

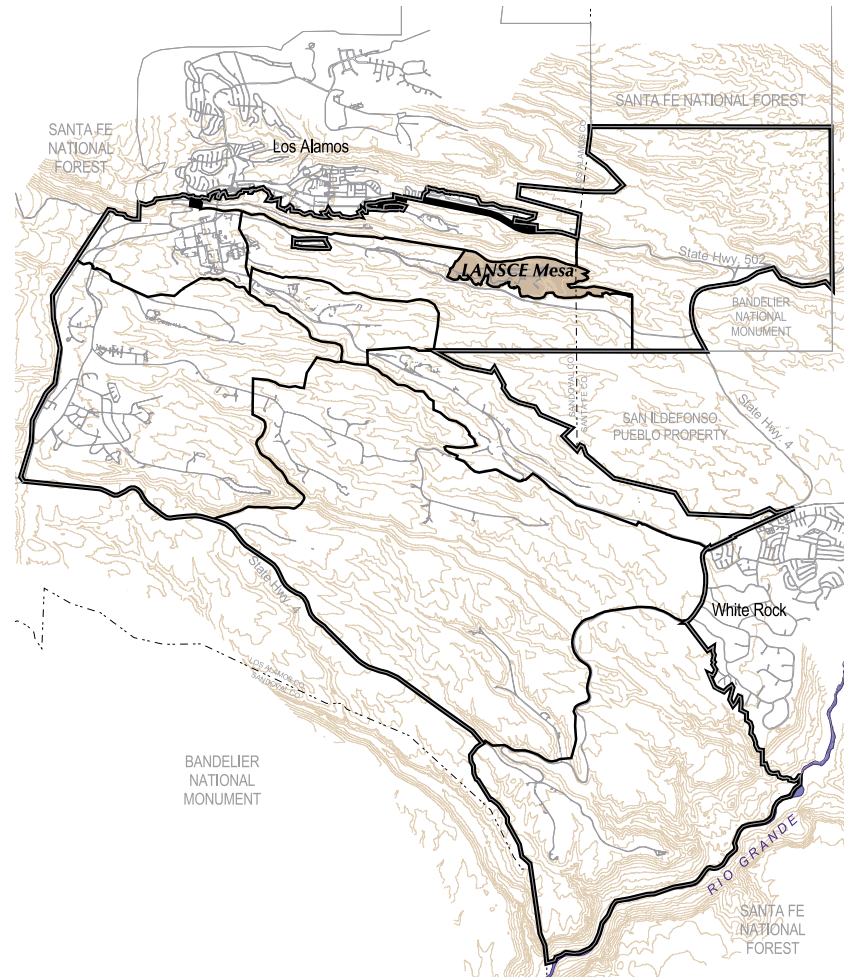
E. Los Alamos Neutron Science Center (LANSCE) Mesa Planning Area

1. General Description

The LANSCE Mesa Planning Area is a site of approximately 0.5 square mile, located entirely atop Mesita De Los Alamos and within the boundary of TA-53. Three planning areas surround it: Omega West to the north, Land Transfer to the east, and Sigma Mesa to the south and west.

The LANSCE Mesa Planning Area supports the primary Laboratory missions of Stockpile Stewardship and Stockpile Management. Facilities in this planning area include the 800-MeV proton linear accelerator, a Proton Storage Ring; neutron production targets at the Lujan Center and the Weapons Neutron Research facility, an isotope production facility and a variety of spectrometers. The Accelerator Production of Tritium Project Office, including the Low-Energy Demonstration Accelerator and R&D activities in accelerator technology and high-power microwaves are also located in the planning area.

Map VI-E1: LANSCE Mesa Planning Area Key Map



The following planning assumptions will guide the physical planning of LANSCE Mesa Planning Area for the next 10 years:

- *LANSCE will remain primarily dedicated to Stockpile Stewardship and some Stockpile Management programs.*
- *Growth of new Stockpile Stewardship programs, specifically portions of the Advanced Hydrotest Facility will happen in the LANSCE Mesa Planning Area.*

2. *Opportunities and Constraints*

The following opportunities and constraints affect physical planning in the LANSCE Mesa Planning Area.

