Washoe County Regional

Debris Management Plan

Washoe County, Nevada

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Prepared by

Steinmetz Associates

Activation of Debris Management Plan

This plan may be partially or fully activated by any authorized official or agent of any of the regional partners. If the plan is partially activated, the regional partner that activates the plan will act as host jurisdiction and activate their Emergency Operations Center. If the plan is fully activated, the Regional Emergency Operations Center will be activated and debris management operations will be directed from that location.

Hazard assessment and vulnerability analyses suggest that significant quantities of debris will be generated by the following events:

- Earthquake
- Flood
- Winter storm
- Fire

If one of these events occurs, or appears likely to occur in the immediate future, any or all of the regional partners should consider activation of this plan and marshal response and recovery resources.

Levels of Activation

Consistent with the Washoe County Regional Emergency Operations Plan (REOP) - this Debris Management Plan, which is intended to augment, supplement, and support the REOP and Regional Emergency Operations Center (REOC), will adhere to the following levels of activation, whether the plan is fully or partially activated.

Minor Emergency – Level 1
Decentralized Coordination and Direction

A minor to moderate incident wherein local response and recovery resources are adequate and readily available for deployment. The REOC is not activated. Off-duty personnel may be recalled. Police, fire, public health, public works or medical responders use on-scene Incident Command System (ICS). Regional partners monitor the situation and provide mutual aid if requested, consistent with exiting mutual aid agreements. The Washoe County Multi-Agency Coordination Group (MAC) may be notified and mobilized.

Moderate Emergency – Level 2
Centralized Coordination and Decentralized Direction

A moderate to severe emergency in which local response and recovery resources are not adequate and mutual aid may be required on a regional or even statewide basis. Key management level personnel from the principal involved agencies will co-locate in a central location to provide County coordination. The REOC may be partially or fully activated based on the severity of the situation. Off-duty personnel may be recalled. A Local Emergency and a State of Emergency may be proclaimed and the Nevada Division of Emergency Management (DEM) will be notified. The City(s) of Reno and/or Sparks or special district EOC(s) may be activated or a request for a Regional EOC activation for purposes of multi jurisdictional response. The Washoe County Multi-Agency Coordination Group (MAC) should be notified and mobilized.

Major Emergency – Level 3
Centralized Coordination and Direction

A major local or regional disaster that overwhelms regional response and recovery resources. Extensive state and/or federal resources are required. A declaration of emergency should be considered and is usually issued. The overall response and early recovery activities will be managed from the Washoe County REOC. Off-duty personnel will be recalled as required. The Washoe County Multi-Agency Coordination Group (MAC) will be notified and mobilized.

Authorities and References

This Plan is developed, promulgated, and maintained under the following local, State and Federal statutes and regulations:

- Nevada Revised Statutes, § 414.090
- Washoe County Nevada Code, § 65.300-65.355
- City of Reno Nevada Municipal Code, Title 8, Chapter 8.34
- City of Sparks Nevada Municipal Code, Title 1, Chapter 1.30 and Title 2, Chapter 2.20
- Public Law 93-288 as amended by Public Law 100-107, the Stafford Disaster Relief and Emergency Assistance Act and in this plan as "the Stafford Act."
- Public Law 81-920, Federal Civil Defense Act of 1950, as amended.
- CFR, Title 44, Part 200 et seq.
- Washoe County Nevada Regional Emergency Operations Plan

Background

The following jurisdictions and entities comprise the Washoe County Nevada Regional Partnership for Debris Management:

- Washoe County
- City of Reno
- City of Sparks
- Incline Village
- University of Nevada, Reno (UNR)
- Washoe County School District
- Reno-Sparks Indian Colony
- Nevada Department of Transportation (NDOT)

The natural and built environment, present opportunities for a number of potential natural and technological disasters or emergencies. The Washoe County Office of Emergency Management and Homeland Security is responsible for planning and emergency preparedness, response and recovery, and mitigation activities. The Washoe County Office of Emergency Management and Homeland Security coordinates with the Regional Partnership Emergency Management Agencies in response to disasters, emergencies, severe weather conditions, and other catastrophic events.

The Regional Partners subscribe to the guidance developed by the Washoe County Office of Emergency Management and Homeland Security and the Washoe County Regional Emergency Operations Plan (REOP). The REOP establishes responsibilities for each Regional Partner and sets forth lines of authority and organizational relationships that are essential for the protection of the public. The EOP also establishes the concepts and policies under which all elements of the Washoe County Regional Partnership will operate during disasters and emergencies by providing for the integration of those resources.

The REOP focuses on the preparation, mitigation, response and recovery activities that are likely to be required during a disruption or emergency, without regard to the type or cause of that disruption or emergency.

Purpose

This Plan has been developed to provide the framework for the Regional Partners and other entities to clear and remove debris generated during a public emergency within the Washoe County region. This Plan unifies the efforts of public and private organizations for a comprehensive and effective approach to:

- Provide organizational structure, guidance, and standardized guidelines for the clearance, removal, and disposal of debris caused by a major debris-generating event.
- Establish the most efficient and cost effective methods to resolve disaster debris removal and disposal issues.
- Implement and coordinate private sector debris removal and disposal contracts to maximize cleanup efficiencies.
- Expedite debris removal and disposal efforts that provide visible signs of recovery designed to mitigate the threat to the health, safety, and welfare of residents.
- Coordinate partnering relationships through communications and pre-planning with local, State, and Federal agencies that have debris management responsibilities.

General Approach

The Washoe County region is vulnerable to numerous natural and technological hazards, including severe weather and hazardous materials spills. With regard to debris generating events and debris removal, earthquake, flood, fire and winter storms pose the most significant threats to the region. Although the region can manage many disaster situations with internal resources, there are potential debris-generating events that may overwhelm regional assets and capabilities.

This Plan establishes the framework within which the region will respond and coordinate the removal and disposal of debris generated by potential disasters. This Plan will also address the potential role that State and Federal agencies and other groups will take in a debris operation.

This Plan defines the roles and responsibilities of local emergency managers with respect to debris planning prior to an event and actions following a major debris-generating event.

Planning Basis and Assumptions

Disasters such as earthquakes, floods, fires and winter storms produce a variety of debris that includes, but is not limited to, trees and other vegetative organic matter, construction materials, appliances, personal property, mud, sediment and snow. Man-made disasters such as terrorist attacks may result in a large number of casualties and heavy damage to buildings and basic infrastructure. Crime scene constraints may hinder normal debris operations, and contaminated debris may require special handling. These factors will necessitate close coordination with local and Federal law enforcement, health, and environmental officials.

This Plan takes an all-hazards approach to identifying and responding to the following hazards that may pose a threat to the Washoe County region:

- Natural Hazards – earthquake, flood, wildland fire, urban conflagration and winter storms.
- Human-caused Events and Hazards – urban conflagration, civil disorder, or transportation accidents.
- Terrorist Incidents – bombings, sabotage, hijacking, armed insurrection, or Weapons of Mass Destruction (WMD) incidents.

The quantity and type of debris generated, its location, and the size of the area over which it is dispersed will have a direct impact on the type of removal and disposal methods utilized, the associated costs, and the speed with which the problem can be addressed. The quantity and type of debris generated from any particular disaster will be a function of the location and kind of event experienced, as well as its magnitude, duration, and intensity.

For planning purposes and for pre-positioning response assets, this plan assumes that the magnitude of the event exceeds the capacities of the Washoe County region.

The fact that this Plan is based on an event that exceeds the Washoe County region's response and recovery capacities does not diminish the value of the Plan for use in response to other types and categories of events. This Plan establishes a general framework that can, with minor modifications, be used in any debris-generating event.

This Plan addresses the clearing, removal, and disposal of debris generated by the above hazards based on the following assumptions:

- A major natural or man-made disaster that requires the removal of debris from public or private lands and waters could occur at any time.
- The amount of debris resulting from a major natural disaster will exceed the Washoe County region's in-house removal and disposal capabilities.
- Washoe County Regional partners will contract for additional resources to assist in the debris removal, reduction, and disposal processes.
- Federal assistance will be requested to supplement the Washoe County Regional partner's debris management capabilities in coordination with the Debris Manager of each regional partner.

Federal Assistance

Each regional partner's Debris Manager will request Federal assistance when the debris-generating event exceeds that jurisdiction's in-house debris clearing,

removal, and disposal capabilities. The request will be submitted to the Washoe County Emergency Manager, who will submit the request to the Nevada Division of Emergency Management (DEM) Mitigation and Recovery Division. DEM will coordinate the request for a mission assignment with the Federal Emergency Management Agency (FEMA). Typically, when a mission is assigned by FEMA, the U.S. Army Corps of Engineers (USACE) will provide a liaison to the EOC when activated. This liaison will serve as an advisor to the EOC staff providing advice as needed and ensuring that the USACE is prepared to respond when tasked.

The USACE will alert a Debris Planning and Response Team (PRT) and the Advance Contracting Initiative (ACI) Contractor under contract for that area and have them ready to respond when a mission assignment is received. Once the USACE receives a mission assignment from FEMA, the management groups for both the PRT and ACI Contractor will be available to meet with the Debris Manager and State representatives to conduct contingency planning as required.

USACE will coordinate with the Debris Management Center (DMC) staff on the use of any pre-identified debris management sites and disposal sites, and identify/acquire other sites as required to accomplish the mission assignment.

Debris Management Organization and Staff Responsibilities

One of the primary functions of this Plan is to clearly delineate a basic organization and assign specific responsibilities. During the conduct of debris operations, many issues will arise that are not specifically mentioned in this Plan. However, responsibilities are sufficiently defined so that unexpected issues can be assigned and resolved efficiently.

Each regional partner will designate and structure a Debris Management team that includes the following positions:

Debris Project Manager

The Debris Project Manager has overall responsibility for the operations, planning, logistics, and cost of the debris management operations. The Debris Project Manager assigns tasks to team members and tracks the completion of tasks to ensure quick implementation of the debris removal operations.

Administration

The Administration section typically includes the finance, personnel, and public information functions of a governing body. It is important for this section to establish a records management system in order to collect and keep all the

documentation that may be required for the Public Assistance grants. Documentation may include, but is not limited to:

- Personnel policies.
- Labor and equipment timesheets and summaries.
- Safety procedures.
- Contract procurement procedures.
- Contracts.
- Billing and invoices, including debris hauler load tickets.
- Environmental permits.
- Right of entry and hold harmless agreements for private property debris removal and demolition, when applicable.
- Public information announcements.
- Debris salvage value information.

The finance section is usually responsible for developing an emergency response and recovery budget, tracking expenses, and ensuring funds are available for personnel, equipment, supplies, and contract service costs.

The Administration section should include a public information officer to distribute information and educate citizens about the debris operations. Planning components of the public information strategy should include the use of various types of media (print, radio, internet, etc.) and the pre-scripted information that will be distributed concerning topics such as:

- Debris pick-up schedules.
- Disposal methods and ongoing actions to comply with Federal, State, and local environmental regulations.
- Disposal procedures for self-help and independent contractors.
- Restrictions and penalties for creating illegal dumps.
- Curbside debris segregation instructions.
- Public drop-off locations for all debris types.
- Process for answering the public's questions concerning debris removal.

Contracting and Procurement

The primary role of the Contracting and Procurement section is to have debris contracts in draft form ready for advertisement or have pre-qualified contractors in place prior to the event. This portion of the plan needs to be updated periodically because procurement procedures and contracts may expire and change over time. Contracting and Procurement planning includes:

- Develop contract requirements.
- Establish contractor qualifications.

- Distribute instructions to bidders.
- Advertise bids.
- Establish a pre-disaster list of pre-qualified contractors.
- Manage the contract scope of work.
- Establish a post-disaster contracting procedure if necessary.

Legal

The Legal staff leads the review process for all legal matters in the debris management planning process. In addition to advising the debris management planning staff, the following tasks should also be performed by the legal section:

- Review all contracts.
- Review and/or establish a land acquisition process for temporary debris management sites.
- Review all insurance policies.
- Ensure environmental and historic preservation compliance before, during, and after operations.
- Ensure that site restoration and closure requirements are fulfilled.
- Review and/or establish a building condemnation processes.
- Review and/or establish a legal process for private property demolition and debris removal.
- Review right-of-entry and hold harmless agreements.

Operations

The Operations staff is responsible for the supervision of government and contract resources and overall project implementation. This section is responsible for implementing the entire debris removal operation. Planning tasks include:

- Position equipment and resources for the response and recovery debris removal operations.
- Develop staff schedules and strategies.
- Provide communication, facilities, services, equipment, and materials to support the response and recovery activities.
- Monitor and direct force account and contract labor.
- Distribute response and recovery resources.
- Operate and manage the collection, debris management site, and disposal strategies.
- Create a demolition strategy for structures, if necessary.
- Report progress for distribution to the debris management planning staff.

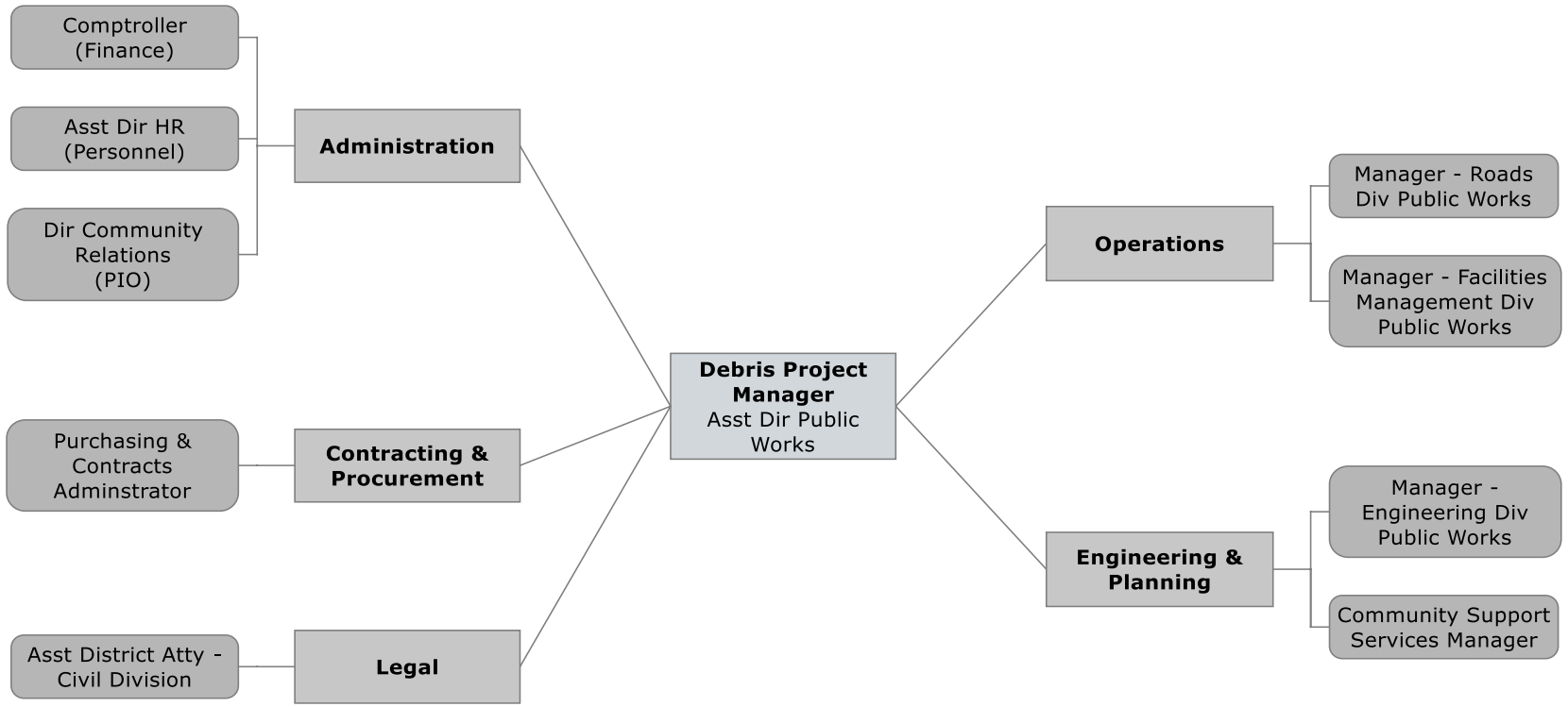
Engineering/Planning

The Engineering staff supports all other debris management sections in a technical role. The Engineering department provides debris quantity assumptions, economic analysis, and feasible solutions for issues and problems associated with debris management operations. The following are tasks that may be completed by the Engineering staff:

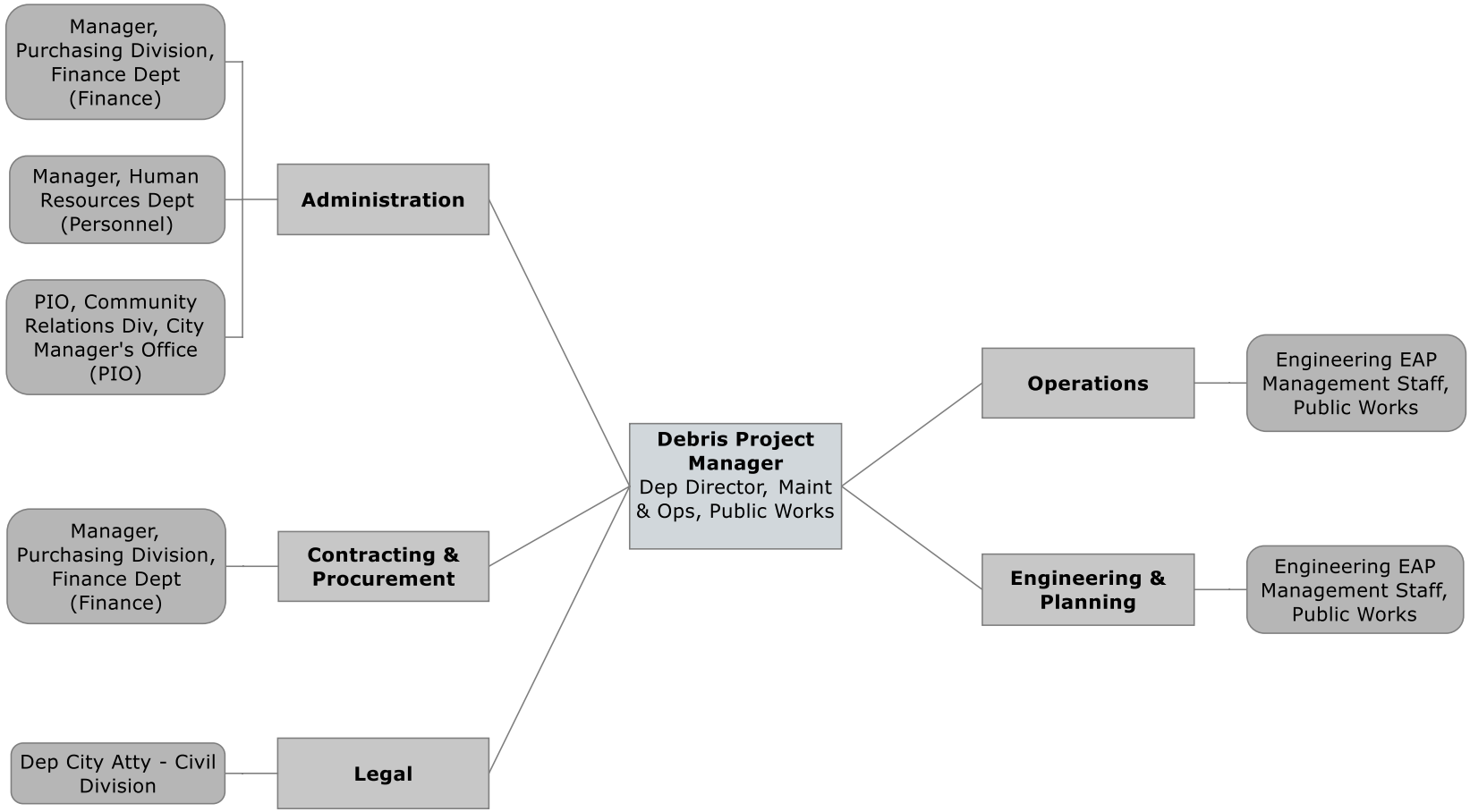
- Forecast debris volume based on assumed disaster type.
- Develop an estimating strategy for post-disaster debris quantities.
- Strategize and map debris haul routes.
- Select debris management sites and design the site layout.
- Determine reduction and recycling means and methods.
- Identify and coordinate environmental issues.
- Assess available landfill space and determine if additional space is needed.
- Develop the debris collection strategy.
- Write contract scopes of work, conditions, and specifications.
- Coordinate with other local and State jurisdictions for road clearance and operations.
- Establish a process for building damage assessment and condemnation (including public and private properties).
- Issue permits

Each regional partner's Debris Management Team organization chart is depicted on the following pages.

