

*New*

STATE OF MINNESOTA  
DEPARTMENT OF TRANSPORTATION  
TECHNICAL SERVICES DIVISION

STATEMENT OF FACTS  
ESTABLISHING NEED AND  
REASONABLENESS OF RULES

In the matter of the Proposed )  
Adoption of Rules, Amendments )  
and Deletions Governing the )  
Rules for BRIDGE INSPECTION )  
AND INVENTORY )

-----

The Commissioner of Transportation has the authority to propose amendments, deletions and additions to the Rules for BRIDGE INSPECTION AND INVENTORY. Pursuant to Minnesota Statutes Section 174.50, Subdivision 7 the Commissioner appointed a 21 person committee composed of county commissioners, county engineers, city elected officials and city engineers to advise him as to proposed changes in the rules. The individuals serving on the committee were recommended to the Commissioner by the Association of Minnesota Counties and the League of Minnesota Municipalities. The committee met on December 14, 1989, and again on January 25, 1990. The results of those meetings are discussed further in this statement.

Solicitation of outside opinion concerning the possible adoption, amendment, suspension or repeal of rules relating to Minn. Stat., chs. 165.03 subd. 2 (Bridge Inspection and Inventory) Chapter 8810.9000 was published in the State Register on Monday, October 16, 1989.

Individual letters requesting comments were sent to County Engineers, City Engineers, Minnesota Legislators, Regional Development Commissioners, Metropolitan Councils, Department of

Transportation staff, Legislative Study Commission and other interested parties on October 11, 1989 and again on December 27, 1989.

The proposed adoption of rules, amendments and deletions governing the rules for BRIDGE INSPECTION AND INVENTORY contain changes to the existing Chapter 8810.9000 of the Minnesota Rules. The majority of these changes are minor in nature and are revised or rewritten for the purpose of clarity and to conform to statutes that have been revised or rewritten. All changes are discussed below.

Under 8810.9000 DEFINITIONS:

The definition of "Bridge" was changed from a structure measuring 20 feet along the center of the roadway to a structure measuring 10 feet along the center of the roadway. This was revised to conform to Minnesota Statutes Section 161.081, Subdivision 2a.

The definition of "Bridge Inspector's Training Manual" was amended to clearly identify that it is the training manual published by the Federal Highway Administration referred to in these rules.

Under 8810.9100 PURPOSE AND SCOPE:

Reference to year the Minnesota legislature last amended Minnesota Statutes, chapter 165, with reference to the inspection and inventory of bridges in the state of Minnesota was deleted.

Under 8810.9200 INSPECTION AND INVENTORY STANDARDS:

For clarity, the phrase "Application of" was added to the title of this section preceding the existing phrase "Inspection and Inventory Standards".

The word "rights" was corrected to read "right of way" to conform to "right-of-way" as used previously in this paragraph.

The statement that bridges on recreation trails used only by pedestrians, bicycles and recreational vehicles were "not included in these rules" was changed to state that said bridges "are excluded from these rules except for those bridges over or under a public highway or street." Pedestrian, bicycle and recreational bridges over or under a public road or street are required to be included in the inventory of bridges and are required to be inspected and rated by the responsible roadway authority as cited in Minnesota Statutes Chapter 165.03 Subd. 2.

Under 8810.9300 PERSONNEL:

For clarity, the title of this section was changed from "Personnel" to "Responsibility and Qualifications" to emphasize the qualifications required to be a certified bridge inspector.

Under Subp. 2, "Qualifications", the qualifications of the individual in charge of the bridge inspection and inventory for each organizational unit was expanded to include the following statement: "or, have current certification as a Level III or IV Bridge Safety

Inspector under the National Society of Professional Engineer's program for National Certification in Engineering Technologies (NICET) or be certified by the commissioner of transportation as a Bridge Safety Inspector".

Under 8810.9400 FREQUENCY OF INSPECTIONS AND INVENTORY:

In Subp. 1, "Inspection", a reference to a specific section, "section 2.3" of the AASHTO manual was deleted, as the AASHTO manual could be revised thus causing the specific reference in the rule to be in conflict with the AASHTO manual.

In Subp. 1, the location of the section delineating the bridge inspection responsibilities of the engineer was changed from "8810.9000" to "8810.9300 subpart 1."

Under 8810.9500 INSPECTION REPORTS AND RATINGS:

In Subp. 1, "Inspection", a reference to a specific section, "section 2.5" of the AASHTO manual was deleted. Here again, the AASHTO manual could be revised thus causing the specific reference in the rule to be in conflict with the AASHTO manual.

In Subp. 2, "Ratings", the first sentence was clarified to state that the structure inventory sheet form shall be "provided by the commissioner of transportation."

In Subp. 2, "Ratings", a minor grammatical correction was made in the second sentence to include the word "the" before the phrase

"condition of the structure."

Under 8810.9800 RECOMMENDATIONS REGARDING SHORT BRIDGES:

This entire section was deleted. Previously bridges were defined as having an opening of 20 feet measured horizontally along the center of the roadway and structures less than 20 feet were not considered bridges per se. There were instances when structures under 20 feet in length were important to the road system and therefore inspection, rating and posting were recommended. Changing the definition of a bridge from 20 feet to 10 feet measured horizontally along the center of the roadway negates the necessity of this statement. All structures 10 feet and longer are now considered bridges.

