Group N

Group N Map

Building 4048

Building 4049

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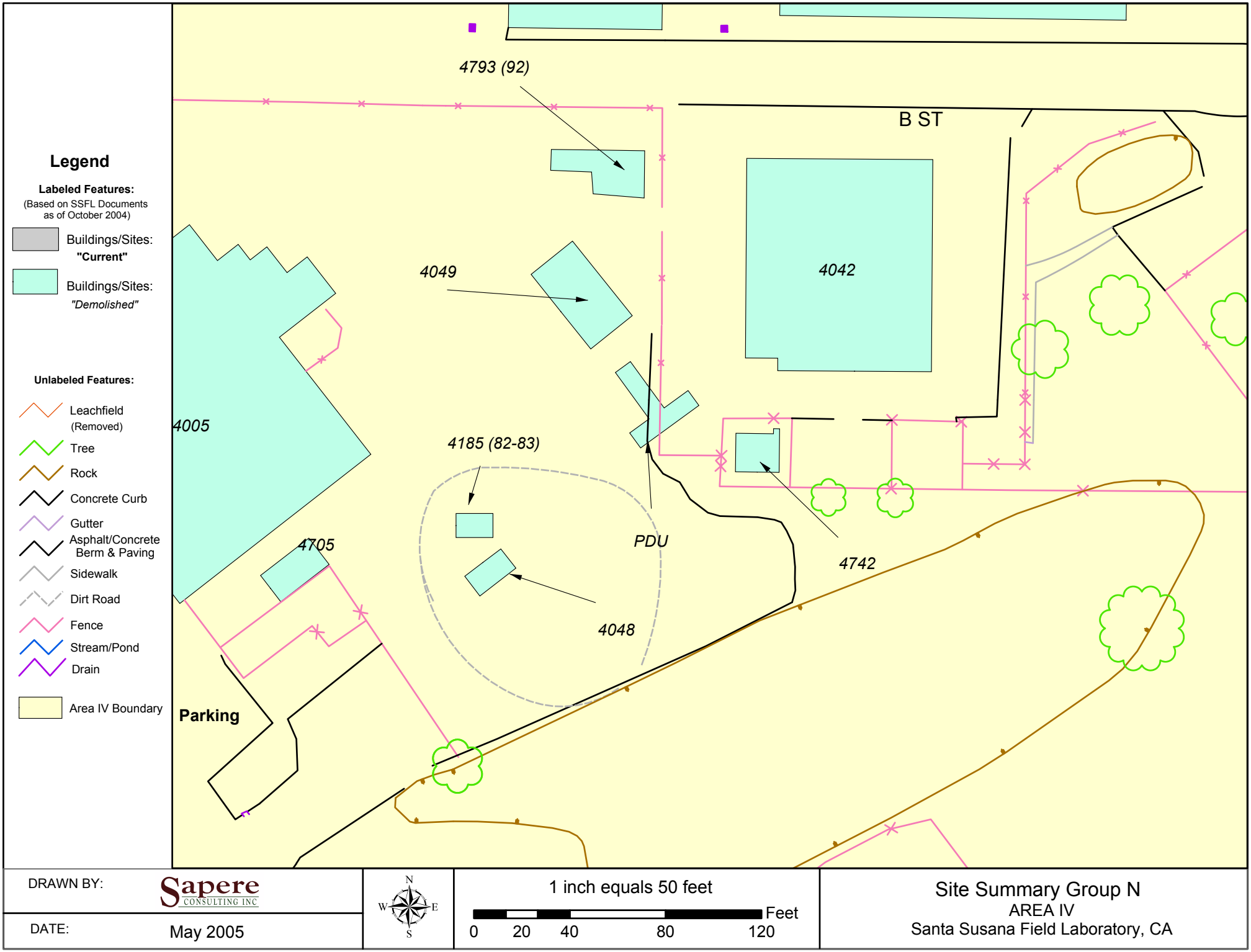
Legend
Labeled Features:
(Based on SSFL Documents as of October 2004)
Buildings/Sites: "Current"
Buildings/Sites: "Demolished"
Unlabeled Features:
Leachfield (Removed)
Tree
Rock
Concrete Curb
Gutter
Asphalt/Concrete Berm & Paving
Sidewalk
Dirt Road
Fence
Stream/Pond
Drain
Area IV Boundary
4793 (92)
B ST
4042
4049
4005
4185 (82-83)
PDU
4705
4742
4048
Parking
DRAWN BY:
Sapere CONSULTING INC
DATE:
May 2005
N
W
E
S
1 inch equals 50 feet
0 20 40 80 120
Feet
Site Summary Group N
AREA IV
Santa Susana Field Laboratory, CA