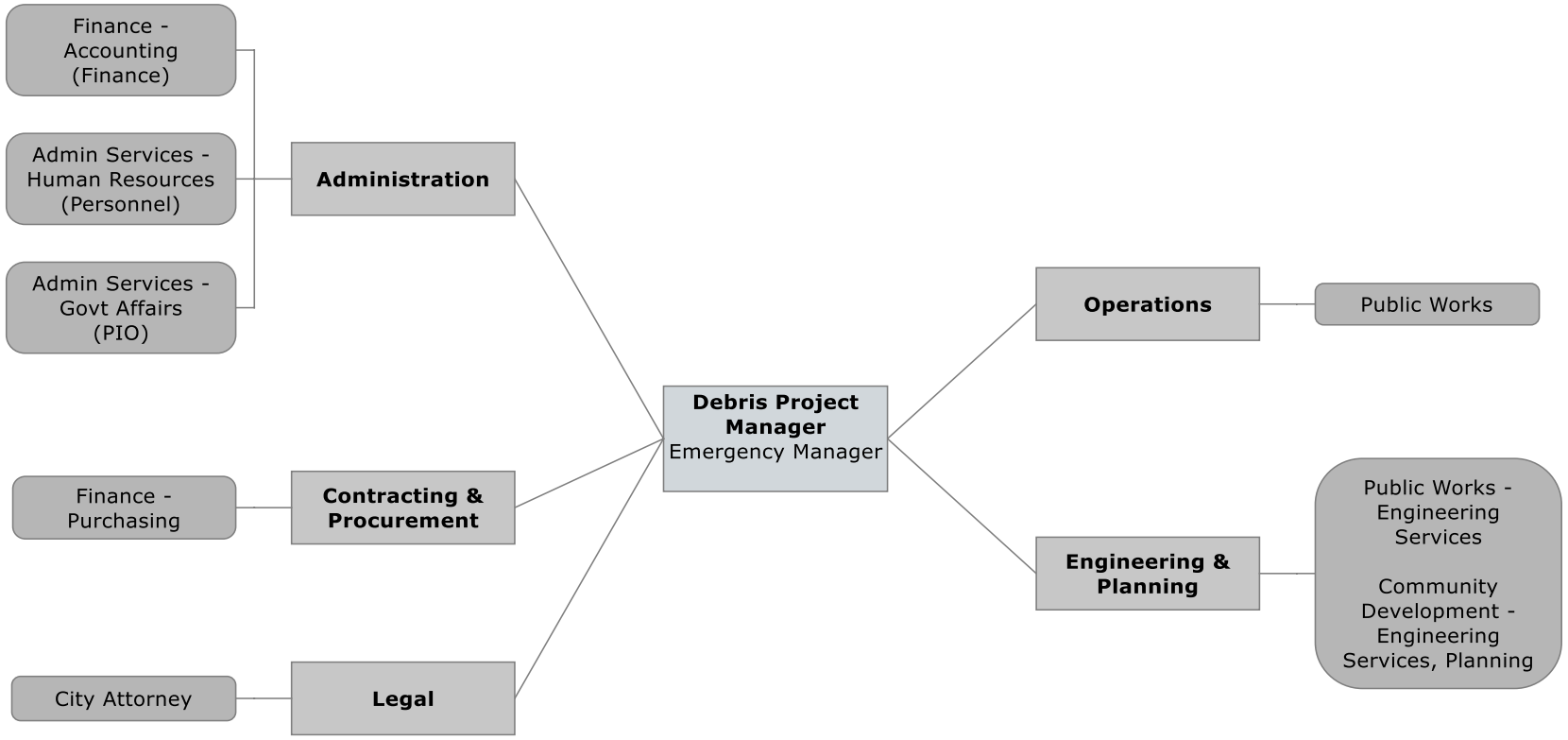
Washoe County Debris Management Team



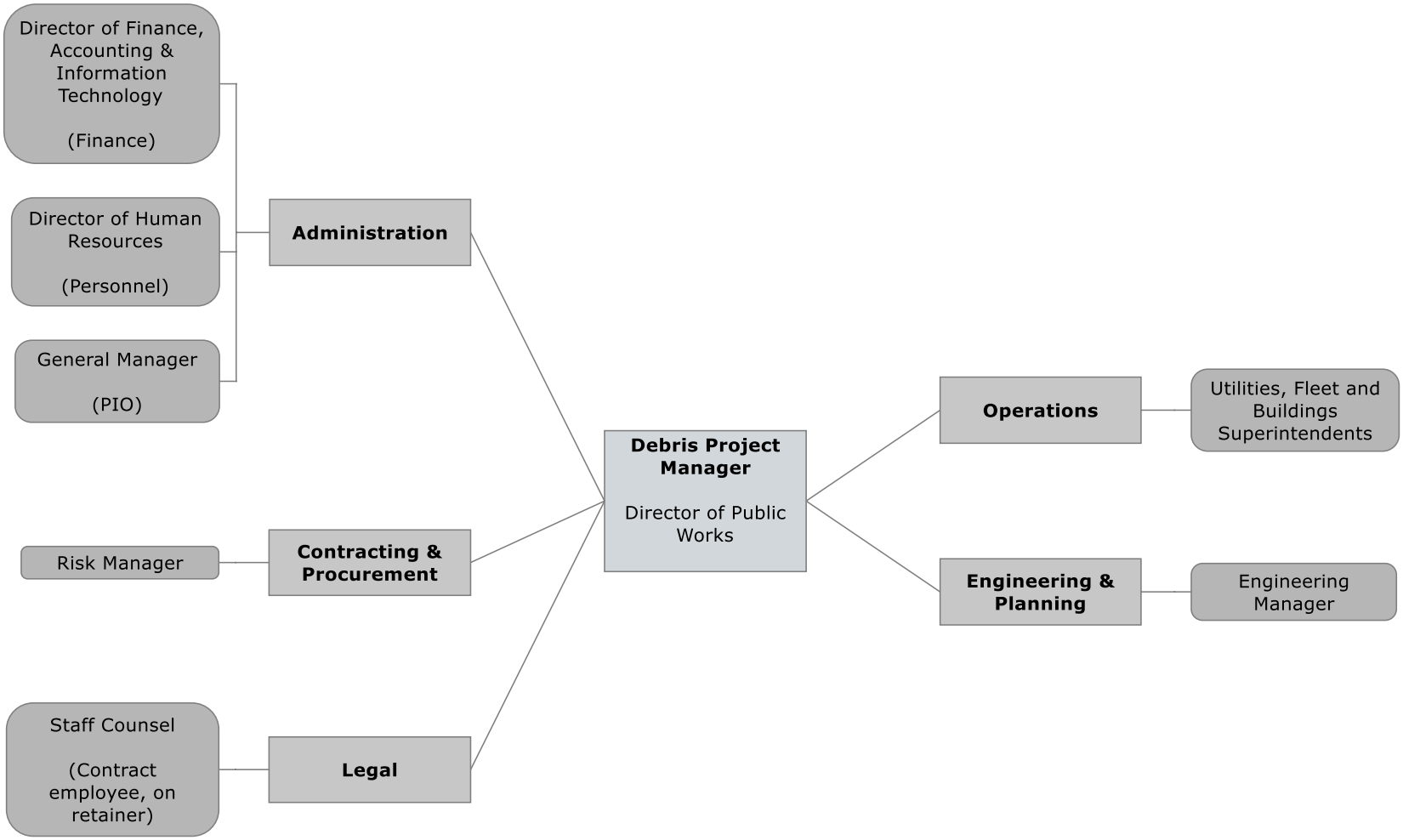
City of Reno Debris Management Team



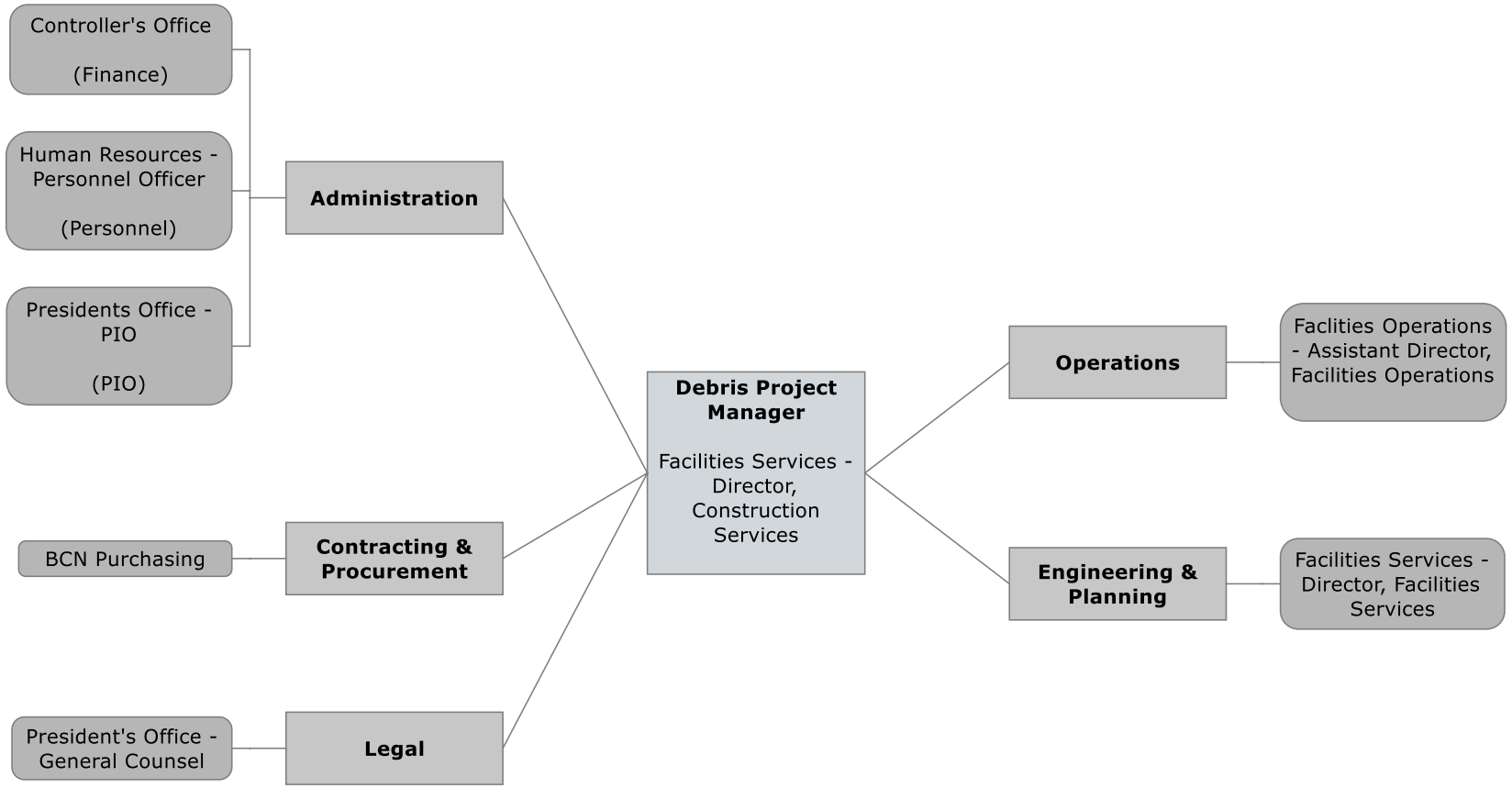
City of Sparks Debris Management Team



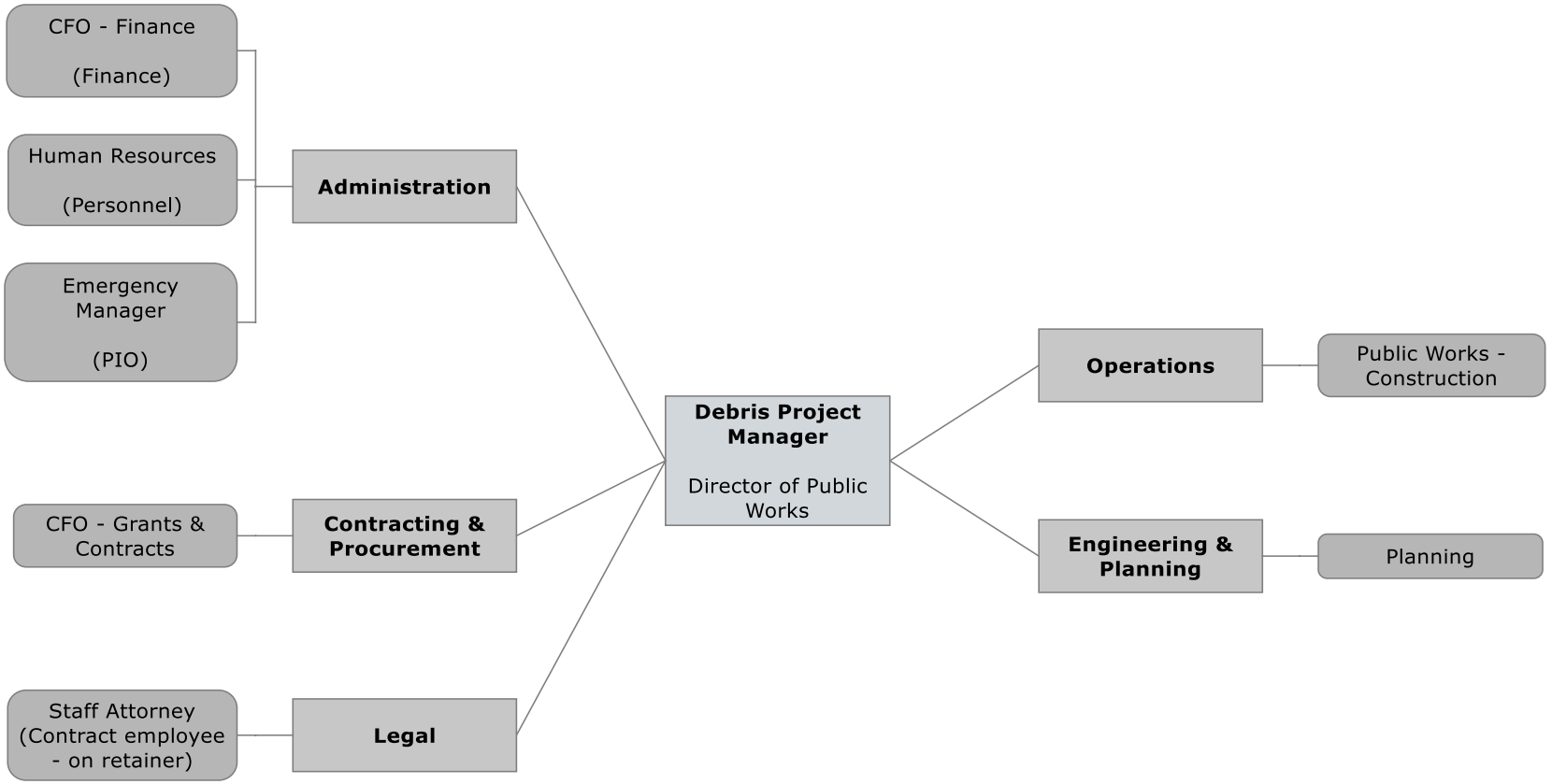
Incline Village Debris Management Team



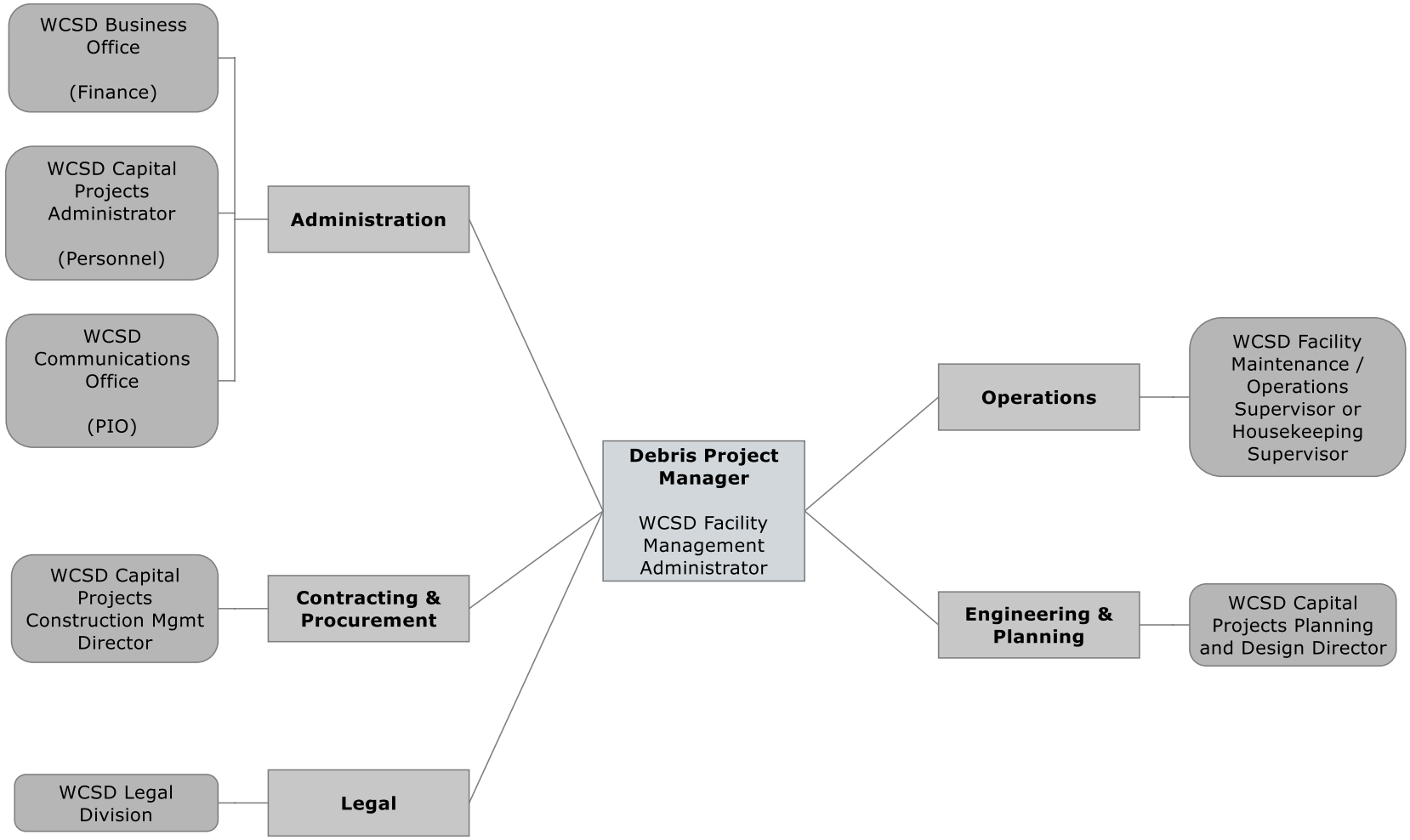
University of Nevada, Reno Debris Management Team



Reno – Sparks Indian Colony Debris Management Team



Washoe County School District (WCSD) Debris Management Team



Nevada Department of Transportation, District 2 Debris Management Team

This section is being developed

In addition to a strategically oriented Debris Management Team, Washoe County, City of Reno, City of Sparks, the University of Nevada Reno, and Nevada Department of Transportation District 2 will mobilize and maintain a field force organization as follows. Washoe County will mobilize, staff, and maintain Debris Management Teams for Incline Village, Washoe County School District, and the Reno-Sparks Indian Colony.

Debris Management Center (DMC)

Each regional partner will mobilize, establish and maintain a DMC as soon as practicable following the advent of a major debris generating event, but in no case later than the initiation of debris collection, storage and removal operations. The DMC is organized to provide a central location for the coordination and control of all debris management requirements. Depending on the level of activation the DMC will be located at each regional partner's EOC or at the REOC.

The DMC organizational diagram shown in Figure 1 identifies the DMC staff positions required to coordinate the actions necessary to remove and dispose of debris using both local government and Contractor assets.

Specific DMC staff actions will include the following:

- Making recommendations for force account and contractor work assignments and priorities based on designated Debris Control Zones. Appendix B contains a map showing the boundaries of the various Debris Control Zones.
- Reporting on debris removal and disposal progress, and preparing status briefings.
- Providing input to the PIO on debris removal and disposal activities.
- Coordinating with State DEM on debris issues affecting adjacent counties.
- Coordinating debris removal and disposal operations with solid waste managers and environmental regulators.
- Coordinating with Federal agencies.

