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**CITY OF SPRINGFIELD EMERGENCY MANAGEMENT PLAN****10. ANNEX D: Damage Assessment**

→Lead Department: Development Services, Public Works  
→Lead ICS Section: Planning

**10.1 PURPOSE**

This Annex describes procedures to be followed in the assessment and reporting of physical damage resulting from disasters. Initial damage assessment will determine whether a disaster event is of significance to request assistance from outside resources. Damage assessment will help establish priorities for allocation of resources and identify requirements for conducting recovery operations.

**10.2 SITUATION AND ASSUMPTIONS****10.2.1 Situation**

Disaster events have the potential for causing death, injury, and extensive damage to public and private property. A planned damage assessment and reporting procedure is essential for effective response and recovery operations. Damage assessment procedures are critical to the cost recovery process initiated during presidentially declared disasters.

A disaster event such as an earthquake or bomb blast may occur instantaneously, or a disaster event such as a flood or snowstorm may be slow-building. Disaster events may be very localized or have regional impacts. The nature of the event will require that damage assessment procedures be flexible and dynamic.

**10.2.2 Assumptions**

- Immediate assessment of public infrastructure will be critical following a disaster event. Assessment of facilities housing response staff, e.g., fire stations, fleet operations, police, 9-1-1 operations, and EOC will be critical;
- Transportation and communications systems may be severely disrupted or inoperable. Immediate and comprehensive damage assessment may be impacted by the condition of these systems;
- Adequate personnel, equipment, and facilities will be assigned to manage the damage assessment function;

- The ability of damage assessment staff to begin work immediately may depend on their personal condition, as well as the condition of their families and homes.

### **10.3 GENERAL PROCEDURES AND RESPONSIBILITIES**

Damage assessment is a Planning Section responsibility. The Planning Chief may appoint a Damage Assessment Manager, e.g., City Engineer or Building Official, to coordinate all phases of damage assessment. Damage assessment consists of four phases:

- 1) Rapid Damage Assessment (RDA) (windshield survey);
- 2) Initial Damage Assessment (IDA);
- 3) Preliminary Damage Assessment (PDA);
- 4) Secondary Damage Assessment (SDA).

Staff for conducting damage assessment would generally come from the Engineering and Community Services Divisions. The exact makeup of the teams would be determined by the Damage Assessment Manager depending on the nature of the event.

#### **10.3.1 Rapid Damage Assessment**

The RDA process, sometimes referred to as a windshield survey, is conducted immediately after an event occurs and should be completed within 24 hours of an event. The first phase of the windshield survey will be coordinated by Fire Department District Chiefs, utilizing station companies. This phase will focus on immediate life-threatening situations. Included in this phase will be specific occupancies listed on each fire company's Earthquake Priority Inspection list. Information gathered by the Fire Department will be forwarded to the Damage Assessment Manager. Rapid assessment provides the Incident Commander with quick information to assess the size of an event and the extent of damage, in addition to prioritizing facilities critical to government response and recovery activities. These facilities generally include: 911 centers, Emergency Operation Centers, Police and Fire stations, Public Works facilities, sewer and water facilities, hospitals, bridges and roads, electrical systems, etc. Depending on the nature of the event, a hazardous material facility may be considered critical. Police, Fire, Building, and Public Works staff responding to the emergency should report damage information to the Damage Assessment Manager. The American Red Cross (ARC) may provide limited damage assessment information and could provide additional assessment information related to residential properties, based on National Red Cross approval.

#### **10.3.2 Initial Damage Assessment**

The IDA process will provide supporting information for a state of emergency declaration and requesting a presidentially declared disaster. This assessment is more detailed than the rapid assessment, including estimates of financial losses of public and private property. The IDA should be completed within 72 hours of an event.

**10.3.3 Preliminary Damage Assessment**

The PDA process is generally performed by teams consisting of Red Cross, Federal, State, and local agency representatives. Teams consist of technical staff who can evaluate emergency and recovery project costs. A team representative should have the authorization to make reimbursement decisions.

**10.3.4 Secondary Damage Assessment**

The SDA is performed by teams of technical staff to determine if buildings, roads, bridges, and other critical infrastructure are safe for use or occupancy. The first priority for assessment is generally given to buildings, roads, and bridges critical to response and recovery efforts, as well as facilities essential to continuation of government services. Building assessment is performed by Development Services staff. Public Works, Maintenance Division will be utilized to assist with inspection and analysis of City buildings. Road and bridge assessments are conducted by Public Works Engineering.

