

## **BASE OF OPERATIONS OVERVIEW**

One of the crucial elements of a successful operation by a task force is the location and operations of the Base of Operations (BoO). The BoO serves as the equipment cache set-up area; command and control area; sleeping, resting, and eating areas; refuge from the elements; communications link with the outside world; and many other functions.

### **A. SITE SELECTION CRITERIA**

One of the functions of the Incident Support Team (IST) Logistics Section is to survey potential Task Force BoO sites. If this is not possible due to the large number of Task Forces on the incident or the wide-area of the disaster, then the Task Forces may have to find a location on their own. If there is no established location for the BoO at the time the Task Force leaves the mobilization center or staging area for their work location, it may be prudent for the Task Force to send out a Base of Operations Site Survey team to provide reconnaissance for selecting a site. The site survey team should include a Task Force Leader, Search Team Manager, Medical Team Manager, Safety Officer, Logistics Manager and Communication Specialist. A Structural Specialist should be included if existing structures are to be considered. These personnel should use the Task Force Site Locations Checklist and Sketch Form to ensure the potential site meets appropriate criteria.

There are a number of general considerations that should be considered when choosing a site. The most strategic factor for the placement of the BoO is its proximity to the anticipated rescue work sites. There are two key factors: travel distance and available transportation. If transportation is limited, the need to establish a forward base close to the work area should be considered. Transportation access or avenues should be considered as part of the location choice of the BoO.

As important as the proximity of the BoO to the work site is, it is also prudent to consider having the BoO some distance away from the work site. The site must provide a tranquil place where Task Force members can get restful sleep. It should be away from major highways, railroad tracks, and airports. It is important for all members to get as much rest as possible. This makes for more productive work sessions and lessens the chance of injuries on site. It is also important that the members get physically away from the work area and are not forced to constantly view the site. This reduces the amount of stress that workers must deal with during the incident and gives them temporary refuge from the disaster environment.

The site should be environmentally safe with no chance of contaminated run-off. It should not be located near landfills, manufacturing plants, tank farms, or other such sites, and, if nearby any facilities of potential release, should be located upwind/upstream. It must be safe from the effects of rain run-off, snow build-up, exposure to high winds, etc. The BoO site should be set up to provide as much natural security as possible. These can be desirable after a widespread disaster. As much as possible, Task Force members must provide guard over the site. The IST or Task Force supervisory personnel should request professional security personnel or military guards to exclude unauthorized persons.

Establishing the BoO on higher ground will usually enhance radio communications. Personnel must ensure that adequate space is available for equipment cache set up and maintenance, shelter of personnel and canine, the task force command post, medical treatment area, food preparation and feeding area, toilet and sanitation area, and helicopter landing zone.

Existing structures may be available for the BoO site. The advance team or IST should consider this during reconnaissance. Existing structures are preferred over the cache tents, but they must be determined safe by the Task Force.

Earthquake aftershocks must be considered in the final decision as well as other events that may affect the stability of a building. The BoO should not be set up next to a high-rise building or other structures with the potential for failure. If the Task Force elects to use existing buildings, permission must first be obtained from the local jurisdiction because there may have to be waivers on the zoning and occupancy of the buildings used. Other health and safety issues may be involved in using non-residential buildings.

If the cache tents are used, the space must be level or have proper drainage so that rainwater does not flow into the tents or create a muddy area where there is heavy foot traffic.

## **B. BASE OF OPERATIONS SET-UP**

The set-up of the BoO should be based upon the needs of the Task Force as it begins the mission. The Task Force is not fully effective without the use of the tools, equipment, and supplies in the cache. Therefore, the cache area of the base should be a priority. In most cases, it will be necessary to assign additional personnel to assist in the set-up of the cache due to its size and weight. As the cache area is developed, equipment needed to support a structures triage team, reconnaissance team, and search and rescue operations should be prepared first.

An early consideration of the cache set up should be the shelter requirements for various cache elements. If an existing structure can safely be used to store the cache this need is simplified. If not, separate tents should be erected for weather sensitive supplies and equipment, food, and medical supplies.

The location of the Task Force Command Post is an important consideration during the set up of the BoO. The location should have been determined during the development of the BoO Location Checklist and Sketch form. During the length of the mission, the Task Force Command Post will be the focal point for the Task Force and must be strategically located so as to function effectively.

After the cache is set up and the Task Force Command Post is operational, the lodging requirements of the Task Force should be addressed. Determine if existing structures are available and can be safely used. In general, smaller, wood framed structures may prove safer for cache and personnel shelter. The type of construction as well as the general condition should be taken into account. If structures are not available, a personnel shelter area should be established using tents denoted on the BoO Location Checklist and Sketch form.

A food preparation area, Task Force feeding area, separate canine area, and toilet and sanitation area must be established.

A medical treatment area must be established within the BoO as identified on the Site Location Checklist and Sketch form. Advice from the Medical Managers should be solicited prior to the selection of the medical treatment area.

The main entrance should be near the main route of travel. Generators and lighting should be placed on the perimeter of the BoO as close as possible to the section being powered. The quietest generators should be used around the sleeping areas and the Task Force Command Post and communication area.

Throughout the course of the mission, Task Force supervisory personnel should assess the BoO functionality. Requests to the IST may be necessary for communications equipment, medical equipment, canine needs, or issues related to food, shelter, and sanitation.

