

## **Emergency Support Function 3 Public Works and Engineering**

### **ESF Coordinator:**

Emergency Management

### **Primary Agencies:**

Public Works Departments

### **Support Agencies:**

Building Departments

Port Districts

Grant County Public Utility District

Private Sector Companies

## **I. INTRODUCTION**

### **A. Purpose**

This ESF is developed for the cooperative efforts of Grant County and the incorporated municipalities to perform public works and engineering tasks in the event of a disaster or emergency. It is intended to provide for support to local jurisdictions in meeting needs related to response and recovery.

### **B. Scope**

Activities within the scope of this ESF include providing technical evaluations, engineering services, construction management, emergency contracting, emergency repair of water and waste facilities, debris clearance, and emergency power. It includes participation in all four phases of emergency management: mitigation, preparedness, response, and recovery.

## **II. POLICIES**

- A.** Appropriate local agencies, volunteers, and private sector resources will be used as available to provide assistance for public works and engineering activities.
- B.** Debris clearance and road repairs will be given priority to support immediate life saving emergency response activities.
- C.** Public works and engineering requirements which cannot be met at the local level will be escalated upward for State, then Federal assistance if needed.
- D.** Agencies will perform tasks within their own policies, authority, and guidelines for providing public works and engineering services.

- E. Additional information can be found in Revised Code of Washington (RCW) 43.19.450, Department of General Administration, Engineering and Architecture.

### **III. SITUATION**

#### **A. Emergency/Disaster Conditions and Hazards**

Property damages may be unprecedented in an emergency or disaster including weakened or destroyed structures to homes, public and critical facilities, roads, and bridges. Debris may make transportation routes impassible. Equipment used to repair or otherwise reinforce these structures may also be damaged. A large enough event may adversely affect the ability of local responders to perform their emergency duties.

#### **B. Planning Assumptions**

1. Widespread and prolonged damages to critical infrastructure may exist within the event area, contributing to delays in the process of repairs. Public Works Agencies may have limited resources for the disaster or emergency due to requirements of normal daily operations.
2. Agencies that support daily public works and engineering tasks may receive an influx of urgent requests for equipment and supplies to the extent that responding to most requests in a timely manner may be infeasible.
3. Rapid assessment will need to be made to determine the work load and response time.
4. Emergency environmental waivers may be granted in order to remove debris and conduct demolition activities within the constraints of the situation.

### **IV. CONCEPT OF OPERATIONS**

#### **A. General**

1. Close coordination will be maintained between county and local jurisdiction officials to determine potential tasks. The tasks will be determined jointly after a Declaration of Emergency is declared by the highest official.
2. ESF 3 participants will provide damage insights to the Information and Analysis participants of ESF 5 for overall damage assessment.

3. The County Engineer is in charge of all county roads and bridges, and the local jurisdiction Engineer is in charge of roads of the municipality.
4. Operations begin with support to law enforcement, emergency medical and fire services, and damage assessment teams.

## **B. Organization**

### **1. Public Works and Engineering**

Public works and Engineering departments of the County and local jurisdictions have their own equipment and tools necessary to complete daily functional activities. Some equipment may be specialized to perform only specific tasks. The number of staff trained on particular equipment may vary. Equipment, personnel, and tools used on a normal basis may or may not apply to the disaster or emergency situation. Therefore, public works and engineering assistance will be provided as resources permit.

### **2. Building Departments**

Building Departments of the County and local jurisdictions conduct services such as building and structure assessments, and enforcement of building codes. They are organized to identify vulnerabilities to structures based on specific criteria and regulations.

### **3. Port Districts**

There are ten Port Districts in Grant County, each with their respective managers and Board of Commissioners. Port Districts in Grant County generally have transportation, excavation, snow plows, pumps, and other equipment to support public works functions.

### **4. Grant County Public Utility District (PUD)**

This publicly owned utility district uses an array of equipment ranging in size from small pick-up trucks to large cranes. Considering their locations along the Columbia River, they also have boats of various sizes. The company employs linemen, systems analysts, hydro-electrical and vehicle mechanics, and engineers. They employ public information, customer service, and administrative staff. The Grant County PUD provides most of the electrical power available in Grant County.

### **5. Private Sector Companies**

There are several private companies which may provide spontaneous services for the response effort to restore critical infrastructure. There are natural and LPG gas utilities, cable companies, excavation and construction companies, and a plentitude of others.

## **C. Procedures**

1. The Public Works emergency plan is developed using information gathered from damage assessments to establish priorities in debris clearance and restoration of critical facilities such as roads, bridges, potable water, and sewer systems.
2. At the conclusion of the preliminary damage assessment, official damage estimates need to be provided to the Emergency Operations Center (EOC).
3. The Emergency Manager (typically Emergency Management Director or staff) at the EOC will provide copies to the WA State Emergency Management Division (EMD) Public Assistance Coordinator.

## **D. Mitigation Activities**

### **1. Primary Agencies**

Public Works Agencies train personnel in basic emergency procedures. They work with legislative bodies to support the creation of ordinances to protect public works systems and to improve life safety through supporting fire and building codes. They may also participate in exercises and review and clarify public works roles in emergency plans. Some may participate in the Grant County All-Hazards Mitigation Plan.

### **2. Support Agencies**

The support agencies to this ESF train personnel in emergency procedures. They Participate in plan reviews and maintain Emergency Action or Risk Management plans. They take actions to reduce or eliminate the effects of emergencies or disasters on natural resources.

## **E. Preparedness**

### **1. Primary Agencies**

Public Works Agencies generally ensure that storm sewers, debris removal equipment, and barrier or road block materials are in good standing. They maintain liaison with the state or federal agencies such as WA State Department of Transportation and the U.S. Army Corps of Engineers. They maintain public works maps of their jurisdictions.

### **2. Support Agencies**

These agencies review emergency plans and coordinate communications with the EOC. They ensure staff preparedness through training them on emergency plans.

## **F. Response Activities**

### **1. Primary Agencies**

Public Works Agencies provide personnel for internal and external Preliminary Damage Assessment (PDA) teams. They activate emergency contracts with the local private sector groups if needed, such as: excavators, contractors, and emergency suppliers. They coordinate with support agencies to supply services and resources through the EOC and provide initial damage assessments on public facilities.

### **2. Support Agencies**

These agencies help to repair public systems, coordinate the mobilization of personnel and equipment, and conduct critical infrastructure inspections.

## **G. Recovery Activities**

### **1. Primary Agencies**

Continue with response efforts and recovery activities until the event and its' impacts have ended, or control is re-gained.

### **2. Support Agencies**

Continue with response efforts and recovery activities until the event and its' impacts have ended, or control is re-gained.

## **V. RESPONSIBILITIES**

### **A. Primary Agencies**

Coordinate public works and engineering support for local jurisdictions with the following areas: demolition of unsafe structures, debris and wreckage clearance, and temporary repair, and inspection of facilities during or following a disaster.

### **B. Support Agencies**

Assist the Public Works Engineer in providing public works and engineering support during an emergency or disaster.

## **VI. RESOURCE REQUIREMENTS**

**A.** Light machinery such as painting equipment.

**B.** Heavy equipment such as excavators and backhoes.

**C.** Vehicles such as trucks, passenger cars, and boats.

**VII. REFERENCES**

*see Appendix 2 of the Basic CEMP*