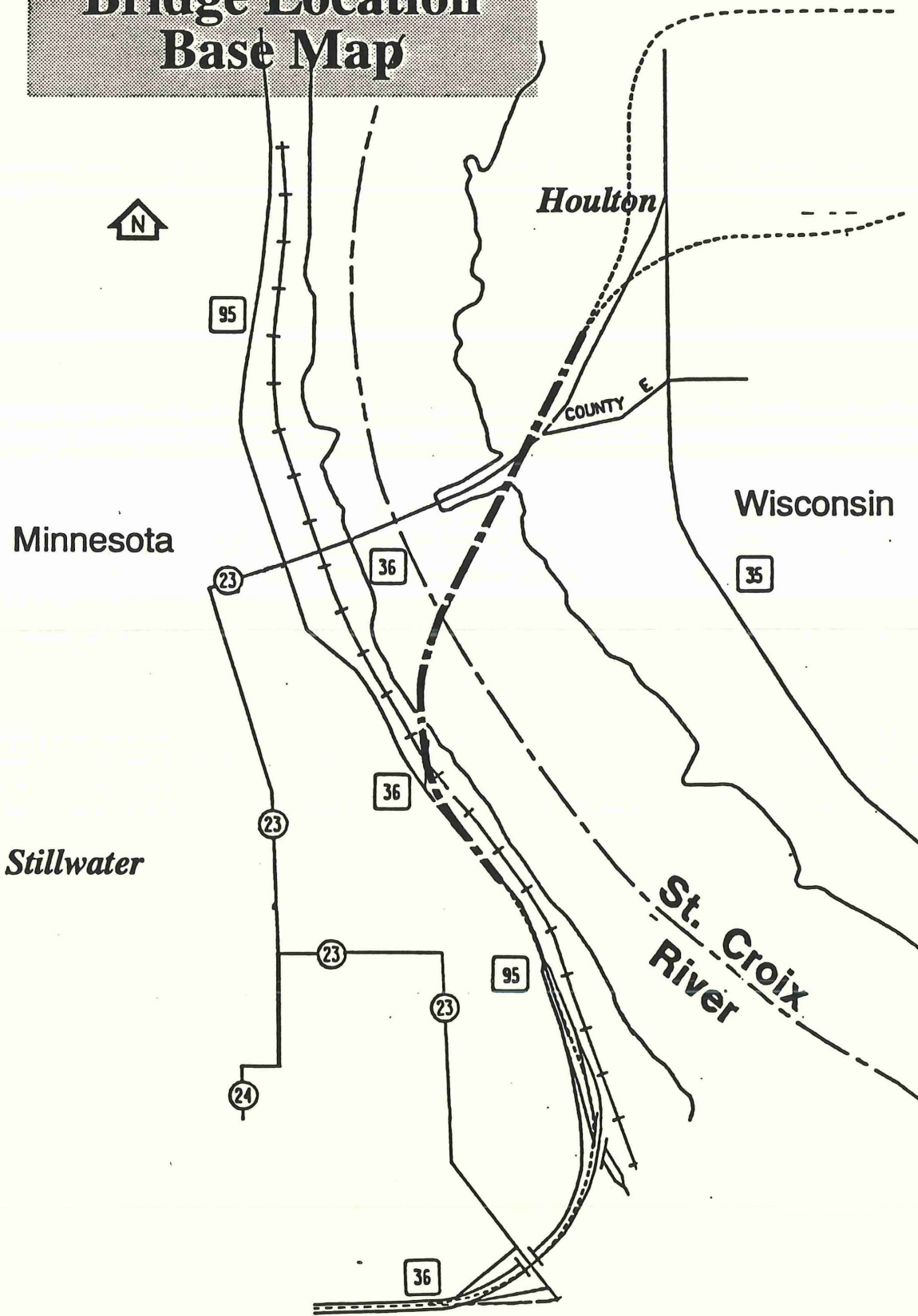


**Cost: \$128,716,200-
\$178,716,000**

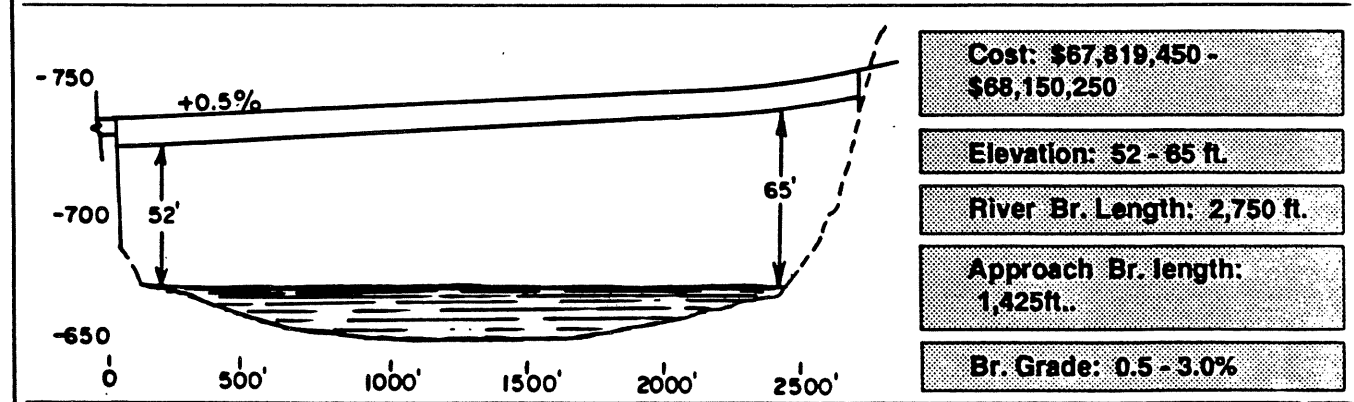
