

1-94

LOCATION / DESIGN

STUDY

ACTIVITY



REST AREA-INFORMATION CENTER 8

WEIGH STATION

REPORT

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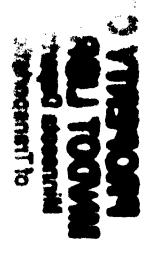
MNDOT

Prepared For: Interdisciplinary Study Group - 1-94 Management Committee

Office of Road Design Office of Environmental Services - Environmental Impact Study

April, 1975

Prepared By:



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PREFACE

Early in July 1973, Commissioner of Highways, Ray Lappegaard, made the decision not to award the contract for the first stages of construction of 1-94 between 1-694/494 and the St. Croix River in Washington County. The decision was made in direct response to concerns raised by local citizens over the proposed location of the highway.

The Commissioner promised that a restudy would be a cooperative endeavor of all levels of government, and that citizens, planning people and elected officials would be asked to participate. Thus, the true role of all levels of government in the overall planning process could best be made clear. It was decided to follow a two-level approach:

- Citizens, communities, and agencies involved through a Management Committee.
- 2. A highway department organized Interdisciplinary Study Group.

The Management Committee provided a means to involve all levels of government as well as citizens and to provide a forum in which all information and questions could be reviewed. The task of the committee was defined as: guiding the overall study process, monitoring input, assuring public involvement, reviewing ultimate solutions, and recommending a location solution to the Commissioner of Highways.

The Interdisciplinary Study Group provided a means to bring together the knowledge and viewpoints of a variety of disciplines during the conduct of project studies. The role of the Interdisciplinary Study Group is one of providing information to the Management Committee as requested, conducting the technical reanalysis of location and design considerations, and beyond that to be educational.

Each of the six communities directly affected by the location of I-94 (Afton, Lake Elmo, Lakeland, Oakdale, Woodbury, and West Lakeland) were invited to appoint one citizen and one elected official of their choosing to the Management Committee. Washington County was asked to appoint an elected official and their planning coordinator. Then it was requested that one member each be appointed from the Federal Highway Administration, Metropolitan Council, Metropolitan Transit Commission, and Minnesota Highway Department making a total of 20 (the Metropolitan Transit Commission and Metropolitan Council appointed two members each, one policy and one technical).

The Management Committee in its early meetings came to agreement on several important issues:

- 1. A need for a facility of Interstate Standards.
- 2. Two clearly defined terminal points: the bridge over the St. Croix River and the 1-694/494 Interchange.
- A defined study area.
- 4. The use of a phased study process.

The Management Committee identified three major steps or activities to implement the phased study process.

ACTIVITY I

Inventory

Activity I was an input or inventory activity culminating in selection of locations to be studied for impact analysis. The Management Committee achieved the following results through this activity:

- 1) An understanding of the decision making structure in Government.
- 2) A clarification of all issues surrounding the project.
- 3) An Inventory Report quantifying concerns and data gathered.

This resulted in the definition of alternates to be considered in Activity II. The Management Committee adopted two basic alternates to be studied and provided the Interdisciplinary Study Group with a basic charge regarding each.

ALTERNATE NO.] (North Alternate).
(North Alignment)
(North Corridor)

Is defined as the originally proposed alignment of I-94 (one-half mile north of T.H. 12). Additionally this alternate is to be reevaluated in light of all new considerations (concerns), with design and access recommendations to be made in all areas of identified adverse impact.

ALTERNATE NO. 2
(South Alternate)
(South Alignment)
(South Corridor)

Is defined as an alignment generally described by the existing location of T.H. 12. Interchange locations as defined on Alternate 1 will apply for the purposes of design only.

Designs of similar standards for both Alternates 1 and 2 will apply to allow for comparison. Separate studies shall be conducted to place a Rest Area-Information Center and Weigh Station on both Alternates.

ACTIVITY II

Impact Analysis of Alternates

The second activity is one of considering the impact of the alternates identified. The alternates defined are evaluated to determine their social, economic, and environmental impacts.

This requires the development of public, and technical criteria by which to measure the effect of the alternates selected, to apply that criteria and report those impacts both plus and minus.

Before actual analysis and design could begin, the Management Committee recognized the need to provide some guidelines to the Interdisciplinary Study Group. Thus, criteria by which to guide the analysis and provide a public statement of the items to be evaluated were developed. The Criteria for Evaluation was published in a 10 page booklet adopted by the Management Committee on April 25, 1974, and on that date the formal charge was given to the Interdisciplinary Study Group.

This report represents one of a series prepared to analyze various aspects of the alternates defined through the Management Committee.

Each report has been prepared by the Interdisciplinary Study Group to evaluate the alternates on a technical basis in the catagories of Transportation, Environment and Social-Economic impact. Each analysis presents a review of the project by the discipline involved, and no attempt is made to indicate a concensus position.

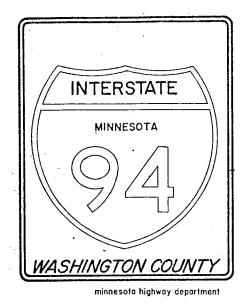
The substudies or reports, in total, serve as one of several devices to be used to weigh the alternates. Each presents only an interpretation of the impacts identified by that area of expertise with no attempt to define a solution. The reports together with public and agency reaction should aid in determining an ultimate recommendation.

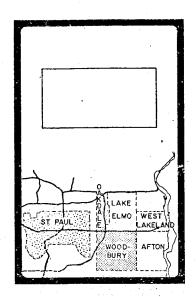
ACTIVITY 111

Selection of a Solution

The last activity will be one of obtaining approval of a selected alternate.

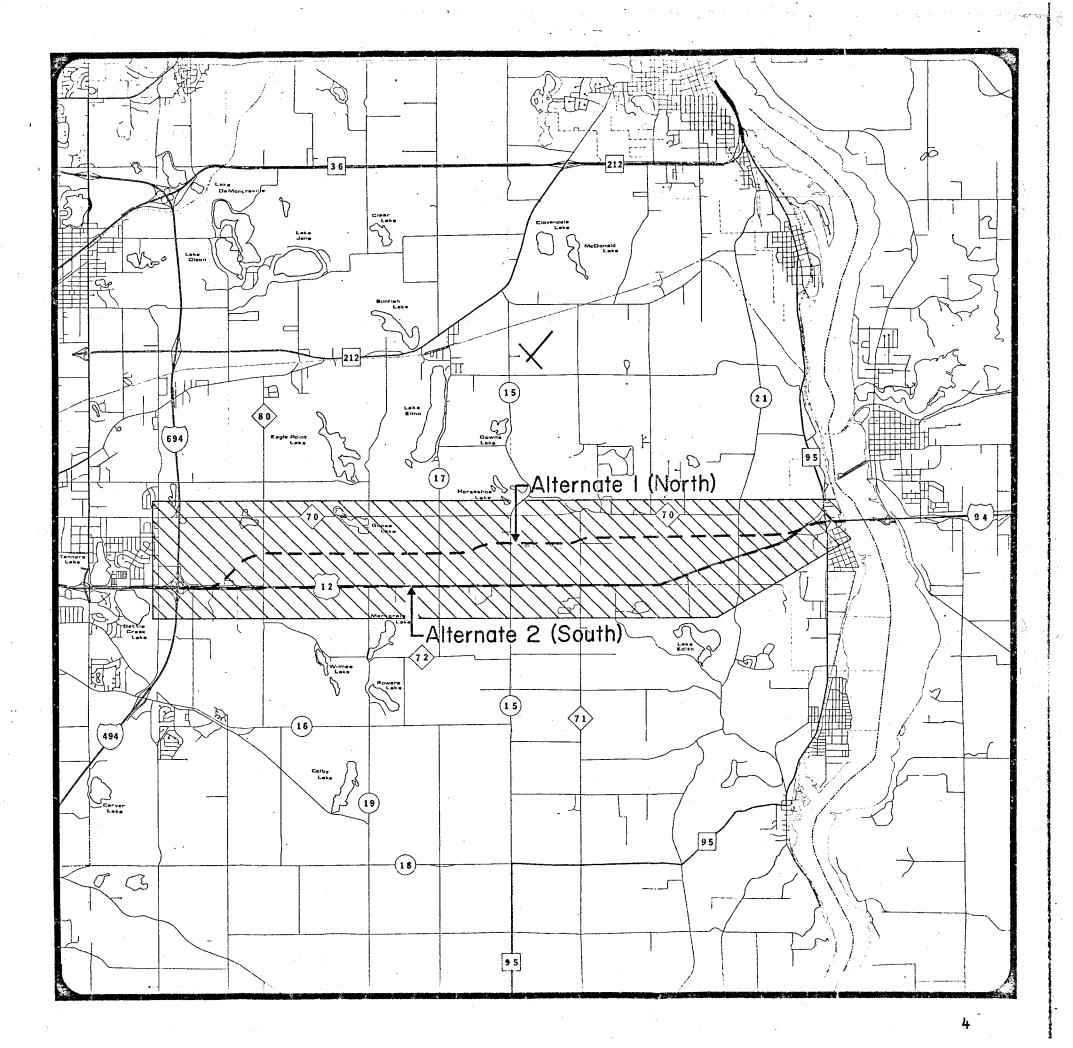
This activity becomes one of a formal selection and documentation process, and is represented by the filing of an Environmental Impact Statement and other formalized procedures.





STUDY AREA
INDEX MAP





INTRODUCTION

Consideration of locations for a Rest Area-Information Center and a Weigh Station is a part of the restudy process for the location of I-94 between I-494/694 and the St. Croix River. This report documents the site locations and concept studies for the Rest Area-Information Center and the site locations for the Weigh Station which were identified and analyzed by the Interdisciplinary Study Group.

The Interstate Safety Rest Area program is an interdisciplinary design approach to planning and designing rest areas. Beginning with site selection and extending through the construction stage, the projects are developed using Landscape Architects, Engineers, Architects, Foresters, Geologists and other fields of expertise necessary to develop a safe, functional and pleasing rest area. The development of the rest areas create open space for public use and enjoyment, preserving natural resources, such as wooded areas, streams, wetlands, grasslands, shorelines and unique topographical features associated with a region.

