

ANNEX TO THE CLACKAMAS COUNTY DEBRIS MANAGEMENT PLAN

CITY OF WILSONVILLE, OR



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City of Wilsonville

Annex to the Clackamas County Debris Management Plan



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1 Introduction

1.1 Purpose

This Annex to the Clackamas County Debris Management Plan (Annex) describes how the City of Wilsonville (City) will conduct debris operations across all phases of debris management. It is designed to be consistent with the Clackamas County Debris Management Plan and the State of Oregon Debris Management Plan. The objectives of this Annex include:

- Establish a debris planning scenario for the City.
- Describe a concept of operations for City debris management activities.
- Assign roles and responsibilities to City departments and key response partners.
- Identify available sites for debris storage and reduction.
- Identify existing contracts to augment the City’s ability to conduct debris operations.

1.2 Scope

This Annex is intended to guide debris operations within the City’s jurisdictional boundaries as well as coordination with Clackamas County (County), state, federal, and private sector partners. It is based upon the principle that emergency operations should be conducted at the lowest level possible before requesting support, and that the City bears the ultimate responsibility for the safety of its residents and protection of its infrastructure.

1.3 Debris Authorities

Table 1-1 identifies solid waste and emergency management general authorities for Clackamas County and the City.

Jurisdiction	Solid Waste Code	Emergency Management Code
Clackamas County	Chapter 10.03 – Solid Waste and Wastes Management	Chapter 6.03 – Emergency Regulations
City of Wilsonville	Chapter 8.4 – 8.404 – Solid Waste Disposal	Resolution No. 2341, Adoption of Emergency Operations Plan; Resolution No. 1961, Adoption of NIMS and ICS; Resolution No. 1960, Declaration of State of Emergency; Resolution No. 1959



1.4 Mutual Aid Agreements

The City is a signatory to the following mutual aid agreements (MAAs) to support disaster debris operations:

- Cooperative Public Agencies of Washington County
- Oregon Water/Wastewater Agency Response Network
- Clackamas County Intra-County Mutual Aid
- Oregon Public Works Cooperative Assistance Agreement

Copies of these MAAs can be obtained through the Public Works Department.

1.5 Debris Planning Scenario

Most disasters can be classified as debris-generating events. Debris management activities resulting from most disaster events will be coordinated by local Emergency Operations Centers (EOCs) in accordance with local plans and procedures, including activation of MAAs (see Table 1-2).

Event	Expected Debris	High Impacts Areas
Flood	Construction/demolition debris, municipal solids, and contaminated debris	Areas in proximity to the Willamette River and its tributaries are at highest risk for flooding. Flooding is also likely to occur at culverts and drainage choke points during and after heavy rainfall.
Landslide	Construction/demolition debris, municipal solids, and contaminated debris	The City has either prohibited or limited building on slopes greater than 12%. Several neighborhoods including Charbonneau, Morey’s Landing, and Rivergreen have been built near steep slopes on the riverfront and may be at increased risk.



Annex to the Debris Management Plan

1. Introduction

Table 1-2 Debris Generating Hazards for the City

Event	Expected Debris	High Impacts Areas
Wildfire	Construction/demolition debris, contaminated soil and water	Areas west of I-5 have the greatest risk of wildfire. Dense vegetation covers areas of the City including Boeckman Creek Corridor, Xerox Woods, Bernerts-Filberts Orchard, Metro Graham Oaks Nature Park, the area north of Elligsen Road near Fire Station 56, Montgomery Way, and the area east of Wilsonville High School. These areas of the city have a higher risk of fire occurrence.
Severe Storms: Wind and Winter	Vegetation and construction/demolition debris	Delays and heavy traffic on I-5 due to extreme weather can cause traffic problems on many of the City’s main transportation routes. Power outages and blocked or covered roads are hazards that can occur throughout the City.
Transportation Accidents	Construction/demolition debris, hazardous waste, chemical, biological, radiological, and nuclear-contaminated debris	I-5 bisects the City and is a heavily-used transportation route for the region and the risk of motor vehicle accidents is high. Flight paths for Aurora Airport pass directly over the City.
Earthquake	Construction/demolition debris, municipal solids, and contaminated debris	The center of downtown is located in a high earthquake hazard area. Another high earthquake hazard area is located within the Charbonneau District and includes the Charbonneau Village Town Center. Several businesses, schools, and other important community assets are located in high hazard areas.
Volcano	Ash and other vegetation debris	The City will likely avoid direct effects, but may experience ashfall from an eruption from Mt. St. Helens, Mt. Hood, or Mt. Jefferson.

