

## CHAPTER 7

## EMERGENCY PROCEDURES

## 5-791.600 SCOPE

## A. Purpose

To describe steps and procedures required for action during and following any flood, storm, natural disaster or emergency involving the trunk highways of Minnesota.

## B. Policies

When any flood, storm, disaster or emergency is of such magnitude as to impede traffic, close trunk highways, endanger life and/or damage highway property or structures, steps should be taken to direct traffic to alternate routes. Adjacent maintenance areas should be called on for assistance if required, and for help during subsequent road and bridge repair work. See Mn/DOT Policy Position Statement, Highways No. 83-2, and Guidelines, Highways No. 83-2-G-1, in the Mn/DOT Policy Manual for additional information.

## C. Procedure

1. All districts may be susceptible to floods resulting from heavy rains and fast thawing of winter snows. When flood forecasts indicate highway flooding is imminent, affected districts should make preparations to protect highways and structures. Materials required may include sandbags, orange flags, flashers, plastic sheeting, earth materials, etc.
2. Any district experiencing a damaging flood, storm, disaster situation or other emergency, should inform the Transportation Permits, Road Condition Information and Emergency Operations Unit of the Office of Maintenance of conditions. Necessary district personnel should be alerted to the possible need for assistance in securing labor, equipment or materials.
3. The District Engineer will inform the Assistant Commissioner of Operations and the State Maintenance Engineer of the emergency, keeping them informed of current conditions.
4. If, in the opinion of the State Maintenance Engineer, the district cannot repair the damages and restore traffic within a reasonable time using its own forces, equipment, materials and funds, the Office of Maintenance will prepare an emergency order in accordance with M.S. 161.32, Subd. 3 for consideration by the Assistant Commissioner of Operations, or the Metro Division as appropriate, and the Deputy Commissioner. This will permit areas involved to expedite repairs by securing materials, supplies and equipment without the delay associated with taking competitive bids.
5. If a Federal-aid highway, all roads except those functionally classified as local roads or rural minor collectors, suffers serious damage, it may be eligible for Federal Emergency Relief (ER) funds. The funds may be available to repair or reconstruct such highways that have suffered serious damage by natural disasters over a wide area or serious damage due to catastrophic failure. The Office of Investment Management will be notified by the

- Office of Maintenance that ER funds should be requested. The Office of Investment Management will, in turn, notify the FHWA Division Administrator that Mn/DOT intends to apply for ER funds.
6. The Area Maintenance Engineer should continue to assess the damage and keep the Road Condition Information and Emergency Operations Unit informed of changing conditions. The Area Maintenance Engineer (or equivalent) should arrange to secure the necessary personnel, equipment and materials from his own and adjacent area sources and, if conditions indicate, arrange for emergency equipment rental contracts and for the emergency purchase of supplies and materials.
  7. If Mn/DOT does, in fact, apply for ER funds, the Office of Investment Management will then prepare a proclamation for the Governor's signature declaring emergency or a request for a Presidential proclamation. After referral to the Governor's office for signature, the Commissioner will submit the application to the FHWA along with a copy of the field report completed by the FHWA with the assistance of Mn/DOT.
  8. The Area Maintenance Engineer should:
    - a. Have photos taken of damaged sites prior to, during and following repair operations.
    - b. Contact the business or office manager to assign special job numbers for each damage site on the affected route.
    - c. Upon completion of work at each damage site, assemble a cost summary. Form 1708, Daily Project Record (Figure A 5-791.600), or Form 17118, Bridge Repair Report (Figure B 5-791.600). Show mile points where work was done, and describe work in detail. These reports should include all costs related to the specific damage site. Only work classified as emergency repair or preliminary engineering can proceed prior to approval of the application.
    - d. It will be necessary to retain on file all material certification forms for all materials used, delivery sheets, weight tickets, zone haul sheets and other data which may be needed for review and audit if the emergency develops to the point where ER funds will be made available for damage repair.
    - e. Concurrently with the above action, forward Forms 29248, Mn/DOT Emergency Relief Damage Field Reports (Figure C 5-791 .600) in duplicate, one copy for the Office of Investment Management and one to the Assistant Commissioner of Operations, or the Metro Division Engineer as appropriate, via the State Maintenance Engineer, also notifying the appropriate FHWA Program Operations Construction Engineer so that arrangements can be made for the inspection of damages.
    - f. Send a statement certifying job completion to the Office of Financial Management and notify the District or Metro Division Business or Office Manager.

