UNIFIED SAN DIEGO COUNTY
EMERGENCY SERVICES ORGANIZATION
OPERATIONAL AREA EMERGENCY PLAN

ANNEX J

CONSTRUCTION AND ENGINEERING OPERATIONS

September 2006

UNIFIED SAN DIEGO COUNTY EMERGENCY SERVICES ORGANIZATION

ANNEX J

CONSTRUCTION AND ENGINEERING OPERATIONS

Construction and Engineering Operations Task Force

John Snyder, Director, Department of Public Works
Thomas P. Davis, Maintenance Coordinator, San Diego County Department of Public Works

Operational Area Plan Review Committee

Deputy Fire Chief Monica Orton, San Diego City Fire Department
Fire Chief David Burk, La Mesa Fire Department
Deputy Chief Dismas Abelman, Solana Beach Fire Department
Fire Chief Vic Reed, Escondido Fire Department
Division Chief Alan Nowakowski, Coronado Fire Department

Staff and Principal Planners

Stephen Rea, Emergency Services Coordinator, Office of Emergency Services
Paul Olsen, Emergency Services Coordinator, Office of Emergency Services

Edited and Printed

Office of Emergency Services

UNIFIED SAN DIEGO COUNTY EMERGENCY SERVICES ORGANIZATION

ANNEX J

CONSTRUCTION AND ENGINEERING OPERATIONS

Table of Contents

Page

ANNEX J 1
I. GENERAL 1
A. Introduction 1
B. Intent 1
C. Purpose 2
D. Planning Basis 3
E. Activation and Termination 4
II. ORGANIZATION AND RESPONSIBILITIES 4
A. Organization 4
B. Responsibilities of Local Agency 5
C. Responsibilities of County Public Works Administrator 6
III. POLICIES AND PROCEDURAL GUIDELINES 8
A. Emergency Work Station 8
B. Alternate Emergency Work Station 8
C. Reporting Procedures During Plan Activation 9
D. Operational Area 9
E. Departmental Operations Centers (DOC's) 9
IV. SUPPORTING ORGANIZATIONS AND RESPONSIBILITIES 10
A. Departments of General Services 10
B. Parks and Recreation Departments 10
C. Land Use Departments 10
D. County Office of Education 10
E. Construction Industry 10
F. Transportation Industry 10
G. Fire and Life Safety Department 11
APPENDIX J-1 Emergency Action Checklist 12
APPENDIX J-2 Emergency Action Checklist 13
APPENDIX J-3 Emergency Action Checklist 14
APPENDIX J-4 Emergency Action Checklist 15

ANNEX J

CONSTRUCTION AND ENGINEERING OPERATIONS

I. GENERAL

A. Introduction

This Annex is created and intended to be an integral part of the San Diego County Operational Area Emergency Plan. In addition, it identifies the implementation procedures for mutual aid and other support.

Construction and Engineering Operations is structured to provide public works and engineering-related support for the changing requirements of domestic incident management to include preparedness, prevention, response, recovery, and mitigation actions. Activities within the scope of this function include conducting pre and post-incident assessment of public works and infrastructure; executing emergency contract support for life-saving and life-sustaining services; providing technical assistance to include engineering expertise, construction management, and contracting and real estate services; providing emergency repair of damaged infrastructure and critical facilities; and implementation of the Associated General Contractors Emergency Services Mobilization Program (AGCESMP), formerly known as Plan Bulldozer.

The construction and engineering operations section of Annex J describes the basic concepts in coordinating and organizing the capabilities and resources of local government to facilitate the delivery of services, technical assistance, engineering expertise, construction management, and other support to prevent, prepare for, respond to, and/or recover from an incident of extreme significance. While local agencies have individual construction and engineering responsibilities, Annex J serves as a unifying document in the event of a major disaster.

B. Intent

No single community or agency has the ability or resources sufficient to cope with any and all emergencies for which a potential exists. This plan is designed to meet the anticipated needs of local agencies and to access the resources of other agencies to meet the needs of emergency incidents. Agencies that are members of the Unified Emergency Services Organization have agreed to assist each other with resources if they are available provided their own recovery operations are not compromised. In addition, some special districts have signed Mutual Aid agreements with other districts throughout Southern California. The State of California Fire and Rescue Emergency Mutual Aid Plan has been signed by most, if not all, cities within the State.

