On-Campus Multipurpose Center

RFP Site Visit and Informational Meeting
Dudley H. Davis Center, Livak Ballroom
March 8, 2017

ON-CAMPUS MULTIPURPOSE CENTER
AGENDA

- Introductions
- Facilities Design & Construction Website
- Defining the Project, Background and Goals
- Existing Utility Infrastructure
- Campus Master Plan Guidelines
- Regulatory Land Use Process
- Contract
- Fee Proposal Matrix
- Architect-Engineer Checklist of Services
- RFP Highlights
- Questions
- Tour of Facilities

INTRODUCTION AND BACKGROUND

- The need to upgrade and expand our facilities to better accommodate UVM's health, fitness, wellness, academic, athletic, events, and related programs has been discussed for years
- In 2007, this Board appointed its own Campus Life Task Force to conduct a detailed assessment of what is needed
- The Task Force Report was issued in 2009, and articulated principles that should guide a proposed project, including:
    1. Reflect and support the mission and values of the University
    2. Integrate academic components into the program
    3. In a highly student-centered way, meet the breadth and depth of wellness, recreation, fitness, athletic, and event/activities needs of UVM's active, diverse community
    4. Maximize cost savings through utilization of existing facilities and co- location of new ones
    5. Build community in an imaginative, integrated way

INTRODUCTION AND BACKGROUND

6. Embody the outdoor, natural spirit of Vermont
7. Be a model of environmental stewardship
8. Compare well with our peer institutions
9. Assist in the recruitment, retention, and success of students, faculty, and staff
10. Allow the intercollegiate athletic program to compete and thrive, with particular attention to the success of the “student-athlete

- The Task Force concluded that fully meeting the University’s programmatic and facilities needs would cost nearly $200 million
- We are presenting a concept that is true to the principles of the Campus Life Task Force Report, and moves the University ahead significantly in terms of meeting the needs of our students and our University community
- The proposed concept offers a significantly lower cost than was contemplated in 2009, and allows our facilities to remain fully on campus in an imaginative, integrated, student-centered fashion

CONTEXT/PROJECT GOALS

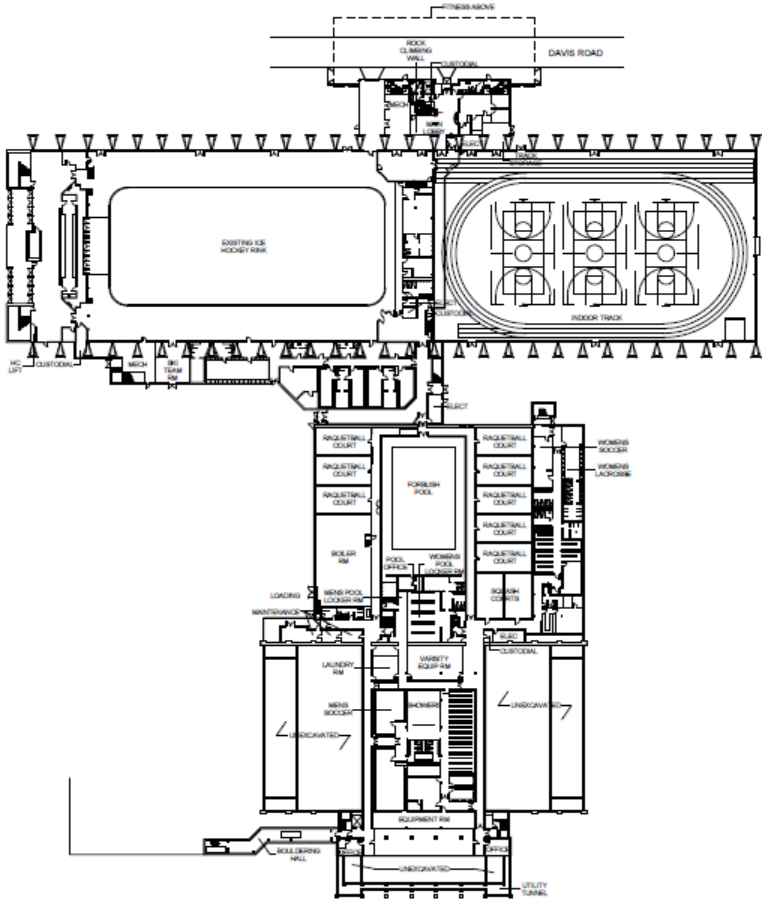
- Athletic Department encompasses full spectrum of health, wellness, recreation and varsity sports programming
- Dramatically enhance and consolidate health and wellness space.
  - ✓ New health/wellness zone is created
  - ✓ Dedicated student health/wellness space increases from 15,000 sq. ft. to 86,000
- Create A true Multipurpose Center that includes Health, Wellness, Academic, Social, Cultural and Athletic Programming elements

CONTEXT/PROJECT GOALS

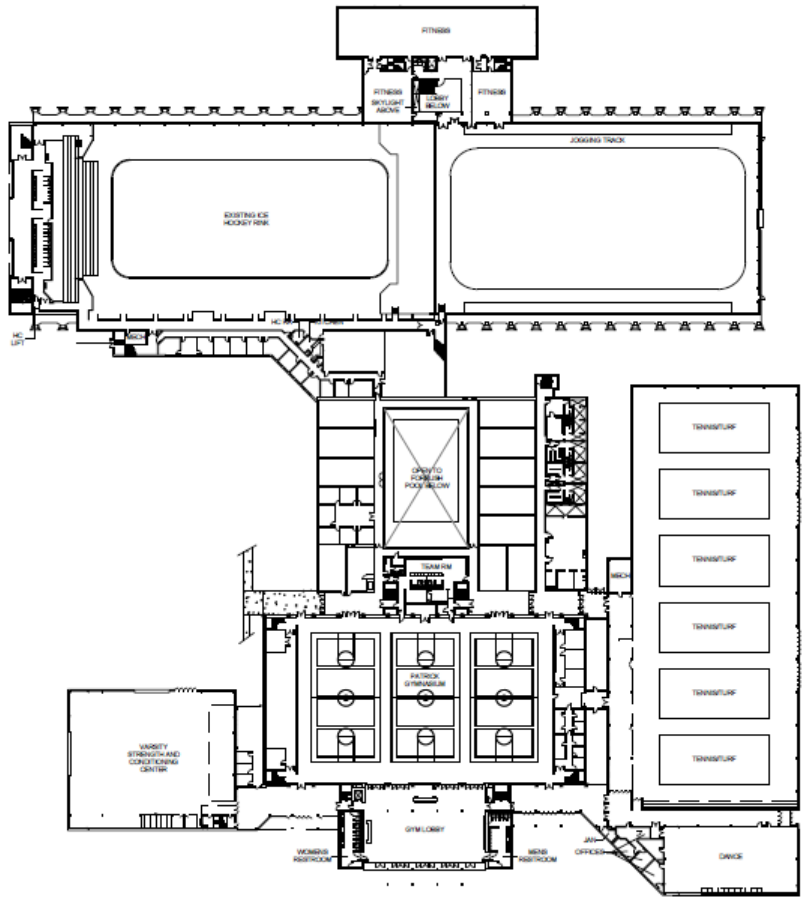
- Maintain two separate On-Campus Facilities for Hockey and Basketball
  - ✓ Gutterson is preserved, improved and remains the home of UVM Hockey
  - ✓ A new, properly sized Events Center is built to house academic, social, cultural and entertainment events as well as basketball practice and competition
  - ✓ Events Center and Gutterson are integrated
- Address long-standing Deferred Maintenance issues
- Improve internal circulation
- Highly efficient concept that includes significant re-use of existing space and limited new construction To dramatically enhance Health/Wellness and Athletics

EXISTING BUILDING CHALLENGES

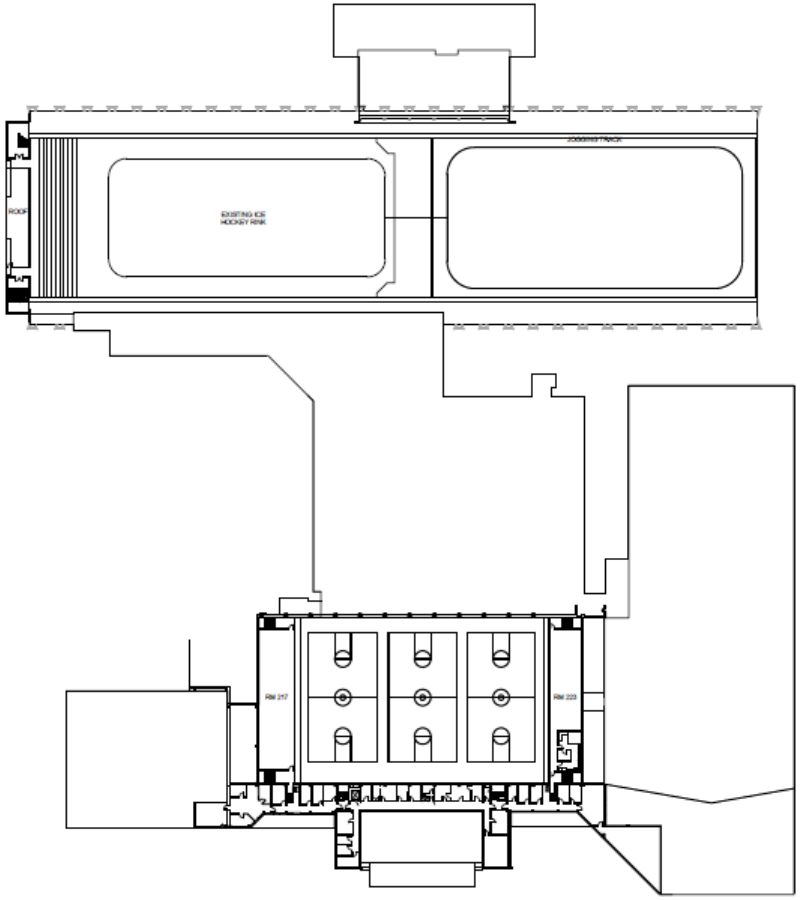
- Opened in 1963; facilities no longer meet current athletic or recreational planning standards
- Functioning at or beyond their full capacity
- Majority of spaces are undersized
- Universal accessibility is limited
- Maintenance program has extended the lifespan of the facilities
- Building systems have reached the end of their typical useful life
- Wayfinding throughout complex is difficult thru multiple corridors