See Chapter 2 of the Clackamas County Debris Management Plan, Chapter 2 of the City EOP, and the Natural Hazard Mitigation Plan for more information.



1.6 Debris Forecasting

1.6.1 Hazus Data Runs

The following debris summary report is based on a 7.1 earthquake on the Portland Hills Fault Zone near Aurora, Oregon and includes the following Census Tracts: 41005022702, 41005022707, 41005022708, 41005022710, 41005022800, and 41005024400.

Debris Type	Tonnage	Cubic Yards ¹	Acreage ^{2, 3}
Brick, Wood, and Others	21,000	84,000	9
Concrete and Steel	33,000	66,000	7
Total	55,000	150,000	15

Notes:

- Cubic yards (CYs) are calculated based on U.S. Army Corps of Engineers (USACE) guidance, which states that for construction and demolition debris 1 ton = 2 CY, and for mixed debris 1 ton = 4 CY.*
- Total acreage of debris is based on USACE guidance, which states that 1 acre of debris 10 feet high converts to 16,133 CY.*
- To provide for roads and buffers, USACE guidance states that acreage must be increased by a factor of 1.66.*

See Federal Emergency Management Agency 329, Debris Estimating Field Guide for additional detail:
http://www.fema.gov/pdf/government/grant/pa/fema_329_debris_estimating.pdf

1.6.2 Estimating a Cascadia Subduction Zone Event

The debris estimate below is the result of the U.S. Army Corps of Engineers (USACE) hurricane debris prediction model (found in Federal Emergency Management Agency [FEMA] 325, Appendix 2 – USACE Hurricane Debris Estimating Model) and represents a Category 3 hurricane. This debris estimate will serve as a proxy for a large-scale event in the County such as a strong earthquake. See Appendix E of the Clackamas County Debris Management Plan for more information on debris estimation and forecasting.

Based on the USACE equation, it is estimated that the City of Wilsonville, with a population of 19,509¹, would produce 342,890 cubic yards or 35 acres of debris.

¹ Based on 2010 U.S. Census information.

2 Coordination of Debris Operations

2.1 General

During any debris-generating event, initial operations will be coordinated through the City EOC. Coordination of debris management operations will be the responsibility of the Operations Section which will coordinate with local responders and resources to ensure an effective response.