THE NOTICE OF INTENT TO SOLICIT OUTSIDE OPINIONS CONCERNING THE POSSIBLE ADOPTION, AMENDMENT, SUSPENSION OR REPEAL OF RULES RELATING TO MINNESOTA STATUTES SECTION 165.03, SUBD. 2 INSPECTION AND INVENTORY, WAS PRINTED IN THE STATE REGISTER ON OCTOBER 16, 1989. THE FOLLOWING COMMENTS HAVE BEEN RECEIVED SUBSEQUENT TO THE NOTICE.

October 18, 1989. A telephone call from Mr. Robert Kurpius, Assistant Traffic Engineer, Operations, Office of Traffic Engineering, Department of Transportation, stated that under 8810.9300 Subp. 2 the plural word "qualifications" in the first sentence of the second paragraph should be changed to the singular word "qualification". RESPONSE: We believe the plural is correct since one of the options contains two requirements (experience and training).

October 23, 1989. A letter from Mr. Dale D. Wegner, Jr., Brown County Highway Engineer, stated that under 8880.9000 - I agree with all the changes to 8810.9000 except 8810.9300, the addition of certified technicians being allowed to head an inspection. I have extensive experience in the bridge inspection field and I have helped teach at bridge inspection schools in the past and have found that if the individual does not have some knowledge of structural engineering, they may never understand what to look for during an inspection. We had some individuals take the same school three times or more and still not grasp what we wanted them to look for.

RESPONSE: If a technician can pass the certification he or she should be qualified to head the inspection. They are still under the supervision of an engineer. The only change to the qualifications is the addition of the certification option.

October 25, 1989. A letter from the Hennepin County Department of Public Works stated that under 8810.9000 Subp. 2 - These changes will not affect Hennepin County since we already are inspecting 10-foot bridges. Hennepin County also stated that under 8810.9200 there was a typographical error in the first sentence and the phrase "rights" of any street should be changed to "right-of-way" of any street. Hennepin County also stated that under 8810.9300 Subp. 2 - Clarification is needed for the proposed change to paragraph 2, adding an alternative method of fulfilling the requirements for the individual in charge of the inspection team. If we understand it correctly, there are three ways in which one could qualify as head of an inspection team. This would be more clear if the alternates were numbered or if the word "or" on line 3 of the paragraph were

left in. RESPONSE: The change from "rights" of any street to "right-of-way" was made in the final rules of 8810.9200. The word "or" was retained in the final rules of 8810.9300 Subp. 2, and an additional option was added "or be certified by the commissioner of transportation as a Bridge Safety Inspector."

October 26, 1989. A memo from Mr. John Allen, Construction and Maintenance Engineer, Office of Bridges and Structures, Department of Transportation, stated that under 8810.9500 Subp. 1, the reference to "section 2.5" in the first sentence should be changed to "section 2.4" so that the first sentence would then read as follows: Subp. 1. Inspection. The items to be inspected and reported on the bridge inspection report form shall include but not be limited to those items specified in section 2.4 of the AASHTO manual. RESPONSE: In the final rules of 8810.9500 Subp. 1, the reference in this sentence to a specific section was deleted, so that the final text reads "The items to be inspected and reported on the bridge inspection report form shall include but not be limited to those items specified in the AASHTO manual."

October 27, 1989. A letter from Mr. Douglas E. Haeder, P.E., Pipestone County Highway Engineer stated - In response to your Notice of October 11, 1989, the following comment is offered: 8810.9300 Responsibility and Qualifications - Subp. 2 - Qualifications. I object to the deletion of the word "or" in the third line of the second paragraph. I believe that being a registered professional engineer in the State of Minnesota should stand alone as acceptable qualifications to be in charge of the inspection team. RESPONSE: See comments made to Hennepin County's

letter of October 25, 1989.

October 27, 1989. A letter from Mr. Allan Kehr, Assistant City Engineer, City of Virginia, stated that under 8810.9000 Definitions Subp. 2 Bridge - lines 4 through 10 - I have no idea what this is trying to say. Perhaps a drawing or drawings is in order to show what is meant. At least simplify the criteria. Mr. Kehr added - Why is the language here different than the language of the Bridge Construction and Reconstruction Rules? Mr. Kehr commented on 8810.9000 Subp. 4, "Inspection" concerning the phrase "examining a structure." He asked how will this be done, - visually? Mr. Kehr commented on 8810.9200 "Application of Inspection and Inventory Standards". - Very wordy! It might be easier to state what it doesn't govern. Mr. Kehr stated under 8810.9300 Subp. 2, "Qualifications" - Experience means little if anything. I have people working for me that have +30 years of experience doing their jobs wrong. Mr. Kehr stated that the existing phrase in lines three through five of the second paragraph "~~or~~ have a minimum of five years experience in Bridge inspection assignments in a responsible capacity" should be replaced by the phrase "or have a certificate in Civil Engineering Technology CCET." Mr. Kehr commented on 8810.9400 "Frequency of Inspections and Inventory" Subp. 1 - Inspection. He stated that in the last sentence the reference to a specific number should be changed from "part 8810.9000" to "part 8810.9300 Subp. 1" so that the last sentence would then read - The evaluation of these factors will be the responsibility of the engineer assigned the responsibility for inspection as defined in part 8810.9300 Subpart 1. RESPONSE: The language in 8810.9000 is the same as AASHTO and FHWA. The language in 8810.9000 must be different from 8810.8000 to



