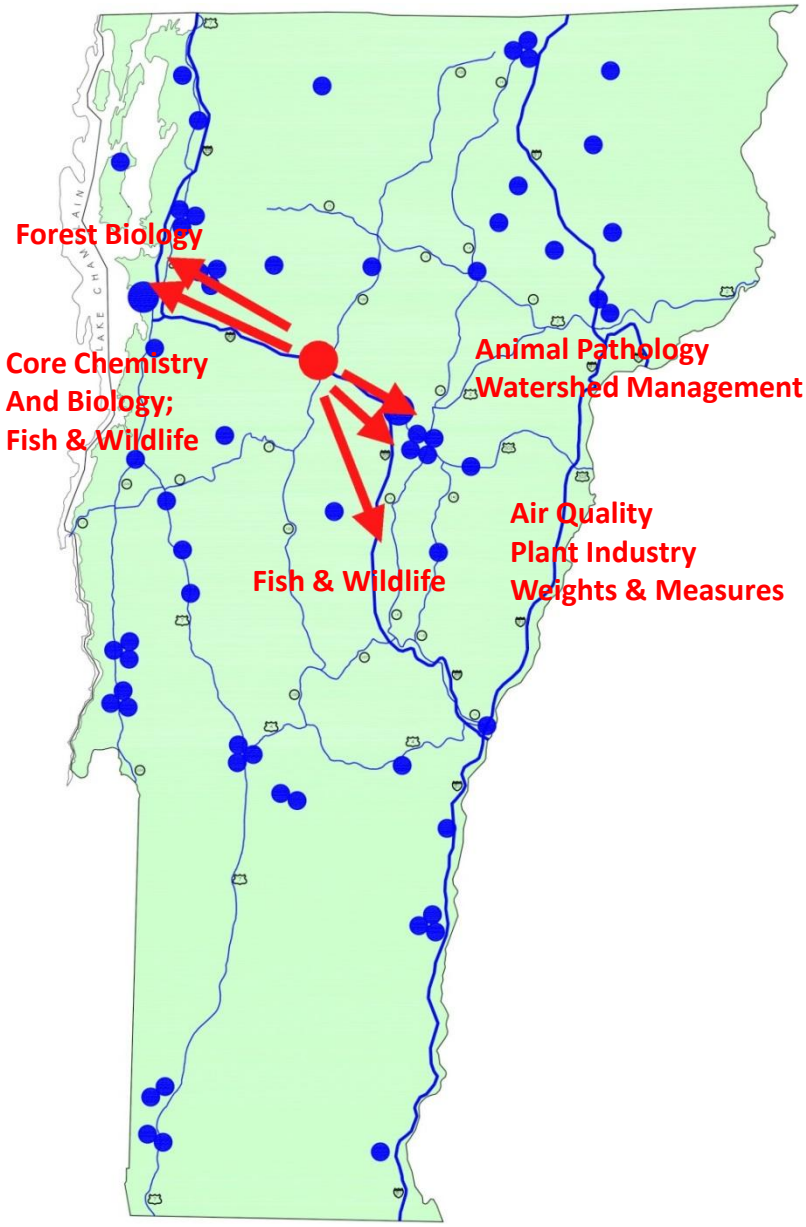
VERMONT AGRICULTURE & ENVIRONMENTAL LABORATORY