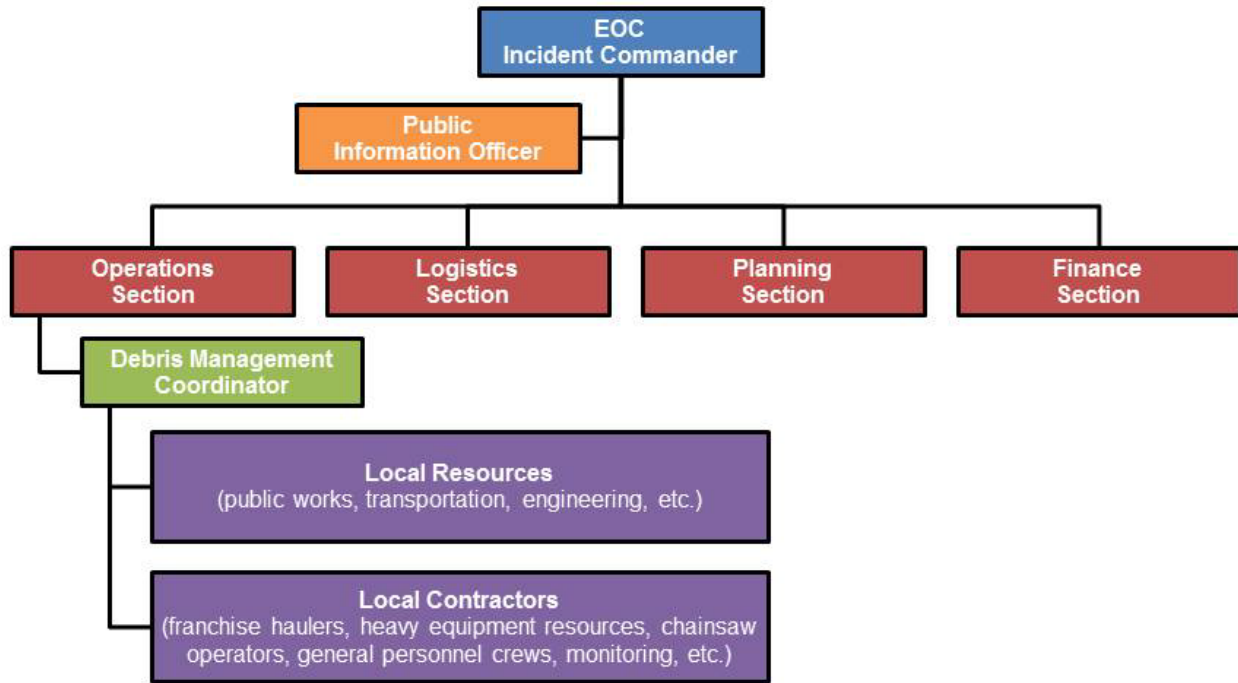
Procedures for activation and operation of the EOC are provided for in in the City Emergency Operations Plan (EOP).

2.2 Debris Operations in the EOC

To support disaster debris operations at the EOC the EOC will assign a Debris Management Coordinator, if not already assigned, who will coordinate and establish priorities for local debris removal, storage, and recycling resources from the EOC. Depending on the size of the incident, the Debris Management Coordinator will coordinate with the County and contractors to provide management of disposal and recycling sites as well as removal of eligible debris from the right-of-way. The Debris Management Coordinator will coordinate closely with damage assessment teams in order to conduct debris estimation activities and to prioritize removal of debris from transportation routes.

See Appendix A for Debris Management Contacts

Figure 2-1 City Debris Management in the EOC



2.3 Debris Management in Action

As with all facets of emergency management, debris management also has four phases, which are discussed in Table 2-1.

Table 2-1 Debris Management in Action		
Phase	Focus	Phase Checklist
Readiness	<i>Ensure the City and its partners are ready and able to respond.</i>	<ul style="list-style-type: none"> <input type="checkbox"/> Review and update this Annex, including pre-identification of potential debris sites. <input type="checkbox"/> Ensure personnel tasked with debris management roles are adequately trained and that plans and procedures are regularly exercised. <input type="checkbox"/> Secure and pre-position equipment to support debris operations in the event that a potential disaster is threatening the area. <input type="checkbox"/> Review and update, as appropriate, lists of qualified contractors, sample contracts, rights of entry, hold harmless agreements, and other contracts necessary to conduct debris operations. <input type="checkbox"/> Review local building codes and revise the codes to expedite debris operations. <input type="checkbox"/> Participate in the identification and planning for Temporary Debris Storage and Reduction (TDSR) sites



**Annex to the Debris Management Plan
2. Coordination of Debris Operations**

Phase	Focus	Phase Checklist
Response Phase (0 – 72 hours)	<i>Emergency debris clearance operations</i>	<ul style="list-style-type: none"> <input type="checkbox"/> Activate the Emergency Operations Center (EOC) and debris management personnel. <input type="checkbox"/> Conduct initial debris operations including: <ul style="list-style-type: none"> ○ Perform initial damage assessments and estimating debris quantities and types. ○ Document areas where debris must be removed. ○ Identify locations of potentially hazardous/contaminated debris that may require state involvement for clean-up. ○ Conduct debris clearance activities based on debris clearance priorities (discussed in subsequent sections in this chapter). ○ Conduct debris removal, if needed, for life-saving measures. ○ Estimate the magnitude of the incident against available resources to determine what additional requests for support should be made. ○ Establish TDSR sites, as needed, and coordinating with the County regarding the establishment of sites. <input type="checkbox"/> Provide initial public messaging regarding safe handling of debris and not blocking public rights-of-way.