restrict funding to eligible bridges. A single definition will be used for both but a Subp. 3 will be added to 8810.8000 describing bridges eligible for funding by the State Transportation Fund. Regarding 8810.9000, Subp. 4 "Inspection": Depending on the situation, different methods of inspection are appropriate. A complete discussion would be lengthy and unnecessary. Regarding 8810.9200 "Application of Inspection and Inventory Standards": We believe that the language is necessary. This does apply to any bridge over or under a public street. Regarding 8810.9300 Subp. 2 "Qualifications": See comments made to Dale Wegner's letter of October 23, 1989 and Hennepin County's letter of October 25, 1989. Regarding 8810.9400 Frequency of Inspections and Inventory Subp. 1 - "Inspection": In the final rules the reference in the last sentence was changed from "part 8810.9000" to "part 8810.9300 Subp. 1."

October 30, 1989. A letter from Mr. Luthard Hagen, P.E., Lincoln County Highway Engineer, stated that under 8810.9200 - Clarification may be needed because it sounds like all structures including bike ramps and walkways are now included. It was Mr. Hagen's understanding that all these structures were not included before. RESPONSE: See comments made to Allan Kehr's letter of October 27, 1989, regarding 8810.9200.

November 6, 1989. A letter from Mr. Ramankutty Kannankutty, P.E., Director, Engineering Design, Minneapolis Department of Public Works, stated that under 8810.9000 Subp. 2, "Definitions" - The last sentence of the "Bridge" definition excludes railroad bridges over or under a public highway or street. Does this mean an actual paved

roadway or is it referencing public right-of-way that might be used for streets or highways in the future? Mr. Ramankutty stated that under 8810.9000 Subp. 3 - The "Bridge Inspector's Training Manual" is not written in the form of a definition. Mr. Ramankutty stated that under 8810.9300 Subp. 2 "Qualifications" - We offer the following suggestions: The individual in charge shall have one of the following qualifications: 1. Be registered as a Professional Engineer and have completed FHWA's Bridge Inspection Course, or 2. If not registered as an engineer, but is an Engineer-in-Training, have a minimum of four years experience in bridge inspection, or bridge design or bridge construction assignments or a combination thereof and has completed FHWA's course on bridge inspection, or 3. Have current certification as a Level III or IV Bridge Safety Inspector under the National Society of Professional Engineer's Program for National Certification in Engineering Technologies (NICET.) Provisions should be made in the implementation of the proposed rule changes that will provide training opportunities for non-engineers to obtain certification as a Level III or IV Bridge Safety Inspector. The new rules should allow for the "grandfathering" of current inspection personnel. With such a major change in the rule, provisions for a target effective date to allow cities time to comply with the rule should be provided. RESPONSE: Regarding 8810.9000 Subp. 2 "Definitions": "Public highway or street" are defined by law and would not include public right of way not currently being used by the public. Regarding 8810.9000 Subp. 3: In the final rules the definition of the Bridge Inspector's Training Manual was clarified to include the phrase "which is the training manual published by the Federal Highway Administration." Regarding 8810.9300 Subp. 2,

"Qualifications": See comments made to Dale Wegner's letter of October 23, 1989 and to Hennepin County's letter of October 25, 1989.

November 6, 1989. A letter from Mr. Kenneth E. Weltzin, P.E., Ramsey County Department of Public Works stated that under 8810.9200 - Lines eleven and twelve should read: All railroad bridges are excluded unless under the jurisdiction of a local unit of government. Mr. Weltzin stated that - The last line, line 16, should be changed to: "except for those bridges on State-Aid rights-of-way." Mr. Weltzin stated under 8810.9300 Subp. 2 "Responsibility and Qualifications" - The second paragraph should read: The individual in charge of the inspection team shall have the following qualifications: be registered in the State of Minnesota as a professional engineer, or have current certification as a Level III or IV Bridge Safety Inspector under the National Society of Professional Engineers' program for National Certification in Engineering Technologies (NICET). RESPONSE: Regarding 8810.9200: See comments made to Allan Kehr's letter of October 27, 1989. Regarding 8810.9300 Subp. 2: See comments made to Hennepin County's letter of October 25, 1989. Also, note that the NICET Certification is included as one option in the final rules under 8810.9300 Subp. 2.

November 7, 1989. A memo from Mr. John Allen, Construction and Maintenance Engineer, Office of Bridges and Structures, Department of Transportation, stated that under 8810.9300 Subp. 2 - The word "or" should not be deleted after the words "The individual in charge of the inspection team shall have the following qualifications; be

registered in the state of Minnesota as a professional engineer;  
or..." RESPONSE: See comments made to Hennepin County's letter of  
October 25, 1989.