LEGISLATIVE PRESENTATION

2015 LEGISLATIVE SESSION

VERMONT AGRICULTURE & ENVIRONMENTAL LABORATORY

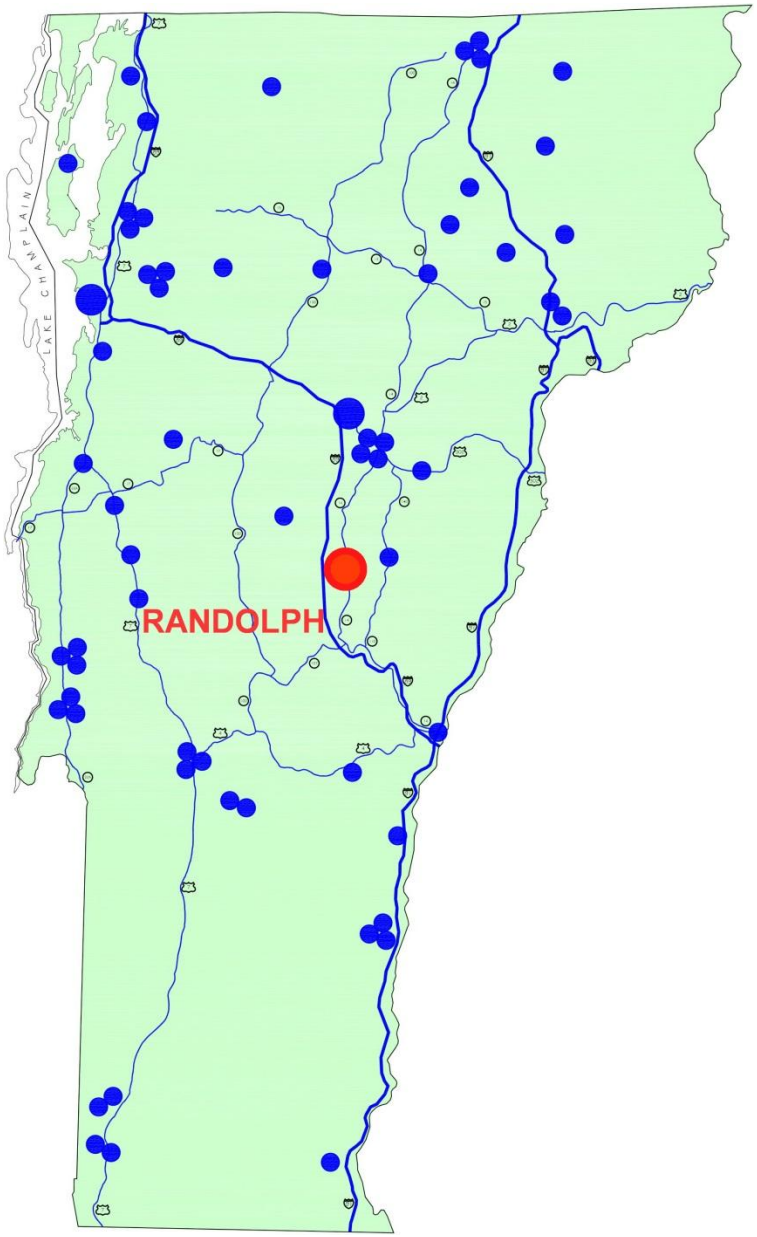


Vermont's agriculture and environmental lab was destroyed by TS Irene in 2011. Since then, these vital functions have been located in five different locations. Some services have been discontinued, costing taxpayers and businesses extra.

A snap shot of critical Ag ANR Lab services…

- Water quality analysis: Nutrient pollution, E.coli, organic contaminants, pesticides, metals and emerging contaminants
- Air monitoring: Monitoring Vermont's air quality in support of the National Air Toxics Trends
- Pesticide monitoring: Pesticides in water, soil, food and the environment
- Residue monitoring: Environmental contaminants in soils and other media
- Dairy and other food testing: Monitoring Vermont's milk, meat, and other foods both for Vermonters and for out-of-state commerce
- Animal feed and fertilizer analysis for consumer assurance and environmental safety
- Weights and measures calibration for all Vermont industries, plus expanding services to other states
- Waste water management support
- Insect and Vector management support
- Emerging animal and plant pathogens
- Fish farm monitoring and disease analysis
- Emerging needs for GMO testing
- Emerging need for THC analysis

… for Vermont's health and economy



Why collaboration?

A 2013 feasibility study demonstrated savings if the two Agencies share administration, equipment, staff, and space. These savings mean operational efficiencies for the Agencies as well as a foundation to expand future services.

