

# Project Experience

## Security System Planning and Technical Support Services

University of California, Los Alamos National Laboratory, Los Alamos, NM

When the Security Operations staff at Los Alamos National Laboratory identified a need to replace their aging intrusion detection and access control system, they turned to Timberline Engineering. For three years, Timberline assisted the Laboratory to bring the Nuclear Materials Safeguards & Security Upgrades Project from initial concept through congressional funding of the first of three phases. As ultimately conceived, Phase I of the project was a \$150M upgrade of the automatic intrusion detection and access control system infrastructure currently in use to protect high-value assets at hundreds of widespread facilities in the 44-square mile Laboratory.



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Timberline developed the Conceptual Design Plan, Functional and Operational Requirements document, and initial funding profiles necessary to begin project development. Timberline assisted the Laboratory in constructing the project team and guided development of the Conceptual Design Reports for the project. Timberline also assisted the Laboratory in subdividing the project into phases, setting schedules and funding profiles, and securing Critical Decision 1 (approval to begin preliminary design) from DOE.

Our experience in successfully completing a Laboratory-wide infrastructure project, the Water SCADA and Equipment Surveillance System, provided the perspective to guide the Laboratory in developing the security project. We brought to the team the necessary insight to ensure the success of the various engineering firms and internal Laboratory organizations required to develop a project of this magnitude.

In the course of developing NMSSUP, the Timberline team gained experience in the following aspects of security design:

- Threat Assessment.
- Vulnerability Analysis.
- Physical Security System Design.
- Perimeter and Interior Intrusion Detection and Assessment System Design.
- Access Control System Design.

- Video Surveillance System Design.
- Security Alarm Response.
- Information Security.
- Technical Security Countermeasures.
- Chemical and Biological Weapons Detection and Protection.
- Force Protection Measures in Building Design.

Upon completion of the conceptual phase of the project, Timberline provided ongoing technical support of the project through one full-time staff member assigned to the project team to provide security system expertise with LANL-specific database development.

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