PFG
Complex
Level 1

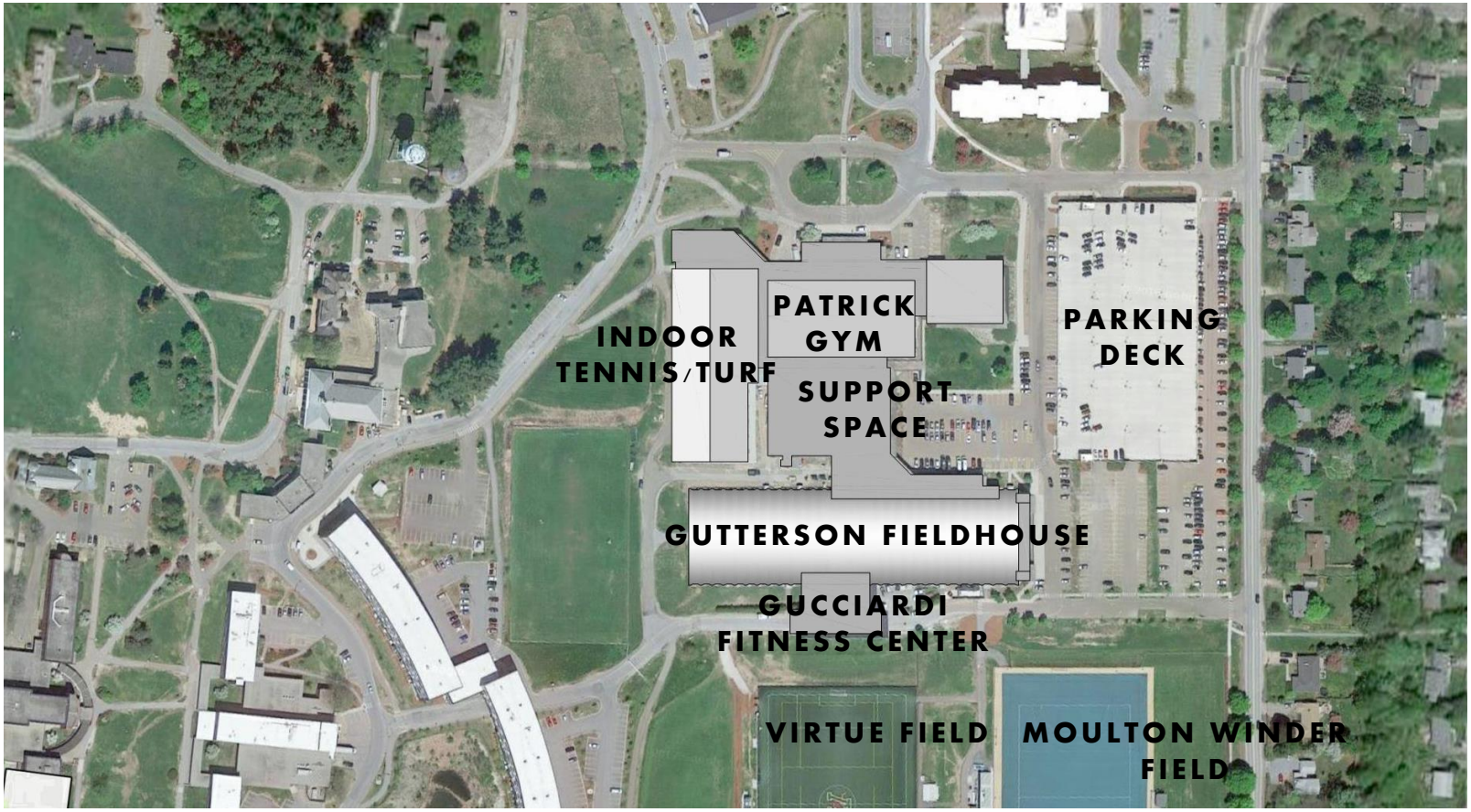


PFG Complex
Level 2

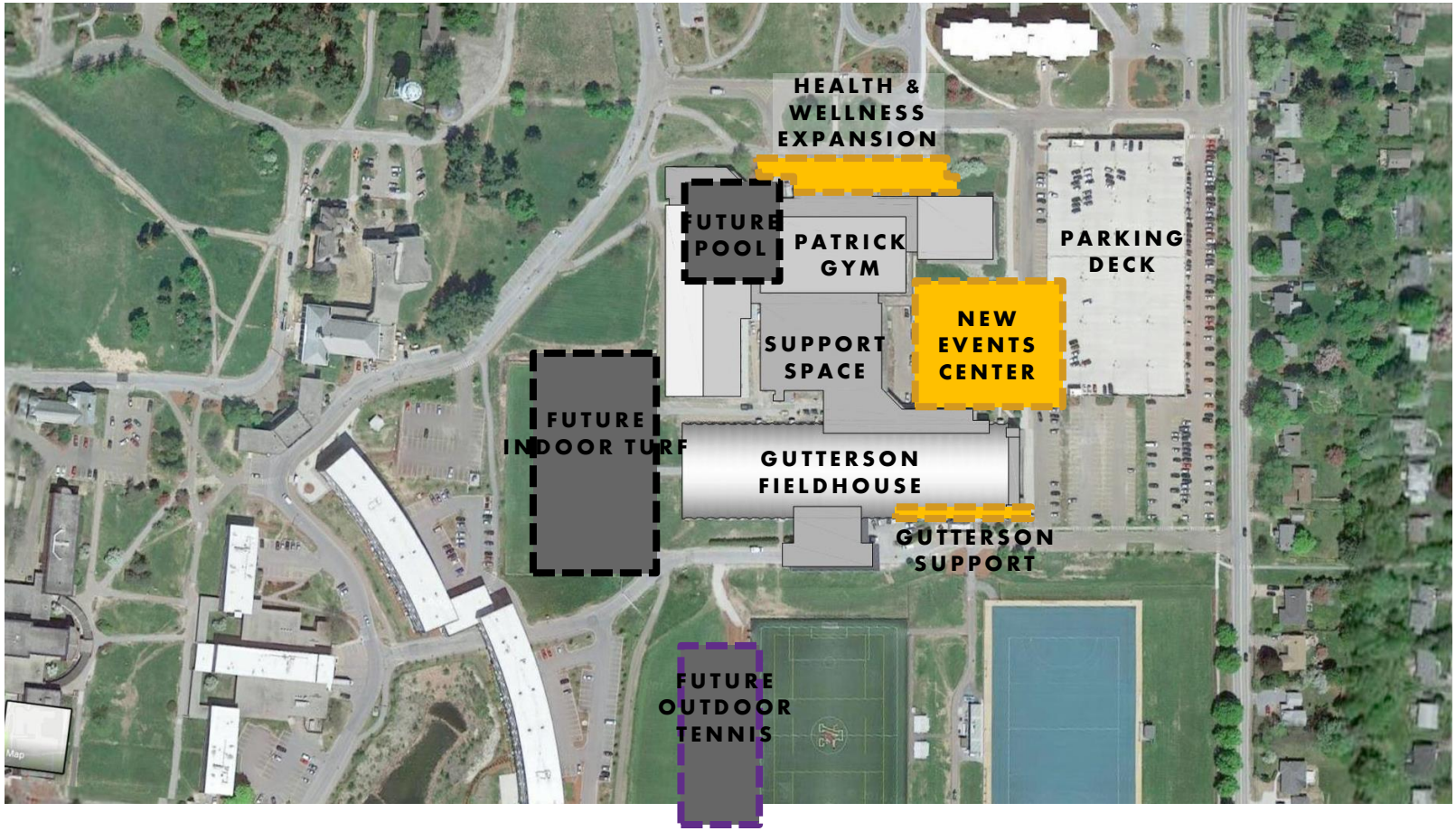


PFG Complex
Level 3

EXISTING COMPLEX

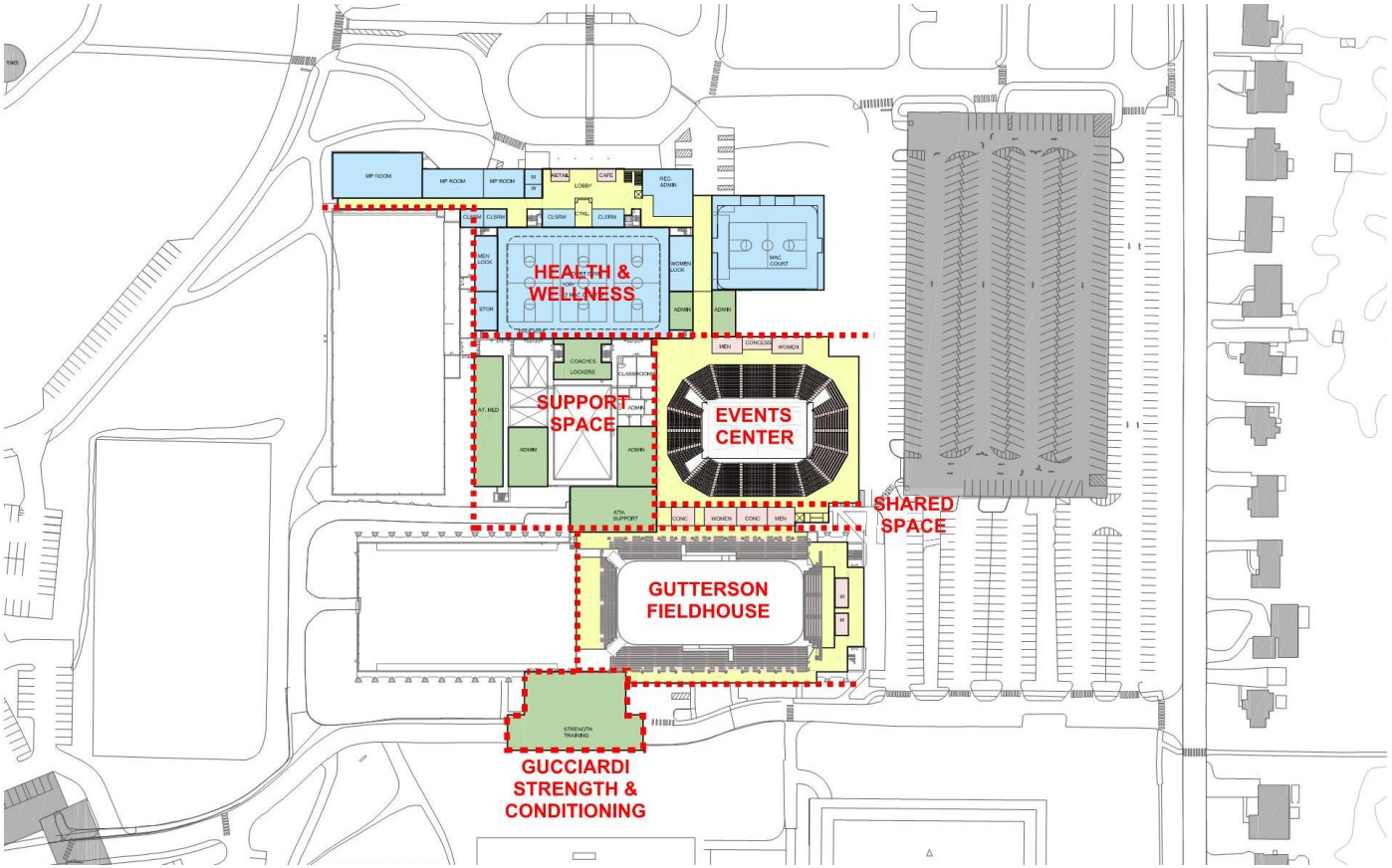


PROPOSED CONCEPT



BUILDING LAYOUTS