The current program requires the development of thirty safety rest areas on the Interstate System in Minnesota and six combined rest areas and information centers, located at the six entry points to the state. A location map has been included on page , showing the rest area and information center locations throughout the state.

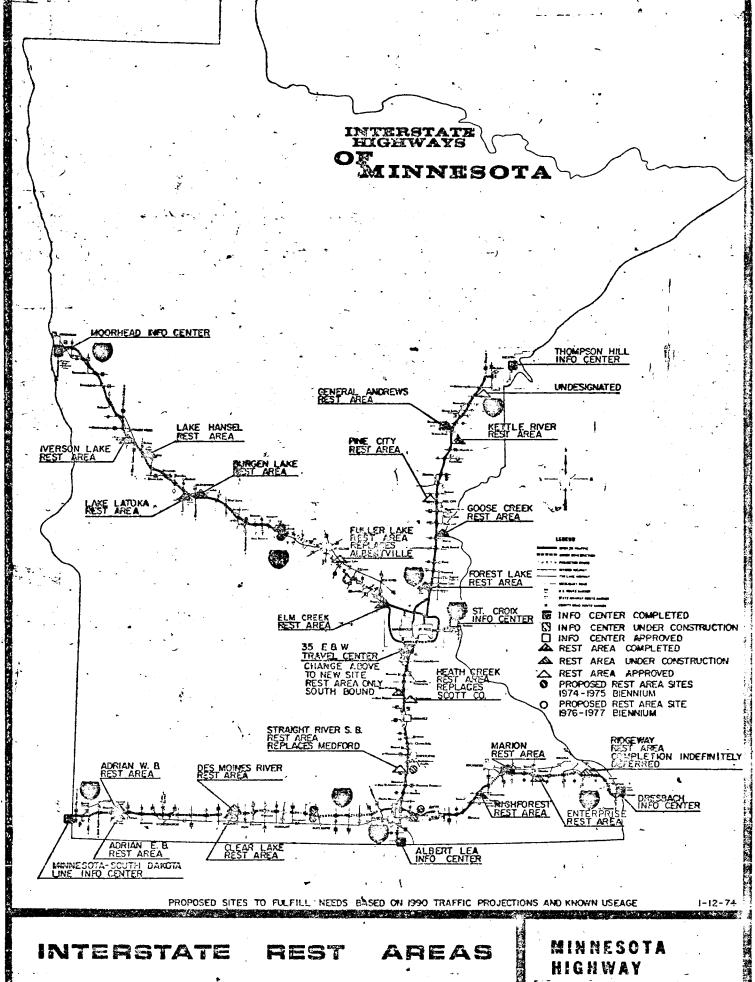
The primary objective in developing rest areas on Minnesota Interstate highways, is to provide for the comfort of the traveler and to contribute to his safety. These off-roadway facilities are located approximately one-half to one hour driving interval along the highway and have been a haven in case of foul weather or emergencies. The developments also provide for physical enjoyment and a change of pace — a scenic view or a forested setting in which a traveler can pause and refresh himself. Through the use of these facilities, they contribute directly to highway safety because a rested motorist is an alert driver.

Development of a system of rest areas also recognizes the current public concern for preservation, open space, and natural resource conservation.

Weigh stations serve a two-fold purpose on the highway system. Their primary use is for enforcement of load limits set by the State Legislature. The State Patrol is the agency responsible for this activity. The secondary use of the Weigh Station is by the Highway Department for research purposes. This research involves a periodic weighing of vehicles together with collecting other

data about the trucks. By gathering this data, the characteristics of the heavy commercial traffic using the highway is determined. This information is then used in traffic forecasting and ultimately in determining the pavement design required to carry the anticipated loads.

A total of seven Rest Area-Information Center and Weigh Station combinations have been identified and analyzed for this project. Three are on the north line and four are on the south line. Each of the combinations have some good and bad characteristics about them. These will be discussed in this report.



INFORMÁTION CENTERS DEPARTMENT

LOCATION CONSIDERATIONS

Locating a rest area or weigh station requires an analysis of a series of desirable characteristics which are appropriate for the type of facility. Because seldom if ever a site is found which satisfies all of the desirable characteristics compromises must be made. However, safety is the limiting factor in how far these compromises may go.

Both rest areas and weigh stations on freeways utilize ramps to allow traffic to enter and leave the facility. Thus, the operational characteristics are similar to that of an interchange. Therefore, many of the desirable design features and traffic signing features of interchanges are considered in location and design of both rest areas and weigh stations.

Desirable characteristics for each of the facilities proposed for this project will be discussed in separate sections.

Rest Area-Information Center

As a part of the Interstate Rest Area program, a combined rest area and information center is planned for the section of Interstate 94 between the St. Croix River and Interstate 694. It will be identified as the St. Croix Travel Information Center. This section of Interstate highway, leading to the metro area, will be the main entrance point into the state and carry the heaviest volumes of traffic. Due to these factors, the information functions should be expanded to include exhibits, displays, individual travel counsel and perhaps brief lectures. The information facility will be located on the west bound lane, thereby serving incoming travelers. The development should be located as close to the St. Croix River as is feasible, in order to welcome travelers to the state, region and metropolitan area. The information materials are supplied to the traveler to make his journey through the state more pleasurable and interesting. This initial design criteria suggests that the development be located within a 3-mile limit of the state border.

The site selection and development should reflect the inherent scenic and natural resource quality of the area. The rest area-information center will provide a safe place to rest, relax and determine the routes and points of interest that are available to the traveler throughout Minnesota. The St. Croix Information Center development will have parking available for 100 cars and 25 trucks, an information and rest room building, plaza, picnic shelters and tables, benches, walkways, lighting, signing and landscaping.

In addition to considering the natural amenities of a site, its location along the mainline roadway must be considered. Location of the facility relative to interchanges or a weigh station is most important. Sufficient distance must be provided to other entrance or exit ramps so that weaving conflicts do not downgrade the operation of the mainline. In addition, adequate spacing of the facilities must be provided so that the exits can be properly signed for.

Gradient of the mainline should be considered in selecting a site. Ideally, the mainline where the ramp exits from the freeway to the rest area and the ramp itself should be on an upgrade to assist in decelerating the vehicles. Likewise, a mainline downgrade beyond an entrance ramp is desirable to assist in accelerating vehicles, particularly trucks. If the grade beyond a mainline entrance ramp is an upgrade that is steep enough to inhibit the acceleration of trucks, a truck climbing lane must be added to allow the trucks to accelerate prior to merging into the mainline traffic stream.

Adjacent development should be considered when selecting a site. Ideally, the proposed rest area development should be compatible with existing development. Consideration must be given to the impact of activities within the rest area on existing development. Likewise, the existing development should not lessen the quality of the physical environment provided for the motorist using the rest area.

A most important consideration in locating a rest area is the capability for disposal of the sewage resulting from the restroom facilities. Ideally, this sewage should be disposed of in a municipal system. If a municipal sanitary sewer system is not available to connect to, a means of treating the sewage must be provided either on the site or by trucking it to a municipal system. Because of the volume involved for this site, trucking it is not a prudent long term solution.

In reviewing the Metropolitan Waste Control Commission's (formerly Metropolitan Sewer Board) 1973 report "Metropolitan Wastewater Disposal System for Washington County" municipal sewage disposal may be available as early as 1980 for sites near the river and as late as year 2000 for the most westerly sites. It is important to keep in mind that these dates are from a 1973 proposed plan. Some of the priorities will no doubt change before their total system is constructed.

For those sites which would not have municipal sewer service until some time after the site is in operation, additional area must be provided on the site for developing an on-site disposal system. The type of system used will depend on

the location, the capacity required, and the existing soil type at the site. Any system used will meet the standards set forth by the State Department of Health and the State Pollution Control Agency.

Weigh Station

Primary considerations in locating a weigh station are the design and traffic operations factors. When a weigh station is in operation, it creates a situation in which trucks are forced to diverge from and merge into the main-line traffic system. Speed of the trucks relative to the speed of the traffic stream when making these maneuvers is extremely important to the safety of the motorists. Thus the reason for the high priority given to these factors.

Just as in the case of a rest area, consideration must be given to the location of a weigh station relative to interchanges or a rest area. Sufficient distance must be provided to other entrance or exit ramps so that weaving conflicts do not downgrade the operation of the mainline. Relative speed of the vehicles is very important when analyzing the weaving conflicts between ramps when a weigh station is involved. In addition to spacing for weaving of vehicles, adequate spacing must be provided between facilities so that the exits can be properly signed for.

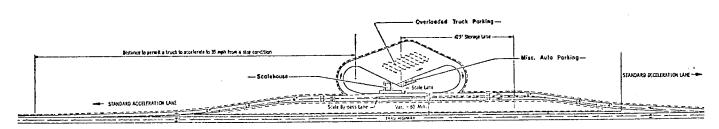
Because a weigh station causes trucks to decelerate and accelerate when leaving and entering the mainline, gradient of the mainline and the ramps are an important consideration. Ideally, the mainline approaching the exit ramp to the weigh station and the ramp itself should be on an upgrade to assist in decelerating the trucks. Likewise, the ramp re-entering the mainline and the mainline beyond the ramp should be on a downgrade to assist in accelerating the trucks. If the ramp grade and mainline grade inhibit the acceleration of a truck, a truck climbing lane must be added to permit the trucks to accelerate prior to merging into the mainline traffic stream.

Surrounding development should be considered when locating a weigh station. When a weigh station is in operation, trucks will be accelerating and decelerating. Therefore, one must recognize the noise associated with it. If the station is in operation at night, the facility will also be lighted. Consideration should be given to the impact of these activities on existing development.

Since a weigh station is primarily for enforcement of weight regulations, the concerns of the State Patrol must be taken into account when selecting a site. State statutes set forth limitations for stopping suspect trucks and directing them to a scale for weighing. The State Patrol's concerns and suggestions for locating a weigh station for this project are documented in a copy of the Patrol Chief's letter on page 12.

An additional requirement for a weigh station is provision for sewage disposal. Rest room facilities are provided in the scale building for use by the operator. The sanitary sewage would be disposed of in a municipal system if one is available. If a municipal system is not available, an on-site system is used. Because the capacity requirements are very low, this is generally not a problem. As in the case of a rest area, any system provided must meet the regulations of the State Health Department and the Pollution Control Agency.