A new level of collaboration: Location at VTC Campus, Randolph

This location was selected by the Agencies and BGS, and approved by HCIC & SIC in August and the JFC in September. Already many benefits from co-location have been identified:

- VTC students: lab and field internships
- Collaborative courses and guest lectures
- VTC offers state-of-the-art long distance communication facilities, making it possible for Ag and ANR staff to conference remotely
- A central location serves the state and also neighboring states
- Potential to partner with Vermont Law School, Dartmouth's Environmental Science program, Gifford Hospital
- Networking opportunities for UVM's Rubenstein School, ECHO, College of Agriculture, Aiken lab, and engineering school
- Potential relocation of ANR's Mobile Source lab to VTC

Collaboration stops only at the bounds of our imagination.

How we got where we are…

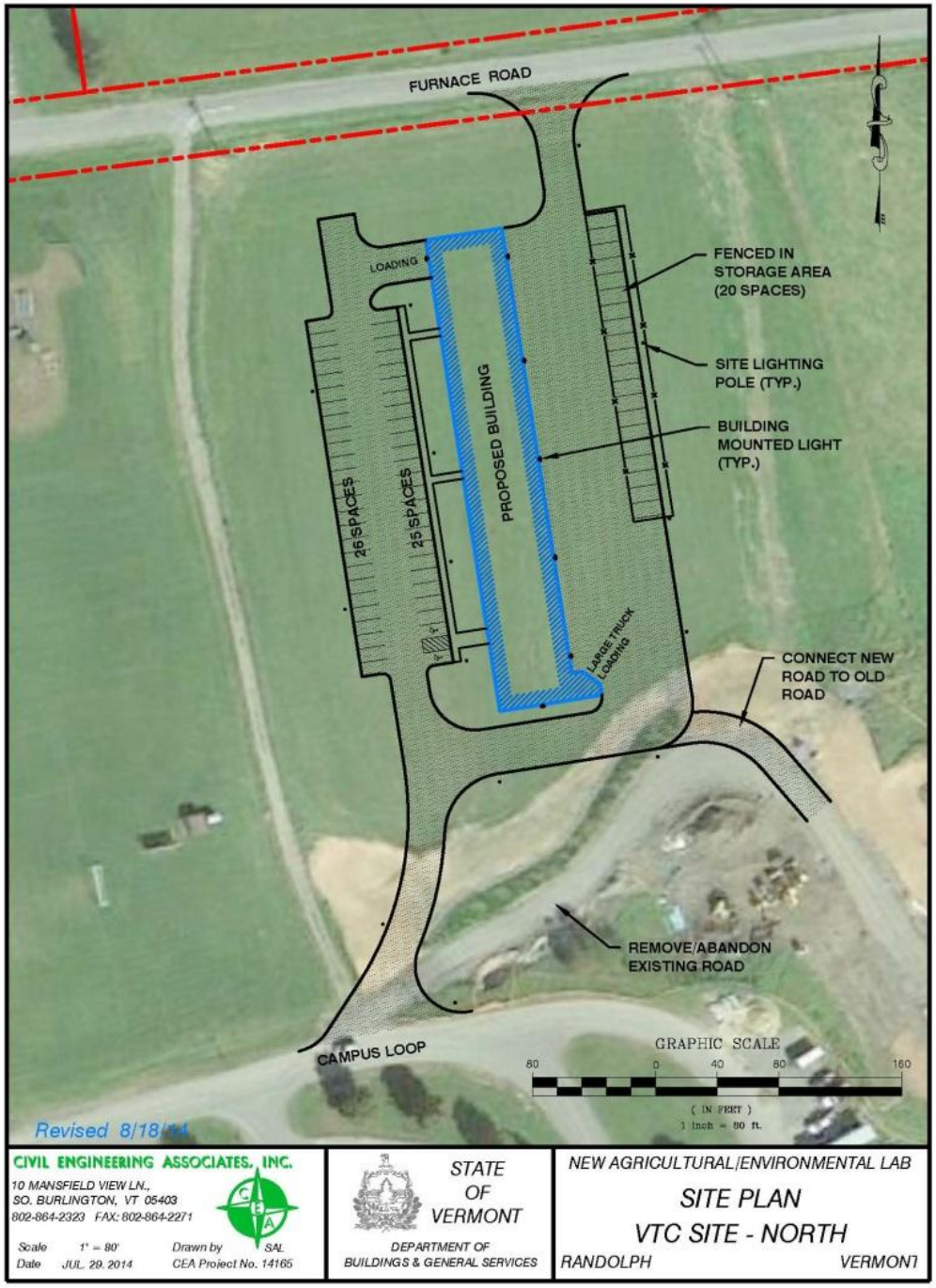
SITE & LOCATION

- Act No. 51 of the 2013 Legislative Session: Section 2.b.17 and Section 41 – Appropriated $100,000 for the study of the feasibility and governance of a Laboratory for the Agency of Natural Resources (ANR) and the Agency of Agriculture, Food, and Markets (AAFM).
    - The feasibility study determined the best approach was for the development of a collaborative laboratory facility under the governance developed between both Agencies.

- Act No. 178 of the 2014 Legislative Session: Section 2.c.12 and Section 33 – Accepted the recommendation for the development of a collaborative governance and laboratory facility and appropriated $300,000 for the development of a site proposal, programming and design.
    - The proposed site location was required to be submitted to the House Committee on Corrections and Institutions and the Senate Committee on Institutions for approval in August 2014
        - August 28, 2014 – The House Committee on Corrections and Institutions and the Senate Committee on Institutions approved the recommendation to locate the facility on the campus of Vermont Technical College in Randolph, Vermont and advanced the recommendation to the Joint Fiscal Committee for action at their September 2014 meeting.
        - September 5, 2014 – The Joint Fiscal Committee reviewed the proposed site location and also approved locating the laboratory facility on the Vermont Technical College's Randolph Vermont campus.