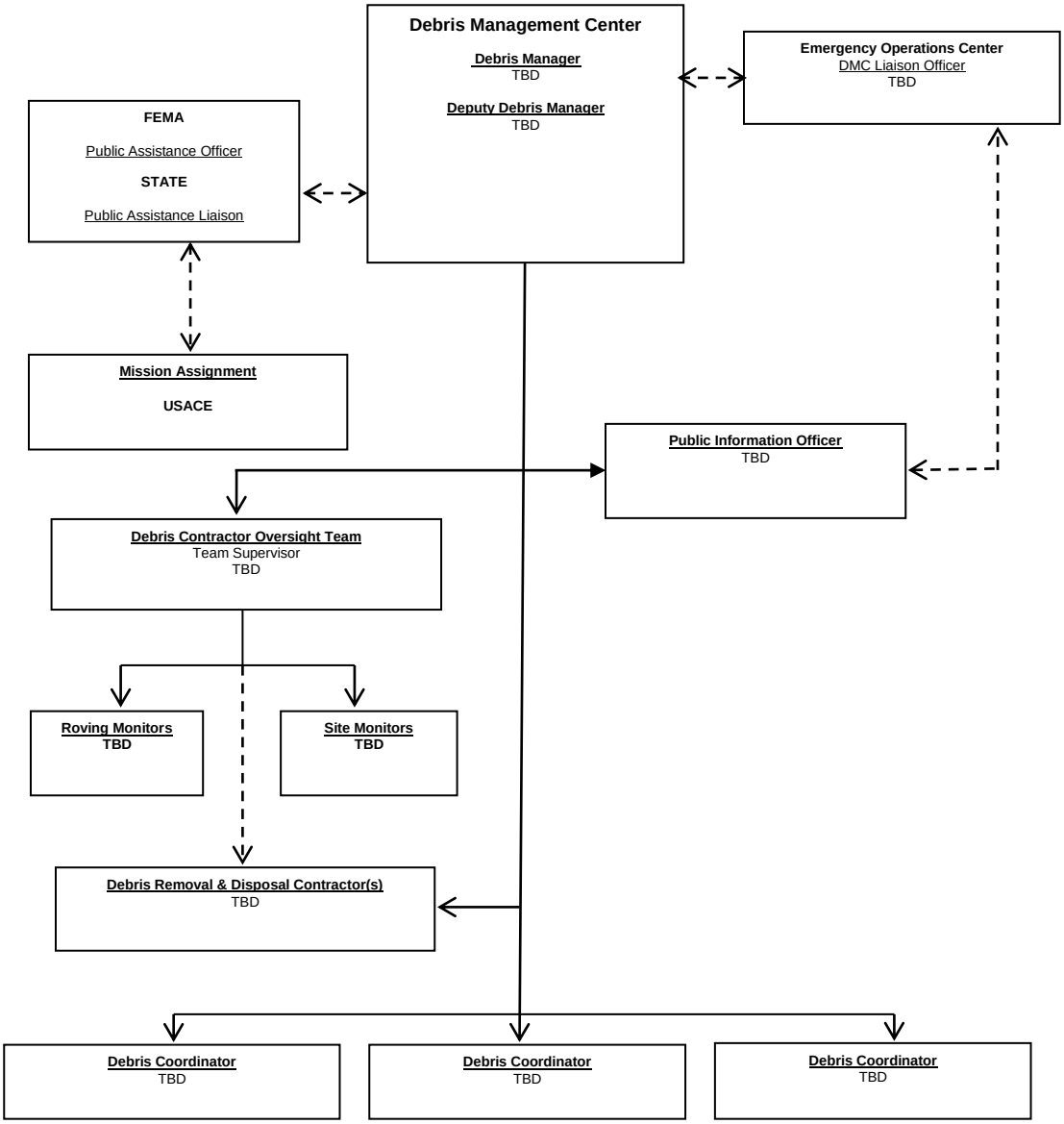
Public Information Officer

The PIO will serve as the DMC liaison to other regional partners, state and federal PIOs. The PIO will develop a proactive information management plan. Emphasis will be placed on actions that the public can perform to expedite the cleanup process. Flyers, newspapers, radio, and TV public service announcements will be used to encourage public cooperation for such activities as:

- Separating burnable and non-burnable debris;

- Segregating Household Hazardous Waste (HHW);
- Placing disaster debris at the curbside;
- Keeping debris piles away from fire hydrants and valves;
- Reporting locations of illegal dump sites or incidents of illegal dumping;
- Segregating recyclable materials; and
- Disseminate pickup schedules through the local news media.

Figure 1 - Debris Management Center Organization Chart



Debris Management Response and Recovery Operations

The Debris Manager will be the single point of contact to coordinate and control all personnel and equipment responding to a major debris-generating event. This Plan provides guidance for the efficient and effective control and coordination of initial debris assessments through debris clearance, removal, and disposal operations.

Damage Assessment Teams

Each regional partner's designated Debris Manager is responsible for coordinating impact assessment for all that jurisdiction's public structures, equipment, and debris clearance immediately following a large-scale disaster. Impact assessments are performed by Damage Assessment Teams and used to prioritize impacted areas and resource needs. The teams will be established and mobilized based on personnel resources available as well as the severity of the event.

The DMC Debris Coordinator will have the primary mission of coordinating the efforts of response personnel to identify debris impacts on critical roads and make initial estimates of debris quantities. Based on this prioritization, the Debris Manager will issue urgent assignments to clear debris from at least one lane on all evacuation routes and identified primary and secondary roads to expedite the movement of emergency service vehicles such as fire, police, and medical responders. A listing of Critical Facilities is provided in Appendix C. A Priority Primary Road Clearance List is found in Appendix D.

Damage Assessment Teams will conduct initial zone-by-zone windshield surveys to identify the type of debris and to estimate amounts of debris on the roadways and on private and public property. The results of the windshield surveys will be provided to the Debris Manager and to the DMC Liaison Officer located at the EOC.

The Debris Manager will establish initial priority for debris clearance based upon the following ranking as provided by the Damage Assessment Teams:

1. Extrication of people.
2. Major flood drainage ways.
3. Egress for fire, police, and Emergency Operations Center.
4. Ingress to hospitals, jail, and special care unit.
5. Major traffic routes.
6. Supply distribution points and mutual aid assembly areas.
7. Government facilities.
8. Public Safety communications towers.

9. American Red Cross shelters.
10. Secondary roads to neighborhood collection points.
11. Access for utility restoration.
12. Neighborhood streets.
13. Private property adversely affecting public welfare.

During the debris clearance and removal process, the DMC staff will be responsible for coordinating with the Debris Coordinator and public utility providers to ensure that power lines do not pose a hazard to emergency work crews.

Debris management operations are divided into two phases.

Phase I – Initial Response

Phase I will be implemented immediately after a debris-generating event and will emphasize opening emergency evacuation routes and roadways to critical facilities and affected neighborhoods. The major emphasis during this phase is to simply push debris from roadways to the side of the road or to the curb. Little or no effort is made to remove debris from the right-of-way during this phase.

Phase I activities include:

- Implementation of the Debris Management Plan.
- Determination of incident-specific debris management responsibilities.
- Establishment of priorities based on evacuation needs and prediction models.
- Identification and procurement of debris management sites.
- Activation of pre-positioned contracts, if necessary to support Phase I clearance operations.
- Implementation of Public Information Plan.
- Coordination and tracking of resources.
- Formal documentation of costs.

Phase II - Recovery

Phase II will be implemented within two to five days following a major debris-generating event, and will encompass the processes of debris removal and disposal. This delay is normal and allows time for affected citizens to return to their homes and begin the cleanup process. Debris must be brought to the rights-of-way or curb to be eligible for removal at public expense.

All debris removal and disposal operations will be coordinated by the Debris Manager located at the DMC. Phase II may be quite lengthy as disaster recovery continues until pre-disaster conditions are restored.

Phase II activities include:

- Activation of pre-positioned contracts.
- Notification to citizens of debris removal procedures.
- Activation of debris management sites.
- Removal of debris from rights-of-way and critical public facilities.
- Movement of debris from debris management sites to permanent landfills.
- Final documentation of costs for reimbursement, as applicable.

Phase II Debris Removal and Disposal Overview

The general concept of debris removal operations includes multiple, scheduled passes by each critical site, location, or right-of-way. This manner of scheduling debris removal allows residents to return to their properties and bring debris to the edge of the right-of-way as property restoration proceeds.

Each regional partner jurisdiction has designated one to several Debris Control Zones to control and expedite debris-removal and disposal operations (please refer to Appendix B for zone delineation).

Phase II Debris Removal and Disposal Operations

The Debris Manager and staff will coordinate debris removal and disposal operations for all portions of their respective jurisdictions. Phase II operations involve the removal and disposal of curbside debris by jurisdiction force account and/or Contractor crews. All jurisdiction hired debris removal and disposal Contractor operations will be overseen by the Debris Contractor Oversight Team (DCOT).

Under this Plan, mixed debris will be collected and hauled from assigned Debris Control Zones to designated debris management sites or to designated landfill locations. Clean woody debris will be hauled to the nearest designated vegetative debris management site for eventual burning or grinding. A listing of debris management sites can be found in Appendix E.

The primary tracking mechanism for all debris loaded, hauled, and disposed of under this plan will be the Load Ticket An example of a Load Ticket is shown in Figure 2. Load tickets will be initiated at pickup sites and closed-out upon drop-off of each load at a debris management site or permanent landfill, and are to be used to document both jurisdiction force account and Contracted haulers.

Load tickets will serve as supporting documentation for Contractor payment as well as for requests for reimbursement from federal grant programs (FEMA) and mutual aid recipients.

Figure 2 - Sample Load Ticket

Name of Jurisdiction **LOAD TICKET**		**Ticket No.** 000001
Section 1		
Prime Contractor:		**Date:**
Subcontractor (Hauler):		**Departure Time:**
Driver:		**Truck Plate No.:**
Measured Bed Capacity (cu. yds.):		
Debris Pickup Site Location: **(must be a street address)**		
Debris Type:	☐ **Vegetation** ☐ **Mixed**	☐ **Construction & Demolition** ☐ **Other:** _____
Loading Site Monitor:	**Print Name:** _____ **Signature:**	
Remarks:		
Section 2		
Debris Disposal Site Location:		
Estimate Debris Quantity (cu. yds.):		**Arrival Time:**
Disposal Site Monitor:	**Print Name:** _____ **Signature:**	
Remarks:		
Copies: White – Load Site Monitor Green – Disposal Site Monitor Canary, Pink, Gold – Onsite Contractor's Representative or Driver		

For tracking of all debris moved in response to a given event, the following is the disposition of each ticket part:

Part 1 (White) Load Site Monitor (Turned in daily to the DMC)
Part 2 (Green) Disposal Site Monitor (Turned in daily to the DMC)
Part 3 (Canary) Driver or Contractor's on-site representative (Contractor Copy)
Part 4 (Pink) Driver or Contractor's on-site representative (Contactor Copy)
Part 5 (Gold) Driver or Contractor's on-site representative (Driver/Subcontractor Copy)

Debris Contractor Oversight Team (DCOT)

The DCOT is responsible for the coordination, oversight, and monitoring of all debris removal and disposal operations performed by private Contractors (see Appendix F, Debris Contract Oversight Team Standard Operating Guidelines).

Each regional partner will designate a DCOT supervisor and team members. The DCOT team may also be supplemented with contracted inspectors and other personnel as needed.

The DCOT team supervisor will be located at the DMC and will provide overall three roving monitors, load site monitors, and disposal site monitors described below. Specific responsibilities include the following:

- Planning and conducting debris management site inspections, quality control, and other Contractor oversight functions.
- Receiving and reviewing all debris load tickets that have been verified by a Disposal Site Monitor (see description below).
- Making recommendations to the Debris Manager regarding distribution of force account and Contractor work assignments and priorities.
- Reporting on progress and preparation of status briefings.
- Providing input to the DMC PIO on debris cleanup activities and pickup schedules.

The DCOT Supervisor will oversee the activities of the three types of monitors. The functions and responsibilities of the field monitors are described below (see Appendix G, Debris Removal and Disposal Monitoring Plan).

Roving Monitors

Two-person teams of Roving Monitors will be assigned to specific Debris Control Zones or to a specific Contractor depending upon the distribution of work assignments. The Roving Monitors' mission is to act as the "eyes and ears" for the Debris Manager and DCOT Supervisor to ensure that all contract requirements, including safety, are properly implemented and enforced.

Staff to fulfill the Roving Monitor positions will be provided by each regional partner jurisdiction utilizing force account labor to the extent possible. Roving Monitors will have the authority to monitor Contractor operations and to report any problems back to the DCOT Supervisor. Roving Monitors may request contract compliance, but do not have the authority to otherwise direct Contractor operations or to modify the contract scope of work.

Roving Monitors will monitor debris operations on a full-time basis and make unannounced visits to all loading and disposal sites within their assigned debris management zone(s). Additional responsibilities include:

- Assist in the measuring of all Contractor trucks and trailer with the Contractors representative. Take photographs of all trucks and trailers.
- Obtain and become familiar with all debris removal and disposal contracts for which they are providing oversight.
- Observe all phases of debris management operation, to include loading sites, debris management sites, and final landfill sites.
- Prepare a daily written report of all Contractor activities observed to include photographs.
- Periodically monitor each debris management site to ensure that operations are being followed as specified in the applicable Debris Removal and Disposal Contract with respect to local and Federal regulations and the Debris Removal and Disposal Monitoring Plan (Appendix G).

Roving Monitors will also submit daily written reports to the DCOT supervisor detailing their observations with respect to the following:

- Is the Contractor using the site properly with respect to layout and environmental considerations?
- Has the Contractor established lined temporary storage areas for ash, household hazardous wastes, and other materials that can contaminate soil and groundwater?
- Has the Contractor established environmental controls in equipment staging areas, fueling, and equipment repair areas to prevent and mitigate spills of petroleum products and hydraulic fluids?
- Are plastic liners in place under stationary equipment such as generators and mobile lighting plants?
- Has the Contractor established appropriate rodent control measures?
- Are burn sites constructed and operating in accordance with the plans and requirements in Appendix H?
- Has the Contractor establish procedures to mitigate smoke, dust, noise, and traffic flow?

Roving Monitors' reports will also include written observations at loading sites, disposal sites, and the locations of any illegal dumping sites. If the monitor sees a problem they are to notify the DMC immediately and take photographs of the site.

Load Site Monitors

Load Site Monitors will be stationed at designated Contractor debris loading sites. The Load Site Monitors' primary function is to verify that debris being picked up is eligible under the terms of the contract.

Each regional partner jurisdiction will staff Load Site Monitor positions using their force account labor to the extent possible. Load Site Monitors will be assigned to each Contractor's debris loading site within designated Debris Control Zones, and will initiate and sign load tickets as verification that the debris being picked up is eligible.

Disposal Site Monitors

Disposal Site Monitors will be located at both debris management sites and landfill sites as identified by the DMC during recovery operations. The Disposal Site Monitors' primary function is to ensure that accurate load quantities are being properly recorded on pre-printed load tickets (see Figure 2).

At each debris management site and landfill disposal site, the Contractor will be required to construct and maintain a monitoring station tower for use by the Disposal Site Monitor. The Contractor will construct the monitoring station towers of pressure treated wood with a floor elevation that affords the Disposal Site Monitor a complete view of the load bed of each piece of equipment being utilized to haul debris. The Contractor will also provide each site with chairs, table, and portable sanitary facilities.

The Disposal Site Monitor will estimate the quantity (in cubic yards) of debris in each truck/trailer entering the Contractor's selected temporary debris management site or landfill disposal site and will record the estimated quantity on pre-numbered debris load tickets. The Contractor will only be paid based on the number of cubic yards of material deposited at the disposal site as recorded on debris load tickets. This is to be done on all types of debris removal contracts and force account vehicles.

Each regional partner jurisdiction will provide Disposal Site Monitors using their force account labor to the extent possible. The Disposal Site Monitors will be stationed at all debris management sites and landfill disposal sites for the purpose of verifying the quantity of material being hauled by the Contractor. The Disposal Site Monitor will be responsible for closing out and signing each load ticket and returning a copy to the DCOT Supervisor at the end of each day.

Franchise Garbage Contractors

Franchise garbage Contractors will continue to pickup refuse in accordance with current procedures, routes, and removal schedules. They will not haul disaster debris unless expressly authorized by the Debris Manager.

Household Hazardous Waste and White Goods

The Debris Manager will identify one or more Household Hazardous Waste (HHW) drop-off locations within each of the Debris Control Zones. Contractors will be encouraged to separate HHW at the curb and not haul it to a Debris Management Site. Residents will be encouraged to separate and transport HHW to pre-identified drop-off points.

White goods are defined as discarded household appliances including, refrigerators, freezers, air conditioners, heat pumps, ovens, rages, washing machines, clothes dryers, water heaters, etc. Refrigerants and other machine fluids are regulated and will only be reclaimed by certified technicians and disposed of at a permitted facility. To avoid the releases of refrigerants or oils, the collection of white goods will be accomplished carefully by manually placing the appliance on trucks or by using lifting equipment that will not damage the elements that contain refrigerants or regulated oils.

Utility Company Property

Utility provider crews will remove and dispose of all utility related debris such as, power transformers, utility poles, cable, and other utility company material.

Equipment Assets

A table summarizing the equipment that regional partner jurisdiction currently have in their inventory that could be used to assist with debris removal is included in Appendix I.

Contractor Debris Removal and Disposal Operations

The Washoe County Nevada region recognizes that disasters may generate debris of types and quantities that exceed its capabilities to process and store. Thus, the jurisdictions will implement a pre-positioned contracting process to have Contractors on stand-by to respond within a pre-determined period to assist in requested aspects of the debris operation.

The Debris Manager or his or her authorized representative will contact the firm(s) holding pre-positioned debris removal and disposal contract(s) and advise them of impending conditions. The scope of the pre-positioned contract provides for the removal and lawful disposal of all natural disaster-generated debris, excepting household, industrial, or commercial hazardous waste. Debris removal will be limited to jurisdiction maintained streets, roads, and other public rights-of-way based on the extent of the disaster. Debris removal will be limited to disaster related material placed at or immediately adjacent to the edge of the rights-of-way by residents within designated Debris Control Zones.

Each Contractor, upon receipt of notice to proceed, will mobilize such personnel and equipment as necessary to conduct the debris removal and disposal operations detailed in the Contractor's General Operations Plan (required by the Debris Removal and Disposal Contract). All Contractor operations will be subject to review by the Debris Manager.

The Contractor will make multiple, scheduled passes of each site, location, or area impacted by the disaster according to assigned Debris Control Zones and as directed by the Debris Manager. Schedules will be provided to the DMC PIO for publication and notification by the news media.

The load ticket, coupled with inspections by Roving, Load Site, and Disposal Site Monitors, will be the primary mechanism for monitoring Contractor performance and tracking quantities for pay purposes.

Federal support will be requested if the scope of the response and recovery operations exceed regional government and local Contractor response capabilities. The USACE may be tasked by FEMA through the mission assignment process to provide the necessary support.

If tasked by FEMA, USACE will respond by providing trained and experienced Debris PRTs that are responsible for managing the debris mission from removal to final disposal. These tasks are accomplished utilizing pre-awarded contracts to private industry Contractors experienced in debris removal operations. The USACE also has Debris Subject Matter Experts available to provide advice and support to the Contractor and the DMC staff.

Procurement Procedures

Procurement of all debris related services shall comply with current regional government procurement procedures and State procurement ordinances.

Any emergency procurement shall be pre-approved by the appropriate jurisdiction Procurement Officer.

In addition, procurement procedures shall be consistent with the procurement check list found in Appendix J.

Temporary Debris Management and Landfill Sites

The Washoe County Nevada Region recognizes the economic benefits of debris volume reduction, and will realize this benefit through the use of local debris management sites for processing of clean woody debris. The Washoe County regional partners have identified pre-designated vegetative debris management sites for the sole purpose of temporarily storing and reducing clean woody debris through either burning or grinding. A listing of debris management and landfill sites is located in Appendix E.

Contractors will operate the debris management sites made available by the regional partners. Each Contractor will be responsible for all site setup, site operations, rodent control, closeout, and remediation costs at each of its sites. The Contractor is also responsible for the lawful disposal of all by-products of debris reduction that may be generated.

The Contractor will restore the debris management sites as close to the original condition as is practical so that it does not impair future land uses. All sites are to be restored to the satisfaction of the Debris Manager with the intent of maintaining the utility of each site.

Contractors are also expected to haul and manage construction and demolition (C&D) waste. C&D materials will be hauled to debris management sites for temporary sorting and storage until final disposal arrangements are made.

It is important to note that all material deposited at debris management sites will eventually be taken to a properly permitted landfill for final disposal. Under certain circumstances, the Debris Manager may direct Contractors to bypass C&D debris management sites and approve the hauling of mixed C&D debris directly to a properly permitted landfill for disposal.

While residents will be encouraged to segregate HHW at curbside, small amounts of HHW may be mixed in with material deposited at the debris management sites. Therefore, the Contractor must be prepared to place any HHW in a separate enclosed and lined area for temporary storage, and must report any accumulation of HHW at the debris management sites to the DCOT staff. The DCOT staff will notify the SWM Debris Coordinator, who will coordinate for removal and disposal.

Load Ticket Disposition

The Load Ticket will be a 5-part pre-printed form (see Figure 2).

At initiation of each load, the Load Site Monitor will fill out all items in Section 1 of the Load Ticket and will retain Part 1 (White Copy). The remaining copies will be given to the driver and carried with the load to the disposal site.

Upon arrival at the disposal site, the driver will give all four copies to the Disposal Site Monitor. The Disposal Site Monitor will complete Section 2 of the Load Ticket and retain Part 2 (Green). Parts 3, 4, and 5 will be given either to the Contractor's on-site representative or to the truck driver for subsequent distribution.

All trucks will be measured by the Contractor and DMC staff before the operation begins and periodically rechecked throughout the operation.

The Contractor will be paid based on the number of cubic yards of eligible debris hauled per truckload. Payment for hauling debris will only be approved upon presentation of Part 4 (Pink) of the Load Ticket with the Contractor's invoice.

Load tickets will also be completed and retained for force account vehicles as a primary mechanism for tracking debris quantities deposited at debris management sites.

Temporary Debris Management Site Setup and Closeout Procedures

The Contractor will be responsible for preparing and closing out a temporary debris management site in accordance with the specifications in the Debris Removal and Disposal Contract and guidance contained in Appendix H.