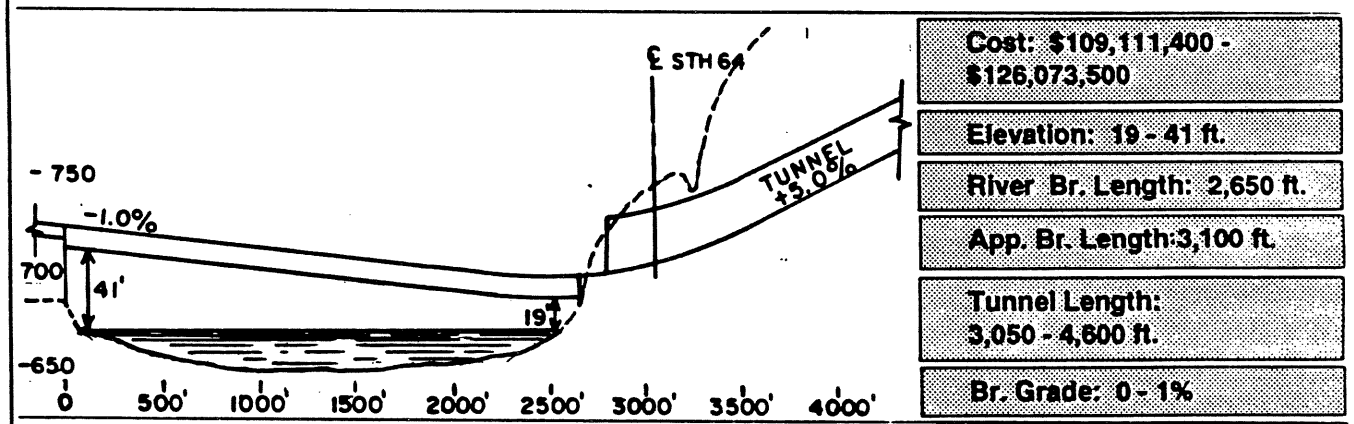
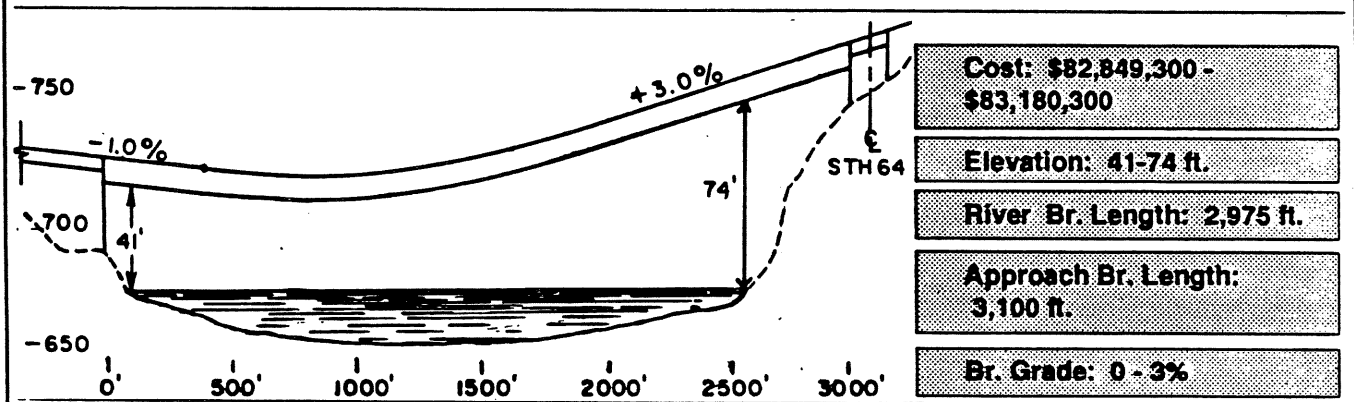
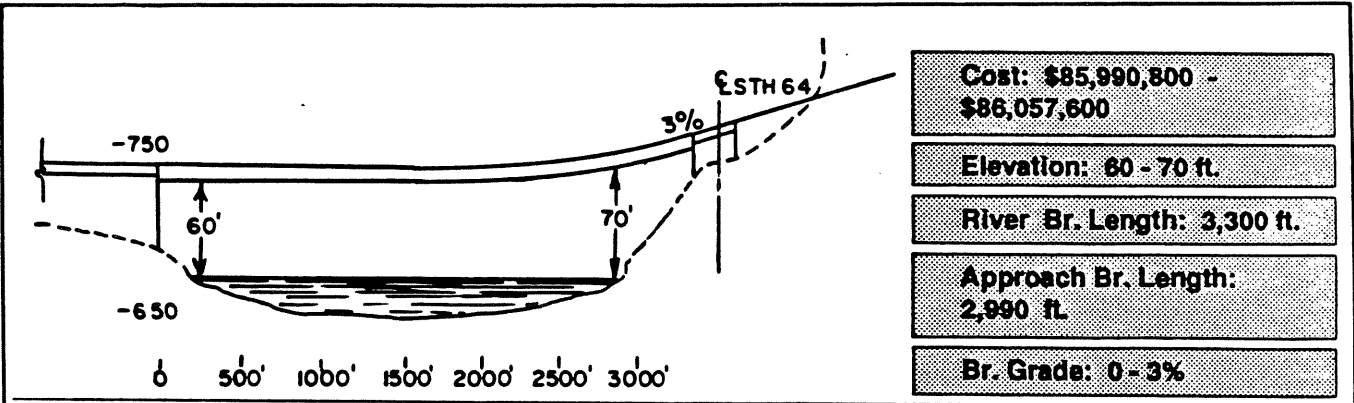
**Tunnel Length:
8,200 ft.**