Weigh stations at all site locations are similar to the Typical Weigh Station Design as shown. Variations may occur due to curvilinear alignment - truck climbing lanes, etc. but they will not be of sufficient magnitude to warrant individual displays. Variances in design will conform to acceptable design standards for freeway construction.



TYPICAL WEIGH STATION DESIGN



STATE OF MINNESOTA DEPARTMENT OF PUBLIC SAFETY SAINT PAUL 55155 April 18, 1975

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Mr. Kermit K. McRae District Engineer Minnesota Highway Department 3485 Hadley Avenue N. North St. Paul, MN 55109

Dear Mr. McRae:

We would appreciate your consideration of the following points with respect to site selection for the weigh station on proposed 194 in Washington County.

If practicable, the site should be less than one mile west of the 194 bridge over the St. Croix River. This would enable us to exhibit a sign on westbound 194 east of Junction 95 which would direct all trucks over 11,000 pounds to proceed to the scale site for weighing. The sign would be exhibited only during periods of time when the weigh station is open and it would minimize the number of instances where a westbound truck could circumvent the scale by turning off onto TH95.

If the weigh station cannot be situated within one mile of the river, then it is desirable that it be as close to TH95 as practicable to enable our Troopers to direct trucks to the weigh station when they observe them circumventing the weigh station by turning off onto TH95. The statute provides that a police officer having reason to believe a truck is overloaded can require it to be driven to a scale located within five miles of the point where the officer stops the truck. For example, under the five mile provision, if the weigh station is situated two miles west of Junction 95, we could use the weigh station to weigh overloaded trucks observed on TH95 within three miles of 194.

In any event, we desire the weigh station be located east of the rest area to preclude overloaded trucks waiting in the rest area until the weigh station closes. We would further urge that the weigh station and rest area be physically separated to the extent that traffic departing from the weigh station would not unduly interfere with traffic intending to enter the rest area.

AN EQUAL OPPORTUNITY EMPLOYER

From our point of view, the ideal location for a weigh station is at the crest of a rise in that the upgrade assists entering trucks in decelerating while the downgrade assists departing trucks in accelerating.

A weigh station should not closely abut a residential area to the extent that the noise generated by the trucks would be objectionable to the residents.

If further information is desired, please feel free to contact us.

Sinterely,

James C. Crawford

fhieb

Minnesota State Patrol

JCC/js

ALTERNATES

For purposes of this report a total of seven (7) alternate locations have been chosen for consideration. Because of the requirements previously stated, the rest area-information center and weigh station sites must be considered jointly when trying to determine their exact location.

For purposes of dealing with T.H. 94 alternate line and alternate locations the following nomenclature will be used.

1 - x (T.H. 94 - North alignment)

2 - x (T.H. 94 - T.H. 12 alignment)

x being the actual site and numbered from West to East (i.e. 1 being the most westerly site)

Sewage disposal at all of the rest area, weigh station sites will require interim self-contained sewage treatment systems. The one exception being the T.H. 95 rest area site located between T.H. 95 and the St. Croix river just north of I-94. Because of the limited area for development and its close proximity to the river the sewage must be either pumped across the river to Hudson, Wisconsin or tied into a new sewage interceptor proposed at Lakeland. Use of metropolitan sewage facilities is predicated upon development of sewage treatment facilities and interceptors as proposed in the 1973 report for Wastewater Disposal in Washington County. The number of years which the on-site sewage disposal facilities must be used is also dependent upon the specific interceptor plan chosen for implementation of the Wastewater Disposal System. The interceptors could be available for use by 1980 or should agencies attempt to control land use development through a "no-build" alternative, no interceptors would be available.

Four rest area-information center alternates 1-2 and 2-3 and 1-3 and 2-4, more commonly called the Bluff site and T.H. 95 site respectively, fall within jurisdictional boundaries of the Lower St. Croix National Scenic Riverway. They also lie within the City of Lakeland and is therefore subject to the construction restrictions applicable to urban sub-districts.

Highway waysides, rest areas, scenic overlooks, and parking facilities are all considered appropriate uses in the St. Croix River District.

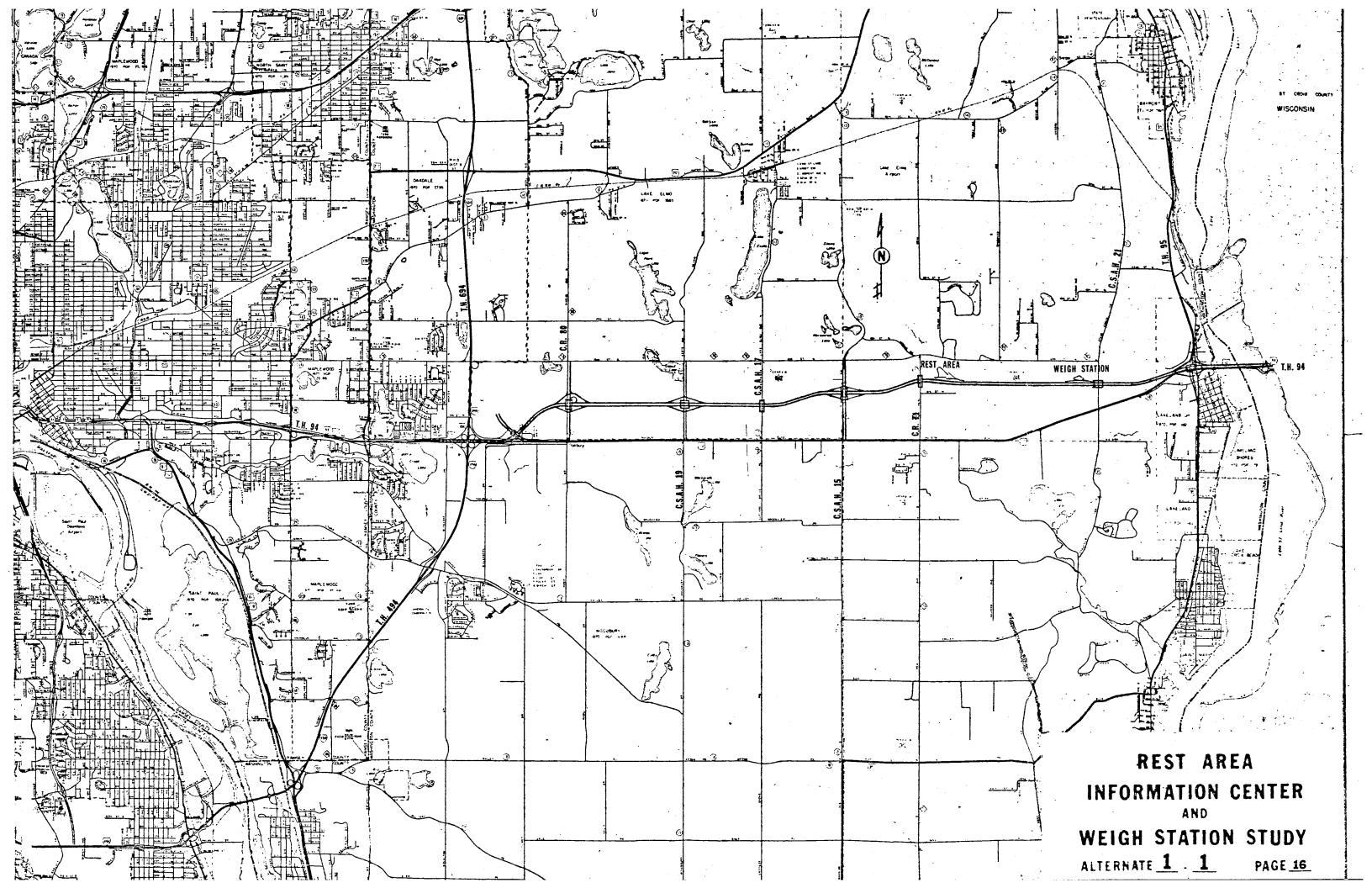
ALTERNATE 1-1

This alternate is as originally proposed for the north alignment. Rights of way have been purchased for the total development.

It has been determined that this alternate will have no effect on previously computed noise level values.

The internal roadway configuration of the rest area are acceptable in terms of curvature, circuity of travel and driver orientation. Mainline I-94 traffic weaving and directional signing problems are held to a minimum because of the excellent ramp spacing and the long distances between traffic signing points.

See Map on page 16 for weigh station and rest area site location. See Sheet 17 for rest area site discussion.



location: 3.25 miles west of the St. Croix River capacity:

100 cars
25 trucks
1 rest room building
3 shelters
50 picnic tables
38 waste receptacles
15 pet tethering posts
20 year design period

site discussion:

This site is the original site approved by the Highway Department Staff and detailed for grading and surfacing. The site is characterized by rolling topography, with evergreen and deciduous tree masses accentuating the knolls and slope areas.

The site development takes advantage of the main topographical land form, penetrating the site along the land form and locating the truck and car parking areas along the outer limits of the knoll. The rest room building and primary usage area is located several feet higher, overlooking the car park area and out across a tree covered glen to the east. The usage area is explored with walkways and paths, tying together the picnic areas, building-plaza and parking areas. The bike trail system located along 1-94, circulates around the outer limits of the development. A bike resting point will be developed at the rest area allowing bike travelers to utilize the rest area facilities. The exiting roadways follow the site land form, allowing the user to view the surrounding setting without serious interruption.

The rest area development will be landscaped with native plant materials lending a natural quality and continuity to the site. The landscaping will also screen adjacent development and Minnehaha Avenue which is visible to the north.

This-site is approximately 42 acres.