### **C. SET-UP PROCEDURES**

The Task Force Base of Operations Location Checklist and Sketch form can be used for the actual placement of the facilities within the BoO. The advance team should carry a kit for use in marking the locations of sections in the BoO. The kit should contain at a minimum:

Two 100' measuring tapes	One roll of fire-line tape
Digital camera	Point down spray paint
Box of marking chalk	One pair binoculars
GPS	

Each Task Force should have a template of the site set-up for their individual Task Force with the type and size of their tents and how they prefer the site to be set up. This should include the minimum size area required for the BoO and an alternate layout size. The team can lay out and identify sections of the BoO with signs and fire-line tape. Personnel can then go back over the area with spray paint cans and outline on the ground each section of the BoO and where each tent will be set up. Areas that need to be marked are for sleeping, food distribution, medical care, Task Force Command Post, equipment cache, equipment repair, fuel storage, sanitation/hygiene areas, and canine shelter areas. When the full Task Force arrives and personnel are designated to begin the full set-up, it will speed the entire process in that it will be evident exactly where each BoO function is to be located.

### **D. BASE OF OPERATIONS MANAGEMENT**

The Logistics Manager or designated Base Camp Manager is tasked with management of the base camp resources within the Base of Operations. BoO base camp management involves daily routine tasks to keep the BoO operational as the task force control point. Routine tasks include such items as security and review of perimeter control measures; maintaining vehicle parking areas and routes of travel; daily service for trash removal; cleaning of sink, toilet, and shower areas; maintenance and/or fueling of power generating/supply equipment; set-up and service of a pre-entry decontamination area; monitoring of hazardous materials storage areas; and hygiene control for all facilities.

The IST Logistics Chief or Facilities Manager should be contacted to assist with contracting services to help maintain the systems within the base of operations. This includes services such as trash pick-up, fuel re-supply or delivery, and portable toilet maintenance.

### **E. DEMOBILIZATION**

Upon demobilization, the BoO site should be restored to its original condition. This includes properly policing for trash and other remnants left behind. The Task Force supervisory personnel should ensure that the site looks as good as or better than when the Task Force arrived. Remember that the Task Force should not be a burden to the locality. This includes not leaving behind a site that requires the local inhabitants to clean up or restore it to its former condition.

**Type III  
Base of Operations  
Site Survey Team**

The following personnel are to be selected to conduct a site survey for the Base of Operations:

1. Logistics Manager: \_\_\_\_\_
2. Safety Officer: \_\_\_\_\_
3. Communications Specialist: \_\_\_\_\_
4. Structural Specialist (if Existing Structures May be Considered)  
\_\_\_\_\_

The BoO Site Survey Team should have the following items:

- |                                   |                                |
|-----------------------------------|--------------------------------|
| Two 100' measuring tapes          | One roll of fire-line tape     |
| Digital camera                    | Point down spray paint         |
| Box of marking chalk              | One pair binoculars            |
| GPS                               | Site Checklist and Sketch Form |
| Base of Operations Master Diagram |                                |

**Base of Operations**  
**Task Force Site Location Checklist/Site Sketch —Page 1 of 3**

1. **Proximity to Anticipated Work Sites**—Consider travel distance and available transportation. Close to incident site to allow for ease of moving personnel and equipment, but far enough away to provide a tranquil place for rest and sleeping. Avoid areas with major highways, railroads, airline flight paths.

\_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_  
\_\_\_\_\_

2. **Safe & Secure Location**—Location provides safety from potential building or infrastructure collapse. Away from potential contaminated areas such as landfills, manufacturing plants, tank farms, etc. Location provides adequate natural security to protect personnel and cache equipment. Consider schools or other fenced in areas.

\_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_  
\_\_\_\_\_

3. **Elevation**—Location provides adequate run-off due to rain. Elevated area to set up radio equipment for optimum transmission and reception.

\_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_  
\_\_\_\_\_

4. **Access Routes**—Routes of travel to and from location provide for access for delivery of supplies and equipment, transportation of personnel and equipment to work sites, and emergency vehicles such as ambulances.

\_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_  
\_\_\_\_\_

5. **Existing Structures**—Existing structures available for use. Safe from subsequent aftershocks. No potential for collapse. Safe from weather related activity.

\_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Base of Operations  
Task Force Site Location Checklist/Site Sketch—Page 2 of 3**

6. **Utilities**—What utilities are available:

Water  Yes  No / Electricity  Yes  No / Phone  Yes  No

Notes/Comments: \_\_\_\_\_  
\_\_\_\_\_

7. **Helicopter Landing Zone**—Open area where helicopter landing zone can be established. Away from BoO but with adequate access routes to move patients and/or equipment.

Yes  No

Notes/Comments: \_\_\_\_\_  
\_\_\_\_\_

8. **Site Sketch Completed**—Include BoO facilities arrangement on sketch, access routes, areas of refuge, potential helicopter landing zone.

Yes  No

Physical Address or GPS Coordinates: \_\_\_\_\_

Notes/Comments: \_\_\_\_\_  
\_\_\_\_\_

9. **BoO Layout Measured, Painted, and/or Marked for Set-up**

Yes  No

Notes/Comments: \_\_\_\_\_  
\_\_\_\_\_

10. **Pictures Taken**—Digital pictures of site obtained for BoO set-up, documentation, and demobilization.

