

LA-UR-22-21065

Approved for public release; distribution is unlimited.

Title: DOE Environmental Management and Newport News Nuclear BWXT Briefing - LANL's Campus Master Plan

Author(s): Keith, Edmond Burl

Intended for: Report

Issued: 2022-02-08



Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by Triad National Security, LLC for the National Nuclear Security Administration of U.S. Department of Energy under contract 89233218CNA000001. By approving this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.



DOE Environmental Management and Newport News Nuclear BWXT Briefing

LANL's Campus Master Plan

Ed Keith, Program Director

Facilities and Operations Directorate
Infrastructure Programs Office (IFPROG)

November 29, 2021

Briefing Overview

- **Campus Master Plan**
 - Background
 - Vision/process/organization
- **DOE EM and N3B Scope Considerations**
 - CMP development
 - CMP scope
 - Opportunities for future implementation
- **CMP Whiteboard Application Demonstration**

Background

- Triad proposed a robust integrated planning effort during the bidding process and began this effort soon after the LANL contract transition
 - First comprehensive site plan in over 20 years
 - Establish a planning process to facilitate better site infrastructure planning for mission execution
 - Plan implements NNSA SD 430.1 – Real Property Asset Management – Facility Site Plan and planning capability
- Within months of Triad commencing this planning process, NA-LA delivered a Contracting Officer (CO) letter requiring:
 - Area Development Plan for the Pajarito Corridor delivered by end of FY19 (completed)
 - The Campus Master Plan (CMP) to be delivered by end of FY21 (completed)



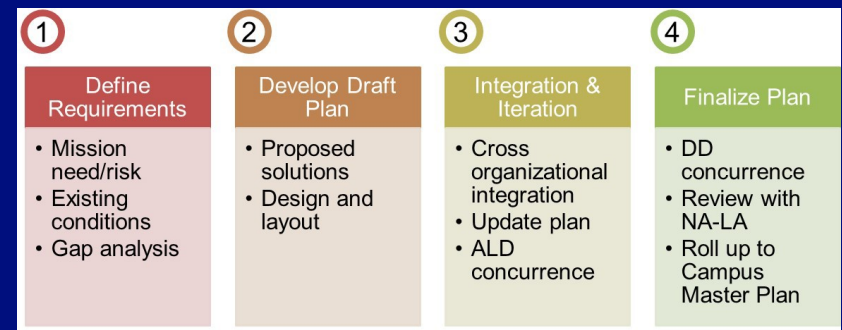
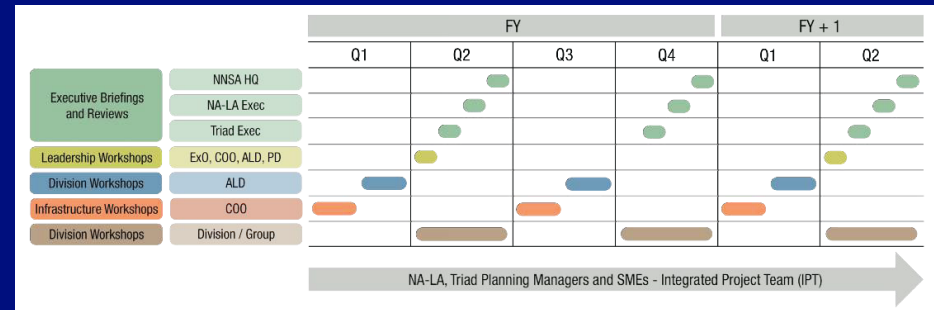
CMP Vision

- Represents a fully integrated strategy for *future physical growth and redevelopment*
- Adopts a vision for *near-, mid-, and long-term planning horizons*
- Fully integrates environmental constraints considerations (e.g., NEPA etc.)
- Promotes a robust program of *new construction, decommissioning, recapitalization, and a re-examined policy on leasing*
- Based on *mission driven priorities* and provides a baseline for future infrastructure needs
- Recognizes that change is a constant and requires *flexibility, integration and an iterative approach* to campus planning
- Integrates with but *does not replace existing institutional M&O systems and processes*
- Facilitates *Federal planning and communication* for LANL



CMP Process

- Integrated approach starting at lowest level of executive management and working up
 - Inclusive and transparent process
 - Understand program drivers and identify infrastructure needs
 - Develop an integrated project list and site plan
 - Continuous process with annual reviews and updates
 - Focus on organizational concurrence/consensus
- Process/communications anchored in an Integrated Project Team (IPT) between Triad and NA-LA Landlord Stewardship Program