Mn/DOT 1708 (1 77)

DAILY PROJECT RECORD

Minnesota Department of Transportation  
Office of Bridges and Structures  
BRIDGE MAINTENANCE COMPLETION REPORT

COUNTY: BRIDGE NO. T.H. REF. POINT BR. CREW NO. 9851 REPORT NO. WORK ORDER NO. 1  
TYPE OF WORK: ITEM OF BRIDGE: REASON FOR WORK: TRAFFIC DAMAGE TAG NO. DATE STARTED : //  
WORK DONE: MAINT. AREA 8A DATE COMPLETED: //  
ACTIVITY NUMBER: PRODUCTIVITY:

MATERIAL

Table with columns: MAT'L NO., DESCRIPTION, AMOUNT, UNIT, RATE, COST

TOTAL MATERIAL COST \$0

LABOR

Table with columns: TITLE, HOURS, RATE, COST, EXPN.

TRAFFIC CONTROL  
LABOR HOURS .0

TOTAL HOURS 0

TOTAL LABOR COST \$0

EQUIPMENT

Table with columns: CLASS, DESCRIPTION, AMOUNT, RATE, COST

TRAFFIC CONTROL  
EQUIPMENT COST \$.00  
TOTAL EQUIPMENT COST \$0

Summary table with columns: Remarks, Distribution, Bridge Supervisor, Date, TOTAL REPAIR COST, Overhead, GRAND TOTAL



MINNESOTA DEPARTMENT OF TRANSPORTATION  
EMERGENCY RELIEF DAMAGE  
FIELD REPORT

State \_\_\_\_\_ Job No. \_\_\_\_\_  
County \_\_\_\_\_ T.H. No. \_\_\_\_\_  
Date Inspection Made \_\_\_\_\_ F.A. Rt. No. \_\_\_\_\_  
Inspection Made By \_\_\_\_\_

Detailed Location \_\_\_\_\_  
\_\_\_\_\_

Facility Existing Prior to Damage; (Roadway type and width, shoulder type and width, bridge length and width.)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Description of Damage: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Immediate Repairs Completed to Date: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost Estimate of Immediate Repairs Completed to Date: \_\_\_\_\_  
\_\_\_\_\_ Material \$ \_\_\_\_\_  
\_\_\_\_\_ Equipment \$ \_\_\_\_\_  
\_\_\_\_\_ Labor \$ \_\_\_\_\_  
\_\_\_\_\_ % Completed.

Immediate Repairs Remaining to be Completed: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost Estimate of Immediate Repairs Remaining to be Completed: \_\_\_\_\_  
\_\_\_\_\_ Material \$ \_\_\_\_\_  
\_\_\_\_\_ Equipment \$ \_\_\_\_\_  
\_\_\_\_\_ Labor \$ \_\_\_\_\_

Permanent Restoration Work Required: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost Estimate of Permanent Restoration Work: \_\_\_\_\_  
\_\_\_\_\_ Material \$ \_\_\_\_\_  
\_\_\_\_\_ Equipment \$ \_\_\_\_\_  
\_\_\_\_\_ Labor \$ \_\_\_\_\_

Recommendations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. The District Business or Office Manager shall:
  - a. Assign special job numbers for each damage site in accordance with Accounting and Finance Section instructions. Assemble all pertinent documents in files conforming with the job numbers.
  - b. Make photocopies of all cost distribution sheets and invoices showing charges to the job numbers so they will be available to support reimbursement.
10. If the application for ER funds is accepted, the FHWA, with the assistance of the State's Office of Investment Management, will make a field report of the disaster or catastrophic failure which provides the basis for the Federal Highway Administrator's finding of eligibility for ER funds.
11. This work may include the repair or reconstruction of all damaged routes of the Federal-aid Highways, all roads except those functionally classified as local roads or rural minor collectors, on either a contract or force-account basis. Immediate repair operations performed during or after the disruptive event are included as well as eventual permanent restoration work. Eligible work is usually confined to reconstruction in kind, inclusive of replacement to current standards, within the highway right-of-way and falls into two categories:
  - a. Immediate Repairs - Those repairs undertaken during or within a reasonable time after a disaster which are designed to:
    - minimize damage to the facility.
    - protect the remaining facilities.
    - restore essential traffic.

These repairs are normally performed by maintenance forces or under negotiated contracts. They may or may not constitute a permanent restoration of the facility. By Federal definition, this category is called emergency repairs and includes temporary work under the Federal procedures.
- b. Permanent Repairs - Permanent restoration work, excluding that performed under immediate repairs, which is completed through the contract procedure or on a force account basis after a finding of public interest has been approved by the FHWA.
12. Work, other than restoration in kind, will not be eligible for the ER cost participation unless justified to re-establish operational compatibility or to prevent recurrence of damage under similar conditions.
13. Due to the associated administrative costs, projects under \$3,000 per site or \$500,000 per disaster are the minimums suggested for processing under this program. However, a "project" may include more than one work site provided it is within the same general area and on the same route.
14. There is no preliminary approval required for emergency repairs. It is imperative that all previously incurred costs be reported along with an estimate of the balance for restoration so that ER funds can be programmed.
15. Before any permanent restoration work in an ER program can be authorized for

construction, details of the proposed work must be approved. Upon submittal of the plans, specifications and estimate of cost to the FHWA, determination will be made as to the eligibility of the proposed work for ER funds. Prior approval of emergency repairs and permanent restoration, done as a part thereof, is not required.