**Tunnel Grade:
4% & 5%**

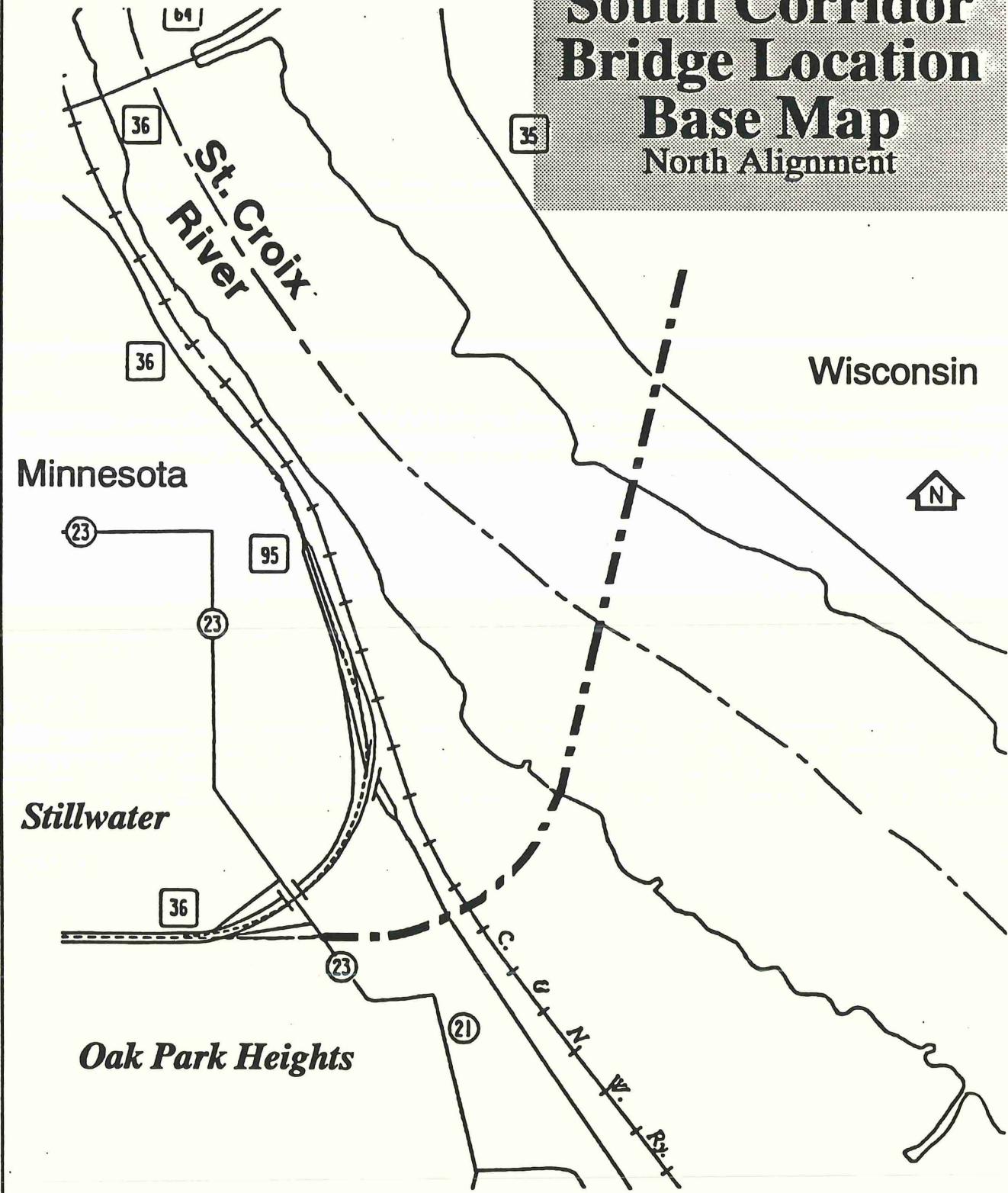
Central Corridor Bridge Location Base Map