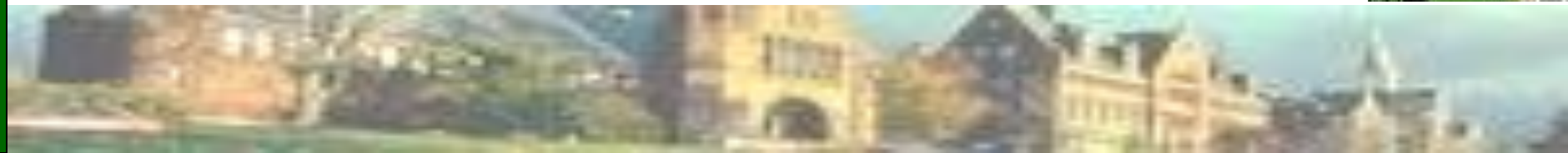
Overall Plan



THE UNIVERSITY of VERMONT

UVM Infrastructure Review For Athletic Multipurpose Facility Upgrades

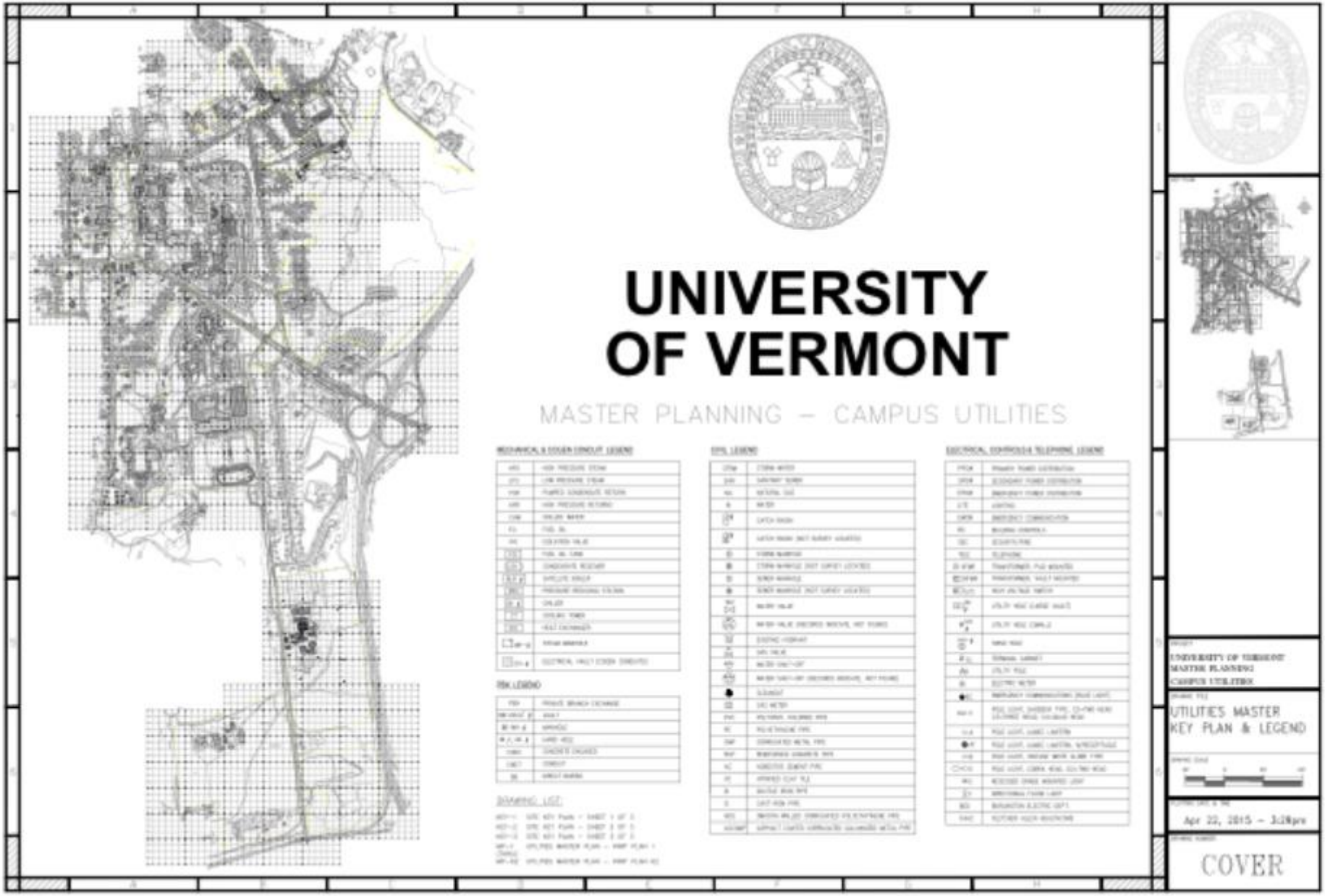
Sal Chiarelli, Director of Physical Plant, March 8, 2017