Yes  No

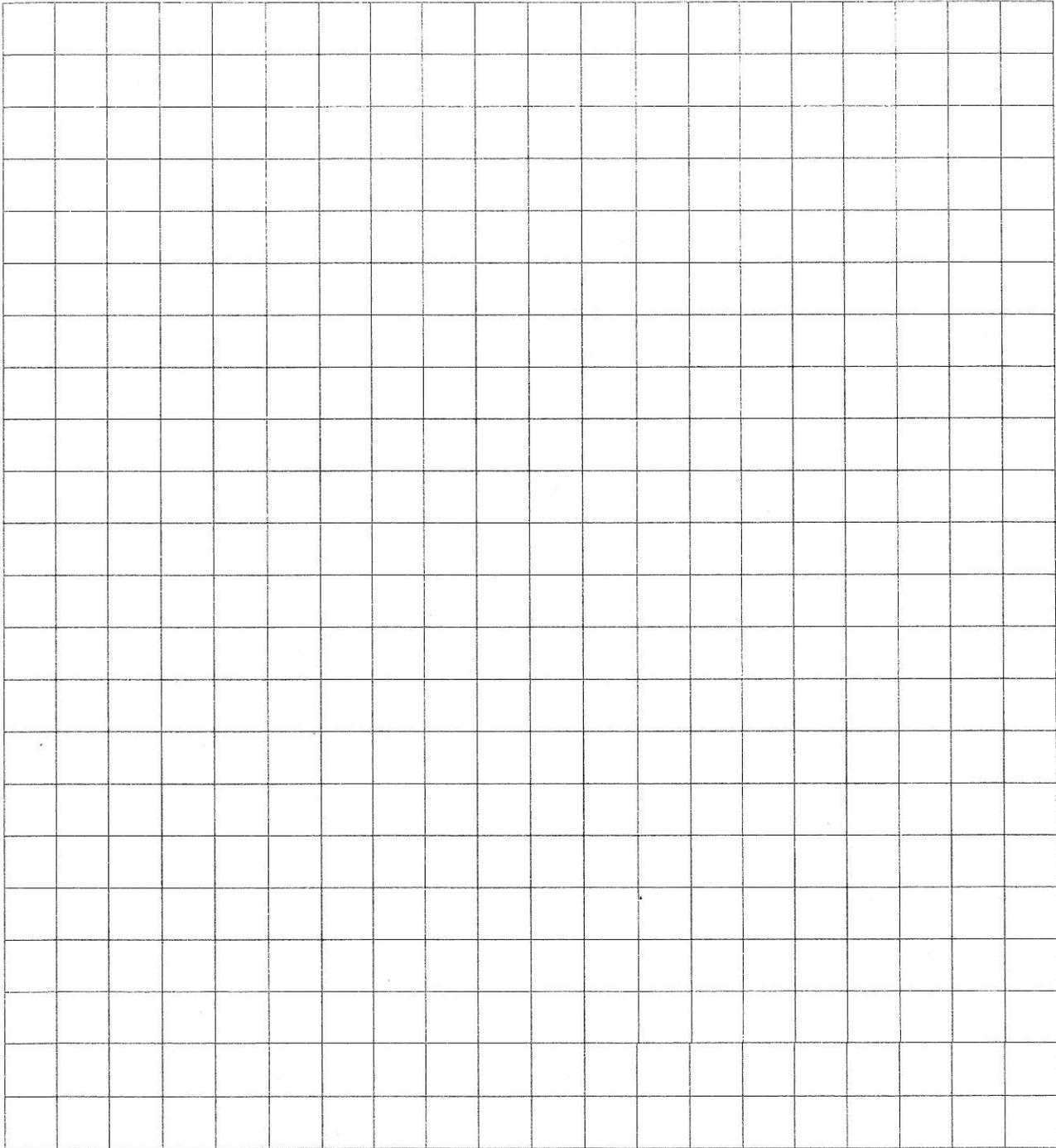
**Site Location Checklist Completed By:** \_\_\_\_\_