- The development of the proposed Site Location involved a number of steps, including:
  - Identification of State-Owned property to evaluate. (4 sites were identified)
  - Publicly advertised for possible sites to locate the facility.
    - Response included 12 privately owned sites.
    - The University of Vermont offered 2 sites.
    - Vermont Technical College offered 1 site.
  - Analysis of all nineteen sites to determine the appropriateness for the development of a laboratory facility.
  - The analysis involved evaluating each site on eight criteria, including ability to accommodate program, physical characteristics, utility services, ease of zoning and permitting, neighborhood/context, construction challenges, benefits to program staff and users, and benefits to Agencies and State of Vermont.

Site Location: North edge of VTC's campus



Project site details

CONCEPTUAL DESIGN

- The Department of Buildings and General Services (BGS) also issued an RFP requesting proposals for the programming and design of a Collaborative Laboratory Facility. The Selection Committee reviewed the proposals received and awarded a Contract for Programming and Design Services for the facility.

- Initial programming and design were necessary to determine size of site needed to support the laboratory facility.

- BGS, with substantial support from AAFM and ANR, proceeded with final programming and conceptual design to determine facility size and preliminary cost estimates.

Concept Phase Statistics

- **Approximately 34,000 sf lab**
- **2,000 sf wood chip plant**
- **Total project cost: $25,600,000**

	Pre-Irene	2013 Feasibility Study	Current Design
Space	34,110+ s.f.	35,375 s.f.	34,004 s.f. (includes capacity for emerging testing)
Staffing	27 + 16 part-time	26 + 16 part-time	32 + 21 part-time (includes staff for 10-year plan)

Highlights of the design so far:

- New programs: Animal pathology, forest pathology, THC testing, GMO testing.
- Increased capacity for water quality testing and many other tests.
- Through rigorous programming, every space and function has already been described and every piece of equipment is known.
- Circulation space has been minimized. For example, only one staircase is needed for the entire building. Mechanical space may be reduced depending on the HVAC systems chosen.
- The building contains a high percentage of specialty space and construction required for certification to operate.

