



DEMOLITION - PRE-PLANNING STEPS

A site-specific **written** demolition plan is a critical (often missing) step to protect the health and safety of the workers and general public at demolition sites. The demolition plan should be prepared by the demolition contractor and submitted to the owner or owner's agent for review prior to the initiation of work. The demolition plan should include the methods used to bring down the structure, the equipment/manpower allotted and the protective work safety measures which will be utilized. The plan must be interlinked with a phasing and project completion schedule.

Key elements of a demolition plan include:

- ✓ **Engineering Survey:** OSHA Standard 29 CFR 1926.850 requires a competent person to determine the condition of the framing, floors and walls to prevent the premature collapse of any portion of a structure. This structural inspection must also identify interior walls and floors which must be shored or braced and the extent of below grade demolition. The proximity of neighboring structures and existing damages as well as items to remain must be identified and photographed. State/County permit(s) and erosion/sediment control requirements must also be addressed.
- ✓ **Hazardous Material(s):** Inspections for asbestos, hazardous chemicals, gases, explosives, flammable materials, including PCB, lead, and mercury-containing items must be completed. Piping, tanks, and other equipment must be inspected, tested, drained and contents properly disposed. Removal/remediation of hazardous materials must be completed prior to demolition. Further, a vector control program should be in place and instituted at least a week prior to minimize the relocation of vermin and spread of potential disease.
- ✓ **Utilities:** Shut off and cap all electric, gas, water, sewer and other service lines. Notify appropriate utility companies. Temporarily relocate and protect any essential power (overhead or below grade), water, or other utilities which serve adjacent structures.
- ✓ **Safety:** All stairs, passageways and ladders must be inspected and maintained. Properly illuminate all stairways. OSHA mandated training and equipment must be provided for fall protection as well as personal protective equipment use. Procedures for medical, first aid, police and fire protection must be specified.
- ✓ **Security:** Safeguards to isolate the work site such as warning signs, barricades, temporary fences and warning lights must be identified and maintained.
- ✓ **Demolition Methods:** Work must proceed from the top of the structure and proceed downward. Specific attention should be paid to areas requiring hand demolition, and any limitations where mechanical equipment may be utilized. The plan should also include safe and proper management of waste and recyclable materials (i.e. staging, accumulation, loading and passage in the site).

AET's Proven Recommendations for Project Demolition include:

1. **Develop project work plan and specifications for competitive bidding purposes:** The contractors bid submittals must attest to similar project experience, and meet insurance/bonding requirements. A site-specific scope of work must be detailed and general site demolition procedures/methodologies addressed in the bid documents along with the final site description for completion of work..
2. **Professional engineer (PE):** A PE must act as the competent person during the engineering survey. A PE inspection of the work site prior to the initiation of work and throughout the course of demolition is critical.
3. **Project Oversight:** Periodic jobsite inspection(s) by an independent consultant (**such as AET**) must be performed to verify contractor's performance with project specifications, engineering assessments, and applicable OSHA health and safety standards. As a general rule, demolition contractors excel at their trade. However, third party oversight and consulting provides for schedule conformation of contractor performance, documentation of environmental concerns/corrective action and verification of completion.

About our organization: AET has 29 years of contracting/consulting experience assisting our clients in facility planning, renovations, demolition, redevelopment and site restoration. AET routinely prepares demolition project work plans/specifications and performs project oversight to minimize the cost and contingent liabilities associated with demolition projects. Make AET your first point of contact for your consulting/contracting needs. Call us now at 610-891-0114 or 1-800-9696-AET.

Need more information regarding your demolition projects, Email Alan Sutherland, CIH, CHMM at a.sutherland@aetinc.biz. We provide nationwide services; phone consultations are free. Check out the full range of environmental contracting/consulting services we provide at our website at www.aetinc.biz.