**Members of BoO Advance Team:** \_\_\_\_\_  
\_\_\_\_\_

**Date/Time Completed:** \_\_\_\_\_

**BoO Site Sketch Worksheet—Page 3 of 3**

**Include BoO Facilities Arrangement, Access Routes, Areas of Refuge, Helicopter LZ, Available Utilities**



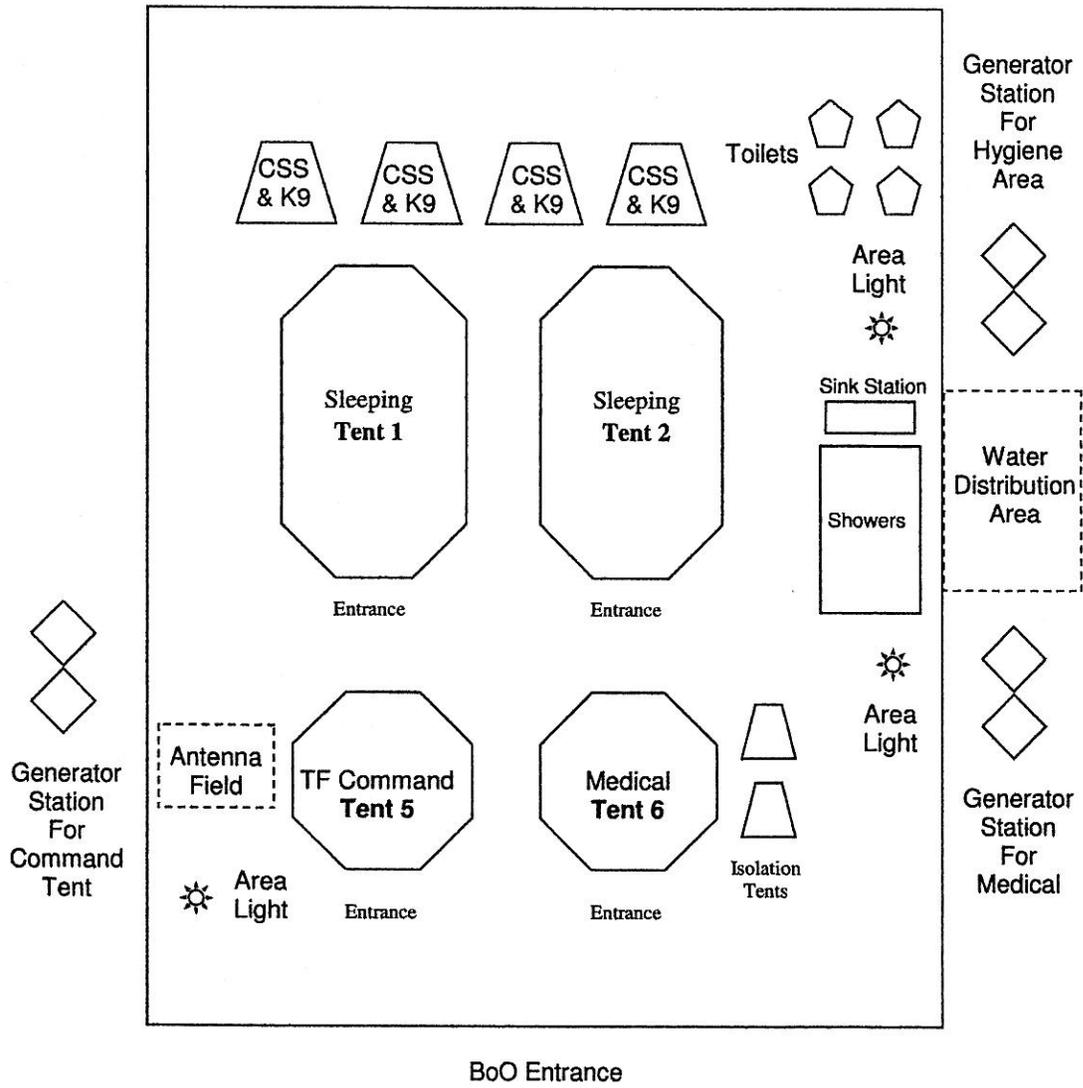
Scale: 1 Square = \_\_\_\_\_ Feet

Indicate North \_\_\_\_\_

Physical Location or GPS Coordinates: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Completed By: \_\_\_\_\_

Type III Base of Operations  
80' x 100' Minimum Size



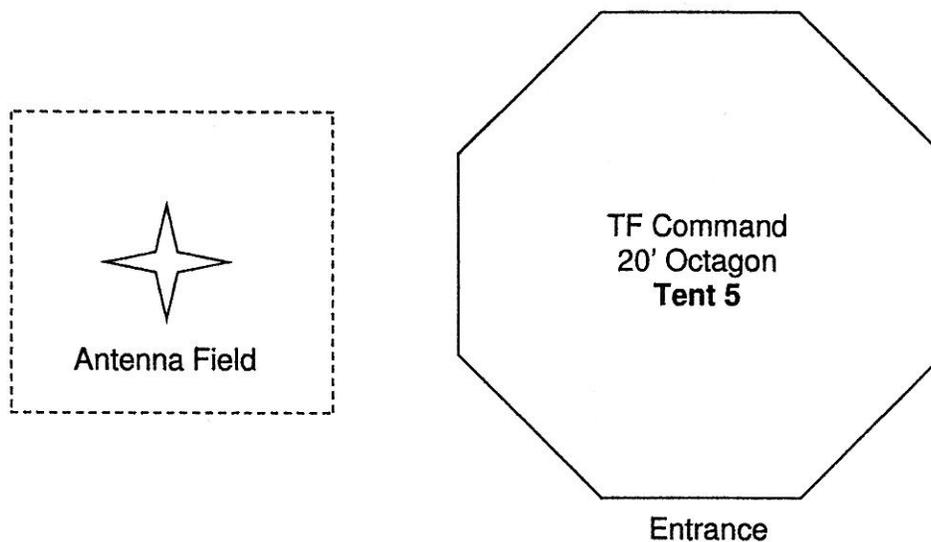
**Base of Operations Set-up  
Assignment Sheet**

Set-up of facilities for the Base of Operations should be coordinated by order of priority starting with task force command and communications areas. Areas are listed below in order of priority for task force operations. Assignments for set-up of BoO should be made while en route:

<u>Priority</u>	<u>Facility</u>	<u>Assigned to:</u>
1.	TF Command Tent HO-20	Tech Info/Comm Specs/Structural Engineers
	In Charge:	_____
2.	Medical Tent HO-20	MTM/Medical Specialists
	In Charge:	_____
3.	Sleeping Tent 1 HS1935	Rescue Specs/HazMat Specs
	In Charge:	_____
4.	Sleeping Tent 2 HS1935	STM's/Tech Search Specialists
	In Charge:	_____
5.	K9 Sleeping Tents 6 Person Type	K9 Specialists
	In Charge:	_____
6.	Toilets/Sink>Showers	Logistics/Ground Support
	In Charge:	_____
7.	Forward Operations	Logistics/Ground Support
	Assign as Needed:	_____

- Safety Officers to Monitor BoO Set-up for Safe Operations/Procedures
- Only Qualified Personnel to Operate Forklifts or Other Heavy Equipment
- Appropriate PPE Worn by All Members—Back Supports, Gloves, Helmets, Eye Protection
- All Electric Cords Need Placed in Cord Runs to Minimize Trip Hazards
- **IMPORTANT:** There should be ONLY 1 Main Entrance to the BoO.
- Perimeter Fence May Need to Be Erected to Maintain Proper BoO Access.
- Check with Logistics for Availability of Fencing and Posts.

TF Command & Communications  
Area Required: Tents—25' x 25'  
Antenna Field—15' x 15'



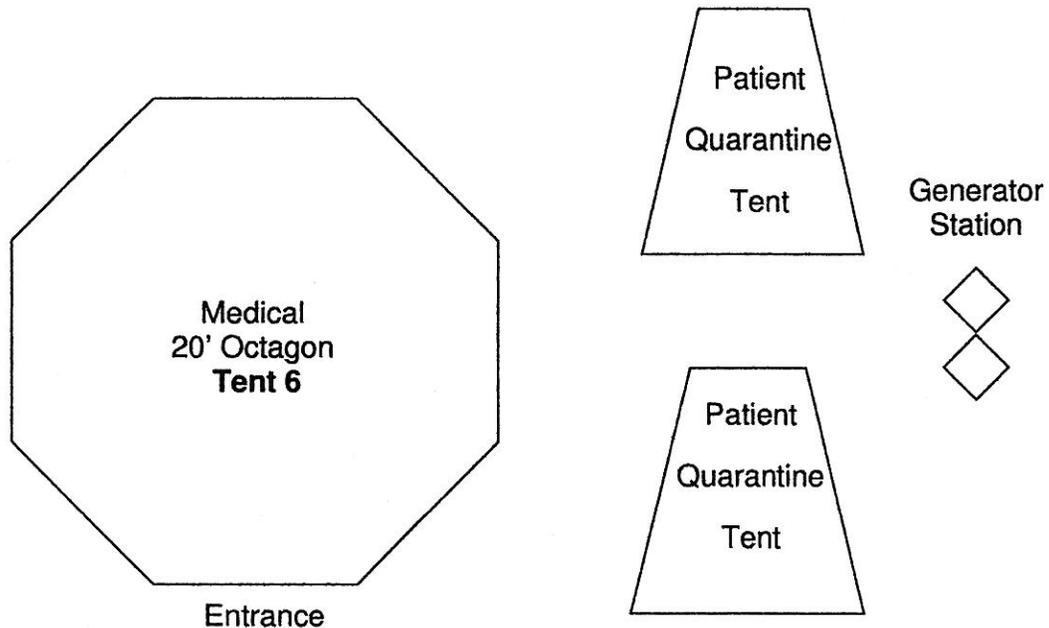
TF Command Tent #5  
Generator Kit - 7000 Watt

Boxes 50314-700, 50314-800, 50314-900  
50820

Considerations:

- Install tent floor panel before moving equipment into tent.
- All tents to be staked down and guy roped or secured with anchor bolts.
- Generators to be set up outside BoO area.
- Fire extinguisher to be placed 10' from generator station.
- Fuel to be stored at least 25' from generator station.
- All cord runs to be minimized to avoid trip hazards.
- TFL/Plans/Comm work stations in TF Command tent.
- Antenna field to be cordoned off with banner tape.
- Store all tent packing bags and remaining set-up items in shipping boxes and close to protect from weather. Store closed boxes behind tent.

Medical Tent  
Area Required: Tent—25' x 25'  
Quarantine Area—15' x 35'