**Annex to the Debris Management Plan
2. Coordination of Debris Operations**

Table 2-1 Debris Management in Action		
Phase	Focus	Phase Checklist
Removal Phase (72 hours – 30 days)	<i>Debris removal and disposal strategy</i>	<ul style="list-style-type: none"> <input type="checkbox"/> Conduct a City-wide damage assessment to refine initial debris estimates and assessments. <input type="checkbox"/> Work with the County to ensure adequate numbers of TDSR sites are operational to accept disaster debris. <input type="checkbox"/> Remove debris according to established objectives. <input type="checkbox"/> Terminate emergency time-and-materials debris clearance and removal contracts after 70 hours of actual work or when the price limit is reached, whichever comes first, and implement more standard contracting processes. <input type="checkbox"/> Work with contractors to restore near-normal curbside collection. <input type="checkbox"/> Continue to disseminate coordinated public information through a Public Information Officer (PIO) or Joint Information Center (JIC), to include providing information about the regional collection strategy, including curbside debris pickup dates, public access to TDSR sites, disaster debris safety-related information, and other debris-related public information. <input type="checkbox"/> Maintain documentation of debris clearance, removal, and disposal activities, and provide information to the City and County EOCs. <input type="checkbox"/> Participate in an Applicant’s Briefing with the Federal Emergency Management Agency (FEMA) Public Assistance Coordinator.
Recovery Phase (30+ days)	<i>Disposition of personal property, problem debris, and closure of TDSR sites</i>	<ul style="list-style-type: none"> <input type="checkbox"/> Continue to carry out debris removal and the demolition of dangerous structures. <input type="checkbox"/> Continue to document debris removal and disposal activities and update documentation. <input type="checkbox"/> Contract for disposition of private automobiles, boats, motor homes, etc. <input type="checkbox"/> Resolve issues with difficult debris materials (e.g., private property debris removal, uncertain ownership, contaminated debris, etc.). <input type="checkbox"/> Coordinate with the County to consolidate, close, and restore TDSR sites. <input type="checkbox"/> Coordinate with State and FEMA representatives to ensure continued compliance with eligibility and documentation requirements.

See Chapter 3 of the Clackamas County Debris Management Plan for more information on the actions outlined in this section.



2.4 Coordination with the County

To be developed in the future.



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2. Coordination of Debris Operations**

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3 Roles and Responsibilities

3.1 General

City departments and response partners may have various roles and responsibilities related to debris management throughout an emergency's duration. Typical duties and roles may also vary depending on the incident's size and the severity of impacts, as well as the availability of local and regional resources. This chapter of the Annex discusses some of the roles and responsibilities that particular organizations may be responsible for in order to manage debris removal in the event of a disaster.

The departments and response partners listed should plan to assume the roles and responsibilities within this chapter in order to prepare for and respond to debris-causing incidents and to ensure efficient response and recovery operations. Each jurisdiction should assign staff to develop and maintain their operational disaster debris management plans and support debris management operations during an incident. Staff should be assigned to these roles prior to an incident so that proper training and planning can take place.

3.2 Debris Management Coordinator

Responsibilities of the Debris Management Coordinator include:

- Establishing local work assignments and priorities.
- Reporting on debris removal and disposal progress, and preparing status briefings for the EOC Incident Commander and other local officials.
- Providing input to the Public Information Officer (PIO) on debris removal and disposal activities.
- Coordinating local resources and contractors to support disaster debris management activities.
- Coordinating with the County on issues that affect both the City and County operations.
- Securing all authorizations necessary for debris removal activities.

3.3 City Government

3.3.1 Mayor and City Council

Responsibilities of elected officials may include:



Annex to the Debris Management Plan

3. Roles and Responsibilities

Preparedness

- Establish policy and budget priorities to support the City disaster debris management capabilities.
- Participate in disaster debris management training and exercises, as appropriate.

