Group Z

Group Z Map

Building 4353

Includes Site 4853, Concrete Pad

Parking Lot 4553

Building 4854

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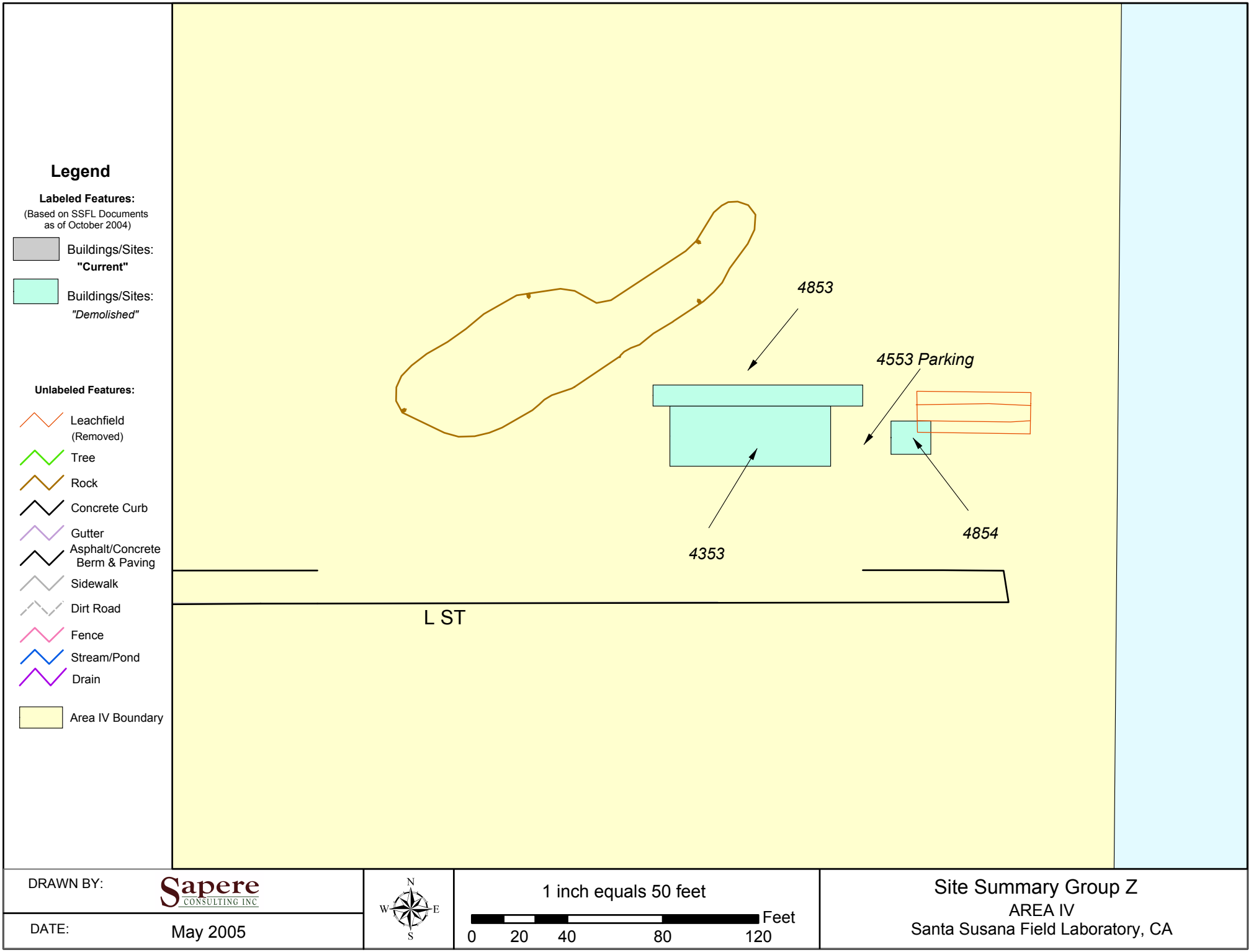
Legend
Labeled Features:
(Based on SSFL Documents as of October 2004)
Buildings/Sites: "Current"
Buildings/Sites: "Demolished"
Unlabeled Features:
Leachfield (Removed)
Tree
Rock
Concrete Curb
Gutter
Asphalt/Concrete Berm & Paving
Sidewalk
Dirt Road
Fence
Stream/Pond
Drain
Area IV Boundary
4853
4553 Parking
4353
4854
L ST
DRAWN BY:
Sapere CONSULTING INC
DATE:
May 2005
N
W
E
S
1 inch equals 50 feet
Feet
0 20 40 80 120
Site Summary Group Z
AREA IV
Santa Susana Field Laboratory, CA

