# Willamette Valley Behavioral Health Facility







### Project Team











#### TOTAL MECHANICAL INC.

Mechanical Engineering and Construction











#### Universal Health Services

- 36 year history serving communities through acute care hospitals, behavioral health facilities, and ambulatory centers in 37 states
- Largest facility-based behavioral health provider in the country
  - 216 behavioral health facilities
  - Serves more than 400,000 patients a year through a comprehensive range of behavioral health services
- Upon discharge, patients report a satisfaction score of 4.46 on a 5 point scale



### About the Willamette Valley Behavioral Health Facility

 100 bed facility serving those with privately paid insurance, private pays, and Medicare.

ALOS: 9 days

• Will specialize in behavioral health treatment and shortterm inpatient and outpatient services.

- Patients will include:
  - Adults
  - Children and adolescents
  - Active duty military and veterans
  - No forensic (criminal) patients



### About the Willamette Valley Behavioral Health Facility

- Common Diagnosis for patients
  - Depression
  - Mood Disorders
  - Post-Traumatic Stress Disorder
  - Anxiety
- Staff: 180 employees with 9 physicians
- Intakes: Average of 10-12 patients per day



### Wilsonville Site Location: Boones Ferry at Day Rd.

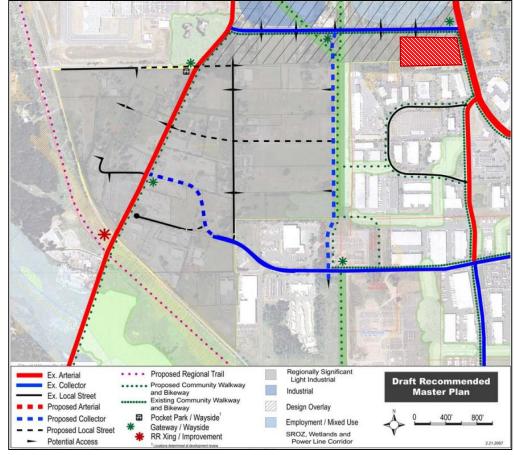
8.72 Acre Site



### Wilsonville Comprehensive Plan

- Coffee Creek Master Plan
- Day Road Overlay Design District

• Regionally Significant Industrial Area







### Wilsonville Land Use Process

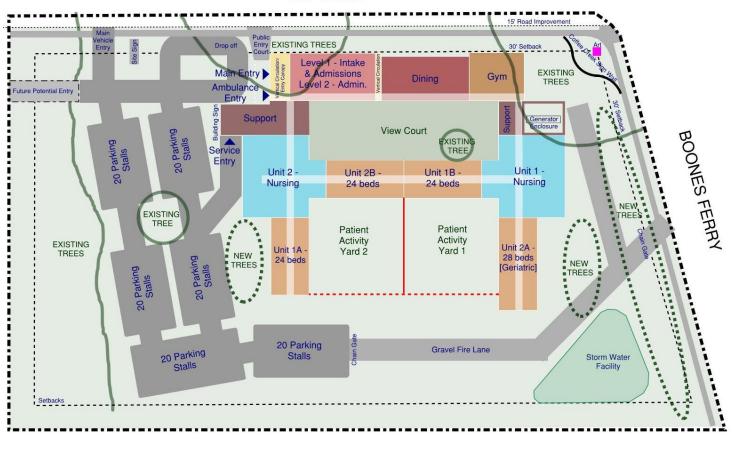
- Annexation into the City of Wilsonville
- Comprehensive Plan Amendment to Industrial
- Zoning Map Amendment to Planned Development Industrial –
   Regionally Significant Industrial Area (PDI-RSIA)
- Stage I and II Plan Review
- Site Design Review
- Type C Tree Removal