Private Property Debris Disposal

Dangerous structures are the responsibility of the owner to demolish in order to protect the health and safety of adjacent residents. However, experience has shown that unsafe structures will often remain in place due to lack of insurance or absentee landlords. Care must be exercised to ensure that the structures listed for demolition are correctly identified.

The Debris Manager will coordinate with the City, Special District, County, State and FEMA Public Assistance Officers regarding:

- Demolition of private structures.
- Removing debris from private property.
- Local law and/or code enforcement requirement.
- Historic and archaeological sites restrictions.
- Qualified environmental Contractors to remove hazardous materials such as asbestos and lead-based paint.
- Execution of Right-of Entry/Hold Harmless agreements with landowners. A sample Right-of-Entry/Hold Harmless agreement is shown in Appendix H.

Recycling Storm Debris

The intent is to recycle as much of the storm generated debris as feasible.

Vegetative Debris – volume reduced, processed yard trash/vegetative storm debris will be transported to agricultural fields for use as a soil amendment in accordance with policies for use of such materials and/or to cogeneration power plants for use as boiler fuel.

Non-Vegetative, Non Hazardous Debris – These materials commonly referred to as C/D (construction demolition debris) will be directed to permitted C/D recycling facilities, if financially feasible and if volumes do not exceed the handling capacity of the Debris Management System of TDSR sites.

The intent is not to recycle any storm generated debris, as it is not economically feasible.

Permitting

All environmental and land-use variances permits necessary to establish temporary debris management sites shall be obtained. Debris operations will comply with all Federal, State, and local regulations. Several agencies may be involved in issuing permits.

The following is a list of potential permits that may be required in debris operations:

- Waste processing and recycling operations permit
- Temporary land-use variances or permits
- Traffic or entrance permits
- Air quality permits
- Water quality permits
- HHW permits
- Fire department permits

- Refrigerant removal from white goods
- Erosion and sediment control

Environmental Requirements

Following a disaster event, compliance with environmental protection laws and regulations is required. Federal and State Environmental Protection Agencies and local Health Departments should be consulted for applicable regulatory requirements.

All debris related activities shall be coordinate with Federal, State, and local agencies, including but not limited to EPA and the Nevada State Historic Preservation Office to ensure compliance with environmental and historic preservation laws/regulations/policies and determining environmental monitoring and reporting requirements for TDSR's,

The agency shall also maintain records for historical purposes.

See Appendix H "Debris Clearing, Removal, and Disposal Guidelines"
Health and Safety

All debris related activities shall be conducted in compliance with local, state and federal occupational health and safety regulations. A Health and Safety Plan will be developed prior to initiation of debris removal operations, and enforced during the duration of such operations.

The Health and Safety plan enables the agency and their contractors to avoid accidents during debris recovery operations and to protect workers from exposure to hazardous materials. The health and safety strategy establishes minimum safety standards for the agency and contractor personnel to follow.

The agency and contractor will disseminate safety information and how the agency will monitor compliance with the minimum safety standards to all emergency workers. The plan also includes specific corrective actions to be taken if workers do not comply with the minimum safety standards.

Debris operations involve the use of heavy equipment to move and process various types of debris. Many of these actions can pose safety hazards to emergency response and recovery personnel and the public. In addition to those safety hazards, exposure to certain types of debris, such as building materials that contain asbestos and mixed debris that contains hazardous materials, can pose potential health risks to emergency workers.

The health and safety plan provides emergency workers with information on how to identify hazardous conditions and specific guidelines on the appropriate and proper use of personal protective equipment.

Weapons of Mass Destruction/Terrorism Event

It is probable that the handling and disposal of debris generated from a Weapons of Mass Destruction (WMD) or terrorism event will exceed the capabilities of the Washoe County region and will require immediate Federal assistance.

Normally, a WMD or terrorism event will require deployment of all available assets and involve mutual aid assistance from numerous Federal and adjacent State and County departments and agencies. The nature of the waste stream as well as whether the debris is contaminated will dictate the necessary cleanup and disposal actions. Debris handling considerations that are unique to this type of event include:

- Much of the affected area will likely be a crime scene. Therefore, debris may be directed to a controlled debris management site by State and/or Federal law enforcement officials for further analysis.
- The debris may be contaminated by chemical, biological, or radiological contaminants. If so, the debris will have to be stabilized, neutralized, containerized, etc. before disposal. In such an occurrence, the operations may be under the supervision and direction of a Federal agency and one or more specialty Contractors retained by that agency. The presence of contamination will influence the need for pretreatment (decontamination), packaging and transportation.
- The type of contaminant will dictate the required capabilities of the personnel working with the debris. Certain contaminants may preclude deployment of resources that are not properly trained or equipped.

The Debris Manager will continue to be the single point of contact for all debris removal and disposal issues. Coordination will be exercised through the USACE ESF #3 Branch located at the designated FEMA Disaster Field Office.

In this type of event, local government will become a supporting element to the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency (USEPA), and/or the Department of Energy (DOE) and will operate as defined in the USACE WMD Emergency Response Plan (to be published).
Administration and Logistics

All Washoe County regional partner jurisdictions and agencies will maintain records of personnel, equipment, load tickets, and material resources used to

comply with this Plan. Such documentation will then be used to support reimbursement from any Federal assistance that may be requested or required.

All agencies assigned a response or recovery role in this plan will ensure 24-hour staffing capability during implementation of this plan, if the emergency or disaster requires or as directed by the Debris Manager.

All agencies assigned a response or recovery role in this plan are responsible for the annual review of this Plan in conjunction with the annual update to the respective jurisdictions EOP and the Washoe County REOP. It will be the responsibility of each tasked department and agency to update its respective portion of the Plan and ensure any limitations and shortfalls are identified and documented, and work-around procedures developed, if necessary.

The review will consider such items as changes or amendments that affect:

- Mission
- Concept of Operations
- Organization
- Responsibility
- Existing contracts
- Contracting policies, procedures and regulations
- Priorities

This Plan also may be updated as necessary to ensure a coordinated response as additional Debris Management Plans and supporting documents are developed.

Debris Generation Estimates and Modeling

Methodology

Debris estimation for identified probable debris generating events (earthquake, flood, fire and winter storm) are based on the HAZUS-MH-MH modeling program. It is assumed that an earthquake would generate the largest amount of debris relative to the other probable events. Based on that assumption, modeling predictions for that event are used as the basis for calculating total amount of debris generated, as well as number, location and capacity of TDSR and landfill requirements. Extrapolation based on HAZUS-MH-MH modeling, as well as historical records suggests that the other identified potential debris generating events would generate moderate amounts of debris in comparison to an earthquake.

Study Area Description

The geographical size of the study area for this HAZUS-MH model is 6,541.48 square miles and contains 67 census tracts. There are over 132,000 households in the region. The population of the region is 339,486.

There are an estimated 105,000 buildings in the region. Approximately 101,850 (97%) of those buildings are associated with residential housing. Approximately 86,100 (82%) of the region's buildings are wood frame construction. The remaining buildings in the regional inventory are a mix of general building types.

Clusters of unreinforced masonry structures are located in the downtown areas of Reno, Sparks and the University of Nevada, Reno campus. There is a cluster of approximately 10 unreinforced masonry structures that contain asbestos materials, located in the south central portion of the University of Nevada, Reno campus. The rail yards and the industrial area of Sparks comprise several acres of potential debris generating sites (primarily reinforced concrete and steel construction.)

TDSR Site Selection Criteria

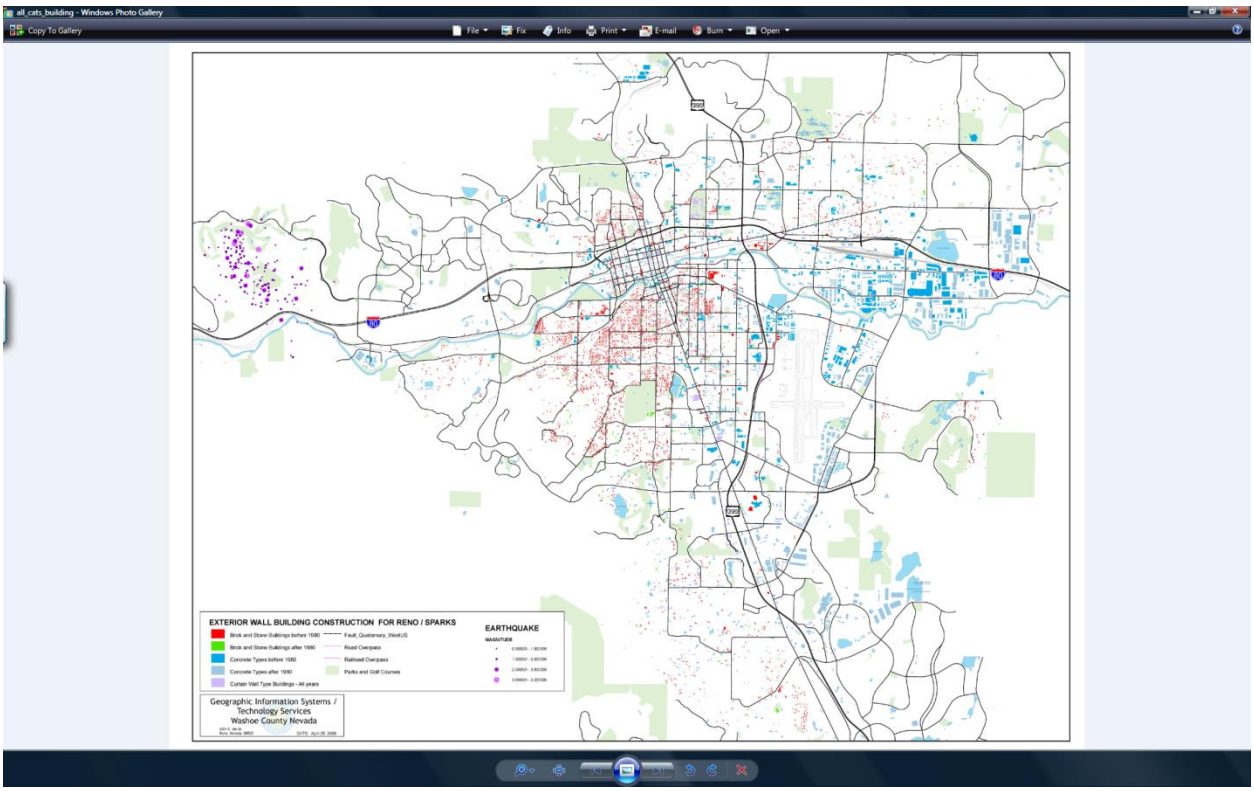
Five primary regional TDSR sites have been identified. These sites are strategically located in the northeast, northwest, southwest and southeast quadrants of the Washoe County region. These sites were selected as primary sites because in an earthquake or flood event of moderate to severe magnitude, it is assumed that east-west means of ingress and egress will be closed east several miles east of Sparks and at Verdi west of Reno. There is a strong possibility the north-south means of ingress and egress will be disrupted at Washoe Valley and Cold Springs. These disruptions are not expected to be opened for at least 72 hours.

Debris Estimate and TDSR Site Capacity

The model developed for this study estimates that approximately 1,488,000 tons of mixed debris would be generated throughout the region. This translates into 5,952,000 cy of mixed debris that must be stored, reduced and transferred to a permanent landfill site.

The capacity of the five designated regional TDSR sites is 5,683,900 cy. Additional TDSR sites with sufficient capacity to handle the capacity deficit of 268,100 cy will be identified and designated.

Based on the projected generation of approximately 1,488,000 tons of mixed debris, it is estimated that 59,520 truckloads of debris will need to be processed at TDSR and terminal landfill sites.



Map depicts likely earthquake related debris generation sites within the Washoe County region

APPENDIX A – Acronyms and Definitions

APPENDIX A

ACRONYMS AND DEFINITIONS

LIST OF ACRONYMS

AC	Acre
ACI	Advance Contracting Initiative (USACE)
C&D	Construction and Demolition
CY	Cubic Yard
DCOT	Debris Contractor Oversight Team
DHHS	Department of Health and Human Services
DM	Debris Manager
DDM	Deputy Debris Manager
DMC	Debris Management Center
DPW	Department of Permitting Services
DPW	Department of Public Services
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
GSA	General Services Administration
HHW	Household Hazardous Waste
PIO	Public Information Officer
REOC	Regional Emergency Operations Center
REOP	Regional Emergency Operations Plan
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
WMD	Weapons of Mass Destruction

DEFINITIONS

Burning – Reduction of woody debris by controlled burning. Woody debris can be reduced in volume by approximately 95% through burning. Air curtain burners are recommended because they can be operated in a manner to comply with clean-air standards.
Chipping or Mulching – Reducing wood related material by mechanical means into small pieces to be used as mulch or fuel. Woody debris can be reduced in volume by approximately 75%, based on data obtained during reduction operations. The terms "chipping" and "mulching" are often used interchangeably.
Construction, Demolition and Land-Clearing Wastes – Any type of solid waste resulting from land-clearing operations, the construction of new buildings or remodeling structures, or the demolition of any building or structure.
Debris - Scattered items and materials that were broken, destroyed, or displaced by a natural disaster. Examples: trees, construction and demolition material, personal property.
Debris Clearance – Clearing the major road arteries by pushing debris to the roadside to accommodate emergency traffic.
Debris Removal – Picking up debris and taking it to a temporary storage site or permanent landfill.
Federal Response Plan – A plan that describes the mechanism and structure by which the Federal government mobilizes resources and conducts activities to address the consequences of any major disaster or emergency that overwhelms the capabilities of State and local governments.
Final Debris Disposal – Placing mixed debris and/or residue from volume reduction operations into an approved landfill.
Force Account Labor – In this context**,** State, tribal or local government employees engaged in debris removal activities within their own jurisdiction.
Garbage – Waste that is normally picked up by a designated department (such as the Department of Solid Waste Management, or a Contractor). Examples: food, plastics, wrapping, papers.
Hazardous Waste – Any waste or combination of wastes of a solid, liquid, contained gaseous or semisolid form which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

- Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or
- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Also includes material and products from institutional, commercial, recreational, industrial and agricultural sources that contain certain chemicals with one or more of the following characteristics, as defined by the Environmental Protection Agency: 1) Toxic, 2) Flammable, 3) Corrosive; and/or 4) Reactive. Such wastes may include, but are not limited to, those that are persistent in nature, assimilated, or concentrated in tissue or which generate pressure through decomposition, heat, or other means. The term does not include solid or dissolved materials in domestic sewage or solid dissolved

materials in irrigation return flows, or industrial discharges, which are point sources subject to state or federal permits.
Household Hazardous Waste (HHW) – Used or leftover contents of consumer products that contain chemicals with one or more of the following characteristics, as defined by the Environmental Protection Agency: 1) Toxic, 2) Flammable, 3) Corrosive and/or 4) Reactive. Examples of household hazardous waste include small quantities of normal household cleaning and maintenance products, latex and oil based paint, cleaning solvents, gasoline, oils, swimming pool chemicals, pesticides, and propane gas cylinders.
Hot Spots – Illegal dumpsites that may pose health and safety threats.
Illegal Dumping – Dumping garbage and rubbish, etc., on open lots is prohibited. No garbage, refuse, abandoned junk, solid waste or other offensive material shall be dumped, thrown onto, or allowed to remain on any lot or space within the City.
Industrial Waste – Any liquid, gaseous, solid, or other waste substance, or a combination thereof resulting from any process of industry, manufacturing, trade, or business or from the development of any natural resources.
Monitoring – Actions taken to ensure that a Contractor complies with the contract scope of work.
Mutual Aid Agreement – A written understanding between communities, states, or other government entities delineating the process of providing assistance during a disaster or emergency. (See FEMA Response and Recovery Directorate Policy Number 9523.6, "Mutual Aid Agreements for Public Assistance", dated August 17, 1999.)
Recycling – The recovery and reuse of metals, soils, and construction materials that may have a residual monetary value**:** The City encourages the voluntary participation of all of its residents to reduce the waste stream through recycling. Residents are strongly encouraged to recycle all items that are recyclable and throw away for ultimate landfill disposal only those items, which cannot be recycled. Special containers are provided at numerous manned recycling and solid waste centers for the storage and collection of:

- Newspapers
- Green glass
- Brown glass
- Clear glass
- Aluminum and bi-metal beverage cans
- PET plastic milk jugs
- HDPE plastic drink bottles
- Used motor oil
- Lead acid batteries
- Scrap metals and appliances including refrigerators, stoves, water heaters, etc.
- Composts including leaves, limbs, brush, and yard wastes

Rights-of-Way – The portions of land over which facilities, such as highways, railroads, or power lines are built. Includes land on both sides of the highway up to the private property line.
Scale/Weigh Station – A scale used to weigh trucks as they enter and leave a landfill. The difference in weight determines the tonnage dumped and a tipping fee may be

charged accordingly. Also may be used to determine the quantity of debris picked-up and hauled.

Sweeps – The number of times a contractor passes through a community to collect all disaster-related debris from the rights-of-way. Usually limited to three passes through the community.

Temporary Debris Storage and Reduction (TDSR) Site – A location where debris is temporarily stored until it is sorted, processed, and reduced in volume and/or taken to a permanent landfill.

Tipping Fee – A fee based on weight or volume of debris dumped that is charged by landfills or other waste management facilities to cover their operating and maintenance costs. The fee also may include amounts to cover the cost of closing the current facility and/or opening a new facility.

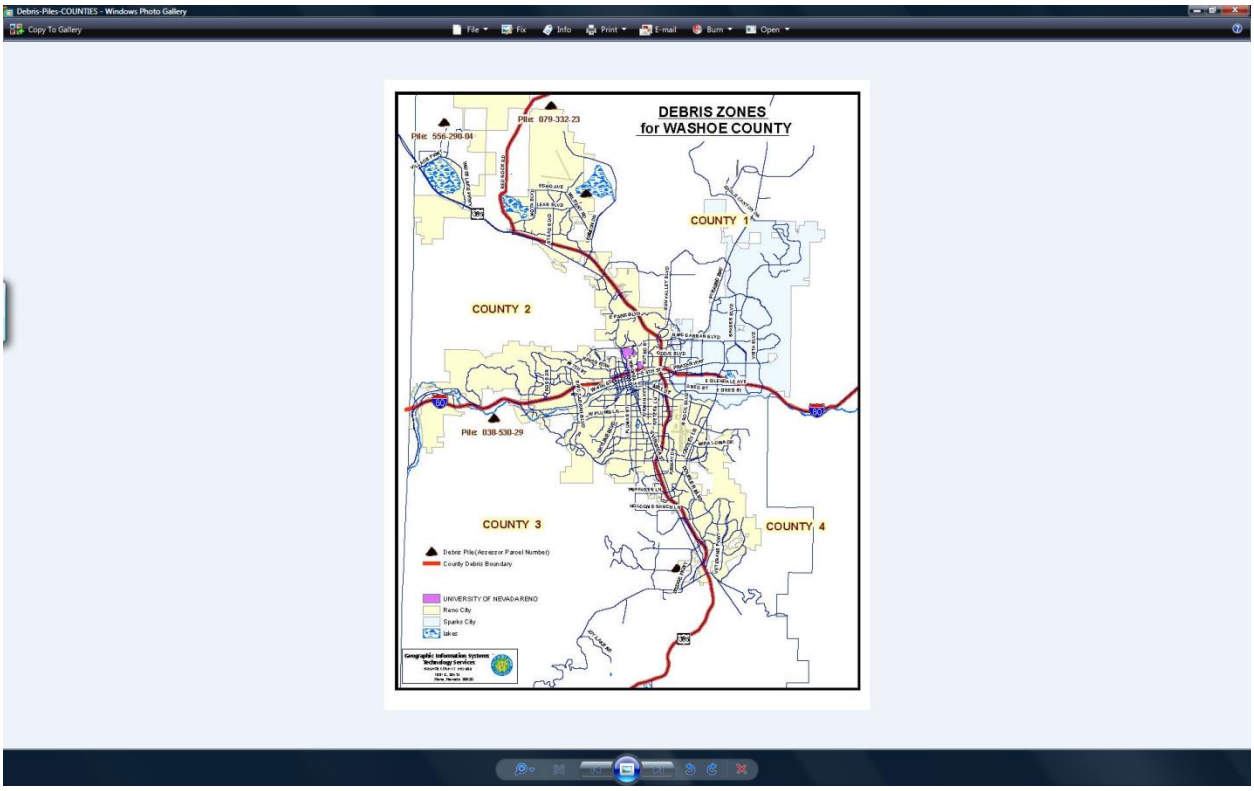
Trash – Non-disaster related yard waste, white metals, or household furnishings placed on the curbside for pickup by local solid waste management personnel. Not synonymous with garbage.

United States Army Corps of Engineers (USACE) – The primary missions of the USACE are the design and management of construction projects for the Army and Air Force, and to oversee various flood control and navigation projects. The USACE may be tasked by FEMA to direct various aspects of debris operations when direct Federal assistance, issued through a mission assignment, is needed.

