

***F***  
***Special  
Construction  
&  
Demolition***

This Element includes special construction systems and demolition. Existing facilities have been constructed over a period of many years. Some buildings and structures may require hazardous materials remediation.

By nature, as a research institute, there are a number of special construction facilities that will take place from project to project. This Element provides insight into some of the special needs, but the Design Professional will need to engage Caltech representatives to properly determine the needs of each individual project.

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# F10 SPECIAL CONSTRUC- TION

## F1010 Pre-Engineered Structures

**1. Portable Cleanrooms:** Coordinate requirements with Caltech Project Manager.

- a.** Portable Cleanroom enclosures must be equipped with a sprinkler head underneath the roof of the enclosure.

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## F20 FACILITY REMEDIA- TION

### F2010 Hazardous Materials Remediation

**1. Asbestos Abatement:** Demolition, renovation, or remodeling projects are likely to involve some abatement. Prior to construction, Caltech will provide current information on identified hazardous materials on site. The Design Professional and/or contractor may encounter questionable materials which should be reported to Caltech Project Manager for further direction.

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## F30 DEMOLITION

**Completely remove foundations and other sub-grade construction associated with a structure indicated to be demolished.**

*Protect existing adjacent buildings, facilities, site improvements, appurtenances, and landscaping indicated to remain.*

**maintain continuity of services/systems to other areas of the Campus.**

### F3010.10 Structure Demolition:

#### 1. General:

- a. Completely remove foundations and other sub-grade construction associated with a structure indicated to be demolished.
- b. Controlled demolition by mechanical means is the preferred method. Obtain written permission from Caltech and authorities having jurisdiction before bringing explosives to, or using explosives on, Project site. Document conditions of adjacent structures when collateral damage is possible. Seismographic monitoring may be required on adjacent structures.

### F3030 Selective Demolition:

#### 1. General:

- a. Comply with the City of Pasadena Municipal Code, Chapter 8.62, Ordinance No. 6917 "Construction & Recycling Ordinance." Complete and submit permit application, fees, reports, and other documentation as required by local authorities. See <http://ww2.cityofpasadena.net/permitcenter/plansubreq/cndord.asp>.
- b. Conduct demolition operations in a manner that avoids interference with Caltech's operations of the occupied project building as well as the adjacent occupied buildings.
- c. Coordinate with Caltech Project Manager and Building Administrator to mitigate noise, dust, fumes, and vibration concerns.
- d. Provide temporary protective barriers, such as fences, railings, canopies, and covered passageways to ensure safe passage of people around demolition area.
- e. Protect existing adjacent buildings, facilities, site improvements, appurtenances, and landscaping indicated to remain.
- f. Maintain entry and exit access from adjacent buildings.
- g. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Caltech and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
- h. Utilize suitable methods to limit spread of dust, dirt and noise. Comply with governing environmental-protection regulations.
- i. On-site storage or sale of removed items or materials is not permitted.
- j. Maintain existing utility services indicated to remain and protect them against damage during demolition operations. Provide at least 72 hour notice to Caltech Design and Construction Facilities Department if shutdown of service is required.
- k. Provide temporary services/systems that bypass utility services/systems that are to be demolished or relocated in order to maintain continuity of services/systems to other areas of the Campus. Do not interrupt existing utilities serving occupied or operating facilities unless authorized in writing by Caltech.
- l. Transport demolition waste materials from Project site in a manner that will

prevent spillage on adjacent surfaces and areas, and legally dispose of them in an EPA-approved landfill acceptable to authorities having jurisdiction.

*END OF  
ELEMENT F*

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