C. Purpose

This Annex establishes the organizational responsibilities and prescribes actions and procedures required for the provision of restorative services and Mutual Aid during a disaster or extreme emergency within the San Diego County Operational Area.

1. Coordination and support of infrastructure risk and vulnerability assessments.

2. Provide the basis for the coordination of operations for Public Works Agencies and other special districts within the San Diego Operational Area.

3. Provide assistance in the monitoring and stabilization of damaged structures and the demolition of structures designated as immediate hazards to public health and safety.

4. Coordinate and provide structural specialists expertise to support inspection of mass care facilities and urban search and rescue operations. This is in conjunction with Annex B.

5. Execution of emergency contracting support for life-saving and life-sustaining services, to include providing potable water, ice, emergency power, and other emergency commodities and services. This may be in conjunction with other Annex activations.

6. Managing, monitoring, and/or providing technical advice in the clearance, removal, and disposal of contaminated and uncontaminated debris from public property. This may include waste sampling, classification, packaging, transportation, treatment, demolition, and disposal of contaminated debris and soil. This shall be general debris/rubble and only performed to support clearing roads or public property.

7. Providing emergency repair of damaged infrastructure and critical public facilities. This may include but not limited to:

    a. Transportation systems - roads, bridges, airports, railway and shipping systems.
    b. Environmental systems - waterways, habitats, coastal erosion and landslides.
    c. Domestic utilities - water, electrical, natural gas, and sewer systems.
    d. Structural systems – foundation, building components and contents.

8. Restoration of critical navigation, flood control, and other water infrastructure systems.

D. Planning Basis

1. No community has resources sufficient to cope with any and all emergencies for which potential exists.

2. Construction and Engineering coordinators must preplan emergency operations to ensure efficient utilization of available resources.

3. Basic to California's emergency planning is a statewide system of mutual aid, in which each local jurisdiction relies first upon its own resources.

4. Agencies that are members of the Unified Emergency Services Organization have agreed to assist each other with resources if they are available.

5. The California Disaster and Civil Defense Master Mutual Aid Agreement between the State of California, each of its counties and those incorporated cities and special districts signatory thereto:

    a. Creates a formal structure for provision of mutual aid.
    b. Provides that no party shall be required to unreasonably deplete its own resources in furnishing mutual aid.
    c. Provides that the responsible local official in whose jurisdiction(s) an incident occurs requiring mutual aid, shall remain in charge at such incident, including the direction of personnel and equipment provided through mutual aid plans pursuant to the agreement.

6. Per the Standardized Emergency Management System (SEMS), Mutual Aid requests from jurisdictions and Special Districts within the Operational Area <u>must be</u> sent to the Operational Area Emergency Operations Center (EOC). The Logistics Section at the EOC will coordinate requests for mutual aid and will keep track of who needs what and where assets have been sent. The Logistics Section coordinates and forwards the requests to other jurisdictions, or the State Office of Emergency Services.

7. When the Mutual Aid assets are ordered, the requester will provide a staging area where the resources will be sent, and a point of contact. It is the responsibility of the requesting jurisdiction to provide any additional logistical support, i.e., food, water, fuel and sleeping accommodations, for the additional resources.

8. The state is divided into six mutual aid regions to facilitate the coordination of mutual aid. San Diego County is located in Mutual Aid Region VI. Through this system, the Governor's office is informed of conditions in each geographic and organizational area of the state, and the occurrence of an imminent threat of disaster.

9. In addition to Public Works resources, this plan includes both public and private agencies with support capability and/or emergency responsibility.

10. Certain types of resources may be considered outside the mutual aid agreement by the responding agency and therefore may be subject to a pre-established agreement, which may be available only on a reimbursement basis.

11. This plan, as part of the San Diego County Operational Area Plan, should be distributed to and discussed with management, command, operational, and support level personnel within each jurisdiction.

12. This plan must be continuously reviewed, revised when necessary, and tested to encompass change and refinement consistent with experience gained through disaster operations and training, and changes in resource availability.

E. Activation and Termination

Activation and termination of this Annex shall be by the direction of:

1. The County Chief Administrative Officer (CAO) as the Area Coordinator of the Unified San Diego County Emergency Services Organization.
2. A designated Deputy CAO.
3. The Director, Office of Emergency Services or a designated representative.
4. The Director, Department of Public Works.