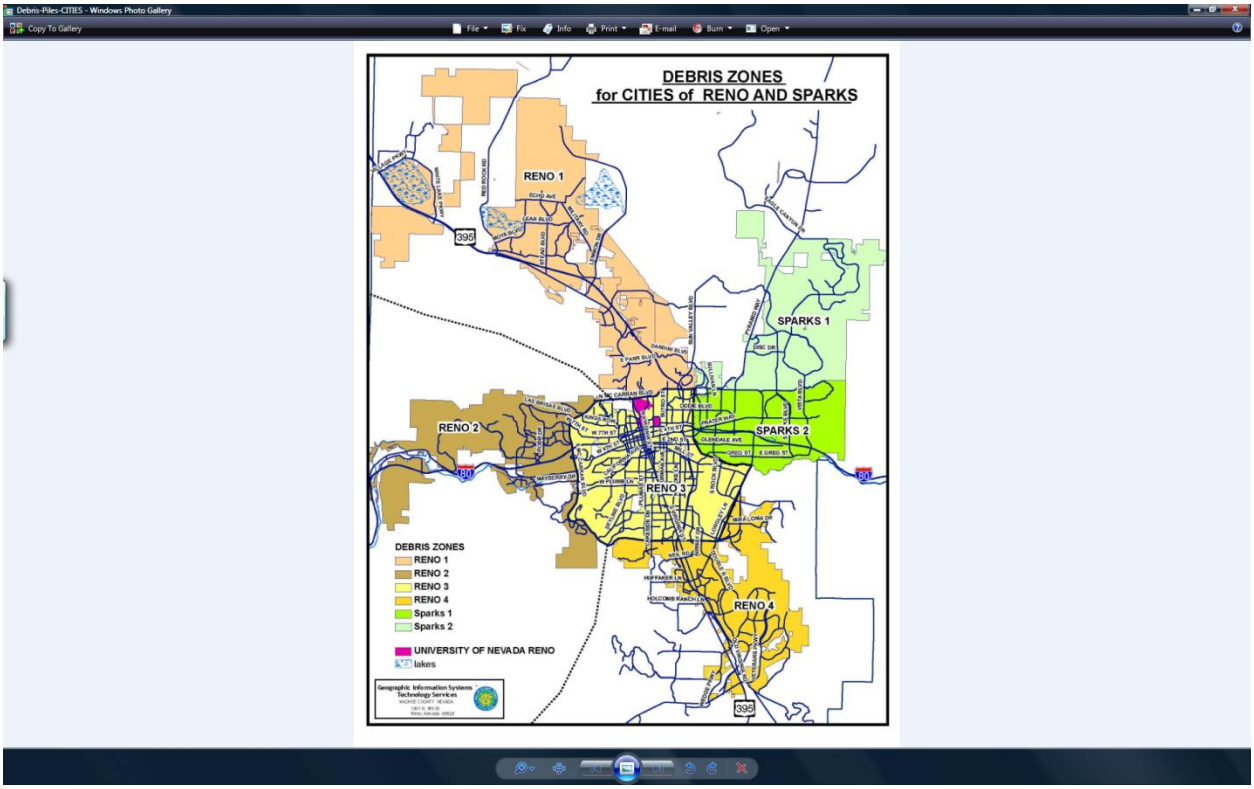
Volume Reduction Operations – Any of several processes used to reduce the volume of debris brought to a temporary debris storage and reduction site. It includes chipping and mulching of woody debris, shredding and baling of metals, air curtain burning, etc.

White Metals – Household appliances such as refrigerators, washers, dryers, and freezers.

Appendix B – Debris Control Zone Index Map



Debris Zones and TDSR Index Map, Washoe County



Debris Zones, Reno and Sparks

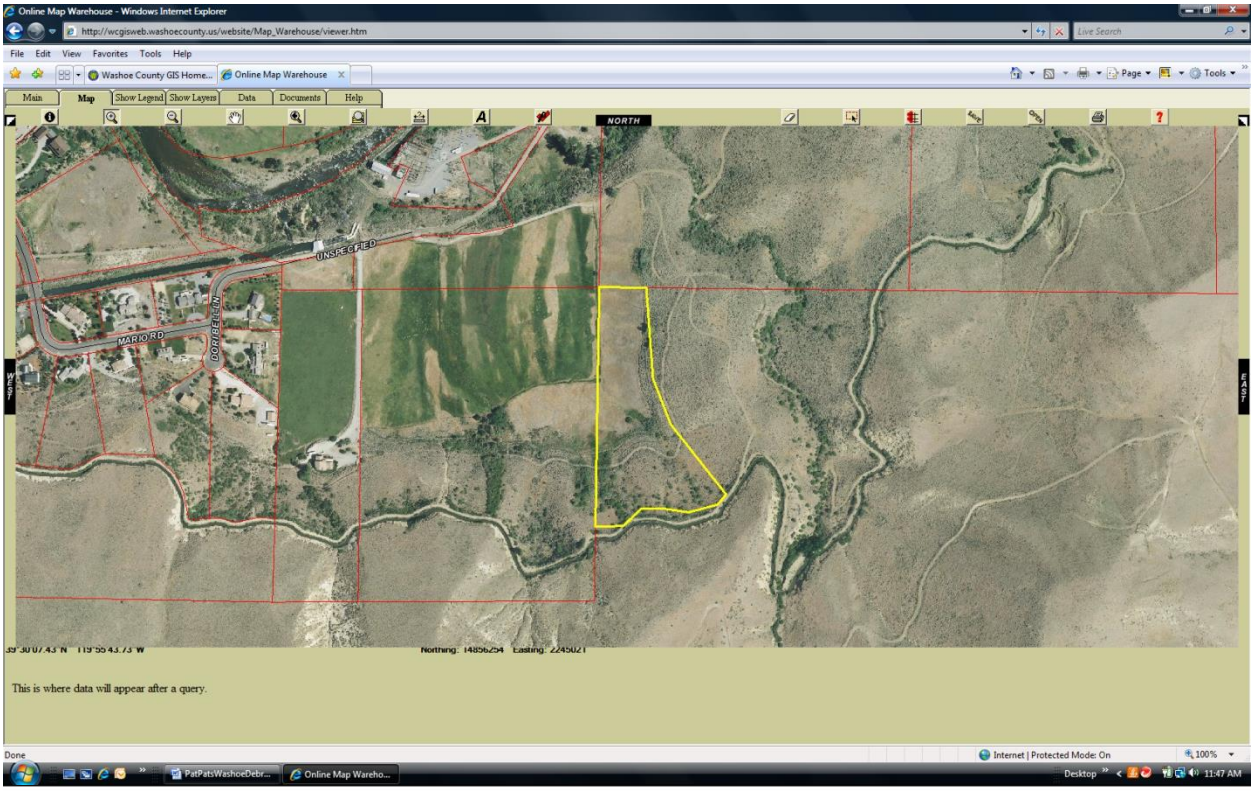
Appendix C – Road Clearance Map

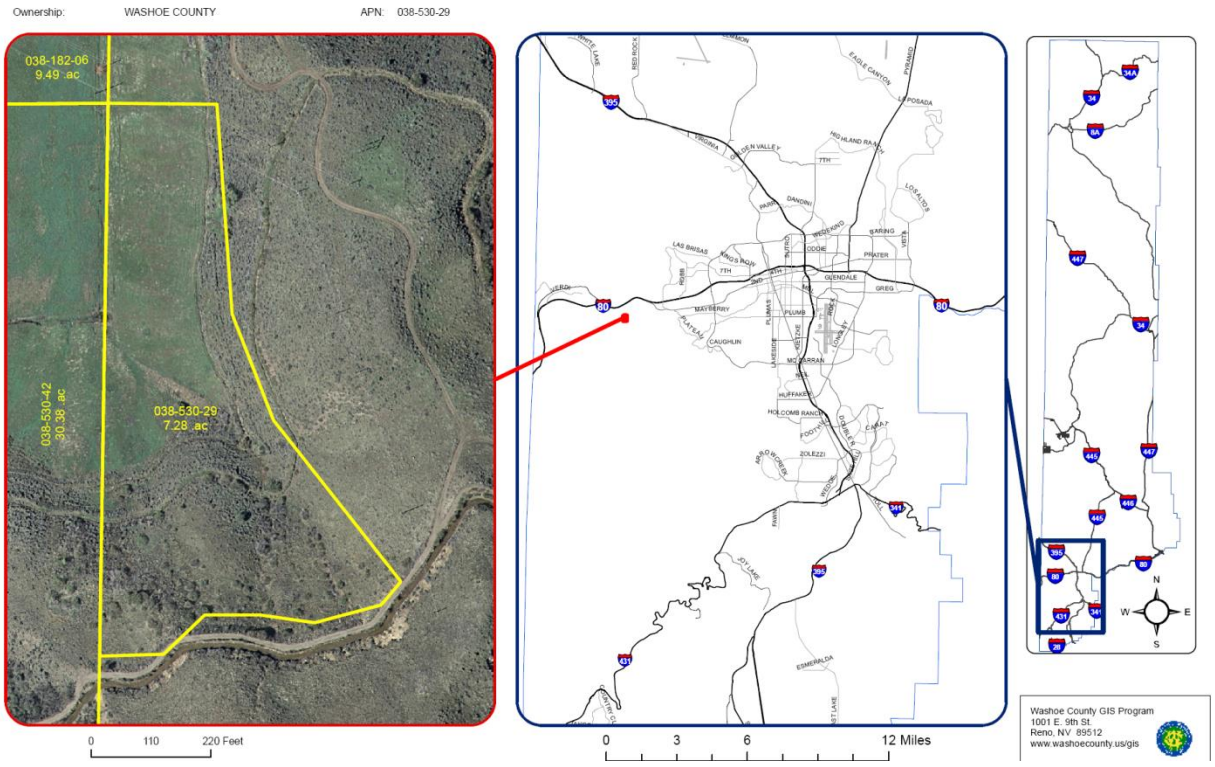
(To Be Published)

Appendix D – Temporary Debris Staging and Reduction Sites

I. TEMPORARY DEBRIS STAGING AND REDUCTION SITES

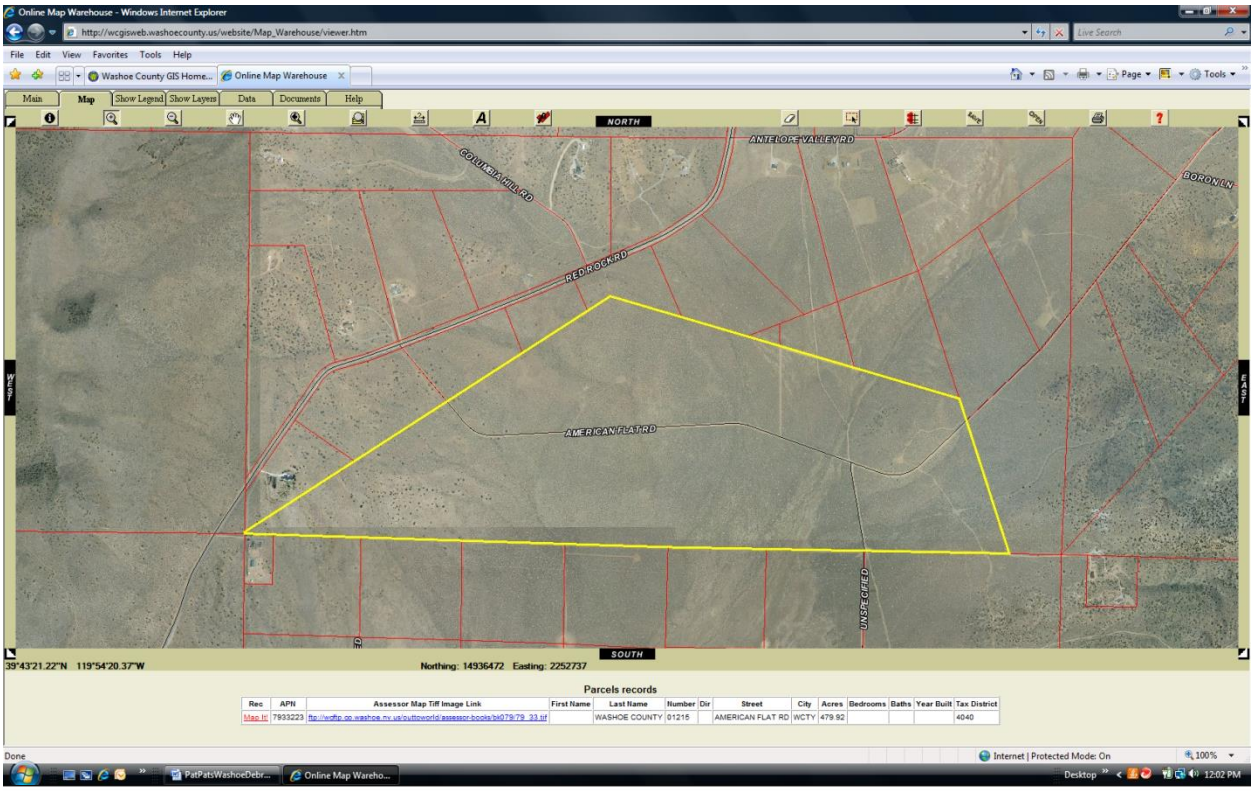
Temporary Debris Staging and Reduction Sites are typically temporary in nature and used for debris segregation, stockpiling or reduction. The following are Temporary Debris Staging and Reduction Sites that have been designated, by jurisdiction, within the Washoe County region.

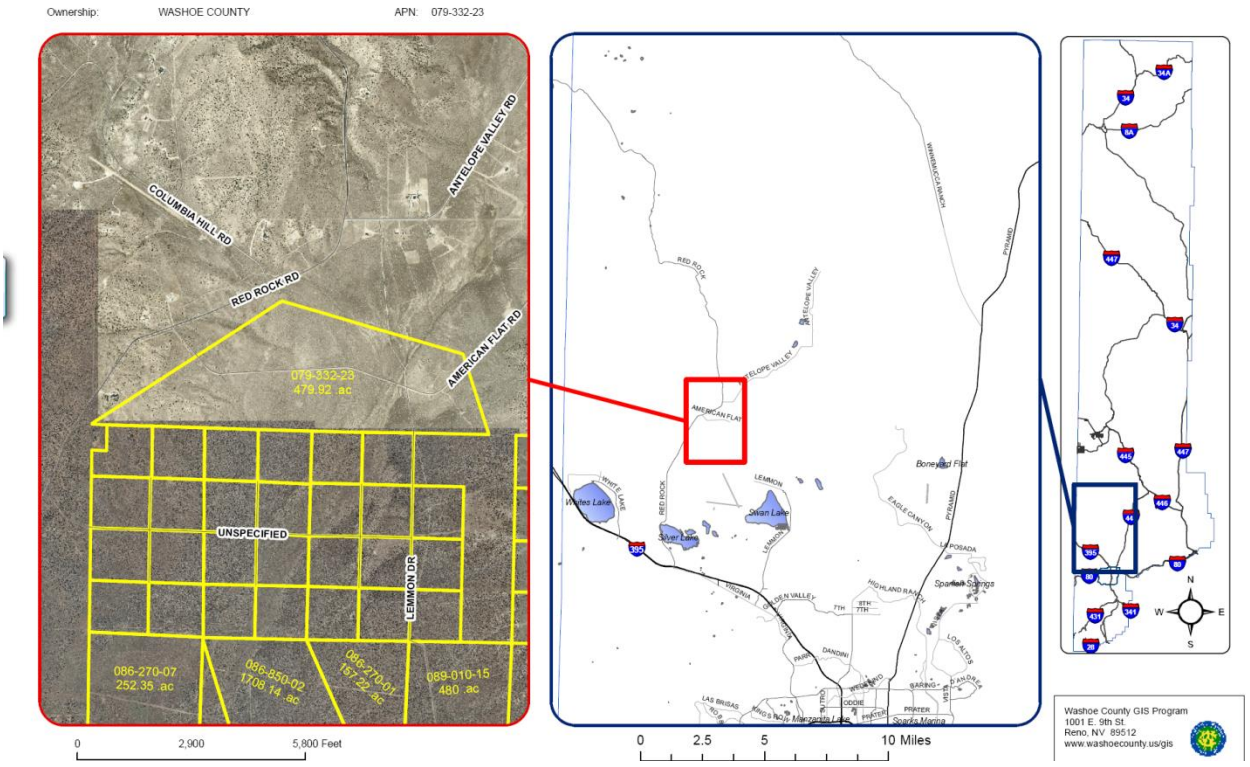




Owner: Washoe County NV
Area: 7.28 ac

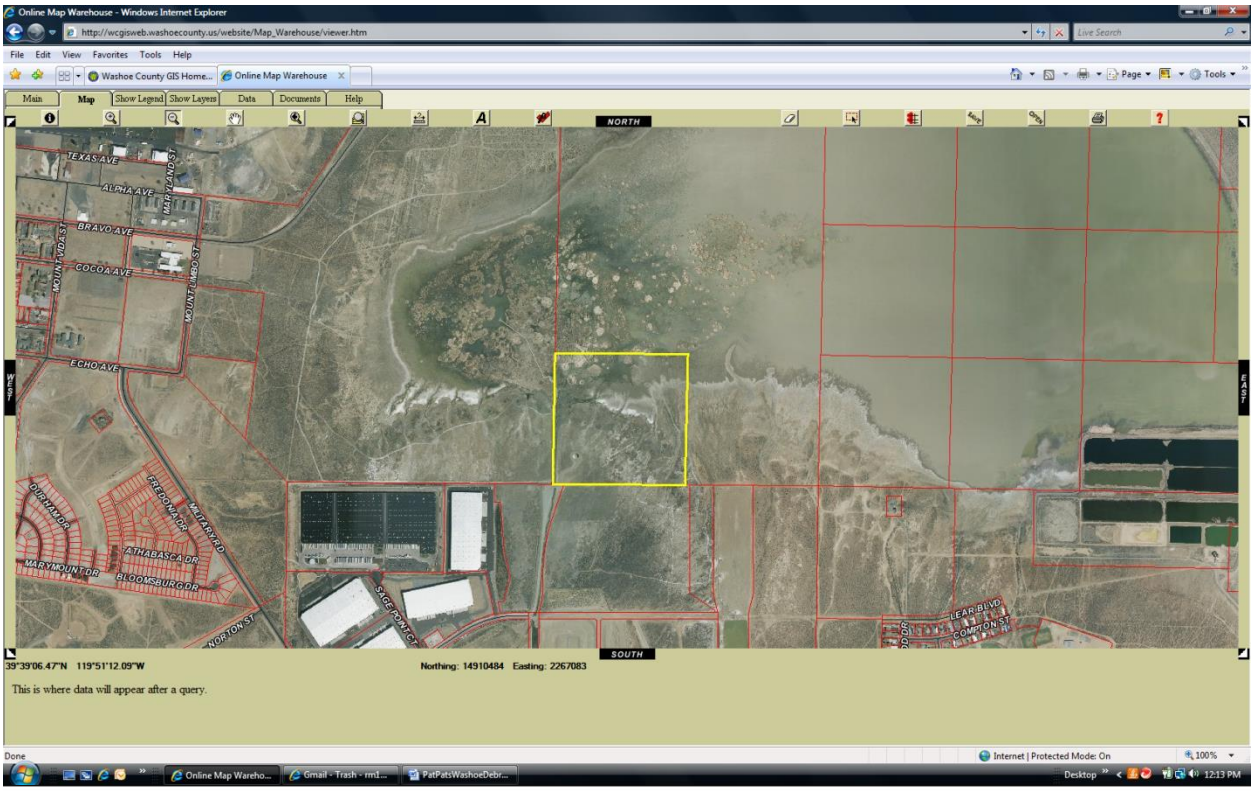
APN 038-530-29
Estimated Capacity: 72,800 cy