Physical Constraints

LANSCE Mesa Planning Area encompasses a very narrow mesa bordered on the north by the Los Alamos Canyon and on the south by Sandia Canyon. These canyons limit the developable area. Federally protected species habitat, archeological sites, and 100-year floodplains are present in both canyons. There are two isolated wetlands in the planning area.

Operational Constraints

Most of the LANSCE Mesa Planning Area consists of usable land surface that has been developed. LANSCE is not a nuclear facility. This planning area has been the Laboratory's largest source of airborne radioactive emissions that are presently well below the emission regulation standards.

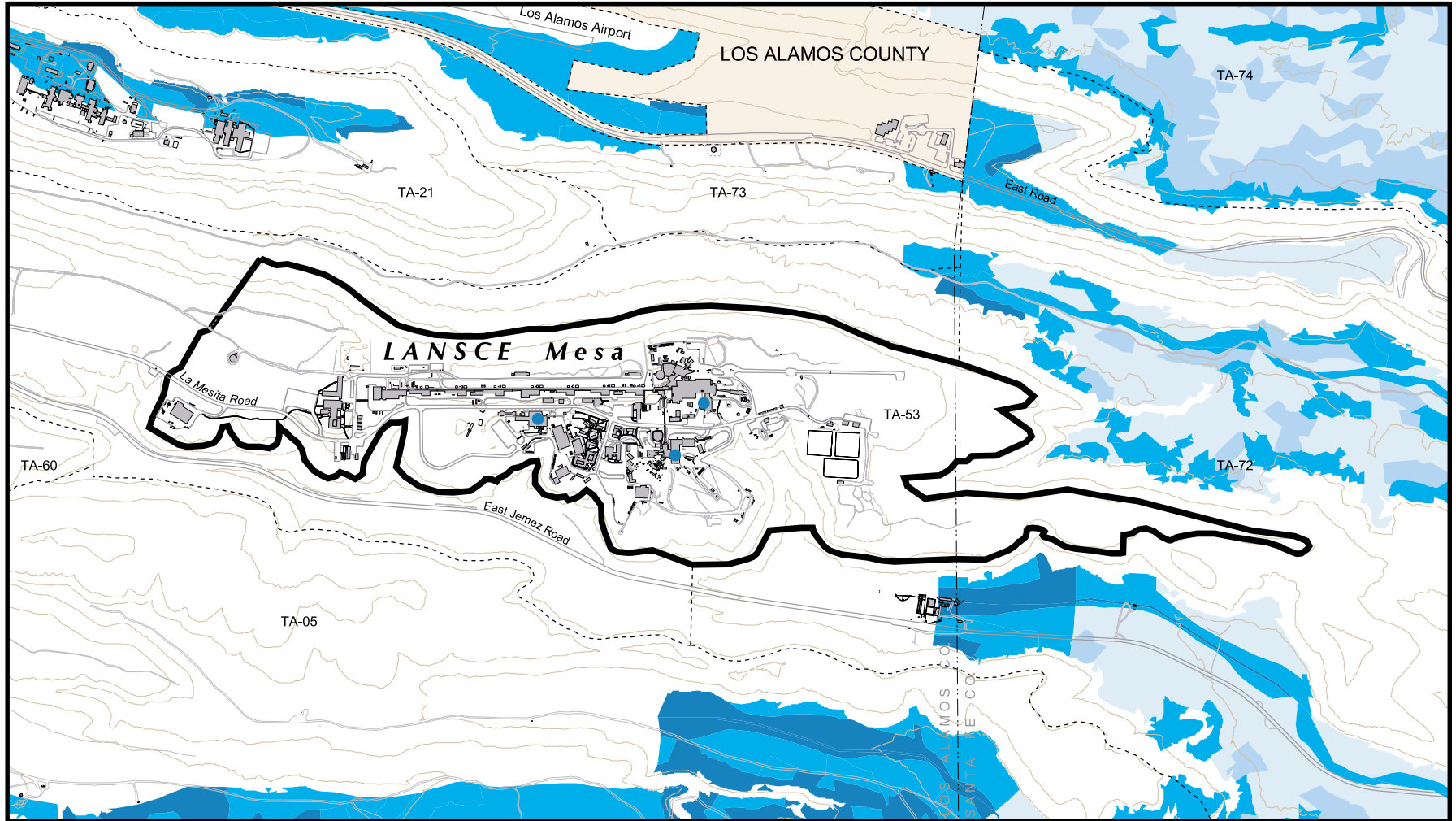
Operating the accelerator in LANSCE requires 250,000 gallons of water a day and \$1 million in electricity a month. Such high draws on existing utilities could restrict the development of other facilities with high water and/or high power requirements.