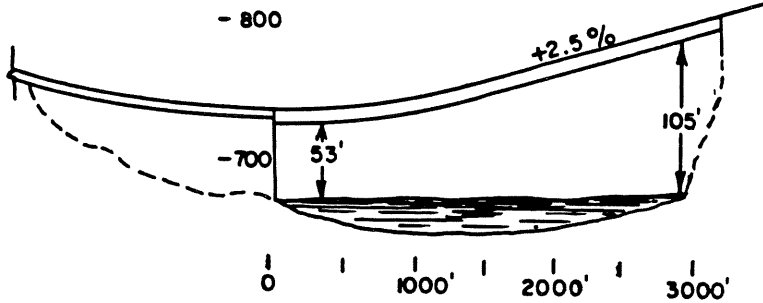
Central Corridor Bridge Profiles



South Corridor Bridge Location Base Map North Alignment



South Corridor Bridge Profiles - North Alignment



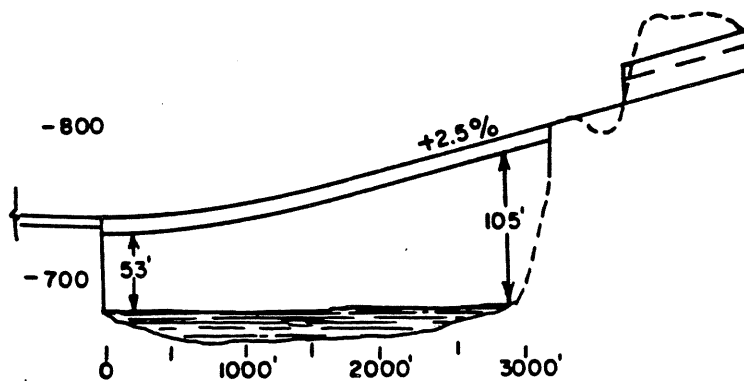
Cost: \$75,727,000

**Elevation:
53 - 105 ft.**

**River Br. Length:
3,200 ft.**

**Approach Br.
Length: 1,700 ft.**

Br. Grade: 2.5%



Cost: \$86,140,000

**Elevation:
53 - 105 ft.**

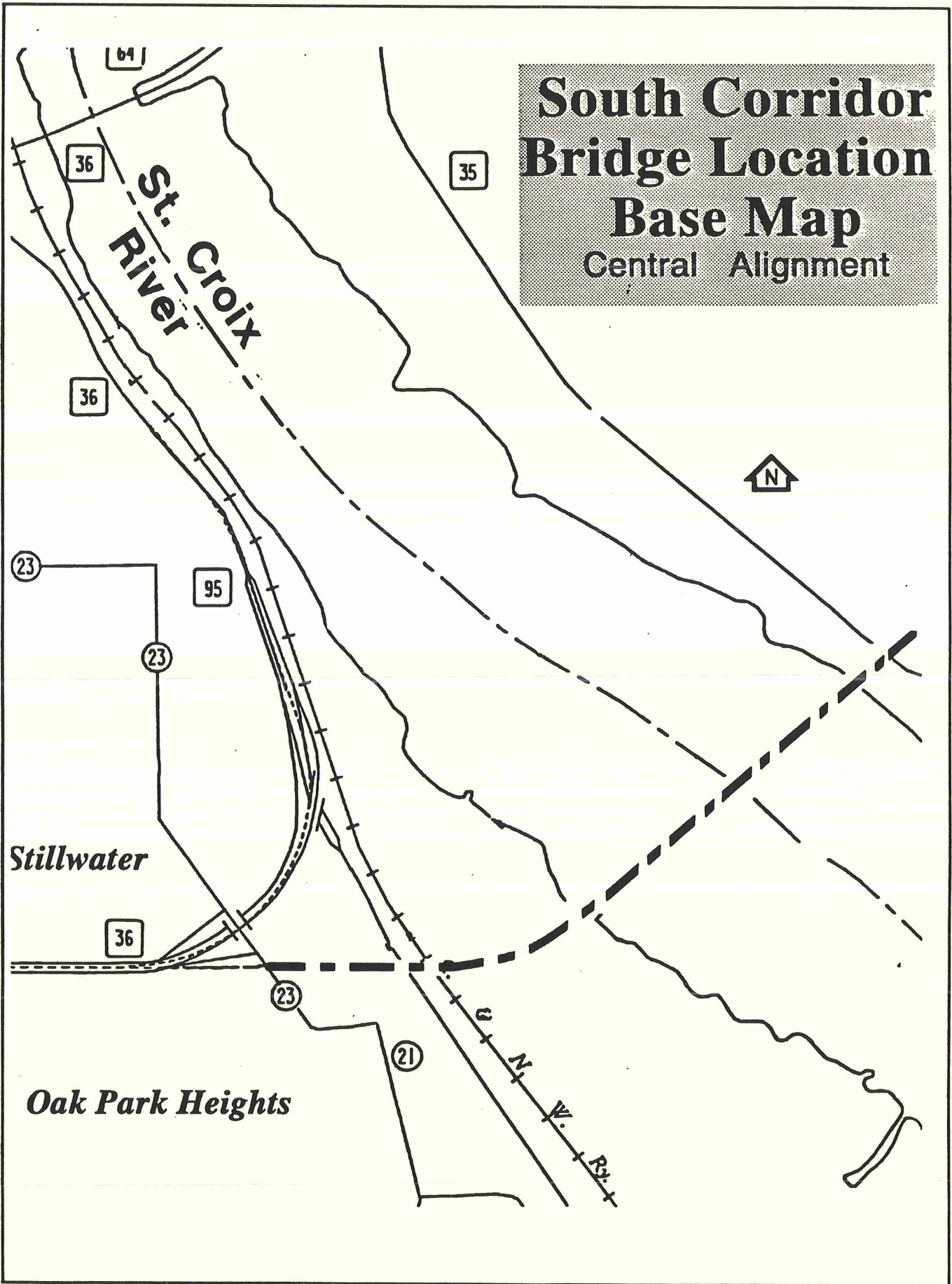
**River Br. Length:
3,200 ft.**

**Approach Br.
Length: 1,700 ft.**

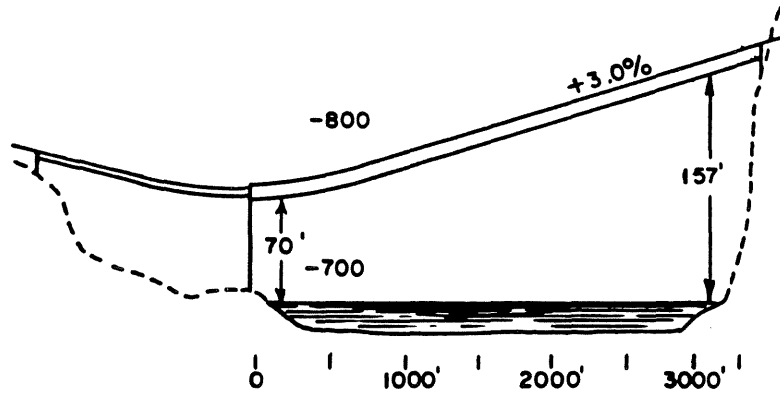