December 5, 1989. A memo from Mr. John Allen, Construction and  
Maintenance Engineer, Office of Bridges and Structures, Department  
of Transportation, stated several typographical and grammatical  
revisions. These revisions were suggested as follows - Under  
8810.9000 Subp. 4: In the first sentence, insert a comma between  
the words "structure" and "evaluating" so that the first part of the  
sentence shall read as follows: Subp. 4. "Inspection". The term  
"inspection" shall mean examining a structure and evaluating..."  
Mr. Allen stated that in the first sentence of 8810.9200, the phrase  
"rights of any street" should be changed to "right-of-way" of any  
street so that the middle part of the first sentence would then read  
"...or which are located wholly or partially within or over the  
right-of-way of any street located within or along municipal  
limits,..." Under 8810.9200: Mr. Allen stated that in the second  
sentence, the word "to" should be changed to the word "or" so that  
the sentence would then read - All railroad bridges are excluded  
from these rules except for railroad bridges over or under a public  
highway or street. Under 8810.9300 Subp. 2 Mr. Allen stated that in  
the first sentence, the word "or" should not be deleted after the  
phrase "professional engineer" so that the first part of the  
sentence would then read "The individual in charge of the inspection  
team shall have the following qualifications; be registered in the  
state of Minnesota as a professional engineer; or have a minimum of  
five year years experience in bridge inspection assignments in a  
responsible capacity..." Under 8810.9400 Subp. 1, Mr. Allen stated

that in the last sentence the statement "as defined in part 8810.9000" should be changed to "as defined in 8810.9300, Subpart 1" so that the last sentence would then read "The evaluation of these factors will be the responsibility of the engineer assigned the responsibility for inspection as defined in part 8810.9300

Subpart 1. RESPONSE: Regarding 8810.9000 Subp. 4: the comma was inserted in the final rules between the words "structure" and "evaluating". Regarding 8810.9200: See comments made to Hennepin County's letter of October 25, 1989. Regarding 8810.9200: In the second sentence of the final rules, the word "to" was changed to the word "or". Regarding 8810.9300 Subp. 2: See comments made to Hennepin County's letter of October 25, 1989. Regarding 8810.9400 Subp. 1: See comments made to Allan Kehr's letter of October 27, 1989.

December 7, 1989. A memo from Mr. John Allen, Construction and Maintenance Engineer, Office of Bridges and Structures, Department of Transportation, suggested a grammatical revision. Under 8810.9000 Subp. 2, "Bridge", Mr. Allen stated that in the first sentence the word "such" should be inserted between the phrases "obstruction" and "as water", so that the sentence would then read -  
Subp. 2. Bridge. "Bridge" means a bridge is defined as a structure including supports erected over a depression or an obstruction, such as water, highway, or railway...RESPONSE: The word "such" was included in the final rules for 8810.9000 Subp. 2.

December 8, 1989. A letter from Mr. James C. Tillitt, P.E., President, Tillitt and Associates Consulting Engineers, stated that under 8810.9300 Subp. 2 - We are Registered Structural Engineers in

the State of Minnesota and have provided Engineering Design and Bridge Inspection Services for over 20 years for MD&W as well as other clients. We feel we have the expertise to conduct the bridge inspection but have not completed a "comprehensive training course" or have been certified as Level III or IV Bridge Safety Inspectors. We request that the word "or" be retained in the third sentence of the second paragraph on page 5 of the rules. RESPONSE: See comments made to Hennepin County's letter of October 25, 1989.

December 26, 1989. A memo from Mr. John Allen, Construction and Maintenance Engineer, Office of Bridges and Structures, Department of Transportation, stated that under 8810.9300 Subp. 2 - The last sentence in the second paragraph is deficient as it does not state whose certification program is acceptable. As it now reads, anyone's program is acceptable. I would favor the retention of the NICET option specifically as it was recently added to NBIS. Current certification by the Commissioner of Transportation could be added as a fourth option if it is necessary to avoid future rule changes. RESPONSE: See comments made to Hennepin County's letter of October 25, 1989.

January 25, 1990. A memo from Mr. D.J. Flemming, State Bridge Engineer, Department of Transportation, stated that under 8810.9300 the phrase in the last sentence which reads "or have certification as approved by the commissioner of transportation" should be changed to read "or be certified by the commissioner of transportation as a Bridge Inspector." Under 8810.9000 Subp. 2 Mr. Flemming stated - The Illustration on Bridge Measurement entitled "Eligible Structures" was attached to the wrong section according to the

verbiage in 8810.9000. It should be attached to both sections.

RESPONSE: Regarding 8810.9300: See comments made to Hennepin County's letter of October 25, 1989. Regarding 8810.9000 Subp. 2: This illustration was deleted in the final rules under 8810.9000 Subp. 2.

Undated letter from Mr. Richard Larson, Mille Lacs County Highway Engineer, discussed 8810.9300 Subp. 2. Mr. Larson stated - If the word "or" were deleted, as proposed, between the phrases "be registered in the state of Minnesota as a professional engineer, ~~or~~ have a minimum of five years experience in bridge inspection assignments in a professional capacity..." that most new County Engineers could not meet this requirement. RESPONSE: See comments made to Hennepin County's letter of October 25, 1989.

