

Group U

Group U Map

Building 4062

Includes Building 4762, Substation

Building 4065

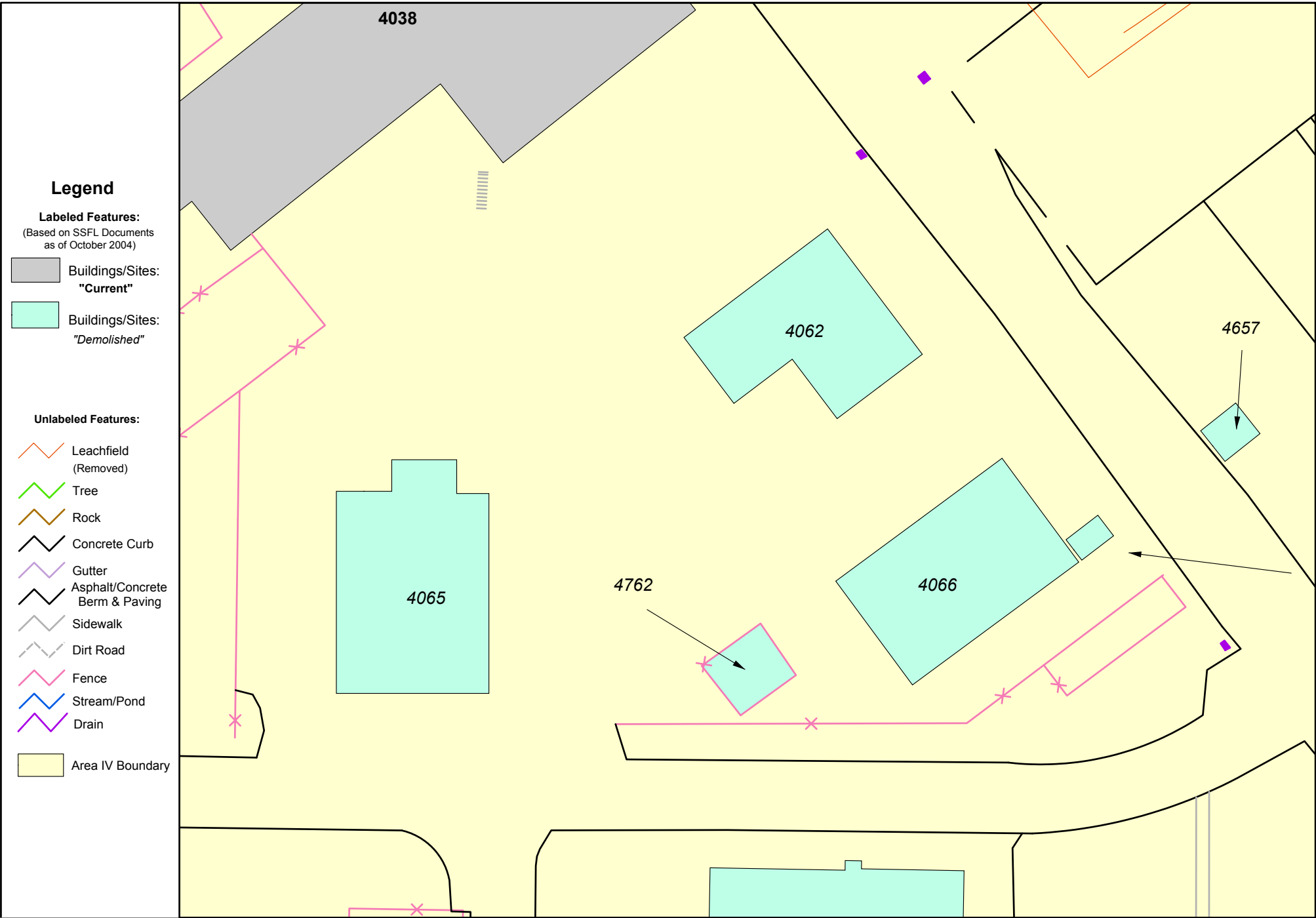
Includes Building 4762, Substation

Building 4066

Includes Building 4762, Substation

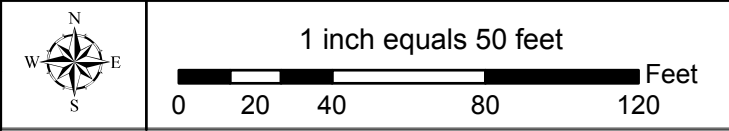
Includes Building 4806, Time Clock

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DRAWN BY: **Sapere**
 CONSULTING INC

DATE: May 2005



Site Summary Group U
 AREA IV
 Santa Susana Field Laboratory, CA

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Site Summary – Building 4062

Site Identification:

Building 4062
Energy Technology Engineering Center (ETEC) Instrumentation Operations
Includes Building 4762, Substation

Operational Use/History:

- Constructed in 1963.
- Building 4062 operated as a non-nuclear support building for the ETEC program, serving as a storage facility for instrument calibration.
- Demolished in 1999.

Site Description:

- Building 4062 was a metal building consisting of a low bay and a high bay.
 - The support structure for the low bay was steel beams with corrugated steel siding and roof with concrete slab floor and concrete foundation.
 - The high bay was located over a concrete basement with a steel beam and plate floor at ground level. The support structure was steel beams with corrugated steel siding and roof. The building contained several internal partition walls with wood framing and drywall surfaces.¹
- Serviced by Substation 4762.

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Building 4062.²

Radiological Surveys:

- Radiological surveys specific to Building 4062 have not been conducted.

Status:

- Building 4062 was demolished in 1999.

References:

- 1- Boeing Document, EID-04366, "Removal of DOE Buildings, Demo Pak A," May 18, 1999.
- 2- Review of Radiation Safety Records Management System, 2003.
- 3- Historical Site Photographs from Boeing Database.
- 4- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.

Photograph – Building 4062