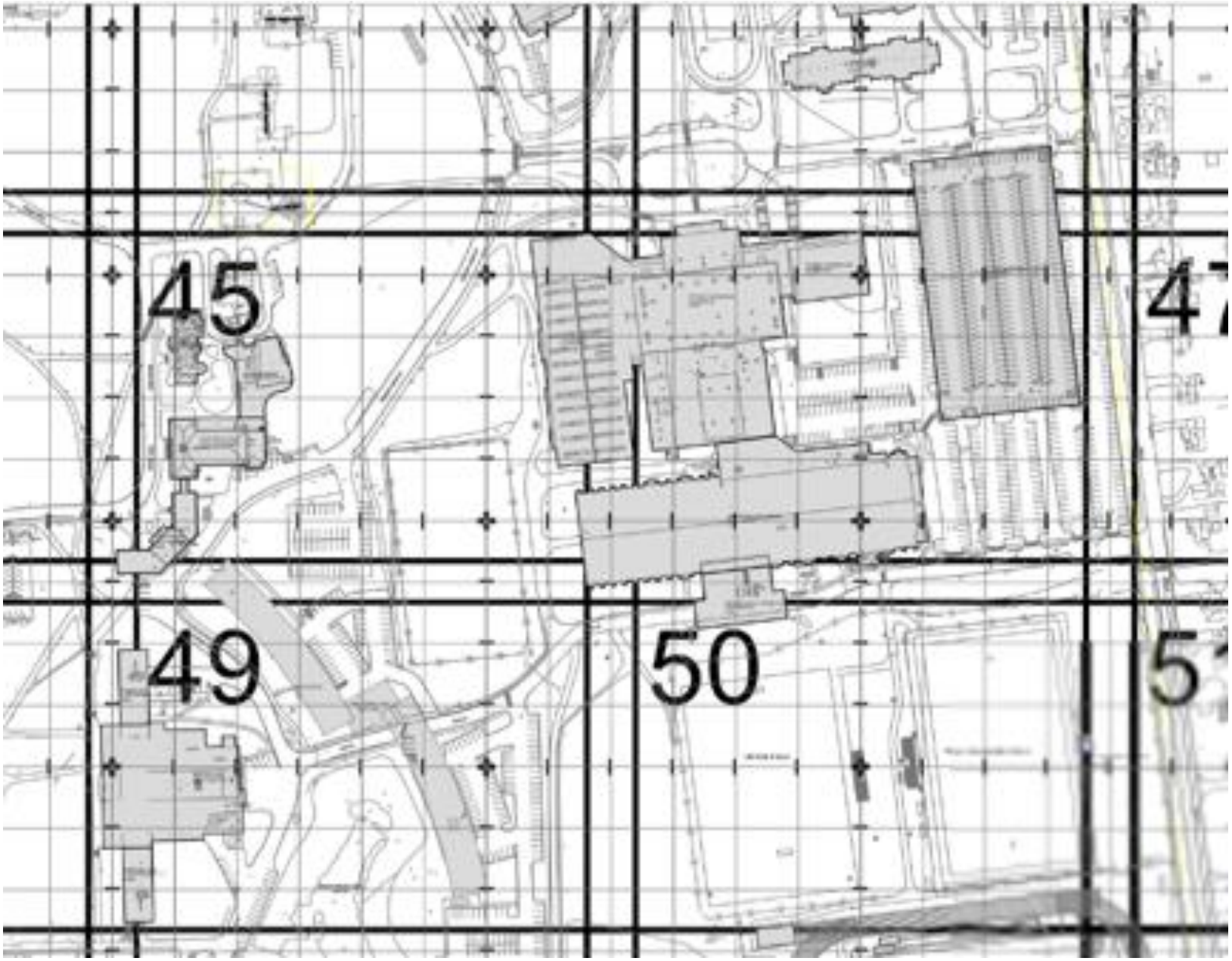
Background - Existing Central Plant and Utilities

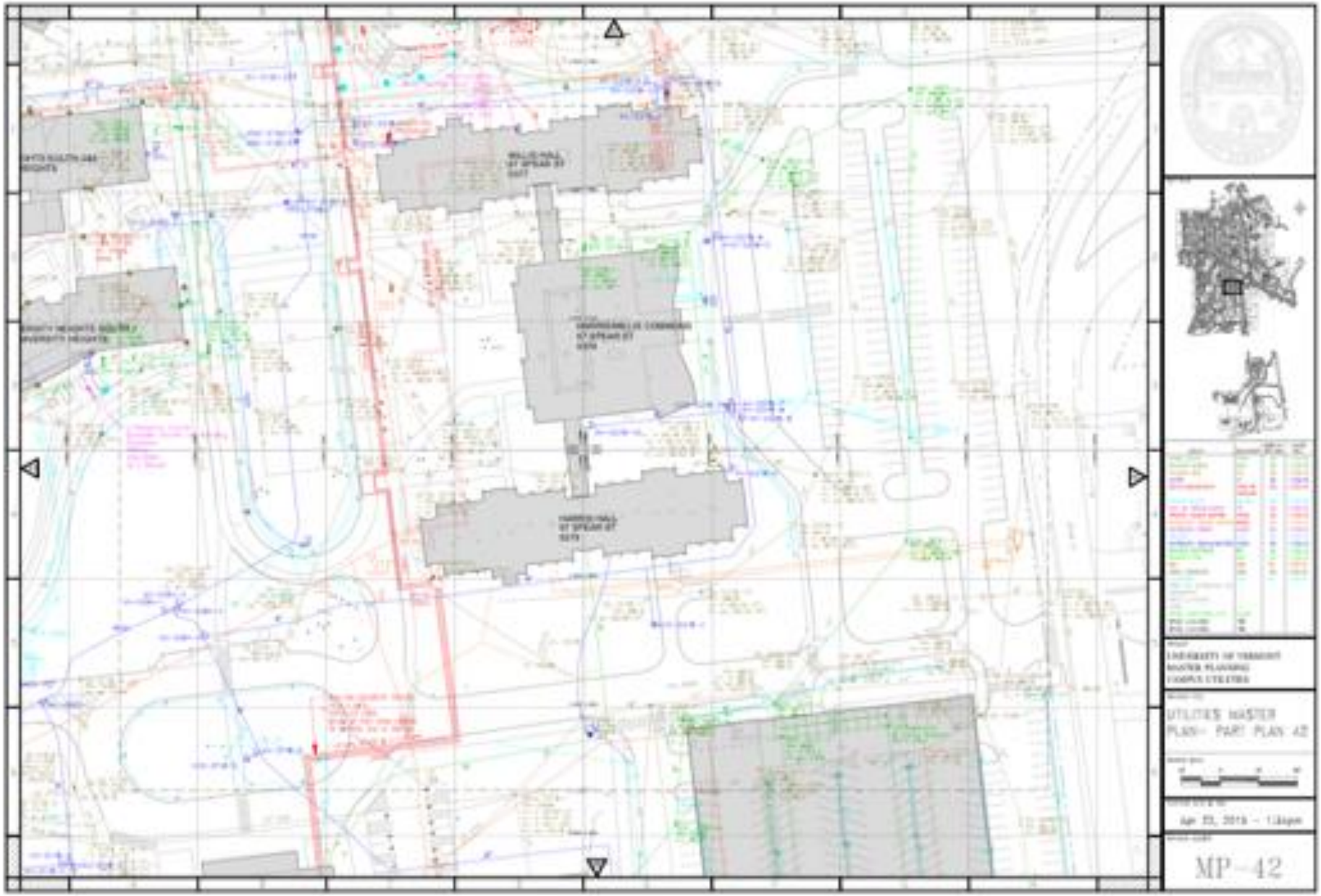
- (4) 40,000 pound per hour steam
- (1) 64,000 pound per hour steam
- Steam line under Main Street
- 3 Chillers in central plant… No feed to athletic complex
- PFG Boiler/ Back up/ Shutdown
- 90% condensate return
- Natural gas/ #2 as interruptible /back up fuel
- Feeds about 90% of campus square footage
- Electric, Burlington Electric
- Water/sewer, Burlington Public Works
- Natural gas, Vermont Gas System