Response and Recovery

- Immediately declare a State of Emergency to allow access to additional County and State resources.
- Participate in the local policy group, if established, to support coordination of local disaster debris operations.
- Stay informed, through the local emergency management agencies, of the local and regional situation.
- Coordinate any public announcements, statements, or messaging with the PIO.

3.3.2 Emergency Management (Public Works Department)

Responsibilities may include:

Preparedness

- Maintain and coordinate regular review of this Annex as well as the City EOP.
- Work with the Debris Management Coordinator to coordinate and participate in disaster debris management training and exercises, as appropriate.
- Identify a Debris Management Coordinator (if not already identified) under the Operations section.

Response and Recovery

- Immediately activate the EOC and prepare materials for the City Council to declare a State of Emergency according to the EOP. *See the EOP for more information.*

3.3.3 Public Works Department

Responsibilities may include:

Preparedness

- Pre-identify Emergency Transportation Routes.
- Participate in regular reviews and updates of this Annex, the City EOP, and emergency procedures.



Annex to the Debris Management Plan

3. Roles and Responsibilities

- Advocate for debris management to be incorporated in local training and exercises programs.
- Work with the County to pre-identify potential sites for both temporary staging of debris and potential locations for Temporary Debris Storage and Reduction (TDSR) sites in the City.

Response and Recovery

- Coordinate initial damage assessment (IDA) and debris estimation activities, and gather and track debris information.
- Assist in prioritization of debris clearance activities based on pre-identified Emergency Transportation Routes.
- Conduct drive-by assessments of pre-identified critical infrastructure and key resources.
- If Emergency Transportation Routes are impeded, attempt to sufficiently clear the roadway to allow access for emergency vehicles. If debris is beyond capabilities, communicate the need to the EOC.
- Coordinate debris removal in accordance with incident objectives
- Report debris information to the EOC Incident Commander and request assistance, as needed.
- Ensure compliance with all federal, state, and local environmental, historical preservation, and other applicable laws, regulations, and policies.
- Participate in after-action review of debris management operations.
- Maintain documentation of costs.

3.3.4 Police Department

Responsibilities may include:

Preparedness

- Assist in identifying and assessing Emergency Transportation Routes.

Response and Recovery

- Support the Debris Management Coordinator, as necessary.
- Assist in traffic control at loading sites and at entrances to and from debris management sites as necessary.



Annex to the Debris Management Plan

3. Roles and Responsibilities

- Assist in monitoring TDSR sites to ensure compliance with local and state safety and traffic regulations.
- Assist in monitoring illegal dumping activities.

3.3.5 Finance Department

Responsibilities may include:

Preparedness

- Develop and review all debris management contracts, including stand-by contracts and emergency authorizations with pre-identified contractors.
- Participate in reviewing this Annex and the City EOP.

Response and Recovery

- Provide support to the Debris Management Coordinator, as needed.
- Maintain familiarity with FEMA public assistance eligibility requirements and provide quality oversight of local debris operations to ensure compliance and maximize reimbursement.

3.3.6 Legal Department

Responsibilities may include:

Preparedness

- Develop and review all debris management contracts, including stand-by contracts with pre-identified contractors.
- Participate in reviewing this Annex and the City EOP.

Response and Recovery

- Review rights-of-entry and hold harmless agreements.
- Review private property insurance information and other assets to ensure benefits and resources are fully utilized.

3.4 County Emergency Management

Responsibilities may include:

Preparedness

- Maintain and coordinate regular review of the County Debris Management Plan, of which this is an annex to.



Annex to the Debris Management Plan

3. Roles and Responsibilities

- Coordinate and participate in disaster debris management training and exercises, as appropriate.

Response and Recovery

- Immediately activate the EOC and prepare materials for the Board of County Commissioners to declare a State of Emergency according to the EOP.
- Establish a Debris Management Team and identify a Debris Manager (if not already identified) under the Operations Section.
- Coordinate debris operations with regional efforts through the Regional Debris Management Multi-Agency Coordination Group, when established.
- Provide a liaison, assigned by the PIO, to the regional Joint Information Center (JIC), when established.
- Assign public information staff to support the regional JIC, if appropriate.