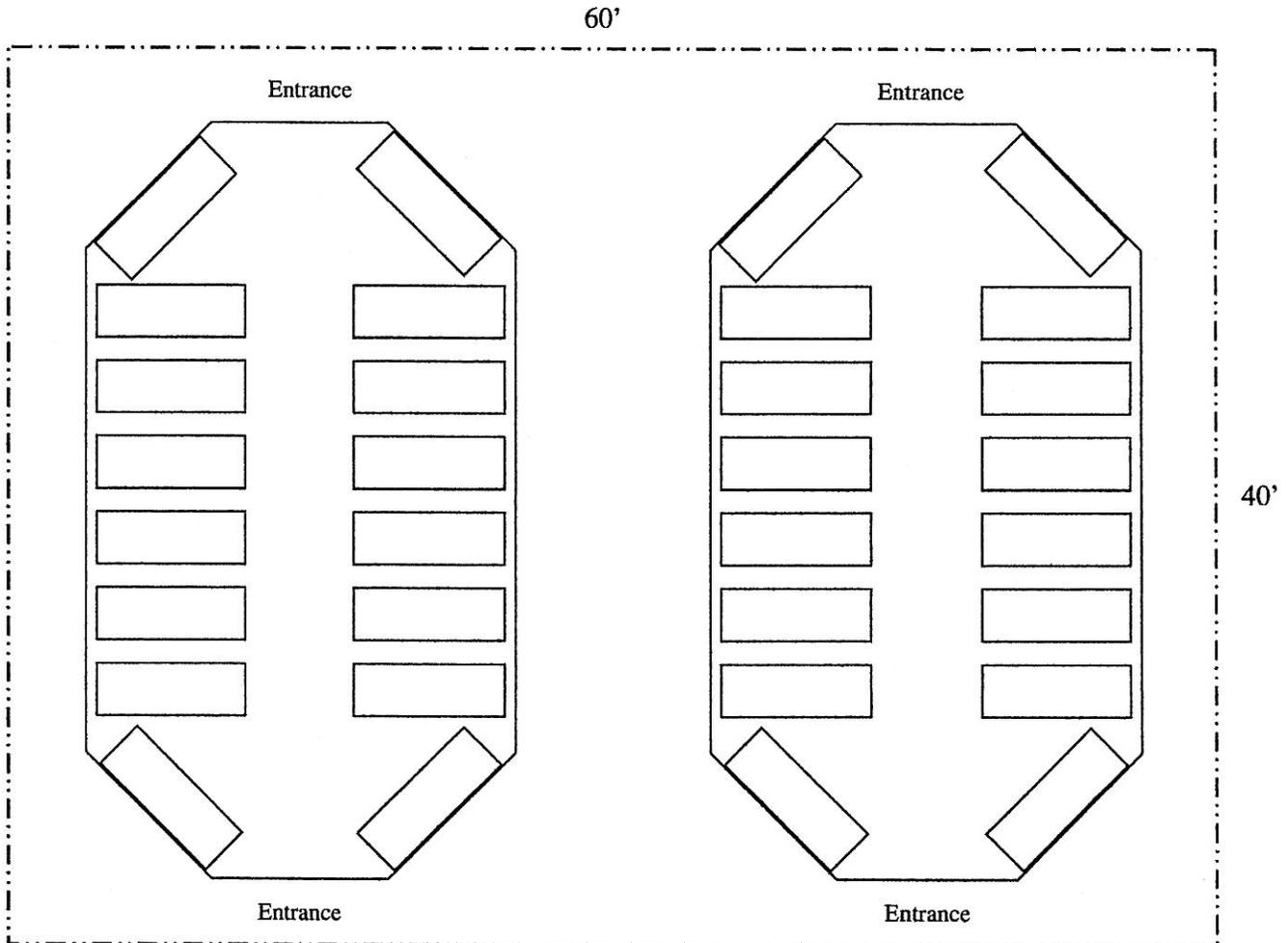
Medical Tent #6  
Quarantine Tents  
Generator Kit - 7000 Watt  
Medical Treatment Cots

Boxes 50315-700, 50315-800, 50315-900  
See Logistics—Use only if needed  
Box 50819  
Box 535

Considerations:

- Install tent floor panel before moving equipment into tent.
- Tent side panels to flare away from tent, do not fold under tent frame.
- All tents to be staked down and guy roped or secured with anchor bolts.
- Generator to be set up outside BoO area.
- Fire extinguisher to be placed 10' from generator station.
- Fuel to be stored at least 25' from generator station.
- All cord runs to be minimized to avoid trip hazards
- Store all tent packing bags and remaining set-up items in shipping boxes and close to protect from weather. Store closed boxes behind tent.

**Sleeping Tents**  
**Area Required: 40' x 60'**

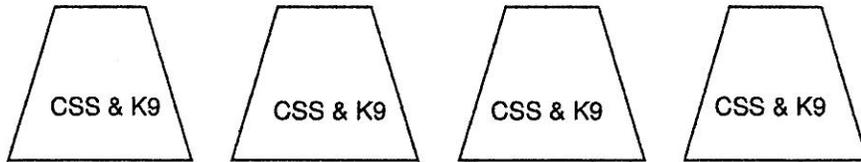


- |                     |   |
|---------------------|---|
| Sleeping Tent 1     | Boxes 50310-500, 50310-600, 50310-700, 50310-800, 50310-900 |
| Sleeping Tent 2     | Boxes 50311-500, 50311-600, 50311-700, 50311-800, 50311-900 |
| Sleeping Bags       | Boxes 50339   |
| Folding Cots        | Boxes 140   |
| Blankets, if needed | Box 50341   |

**Considerations:**

- Tent side panels to flare away from tent, do not fold under tent frame
- All tents to be staked down and guy roped or secured with anchor bolts to pavement
- See Logistics for power supply needs
- Store all tent packing bags and remaining set-up items in shipping boxes and close to protect from weather. Store closed boxes behind tent.