Waste lagoons located at the east end of the site are currently being sampled to identify appropriate remediation activities. The extent to which redevelopment is feasible will depend in part on the remediation alternative selected for this site. The site also contains three radiation sources, a radioactive liquid waste line, and other potentially contaminated areas. A significant portion of the area is within a safety analysis report area. The western end of the mesa contains a major utility corridor. Several solid waste management units and point release sources also are found in this planning area. Seismic "Extremely High Risk" buildings in this planning area include Buildings 1, 2 and 6 at TA-53.

Development Opportunities

Few development parcels remain, but opportunities are available for redevelopment in underutilized or inappropriately used parcels. Many of these sites are occupied by trailers, transportables, and temporary storage containers.

Map VI-E2: LANSCÉ Mesa Planning Area Development Opportunities Map



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- | | | | |
|-------|---|---|---------------------------------|
| ----- | Technical Area Boundary | □ | Excellent Development Potential |
| □ | Non Dept. of Energy Property | □ | Good Development Potential |
| ▬ | Planning Area | □ | Fair Development Potential |
| □ | Unique Operational and/or Physical Considerations Exist | □ | Poor Development Potential |
| ● | | ● | Radiation Source |

Areas of one acre or less are incorporated into the surrounding larger areas.



3. *Projects for LANSCE Mesa Planning Area*

Proposed, planned or budgeted projects noted below and on the facing summary map, VI-E3, for this planning area were identified through Laboratory documents or by stakeholders during the Comprehensive Site Plan 2000 process. The symbol *NS* stands for project “Not Shown” on the summary map.

Development of AHF Capabilities

- ① Planned development of the 50-GeV ring module of the Advanced Hydrotest Facility (AHF) to support Stockpile Stewardship mission.
- ② Potential tunnel connections to AHF-related facilities at Sigma Mesa (Mortandad Canyon) and Dynamic Testing Planning Areas.
- ③ Proposed classified and unclassified office space to support AHF development and other programs.

Revitalization of LANSCE

- ④ Proposed physical/technical support facilities for nuclear materials R&D.

Transportation Development

- ⑤ Proposed second access road eastward to East Jemez Road to provide secondary safety/emergency access. Also limited access route to potential AHF firing site in Sigma Mesa Planning Area.
- ⑥ Proposed removal of trailers and transportables to create opportunities for new development and parking.
- ⑦ Proposed sidewalks to improve pedestrian circulation and safety within developed areas.

Security Development

- ⑧ Proposed guard gate on potential new access road.

Infrastructure Revitalization

- NS* Ongoing utility revitalization activities as noted in Site Wide Planning Area section.
- NS* Budgeted upgrade of fire protection system, including second supply line, storage tank and connections to existing fire lines for safety reasons.
- ⑨ Proposed reconductoring of Norton electrical transmission line to increase site wide electrical distribution capacity.

Facilities Revitalization

- NS* Proposed replacement, removal or upgrade of poor and failed facilities which are approximately 7% of facilities in this planning area.

- ⑩ Potential replacement of seismic “Extremely High Risk” buildings 1, 2 and 6 at TA-53.