Site Summary – Building 4065

Site Identification:

Building 4065
Systems for Nuclear Auxiliary Power (SNAP) Thermoelectric Converter Test
Building
Liquid Metal Engineering Center (LMEC) Chemical Laboratory
Chemistry & Metallurgical Laboratory
Includes Building 4762, Substation

Operational Use/History:

- Constructed in 1963.
- Building 4065 initially operated as a vacuum test facility. After 1973, it served as a non-nuclear chemical laboratory that performed sodium research and was equipped with a scanning electron microscope.
- Demolished in 1999.¹

Site Description:

- Building 4065 was a 6,300-square-foot single-story building with galvanized steel walls and roof anchored to a concrete slab floor. This building had various types of internal walls and partitions.²

Relevant Site Information:

- Use Authorization Series 39, original issue date May 14, 1971, permitted the examination of irradiated SNAP 8 Development Reactor (S8DR) cladding and irradiated or unirradiated S8DR fuel and use of an Electron Microprobe for one and two years respectively. The tests performed were related to the SNAP program. It is not likely that there was release to the environment.³
- Use Authorization 61, issue date December 12, 1972, permitted 50 gm of uranium, $U_{ZrH_{1.67}}$, in sealed containers for use in fuel friction tests for one year. There is no evidence of the authorization being renewed. It is likely that the fuel friction test was related to the SNAP program. It is not likely that there was release to the environment.⁴
- Use Authorization Series 74, original issue date March 20, 1974, permitted the use of the Norelco XRG-5000 analytical x-ray generator. This piece of equipment emits radiation at negligible levels.⁵
- Use Authorization Series 75, original issue date March 20, 1975, permitted the possession and use of tritiated titanium foils as gas chromatography detectors. The quantity ranged from 77.2 μCi to 180.0 μCi . This Use Authorization was renewed until 1996.⁶