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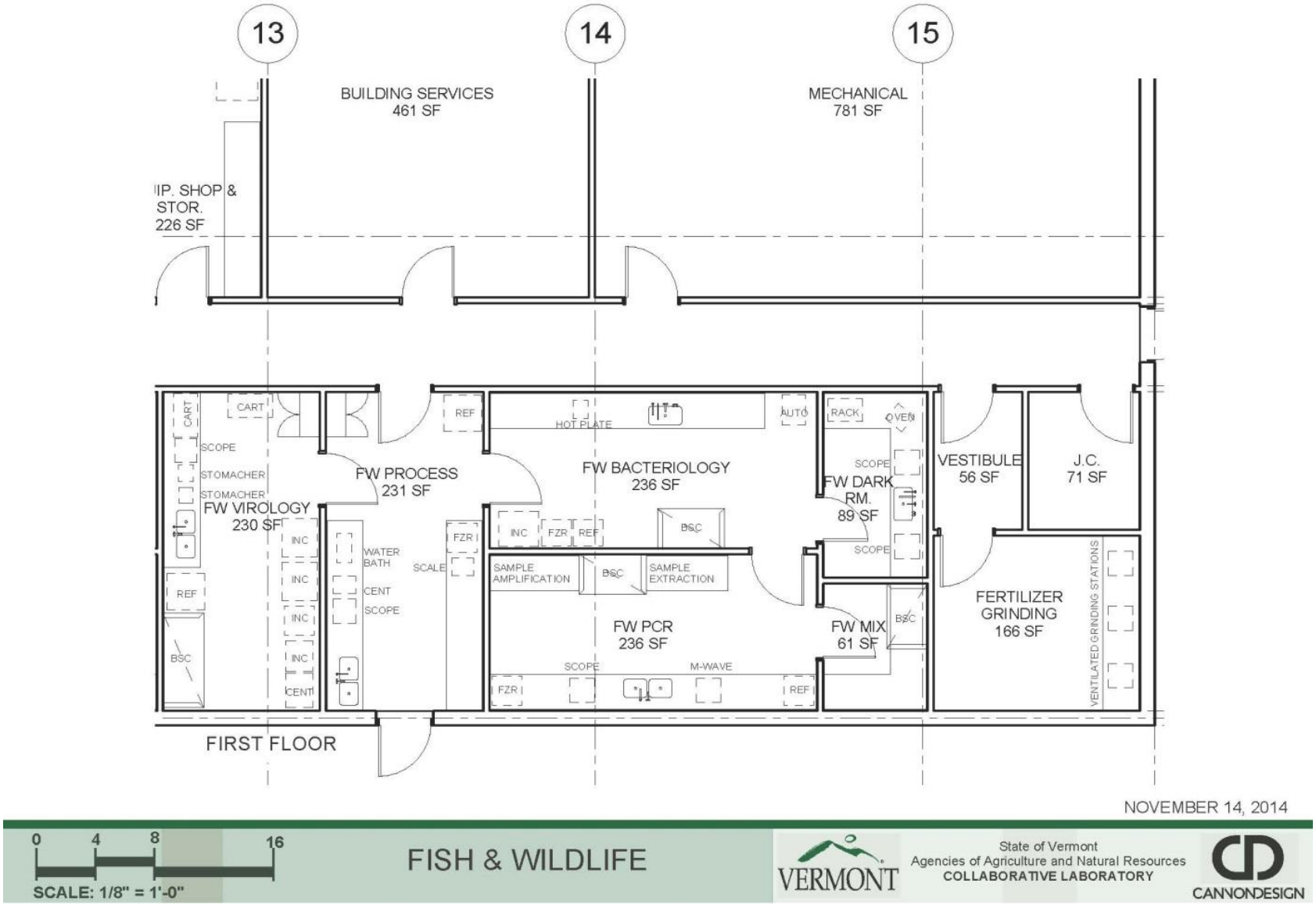
Act 51 (2013) Sec. 49. RENEWABLE ENERGY AND ENERGY CONSERVATION POLICY

" The Department of Buildings and General Services shall incorporate the use of renewable energy sources, energy efficiency, and thermal energy conservation in any new building construction or major renovation project in excess of $250,000.00 unless a life cycle cost analysis demonstrates that the investment cannot be recouped or there are limitations on siting."