Undated letter from Mr. David S. Heyer, P.E., Becker County Highway Engineer, stated that under 8810.9000 Subp. 2 - I fully support the change in definition from 20 feet to 10 feet. Under 8810.9300 Subp. 2, Mr. Heyer stated that - The beginning of the second paragraph refers to the "individual in charge..." This needs more clarification as to what is being referred to. Is it, say, the County Highway Engineer, or is it the inspection team leader in the field? RESPONSE: Regarding 8810.9000 Subp. 2, Thank you. Regarding 8810.9300 Subp. 2: See comments made to Dale Wegner's letter of October 23, 1989.

Undated memo from Mr. Raymond P. Cekalla, State Aid Bridge Unit, Office of Bridges and Structures, Department of Transportation,

recommended three grammatical revisions under 8810.9000 Subp. 2. In the first sentence of 8810.9000, Mr. Cekalla recommended including a comma after the word "structure"; including a comma after the word "supports"; and adding the word "such" after the word "obstruction" so that the first part of the first sentence would then read:  
Subp. 2. Bridge. "Bridge" means a bridge is defined as a structure, including supports, erected over a depression or an obstruction such as water, highway, or railway..." Under 8810.9200: Mr. Cekalla suggested changing the word "to" to the word "or" so that the sentence would then read "All railroad bridges are excluded from these rules except for railroad bridges over or under a public highway or street." RESPONSE: In the final rules for 8810.9000 Subp. 2, the word "such" was added, but the two additional commas were not added. Regarding 8810.9200: See comments made to John Allen's letter of December 5, 1989.

DATE

10/26/90



LEONARD W. LEVINE,

Commissioner



5/14/90



Minnesota Department of Transportation  
Transportation Building, St. Paul, MN 55155



May 30, 1990

The Legislative Commission to  
Review Administrative Rules  
Maryanne Hruby, Director  
55 State Office Building  
St. Paul, Minnesota 55155

In reply refer to:  
Proposed Rules Relating  
to Bridge Construction and  
Reconstruction

Dear Ms. Hruby:

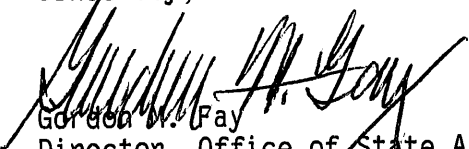
As requested in your letter of May 24, 1990, we are enclosing a copy of the proposed rules relating to bridge construction and reconstruction.

Listed below are the Rules enclosed for your files:

In the matter of the Proposed Adoption of Rules, Amendments and Deletions Governing the Rules for Bridge Construction and Reconstruction.

In the matter of the Proposed Adoption of Rules, Amendments and Deletions Governing the Rules for Bridge Inspection and Inventory.

Sincerely,

  
Gordon W. Fay  
Director, Office of State Aid

Enclosures; (2)  
Rules

cc:  
File - 420

GMF:jmm

STATE OF MINNESOTA  
DEPARTMENT OF TRANSPORTATION  
TECHNICAL SERVICES DIVISION

STATEMENT OF FACTS  
ESTABLISHING NEED AND  
REASONABLENESS OF RULES

In the matter of the Proposed )  
Adoption of Rules, Amendments )  
and Deletions Governing the )  
Rules for BRIDGE INSPECTION )  
AND INVENTORY )

-----

The Commissioner of Transportation has the authority to propose amendments, deletions and additions to the Rules for BRIDGE INSPECTION AND INVENTORY. Pursuant to Minnesota Statutes Section 174.50, Subdivision 7 the Commissioner appointed a 21 person committee composed of county commissioners, county engineers, city elected officials and city engineers to advise him as to proposed changes in the rules. The individuals serving on the committee were recommended to the Commissioner by the Association of Minnesota Counties and the League of Minnesota Municipalities. The committee met on December 14, 1989, and again on January 25, 1990. The results of those meetings are discussed further in this statement.

Solicitation of outside opinion concerning the possible adoption, amendment, suspension or repeal of rules relating to Minn. Stat., chs. 165.03 subd. 2 (Bridge Inspection and Inventory) Chapter 8810.9000 was published in the State Register on Monday, October 16, 1989.

Individual letters requesting comments were sent to County Engineers, City Engineers, Minnesota Legislators, Regional Development Commissions, Metropolitan Councils, Department of

Transportation staff, the Legislative Study Commission and other interested parties on October 11, 1989 and again on December 27, 1989.

The proposed adoption of rules, amendments and deletions governing the rules for BRIDGE INSPECTION AND INVENTORY contain changes to the existing Chapter 8810.9000 of the Minnesota Rules. The majority of these changes are minor in nature and are revised or rewritten for the purpose of clarity and to conform to statutes that have been revised or rewritten. All changes are discussed below.

Under 8810.9000 DEFINITIONS:

The definition of "Bridge" was changed from a structure measuring 20 feet along the center of the roadway to a structure measuring 10 feet along the center of the roadway. This was revised to conform to Minnesota Statutes Section 161.081, Subdivision 2a.

The definition of "Bridge Inspector's Training Manual" was clarified to explain that it is the training manual published by the Federal Highway Administration.