The Building Official has the authority to declare buildings unsafe to occupy. Buildings that have been inspected will be posted as:

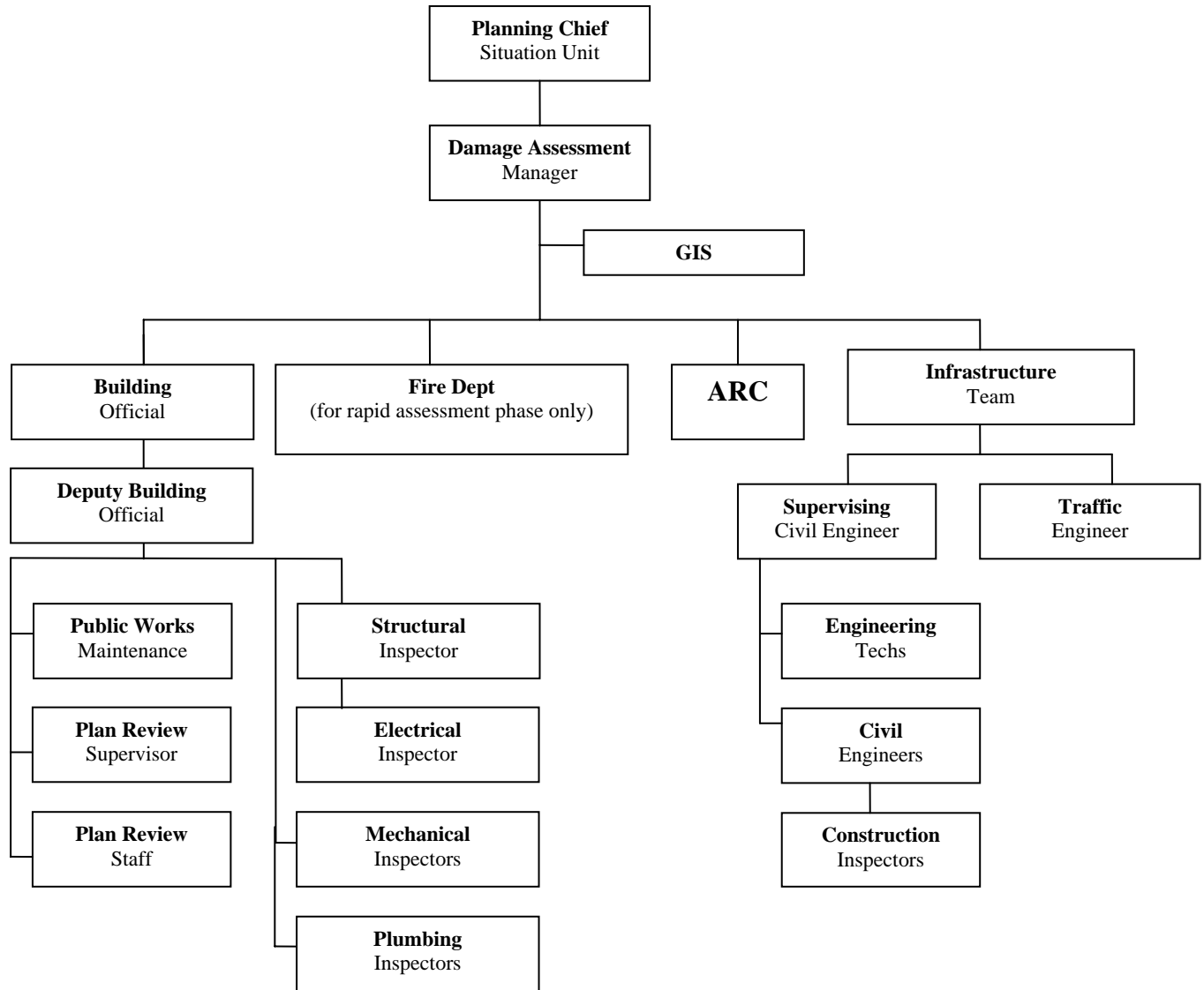
- safe to occupy (green);
- safe to occupy with repair-temporary occupancy (yellow);
- unsafe to occupy (red);

The City Engineer has parallel authority for roads and bridges.

**10.3.5 Damage Assessment Annex Organizational Chart**

See the chart on the following page.

### CHAIN OF COMMAND Damage Assessment Annex *Organizational Chart*



**10.4 PHASES OF EMERGENCY MANAGEMENT****10.4.1 Preparedness**

**→Departments Involved: Development Services, Fire & Life Safety, Police, Public Works**

- Discuss specific roles for damage assessment staff and teams;
- Discuss expected method of communication that will be used during damage assessment;
- Integrate use of Geographic Information System (GIS) to record damage assessment for addresses and facilities;
- Provide damage assessment training and certification for appropriate Development Services and Maintenance staff (FEMA ATC 20 damage assessment);
- Review various forms to be completed during damage assessment process;
- Review Infrastructure Team training.

