

Post Earthquake/ Disaster Training

Level I Inspection Procedures
and
Road Closure

OBSERVATIONS:

- EQ's tend to occur at the end of faults.
- Midwest Buildings have not been tested.
- The 1811/1812 Quake had >1800 aftershocks -- 3 major (8 M) and over 50 moderate.
- Past EQ's occurred in 900AD, 1530 & 1811 (average 450 years)-- last WVQk was 6000.
- 50Ye. PROBABILITY
- Magnitude 6.3--90%
- Magnitude 7.1--66%
- Magnitude 7.6--25%
- Magnitude 8. ---3%
- EQ energy doubles with each 0.2 increase in Richter: A 7. Mag. releases 32 times the energy of a 6. Mag.

LEVEL 1 & 2

INSPECTION GOALS:

- 1. Make the Roads Safe for the Public/EM by CLOSING damaged bridge/road sections. Priority roads are inspected first.
- 2. ACCESS of the Damage and RELAY that to STATE/SEMA.
- 3. Start the REPAIR/RECOVERY process by organizing Inspections and in-house repairs.

REPORTING TO WORK IN A MAJOR DISASTER

- AFTER YOU HAVE CHECKED OUT YOUR FAMILY AND PROPERTY : IF YOUR PHONE IS NOT WORKING:
- UNLESS YOU ARE ASSIGNED STAFF
- ALL OTHERS SHOULD REPORT TO THE CLOSEST INDOT UNIT FACILITY TO YOUR HOME.
- BRING FOOD, WATER & CLOTHING TO LAST A PERIOD OF 72 HOURS.

ASSIGNED DISASTER STAFF

- TO VINCENNES DO:
 - Director, Dept. Heads, Safety Coor., Bridge Eng, Operations Support Engineers & Misc Staff to handle phones, radio etc.
- TO SUBDISTRICTS:
 - Managers, Operations Foreman and Damage Assessment Coord's:
 - Linton-Mike Dyar
 - Dale--Richard Thomas
 - EvansvilleCurt Schum
 - Paoli---Arnie Apple
 - Tell City--Aden Carr
 - Petersburg--R. Fowler

RESPONSE PROCEDURES

- Make Operational ALL Unit Facilities in the disaster affected area.
- If any Unit opens then its Subdistrict and the District will open to provide support.
- Immediately establish Communications (both Phone & Radio) between facilities.
- Unless directed otherwise, all Units are to start two person LEVEL 1 INSPECTIONS on Priority Routes when people arrive.



The First Person at Unit should:

- Before entering any buildings--Check to see that gas & electricity are not damaged.
- Establish Phone & Radio Communications with your Subdistrict. ALWAYS have a person monitoring Communications.
- Open Disaster Cabinet and locate Primary Route Packets and other needed tools.
- As soon as two more people arrive start your Level 1 Primary Route Inspections doing Route A, B... until all are assigned.

LEVEL 1 INSPECTION PROCEDURES

- PICK UP THE LEVEL 1 PRIMARY ROUTE INSPECTION KIT A then B etc.
- READ INSTRUCTIONS AND FOLLOW DIRECTIONS. DO NOT VARY FROM ASSIGNED ROUTE EXCEPT FOR LD.
- LOAD RADIO EQUIPPED VEHICLE WITH PROVIDED EQUIPMENT.
- SIGN OUT AT START OF YOUR LEVEL 1 PRIMARY ROUTE INSPECTION.







1.1.1997



- LEVEL 1 INSPECTION CONTINUED:
- Drive your route recording all ROADWAY problems observed-cracked pavement-slides
- STOP at EVERY BRIDGE and do a quick visual of the entire bridge. Tag each bridge marker with an appropriate ribbon.(G-Y-R)
- Complete the LEVEL 1 INSPECTION FORM for all bridges on the priority route. Record all damage observed and by radio **IMMEDIATELY REPORT DAMAGE REQUIRING CLOSURE.**
- Sign in and get directions about Inspecting Secondary Routes or if aftershocks Primary.

INDOT RAPID ASSESSMENT BRIDGE INSPECTION REPORT (LEVEL 1)

Route IE 41 Direction North from Intersection Viernes RD Page 1 of 1

Date and Local Time:

Past Earthquake Condition of the Bridge (Please write "YES, NO or DRN (Detailed Review Needed)" for items 1-6):