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Site Summary – Building 4353

Site Identification:

Building 4353
Organics Reactor Development Building
Research and Development (R&D) Laboratory Building
General Storage
Includes Site 4853, Concrete Pad

Operational Use/History:

- Building 4353 was constructed in 1956 as an R&D Laboratory for the Organic Moderate Reactor Program.[1]
- The primary usage has been general storage.[2,3]
- The steel portion of the structure was removed in the late 1970s.[1]
- The concrete pad was removed in 2001 during septic tank removal.[1]

Site Description:

- Building 4353 is 2,041 square feet and was constructed of galvanized steel walls and roof that were anchored to a concrete slab floor.[2]
- The building was connected to a septic tank measuring approximately 60 x 54 x 96 inches with a capacity of 1,500 gallons. There was an associated 200-foot leachfield located 50 feet directly east of the northeast corner of the building. A survey concluded these are free of radiological contaminants.[3]

Relevant Site Information:

- On July 29, 1960, while inspecting a hissing noise from the Impurification Removal Loop, an employee was exposed to coolant from which over 90 percent of the radioactivity had been removed. No contamination was detected at the scene (A0375).
- There are no Use Authorizations associated with Building 4353.[4]

Radiological Surveys:

- A radiological survey of the surrounding grounds was conducted in 1959. There is no evidence suggesting an incident was causal for this survey. The release levels from this survey range from 32.0 to 527.5 dpm/cm^2, well below the 1,000 dpm/cm^2 limit.[5]
- During the 1996 Area IV Radiological Characterization Survey, soil samples were taken at one location in the vicinity of Building 4353. None of the measurements were distinguishable from background and all the measurements were below the acceptable concentration levels established by Boeing and presented in document N001SRR140131.[6]

- A radiological survey of the septic tank and associated pipes and leach field was conducted in 2001 during the removal process. With two exceptions, the results were below minimum detectable activity (MDA) for both removable alpha and beta (alpha range 9-11 dpm/cm^2, beta 18-20 dpm/cm^2). One sample on the outside of the tank registered a level of beta 20 dpm/cm^2, the MDA for the sample. The second exception was the clay field pipes and distribution box. These samples also registered an MDA result of 11dpm/cm^2 alpha, 18dpm/cm^2 beta. Direct frisk tests were performed on all samples as well with a consistent no detectable activity (NDA) result.[7]

Status:

- Demolished in the late 1970s.

References:

1- Personnel Interview, Dan Trippeda, September 8, 2003.
2- ERDA Document, LR-03026, Part 1, "Site Development Plan: 1977-1981," June 1975.
3- Boeing Data Package, no document number, "Septic and Leachfield Survey Data 011, 353, and 373."
4- Review of Radiation Safety Records Management System, 2003.
5- Atomics International Internal Document, no document number, "Special Survey of Building 353 Area."
6- Rocketdyne Report, A4CM-ZR-0011, "Area IV Radiological Characterization Survey Final Report," August 15, 1996.
7- Boeing Internal Document, no document number, "Radiation Survey, Building 353."

Site Summary – Parking Lot 4553

Site Identification:

Site 4553
Parking Lot Near Building 4353

Operational Use/History:

- Constructed prior to 1962.[1]
- Site 4553 served as a parking lot for personnel working in Building 4353 and the surrounding areas.
- No longer in use.

Site Description:

- Site 4553 was located near Building 4353, in the southeast corner of Area IV.

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Site 4553.[2]

Radiological Surveys:

- Radiological surveys specific to Site 4553 have not been conducted.
- This area was covered as part of the 1994-1995 Area IV Radiological Characterization Survey.[3]
  - Background: 15.6 µ/hr.
  - Acceptable Limit: Less than 5 µ/hr above background.
  - Survey results were below the acceptable limits.

Status:

- Site 4553 is no longer in use.

References:

1- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.
2- Review of Radiation Safety Records Management System, 2003.
3- Rocketdyne Document, A4CM-ZR-0011, Rev. A, "Area IV Radiological Characterization Survey," August 15, 1996.

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Site Summary – Building 4854

Site Identification:

Building 4854
Radiation Fuel Gauge Test Structure

Operational Use/History:

- Constructed sometime between 1964 and 1967.
- Building 4854 was used to test Radiation Fuel Gauges.
- Demolished in the late 1990s.[1]

Site Description:

- Building 4854 was located in the southeast corner of Area IV, near Building 4354 and just north of L Street.

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Building 4854.[2]

Radiological Surveys:

- Radiological surveys specific to Building 4854 have not been conducted.

Status:

- Building 4854 was demolished in the late 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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