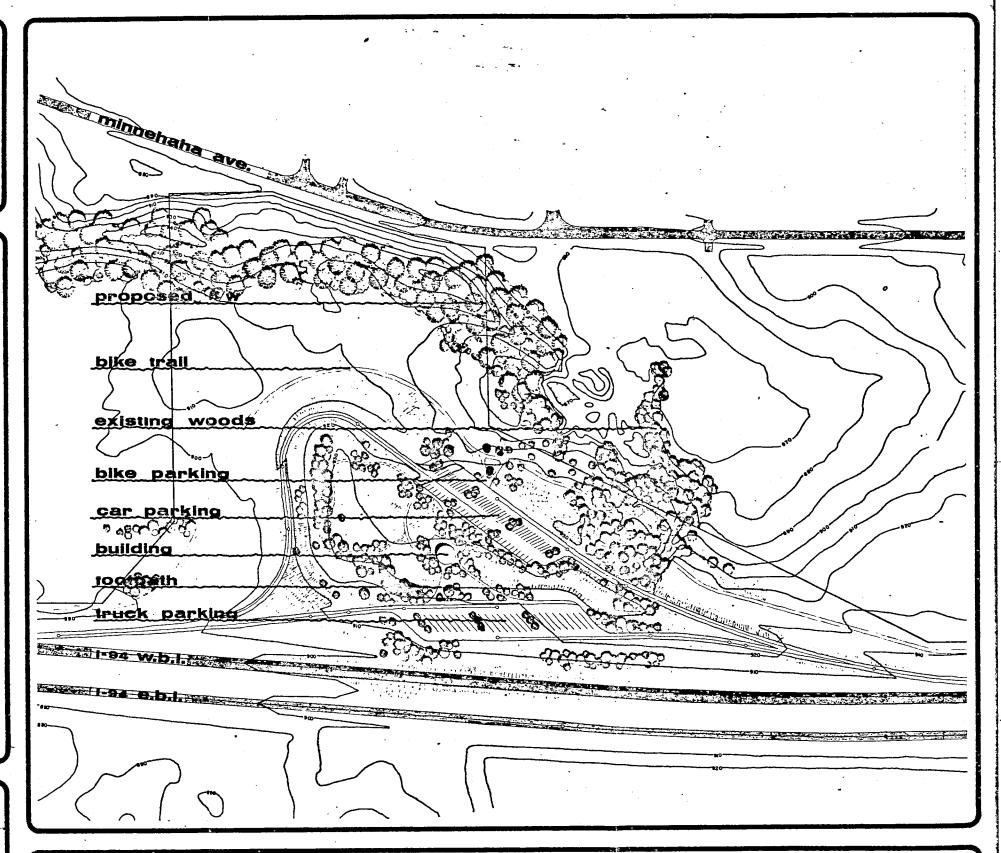
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prepared by:

Office of Environmental Services Minnesota Department of Highways





E I-I - ST CROIX INFO CENTER

ALTERNATE 1-2 and 2-3

The rest area site of this alternate is commonly called the bluff site because of its proximity to the upper bluff of the St. Croix River.

The internal geometrics of this site are negotiable but have circuity of travel and lack driver orientation towards the main building until the vehicle has advanced well into the rest area.

No effect on the previously computed noise analysis values is anticipated with these alternates. Alternate 2-3 will require removal of 2 additional homes.

This rest area location is poor in terms of traffic serviceability. Many traffic conflicts will occur due to the close proximity of the T.H. 95 interchange. Additional problems will result from cars having to weave with trucks coming out of the river valley and using the truck climbing lanes.

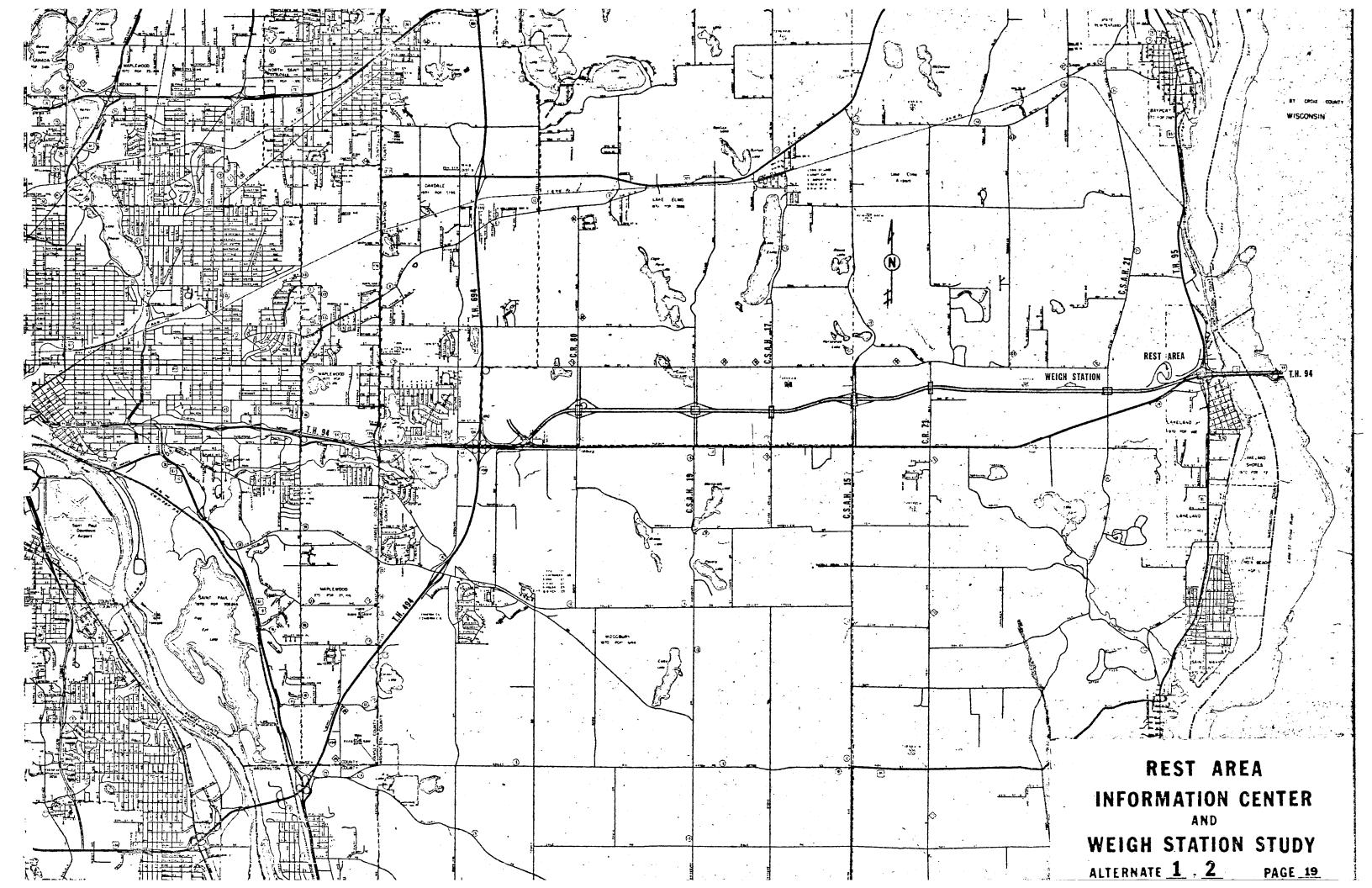
The short distances between interchanging movements requires placement of signs at locations and intervals which are undesirable. The confusion caused by the inadequate placement of signs is compounded by the panoramic river view which will command the attention of the driver.

While Alternate 2-3 is shown on the concept plan using the north I-94 alignment, the roadway geometrics and internal configurations are so similar it was deemed unwarranted to produce a totally new rendering at this time.

The weigh station is located in such a manner not to cause any serious traffic conflicts with the rest area.

For Alternate 1-2: See Map on page 19 for weigh station and rest area site location. See Sheet 20 for rest area site discussion.

For Alternate 2-3: See Map on page 21 for weigh station and rest area site location. See Sheet 22 for rest area site discussion.



location: 0.38 miles west of the St. Croix River capacity:

100 cars
25 trucks
1 rest room building
3 shelters
50 picnic tables
38 waste receptacles
15 pet tethering posts
20 year design period

site discussion:

This site is situated at the edge of the tree-covered upper , bluff of the St. Coix River corridor. The physical topography is relatively flat, except for the bluff edge which is very steep and is project out toward the river valley. The basic vegatation at the bluff edge is deciduous canopy trees, some evergreens and understory shrub growth.

The site development at this location takes advantage of the bluff edge. The combined rest room and information building is situated at the high point of the site overlooking the dramatic St. Croix River Valley. The river valley, from this location, can be seen for several miles. The car and truck parking facilities are located in the flat area, back from the bluff edge. The exiting roadway curves back toward the mainline, providing a safe merging with traffic. The open areas created by the roadways will be defined by subtle earth mounds and extensive landscaping, blending the development into the surrounding environment. The site development will include picnic shelters and tables located throughout the site which will take advantage of the river valley vista. The building, plaza, shelters, tables, parking areas, etc., will be tied together by the walks and pathways. Pedestrian circulation will allow the traveler to experience the river corridor and to relate to the natural quality of the site in a very intimate way. This site will require approximately 57 acres.