**Approach Tunnel
Length: 900 ft.**

Bridge Grade: 2.5%

South Corridor Bridge Location Base Map Central Alignment



South Corridor Bridge Profiles - Central Alignment



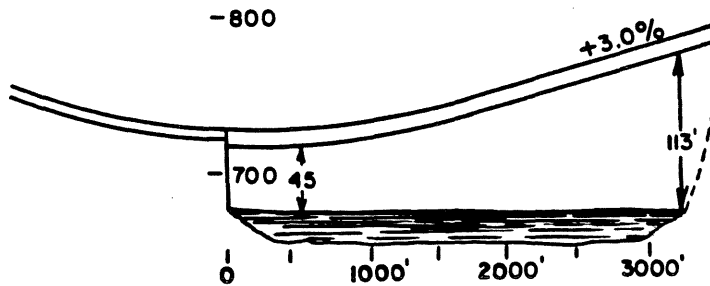
Cost: \$78,712,200

Elevation: 70 - 157 ft.

River Br. Length: 3,400 ft.

**Approach Br. Length:
1,700 ft.**

Bridge Grade: 3%



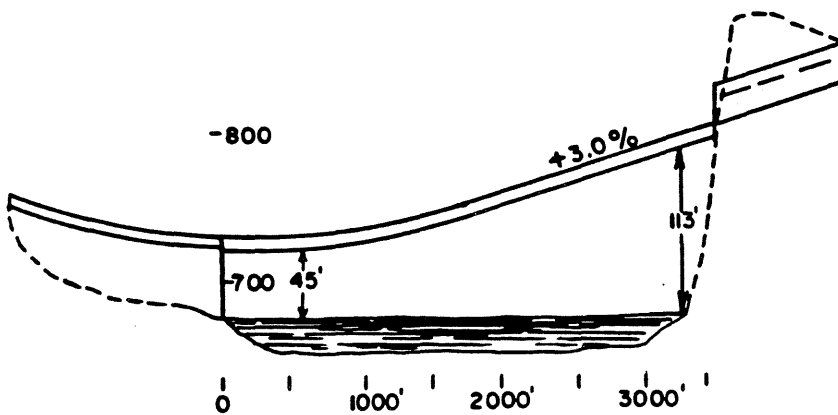
Cost: \$77,560,200

Elevation: 45 - 113 ft.

River Br. Length: 3,425 ft.

**Approach Br. Length:
1,500 ft.**

Bridge Grade: 3%



Cost: \$88,204,600

Elevation: 45 - 113 ft.