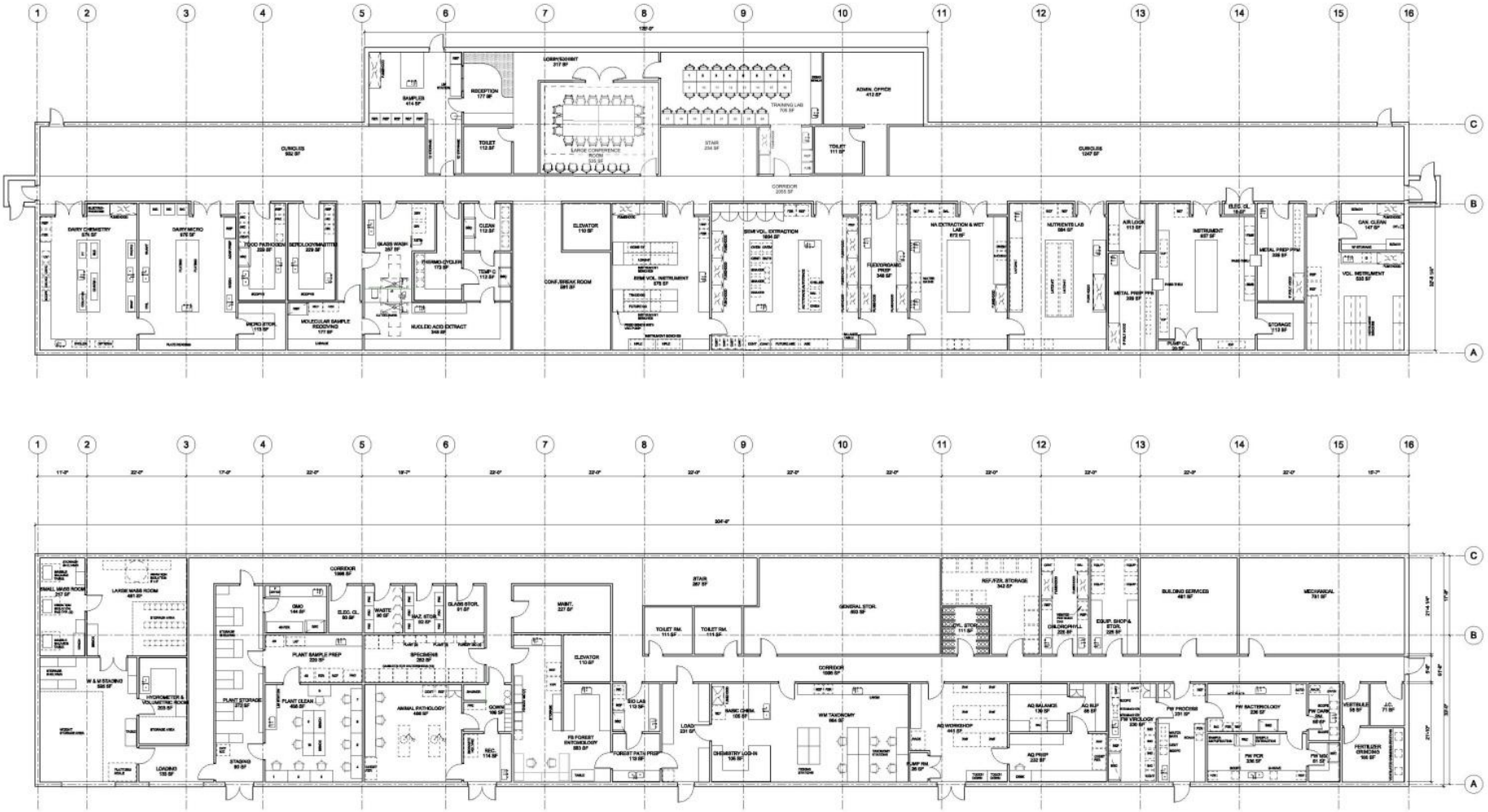
Energy Goal: 50% less energy use than a standard lab. Using life cycle cost analysis, the team has explored many options. The recommended design is a 2,000 sf wood chip plant. This is included in the project cost.