Under 8810.9100 PURPOSE AND SCOPE:

Reference to year the Minnesota legislature last amended Minnesota Statutes, chapter 165, with reference to the inspection and inventory of bridges in the state of Minnesota, was deleted.

Under 8810.9200 INSPECTION AND INVENTORY STANDARDS:

For clarity, the phrase "Application of" was added to the title of this section preceding the existing phrase "Inspection and Inventory Standards". Qualifications were itemized.

The word "rights" was corrected to read "right of way" to conform to "right-of-way" as used previously in this paragraph.

The statement that bridges on recreation trails used only by pedestrians, bicycles and recreational vehicles were "not included in these rules" was changed to state that said bridges "are excluded from these rules except for those bridges over or under a public highway or street."

Under 8810.9300 PERSONNEL:

For clarity, the title of this section was changed from "Personnel" to "Responsibility and Qualifications".

Under Subp. 2, "Qualifications", the qualifications of the individual in charge of the bridge inspection and inventory for each organizational unit was expanded to include the following statement: " have current certification as a Level III or IV Bridge Safety Inspector under the National Society of Professional Engineer's program for National Certification in Engineering Technologies (NICET) or be certified by the commissioner of transportation as a Bridge Safety Inspector".

Under 8810.9400 FREQUENCY OF INSPECTIONS AND INVENTORY:

In Subp. 1, "Inspection", a reference to a specific section, "section 2.3" of the AASHTO manual was deleted, as the AASHTO manual could be revised thus causing the specific reference in the rule to be in conflict with the AASHTO manual.

In Subp. 1, the location of the section delineating the bridge inspection responsibilities of the engineer was changed from "8810.9000" to "8810.9300 Subpart 1."

Under 8810.9500 INSPECTION REPORTS AND RATINGS:

In Subp. 1, "Inspection", a reference to a specific section, "section 2.5" of the AASHTO manual was deleted. Here again, the AASHTO manual could be revised thus causing the specific reference in the rule to be in conflict with the AASHTO manual.

In Subp. 2, "Ratings", the first sentence was clarified to state that the structure inventory sheet form shall be "provided by the commissioner of transportation."

In Subp. 2, "Ratings", a minor grammatical correction was made in the second sentence to include the word "the" before the phrase "condition of the structure."

Under 8810.9800 RECOMMENDATIONS REGARDING SHORT BRIDGES:

This entire section was deleted.

THE NOTICE OF INTENT TO SOLICIT OUTSIDE OPINIONS CONCERNING THE POSSIBLE ADOPTION, AMENDMENT, SUSPENSION OR REPEAL OF RULES RELATING TO MINNESOTA STATUTES SECTION 165.03, SUBD. 2 INSPECTION AND INVENTORY, WAS PRINTED IN THE STATE REGISTER ON OCTOBER 16, 1989. THE FOLLOWING COMMENTS HAVE BEEN RECEIVED SUBSEQUENT TO THE NOTICE.

October 18, 1989. A telephone call from Mr. Robert Kurpius, Assistant Traffic Engineer, Operations, Office of Traffic Engineering, Department of Transportation, stated that under 8810.9300 Subp. 2 the plural word "qualifications" in the first sentence of the second paragraph should be changed to the singular word "qualification". RESPONSE: We believe the plural is correct since one of the options contains two requirements (experience and training).

October 23, 1989. A letter from Mr. Dale D. Wegner, Jr., Brown County Highway Engineer, stated that under 8880.9000 - I agree with all the changes to 8810.9000 except 8810.9300, the addition of certified technicians being allowed to head an inspection. I have extensive experience in the bridge inspection field. I have helped teach at bridge inspection schools in the past and have found that if the individual does not have some knowledge of structural engineering, they may never understand what to look for during an inspection. We had some individuals take the same school three times or more and still not grasp what we wanted them to look for. RESPONSE: If a technician can pass the certification he or she should be qualified to head the inspection. They are still under the supervision of an engineer. The only change to the qualifications is the addition of the certification option.

October 25, 1989. A letter from the Hennepin County Department of Public Works stated that under 8810.9000 Subp. 2 - These changes will not affect Hennepin County since we already are inspecting 10-foot bridges. Hennepin County also stated that under 8810.9200 there was a typographical error in the first sentence and the phrase "rights" of any street should be changed to "right-of-way" of any street. RESPONSE: The change from "rights" of any street to "right-of-way" was made in the final rules of 8810.9200. Hennepin County also stated that under 8810.9300 Subp. 2 - Clarification is needed for the proposed change to paragraph 2, adding an alternative method of fulfilling the requirements for the individual in charge of the inspection team. If we understand it correctly, there are three ways in which one could qualify as head of an inspection team. This would be more clear if the alternates were numbered or if the word "or" on line 3 of the paragraph were left in. RESPONSE: The word "or" was retained in the final rules of 8810.9300 Subp. 2, and an additional option was added "or be certified by the commissioner of transportation as a Bridge Safety Inspector."