3.5 Regional and Community Partners

3.5.1 Tualatin Valley Fire & Rescue

Responsibilities may include:

Preparedness

- Assist in IDA and debris estimation activities, as able.
- Assist in the identification of Emergency Transportation Routes.

Response and Recovery

- Provide support to the Debris Management Coordinator, as needed.
- Respond to requests to investigate and manage hazardous materials incidents.
- Respond to fire at debris management sites.
- Approve and supervise debris management burn sites in accordance with appropriate state and local requirements to ensure safe burning.
- Work with the EOC PIO to issue bans on open burning based upon assessment of local conditions.
- Conduct drive-by assessments of pre-identified critical infrastructure and key resources.



3.5.2 Local Contractors

Responsibilities may include:

Preparedness

- Work with the City to develop debris management contracts to support debris management in the event of a disaster.

Response and Recovery

- Remove debris from public/private property in accordance with locally developed priorities and approved scopes of work in contracts.
- Ensure that all debris is transported to appropriate TDSR sites or to a regulated waste facility.
- Operate TDSR sites (in conjunction with the designated local agency) in accordance with generally accepted standards and practices and in full compliance with applicable environmental regulations.

3.5.3 Local Utilities

Responsibilities may include:

Preparedness

- Work with local agencies to identify critical infrastructure and key resources, and make plans to bring utilities back to those facilities first, if possible.
- Ensure that EOPs and standard operating procedures are in place to support restoration of service after an event.

Response and Recovery

- Mark underground utilities, when necessary.
- If Emergency Transportation Routes are impeded, assist local agencies in clearing roadways to allow access for emergency vehicles.
- Work to return utility services to critical infrastructure and key resources as quickly as possible.

3.6 Residents

Responsibilities may include:

Preparedness

- Participate in local preparedness groups, such as Citizen Corps, as able.



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3. Roles and Responsibilities

- Establish and practice home emergency plans.

Response and Recovery

- Assist with debris removal efforts by removing debris from the right-of-way, as able and as trained in the equipment being used.
- Follow guidance provided for separation, drop-off, and/or collection of debris.
- Assist neighbors, as able.
- Report dangerous debris to local law enforcement.



Annex to the Debris Management Plan
3. Roles and Responsibilities

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4 Plan Implementation and Maintenance

4.1 General

In order to maintain a robust capability to respond to a large-scale debris-generating event, it is important that local responders and personnel tasked with debris management responsibilities are adequately trained. Ultimately, it is the City's responsibility to ensure adequate emergency response to debris-generating events within the City. The City Public Works Department will encourage staff to participate in trainings and exercises to test this Annex, activation of the Debris Management Coordinator, and implementation of mutual aid. The City will encourage City departments as well as private industry with a role in debris management to participate in joint exercises.

4.2 Training

Training provides the foundation for successful debris management response and recovery. It is important that the City regularly test debris management capabilities through discussion- and operations-based training. A comprehensive debris management training program should include local debris management training and FEMA training courses that support debris management operations. Refer to the EOP for more information on training opportunities that support general emergency response operations.

FEMA online and classroom training that support debris management operations include:

- IS-632.a: [Introduction to Debris Operations in FEMA's Public Assistance Program](#)
- IS-634: [Introduction to the Public Assistance Program](#)
- E202: [Debris Management Planning for State, Tribal and Local Officials](#)

Training plans should be periodically reviewed and altered based on after-action and corrective-action reports, as well as capabilities assessments that address identified shortfalls.

4.3 Exercises

The City will test its ability to respond to a large-scale debris-generating event through discussion-based (e.g., workshops, tabletop exercises) and operations-based (e.g., drills, functional, and full-scale exercises) exercises on a regular basis as funding and resources allow.



4.4 Review and Update Process

At a minimum, this Annex will be reviewed every five years in conjunction with the City EOP review. This review will be coordinated by City Public Works Department and include:

- Updating authorities and agreements.
- Reviewing the status of resources.
- Evaluating the procedures outlined in the Annex to ensure their continued viability.
- Updating appendices as appropriate.