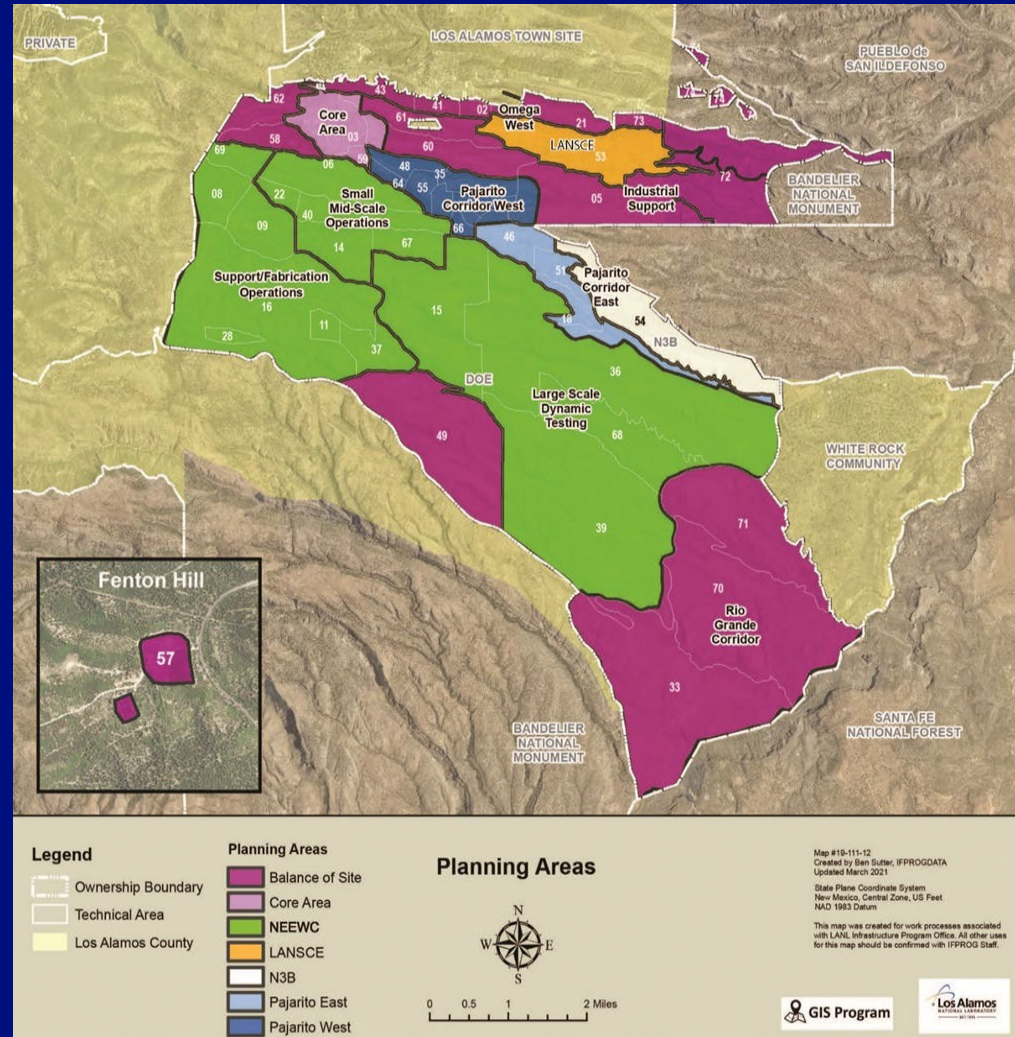
CMP Organization – Key Sections

- Director's Forward
- **CMP Requirement and Drivers**
- Vision and Summary
- Introduction
- **Planning Considerations**
- Transportation
- Utilities
- **NEPA Considerations (overview)**
- Land Use Management
- **Planning Areas (e.g., Core, Pajarito East and West, NEEWC, LANSCE, and Balance of Site)**
- CMP Implementation
- Acronyms, Appendices, etc.

(Indicates sections of CMP with EM scope considerations)

CMP Organization

- The LANL campus is divided into five geographical planning areas:
 - Core Area
 - LANSCE
 - National Energetic & Engineering Weapons Campus (NEEWC)
 - Small Mid-Scale Operations
 - Support/Fabrication Operations
 - Large Scale Dynamic Testing
 - Pajarito Corridor
 - Pajarito Corridor East
 - Pajarito Corridor West
 - Balance of Site
 - Industrial Support
 - Rio Grande Corridor
 - TA-57 (Fenton Hill)
 - Lease Facilities