Quality Environment Enhancement

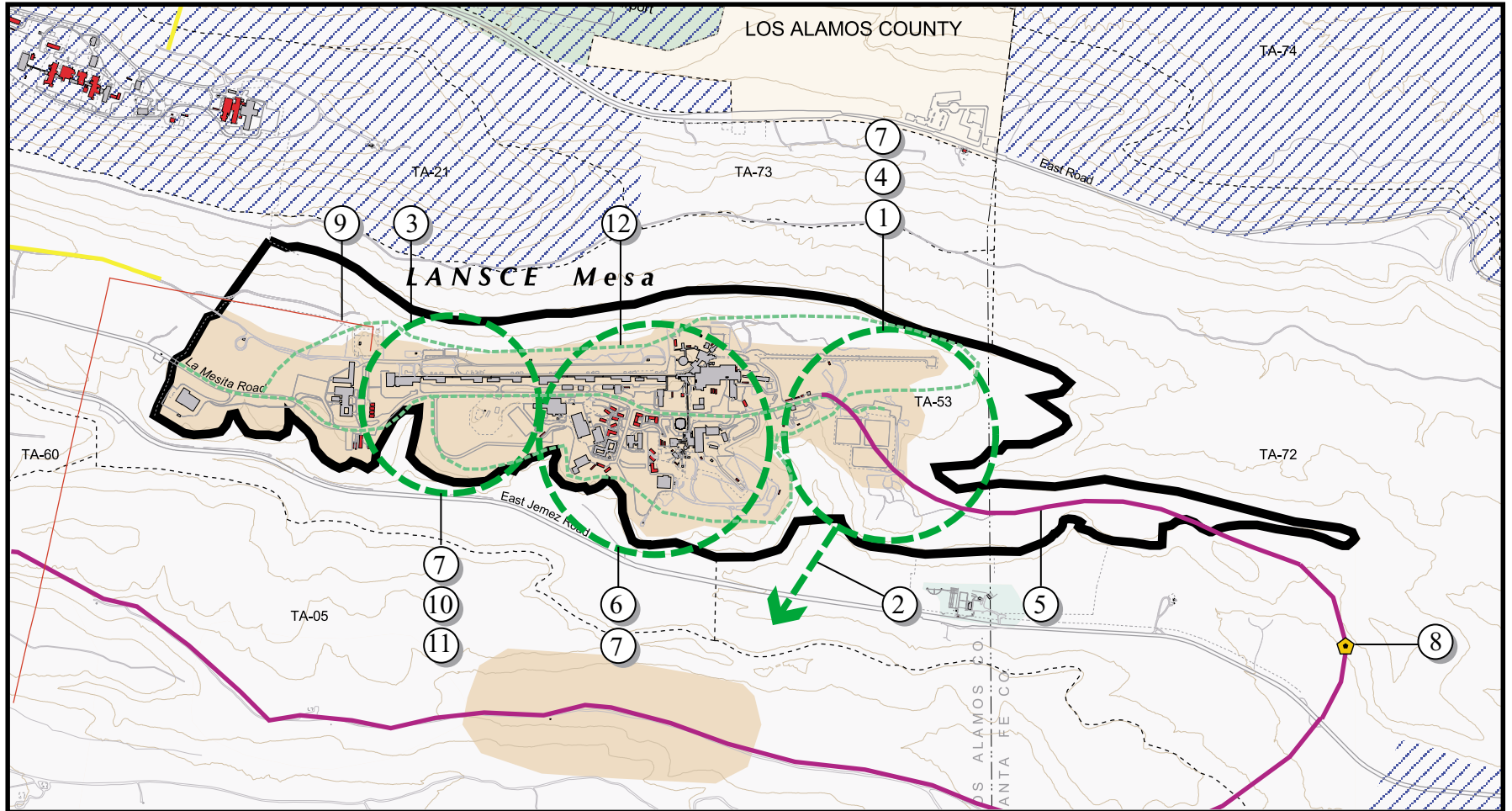
- ⑪ Proposed development of picnic pavilion to provide area for personnel interaction.
- ⑫ Proposed walking/jogging trail, bicycle and pedestrian paths to meet staff requests for safer pedestrian and bicyclist environment.

CSP 2000 Issues for LANSCE Mesa Planning Area

Important CSP issues that need discussion for continuing refinement for this planning area:

- *Identify timing, scope and facilities needed for ring module of AHF.*
- *Create strategy for removal of temporary structures to create opportunity for new development and parking.*
- *Create and improve pedestrian and bicycle circulation.*

Map VI-E3: LANSCÉ Mesa Planning Area Summary Map



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- | | | |
|----------------------------|----------------------------------|----------------------------------|
| Airfield | Fair or Poor Buildings | Proposed Pedestrian Improvements |
| Experimental Science | Area of Interest | |
| Non-DOE Property | Electric Line 115 kV | |
| Physical/Technical Support | Gas Pipeline | |
| Reserve | Long Range New or Improved Roads | |
| Land Transfer Tracts | New or Improved Roads | |
| Planning Area | Proposed Guard Gate | |