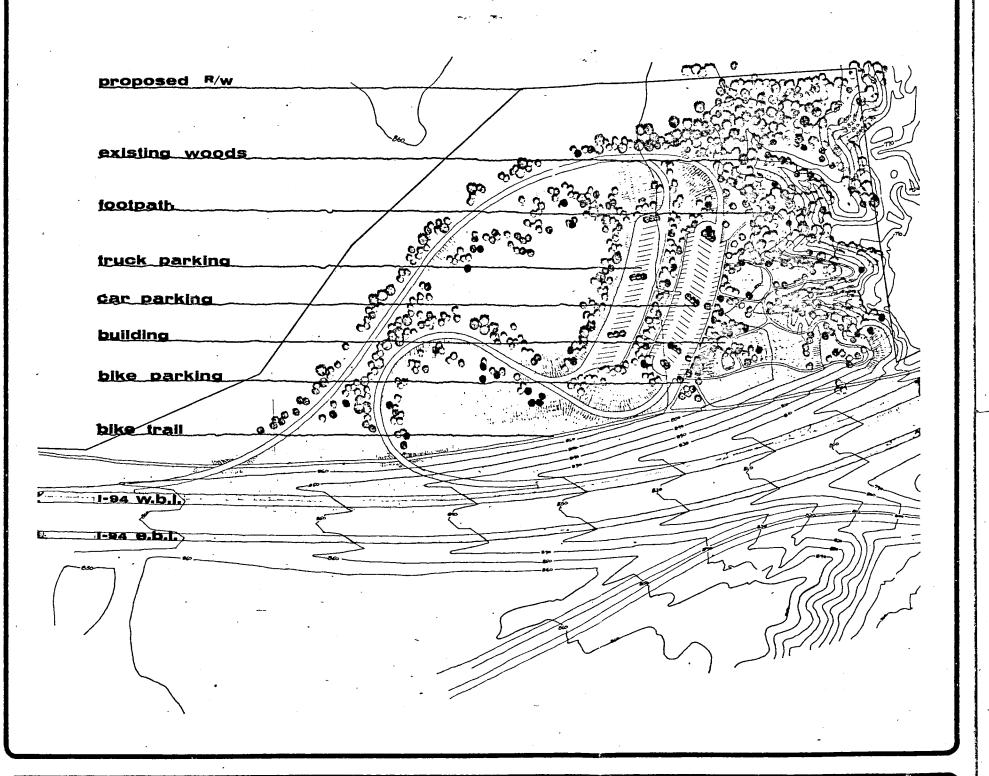
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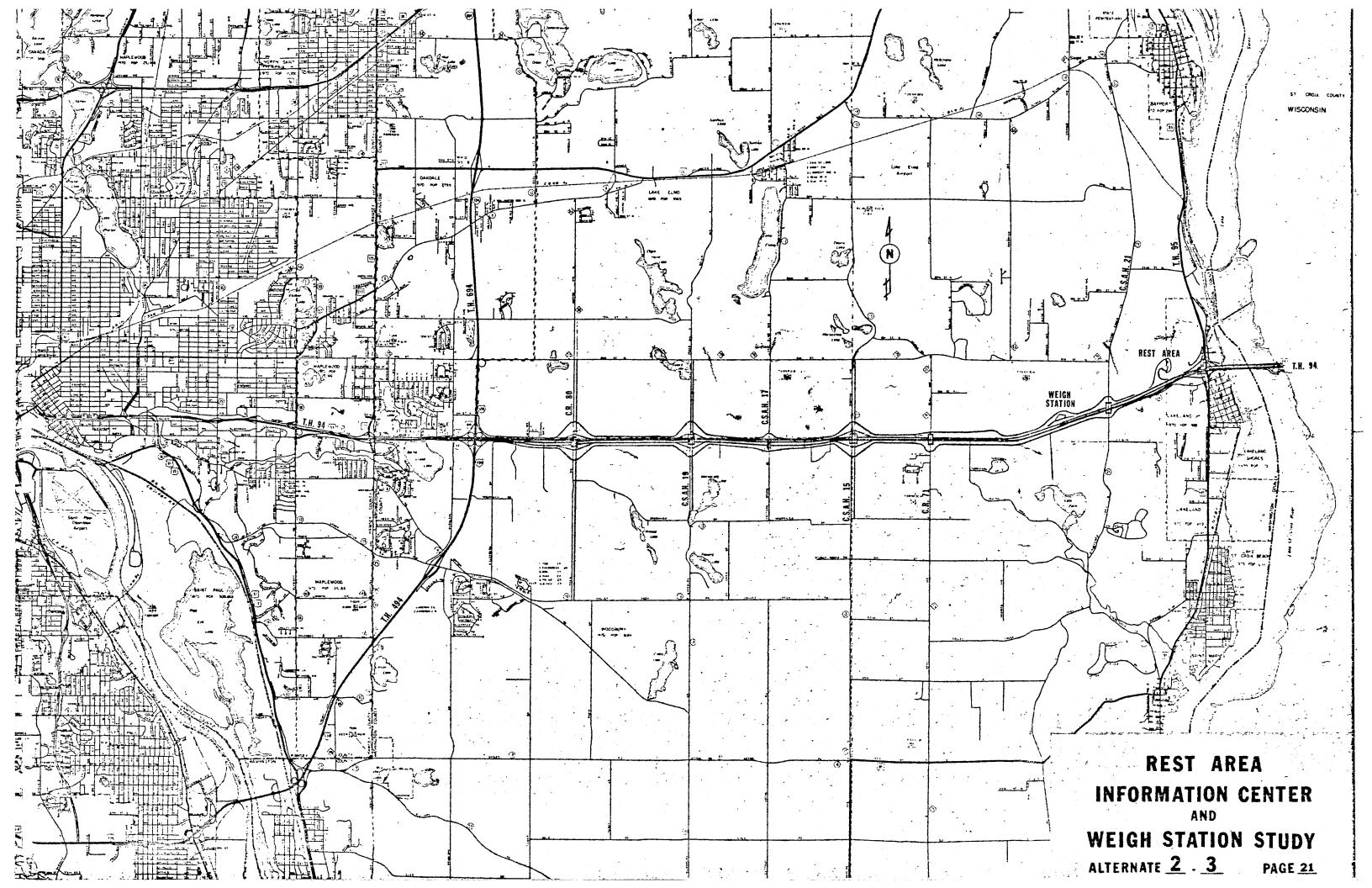
prepared by:

Office of Environmental Services Minnesota Department of Highways





EI-2 - ST CROIX INFO CENTER



location: 0.38 miles west of the St. Croix River capacity:

100 cars
25 trucks
1 rest room building
3 shelters
50 picnic tables
38 waste receptacles
15 pet tethering posts
20 year design period

site discussion:

This site is situated at the edge of the tree-covered upper bluff of the St. Coix River corridor. The physical topography is relatively flat, except for the bluff edge which is very steep and is project out toward the river valley. The basic vegatation at the bluff edge is deciduous canopy trees, some evergreens and understory shrub growth.

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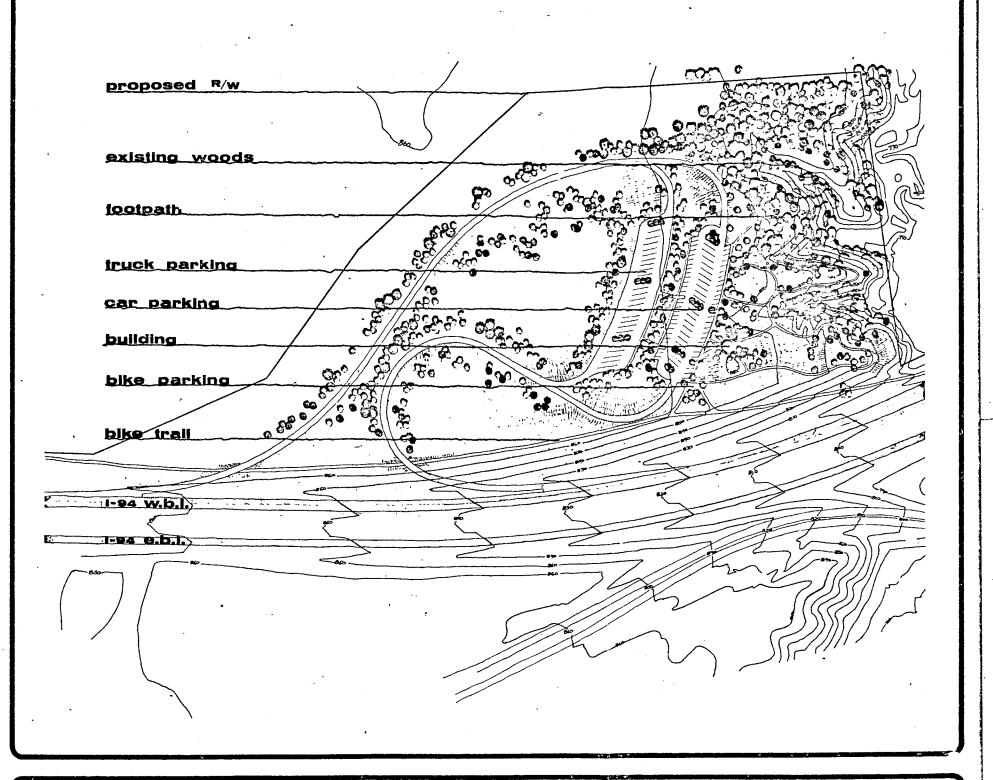
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prepared by:

Office of Environmental Services Minnesota Department of Highways





2-3-ST CROIX INFO CENTER

ALTERNATE 1-3 and 2-4

This site called the T.H. 95 site, has the potential for becoming a community park, because its access must be orientated to T.H. 95. This park-like feature negates the original intent of the proposal, a rest area-information center for the Interstate traveler, by forcing him to compete with the local citizen.

The circulation pattern within this area, while being tight, is adequate to serve the motoring public.