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Site Summary – Building 4048

Site Identification:

Building 4048
Plant Development Unit (PDU) Instrumentation

Operational Use/History:

- Constructed in approximately 1978.[1]
- Building 4048 served the instrumentation building for the PDU facility.
- Demolished in the middle 1990s.[1]

Site Description:

- Building 4048 was a small structure located southeast of Building 4005.[1]

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Building 4048.[2]

Radiological Surveys:

- Radiological surveys specific to Building 4048 have not been conducted.

Status:

- Building 4048 was demolished in the middle 1990s.[1]

References:

1- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.
2- Review of Radiation Safety Records Management System, 2003.

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Site Summary – Building 4049

Site Identification:

Building 4049
Organic Moderated Reactor (OMR) Piqua Prototype Experiment
Hydraulic Test Building
Liquid Metal Fast Breeder Reactor (LMFBR) Test
Process Development Unit (PDU) Control Room

Operational Use/History:

- Constructed in 1959.
- Building 4049 was used as a control center in the 1950s and 1960s to support the Systems for Nuclear Auxiliary Power (SNAP) Program.[1]
- Beginning in 1960, Building 4049 was used as a hydraulic test facility control center. The outside test stand was used for tests with terphenyl organics and finned sintered-aluminum-product cladding materials, sodium-water reaction tests and a variety of sodium and NaK hydraulic tests.[1]
- From 1968 to 1977, Building 4049 was used as a control center for Piqua Test Loops.
- In 1977, Building 4049 was designated as a control and test center for the PDU coal gasification process.[1]
- By 1988, Building 4049 was secured and inactive.[1]
- Demolished in 1999.[2]

Site Description:

- Building 4049 was an 800-square-foot structure with concrete walls, a concrete slab floor and a concrete foundation. The roof was tar and gravel and supported by steel trusses.[2]

Relevant Site Information:

- Several incidents occurred in Building 4049 which could have resulted in a release to the environment.
    - On March 31, 1960, a pipe containing High Boiler Residue (HBR) was opened, with HBR spilling onto someone's shoes and pant legs. Activated corrosion product (ACP) contamination levels were recorded at 500 dpm/100cm^2 (A0425).
    - An incident occurred on April 1, 1960, during which an employee came in contact with a pipe containing a residue of HBR. It was not considered necessary to measure ACP contamination levels (A0479).

Radiological Surveys:

- Building 4049 was included as part of the 1988 DOE SSFL Site Survey to determine whether any residual activity remained as a result of the SNAP program.[3] Building 4049 was located within the fence-line boundary of Building 4005, which was known to be contaminated in certain locations.
- The radiological survey of Building 4049 concluded: [1]
    - The inside ambient exposure rate was 9.3 +/- 1.02 µR/hr (gross). This is much less than the average local outside background of 15.3 µR/hr (gross). Therefore the acceptable gamma exposure limit of 5 µR/hr (net) is met.
    - Maximum total alpha contamination is 17.5 dpm/100 cm^2
    - Total alpha contamination limit is 5,000 dpm/100 cm^2
    - Maximum total beta contamination is 1080 dpm/100 cm^2
    - Total beta contamination limit is 5,000 dpm/100 cm^2
    - Maximum removable alpha contamination is 1.7 dpm/100 cm^2
    - Removable alpha contamination limit is 1,000 dpm/100 cm^2
    - Maximum removable beta contamination is 7.1 dpm/100 cm^2
    - Removable beta contamination limit is 1,000 dpm/100 cm^2
- Based on the results the Building 4049 was judged to be uncontaminated.[1]