Concept Package so far:

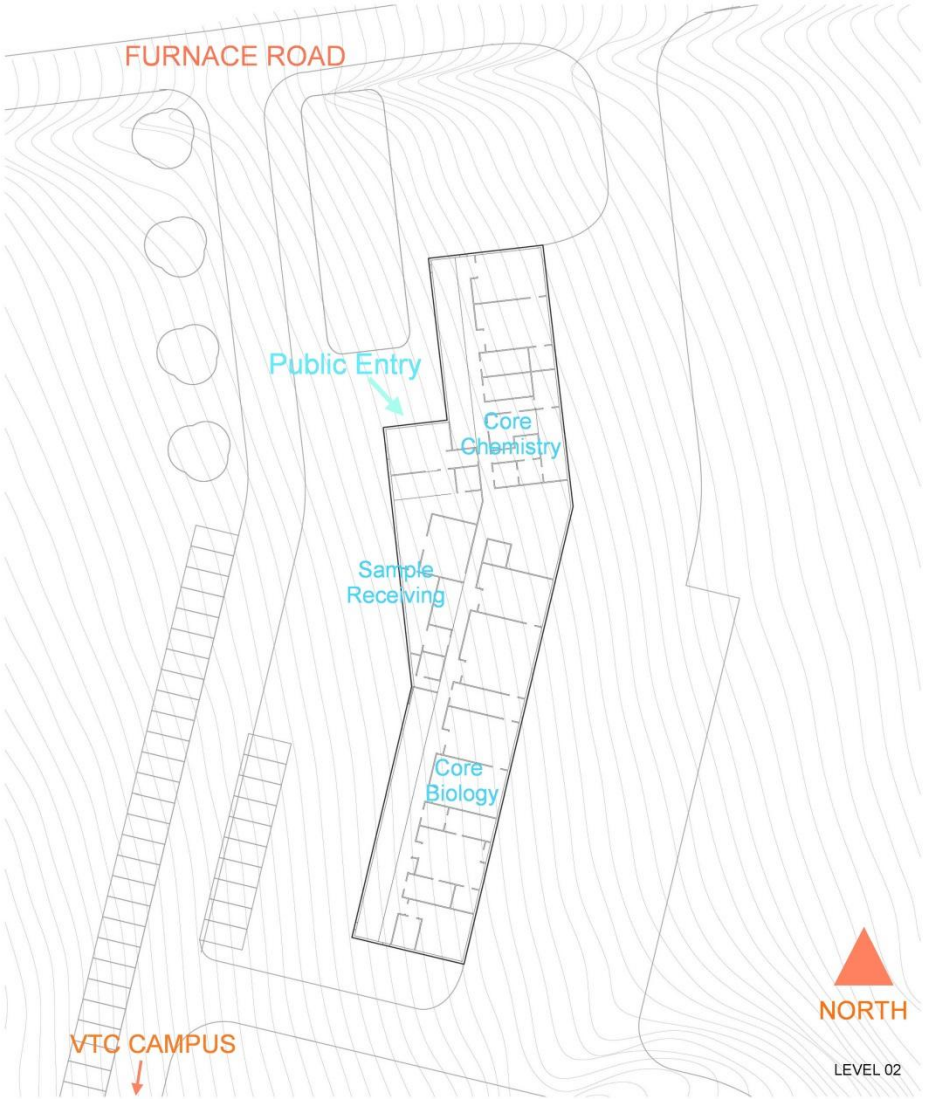
- Basis of Design: documents all background data– building codes, energy efficiency and sustainability goals, lab certifications required, IT guidelines, site design guidelines, etc.
- Room Data Sheets: identifies details such as equipment, temperature, data needs, and plumbing for each room
- Space Program: summarizes room sizes for the entire building
- Concept Diagrams: for each section of the building as well as the whole building and site
- Price information: based on detailed cost estimates, not from typical square footage costs.