Bridge Number	1. Collapse / Partial Collapse / Roadway Closed	2. Superstructure Damage / Movement, Decking, Backfill, Cracking, Failure	3. Substructure Damage / Shear Key Damage, Local Buckling, Settlement, Tilting, Sliding, Rotation, Crushing, Failure	4. Bearing Damage / Failure, Movement, Shearing or pullout of bolts	5. Soil Problems / Slope Failure, Soil Liquefaction, Erosion, Differential Settlement	6. Secondary Structure Damage / Wingwalls, Parapets, Fenders	7. Other problems Observed (Explain)	RED TAG	YELLOW TAG	GREEN TAG
	YES NO DRN	YES NO DRN	YES NO DRN	YES NO DRN	YES NO DRN	YES NO DRN				
41-42-5077A NE Vicks Ditch										
41-42-50761A NE										
SR 401 Overpass										
41-42-2351A NE CSX Overpass										
41-42-5080A NE Main Street Overpass										
41-42-50810 NW Int. Street Underpass										
41-42-5082A SR 61 Underpass										
41-42-5083A NE Kelso Creek										
41-42-4643A NE US 41NB under 50EB										
50-42-4644A EB US 50 EB over 41NB										
41-42-22910 NW CSX Overpass										
Roadway Problems Encountered and Comments:										

Name and Signature of the Inspector(s)





[illegible]

Direction _____ from Intersection _____

Page: _____ of _____

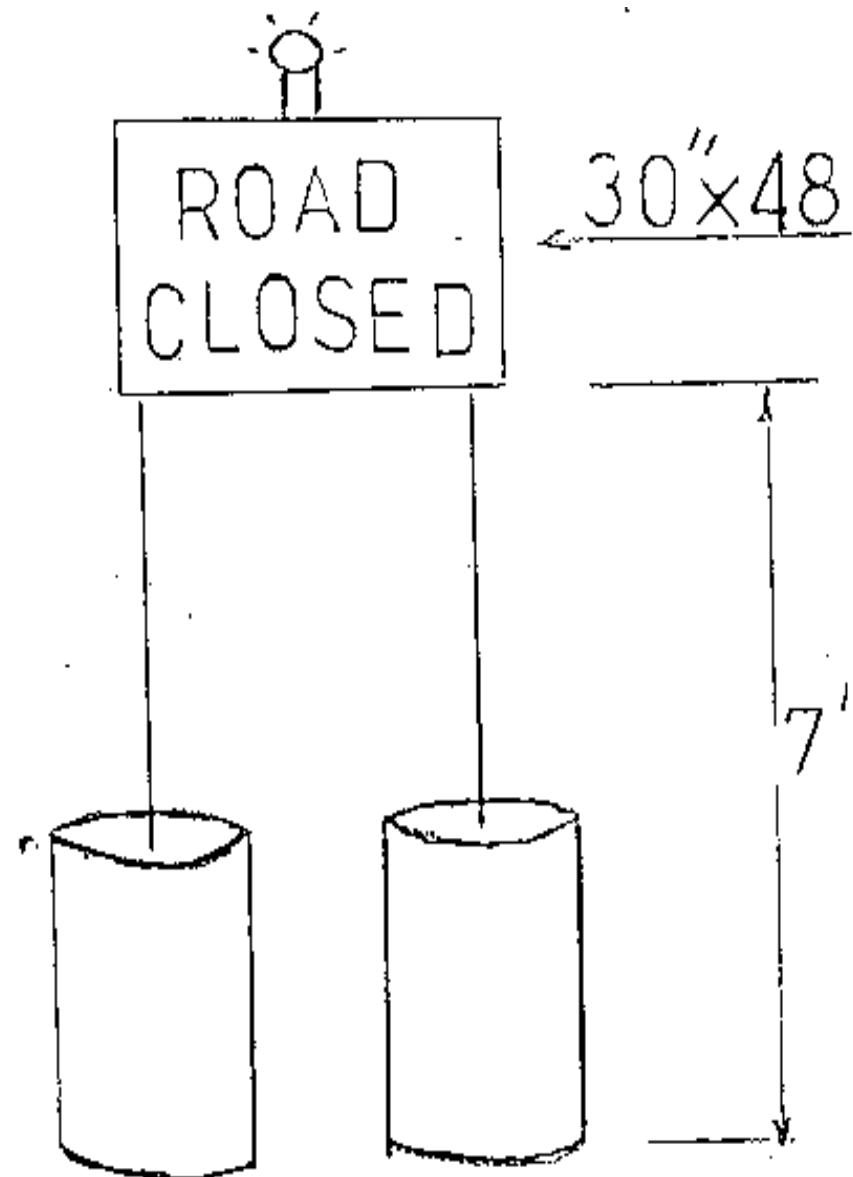
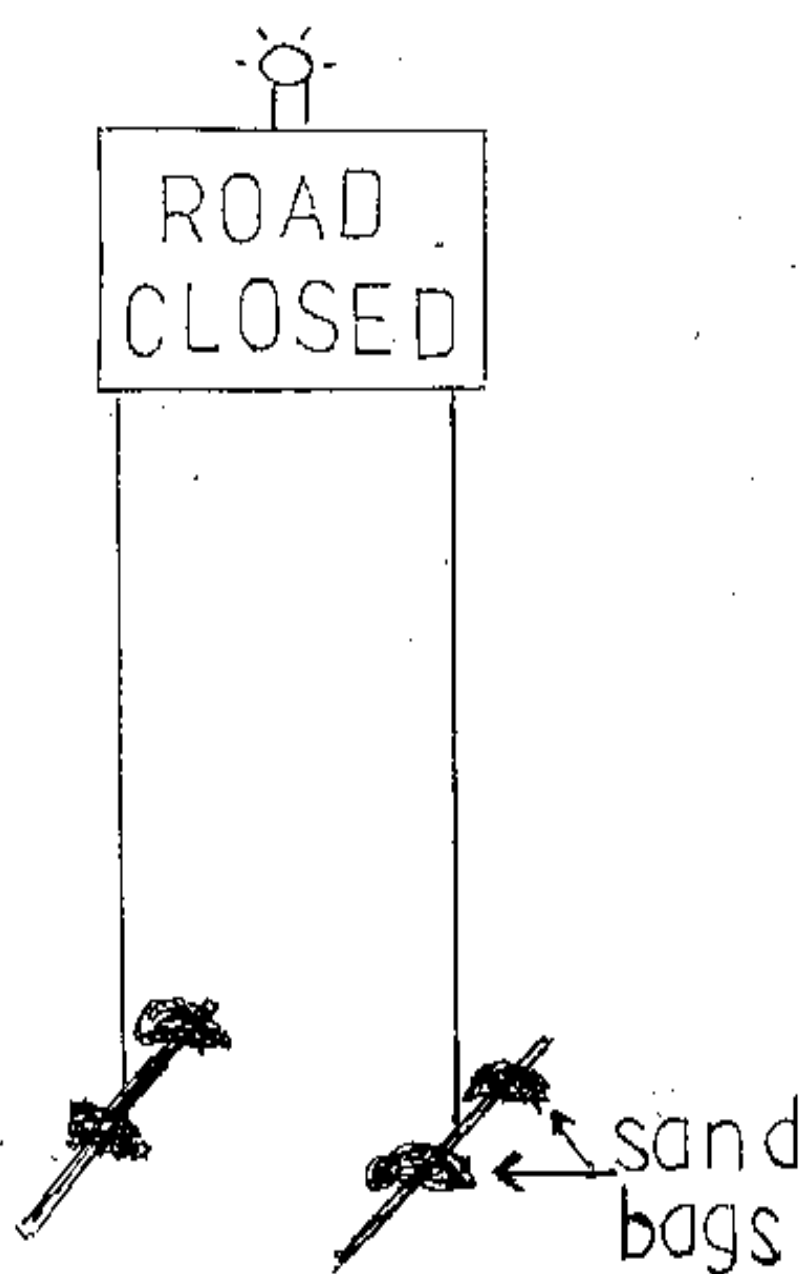
Like Condition of the Bridge (Please write "YES, NO or DRN (Detailed Review Needed)" for items 1-6)