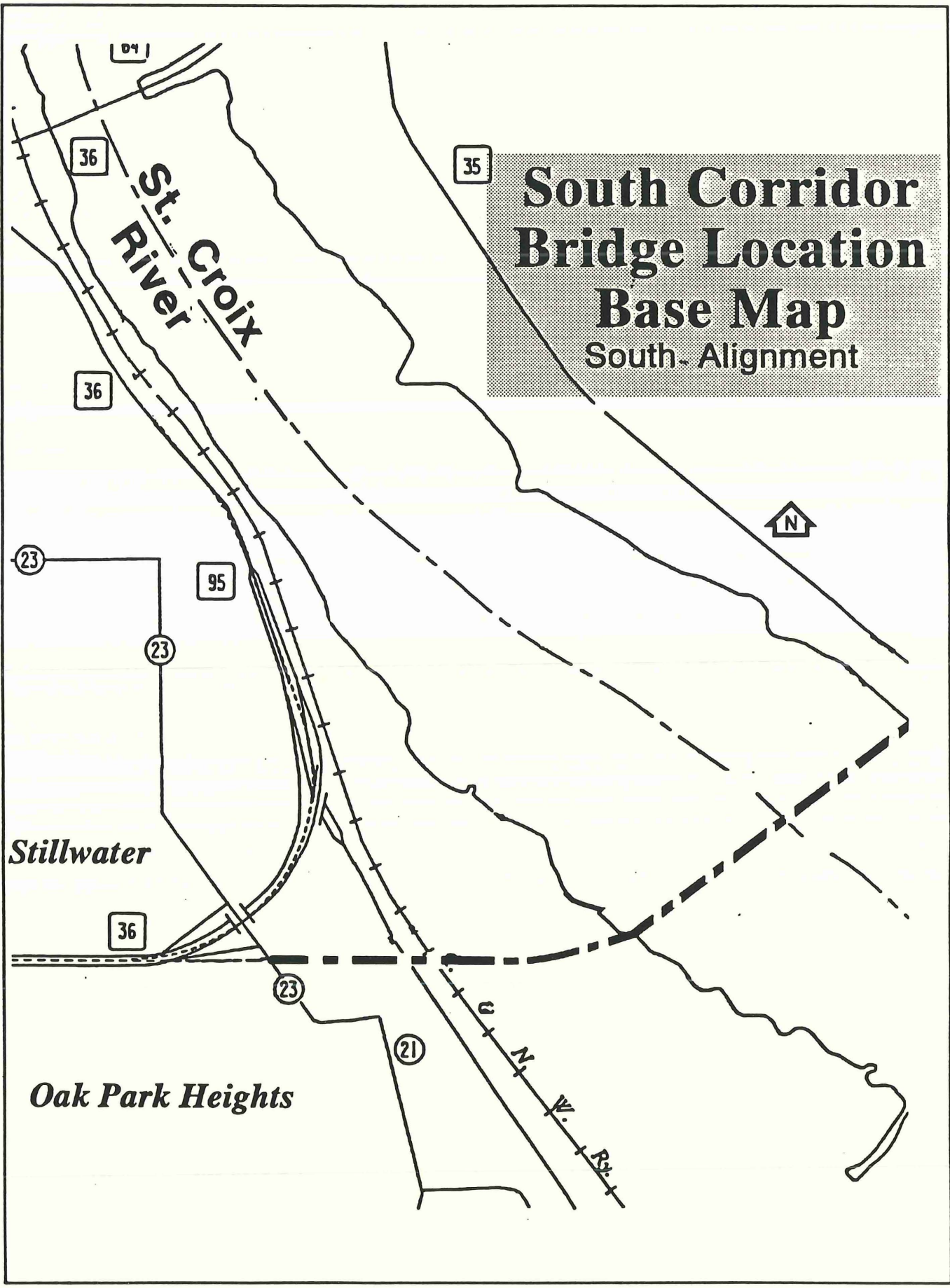
River Br. Length: 3,425 ft.