CMP Considerations for DOE EM and N3B scope

- Focused on considerations/constraints most relevant to infrastructure planning (project siting and timing)
 - CMP CO Letter requires consideration of Consent Order sites
 - CMP includes Consent Order site context and data layers and context
 - CMP planning process not the same as scope execution (e.g., PRID process)
 - TA-54 addressed as DOE EM footprint and separate of infrastructure planning analysis (part of Balance of Site narrative)
- Utilized existing processes for integration and communication for EM/N3B scope considerations
 - Participation in Regulatory Integration Steering Committee (RISC)
 - Participation in Triad Monthly PRS/IP Interface meetings
 - Worked closely with Triad EPC-CP subject matter experts and management throughout planning process – considered primary interface with N3B
- Maintained frequent and interactions with Federal Customers
 - Joint CMP-LSP IPT and periodic CMP process and product status briefings

CMP Considerations for DOE EM and N3B scope

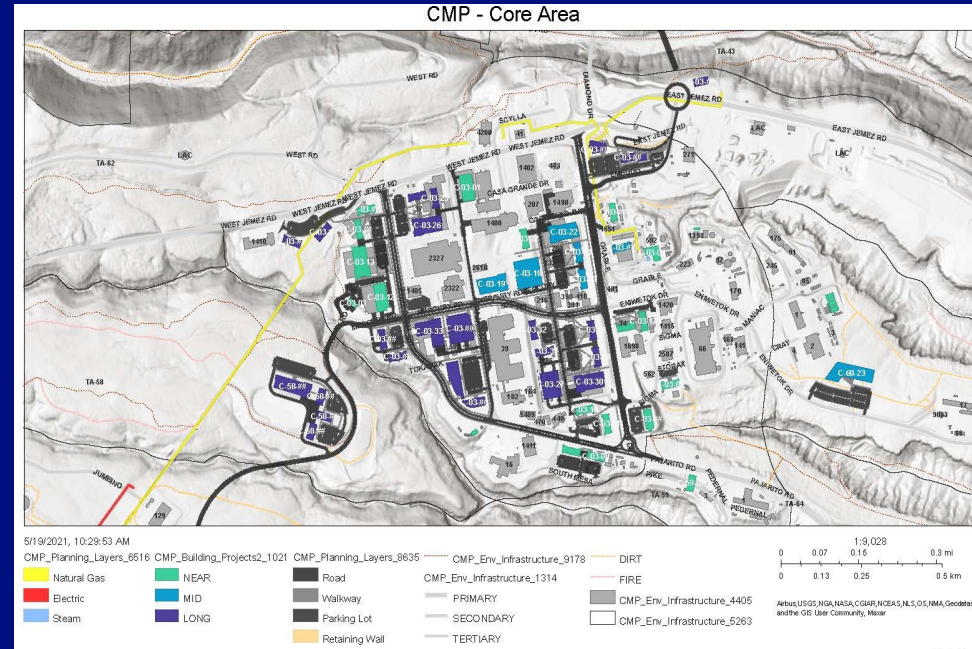
- Prominently featured in CMP NEPA Considerations Section – Consent Order sites
 - Context (requirements and processes) provided in NEPA Considerations Overview Section
 - More specific consideration in NEPA Considerations sections of individual planning areas (e.g., Core, Pajarito Corridor, NEEWC, LANSCE, etc.)
 - Provides cross-walk between CMP proposed “projects” and specific Consent Order sites
 - Provides indication of required regulatory due diligence for proposed projects
- One of the key data layers in the CMP Whiteboard
 - Using GIS data layers for accuracy and continuity
 - Enables dynamic (real-time) planning for siting and development of potential regulatory strategies

CMP Considerations for DOE EM and N3B scope

- CMP implementation opportunities
 - Refine integrated planning process
 - Continue participation in RISC and PRS/IP Interface venues
 - Continue to maintain Consent Order sites as prominent feature in CMP Whiteboard application and process
 - Consider adding more fidelity
 - Consent Order site status
 - Individual Permit sites
 - Identify and pursue opportunities for strategic integration with planning and scope execution
 - Mechanisms in place (Triad Interface Office)
 - Cross-walk EM-authorized scope with CMP infrastructure investment priorities (spatially/temporally)
 - Consider CMP scope in developing candidate sites for RCRA Permit Modifications

CMP Whiteboard Application

- Facilitating CMP integrated reviews through use of “Whiteboard” application
- Moves the CMP from development into implementation (work in progress)
- Allows “real-time” coordination and updates with LANL stakeholders, planners, and SMEs
 - Physical infrastructure and associated development (e.g., buildings, utilities, roads)
 - Development context (e.g., projects, function, capability)
 - NEPA/environmental/cultural resources and Consent Order sites
 - Enables near-, mid-, and long- term planning
- Enables strategies, decision-making and institutional consensus
- Functionally integrated with other CMP tools (e.g., GIS constraints data layers, project lists)



CMP Whiteboard Application

Whiteboard Demonstration