**K9 Sleeping Tents**  
**Area Required: 20' x 60'**

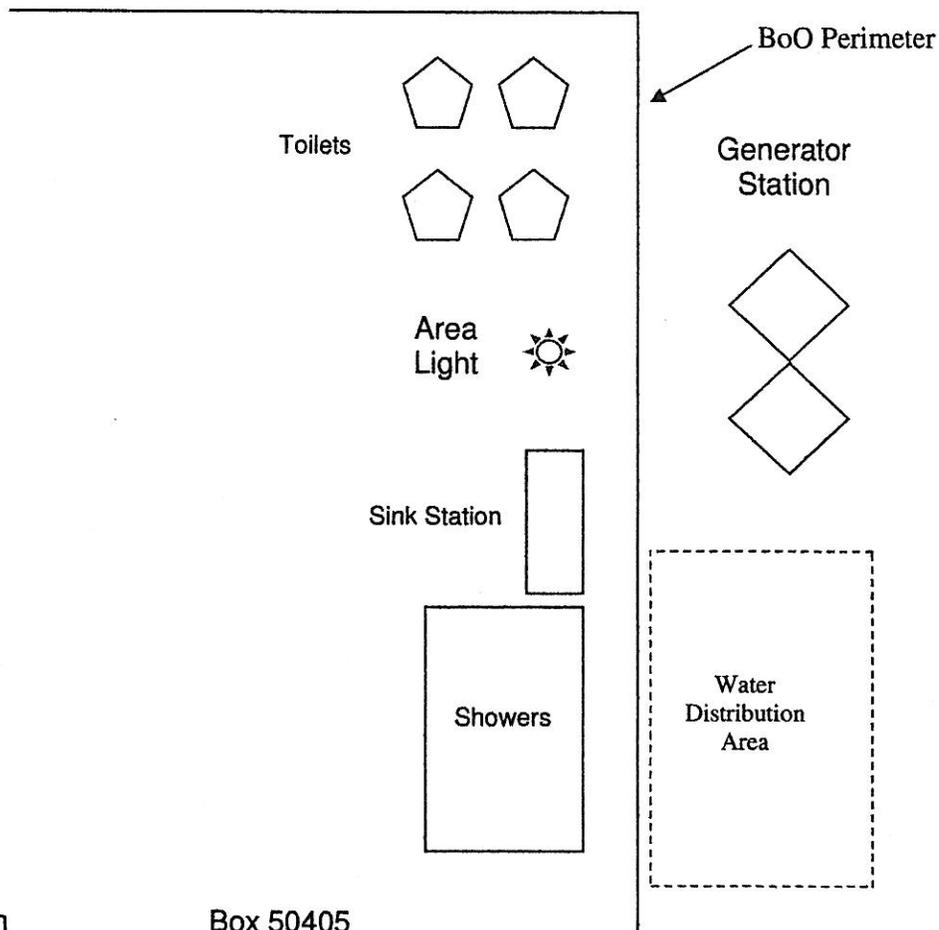


**CSS Tents                  Box 50341 6 Person Tents**

**Considerations:**

- 1 K9/handler team per tent
- 1 Folding cot per tent
- 1 Sleeping bag per handler
- Set-up K9 Kennel inside tent
- All tents to be staked down and guy roped to secure in event of windy weather

Sink/Shower/Toilet Stations  
 Area Required: Tent—40' x 80'