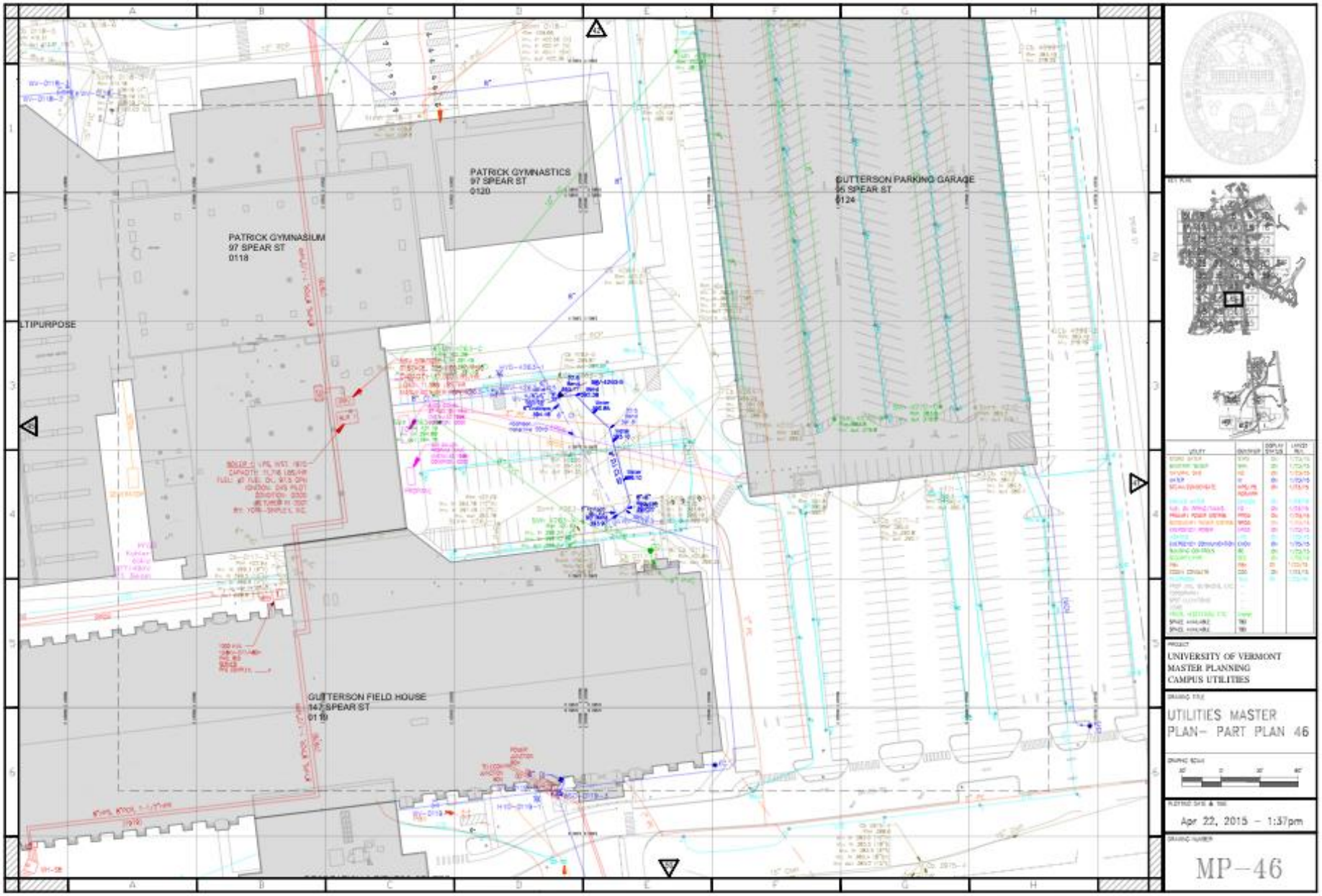
Central Plant

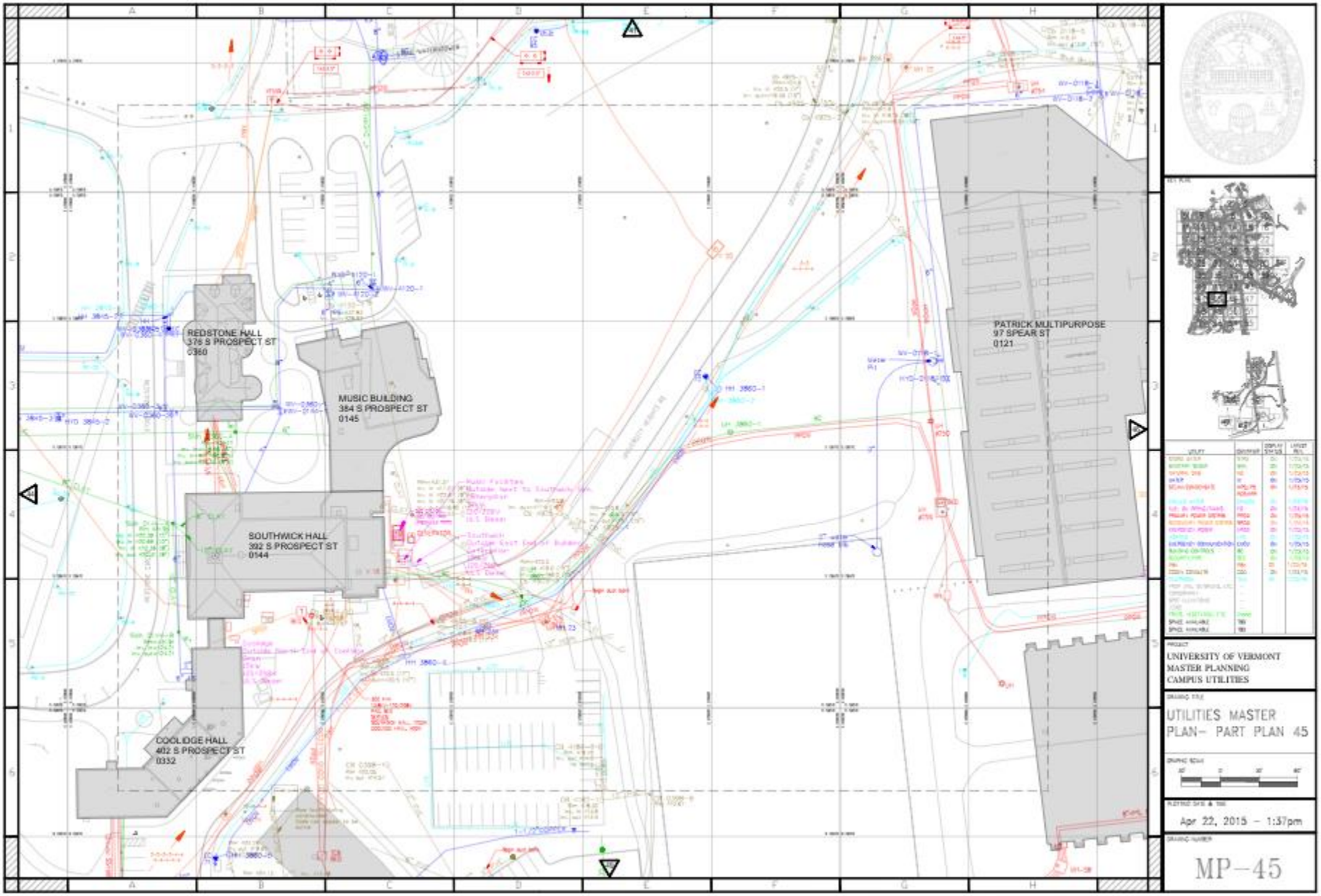

UNIVERSITY
OF VERMONT
MASTER PLANNING – CAMPUS UTILITIES
UTILITIES MASTER
KEY PLAN & LEGEND
Apr 22, 2015 - 3:28pm
COVER

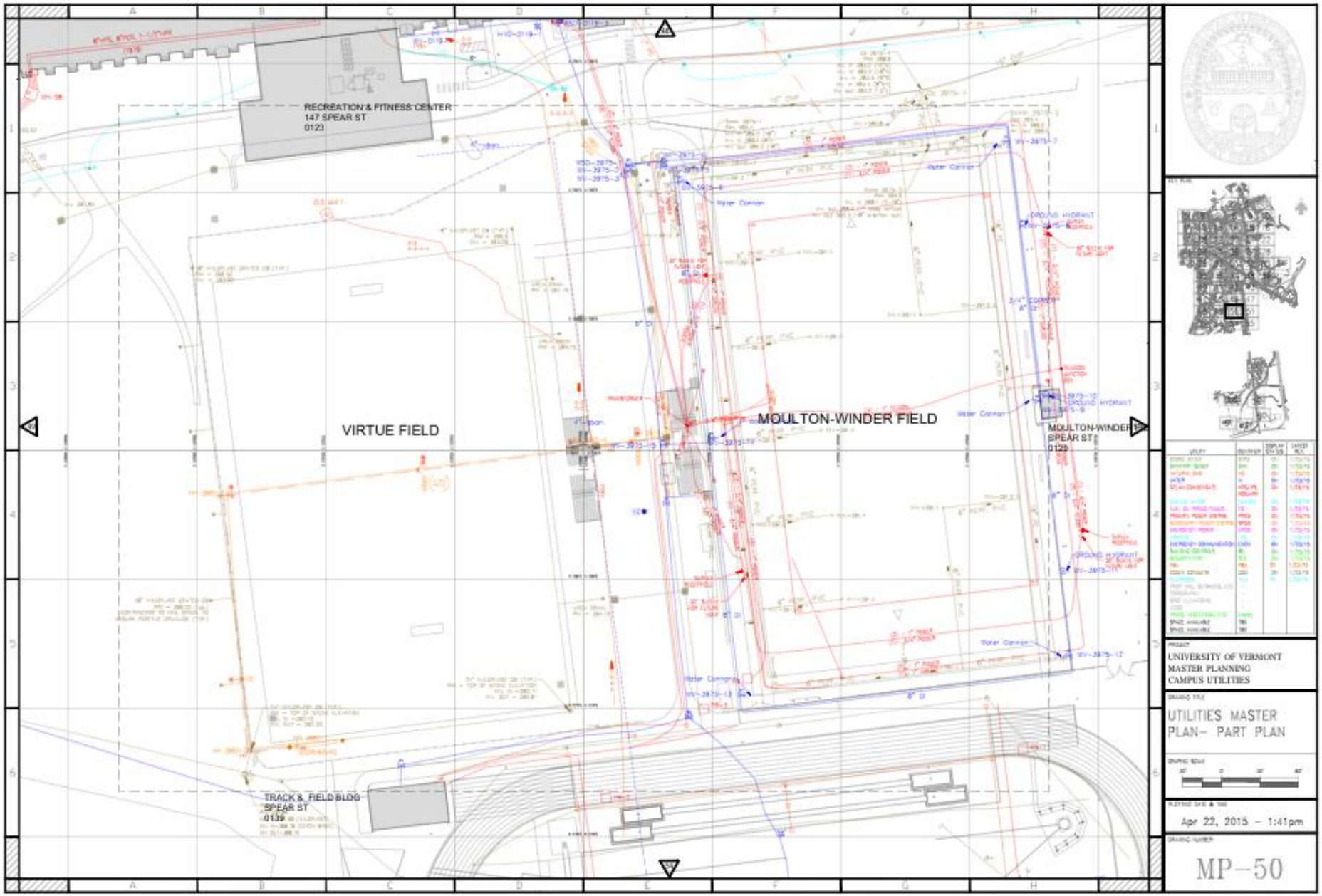
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
38
39
40
41
42
43
44
45
47
48
49
50
51
52
53
54
55
KEY-2