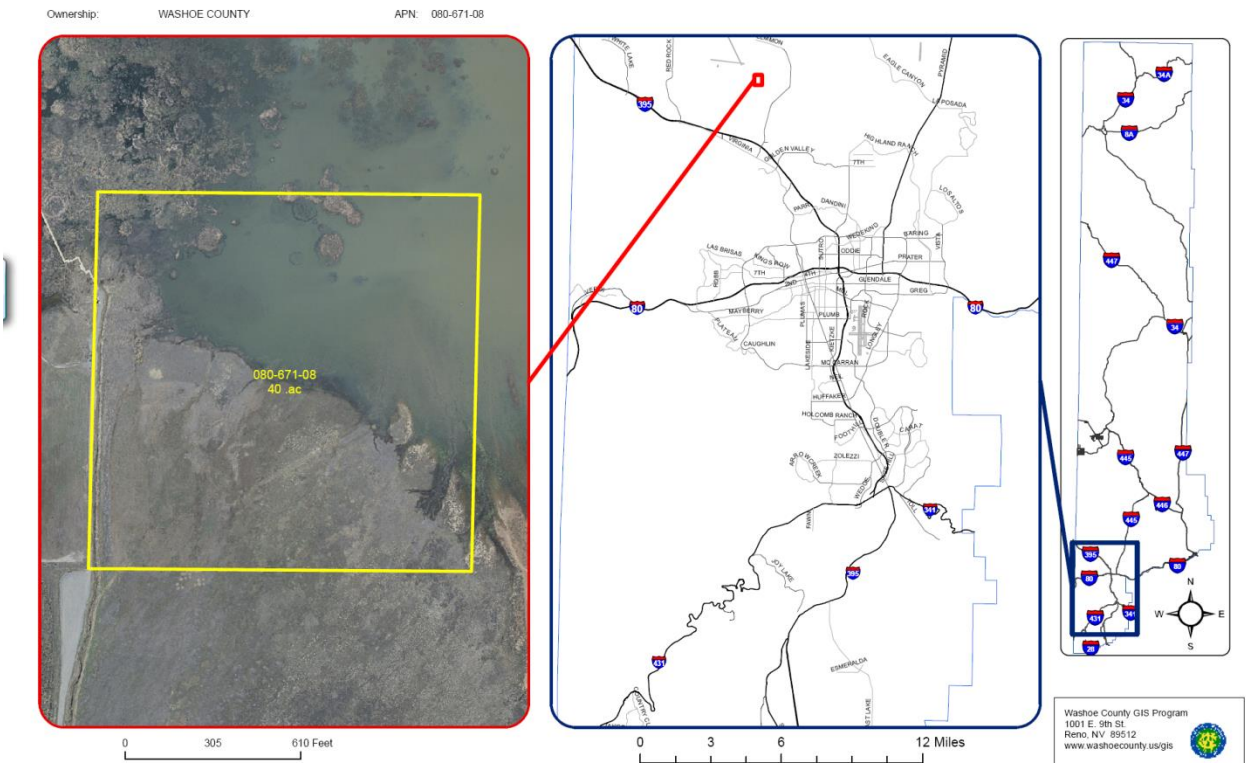




Owner: Washoe County NV
Area: 479.9 ac

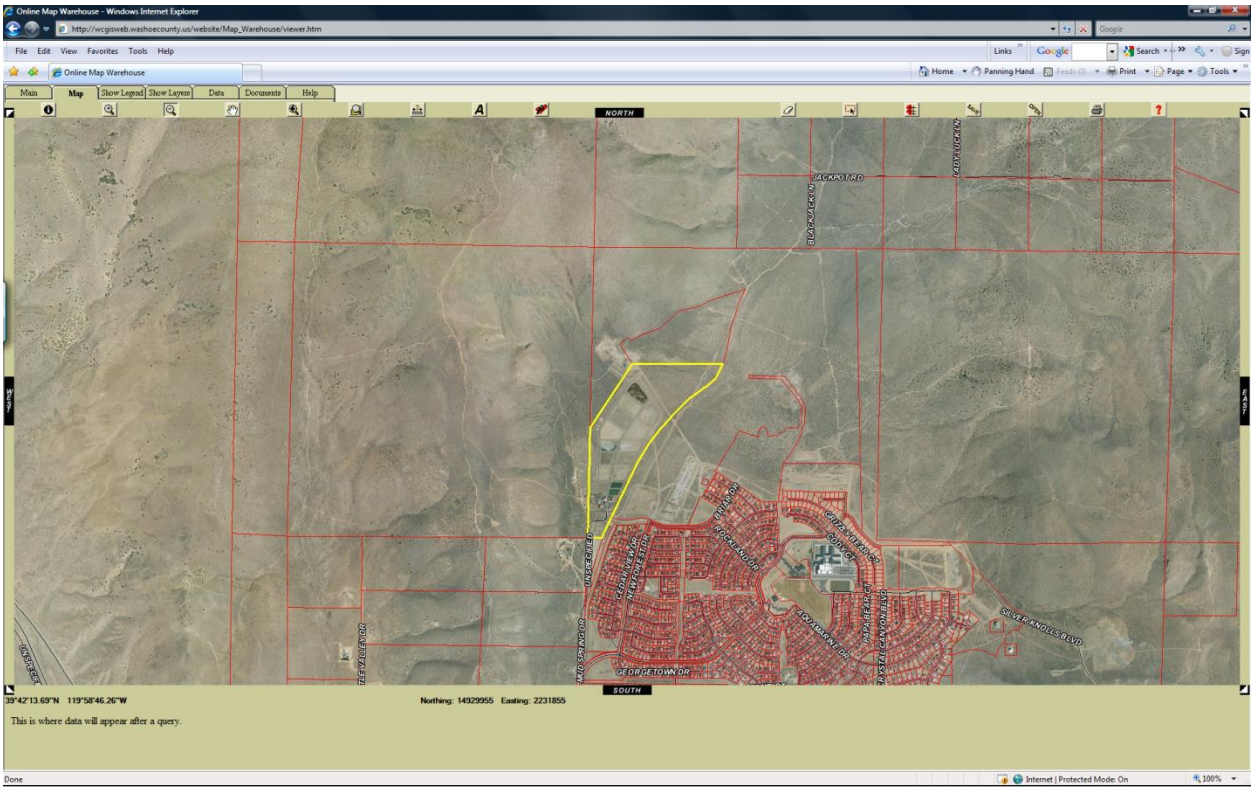
APN 079-332-23
Estimated Capacity: 4,799,200 cy

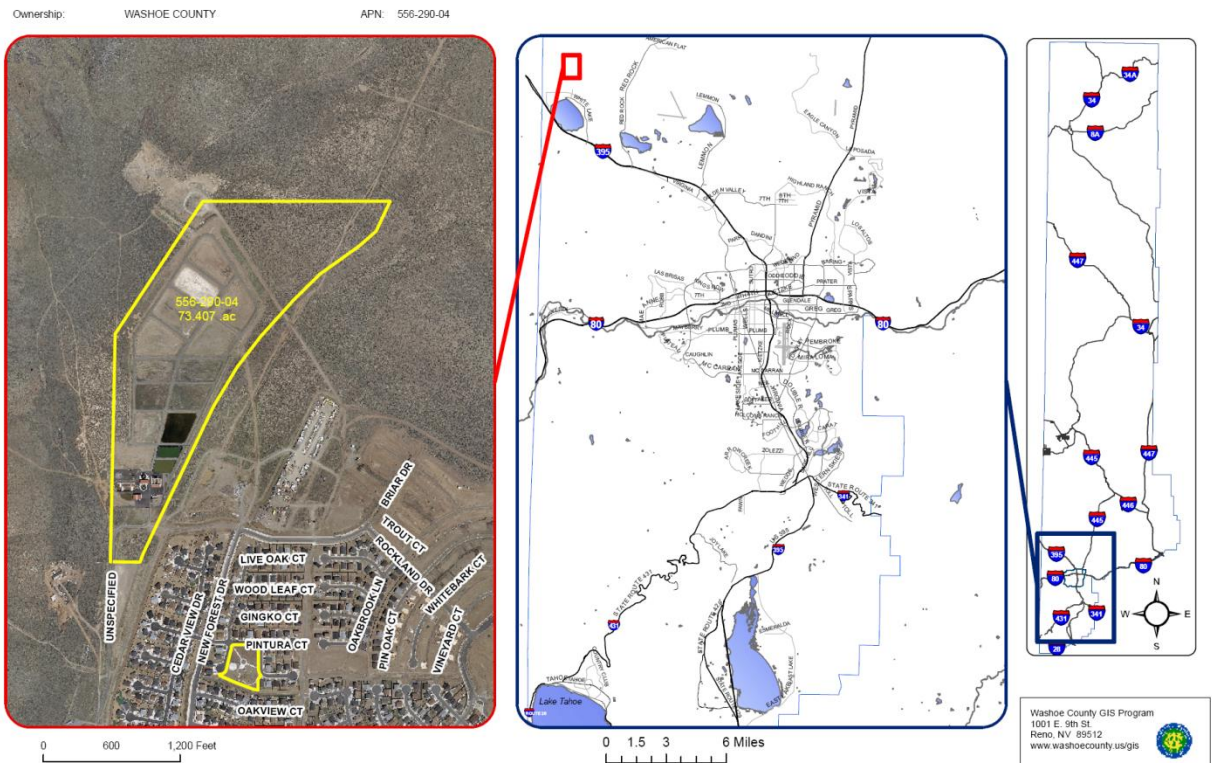




Owner: Washoe County NV APN 080-671-08
Area: 40 ac (approximately 20 acres usable in SW diagonal ½ of parcel)
Estimated capacity: 200,000 cy

Owner: Washoe County NV APN 142-020-06
Area: 24.488 ac (approximately 12.25 acres usable in northern ½ of parcel)
Estimated capacity: 122,500 cy)





Owner: Washoe County NV APN 556-290-04
Area: 73.407 acres (approximately 48.94 acres usable in northern 2/3 of parcel)
Estimated capacity: 489,400 cy

Appendix E – Debris Contractor Oversight Team Standard Operating Guidelines

DEBRIS CONTRACTOR OVERSIGHT TEAM
STANDARD OPERATING GUIDELINES

DEBRIS REMOVAL AND DISPOSAL OPERATIONS

General

The jurisdiction Debris Manager (DM) and Debris Management Center (DMC) staff will coordinate debris removal and disposal operations for all portions of that jurisdiction. Phase II operations involve the removal and disposal of curbside debris by City force account and private contractors. While City agencies will provide oversight of their own removal operations, contractor operations will be overseen by the Debris Contractor Oversight Team (DCOT).

Mixed debris will be collected and hauled from assigned Debris Control Zones to designated TDSR sites or to designated landfill locations. Clean woody debris will be hauled to the nearest designated vegetative TDSR site for eventual burning or grinding.

Load tickets will be used to track all debris that is loaded, hauled, and disposed of. Load tickets are to be used by both in-house and contracted haulers and will serve as supporting documentation for contractor payment as well as for requests for Federal assistance or reimbursement.

Franchise garbage contractors will continue to pickup refuse in accordance with current procedures, routes, and removal schedules. They will haul disaster debris as requested by the contracting authority.

DEBRIS CONTRACTOR OVERSIGHT TEAM

General

The DCOT supervisor and team members will be detailed from each jurisdictions force account labor pool, to the extent possible. The DCOT team may also be supplemented with contracted inspectors and other personnel as needed. Figure 1 below shows the organization of the DCOT within the DMC.

The DCOT team supervisor will be located at the Debris Management Center (DMC) and will provide overall supervision of the two field-based monitoring elements as described below. The DMC location will be located at a site determined by the Debris Project Manager as soon as possible following the advent of a debris generating event. Specific DCOT Supervisor responsibilities include:

1. Planning, TDSR Site inspection, quality control, and other contractor oversight functions.

2. Receiving and reviewing all debris load tickets that have been verified by a Disposal Site Monitor (see description below).

3. Making recommendations to the DM regarding distribution of in-house and contractor work assignments and priorities.

4. Reporting on progress and preparation of status briefings.

5. Providing input to the DMC PIO on debris removal and disposal activities and pickup schedules.

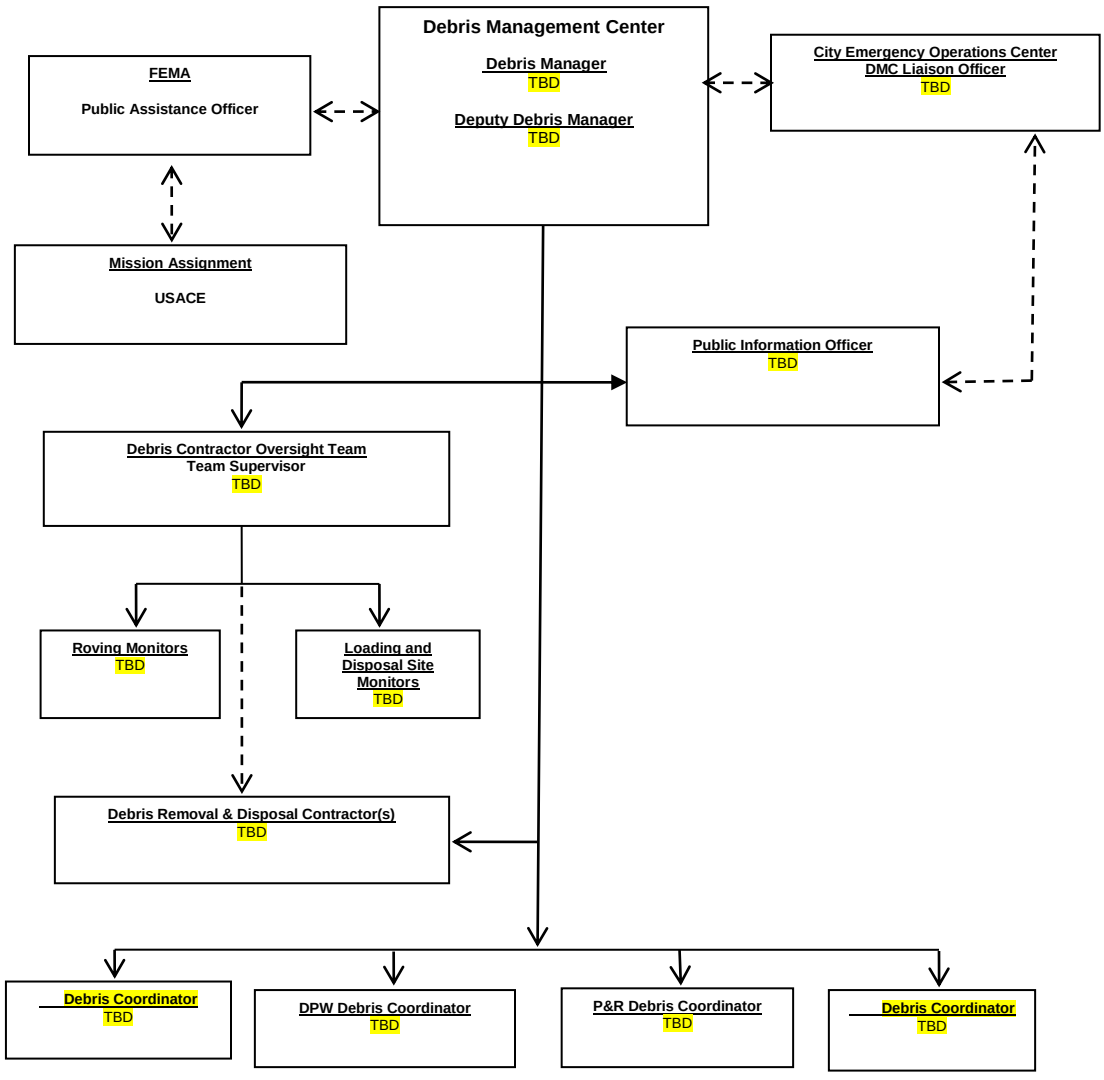


Figure 1 – Debris Management Center Organization

The DCOT Supervisor will oversee the activities of two types of field-based inspection teams. The functions and responsibilities of the field inspectors are described in the following sections.

Roving Monitors

Teams of Roving Monitors will be assigned to a specific Debris Control Zones or to a specific Contractor depending upon the distribution of work assignments. Their mission is to act as the "eyes and ears" for the Debris Manager and DCOT Supervisor to ensure that all contract requirements, including safety, are properly implemented and enforced.

Roving Monitor staff will be provided by each partner jurisdiction utilizing force account labor to the extent possible. Contract labor may be used to supplement force account labor if necessary. Roving Monitors will have the authority to monitor contractor operations and to report back to the DCOT Supervisor. Roving Monitors may request contract compliance, but do not have the authority to otherwise direct contractor operations or to modify the contract scope of work.

The following actions will be initiated immediately after a debris-generating disaster:

1. The Debris Manager will establish two-person roving monitor teams with their own transportation and communications.

2. Roving Monitor teams will be assigned to each contractor's debris removal and disposal zone.

Once assigned, Roving Monitors will monitor debris operations on a full-time basis and make unannounced visits to all loading and disposal sites within their assigned Debris Management zone(s). In addition, Roving Monitors are responsible to do the following:

1. Obtain and become familiar with all debris removal and disposal contracts for which they are providing oversight.

2. Observe all phases of Debris Management operation, to include loading sites, TDSR sites, and final landfill sites.

3. Complete a Debris Loading Site Monitoring Checklist (Attachment 2) for every site visited.

4. Complete a Debris Disposal Site Monitoring Checklist (Attachment 3) for every TDSR Site visited. Ensure that operations are being followed as specified in the applicable Debris Removal and Disposal Contract with respect to local, state, and federal regulations.

5. Complete the Stockpiled Debris Field Survey Form (Attachment 4) at least weekly at all temporary TDSR Sites to determine estimated quantities of debris stockpiled.

6. Periodically measure curbside debris using the estimating formulas shown in Attachment 5.

7. Prepare a daily written report of all contractor activities observed to include photographs and the aforementioned checklists.

Roving Monitors will also submit daily written reports to the DCOT supervisor outlining their observations with respect to the following:

1. Is the contractor using the site properly with respect to layout and environmental considerations?

2. Has the contractor established lined temporary storage areas for ash, household hazardous wastes, and other materials that can contaminate soil and groundwater?

3. Has the contractor established environmental controls in equipment staging areas, fueling, and equipment repair areas to prevent and mitigate spills of petroleum products and hydraulic fluids?

4. Are plastic liners in place under stationary equipment such as generators and mobile lighting plants?

5. Has the contractor established appropriate rodent control measures?

6. Are burn sites constructed and operating in accordance with the plans and requirements as stated in the contract?

7. Has the contractor establish procedures to mitigate:

    a. Smoke – Are the incineration pits constructed properly and being operated according to the contract statement of work?

    b. Dust – Are water trucks employed to keep the dust down?

    c. Noise – Have berms or other noise abatement procedures been employed?

    d. Traffic – Does the TDSR site have a suitable layout for ingress and egress to help traffic flow?

Roving Monitor's reports will also include observations at loading sites, disposal sites, and the locations of any illegal dumping sites.

Load Site Monitors

Load Site Monitors will be stationed at designated contractor loading sites.

Load Site Monitor positions will be staffed by each jurisdiction utilizing force account labor to the extent possible. Contract labor may be used if necessary.

Load Site Monitors will be assigned to each contractor loading site within designated Debris Control Zones. The Load Site Monitors' primary function is to verify that debris

being picked up is eligible under the terms of the contract. They will initiate and sign load tickets as verification that the debris being picked up is eligible. See Figure 1 below.

The primary tracking mechanism for all debris loaded, hauled, and disposed of will be the Load Ticket. Load tickets will be initiated at pickup and closed-out upon drop-off of each load, and are to be used by both City and contracted haulers.

Disposal Site Monitors

Disposal Site Monitors will be staffed by jurisdiction force account labor to the extent possible. Contract labor may be used if necessary. The Disposal Site Monitors will be stationed at all TDSR sites and landfill disposal sites for the purpose of verifying the quantity of material being hauled by the contractor.

The Disposal Site Monitor will estimate the cubic yards of debris in each truck entering the TDSR site or landfill disposal site and will record the estimated quantity on pre-numbered debris load tickets. The contractor will only be paid based on the number of cubic yards of material deposited at the disposal site as recorded on the debris load tickets. See Figure 2 below.

The Disposal Site Monitor will be responsible for completing and signing each load ticket and returning DCOT copies to the DCOT Supervisor. In addition, Disposal Site Monitors will maintain a daily Debris Disposal Site Load Tracking Log (Attachment 6), which will also be returned to the DCOT at the end of each day.

At each TDSR site and landfill disposal site, the Contractor will be required to construct and maintain a monitoring station tower for use by the Disposal Site Monitor. The Contractor will construct the monitoring station towers of pressure treated wood with a floor elevation that affords the Disposal Site Monitor a complete view of the load bed of each piece of equipment being utilized to haul debris. The Contractor will also provide each site with chairs, table, and portable sanitary facilities.