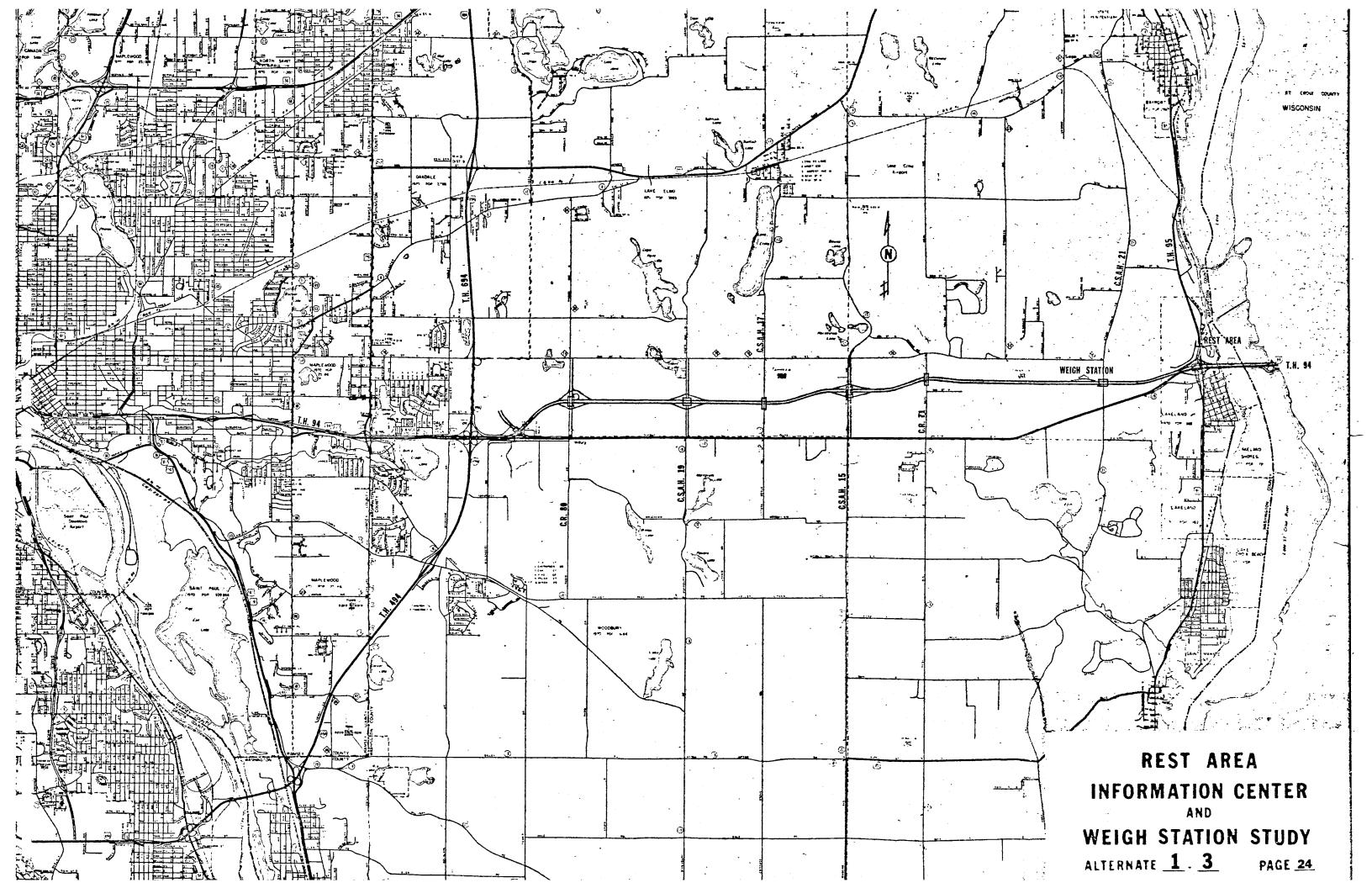
I-94 weaving problems are not compounded with development of this site because the T.H. 95 interchange would be used for access. The signing for traffic is considered less desirable than for Alternates 1-2 and 2-3. Additional "trail blazing" signs will be required on T.H. 95 and on I-94 because of this unusual access.

These alternates require removal of additional homes and produce a net effect on the noise attenuation requirements by eliminating \$44,000 in noise barrier which was identified in the noise analysis report. Alternate 1-3 requires the removal of 4 homes while Alternate 2-4 takes a total of 6.

The weigh station is located in such a manner not to cause any serious traffic conflicts with the rest area.

For Alternate 1-3: See Map on page 24 for weigh station and rest area site location. See Sheet 25 for rest area site discussion.

For Alternate 2-4: See Map on page 26 for weigh station and rest area site location. See Sheet 27 for rest area site discussion.



location: Junction I-94 and T.H. 95 at the St. Croix River capacity:

100 cars
25 trucks
1 rest room building
3 shelters
50 picnic tables
38 waste receptacles
15 pet tethering posts
20 year design period

site discussion:

This concept study area is located at the first terrace level of the St.-Croix River. The physical character of the site is flat with vegetation and residential housing along the terrace edge. The site vegetation is primarily deciduous shade trees and areas of planted evergreens. Shrub undergrowth is common along the terrace edge embankment.

The site development would take advantage of the river view in the immediate area. This 27 acre site is relatively small to house 100 cars and 25 trucks and future expansion possibilities would be severely limited. In addition, 6 residential units The entrance and exit roadwould be acquired ways would have to be located on Highway 95, due to the interchange development at the junction of T.H. 95 and 94. This ingress-egress point would allow usage to T.H. 95 users and local users, increasing the user impact on the site. The site can be considered fragile in terms of user impacts because ofits limited size. The car and truck parking areas would be located in the flat open areas, preserving existing vegetation. The primary use-area and building would be oriented toward the river. From these points a view of the river and its activities would be available. The development of the terrace-edge would include shelters, picnic tables and walkways, tying the various site amenities together.

The site would also be landscaped with indigenous plant species, blending the development into the surrounding environment.

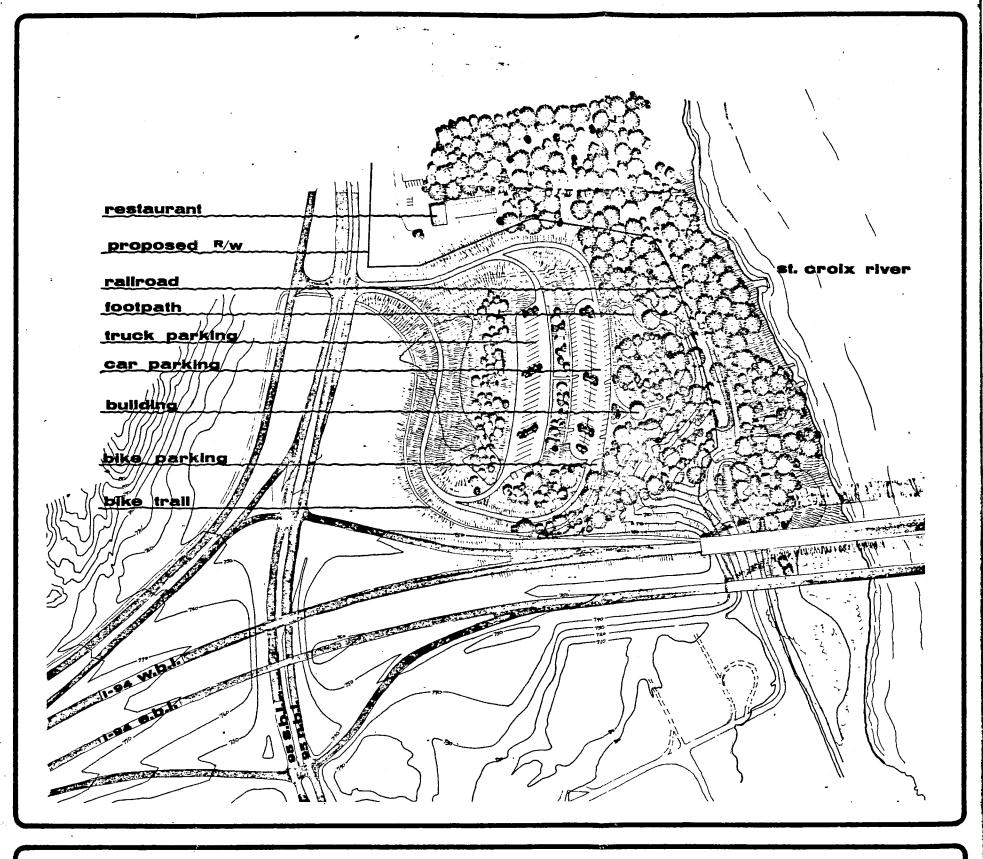
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contour: 10' interval date: October 5, 1974

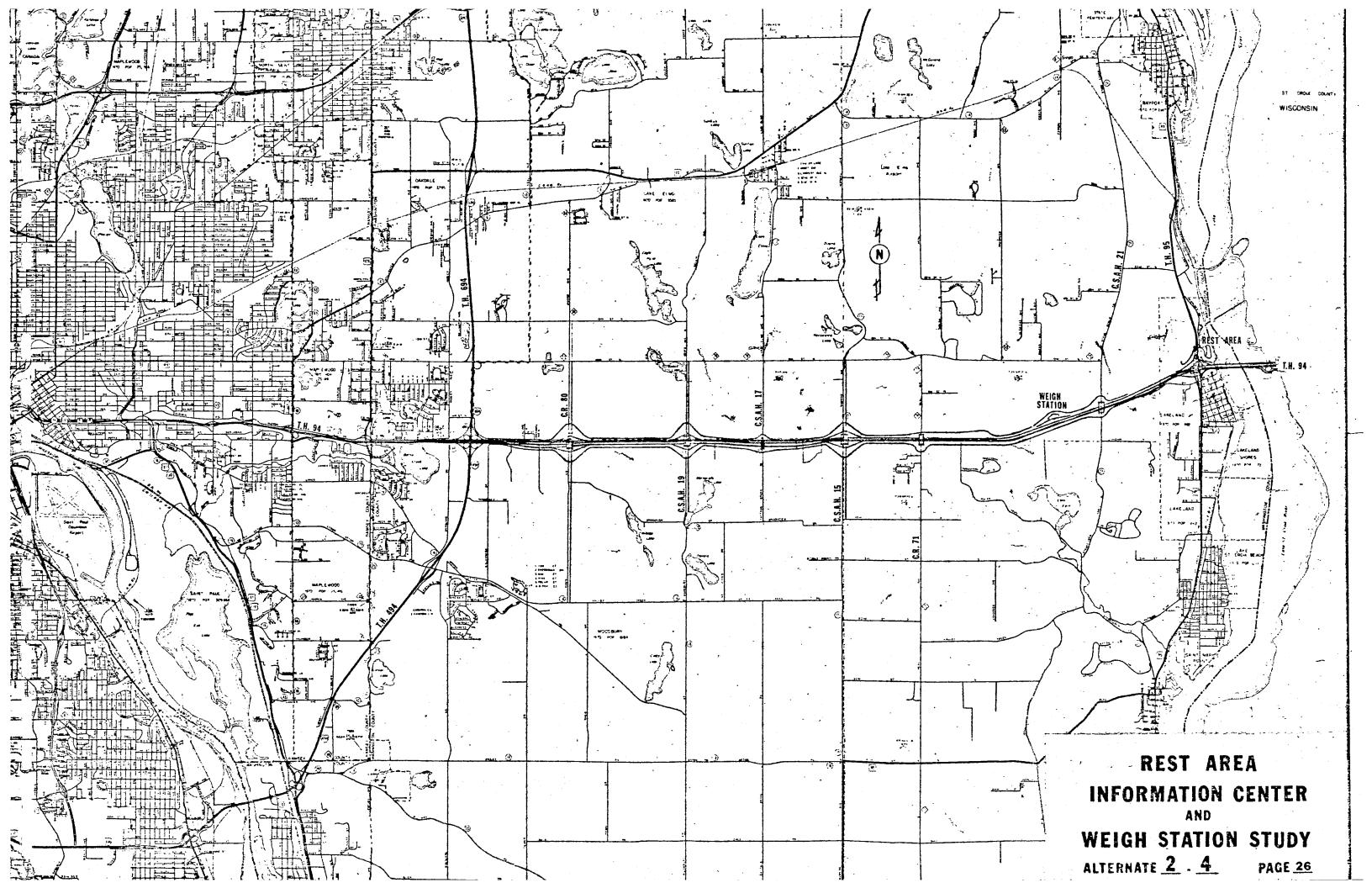
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I-3 · ST CROIX INFO CENTER



location: Junction 1-94 and T.H. 95 at the St. Croix River capacity:

100 cars
25 trucks
1 rest room building
3 shelters
50 picnic tables
38 waste receptacles
15 pet tethering posts
20 year design period

site discussion:

This concept study area is located at the first terrace level of the St. Croix River. The physical character of the site is flat with vegetation and residential housing along the terrace edge. The site vegetation is primarily deciduous shade trees and areas of planted evergreens. Shrub undergrowth is common along the terrace edge embankment.