Activation normally occurs based on: Notification by OES that the scope of an emergency will exceed local resources; a disaster which by its nature or severity automatically initiates activation of the plan; and/or a public media announcement that a disaster has occurred and that all personnel are to report to their disaster assignments.

Deactivation is normally accomplished by a phase-down procedure and a return to normal, pre-disaster operations. Operations then revert to activities for reconstituting local government activities, as needed and as directed by the Unified Disaster Council in accordance with standing policies and unified agreements.

II. ORGANIZATION AND RESPONSIBILITIES

A. Organization

Most cities in the San Diego County Operational Area have Public Works Departments. In the event of a major emergency or disaster, the Director(s) of Public Works in the affected jurisdiction(s) will coordinate the implementation of this Annex. In unincorporated areas of the county, this responsibility falls upon the County Public Works Director. In many instances because of size and complexity of the incident, some agencies/jurisdictions may not have the personnel to fill all the positions at the EOC as

shown at the Operational Area level. This may require the assistance of all affected and non-affected agencies and Special Districts for additional resources.

B. Responsibilities of Local Agency

Activities include but are not limited to the following:

1. Reasonably exhaust local resources before calling for outside assistance.
2. Render the maximum practicable assistance to all emergency stricken communities, under provisions of the San Diego County Mutual Aid Plan.
3. Provide for receiving and disseminating information, data and directives.
4. Maintain a call-back list of primary response personnel.
5. Coordinate and conduct necessary training to adequately perform functions and responsibilities during emergencies.
6. Provide department personnel to staff the Local Emergency Operations Center (EOC).
7. Provide department personnel to staff the Local Joint Information Center (JIC).
8. Coordinate all interdepartmental contacts with other Deputy Directors.
9. Coordinate with County EOC Director.
10. Develop and maintain current records of road and flood conditions throughout their jurisdiction.
11. Provide engineering and public service work.
    Tasks (where applicable):
    a. Restore, maintain and operate essential services within their jurisdiction:
        i. Roads and bridges and/or traffic control devices
        ii. Storm drainage facilities
        iii. Wastewater disposal plants, trunk sewers and laterals
        iv. Airport facilities
        v. Rural transportation facilities

b. Repair, modification and/or construction of emergency facilities and housing:

   i. Bridges

   ii. Alternate road access

   iii. Alternate airport landing strips

   iv. Temporary solid waste collection areas

   v. Temporary wastewater transmission lines

   vi. Temporary housing

12. Provide engineering expertise and equipment to assist in search and rescue operations. Additional personnel for engineering assistance will be drawn from other public and private sectors.

13. Maintain an inventory of heavy equipment and equipment operators. Additional equipment and personnel may be drawn from other public and private sectors.

14. Manage and coordinate contracted transportation vehicles and facilities.

15. Maintain an inventory of resources and provide for procurement and allocation of transportation resources.

C. Responsibilities of County Public Works Administrator

The County Deputy Director of Public Works/Transportation Division has the primary responsibility to respond for the department in the event of an emergency. During disaster conditions, the Deputy Director shall:

1. Reasonably exhaust county resources before calling for outside assistance.

2. Render the maximum practicable assistance to all emergency stricken communities, under provisions of the San Diego County Mutual Aid Plan.

3. Provide for receiving and disseminating information, data and directives.

4. Maintain a call-back list of primary response personnel.

5. Coordinate and conduct necessary training to adequately perform functions and responsibilities during emergencies.

6. Provide department personnel to staff the County Emergency Operations Center (EOC).

7. Provide department personnel to staff the County Joint Information Center (JIC).

8. Coordinate all interdepartmental contacts with other Deputy Directors.

9. Coordinate with Local EOC Directors.

10. Develop and maintain current records of road and flood conditions throughout their jurisdiction.

11. Provide engineering and public service work.

    Tasks (where applicable):

    a. Restore, maintain and operate essential services within their jurisdiction:

        i. Roads and bridges and/or traffic control devices

        ii. Storm drainage facilities

        iii. Wastewater disposal plants, trunk sewers and laterals

        iv. Airport facilities

        v. Rural transportation facilities

    b. Repair, modification and/or construction of emergency facilities and housing:

        i. Bridges

        ii. Alternate road access

        iii. Alternate airport landing strips

        iv. Temporary solid waste collection areas

        v. Temporary wastewater transmission lines

        vi. Temporary housing

12. Provide engineering expertise and equipment to assist in search and rescue operations. Additional personnel for engineering assistance will be drawn from other public and private sectors.