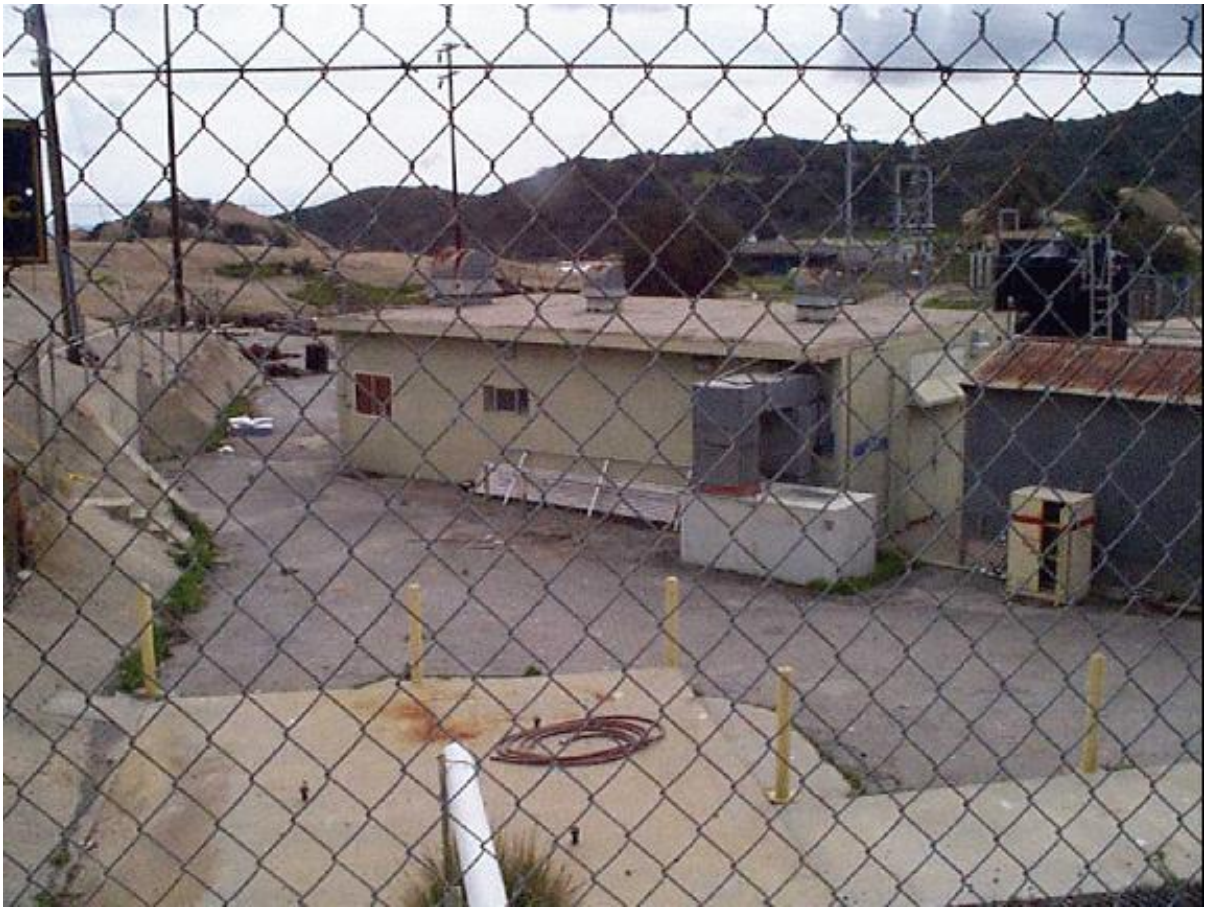
Status:

- Building 4049 was demolished in 1999.

References:

1- ETEC Document, GEN-ZR-0013, “Radiological Survey of Buildings T049, T042, T027, T032, and T025,” August 26, 1988.
2- Boeing Document EID-04366, “Removal of DOE Buildings, Demo Pak A,” May 18, 1999, pg. 5.
3- Rockwell International Report, 154SRR000001, “Radiological Survey Plan for SSFL,” September 25, 1985.
4- Historical Site Photographs from Boeing Database.
5- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.

Photograph – Building 4049



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