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The site would also be landscaped with indigenous plant species, blending the development into the surrounding environment.

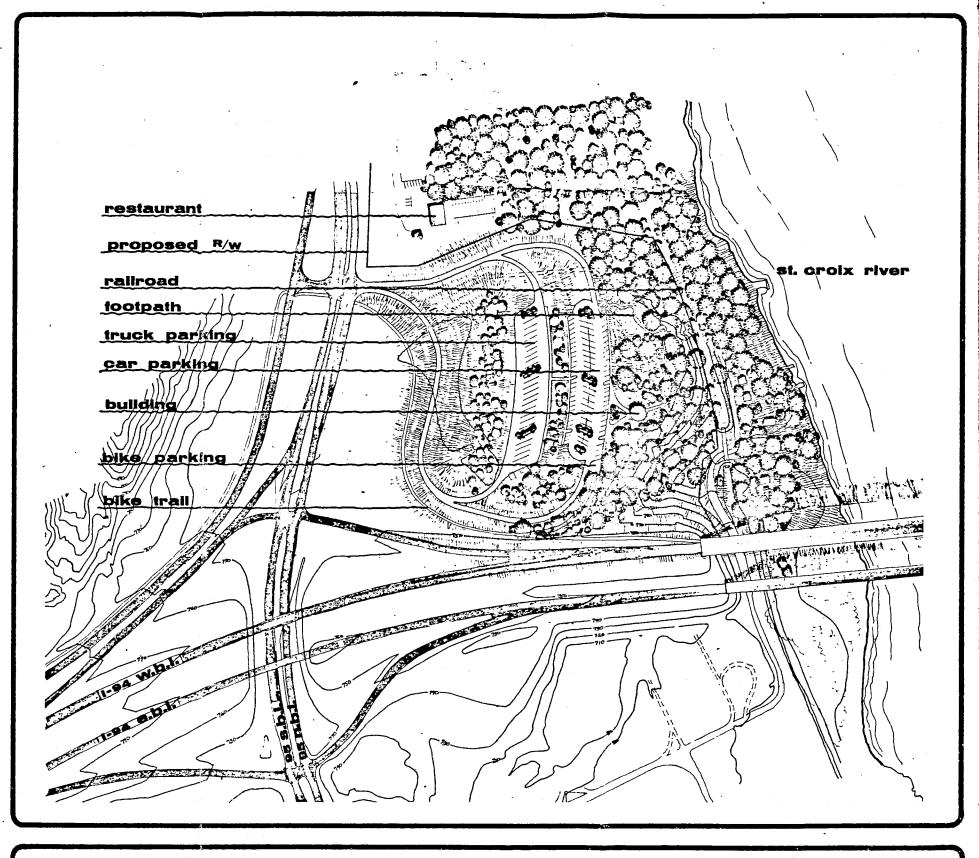
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contour: 10' interval date: October 5, 1974

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E2-4-ST CROIX INFO CENTER

ALTERNATE 2-1

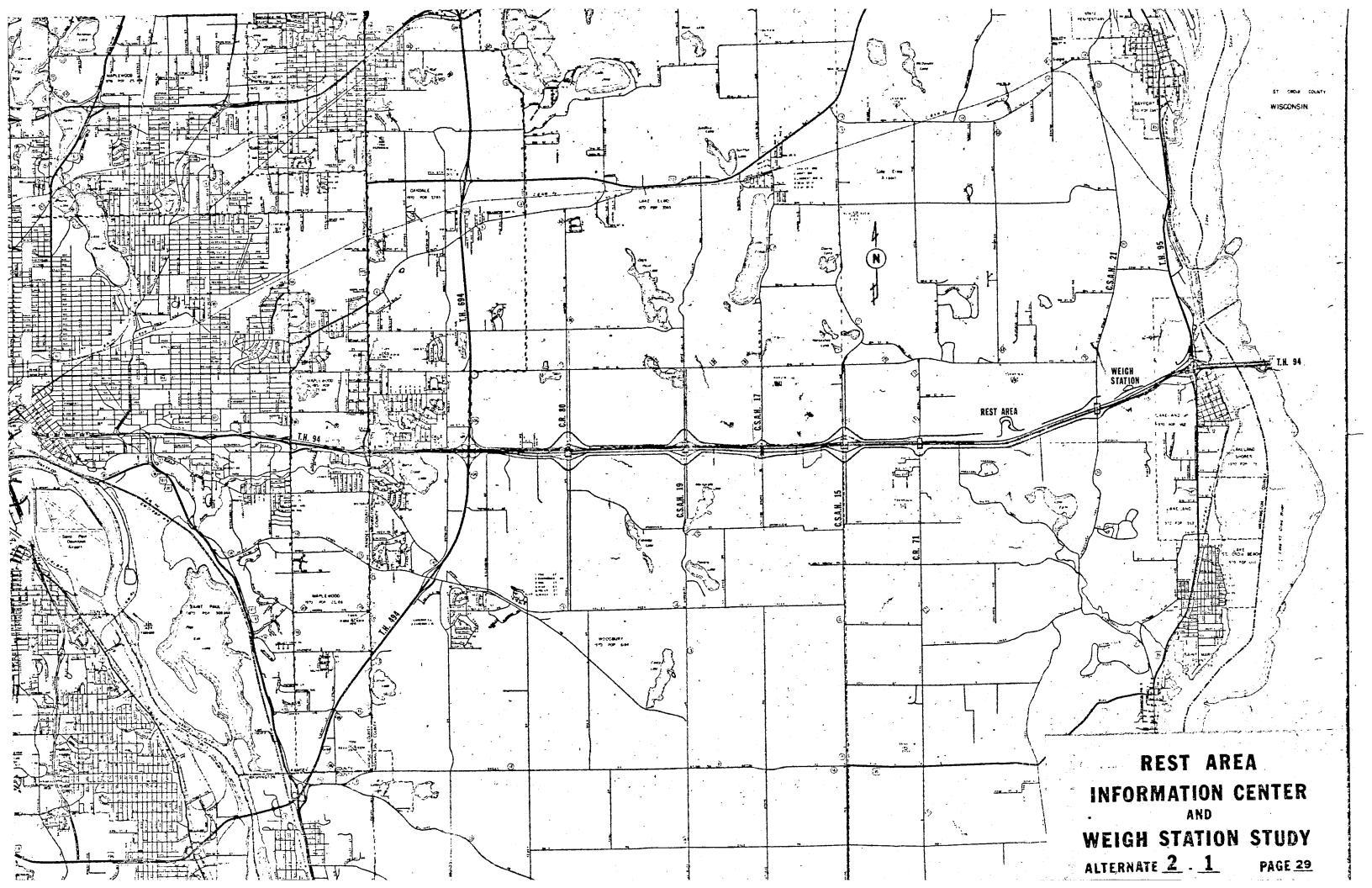
No internal circulation problems are anticipated in this, the most westerly site considered on the south I-94 alignment.

Adequate spacing of interchanging movements abrogate any weaving and signing problems for this site.

This alternate requires acquisition of one motel but will not change the noise barrier requirement based on the initial noise analysis.

There appears to be no major traffic conflicts between vehicles using the weigh station and the rest area.

See Map on page 29 for weigh station and rest area site location. See Sheet 30 for rest area site discussion.



location: 2.76 miles west of the St. Croix River capacity:

> 100 cars 25 trucks I rest room building 15 pet tethering posts

50 picnic tables 38 waste receptacles

3 shelters

20 year design period

site discussion:

This site alternative is characterized by rolling topography, wooded tree masses and open agricultural area. The main identification of the site is an interior meadow-like area surrounded by trees. A power transmission line runs along the east side of the site creating a visual conflict at certain vantage points. The development of the site, however, will attempt to minimize the visual conflict of the transmission line.

The concept development of this site takes advantage of the existing wooded area by locating the building and primary usage area in the woods. The development is then oriented towards the meadow-like opening as a visual experience for the motorist. The entrance roadway sweeps into the site along existing contour grades minimizing intrusion. The parking areas are situated into the site at various elevations in an attempt to integrate them into the existing land forms. Walkways and paths will meander throughout the site tying together site amenities and allowing the user a pleasant stroll through the site.

The site is partially open on the western side and will require sizable landscaping. The type of landscaping will be in keeping with the native plant material at the site and throughout the region. The landscape concept is to blend the rest area information center development into the existing character of the site.

This site will require appoximately 73 acres.