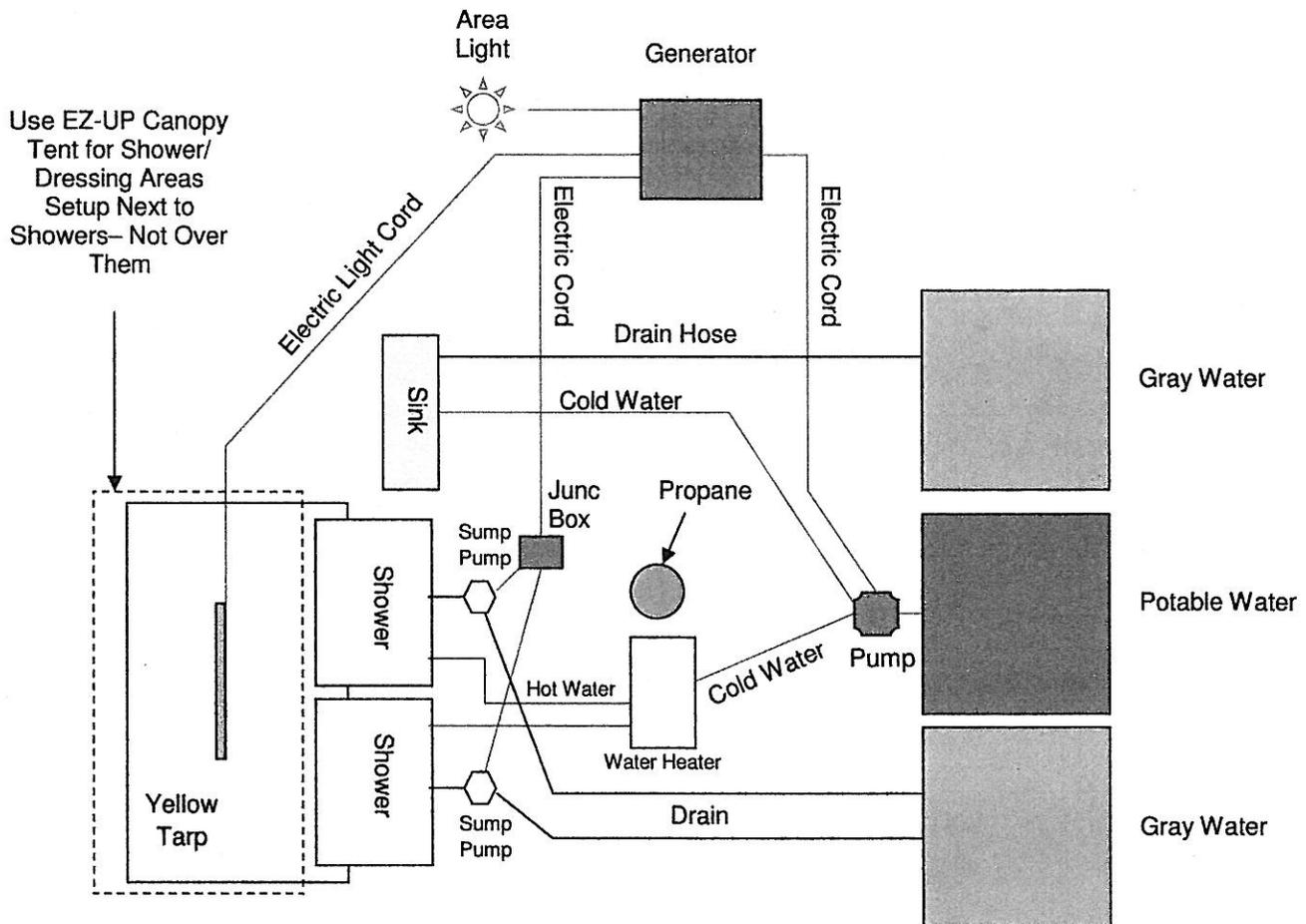


Sink Station	Box 50405
Shower Unit	Boxes 50401, 50402
Water Heater	Box 164
Water Distribution Kit	Box 50411
Gray Water Kit	Box 50412
EZ-Up Canopy Tent	Box 196
Brief Relief Toilet Kit	Box 50416
Generator	Box 50817
Toilet and Bath Supplies	Box 50103, 156

Considerations:

- Lay Down Large Tarp as Floor for Shower Dressing Area
- Set-up Showers on edge of Tarps and next to Canopy Tent
- Place Shower Supplies Inside Canopy Tent
- Use Tent Stakes & Guy Ropes to Secure Canopy Tent-Do Not Put Stakes Through Tarps
- Mark Tent Guy Ropes & Stakes with Banner Tape for Visibility
- Fire Extinguisher Placed 10' From Generator
- Fuel Stored at least 25' from Generator
- See Next Page for Plumbing & Electrical Diagram

## Sink/Shower Stations Plumbing & Electrical Diagram



### Considerations:

- Stake Canopy Legs
- Use Guy Ropes and Guy Stakes to Secure for Windy Conditions
- Mark Guy Ropes and Stakes with Banner Tape for Visibility
- Potable Water May be Able to be Obtained From Hydrant System, if Available
- If Hydrant System Available, Potable Water Bladders & Pumps May Not be Needed
- Drain Hoses May be Placed into Sanitary Sewer System, if Available
- Water Heaters May Need to be Staked to Secure—See Logistics
- Use Fluorescent Light for Canopy Tents—Obtain from Sleeping Tent Light Kit

## Type III Forward Operations Areas

Forward operations for Type III responses includes the use of task force vehicles to provide the following:

1. Forward Task Force Command & Control—Suburban NE-USR1, NE-USR 2, or Motorcoach
2. Forward Logistics & Equipment Staging—Work from Straight Trucks NE-USR5, NE-USR6
3. Medical/Personnel Rehab—Motorcoach, Existing Structure, or use temperature controlled box on NE-USR5 or NE-USR6 straight trucks

Type III  
Base of Operations Demobilization  
Assignment Sheet

Demobilization of facilities used for the Base of Operations should be coordinated by order of lessening priority starting with any Forward Operations Areas.

<u>Priority</u>	<u>Facility</u>	<u>Assigned to:</u>
1.	Forward Operations	Logistics/Ground Support/On Site Personnel
	Assign as Needed:	_____
2.	Sleeping Areas	All Personnel Demob Own Sleeping Area & Tents
	In Charge:	_____
3.	Toilets/Sink>Showers	Logistics/Ground Support
	In Charge:	_____
4.	Medical Tent	MTM/Medical Specialists
	In Charge:	_____
5.	TF Command Tent	Tech Info/Comm Specs/Structural Engineers
	In Charge:	_____

- Safety Officers to Monitor BoO Demobilization for Safe Operations/Procedures
- Appropriate PPE Worn by All Members—Back Supports, Gloves, Helmets, Eye Protection
- Logistics Shall Coordinate Demob of Items Issued to Personnel During Mobilization
- Check in of Equipment Coordinated by Logistics
- Missing/Damaged Equipment Shall be Reported to Logistics
- Logistics Shall Coordinate Final Packaging and Loading of Equipment for Transport
- Only Qualified Personnel Allowed to Operate Forklift or Other Loading Equipment.