16. All ER work must be programmed with the Federal Highway Administrator within ninety (90) days of approval of ER funds by FHWA. To comply, areas or districts must submit the necessary information in duplicate to the Assistant Commissioner of Operations or the Metro Division Engineer as appropriate, through the State Maintenance Engineer, within forty-five (45) days of the approval date to provide time for study and programming.
17. Upon receipt of project approval from the FHWA by the Office of Investment Management, the business manager shall prepare work authorities and forward them to the Office of Financial Management to assign area job numbers, for use by the district, area or Division offices in coding the charges for the work undertaken. When the approved emergency and restorative work has been completed, the business manager will prepare the interdivision billing (from maintenance to construction) and invoices and submit them to the Office of Financial Management. The charges will appear on computer prints used by the Office of Financial Management in billing the Federal Government for reimbursement as well as providing a record for Federal audit.
18. The foregoing items concern only emergency repairs and restoration on the Federal-aid highways, all roads except those functionally classified as local roads or rural minor collectors.
19. For other highways, Public Law 93-288, Federal Disaster Assistance Program of 1974, prevails and claims are processed through the Road Condition Information and Emergency Operations Unit. Documentation procedures for off-system emergencies are the same as for on-system emergencies. Determination whether highways are Federal-aid highways may be made by checking for federal numbers in the Control Section Record. The functional classification of all roads in Minnesota is available through the Office of Investment Management.
20. In an emergency, Civil Defense and other government agencies may require materials and/or supplies not immediately available locally. In that event, such agencies may seek assistance from the Mn/DOT Districts or Metro Division. Assistance should be provided if it can be managed without creating a critical shortage of supplies for highway emergencies. In the event that the Office of Financial Management has not set up an account, an accounts receivable debit should be set up by the area, district or Division charging the borrowing agency for the supplies furnished.

#### D. Field Operations

##### 1. Prior to Emergency

In areas where there is normally a high traffic density, at locations exhibiting the possibility of high accident rates, in areas where heavier-than-air gasses could collect or at locations where emergency services such as police, fire or hospital facilities may be disrupted, an emergency plan should be considered. These plans can vary from a personal review to note available detours to comprehensive meetings with local emergency services personnel.

## 2. During Emergencies

- a. During emergencies, procedures and documentation shall conform to those noted above. In addition:
- (1) When it becomes apparent that high water conditions may develop, maintenance workers shall make frequent inspections of those areas which, according to past experience, are liable to become affected. Arrangements are made to have the maintenance workers keep the area office advised, by radio or telephone, of all high water conditions as they develop.
  - (2) In case water begins rising over the roadbed, the Road Condition Information and Emergency Operations Unit must be advised giving the exact location and the length and depth, or the extent to which that location may become affected. This preliminary information should also advise whether or not there is a possibility that the section may become entirely blocked, necessitating diverting traffic. This report is required so that the traveling public can be advised of impending conditions by special releases by radio, television or other media.
  - (3) The District or Metro Division Traffic Engineer should be contacted for recommendations for the placement of advance warning signs, flags, barricades or supplementary lighting.
  - (4) Normally, flag persons are not required on a continual basis. However, if the roadway is open to traffic and the Maintenance Engineer determines it is threatened, or if continued rising water is expected, maintenance workers may be assigned to keep vigilance and safeguard traffic until such time that the roadway may be closed.
  - (5) If the roadbed becomes impassable, barricades must be erected immediately. The District or Metro Division Traffic Engineer should be contacted to arrange for a marked detour to be put in place and for the associated notifications to be made to units of government where roads are affected. Refer to 5-791.650, Temporary Highways. When such emergency arises, the Emergency Operations Unit must be notified by telephone as soon as possible.
  - (6) One such barricade is to be erected at each end of the flooded section and other barricades are to be placed at a point where traffic can turn back readily or use an alternate trunk highway or other suitable road. Flag persons should be used wherever and whenever traffic conditions make it advisable.
  - (7) Eroded areas encroaching on shoulders or roadways are to be enclosed with snow fence or otherwise protected. The protection is to be kept in place until adequate repairs have been made.
  - (8) All supervisors and maintenance workers should be thoroughly instructed in regard to the foregoing procedures as necessary.