

Livermore Valley  
Open Campus

Flad Architects

“The new campus is an exciting concept with enormous potential, and we’re working hard to expedite its realization.”

Alice Williams, *National Nuclear Security Administration, Livermore Site Manager*

Open  
Campus

insights



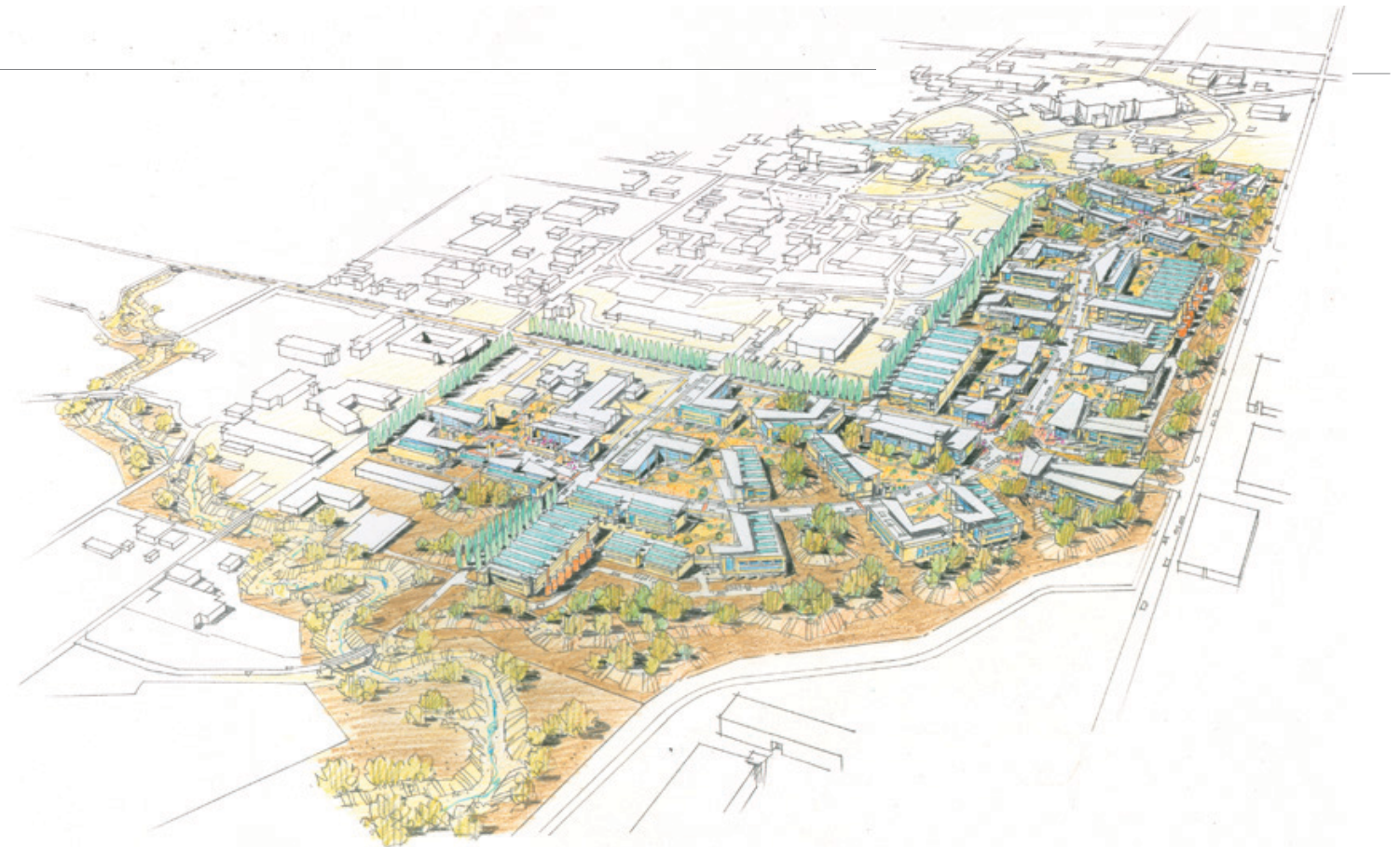
“The Department of Energy and the National Nuclear Security Administration recognize that many national security issues are too important and complex to leave out broader participation by the talented scientists and engineers in universities and industries. We need their contributions to expand and deepen basic research related to national security in areas such as transportation, energy, cybersecurity, high performance computing, and nonproliferation.”

James “Buck” Koonce, *Senior Advisor, LLNL*

#### **Livermore Valley Open Campus (LVOC)**

Lawrence Livermore National Laboratory (LLNL) and Sandia National Laboratories/California (SNL/CA), two neighboring research facilities in Livermore Valley, California, are working together to create an open, national security research and

development space called the Livermore Valley Open Campus (LVOC). The campus is being built on 110 acres of contiguous land adjoining the southeast corner of Lawrence Livermore's main site and the northeast corner of the Sandia site.