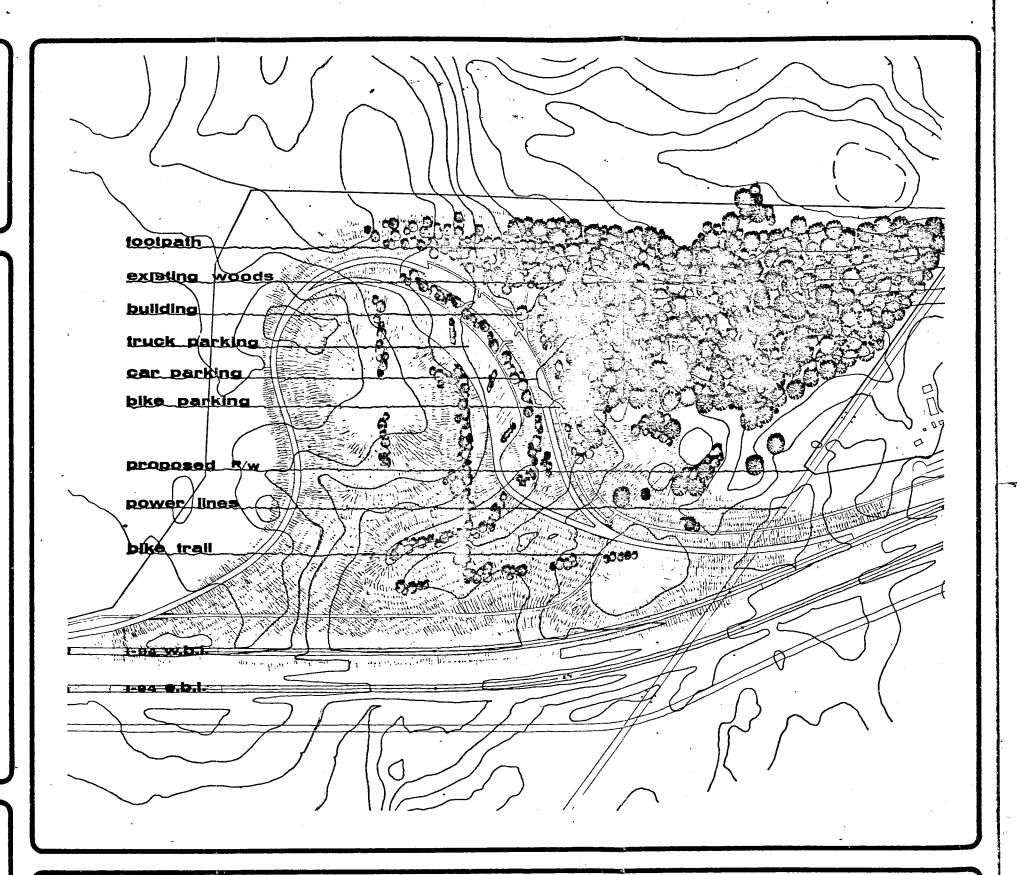
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contour: 10' interval date: October 5, 1974

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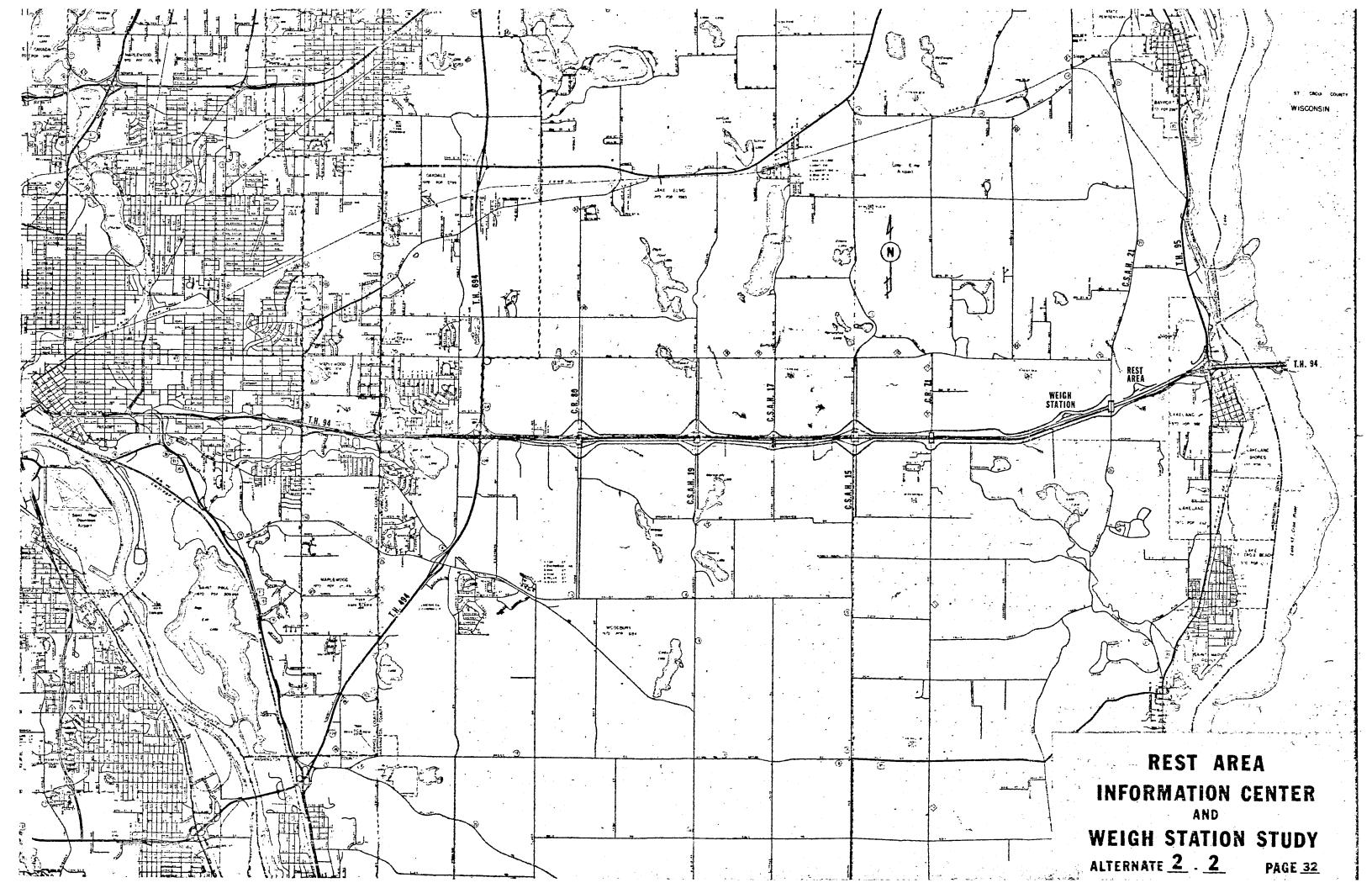


ALTERNATE 2-2

This location has the same weaving problem associated with it as does Alternate 2-3 but to a somewhat lesser degree due to the more westerly location. Signing problems are again similar to Alternate 2-3.

This alternate requires removal of 2 homes and one motel but no net change in total noise impact as shown in the noise analysis report is anticipated.

See Map on page 32 for weigh station and rest area site location. See Sheet 33 for rest area site discussion.



location: 1.14 miles west of the St. Croix River capacity:

100 cars
25 trucks
1 rest room building
3 shelters
50 picnic tables
38 waste receptacles
15 pet tethering posts
20 year design period

site discussion:

This site is basically a flat, open agricultural field situation which is barren of any identifiable resource qualities.

The site development concept is similar to site I, in that the roadways will sweep into the site to the split car and truck parking areas. The building, plaza and primary usage area are inward oriented, surrounded by roadways. The walkways and paths will tie the building, plaza, shelters and picnic tables to the parking areas. The site will be graded extensively, creating earth berms necessary to separate usage area from roadway travel. The earth berms will also add interest to the site.

The landscape design at this site would be most extensive, owing to the barren quality of the site. Several species of shade trees, half trees, shrubs and ground covers would be necessary to give the site scale and interest. The nature of the plant material would be similar to that existing in the area.

The rest area information center site will require approximately 39 acres.

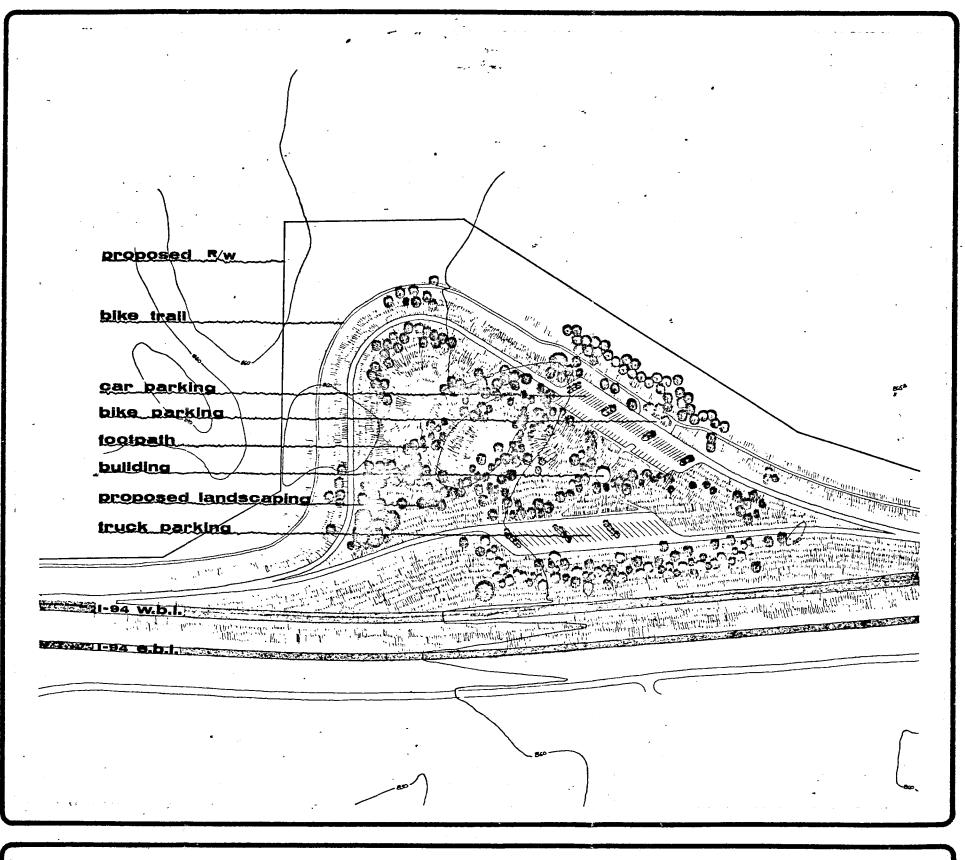
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contour: 10' interval date: October 5, 1974

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E2-2-ST CROIX INFO CENTER