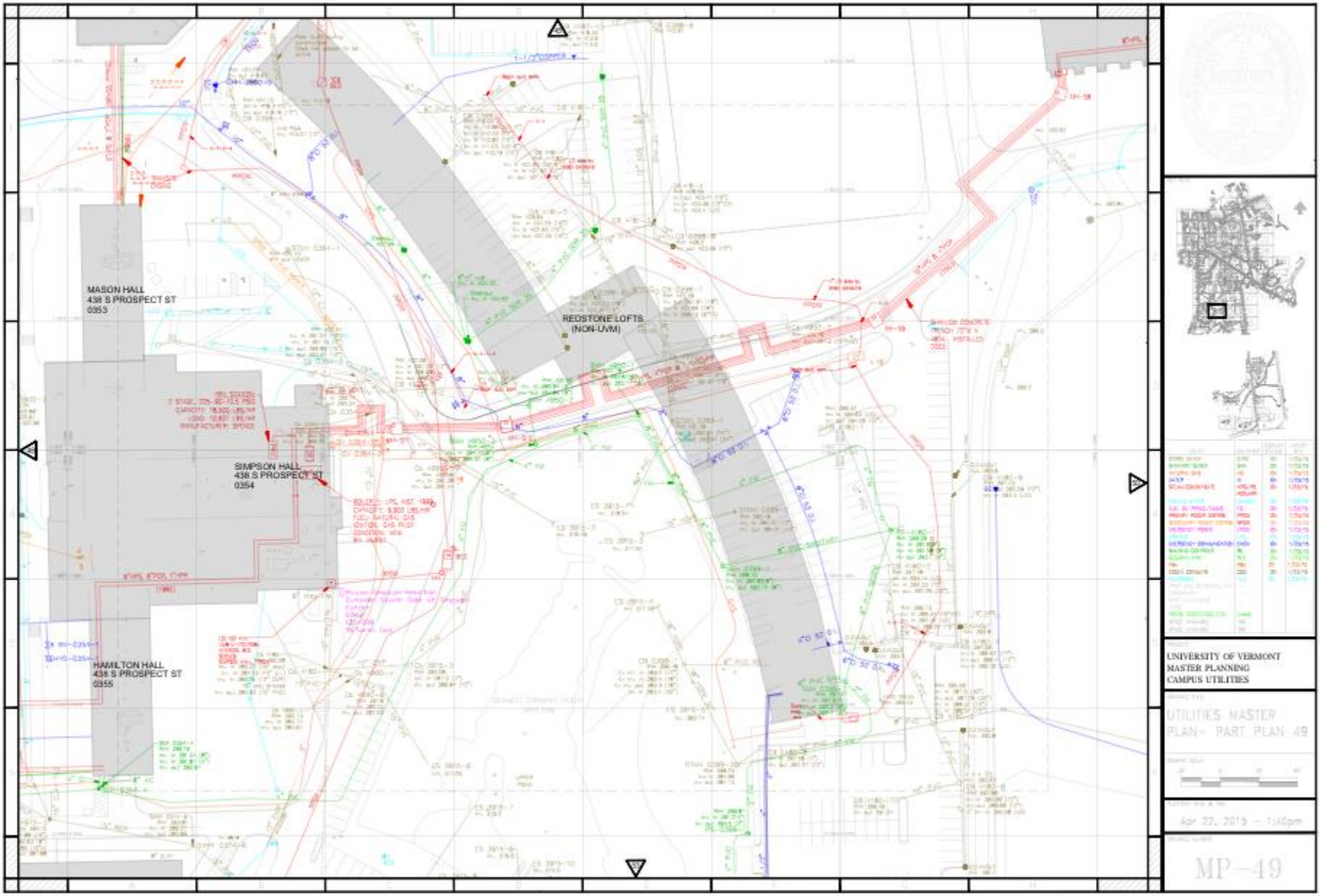

45
49
50


UTILITIES MASTER
PLAN- PART PLAN 42
MP-42


PATRICK GYMNASTICS
97 SPEAR ST
0120
PATRICK GYMNASIUM
97 SPEAR ST
0118
GUTTERSON PARKING GARAGE
96 SPEAR ST
0124
GUTTERSON FIELD HOUSE
147 SPEAR ST
0119
UNIVERSITY OF VERMONT
MASTER PLANNING
CAMPUS UTILITIES
UTILITIES MASTER
PLAN- PART PLAN 46
Apr 22, 2015 - 1:37pm
MP-46


REDSTONE HALL
376 S PROSPECT ST
0360
MUSIC BUILDING
384 S PROSPECT ST
0145
SOUTHWICK HALL
392 S PROSPECT ST
0144
COOLIDGE HALL
402 S PROSPECT ST
0332
PATRICK MULTIPURPOSE
97 SPEAR ST
0121
UNIVERSITY OF VERMONT
MASTER PLANNING
CAMPUS UTILITIES
UTILITIES MASTER
PLAN- PART PLAN 45
Apr 22, 2015 - 1:37pm
MP-45


RECREATION & FITNESS CENTER
147 SPEAR ST
0123
VIRTUE FIELD
MOULTON-WINDER FIELD
MOULTON-WINDER
SPEAR ST
0125
TRACK & FIELD BLDG
SPEAR ST
0139
UNIVERSITY OF VERMONT
MASTER PLANNING
CAMPUS UTILITIES
UTILITIES MASTER
PLAN- PART PLAN
Apr 22, 2015 - 1:41pm
MP-50


MASON HALL
438 S PROSPECT ST
0353
REDSTONE LOFTS
(NON-UVM)
SIMPSON HALL
438 S PROSPECT ST
0354
HAMILTON HALL
438 S PROSPECT ST
0355
UNIVERSITY OF VERMONT
MASTER PLANNING
CAMPUS UTILITIES
UTILITIES MASTER
PLAN - PART PLAN 49
Apr 22, 2015 - 1:40pm
MP-49

Issues and Opportunities at PFG

- Metal standing seam roof over Gutterson starting to rust, pin holes noted/asbestos roof under metal roof
- Patrick gym floor needs replacing
- Patrick gym roof needs replacing
- Multi purpose roof leaking at skylights and screw hole connections.
- 2 Chillers for ice rink need replacing, 20 years old
- Antiquated control system/pneumatics
- Steam piping that runs inside the building is a concern, age.
- Remaining life of piping should be evaluated, also a choke point in system
- “Greening” opportunities should be considered and designed into facilities
- Heat and cooling recovery opportunities
- Pool infrastructure requires analysis and upgrade

Issues and Opportunities at PFG, cont'd

- Use chilled water system for ice rink through heat exchanger to provide cooling
- Use existing and upgraded chilled water system for ice storage to be used during the day
- Create energy goal not to increase electrical or steam demand of facility
- Snow is a major, safety issue, volume, weight, avalanche, transporting
- Storage is very limited and frequently impinges on mechanical areas and egress
- PFG loading dock not adequate for efficient waste/recycling material handling
- Entrance at Patrick Gym in bad shape
- No Generator for EOG Emergency Operations
- Asbestos abatement and other environmental hazards need to be analyzed
- Facility partially sprinklered. Building (life safety and loss of use) but also restricts how the students are able to set up Patrick for concerts.

Issues and Opportunities at PFG, cont'd

- Fire alarm system needs to be upgraded, integrated and strategic
- Most of the fire doors in the Patrick stairwells are not properly constructed or rated and do not have the correct hardware.
- Arc Flash analysis and grounding study for existing facilities must be performed
- ADA, Elevators, railings, access issues are all items we discuss
- Increase use of security access (catcard) throughout facility/cameras
- Concrete spalling in many areas internal to building (lockers, by loading dock)
- Seismic considerations for existing buildings
- Mechanical/boiler room air intake by loading dock.
- Underground steam piping from Harris Millis could be in conflict
- Some utilities in parking lot area.
- BED electric requires analysis and upgrade if we don't do something innovative

Issues and Opportunities at PFG, cont'd

- No chilled water for AC
- Steam modeling or analysis should be done to ensure proper sizing for new space
- Good opportunity for a Tri Gen plant, Heat, Cooling, Electric. CoGen/Combined heat and power
- Consider geothermal for heating/cooling
- Lighting upgrades can reduce overall demand on facility
- Only 1 natural gas feed into building
- All Heating Ventilation equipment is well beyond life expectancy
- Sanitary drains need replacement, basement areas run slow
- Electrical deficiencies throughout facilities, original equipment
- Only 1 main water feed into complex

A Great Overall Common Goal Should Be:

- **Do not increase peak demand of 850KW**
- **Design to be steam neutral or reduce load**
- **Be innovative and think strategic and systematically regarding utilities**
- **Use the environment to help reduce load, geothermal, solar, cold air/free cooling**
- **Consider Cogeneration**
- **Recover as much energy as we can, waste heating, cooling**
- **Provide instrumentation, controls and metering to monitor, measure, fine tune, adjust, and control the interior spaces.**

THE UNIVERSITY of VERMONT

On-Campus Multipurpose Center

Campus Master Plan Guidelines

&

Regulatory Land Use Process

Linda Seavey
Director
Campus Planning Services

Campus Master Plan:
www.uvm.edu/~plan

Site Planning & Design Review Process:
www.uvm.edu/~plan/cmpc_design_review_process.pdf