[illegible]



RD CLOSURE PROCEDURES:

- When Disaster Damage requires the closing of a road/bridge, the unit will Radio in the closure & use the two “Road Closed” signs that are stored in each unit for each Route.
- Set up the Rd Closed Sign on the approach and find a route (state/county road) around to the other side of the closure for 2nd sign.
- Continue the Inspection on your primary route. If more closures are found radio your unit for direction. It is CRITICAL that the inspection be completed in a timely manner so only stop for life or death situations.



Follow up Level 2/3 Inspections:

- If Yellow or Red Tags are found in Level 1 Insp. then results are turned over to Level 2 Damage Assessment Team (CE or EAS's).
- DAT's will load radio/phone equipped vehicle with provided inspection equipment and proceed to damage area to perform LEVEL 2 In-depth Inspection of Rd/Bridge.
- If the damage is not repairable/correctable a LEVEL 3 Inspection will be done by CO design/consultants.



1.1.1997

PREPARE FOR DISASTER BY:

- PRE-EQ-----
- PRACTICE ESCAPE & MEETING PLACE
- SECURE HEAVY ITEMS-waterht, book.
- KNOW WHERE TO SHUT OFF GAS etc
- LEARN FIRST AID
- KEEP EMERGENCY FOOD, WATER, BATT. RADIO ETC.
- DURING A EQ----
- INDOORS TAKE COVER UNDER BED, DOORWAY, TABLE. AVOID GLASS & BRICK
- OUTDOORS GO TO OPEN AREA AND LAY DOWN. STAY AWAY FROM BLDG & BRIDGE STRS.
- PICKUP PASSOUT