**10.4.2 Response**

**→Departments Involved: Development Services, Fire & Life Safety, Finance, Police, Public Works**

**10.4.2.1 Damage Assessment Manager**

<b>Position:</b>	<b>Damage Assessment Director</b>
<b>Responsible Department/Division:</b>	<b>Public Works/DSD</b>
<b>Emergency Supervisor (title):</b>	Section Unit Leader
<b>Reports to (location):</b>	EOC
<b>Applicable ICS Section:</b>	Planning

- Coordinate all phases of damage assessment;
- Provide technical assistance in evaluation of public buildings and public infrastructure damaged by an event; prepare priority list for those facilities with highest risk to the public health, welfare, and safety;
- Secure services of other professionals, as necessary, to assist in damage assessment and development of repair strategies;
- Provide records and mapping information regarding damaged infrastructure and structures including streets, sewers, street lights, signals, airport, bridges, etc.;
- Ensure inspections are conducted of residential, commercial, and public building structures and facilities; ensure posting is made concerning unsafe to occupy, where necessary, or structures are condemned if beyond repair;
- Ensure licensed civil engineers, as well as field inspection staff, perform inspections to determine whether infrastructure is useable or unsafe;
- Ensure field inspection staff from Transportation Division investigates damage to traffic signals and lighting systems;
- Establish priorities based on type of event with focus on key transportation links, 911 centers, Emergency Operation Centers, Police and Fire stations, hospitals, sanitary and storm sewer systems, and water systems;
- Provide photographic services and maps;
- Collect incident data at earliest possible opportunity; continue collecting data throughout incident;
- Form, assign, and supervise damage assessment teams and other field observers;
- Collect, compile, and maintain damage records;
- Make initial disaster report to County, State, and Federal level agencies as appropriate; follow up with required paperwork to support requests for assistance;
- Coordinate with PIO and EMO IC regarding keeping the public informed about hazardous roads, bridges, drinking water, etc.;

- Notify Logistics of need to relocate building occupants from hazardous structures;
- Ensure unsafe facilities, roads, bridges, etc., are visibly marked as unsafe;
- Coordinate damage assessment information with Finance/Risk Management Section;
- Maintain unit log.

**10.4.2.2 Development Services Building Official**

<b>Position:</b>	<b>Building Official</b>
<b>Responsible Department/Division:</b>	<b>Development Services</b>
<b>Emergency Supervisor (title):</b>	Damage Assessment Manager
<b>Reports to (location):</b>	<b>EOC</b>
<b>Applicable ICS Section:</b>	Planning

- Obtain briefing from Damage Assessment Manager;
- Assist Damage Assessment Manager in prioritizing and coordinating order of assessment;
- Establish contact with PW staff;
- Determine which inspection specialties are needed and ensure contacts are made; PW has licensed electricians available to assist in inspection of public buildings if necessary;
- Assign field inspectors to damage assessment teams and deploy to areas where damage assessment is needed;
- Coordinate inspections and assist in determining damage to key facilities according to highest priority;
- Report inspection results to Damage Assessment Manager;
- Provide documentation of damage identified in inspections.

**10.4.2.3 Public Works Division Manager**

<b>Position:</b>	<b>Public Works Division Manager</b>
<b>Responsible Department/Division:</b>	<b>Public Works, Maintenance</b>
<b>Emergency Supervisor (title):</b>	Building Official
<b>Reports to (location):</b>	<b>EOC</b>
<b>Applicable ICS Section:</b>	Planning

- Contact Building Official to coordinate inspections;
- Coordinate damage assessment to City buildings
- Assist Building Official in posting damaged City buildings;
- Report financial loss or damage to City buildings;
- Report inspection results to Building Official.

**10.4.2.4 Infrastructure Team Manager**

<b>Position:</b>	<b>Infrastructure Team Manager</b>
<b>Responsible Department/Division:</b>	PW Engineering
<b>Emergency Supervisor (title):</b>	Damage Assessment Manager
<b>Reports to (location):</b>	Engineering Division
<b>Applicable ICS Section:</b>	Planning

- Coordinate damage assessment activities related to City street systems, sewer systems, drainage systems;
- Prioritize damage assessment activities;
- Notify PW Maintenance Division of infrastructure to barricade or post as unsafe;
- Report financial loss to Finance/Risk Management;
- Report inspection results to the Damage Assessment Manager.

**10.4.3 Recovery**

**→ Departments Involved: Public Works, Development Services**

- After emergency situation is resolved, continue to provide building inspections related to health and life safety;
- Complete all documentation reports necessary for records and reimbursement;
- PW Administration will compile all costs associated with event and work with Finance/Risk Management to obtain County, State and Federal reimbursement;
- Evaluate operations and collected information during response; submit necessary improvements and revisions to the City’s EMP.

**10.4.3.1 Civil Disturbance**

- Public Works Maintenance staff will determine damage to City facilities;
- After other investigations are complete, Public Works Maintenance staff will act as owner's representative in arranging for repairs, etc.

**10.4.3.2 Flood**

- Engineering, Transportation, and Maintenance Division will analyze damaged streets, sewers, drainage channels, and bridges for needed repairs. City Engineer is responsible for coordinating activities and administering any contractual services as needed;
- Building Official will determine damage to buildings and the possible need to post buildings as “dangerous”.

**10.4.3.3 Severe Weather: Wind/Ice/Other**

- Engineering, Transportation, and Maintenance crews will analyze damaged streets, sewers, drainage channels and bridges for needed repairs. Engineering will coordinate, as necessary, contractual services;
- Building official will determine damage to buildings and the possible need to post buildings as “dangerous”.

**10.4.3.4 Earthquake**

- Building Official will coordinate the issuance and inspection of emergency repair permits for damaged structures.

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