“Having an open campus will expand opportunities to engage with the broader international research and academic community in a modern high-tech environment. Those kinds of partnerships will help the laboratories recruit and retain talented scientists and engineers and keep our staff at the leading edge of their fields.”

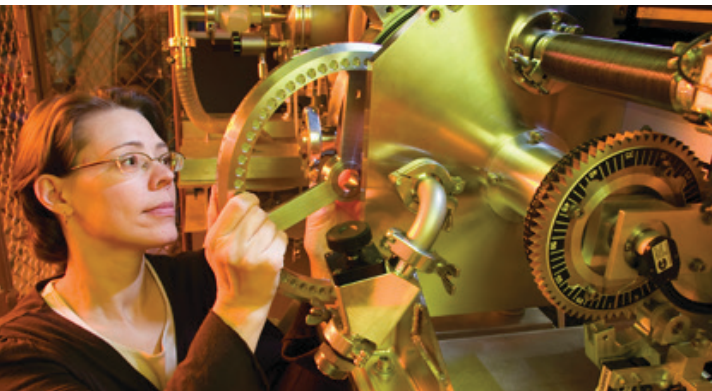
Camille Bibeau, *Program Development, LVOC*

Focus Areas for Science and Technology

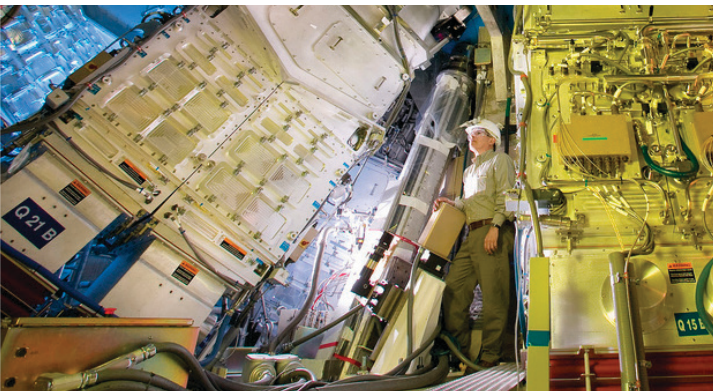
The LVOC represents an exciting opportunity for the creation of vibrant areas for science and technology that will enhance the overall

capabilities of both national laboratories and their national security missions. The open campus will develop around three anchor research programs:

Transportation Energy, High Energy Density Science and High Performance Computing.



Transportation Energy Center



High Energy Density Science and Inertial Fusion Energy Center (HEDS/IFE)



High Performance Computing Center (HPC Center)

Flad Architects

Lawrence Livermore and Sandia/CA labs engaged Flad Architects to study development options and create a master plan that expands the LVOC over 30 years until it provides approximately 3 million square feet of laboratory and office space and accommodates up to 4,000 people.



“Data has proven that open public spaces foster collaboration among multi-disciplinary researchers. Creating spaces where social interactions can occur also fosters a sense of community and creates an atmosphere ripe for discovery.”