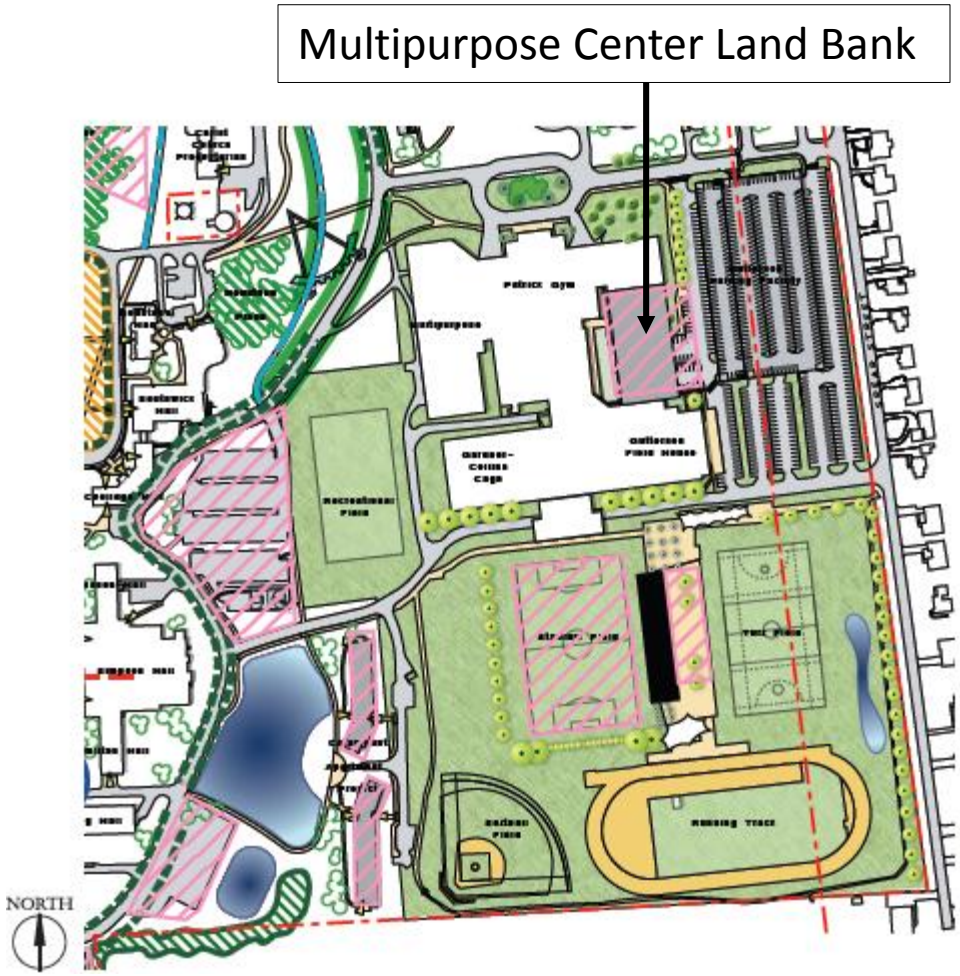
The University of Vermont

Campus Master Plan
& Design Guidelines

May 2006

2006 Campus Master Plan

- **Board of Trustees** Approved
- Divides campus into **9 Architectural Districts** (project is in Athletic District)
- **Land Banks** provide approved development sites, with priority for already developed areas (parking lots)
- **Guiding Principles**
  - Sense of Place
  - Inclusive & Accessible
  - Environmental Sustainability
  - Circulation
  - Compatibility
  - Flexibility
- **Campus Master Plan Committee** internal review process



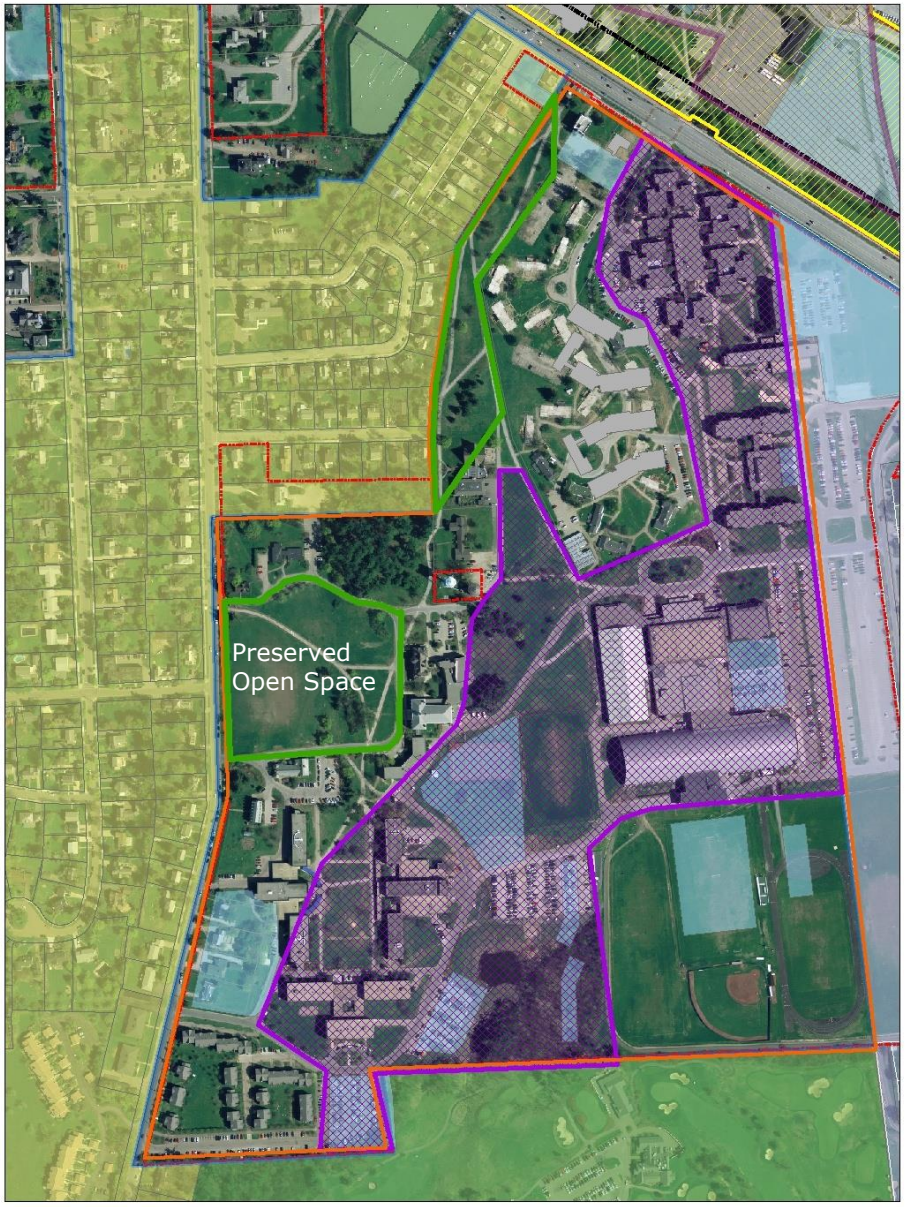
Map excerpted from the **2006 Campus Master Plan**

Campus & Community Context

THE UNIVERSITY of VERMONT

Regulatory/Land Use Issues

- **Zoning District: Institutional (I) & Institutional Core Campus Overlay (ICC):**
  - **Lot Coverage:** Allows up to 60% lot coverage
  - **Height:** Allows up to 8 stories/80 feet in height overlay
- **Capacity** (stormwater, transportation, & utilities)
- **Circulation**
- **Traffic Analysis**
- **Parking requirements –** met off-site by UVM
- **Institutional Adjacencies & Compatibility**
- **Compliance with UVM Campus Master Plan, local municipal & regional plans**
  - **Athletic/Fitness** facilities located within **Athletic Campus and Centennial Sports District**
  - 1st option for siting a project is on **pre-developed land** such as parking lots, or existing building footprints



The University of Vermont
South of Main Street - Institutional
Core Campus &
Core Campus Height Overlay