October 26, 1989. A memo from Mr. John Allen, Construction and Maintenance Engineer, Office of Bridges and Structures, Department of Transportation, stated that under 8810.9500 Subp. 1, the reference to "section 2.5" in the first sentence should be changed to "section 2.4". RESPONSE: In the final rules of 8810.9500 Subp. 1, the reference in this sentence to "section 2.5" was deleted, so that if the AASHTO Manual is revised the rules will still be in conformance.

October 27, 1989. A letter from Mr. Douglas E. Haeder, P.E., Pipestone County Highway Engineer stated : 8810.9300 Responsibility and Qualifications - Subp. 2 - Qualifications. I object to the deletion of the word "or" in the third line of the second paragraph. I believe that being a registered professional engineer in the State of Minnesota should stand alone as acceptable qualifications to be in charge of the inspection team. RESPONSE: See comments made to Hennepin County's letter of October 25, 1989.

October 27, 1989. A letter from Mr. Allan Kehr, Assistant City Engineer, City of Virginia, stated that under 8810.9000 Definitions Subp. 2 Bridge - lines 4 through 10 - I have no idea what this is trying to say. Perhaps a drawing or drawings is in order to show what is meant. At least simplify the criteria. RESPONSE: Illustrations of measurements are shown under 8810.8000, Figures 1 through 4. Mr. Kehr added - Why is the language here different than the language of the Bridge Construction and Reconstruction Rules? RESPONSE: The language in 8810.9000 must be different from 8810.8000 to restrict funding to eligible bridges. A single definition will be used for both but a Subp. 3 will be added to 8810.8000 describing bridges eligible for funding by the State Transportation Fund. Mr. Kehr commented on 8810.9000 Subp. 4, "Inspection" concerning the phrase "examining a structure." He asked how ? - visually? RESPONSE: We feel the definition of the term "inspection" is adequate. Mr. Kehr commented on 8810.9200 "Application of Inspection and Inventory Standards". - Very wordy! It might be easier to state what it doesn't govern. RESPONSE: We feel the revised language is adequate. Mr. Kehr stated that under 8810.9300 Subp. 2, "Qualifications" - Experience means little if



anything. I have people working for me that have +30 years of experience doing their jobs wrong. Mr. Kehr stated that the existing phrase in lines three through five of the second paragraph "~~or~~ have a minimum of five years experience in Bridge inspection assignments in a responsible capacity" should be replaced by the phrase "or have a certificate in Civil Engineering Technology (CET)." RESPONSE: See comments made to Dale Wegner's letter of October 23, 1989 and Hennepin County's letter of October 25, 1989. Mr. Kehr commented on 8810.9400 "Frequency of Inspections and Inventory" Subp. 1 - Inspection. He stated that in the last sentence the reference to a specific number should be changed from "part 8810.9000" to "part 8810.9300 Subp. 1". RESPONSE: In the final rules the reference in the last sentence was changed from "part 8810.9000" to "part 8810.9300 Subp. 1."

October 30, 1989. A letter from Mr. Luthard Hagen, P.E., Lincoln County Highway Engineer, stated that under 8810.9200 - Clarification may be needed because it sounds like all structures including bike ramps and walkways are now included. It was Mr. Hagen's understanding that all these structures were not included before. RESPONSE: These are included if over a public right-of-way.

November 6, 1989. A letter from Mr. Ramankutty Kannankutty, P.E., Director, Engineering Design, Minneapolis Department of Public Works, stated that under 8810.9000 Subp. 2, "Definitions" - The last sentence of the "Bridge" definition excludes railroad bridges over or under a public highway or street. Does this mean an actual paved roadway or is it referencing public right-of-way that might be used for streets or highways in the future? RESPONSE: Regarding

8810.9000 Subp. 2 "Definitions": "Public highway or street" are defined by law and would not include public right of way not currently being used by the public. Mr. Kannankutty stated that under 8810.9000 Subp. 3 - The "Bridge Inspector's Training Manual" is not written in the form of a definition. RESPONSE: In the final rules the definition of the Bridge Inspector's Training Manual was clarified to include the phrase "which is the training manual published by the Federal Highway Administration." Mr. Kannankutty stated that under 8810.9300 Subp. 2 "Qualifications" - We offer the following suggestions: The individual in charge shall have one of the following qualifications: 1. Be registered as a Professional Engineer and have completed FHWA's Bridge Inspection Course, or 2. If not registered as an engineer, but is an Engineer-in-Training, have a minimum of four years experience in bridge inspection, or bridge design or bridge construction assignments or a combination thereof and has completed FHWA's course on bridge inspection, or 3. Have current certification as a Level III or IV Bridge Safety Inspector under the National Society of Professional Engineer's Program for National Certification in Engineering Technologies (NICET.) Provisions should be made in the implementation of the proposed rule changes that will provide training opportunities for non-engineers to obtain certification as a Level III or IV Bridge Safety Inspector. The new rules should allow for the "grandfathering" of current inspection personnel. With such a major change in the rule, provisions for a target effective date to allow cities time to comply with the rule should be provided. RESPONSE: See comments made to Dale Wegner's letter of October 23, 1989 and to Hennepin County's letter of October 25, 1989.