MODEL LOAD TICKET	**Ticket No.** 000001
Section 1	
Prime Contractor:	**Date:**
Subcontractor (Hauler):	**Departure Time:**
Driver:	**Truck Plate No.:**
Measured Bed Capacity (cu. yds.):	
Debris Pickup Site Location: **(must be a street address)**	
Debris Type: □ **Vegetation** □ **Construction & Demolition** □ **Mixed** □ **Other:**	
Loading Site Monitor: **Print Name:** **Signature:**	
Remarks:	
Section 2	
Debris Disposal Site Location:	
Estimate Debris Quantity: cu. yds. _____	**Arrival Time:**
Disposal Site Monitor: **Print Name:** _____ **Signature:**	
Remarks:	
Copies: White – Load Site Monitor Green – Disposal Site Monitor Canary, Pink, Gold – Onsite Contractor's Representative or Driver	

Figure 2 - Sample Load Ticket

For tracking of all debris moved in response to a given event, the following is the disposition of each ticket part:

Part 1 (White) Load Site Monitor (Turned in daily to the DMC)
Part 2 (Green) Disposal Site Monitor (Turned in daily to the DMC)
Part 3 (Canary) Driver or Contractor's on-site representative (Contractor Copy)
Part 4 (Pink) Driver or Contractor's on-site representative (Contactor Copy)
Part 5 (Gold) Driver or Contractor's on-site representative (Driver/Subcontractor Copy)

Annual Training Workshop

Each jurisdiction's DM will be responsible for coordinating an annual training workshop for all assigned DCOT personnel. The purpose of the workshop is to review the Debris Management Plan procedures and to ensure that the DCOT operation works smoothly. Items of discussion will include:

1. Contractor responsibility
2. Mobilization sites
3. Logistical support
4. Pre-storm mobilization
5. Procedures for call-up of Contractor personnel and equipment
6. Haul routing
7. Contractor vehicle identification and registration
8. Debris hauling load ticket administration
9. Mobilization and operation of the TDSR sites
10. Contractor payment request submission, review, and verification
11. Special procedures for Household Hazardous Waste
12. TDSR site closure requirements

ATTACHMENT 2

Debris Loading Site Monitoring Checklist

Date: _____
Arrival Time: _____Departure Time: _____Weather Conditions: _____
Loading Site Location: _____
(Street address or nearest intersection)
GPS Location: **N**_____; **W**_____
Loading Site Monitor's Name _____
(Print Name)
Roving Monitor's Name: _____
(Print Name)

_____
(Signature)

Loading Site

1. Is the Site Monitor filling out the Load Ticket properly? ☐ YES ☐ NO
If NO, explain actions taken:
_____
_____

2. Is the Contractor loading eligible debris from the designated right-of way (approximately 15' from curb)? ☐ YES ☐ NO
If NO, explain actions taken:
_____
_____

3. Is the Contractor loading trucks to capacity? ☐ YES ☐ NO
If NO, explain actions taken:
_____
_____

4. Identify Contractor's truck numbers observed while on site:
_____;_____;_____;_____;_____;_____;_____;_____;_____
____;_____;_____;_____;_____;_____;_____;_____;_____

5. Were photographs taken at the loading site? ☐ YES ☐ NO
If YES, list photo log numbers: _____;_____;_____;_____;_____

General Notes and Comments: (Include observations within the general area as to overall cleanup activities)
_____
_____
_____
_____(Use reverse side if necessary)

ATTACHMENT 3

Debris Disposal Site Monitoring Checklist

Date: _____
Arrival Time: _____Departure Time: _____Weather Conditions: _____
Disposal Site Location: _____
(Street address or nearest intersection)
GPS Location: **N**_____; **W**_____
Disposal Site Monitor's Name _____
(Print Name)
Roving Monitor's Name: _____
(Print Name)

_____
(Signature)

Disposal Site

1. Is the Disposal Monitor filling out the Load Ticket properly? ☐ YES ☐ NO
If NO, explain actions taken:
_____
_____

2. Is the Disposal Monitor attaching a copy of the Weight Ticket to the Load Ticket?
☐ YES ☐ NO
If NO, explain actions taken:
_____
_____

3. Are the Contractor's trucks loaded to capacity? ☐ YES ☐ NO
If NO, explain actions taken:
_____
_____

4. Identify Contractor's truck numbers observed while on site:
_____;_____;_____;_____;_____;_____;_____;_____;_____
____;_____;_____;_____;_____;_____;_____;_____;_____

5. Were photographs taken at the loading site? ☐ YES ☐ NO
If YES, list photo log numbers: _____;_____;_____;_____;_____

General Notes and Comments: (Include observations of operations at the landfill)
_____
_____
_____
_____
_____(Use reverse side if necessary)

ATTACHMENT 4

Stockpiled Debris Field Survey Form

Stockpiled Debris Field Survey Form

Type of Material:

Clean Vegetative___ Mixed____C&D___Mulch____Other_____

Stockpile Location: _____ Date:_____

Average Length of Stockpile: _____Feet

Average Width of Stockpile:__ _____Feet

Average Height of Stockpile:_ _____Feet

Total Cubic Feet : _____Cubic Feet

Total Cubic Yards:(Cubic Feet divided by 27) _____Cubic Yards

Contractor's Representative: _____Date _____

Government's Representative: _____Date_____

Remarks:_____

See Sketch of Site on Reverse Side

Stockpiled Debris Field Survey Form

Stockpile Location: _____

Width _____Feet

Height ___Feet

Length ____Feet

Height ___Feet

Length ____Feet

Remarks:_____

_____

_____

_____

Height ___Feet

L'x W'x H' = CY
27

Width _____Feet

ATTACHMENT 5

Debris Estimating Formulas

Estimating Rule of Thumb:

- 15 trees, 8 inches in diameter = 40 CY
- Single wide mobile home = 290 CY
- Double wide mobile home = 415 CY
- Root system (8'-10' dia.) = One flat bed trailer to move
- Treat debris piles as a cube, not a cone, when performing estimates.
- Average pace = 2' 6"

Formulas

Conversions:
- 27 cubic feet=1 cubic yard
- One mile=5280 feet or 1760 yards

Building formula:
L'xW' (building footprint) x No. of Stories x 0.2 = _____Cubic Yards of debris

Debris pile formula:
L'xW'xH'= _____Cubic Yards of debris.
27

Conversion Factors from Cubic Yards to Tons

- Mixed Construction & Demolition Debris = 500 LBS/CY or CY x 0.25 = Tons
- Yard Vegetation = 300 LBS/CY or CY x 0.15 = Tons
- Mulch = 500 LBS/CY or CY x 0.25 = Tons
- Regular Trash = 300 LBS/CY or CY x 0.15 = Tons
- Concrete = 2000 LBS/CY or CY x 1.0 = Tons
- Sand = 2600 LBS/CY or CY x 1.3 = Tons
- Land Clearing (Root balls with dirt) 1500 LBS/CY or CY x 0.75 = Tons

ATTACHMENT 6

Debris Disposal Site Load Tracking Log

Debris Disposal Site Load Tracking Log							
Date		**Supervisor's Name**		**Debris Contractor's Site Representative's Name**			
Weather: am:			**Weather: pm**				
Location			**Monitor's Name(s)**				
Truck No.	**Ticket No.**	**Ticket Owner**	**Estimated Quantity (CY)**	**Monitor's Initials**	**Load Accepted**	**Load Denied**	**Remarks**

Appendix F – Sample Debris Removal and Disposal Monitoring Plan

SAMPLE DEBRIS REMOVAL AND DISPOSAL MONITORING PLAN
DEBRIS REMOVAL AND DISPOSAL MONITORING PLAN

SAMPLE

GENERAL

The Insert name of contracting agency and jurisdiction has entered into a contract with Insert name of Contractor for the purposes of:

- Removing debris from city rights-of-way to temporary debris staging sites, and hauling vegetative and recyclable C&D and mixed debris to a debris volume reduction site.

- Setting up and operating Insert appropriate number of TDSR sites debris volume reduction site(s) located at Insert address(es) of TDSR site(s).

- Hauling chips/mulch from the debris volume reduction site to Insert name of landfill Landfill or a location of the Debris Manager's choosing.

- Hauling recycled concrete, metal and other recycle C&D and mixed debris to Insert name of approved C&D landfill Landfill or a location of the Debris Manager's choosing or, if permitted under the terms of the contract, to a location of the Contractor's choosing for profit.

Insert name of agency, department, or division responsible for monitoring Contractor activities will be responsible for monitoring the Contractor's debris removal and disposal activities using Insert appropriate agency, department, or division personnel to prepare Debris Load Tickets and contract oversight.

PURPOSE

The purpose of this plan is to outline the monitoring responsibilities of the Insert jurisdiction name's Contract Oversight Team personnel. This plan is subject to revision based on changing conditions.

MONITORING OPERATIONS

Insert jurisdiction name has been divided into Insert number of Debris Management zones primary Debris Management zones Add verbage here if debris zones are modeled after snow zones, etc.. The Contractor will be responsible for removing all eligible vegetative, C&D and mixed debris from city

street rights-of-way and hauling limbs, branches, and yard wastes to designated TDSR sites at _____.

Tree trunks greater than _____feet in diameter and root balls will be hauled directly to the Insert names of TDSR sites as appropriate TDSR site.

Monitoring activities will be controlled by the Debris Manager from the DMC located at Insert address of DMC. Phone number for the Debris Manager is Insert Debris Manager's phone number. Day to day operations and contracting problems/questions should be directed to Insert name, title and phone number of appropriate person.

Debris Contract Oversight Team monitor's work day is expected to be from _____ a.m. until _____ p.m. with _____ hour for lunch or maximum of _____ hours/day _____ days per week.

Monitors will be responsible for initiating Debris Load Tickets at Contractor debris loading sites and estimating and recording the type and quantity of debris, in cubic yards, of Contractor vehicles entering the TDSR sites on Debris Load Tickets. See Figure 1 below.

DEBRIS LOADING SITES MONITORS

The debris loading site monitors will complete Section 1 of the load ticket. The monitor will keep one copy and give the remaining copies to the truck driver. The monitor's copy will be turned into the Debris Manager or designated representative on a daily basis. Load ticket information will be entered into a database by Insert appropriate agency, department, or division personnel.

Transportation will be provided by Insert appropriate agency, department, or division from Insert appropriate location address and returning to Insert appropriate location address or to/from a mutual meeting point.

TDSR SITE MONITORS

The TDSR site monitors will record the estimated quantity, in cubic yards, on Section 2 of the load ticket. The monitor will keep one copy and give the remaining copies to the truck driver. The monitor's copy will be turned into the Debris Manager or designated representative on a daily basis. Load ticket information will be entered into a database by Insert appropriate agency, department, or division personnel.

Monitors will be located at the entrance to the TDSR site where the inspection tower is located. They will be responsible for estimating and recording the cubic

yards of debris in Section 2 of the Load Ticket for all incoming Contractor's debris hauling vehicles. A copy of the Debris Load Ticket is shown on the following page.

Transportation will be provided by Insert appropriate agency, department, or division from Insert appropriate location address and returning to Insert appropriate location address or to/from a mutual meeting point.

MODEL LOAD TICKET	**Ticket No.** 000001
Section 1	
Prime Contractor:	**Date:**
Subcontractor (Hauler):	**Departure Time:**
Driver:	**Truck Plate No.:**
Measured Bed Capacity (cu. yds.):	
Debris Pickup Site Location: **(must be a street address)**	
Debris Type: □ **Vegetation** □ **Construction & Demolition** □ **Mixed** □ **Other:**	
Loading Site Monitor: **Print Name:** **Signature:**	
Remarks:	
Section 2	
Debris Disposal Site Location:	
Estimate Debris Quantity: cu. yds. _____	**Arrival Time:**
Disposal Site Monitor: **Print Name:** _____ **Signature:**	
Remarks:	
Copies: White – Load Site Monitor Green – Disposal Site Monitor Canary, Pink, Gold – Onsite Contractor's Representative or Driver	

Figure 1 – Sample Load Ticket

COMPLETING THE LOAD TICKET

- The disposal site monitor will be stationed in the inspection tower and make an estimate of the quantity of debris contained in the truck or trailer in cubic yards. Each truck or trailer will have the measured hauling capacity in cubic yards recorded on the side of the truck or trailer. That number should be validated with the quantity stated in Section 1.
- The disposal site monitor will indicate the name and the arrival time of the truck and indicate the type of debris in the truck.
- The disposal site monitor will record the estimated volume, in cubic yards, on the load ticket in the Estimated Debris Quantity block of material contained within the bed of the truck or trailer.

Truck/Trailer Size - CY	**100% CY**	**90% CY**	**85% CY**	**80% CY**	**75% CY**
32	32	29	27	25	24
46	46	41	39	37	35
47	47	42	40	38	35
Note: Truck/Trailer without tailgate is rated at 85% of capacity					

- Examples of a Truck / Trailer Estimating Table and Truck Capacity Table are shown on the following page.
- The monitor will print and sign his/her name in the designated block.
- The disposal site monitor will retain one copy of the load ticket and give the remaining copies to the truck driver. The disposal site monitor's copy will be turned into the City Debris Manager or his representative at the end of each day. These are controlled forms and cannot be lost since they will be used to verify the amount of money paid to the Debris reduction site Contractor and to the debris hauling Contractor.

EXAMPLE TRUCK / TRAILER ESTIMATING TABLE

EXAMPLE TRUCK CAPACITY TABLE

Truck Number	**Driver**	**Model**	**License #**	**Capacity in CY**
101	Joe Blow	Self Loader	39X2520 GA	32 CY
102	Kim Driver	Self Loader	39X2522 TX	32 CY
103	Steve Loader	Trailer	63XN362 MD	47 CY
104	David Dump	Self Loader	63X5542 LA	46 CY
105	Chip Grinder	Trailer	W5008 FL	47 CY

List Vehicle Numbers, Drivers Name, Model, License Number and Measured Capacity of Truck / Trailer Bed In Cubic Yards.
NOTE: Debris Contract Oversight Team members must measure and photograph every truck and trailer used by the contractor to move debris. This should be done jointly with the contractor's representative before debris removal operations begin.

MONITORING STAFF ASSIGNMENTS

Monitoring assignments and personnel names should be recorded in a table similar to the following:

EXAMPLE MONITORING STAFF TRACKING TABLE

Date	Monitor's Name	Monitor's Title	Disposal Site Name	Disposal Site Address	Hours Worked
10/1/03	Betty Rubble	Inspector	Mulching Park	123 Main St.	7 a.m. – 6 p.m.
10/1/03	Joe Blades	Tow Truck Operator	Redux Central	5000 South St.	7 a.m. – 7 p.m.

TRAINING

All assigned monitors will attend a _____ hour training session starting at _____ ☐ a.m. ☐ p.m. on Insert date at Insert location. Alternate training date is Insert alternate date, same time and location.

Appendix G – Debris Clearing, Removal and Disposal Guidelines

Right of Entry / Hold Harmless Agreement Sample

I/We Insert Owners' Legal Names, the owner(s) of the property commonly identified as Insert Street Address, Insert City/Town Name, City of Insert City Name, State of Nevada, do hereby grant and give freely and without coercion, the right of access and entry to Insert Jurisdiction Name, its agencies, contractors, and subcontractors, for the purpose of removing and clearing any or all storm-generated debris of whatever nature from the above described property.

It is fully understood that this permit is not an obligation to perform debris clearance. The undersigned agrees and warrants to hold harmless the City of Insert Jurisdiction Name, State of Nevada, its agencies, contractors, and subcontractors, for damage of any type whatsoever either to the above described property or persons situated thereon and hereby release, discharge, and waive any action, either legal or equitable, that might arise out of any activities on the above described property. The property owner(s) will mark any storm damaged sewer lines, water lines, and other utility lines located on the described property.

I/We (☐have, ☐have not) (☐will, ☐will not) receive(d) any compensation for debris removal from any other source, including the Small Business Association (SBA), Agricultural Stabilization and Conservation Service (ASCS), private insurance, individual and family grant program or any other public assistance program. I will report for this property any insurance settlements to me or my family for debris removal that has been performed at government expense. For the considerations and purposes set forth herein, I set my hand this Insert Numerical Day day of Insert Month, 20Insert last two digits of year.

_____ _____

Witness Owner

_____

Owner

_____

Telephone Number and Address

TDSR Site Setup

The topography and soil/substrate conditions should be evaluated to determine best site layout. When planning site preparation, think of ways to make restoration easier. For example, if the local soils are very thin, the topsoil can be scraped to bedrock and stockpiled in perimeter berms. Upon site closeout, the uncontaminated soil can be spread to preserve the integrity of the tillable soils.

The following site baseline data checklist should be used to evaluate a site before a contractor begins operations and used during and after to ensure that site conditions are properly documented.

TDSR Site Baseline Data Checklist
Before Activities Begin

- ☐ Take ground or aerial photographs and/or video.
- ☐ Note important features, such as structures, fences, culverts, and landscaping.
- ☐ Take random soil samples.
- ☐ Take random groundwater samples.
- ☐ Take water samples from existing wells.
- ☐ Check the site for volatile organic compounds.

After Activities Begin

- ☐ Establish groundwater-monitoring wells.
- ☐ Take groundwater samples.
- ☐ Take spot soil samples at household hazardous waste, ash, and fuel storage areas.

Progressive Updates

- ☐ Update videos/photographs.
- ☐ Update maps/sketches of site layout.
- ☐ Update quality assurance reports, fuel spill reports, etc.

TDSR Site Operations

Lined temporary storage areas should be established for ash, household hazardous waste, fuels, and other materials that may contaminate soils and groundwater. Plastic liners should be placed under stationary equipment such as generators and mobile lighting plants. These actions should be included as a requirement in the contract scope of work. If the site is also an equipment storage area, fueling and equipment repair should be monitored to prevent and mitigate spills of petroleum products and hydraulic fluids. Be aware of and lessen the effects of operations that might irritate occupants of neighboring areas. Establishment of a buffer zone can abate concerns over smoke, dust, noise, and traffic.

Consider on-site traffic patterns and segregate materials based on planned volume reduction methods. Operations that modify the landscape, such as substrate compaction and over excavation of soils when loading debris for final disposal, will adversely affect landscape restoration.

Debris removal/disposal should be viewed as a multi-staged operation with continuous volume reduction. There should be no significant accumulation of debris at temporary storage sites. Instead, debris should be constantly flowing to burners and grinders, or recycled with the residue and mixed construction and demolition materials going to a landfill.

TDSR Site Closeout

Each TDSR Site will eventually be emptied of all material and be restored to its previous condition and use. The Contractor is required to remove and dispose of all mixed debris, construction and demolition debris, and debris residue to approved landfills. Appropriate *Insert Jurisdiction* inspectors will monitor all closeout activities to ensure that the Contractor complies with the Debris Removal and Disposal Contract. Additional measures may be necessary to meet local, State, and Federal environmental requirements because of the nature of the TDSR site operation(s).

TDSR Site Closeout Planning

The Contractor must assure the Debris Manager that all TDSR sites are properly remediated. There will be significant costs associated with this operation as well as close scrutiny by the local press and environmental groups. Site remediation will go smoothly if baseline data collection and site operation procedures are followed. Closeout or re-approval of a TDSR site should be accomplished within 30 days of receiving the last load of debris.

TDSR Site Closeout Steps

1. Contractor is responsible for removing all debris from the site.
2. Contractor conducts an environmental assessment with the Debris Manager and landowner.
3. Contractor develops a remediation plan.

4. Remediation plan reviewed by the Debris Manager, landowner, and appropriate environmental agency.
5. Remediation plan approved by the appropriate environmental agency.
6. Contractor executes the plan.
7. Contractor obtains acceptance from the Debris Manager, appropriate environmental agency, and the landowner.

TDSR Site Closeout Coordination

The Contractor will coordinate the following closeout requirements through the DCOT staff:

- Coordinate with local and State officials responsible for construction, real estate, contracting, project management, and legal counsel regarding requirements and support for implementation of a site remediation plan.
- Establish an independent testing and monitoring program. The Contractor is responsible for environmental restoration of both public and leased sites. The Contractor will also remove all debris from sites for final disposal at landfills prior to closure.
- Refer to appropriate and applicable environmental regulations.
- Prioritize site closures.
- Schedule closeout activities.
- Determine separate protocols for ash, soil and water testing.
- Develop decision criteria for certifying satisfactory closure based on limited baseline information.
- Develop administrative procedures and contractual arrangements for closure phase.
- Inform local and State environmental agencies regarding acceptability of program and established requirements.
- Designate approving authority to review and evaluate Contractor closure activities and progress.
- Retain staff during closure phase to develop site-specific remediation for sites, as needed, based on information obtained from the closure checklist shown below.

Material Removal

- All processed and unprocessed vegetative material and inter debris shall be removed to a properly approved solid waste management site.
- Tires must be disposed of at a scrap tire collection/processing facility; white goods and other scrap metal should be separated for recycling.
- Burn residues shall be removed to a properly approved solid waste management site or land applied in accordance with these guidelines.
- All other materials, unrecoverable metals, insulation, wallboard, plastics, roofing material, painted wood, and other material from demolished buildings that is not inert debris (see #1 above) as well as inter debris that is mixed with such materials

shall be removed to a properly permitted C&D recycling facility, C&D landfill, or municipal solid waste landfill.

TDSR Site Remediation

During the debris removal process and after the material has been removed from each of the TDSR sites, environmental monitoring will be needed to close each of the sites. This is to ensure that no long-term environmental contamination is left on the site. The monitoring should be done on three different media: ash, soil, and groundwater.

Ash. The monitoring of the ash should consist of chemical testing to determine the suitability of the material for either agricultural use or as a landfill cover material.
Soil. Monitoring of the soils should be by portable inspection methods to determine if any of the soils are contaminated by volatile hydrocarbons. The Contractors may do this if it is determined that hazardous material, such as oil or diesel fuel was spilled on the site. This phase of the monitoring should be done after the stockpiles are removed from the site.
Ground Water. The monitoring of the groundwater should be done to determine the probable effects of rainfall leaching through either the ash areas or the stockpile areas.

TDSR Site Closure Checklist

- ☐ Site number and location
- ☐ Date closure complete
- ☐ Household hazardous waste removed
- ☐ Contractor equipment and temporary structures removed
- ☐ Contractor petroleum spills remediated
- ☐ Ash piles removed
- ☐ Comparison of baseline information to conditions after the contractor has vacated the temporary site

Site Re-approval

Sites that were approved as TDSR sites will require re-approval for long-term storage, continuing reduction processing, and permanent disposal if site is not closed out in accordance with guidelines stated here. Sites shall be managed and monitored in accordance with the Health Department requirements and to prevent threats to the environment or public health.

Temporary Construction and Demolition Staging / Transfer Site Guidelines

General

The following guidelines should be considered when establishing staging/transfer sites for Construction & Demolition (C&D) and C&D recycling treatment and processing facilities.

Selecting Temporary Staging / Transferring Sites

Locating sites for staging/transferring C&D waste can be accomplished by evaluating potential sites and by revisiting sites used in the past to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use of the site. The following guidelines are presented in locating a site for "staging/transferring" and are considered "minimum standards" for selecting a site for use:

- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your City to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected.
- Unloading areas for incoming C&D debris material should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming C&D debris shall be at least 100 feet from the site property boundaries, on-site buildings, structures, and septic tanks with leach fields or at least 250 feet from off-site residential dwellings, commercial or public structures, and potable water supply wells, whichever is greater.
- Materials separated from incoming C&D debris (white goods, scrap metal, etc.) shall be at least 50 feet from site property lines. Other non-transferable C&D wastes (household garbage, larger containers of liquid, household hazardous waste shall be placed in containers and transported to the appropriate facilities as soon as possible.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris, and underground utilities need to be identified due to the potential for site disturbance by truck/equipment traffic and possible site grading.