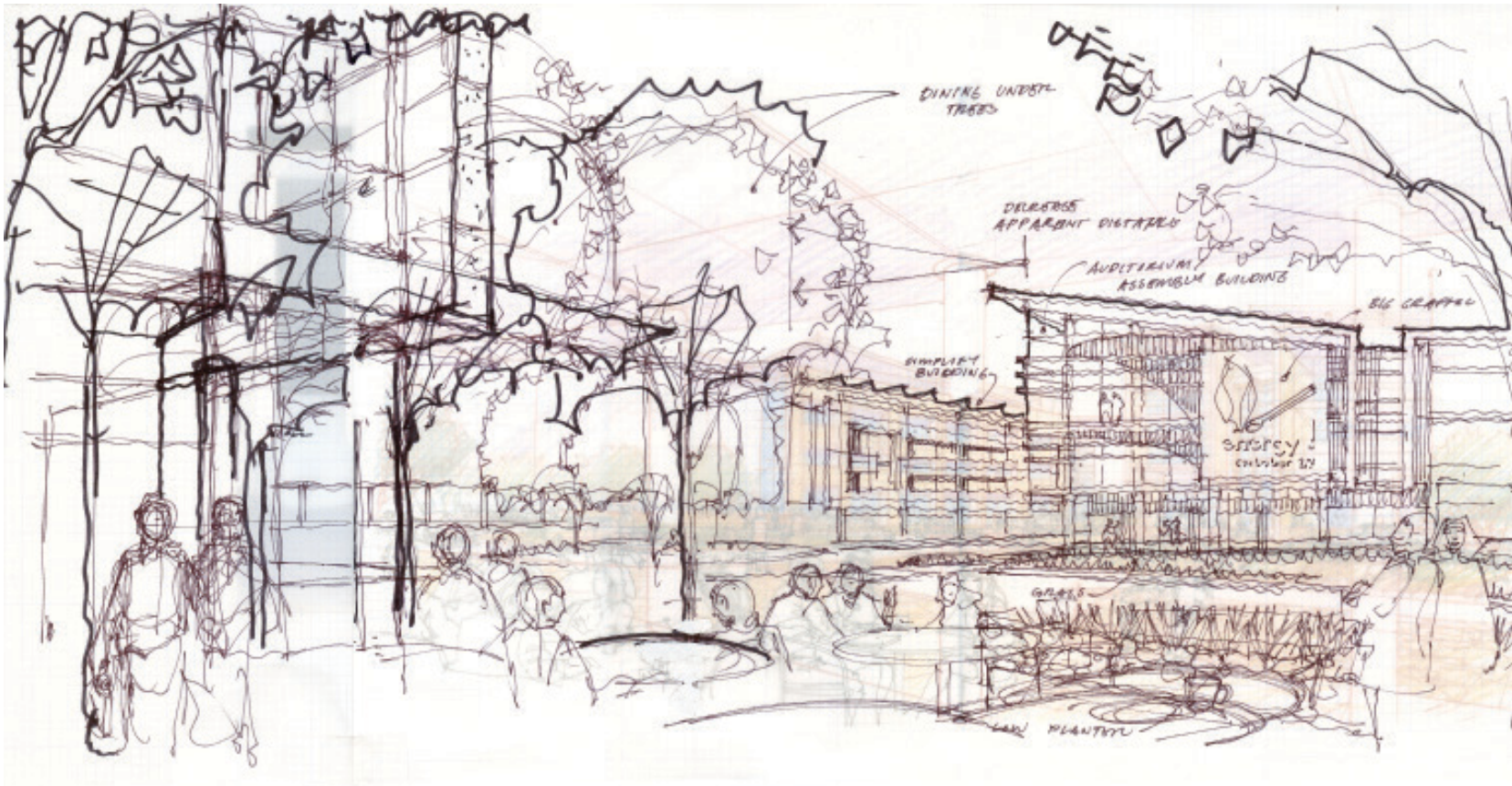
Stevens Williams, *Flad Architects*

**Village Centers**

The master plan is anchored by two strong science-focused Village Centers, one at the north end of the site and one at the south, capitalizing on adjacency and functional relationships to the existing research facilities on the LLNL and SNL/CA campuses.

Each of these Village Centers focus on a circulation and pedestrian plaza where program facilities, shared functions, amenity

areas and conference facilities draw researchers together to create an active space that fosters communication and interaction. Village centers are intended to each have a unique identity. By using site lighting, directional and identification signage systems, and landscape elements, each village center will develop its own sense of place within the larger LVOC.





“LVOOC represents an exciting opportunity to both advance technology ... and to increase our partnerships with the city of Livermore and local businesses.”

Rick Stulen, *Vice President, SNL/CA*

Campus Collaboration Core

The Campus Collaboration Core is intended to serve as the hub of the campus community and the link between the north and south regions of the LVOOC campus. Within the collaboration core are major gathering and conference spaces where primary community outreach and educational components, such as academic classrooms, could eventually be located.

As the largest and most prominent public space on the campus, the collaboration core will have large and small gathering areas. Key shared programs and campus-wide amenities such as food service facilities and an auditorium will draw

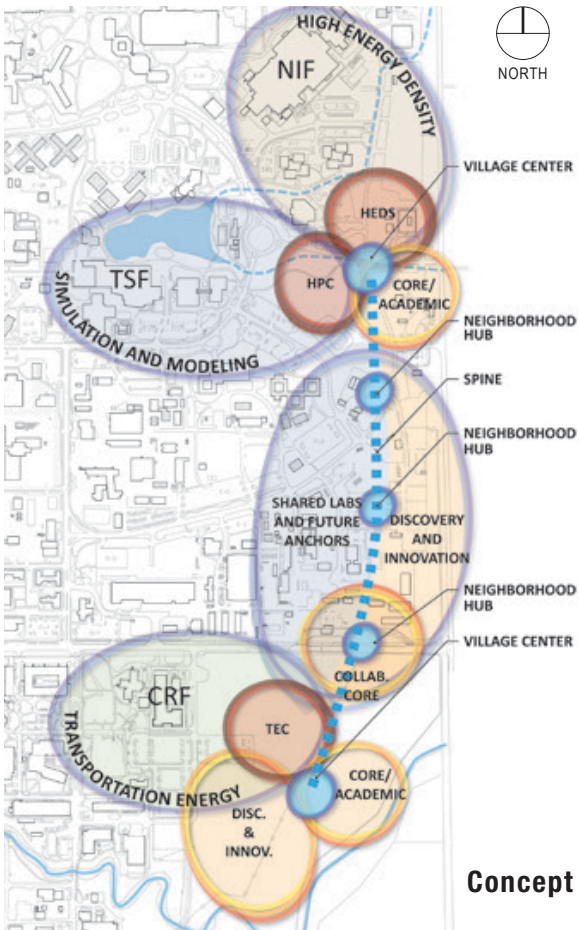
national lab staff, campus occupants, visiting scientists, and the public. The location at the center of the campus makes for convenient pedestrian access from all areas.