November 6, 1989. A letter from Mr. Kenneth E. Weltzin, P.E., Ramsey County Department of Public Works stated that under 8810.9200 - Lines eleven and twelve should read: All railroad bridges are excluded unless under the jurisdiction of a local unit of government. Mr. Weltzin stated that - The last line, line 16, should be changed to: "except for those bridges on State-Aid rights-of-way." RESPONSE: See comments made to Allan Kehr's letter of October 27, 1989. Mr. Weltzin stated under 8810.9300 Subp. 2 "Responsibility and Qualifications" - The second paragraph should read: The individual in charge of the inspection team shall have the following qualifications: be registered in the State of Minnesota as a professional engineer, or have current certification as a Level III or IV Bridge Safety Inspector under the National Society of Professional Engineers' program for National Certification in Engineering Technologies (NICET). RESPONSE: See comments made to Hennepin County's letter of October 25, 1989. Also, note that the NICET Certification is included as one option in the final rules under 8810.9300 Subp. 2.

November 7, 1989. A memo from Mr. John Allen, Construction and Maintenance Engineer, Office of Bridges and Structures, Department of Transportation, stated that under 8810.9300 Subp. 2 - The word "or" should not be deleted in the third line of the second paragraph. RESPONSE: It was not deleted in the final document.

December 5, 1989. A memo from Mr. John Allen, Construction and Maintenance Engineer, Office of Bridges and Structures, Department of Transportation, denoted several typographical and grammatical revisions. RESPONSE: These revisions were made. Under 8810.9400

Subp. 1, Mr. Allen stated that in the last sentence the statement "as defined in part 8810.9000" should be changed to "as defined in 8810.9300, Subpart 1". RESPONSE: The change was made.

December 7, 1989. A memo from Mr. John Allen, Construction and Maintenance Engineer, Office of Bridges and Structures, Department of Transportation, suggested a grammatical revision. Under 8810.9000 Subp. 2, "Bridge", Mr. Allen stated that in the first sentence the word "such" should be inserted between the phrases "obstruction" and "as water". RESPONSE: The word "such" was included in the final rules.

December 8, 1989. A letter from Mr. James C. Tillitt, P.E., President, Tillitt and Associates Consulting Engineers, Minneapolis, Minnesota stated that under 8810.9300 Subp. 2 - We are Registered Structural Engineers in the State of Minnesota and have provided Engineering Design and Bridge Inspection Services for over 20 years for MD&W as well as other clients. We feel we have the expertise to conduct the bridge inspection but have not completed a "comprehensive training course" or have been certified as Level III or IV Bridge Safety Inspectors. We request that the word "or" be retained in the third sentence of the second paragraph on page 5 of the rules. RESPONSE: The word "or" has been retained in the final draft.

December 26, 1989. A memo from Mr. John Allen, Construction and Maintenance Engineer, Office of Bridges and Structures, Department of Transportation, stated that under 8810.9300 Subp. 2 - The last sentence in the second paragraph is deficient as it does not state

whose certification program is acceptable. As it now reads, anyone's program is acceptable. I would favor the retention of the NICET option specifically as it was recently added to NBIS. Current certification by the Commissioner of Transportation could be added as a fourth option if it is necessary to avoid future rule changes.

RESPONSE: The recommendations have been included in the final draft.

January 25, 1990. A memo from Mr. D.J. Flemming, State Bridge Engineer, Department of Transportation, stated that under 8810.9300 the phrase in the last sentence which reads "or have certification as approved by the commissioner of transportation" should be changed to read "or be certified by the commissioner of transportation as a Bridge Inspector." RESPONSE: The recommendation has been included in the final draft. Under 8810.9000 Subp. 2 Mr. Flemming stated - The Illustration on Bridge Measurement entitled "Eligible Structures" was attached to the wrong section according to the verbiage in 8810.9000. It should be attached to both sections.

RESPONSE: Regarding 8810.9000 Subp. 2: This illustration was deleted in the final rules under 8810.9000 Subp. 2. It is included in the rule 8810.8000 Subp. 2.

Undated letter from Mr. Richard Larson, Mille Lacs County Highway Engineer, discussed 8810.9300 Subp. 2. Mr. Larson stated - If the word "or" were deleted, as proposed, between the phrases "be registered in the state of Minnesota as a professional engineer, ~~or~~ have a minimum of five years experience in bridge inspection assignments in a professional capacity..." that most new County

Engineers could not meet this requirement. RESPONSE: The recommendation has been included in the final draft.

Undated letter from Mr. David S. Heyer, P.E., Becker County Highway Engineer, stated that under 8810.9000 Subp. 2 - I fully support the change in definition from 20 feet to 10 feet. RESPONSE: Thank you. Under 8810.9300 Subp. 2, Mr. Heyer stated that - The beginning of the second paragraph refers to the "individual in charge..." This needs more clarification as to what is being referred to. Is it, say, the County Highway Engineer, or is it the inspection team leader in the field? RESPONSE: See comments made to Dale Wegner's letter of October 23, 1989.

Undated memo from Mr. Raymond P. Cekalla, State Aid Bridge Unit, Office of Bridges and Structures, Department of Transportation, recommended three grammatical revisions. RESPONSE: Some of the recommendations have been included in the final draft.

DATE

4-23-90



LEONARD W. LEVINE,

Commissioner