Example of a lab suite with equipment layout



Conceptual floor plans



Lower Level

Upper Level

Site Concept

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Capital Bill Funding Requests:

- FY ’16 $ 2,500,000
- FY ’17 $14,048,174
- FY ’18 $ 8,651,826
  - FY ‘18 request to be finalizing of project funding needs, including use of FEMA funds anticipated to be $1,622,059

Funds will support:

- FY ‘16 – completion of design, bidding, and start of permitting.
- FY ‘17 – proceeding to construction with an anticipated start of October 2016
- FY ‘18 – completion of construction, commissioning, and building occupancy anticipated in June 2018

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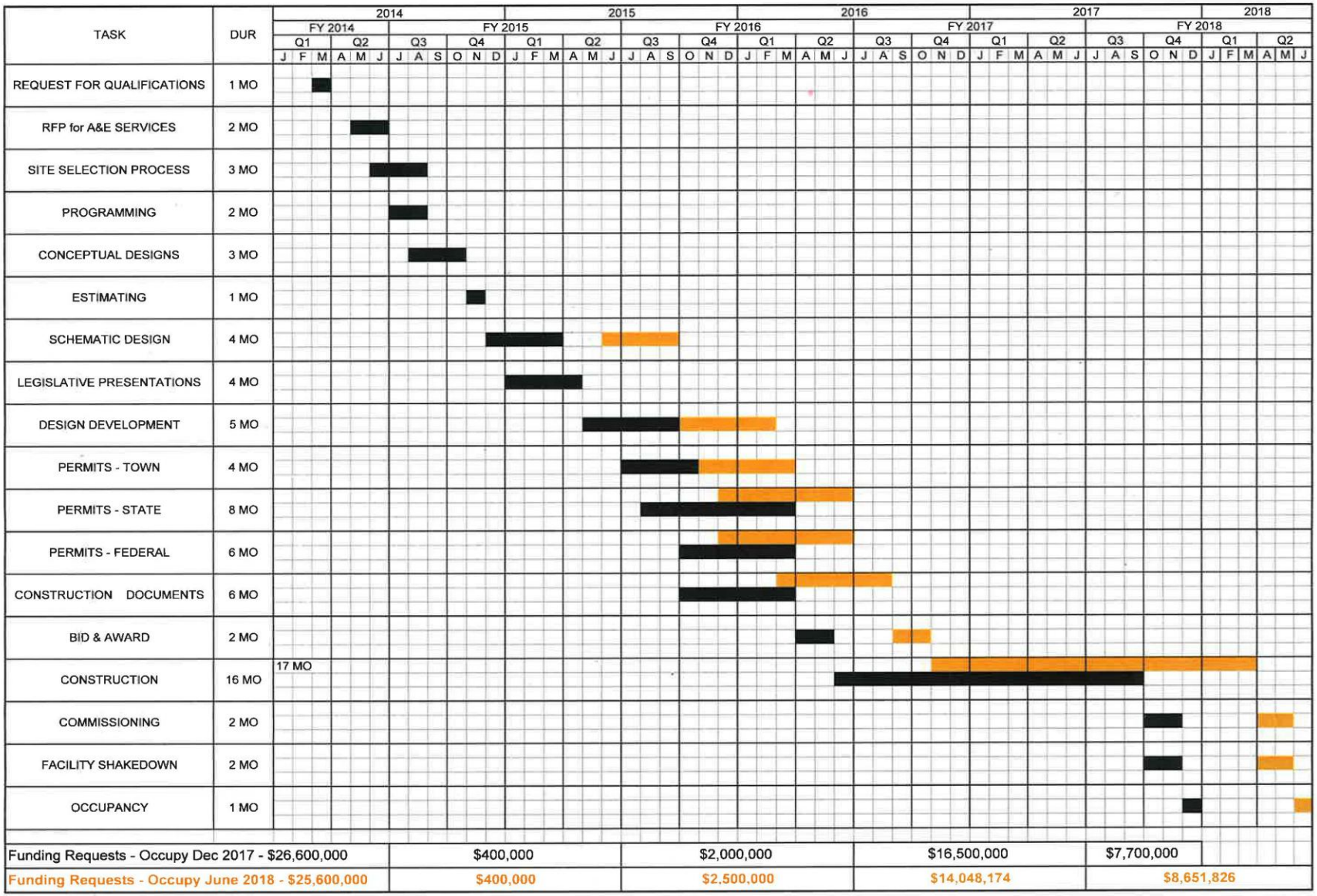
PROPOSED PROJECT SCHEDULE w/ FUNDING NEEDS
JANUARY 21, 2015



Delayed construction facilitates three year funding.
(black) mid-2016 start of construction
(orange) late-2016 start of construction

Project Timeline