Circulation Spine

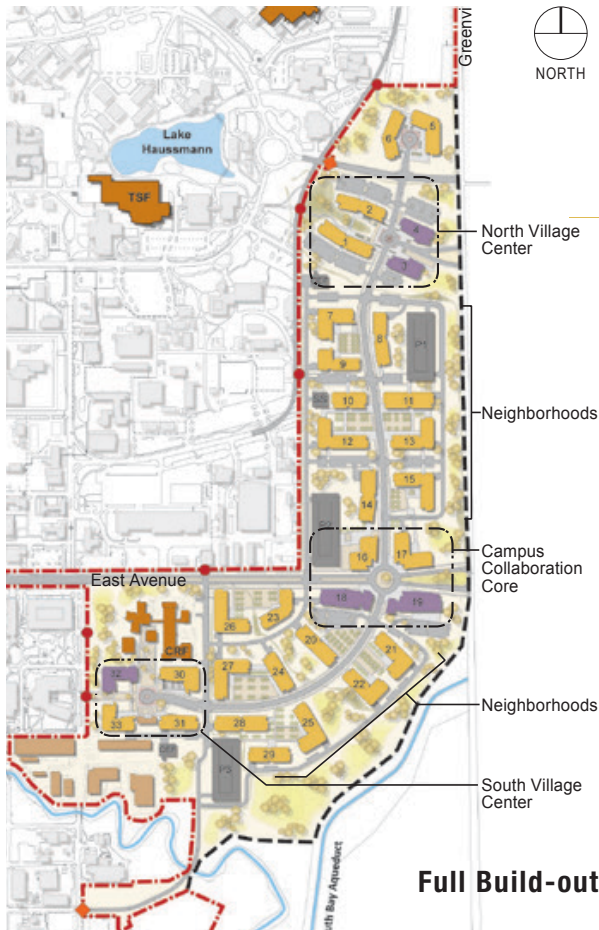
A strong circulation spine that combines pedestrian, bicycle, and vehicular movement links these north and south village centers and neighborhood hubs together, organizing the campus into a series of integrated destinations and events along a common path and breaking down the overall scale of the campus.

- HEDS/IFE High Energy Density Sciences and Inertial Fusion Energy Center
- HPC High Performance Computing Center
- TEC Transportation Energy Center
- NIF National Ignition Facility
- TSF Terrascale Simulation Facility
- CRF Combustion Research Facility

- Lab/Office Buildings
- Amenities Buildings
- Existing Core Facilities
- Parking Structures
- Pedestrian Gate
- Vehicular Gate



Concept



Full Build-out

“A Livermore Valley Open Campus will maximize the return on our nation’s investment in nuclear security. By leveraging the groundbreaking research of our nuclear security labs through private sector collaborations, we will bring breakthroughs to the market faster and find new solutions to the energy problem.”

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Steven Chu, *Secretary of Energy*

**Community**

The basic premise is that the initial growth will be focused within the two village centers and the campus collaboration core until these building sites are filled. We envision smaller science and technology research programs developing around these three main centers to eventually complete the campus.

The master plan proposes a total of thirty-three buildings and three parking structures on the site, providing approximately three million gross square feet of program and amenity space at full build-out. The Livermore Valley Open Campus is intended to be implemented over a period of many years, driven both by program growth and funding

availability. The initial phasing plans will provide a wide range of flexibility for the continued growth of the campus.

The mix of buildings within each village center and neighborhood will be carefully considered to support interdisciplinary science needs and foster interaction and collaboration among the research

occupants and programs. Additional minor amenity and common functions will be located in each neighborhood to add to the activity and sense of place. These elements and organizational structure, taken together, are intended to create a truly integrated science community, comprised of national laboratories, industry, educational institutions, and the Livermore Valley and surrounding communities.

## Our Commitment to Science and Technology

We create spaces to help researchers work more efficiently, interact more freely, and make discoveries more quickly. Although Flad has worked on complex projects with some of the largest companies in the

industry, we measure the success of our designs on a much smaller scale: the achievements of the individuals who work within them.