Recommended changes should be forwarded to:

Delora Kerber, Public Works Director
City of Wilsonville
kerber@ci.wilsonville.or.us

Attachment A: City Debris Management Contacts



**Annex to the Debris Management Plan
A. City Debris Management Contacts**

A-1 Debris Management Task Force

Team Position	Name and Title	Department	Contact Information <i>(office, home, cell, pager, email)</i>
Debris Management Coordinator (including contractor oversight)	Kerry Rappold and/or Kristin Retherford	Community Development	O=000-000-0000 x0000 H=000-000-0000 C=000-000-0000 email
Geographic Information Systems	Kurt Budlong	Public Works Department	O=503-570-1555

A-2 Other Key Debris Contacts

Name and Title	Company Name	Contact Information <i>(office, home, cell, pager, email)</i>	Notes <i>(e.g., hours of operation, capabilities, level of training, resources available, existing contract?)</i>
Dave Erickson	DaNeal Construction	O=503-793-0804 Wilsonville	
Brian Clopton	Clopton Excavating	C=503-682-0420 O=503-209-1163 11277 Clay St, Sherwood	
Jaime Hartley	Water Truck Services	C=503-964-2753 O=503-682-2723 Wilsonville	
Rob Woods	CR Woods	C=503-351-0574 Sherwood	
Mike Keller	Save Sorb	O=503-781-6686 Wilsonville	
	Wilsonville Concrete	O=503-682-2525 Wilsonville	

Attachment B: City Temporary Debris Storage and Reduction Sites



B. City Temporary Debris Storage and Reduction Sites

Site Requirements

The U.S. Army Corps of Engineers uses the following Debris Storage Site Requirements.

Additional information can be found here:

<http://www.fema.gov/pdf/government/grant/pa/demagde.pdf>.

Using an estimated debris pile stack height of 10 feet and 60% usage of land area to provide for roads, safety buffers, burn pits and household hazardous waste areas:

<p>1 acre (ac) = 4,840 square yards (sy) 10 foot stack height = 3.33 yards (y) Total volume per acre = 4,840 sy/ac x 3.33 y = 16, 117 cy/ac</p>
--

From the example above, the acreage required for debris sites is:

<p>(Estimated Debris Quantity*)/16,117 cy/ac = # acres (required for debris storage only, no buffers, etc.)</p>
--

To provide for roads and buffers, acreage must be increased by a factor of 1.66.

<p>(# acres) x 1.66 = # acres including buffers, etc.</p>
--

If you assume a 100-acre storage site can be cycled every 45 to 60 days or one time during the recovery period then **(# acres including buffers, etc.)/2 = # acres** (divide by 100 and that is how many 100 acre sites would be required).

The number of sites varies with:

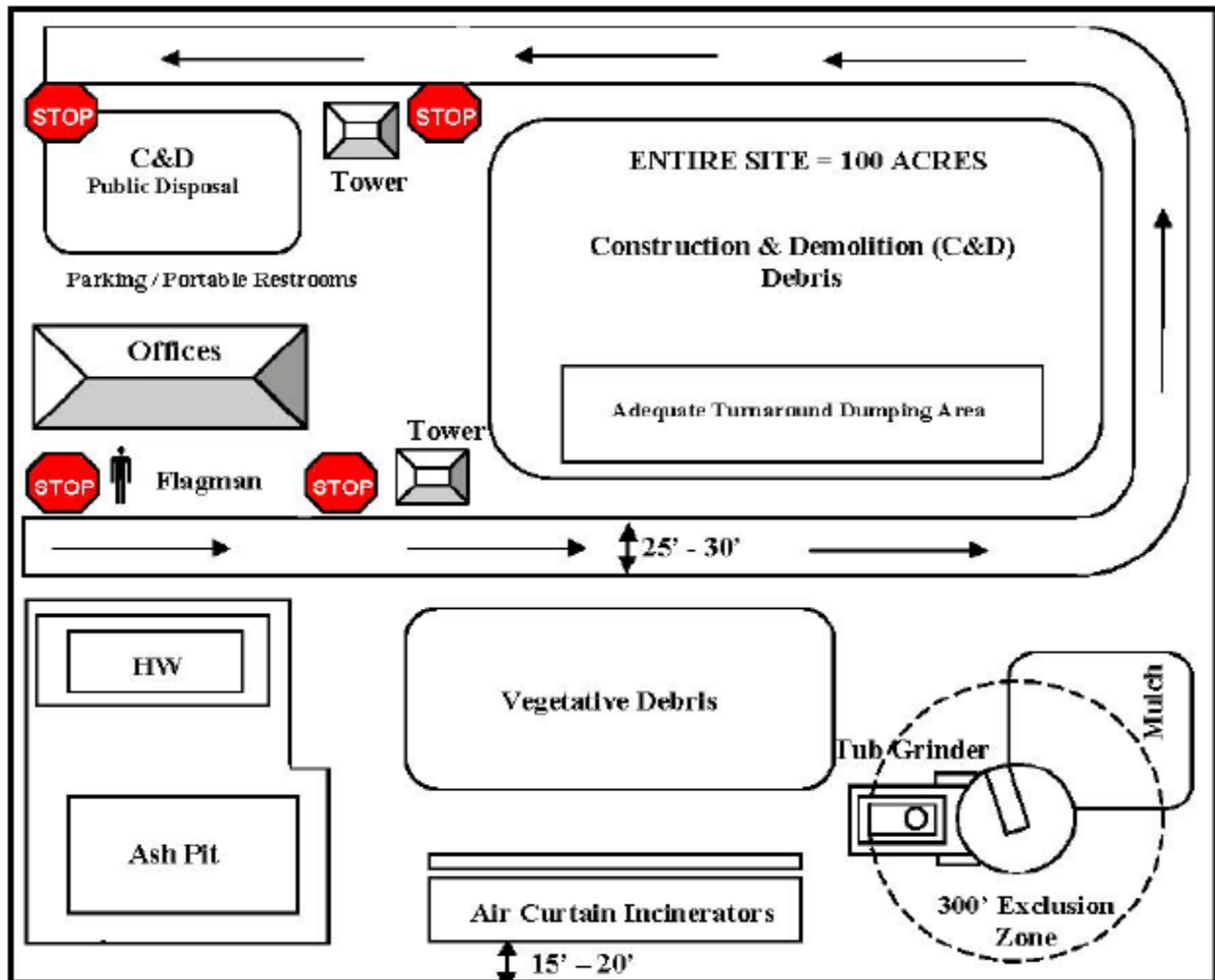
- Size.
- Distance from source.
- Speed of reduction (mixed debris is slower than clean woody debris).

The USACE commonly removes approximately 70% of the total volume generated with local governments, volunteer groups, and private individuals removing the remainder.

<p>If 7 million CY were estimated, the USACE would estimate removing approximately 4.9 million CY of debris.</p>

Sample Debris Site Layout

The following is an example of a TDSR sites layout best practice. How a site is laid out will depend partially on the size, shape and general terrain of the acreage chosen; however, all elements of the following site and general flow should be considered.



Source: <http://www.fema.gov/pdf/government/grant/pa/demagde.pdf>



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B. City Temporary Debris Storage and Reduction Sites

Site Name	Useable Acres	Latitude	Longitude	Tax Lot(s)	Total Acres	Address	Ownership	Special considerations (e.g. environmental issues, proximity to sensitive facilities)	Level of Site Preparation Needed (e.g., minor, extensive)
Memorial Park	22	122d 34m 34s W - 122d 45m 16s W	45d 17m 50s N- 45 d 18m 4s N	31W2400691	94.5	8200 SW Wilsonville Road	City of Wilsonville		
Transit Station	4	122d 46m 41s W	45D 18M 41S n	31w14b00700	10	9699 SW Barbur Street	City of Wilsonville	Near wetland	
Boones Ferry Park	4	122d 46m 29s	45d 17m 39s	31W23DB01100 31W23CA00100 31W23CA00700	7.8	31240 SW Tauchman St	City of Wilsonville	Near the Willamette River	
City's Total Useable Acres	30								