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- Use Authorization 164A, original issue date January 3, 1995, permitted the possession and use of a Gas Chromatograph probe containing Ni-63 source. It is not likely that there was release to the environment.⁷
- An Authorization 75v, original issue date August 29, 1996, permitted possession only of the Norelco XRG 5000 to W.S. DeBear.⁸
- On June 26, 1974, two outside contractors were exposed to radiation from an X-ray machine during routine maintenance. No environmental impact was expected from this incident (A0311).⁹
- Building 4065 did not require radiological controls during demolition.¹

Radiological Surveys:

- Radiological surveys specific to Building 4065 have not been conducted.

Status:

- Building 4065 was demolished in 1999.

References:

- 1- Boeing Document, EID-04366, "Removal of DOE Buildings, Demo Pak A," May 18, 1999.
- 2- DOE Document, NEPA Document Number ET-EM-99-03, "Categorical Exclusion under DOE NEPA Regulations for Dismantling, Removal, and Site Restoration of Demo Package A," May 18, 1999.
- 3- NA Rockwell Document, Use Authorization 39, "Operation of Electron Microprobe," L. Cooper, May 14, 1971.
- 4- NA Rockwell Document, Use Authorization 61, "Use of Normal U₂zrH_{1.67} Fuel," P.H. Horton, December 14, 1972.
- 5- Rockwell International Document, Use Authorization 74, "Use of X-ray Generator," D.E. Goggin, March 20, 1974.
- 6- Rockwell International Document, Use Authorization Series 75, 33-105-Auth 75, "Use of Tritiated Titanium Foils as Gas Chromatography Detectors," March 20, 1975.
- 7- Rockwell International Document, Use Authorization 164A, "Possession and use of Gas Chromatograph Probe Containing Ni-63 source," January 3, 1995.
- 8- Boeing Document, Use Authorization 75V, "Possession Only of X-ray Diffraction Equipment," W.S. DeBear, August 29, 1996.
- 9- Rockwell International, Internal Letter, "Exposure Measurements with Analytical X-Ray Machine," R.J. Tuttle to Isotopes Committee, November 10, 1980.
- 10- Historical Site Photographs from Boeing Database.
- 11- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.

Photograph – Building 4065



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Site Summary – Building 4066

Site Identification:

Building 4066
Instrumentation Repair and Calibration Building
Instrument Lab
Includes Building 4762, Substation
Includes Building 4806, Time Clock

Operational Use/History:

- Constructed in 1963.
- Building 4066 was used for calibrating and testing non-radiological equipment.¹
- Demolished in 1999.

Site Description:

- The LMEC Chemistry Lab was 4,800 square feet in total, including 3,524 square feet of laboratory space.²
- The frame, siding and roof were made of steel, and the floors and foundation were made of concrete. The building contained numerous internal partition walls with wood framing and drywall surfaces.³
- Serviced by Substation 4762.
- Serviced by Time Clock 4806.

Relevant Site Information:

- An incident occurred in October 1966, during which an in-line vacuum switch was removed from the tiltpour pumping system and hand carried by Atomic International (AI) personnel to the building. When the instrumentation technician opened the switch to calibrate it, a fine black powder (presumably U_3O_8) sifted out and onto his clothing and workbench. The area surrounding the workbench was subsequently decontaminated (A0599).

Radiological Surveys:

- Radiological surveys specific to Building 4066 have not been conducted.

Status:

- Building 4066 was demolished in 1999.

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References:

- 1- Personnel Interview, Randy Ingersoll, September 15, 2003.
- 2- ERDA Document, LR-03026, Part 1, "Site Development Plan: 1977-1981," June 1975.
- 3- Boeing Document, EID-04366, "Removal of DOE Buildings, Demo Pak A," May 18, 1999.
- 4- Historical Site Photographs from Boeing Database.
- 5- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.
- 6- Review of Radiation Safety Records Management System, 2003.

Photograph – Site 4066



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