- Sites shall have an attendant(s) during operating hours to minimize the acceptance of unapproved materials and to provide directions to haulers and private citizens bringing in debris.
- Sites should be secure after operating hours to prevent unauthorized access to the site. Temporary measures to limit access to the site could be the use of trucks or equipment to block entry. Gates, cables, or swing pipes should be installed as soon as possible for permanent access control, if a site is to be used longer than two weeks.
- When possible, signs should be installed to inform haulers and the general public on types of waste accepted, hours of operation, and who to contact in case of after hours emergency.
- Final written approval is required to consider any TDSR site to be closed. Closeout of processing/recycling sites shall be within one (1) year of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the State may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closeout of sites shall be in accordance with the closeout and restoration of TDSR sites guidelines.

C&D Treatment & Processing/Recycling Sites

Management of C&D debris and source separated materials to be recycled shall be in accordance with the following additional conditions:

- Contact ***Insert name of appropriate local agency*** for information on managing asbestos containing materials (ACM's) or materials that are considered regulated asbestos containing materials.
- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your jurisdiction to verify these areas. Storage areas for incoming debris should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris shall be located at least 100 feet from property boundaries and on-site buildings/structures.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site verification will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Storage areas for incoming C&D debris shall be at least 100 feet from the site property boundaries, on-site buildings, structures, and septic tanks with leach fields or at least 250 feet from off-site residential dwellings, commercial or public structures, and potable water supply wells, whichever is greater.
- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks / trailers used to haul debris and the intense heat

generated by the air curtain burner (ACB) device. Underground utilities need to be identified prior to digging pits for using the ACB device.

- Provisions should be made to prevent unauthorized access to facilities when not open for use. As a temporary measure, access can be secured by blocking drives or entrances with trucks or other equipment when the facilities are closed. Gates, cables, or other more standard types of access control should be installed as soon as possible.
- When possible, post signs with operating hours and information about what types of clean up waste may be accepted. Also include information as to whether only commercial haulers or the general public may deposit waste.
- Final written approval is required to consider any TDSR site to be closed. Closeout of processing / recycling sites shall be within six months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the State may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed.

Temporary Vegetative TDSR Site Guidelines

General

When preparing temporary facilities for handling debris resulting from storm damage, the following guidelines should be considered when establishing Temporary TDSR sites.

These guidelines apply only to sites for staging or burning vegetative storm debris (yard waste, trees, limbs, stumps, branches, and untreated or unpainted wood). Arrangements should be made to screen out unsuitable materials.

The two method (s) of managing vegetative and land clearing storm debris are "chipping/grinding" for use in landscape mulch, compost preparation, and industrial boiler fuel or using an "air curtain burner (ACB)", with the resulting ash being land applied as a liming agent or incorporated into a finished compost product as needed.

Chipping and Grinding Sites

Locating sites for chipping/grinding of vegetative and land clearing debris will require a detailed evaluation of potential sites and possible revisits at future dates to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use of the site.

The following guidelines are presented in locating a site for "chipping/grinding" and are considered "minimum standards" for selecting a site for use:

- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your jurisdiction to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected.
- Storage areas for incoming debris and processed material should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris and processed material shall be at least 100 feet from the site property boundaries and on-site buildings/structures. Management of processed material shall be in accordance with the guidelines for reducing the potential for spontaneous combustion in compost/mulch piles.
- Storage areas for incoming debris shall be located at least 100 feet from residential dwellings, commercial or public structures, potable water supply wells, and septic tanks with leach fields.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification will be necessary to

delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.

- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris, and underground utilities need to be identified due to the potential for site disturbance by truck/equipment traffic and possible site grading.
- Sites shall have an attendant(s) during operating hours to minimize the acceptance of unapproved materials and to provide directions to haulers and private citizens bringing in debris.
- Sites should be secure after operating hours to prevent unauthorized access to the site. Temporary measures to limit access to the site could be the use of trucks or equipment to block entry. Gates, cables, or swing pipes should be installed as soon as possible for permanent access control, if a site is to be used longer than two weeks. Sites should have adequate access that prohibits traffic from backing onto public rights-of-way or blocking primary and/or secondary roads to the site.
- When possible, signs should be installed to inform haulers and the general public on types of waste accepted, hours of operation, and who to contact in case of an after hours emergency.
- Grinding of clean wood waste such as pallets and segregated non-painted/non-treated dimensional lumber is allowed.
- Final written approval is required to consider any TDSR site to be closed. Closeout of staging and processing sites shall be within six months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closeout of sites shall be in accordance with the closeout and restoration guidelines for TDSR sites.

Air Curtain Burner Site Location and Operations

Locating sites that are intended for air curtain burning (ACB) operations is a coordinated effort between Insert Appropriate Local Authority and Insert Appropriate State Agency for evaluating the surrounding areas and to reevaluate potential sites used in the past.

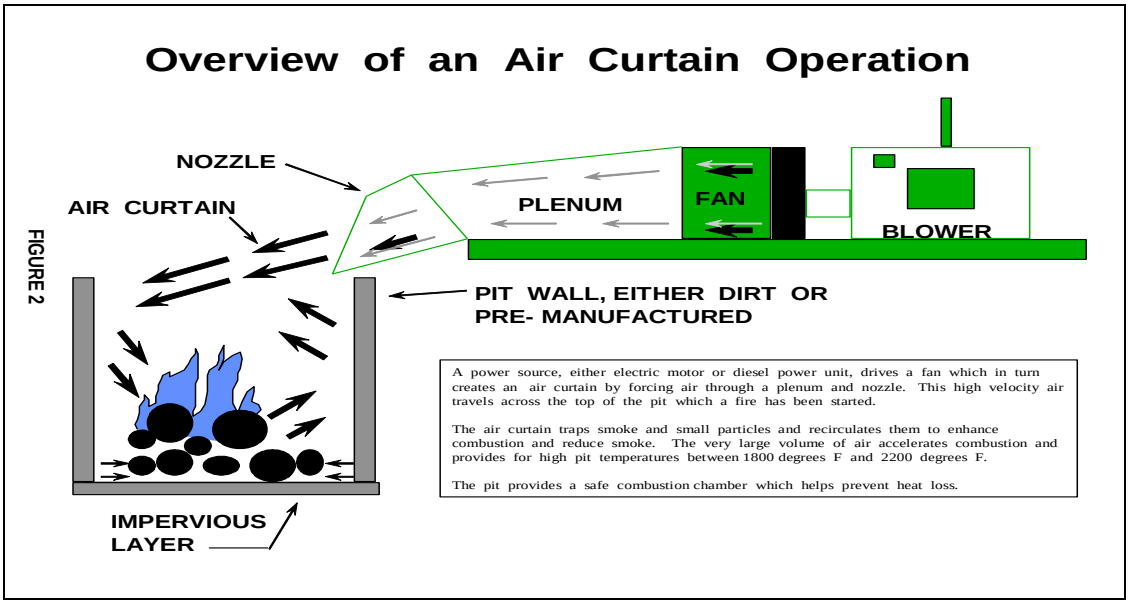
The following guidelines are presented for selecting an ACB site and operational requirements once a site is in use:

- Contact the local fire services agency for input into site selection in order to minimize the potential for fire hazards, other potential problems related to fire fighting that could be presented by the location of the site, and to ensure that adequate fire protection resources area available in the event of an emergency.
- The requirements for ACB device(s), in accordance with Air Quality rules require the following buffers: a minimum of 500 feet from the ACB device to homes, dwellings and other structures and 250 feet from roadways. Contact Insert Appropriate Local and/or State Agency for updates or changes to their requirements.
- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your jurisdiction to verify these areas. Due to heavy and saturated conditions that result, flooding may occur more frequently than normally expected. If ACB pit devices are utilized, a minimum two-foot separation to the seasonal high water table is recommended. A larger buffer to the seasonal high water table may be necessary due to on-site soil conditions and topography.
- Storage areas for incoming debris should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris shall be located at least 100 feet from property boundaries and on-site buildings/structures.
- Air Curtain Burners in use should be located at least 200 feet from on-site storage areas for incoming debris, on-site dwellings and other structures, potable water supply wells, and septic tanks and leaching fields.
- Wood ash stored on-site shall be located at least 200 feet from storage areas for incoming debris, processed mulch or tub grinders (if a grinding site and ACB site is located on the same property). Wood ash shall be wetted prior to removal from the ACB device or earth pit and placed in storage. If the wood ash is to be stored prior to removal from the site, then rewetting may be necessary to minimize airborne emissions.
- Wood ash to be land applied on site or off site shall be managed in accordance with the guidelines for the land application of wood ash from storm debris burn

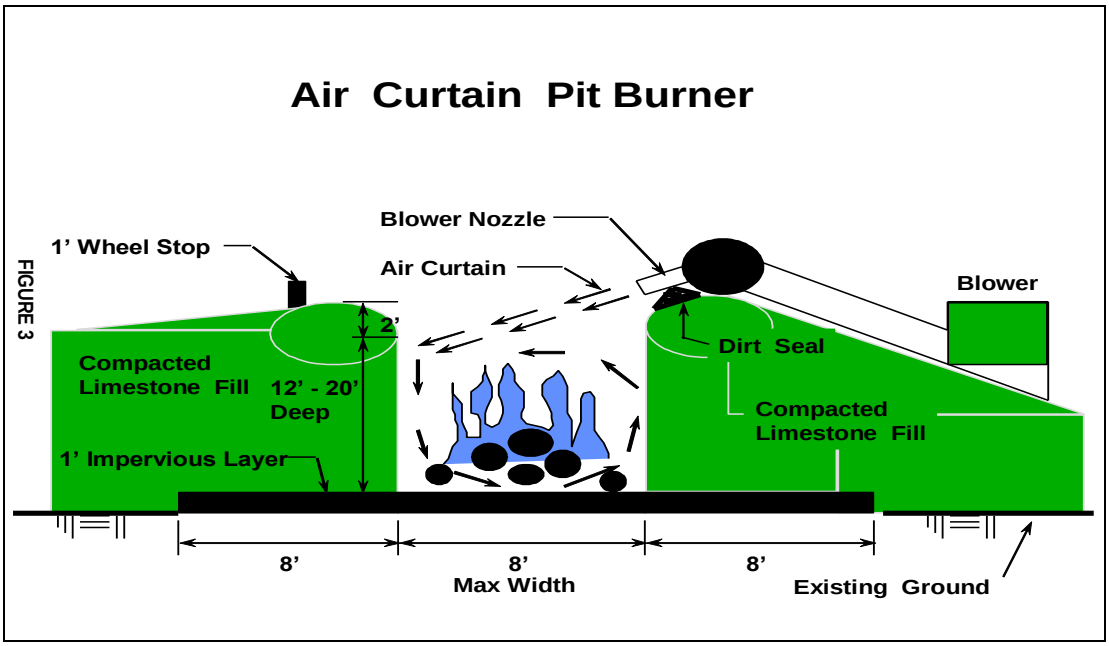
sites. The ash shall be incorporated into the soil by the end of the operational day or sooner if the wood ash becomes dry and airborne.

- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged, and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris and the intense heat generated by the ACB device. Underground utilities need to be identified prior to digging pits for using the ACB device.
- Provisions should be made to prevent unauthorized access to facilities when not open for use. As a temporary measure, access can be secured by blocking drives or entrances with trucks or other equipment when the facilities are closed. Gates, cables, or other more standard types of access control should be installed as soon as possible.
- When possible, post signs with operating hours and information about what types of clean up waste may be accepted. Also, include information as to whether only commercial haulers or the general public may deposit waste.

Closeout of air curtain burner sites shall be within six (6) months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed.



Based on FEMA 325, *Debris Management Guide*, Appendix H, Figure 2, 1999.



Based on FEMA 325, *Debris Management Guide*, Appendix H, Figure 3, 1999.

Environmental Checklist for Air Curtain Pit Burners

Incineration site inspections will also include an assessment of the environmental controls being used by the Contractor. Environmental controls are essential for all incineration methods, and the following will be monitored.

☐ A setback of at least 1,000 feet should be maintained between the debris piles and the incineration area. Keep at least 1,000 feet between the incineration area and the nearest building. Contractor should use fencing and warning signs to keep the public away from the incineration area.

☐ The fire should be extinguished approximately two hours before anticipated removal of the ash mound. The ash mound should be removed when it reaches 2 feet below the lip of the incineration pit.

☐ The incineration area should be placed in an aboveground or below ground pit that is no wider than 8 feet and between 9 and 14 feet deep.

☐ Above ground incineration pits should be constructed with limestone and reinforced with earth anchors or wire mesh to support the weight of the loaders. There should be a 1-foot impervious layer of clay or limestone on the bottom of the pit to seal the ash from the aquifer.

☐ The ends of the pits should be sealed with dirt or ash to a height of 4 feet.

☐ A 12-inch dirt seal should be placed on the lip of the incineration pit area to seal the blower nozzle. The nozzle should overlap the pit edge by 3 to 6 inches.

☐ There should be 1-foot high, unburnable warning stops along the edge of the pit's length to prevent the loader from damaging the lip of the incineration pit.

☐ Hazardous or contaminated ignitable material should not be placed in the pit. This is to prevent contained explosions.

☐ The airflow should hit the wall of the pit about 2 feet below the top edge of the pit, and the debris should not break the path of the airflow except during dumping.

☐ The pit should be no longer than the length of the blower system and the pit should be loaded uniformly along its length.

- Whenever possible, soil test data and waste analysis of the ash should be available to determine appropriate application rate.
- In the absence of test data to indicate agronomic rates, application should be limited to 2 to 4 tons per acre/one time event. If additional applications are necessary, due to the volume of ash generated and time frame in which the ash is generated, then an ash management plan will be needed.
- Ash should be land applied in a similar manner as agricultural limestone.
- Ash should not be land applied during periods of high wind to avoid the ash blowing off the application sites.
- Ash should not be land applied within 25 feet of surface waters or within 5 feet of drainage ways or ditches on sites that are stabilized with vegetation. These distances should be doubled on sites that are not vegetated and the ash should be promptly incorporated into the soil.
- Records should be maintained to indicate where ash is applied and the approximate quantities of ash applied.
- As an option to land application, ash may be managed at a permitted solid waste landfill after cooling to prevent possible fire.
- Assistance in obtaining soil test data and waste analysis of ash should be available through Insert Appropriate Local or State Agency.

Reducing the Potential for Spontaneous Combustion in Compost or Mulch Piles Guidelines

- When ground organic debris is put into piles, microorganisms can very quickly begin to decompose the organic materials. The microorganisms generate heat and volatile gases as a result of the decomposition process. Temperatures in these piles can easily rise to more than 160 degrees Fahrenheit. Spontaneous combustion can occur in these situations.
- Spontaneous combustion is more likely to occur in larger piles of debris because of a greater possibility of volatile gases building up in the piles and being ignited by the high temperatures. If wind rows can be maintained 5 feet to 6 feet high and 8 feet to 10 feet wide, volatile gases have a better chance of escaping the piles; and the possibility of spontaneous combustion will be reduced.
- Turning piles when temperatures reach 160 degrees can also reduce the potential for spontaneous combustion. Pile turning provides an opportunity for gases to escape and for the contents of the pile to cool. Adding moisture during turning will increase cooling. Controlling the amount of nitrogen-bearing (green) wastes in piles will also help to reduce the risk of fire. The less nitrogen in the piles the slower the decomposition process and consequently the less heat generated and gases released.
- Large piles should be kept away from wooded areas and structures and should be accessible to firefighting equipment, if a fire were to occur. Efforts should be made to avoid driving or operating heavy equipment on large piles because the compaction will increase the amount of heat build-up, which could increase the possibility of spontaneous combustion.

APPENDIX H

APPROVED CONTRACTS &
DEBRIS MANAGEMENT EQUIPMENT ASSETS

APPENDIX I

DEBRIS REMOVAL APPLICANTS CONTRACTING CHECKLIST

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RP9580.201

DEBRIS REMOVAL

APPLICANT'S CONTRACTING CHECKLIST

Overview

To be eligible for reimbursement under the Public Assistance Program, contracts for debris removal must meet rules for Federal grants, as provided for in 44 CFR Part 13.36 *Procurement* (http://www.access.gpo.gov/nara/cfr/waisidx_04/44cfr13_04.html). Public Assistance applicants should comply with their own procurement procedures in accordance with applicable State and local laws and regulations, provided that they conform to applicable Federal laws and standards identified in Part 13. The following guidance is provided to assist Public Assistance applicants in the procurement process.

Contracting Process Checklist

- ☐ Use competitive bidding procedures. Complete and document a cost analysis to demonstrate price reasonableness on any contract or contract modification where adequate price competition is lacking, as detailed in 44 CFR 13.36(f).
- ☐ Provide a clear and definitive scope of work and monitoring requirements in the request for proposals/bids. Use acceptable emergency contracting procedures that include an expedited competitive bid process only if time does not allow for more stringent procedures.
- ☐ Require bidders to provide copies of references, licenses, financial records, and proof of insurance and bonding.
- ☐ Obtain review from your legal representative of your procurement process and any contract to be awarded to ensure they are in compliance with all Federal, State, and local requirements.
- ☐ Document procedures used to obtain/award contracts (procurement information, bid requests and tabulations, etc).
- ☐ Use load ticket requirement to record with specificity (e.g., street address) where debris is picked up and the amount picked up, hauled, reduced and disposed of.

FEMA will, when requested by applicants, assist in the review of debris removal contracts. However, such a review does not constitute approval.

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DEBRIS REMOVAL

APPLICANT'S CONTRACTING CHECKLIST

Contract Provisions Checklist

All contracts must contain/reflect the following provisions:

- ☐ All payment provisions must be based on unit prices.
- ☐ No payments may be based on time and material costs unless limited to work performed during the first 70 hours of actual work following a disaster event.
- ☐ That payment will be made only for debris that FEMA determines eligible, referencing FEMA regulations and Public Assistance guides and fact sheets. (This is an optional provision to protect the applicant, and is used only following a major disaster declaration.)
- ☐ An invoice provision requiring contractors to submit invoices regularly and for no more than 30-day periods.
- ☐ A "Termination for Convenience" clause allowing contract termination at any time for any reason.
- ☐ A reasonable limit on the period of performance for the work to be done.
- ☐ A subcontract plan including a clear description of the percentage of the work the contractor may subcontract out and limiting use of subcontractors to only those you approve.
- ☐ The preference that the contractor use mechanical equipment to load and reasonably compact debris into the trucks and trailers.
- ☐ The requirement that the contractor provide a safe working environment, including properly constructed monitoring towers.
- ☐ Option of a unit price for extracting from ground and removing FEMA-eligible stumps (only for stumps with diameters larger than 24 inches, measured 24 inches above the ground, and with 50% or more of the root ball exposed), or including all stumps in the unit price.

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DEBRIS REMOVAL

APPLICANT'S CONTRACTING CHECKLIST

Contract Provisions Checklist - Continued

All contracts must contain/reflect the following provisions:

- ☐ Requirement that all contract amendments and modifications be in writing.
- ☐ Requirement that contractor obtain adequate payment and performance bonds and insurance coverage.

Pre-Disaster and Stand-By Contracts Checklist

- ☐ It is recommended that you pre-qualify contractors prior to an event and solicit bid prices from this list of contractors once an event has occurred.
- ☐ The solicitation for pre-qualifying contractors must adequately define in the proposed scope of work all the potential types of debris, typical haul distances, and size of events for which a contract may be activated.
- ☐ To ensure reasonable debris removal costs, award debris removal contracts based on unit prices (volume or weight).
- ☐ If the contract is awarded on a time and material basis, it should be limited to no more than 70 hours of actual clearance and removal operations.
- ☐ After the initial 70-hour period, payment should be on a unit price basis (volume or weight).

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DEBRIS REMOVAL

APPLICANT'S CONTRACTING CHECKLIST

Avoidance Checklist

- ☐ **DO NOT**: Award a debris removal contract on a sole-source basis.
- ☐ **DO NOT**: Sign a contract (including one provided by a contractor) until it has been thoroughly reviewed by your legal representative.
- ☐ **DO NOT**: Allow any contractor to make eligibility determinations, since only FEMA has that authority.
- ☐ **DO NOT**: Accept any contractor's claim that it is "FEMA certified." FEMA does not certify, credential, or recommend debris contractors.
- ☐ **DO NOT**: Award a contract to develop and manage debris processing sites unless you know it is necessary, and have contacted the State for technical assistance concerning the need for such operations. Temporary debris storage and reduction sites are not always necessary.
- ☐ **DO NOT**: Allow separate line item payment for stumps 24 inches and smaller in diameter; these should be treated as normal debris.
- ☐ **DO NOT**: "Piggyback" or utilize a contract awarded by another entity. Piggybacking may be legal under applicable state law; however, the use of such a contract may jeopardize FEMA funding.
- ☐ **DO NOT**: Award pre-disaster/stand-by contracts with mobilization costs or unit costs that are significantly higher than what they would be if the contract were awarded post-disaster. Such contracts should have variable mobilization costs depending upon the size of the debris work that may be encountered.

Annex L – Sample Contracts