13. Maintain an inventory of heavy equipment and equipment operators. Additional equipment and personnel may be drawn from other public and private sectors.

14. Manage and coordinate contracted transportation vehicles and facilities.

15. Maintain an inventory of resources and provide for procurement and allocation of transportation resources.

16. The County may initiate the Associated General Contractors Emergency Services Mobilization Program (AGCESMP), which, through the assistance of the construction industry, will maintain an inventory of resources and provide for procurement and allocation of heavy construction equipment and necessary equipment operators. The AGCESMP is a plan for rapid mobilization of construction manpower and equipment in the event of a disaster, at currently existing rates. The Board of Supervisors has signed a Memorandum of Understanding with the Associated General Contractors of America, San Diego Chapter, to implement this program.

III. POLICIES AND PROCEDURAL GUIDELINES

The following general procedures have been developed to provide guidance in the implementation of Annex J:

A. Emergency Work Station

All Public Works Agency personnel should have a designated emergency workstation. This will generally be the station they normally report to during regular work hours, unless a different emergency workstation has been previously assigned.

B. Alternate Emergency Work Station

In the event that Public Works' normal or emergency work stations are inoperable as a result of the disaster, or staff cannot get to their normal or emergency work stations, the following is a guide used by County DPW for reporting to alternative stations:

Regular or Emergency Work Station	Alternate Work Station
Co. Operations Center-San Diego	Div. I Headquarters-Jamacha
Div. I Headquarters-Jamacha	Co. Operations Center, San Diego
Div. II HQ San Marcos	Ramona Field Office
Maintenance Stations Countywide	Appropriate Division HQ
Wastewater Division-Kearny Mesa	Wastewater Operations/Spring Valley
Gillespie Field El Cajon	Ramona Airport
Palomar Airport Carlsbad	Ramona Airport
Ramona Airport	Gillespie Field, El Cajon

C. Reporting Procedures During Plan Activation

Unless assigned to an emergency station, personnel will report to their regular workstation. When assigned to an emergency workstation prior to the emergency, or if telephone communications are disrupted, personnel will report in person to their workstation.

D. Operational Area

The Operational Area covered under this Annex is the entire county and all cities. The County Department of Public Works' responsibilities are within the unincorporated areas of San Diego County. When requested by proper authority, mutual aid services within incorporated cities and adjacent counties can be provided.

E. Departmental Operations Centers (DOC's)

All Public Works Agencies should designate alternate locations for their Departmental Operations Centers (DOCs) in the event that the primary location is inoperable. For example, the County Department of Public Works is headquartered at the County Operations Center in Kearney Mesa. In the event this facility was damaged to the extent that it could not serve as a DOC, the DOC would be located at Division I Headquarters in Spring Valley, as first choice, and then to Division II Headquarters in San Marcos, as second choice.

IV. SUPPORTING ORGANIZATIONS AND RESPONSIBILITIES

A. Departments of General Services

1. Provide vehicles as needed.
2. Provide vehicle maintenance, repair and fueling services.
3. Provide architects, engineers, electricians and plumbers.
4. Provide communications support in the form of personnel and/or equipment.

B. Parks and Recreation Departments

Provide miscellaneous construction equipment and operators.

C. Land Use Departments

1. Provide structural engineers and building inspectors for damage assessment activities, as well as for recovery efforts.
2. Provide geologists for technical support.
3. Acquire water resources.

D. County Office of Education

Provide school buses and operators for emergency transportation and evacuation.

E. Construction Industry

1. Respond to requests for heavy equipment and labor in accordance with the AGCESMP.
2. Provide structural engineers and building inspectors for damage assessment activities, as well as for recovery efforts.

F. Transportation Industry

1. Provide ground and rail transportation, including operators, for emergency transportation and evacuation.
2. Provide additional vehicular support.

G. Fire and Life Safety Department

1. Respond to requests for rescue and treatment following Annex B and the California State Mutual Aid Plan.

2. Provide emergency structural stabilization and hazard abatement for damage assessment activities, as well as for recovery efforts.