**Approach Br. Length:
1,500 ft.**

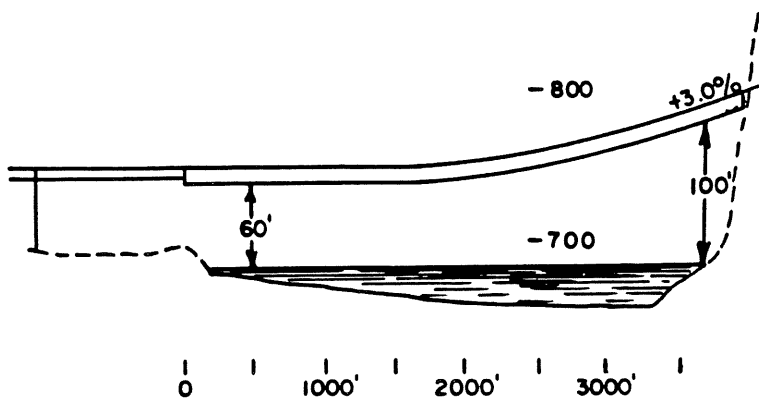
**Approach Tunnel Length:
920 ft.**

Bridge Grade: 3%

South Corridor Bridge Location Base Map South-Alignment



South Corridor Bridge Profiles - South Alignment



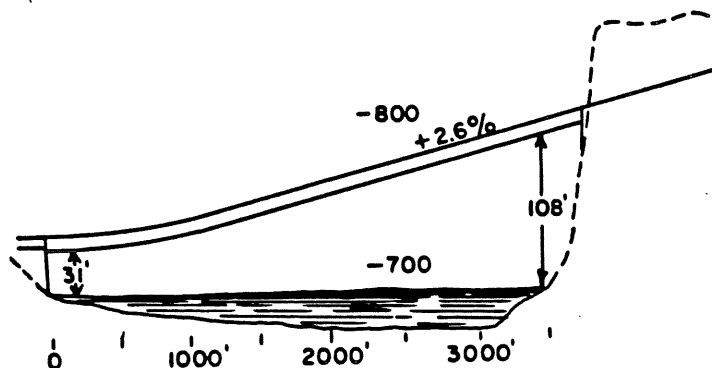
Cost: \$86,737,000

Elevation: 60 - 100 ft.

River Br. Length: 3,900 ft.

Approach Br. Length: 2,000 ft.

Bridge Grade: 0 - 3%



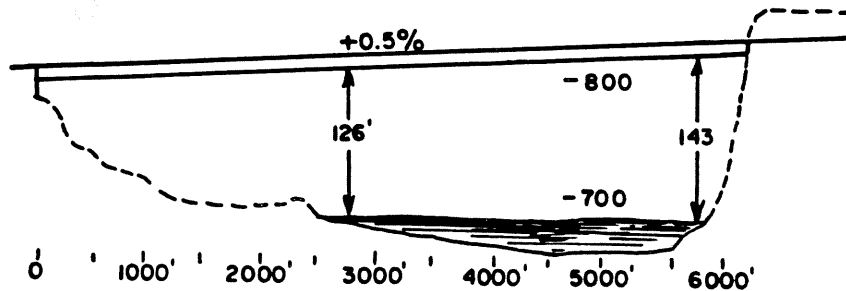
Cost: \$86,167,600

Elevation: 31 - 108 ft.

River Br. Length: 3,750 ft.

Approach Br. Length: 2,150 ft.