Campus Planning Services
11/19/08

N

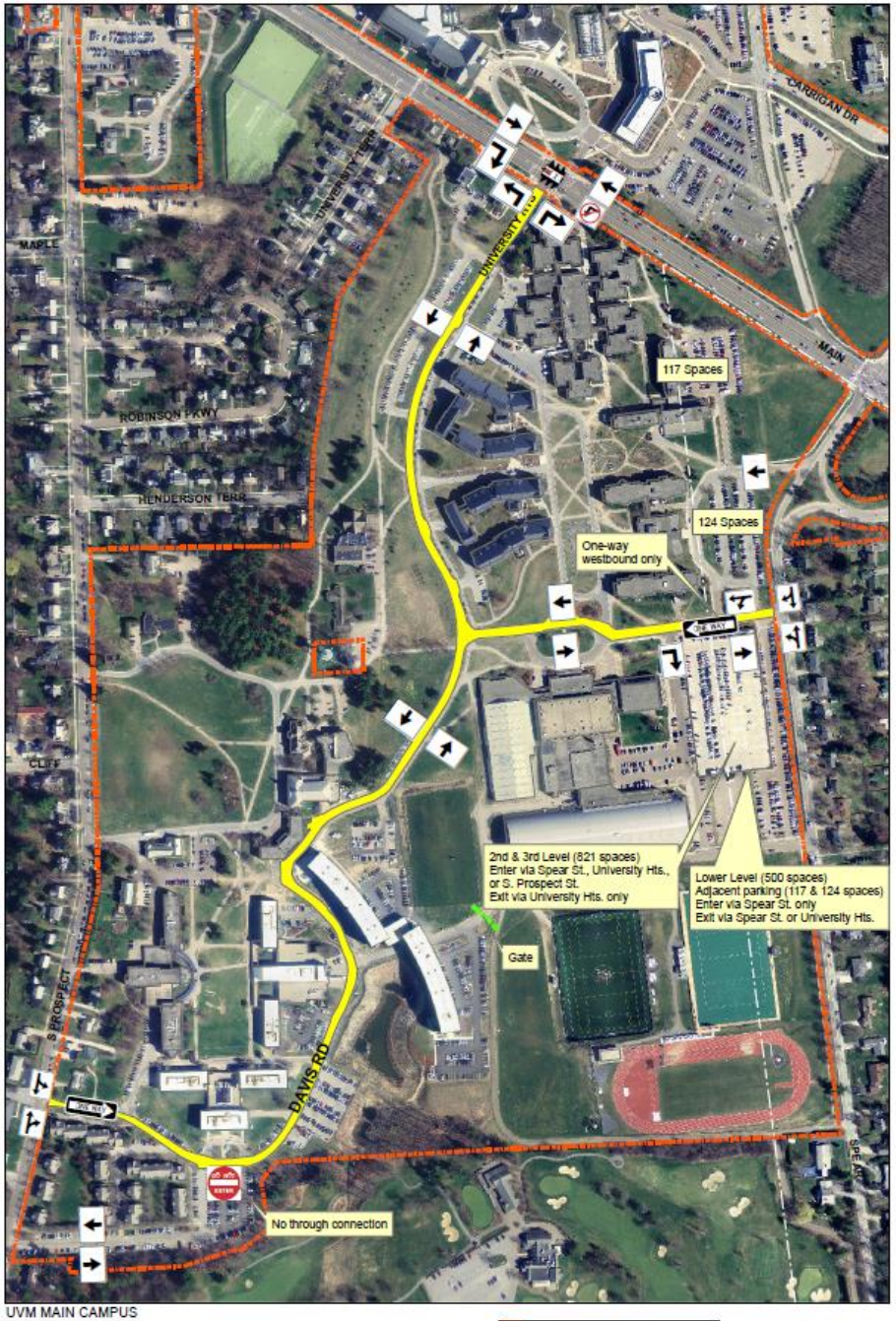
Not to Scale

Legend
INSTITUTIONAL ZONING (was UC)
SOUTH OF MAIN - INSTITUTIONAL CORE CAMPUS OVERLAY
SOUTH OF MAIN STREET HEIGHT OVERLAY
LAND_BANKS
PRESERVED OPEN SPACES
2008_UVM_BOUNDARY

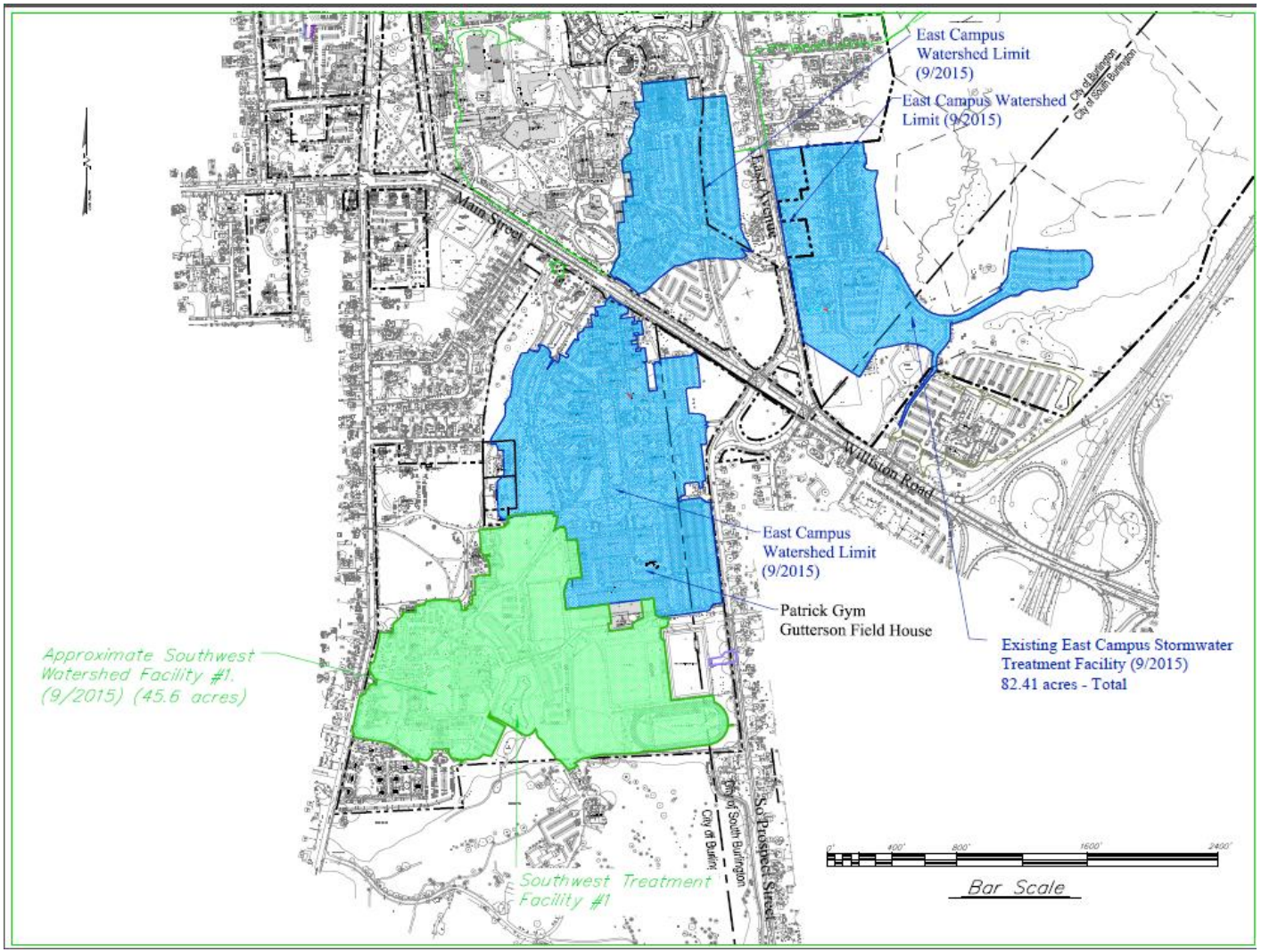
THE UNIVERSITY of VERMONT

South Campus Transportation Master Plan

- Circulation pattern **negotiated** between **two neighborhoods**
  - **One-way entrance** from South Prospect Street, no exit
  - One-way entrance from Spear Street for all **except 1st level** of garage parking may exit
  - All **other traffic** must exit to **Main Street** from University Heights Road
- **Condition** of several land use permits



Stormwater Planning



Regulatory Process/Timeline

Regulatory Process	Estimated # Meetings	Time of Day	Estimated # Hours	Estimated Cumulative Hours
UVM Permit Strategy Meetings	5-7	Day	2	10 -- 14
Campus Master Plan Review	1	Day	2	2
Burlington Neighborhood Planning Assemblies	2	Evening	2	4
South Burlington Neighborhood (SETNA) meeting	2	Evening	2	4
* Burlington Technical Review	1	Day	2	2
* Burlington Design Advisory Board	1	Afternoon	2	2
* Burlington Conservation Board	1	Afternoon	2	2
Burlington Development Review Board	1 – 2	Evening	2-3	3 -- 6
Act 250 Pre-Hearing or Site Visit	1	Day	2-3	3
Act 250 Hearing	1	Evening	2-3	3
Estimated Total:	**16 – 19**			**35 – 42**

* These meetings are more likely to happen if the project is deemed by the Burlington Planning and Zoning Department as “Major Impact”. While this project meets the size criteria for Major Impact, there is an exemption for projects that have “no change of use or increased parking demand”. City staff will make that determination.

RFP Highlights

- Full design team requirement, with Vermont partnership of 20% effort minimum
- Full design and construction schedule
- RFP schedule
- Method of Construction, Pre-construction services, Estimates
- Proposal Requirements, Selection Criteria, Proposal Terms, and Deadlines

On-Campus Multipurpose Center Design & Construction Schedule

May 9, 2017	Begin Schematic Design Phase
October 1, 2017	Complete Schematic Design and estimate reconciliation
October 20, 2017	Present Schematic Design to Board of Trustees
October 1, 2018	Complete Design Development, Construction Drawings and estimate reconciliations
October 26, 2018	Present Construction Drawings to Board of Trustees
January 1, 2019	Completion of Bid Phase
April 1, 2019	Begin Construction on New Events Center
October 1, 2020	Complete Construction on New Events Center
December 1, 2020	Begin Renovation of Health/Wellness/Recreation Space
December 1, 2021	Complete Renovation of Health/Wellness/Recreation Space

RFP Schedule

• Wednesday, February 22, 2017	Request For Proposal Available
• Wednesday, March 8, 2017 (2:00 PM)	Mandatory Campus Site Visit
• Tuesday, March 14, 2017 (2:00 PM)	Deadline For Questions
• Tuesday, March 21, 2017	Addendum to be Issued
• Wednesday, March 29, 2017 (2:00 PM)	Request for Proposals Due
• Week of April 17, 2017	On-Campus Interviews with Short Listed Firms
• Tuesday, May 9, 2017	Schematic Design Start Date