APPENDIX J-1
EMERGENCY ACTION CHECKLIST

RESPONSE TO A MAJOR EARTHQUAKE

Action	Responsibility
Check key facilities, public works yards, and other facilities to determine the extent of damage and ability to operate.	Public Works Agency
Assure that equipment under cover has been moved to open areas to prevent damage in the event of aftershocks.	Public Works Agency

IF LITTLE OR NO DAMAGE IS REPORTED, PREPARE TO SUPPORT MORE HEAVILY DAMAGED JURISDICTIONS.

IF EXTENSIVE DAMAGED IS REPORTED, TAKE THE FOLLOWING ACTIONS AS APPROPRIATE.

Determine priorities for construction and engineering activities.	Public Works Agency
Allocate personnel and equipment in accordance with established policies	Public Works Agency/ Human Resource Agency
Organize crews to clear debris when it hampers emergency response activities.	Public Works Agency
Provide barricades for traffic and access controls.	Public Works Agency
Assign engineering teams to determine capacity and safety of bridges, underpasses, and roadways.	Engineering Services/ Public Works Agency
Construct detours and alternate routes according to plans.	Public Works Agency/ Traffic Ops. Agency
Repair damage to essential routes.	Public Works Agency
Coordinate with utilities on repair efforts.	Utility Coordinators
Clear debris from waterways to prevent flooding and contamination.	Flood Control Agency

APPENDIX J-2
EMERGENCY ACTION CHECKLIST

RESPONSE TO HAZARDOUS MATERIALS INCIDENT

Action	Responsibility
Check with scene coordinator (HAZMAT, CHP, Environmental Health, Fire Dept., etc.) to determine agency involvement.	Public Works Agency
Provide barricades for traffic and access controls.	Public Works Agency
Construct detours and alternate routes according to plans.	Public Works Agency/ Traffic Ops. Agency
Clear debris from waterways to prevent contamination.	Flood Control Agency

APPENDIX J-3
EMERGENCY ACTION CHECKLIST

RESPONSE TO IMMENENT/ACTUAL FLOODING

FLOODING EXPECTED

Action	Responsibility
Monitor Stream gauges and reservoir water levels.	Flood Control Agency
Mobilize work crews for flood fighting operations.	Public Works Agency/ Flood Control Agency
Coordinate sandbagging and drainage channel reinforcement.	Public Works Agency/ Flood Control Agency
Clear debris from channel to prevent backups.	Public Works Agency/ Flood Control Agency
Place damage assessment teams on standby.	Public Works Agency/ Engineering Agency
Move construction equipment to high ground.	Public works Agency
Provide barricades for traffic and access controls.	Public Works Agency
Construct detours and alternate routes according to plans.	Public Works Agency/ Traffic Ops. Agency

FLOODING OCCURS

Report flooding/flooded areas to the EOC.	Flood Control Agency
Dispatch damage assessment teams to flooded areas.	Public Works Agency
Continue sandbagging efforts as feasible.	Public Works Agency
Begin debris clearance as situation permits.	Public Works Agency
Provide barricades for access control.	Public Works Agency
Construct detours and alternate routes according to plans.	Public Works Agency/ Traffic Ops. Agency

APPENDIX J-4
EMERGENCY ACTION CHECLIST

RESPONSE TO IMMINENT/ACTUAL DAM FAILURE

DAM FAILURE IMMINENT

Action	Responsibility
Move construction equipment to high ground. Monitor Stream gauges and reservoir water levels.	Public Works Agency/ Flood Control Agency
Mobilize work crews for flood fighting operations.	Public Works Agency/ Flood Control Agency
Coordinate sandbagging and drainage channel reinforcement.	Public Works Agency/ Flood Control Agency
Place damage assessment teams on standby.	Public Works Agency/ Engineering Agency
Provide barricades for traffic and access controls.	Public Works Agency
Construct detours and alternate routes according to plans.	Public Works Agency/ Traffic Ops. Agency

DAM FAILURE OCCURS

Provide water-hauling equipment for emergency needs.	Water Agency/ Flood Control Agency
Mobilize work crews for flood fighting operations.	Public Works Agency/ Flood Control Agency
Coordinate sandbagging and drainage channel reinforcement.	Public Works Agency/ Flood Control Agency
Place damage assessment teams on standby.	Public Works Agency/ Engineering Agency
Provide barricades for traffic and access controls.	Public Works Agency
Construct detours and alternate routes according to plans.	Public Works Agency/ Traffic Ops. Agency