Bridge Grade: 2.6%

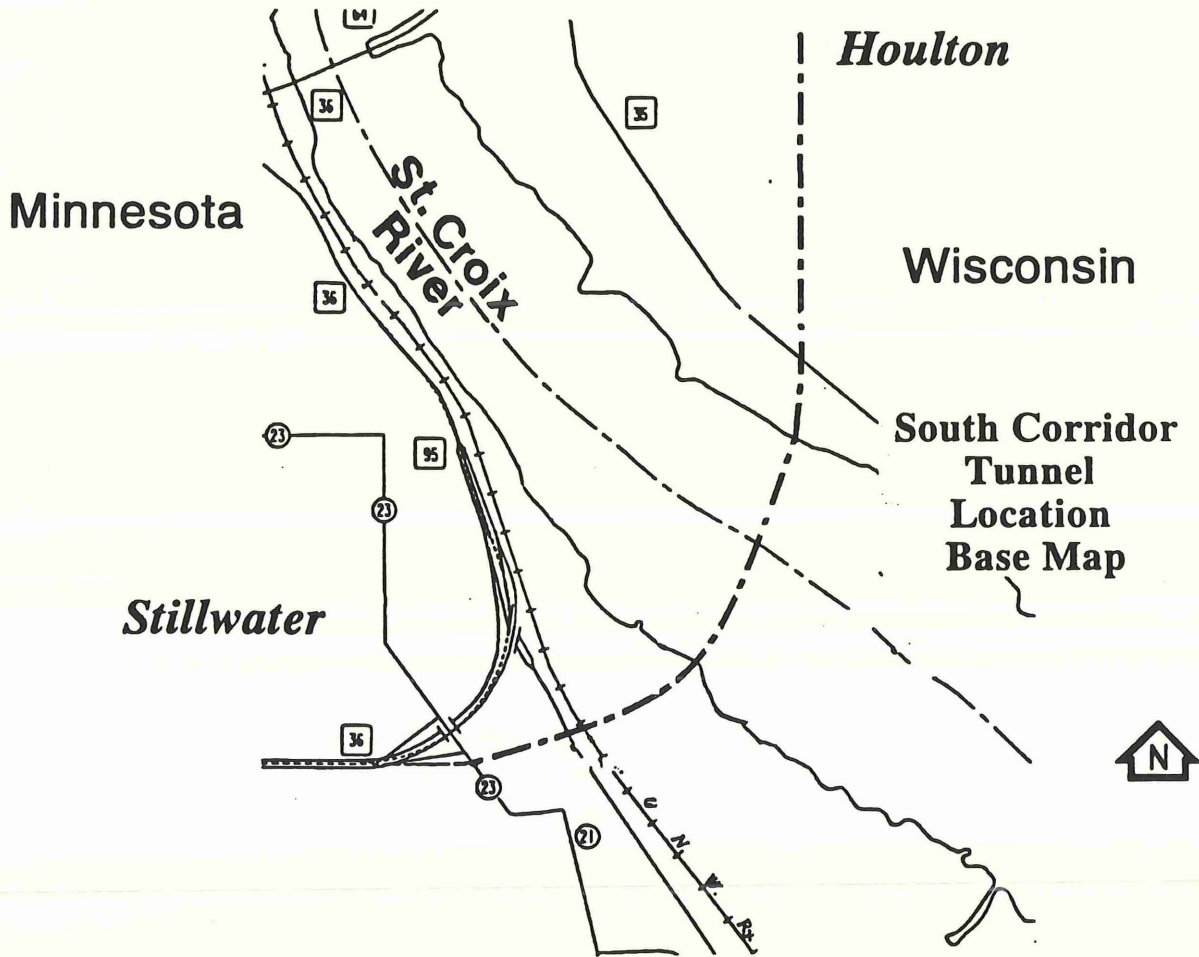


Cost: \$98,089,200

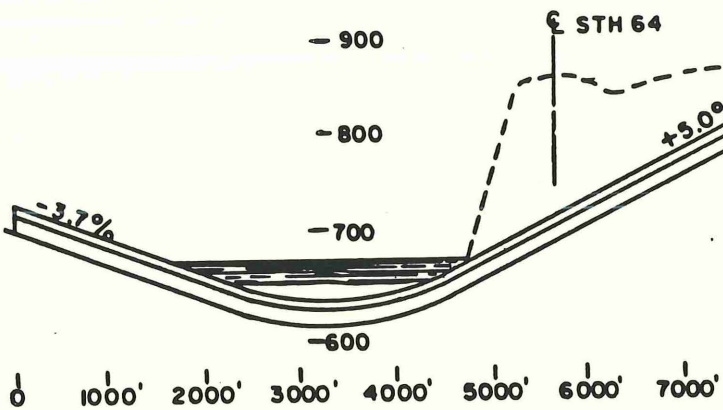
Elevation: 126 - 143 ft.

River Br. Length: 6,200 ft.

Bridge Grade: 0.5%



South Corridor Tunnel Profile



Cost: \$122,888,600 - \$172,888,600

Tunnel Length: 8,800 ft.

Tunnel Grade: 3.7 - 5.0%

ENVIRONMENTAL DOCUMENTS AVAILABLE FROM MN/DOT: STILLWATER-HOULTON RIVER CROSSING STUDIES

For those who desire more detailed information on environmental impacts associated with a new river crossing, the full set of environmental documents will be available for review at the following locations until the time of the public hearings:

MINNESOTA

Stillwater Public Library
223 North Fourth St.
Stillwater, MN 55082
(612) 439-1657

City of Stillwater Government Offices
City Hall
216 North Fourth St.
Stillwater, MN 55082
(612) 439-6121

Bayport Public Library
260 North Third St.
Bayport, MN 55003
(612) 439-7454

City of Bayport Government Offices
City Hall
Bayport, MN 55003
(612) 439-2530

City of Oak Park Heights Government Offices
City Hall
14168--57th St. North
Oak Park Heights, MN 55082
(612) 439-4439

Washington County Government Center
14900 61st St. North
P.O. Box 6
Stillwater, MN 55082
(612) 439-3220

Minnesota Department of Transportation
Oakdale Office/Metro District
3485 Hadley Ave. North
Oakdale, MN 55128
(612) 779-1208

Minnesota Department of Transportation
Transportation Building
John Ireland Boulevard
St. Paul, Mn 55155
(612) 296-3000

WISCONSIN

Hudson Public Library
304 Locust St.
Hudson, WI 54016
(715) 386-3101

St. Croix County Government Center
County Courthouse
911 4th St.
Hudson, WI 54016
(715) 386-4600

Minnesota-Wisconsin Boundary Area Commission
619 Second St.
Hudson, WI 54016
(715) 386-9444
(612) 436-7131

Somerset Public Library
122 Spring St.
Box 129
Somerset, WI 54025
(715) 247-5228

Wisconsin Department of Transportation
District 6 Office
718 West Clairemont Ave.
Eau Claire, WI 54701
(715) 836-2857

The complete set of environmental studies is listed below. If you wish to order one or more of the studies, mail your request(s) to Mn/DOT's Oakdale Office (listed on previous page). A charge to cover printing costs will be charged for most of the documents, as indicated. If a fee is required, send a check made out to the Minnesota Commissioner of Transportation with your request.

Draft EIS Summary Document (no charge)

Stillwater-Houlton Draft Environmental Impact Statement (EIS)/Section 4(f) Evaluations (\$3.50)

Economic Issues and Impacts Special Study (\$2.50)

Threatened and Endangered Species Special Study (\$2.50)

Natural Resource Impacts Special Study (\$2.50)

Recreational Use of the St. Croix River Special Study (\$2.50)

Wild and Scenic River Impacts Summary Report (\$5.00)

Visual Impacts Special Study (\$2.50)

Social Impacts Special Study (\$2.50)

Energy, Noise, and Air Quality Impacts Special Studies (\$2.50)

Agricultural Issues and Impacts Special Study (\$2.50)

Historical and Archaeological Impacts Special Study (\$2.50)

North and South Corridor Tunnel Impact Special Study (\$2.50)