## Site Planning

#### Site Diagram

#### DAY ROAD

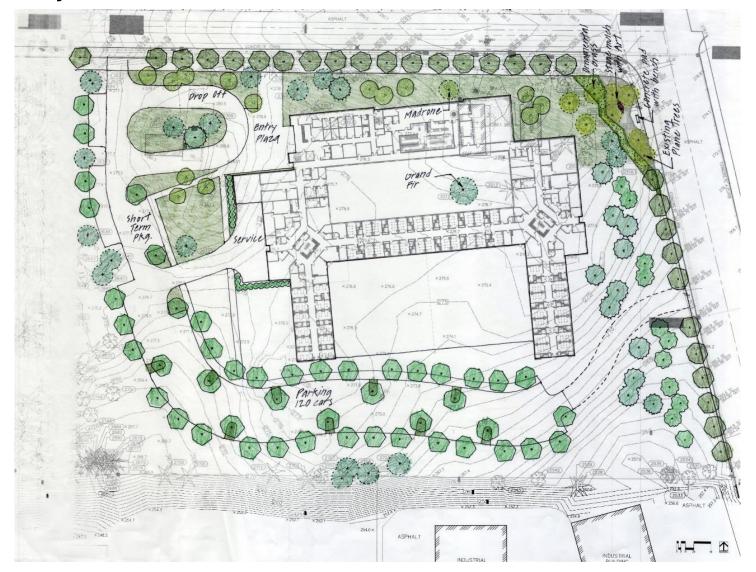






# Site Planning

### Preliminary Site Plan

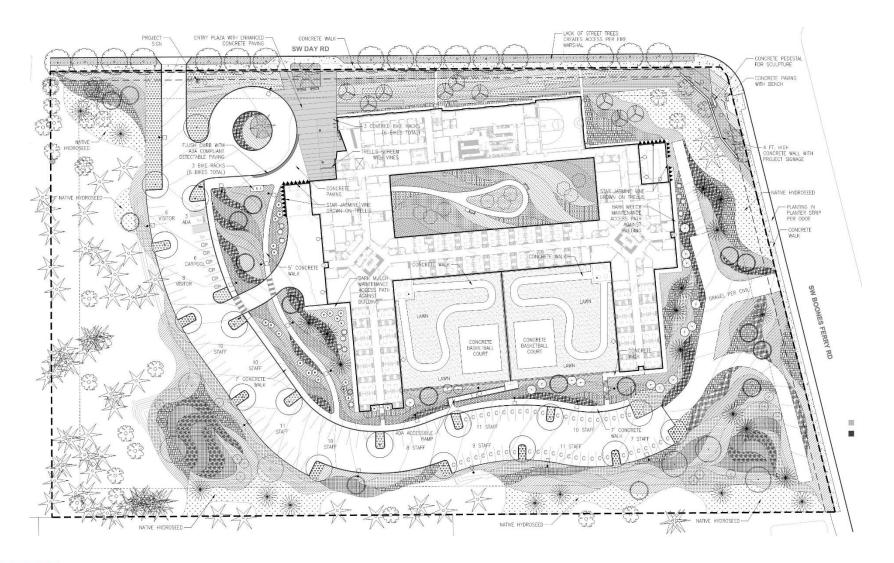






## Site Planning

#### Final Site Plan

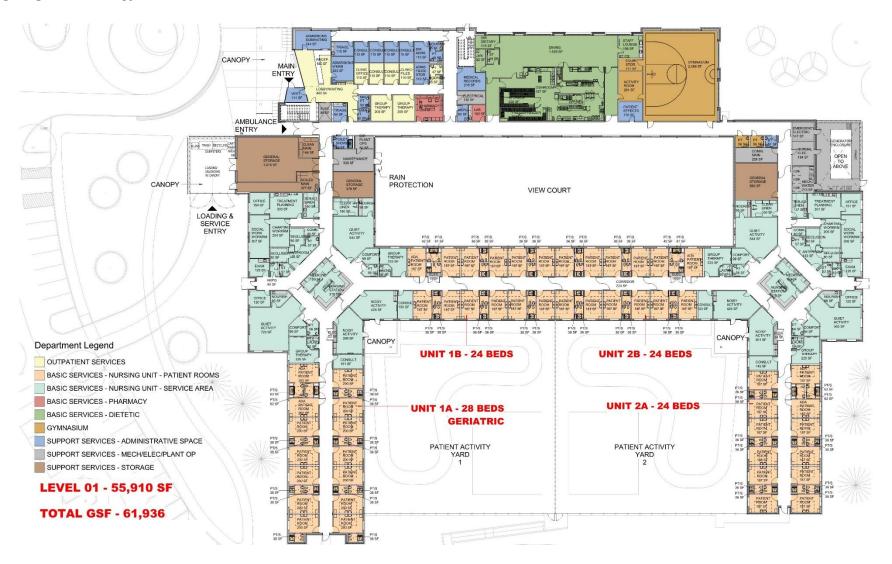






# Building Plan

#### Level 1 Plan

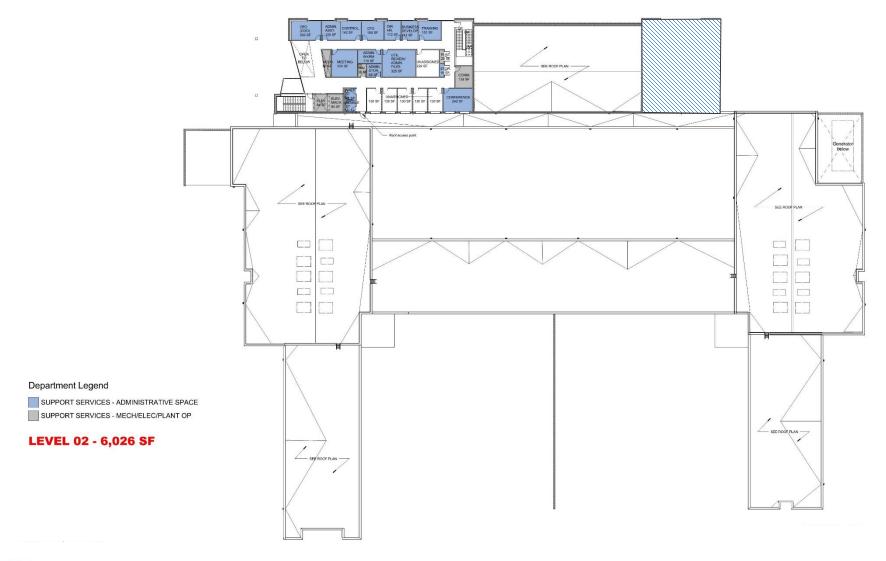






# Building Plan

#### Level 1 Plan

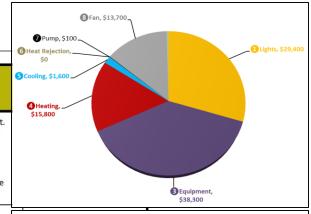


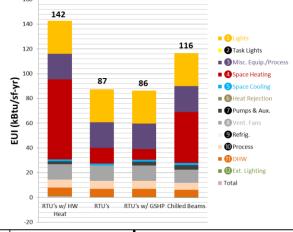


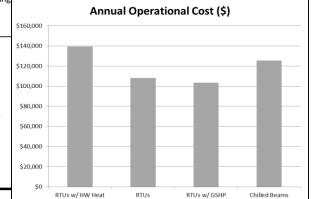


# **Energy Analysis**

						6 Heat Rejection,_ \$0
System Type	Annual Energy Cost (\$)	First Cost (\$)	EUI	Pros	Cons	5 Cooling, \$1,600 _
<u>Option 1</u> Packaged Rooftop Heat Pumps	\$ 108,000.00	\$ 3,759,672.00	87	-Most cost effective equipment -Simplified maintenance which is consolidated to mechanical areas onlySystem reliability - Impact of loss of any single piece of equipment limited to handful of roomsEnergy efficient system.	-Lesser control of thermal comfortRequires electric backup heat on epower which increases size of generatorReduced equipment lifeOften more noisy than alternative mechanical solutions.	\$15,800
Option 2 Packaged Rooftop High Efficiency Units With Hydronic Heat and Boiler System	\$ 139,000.00	\$ 4,000,672.00	142	-Increased control of thermal comfort from base optionLimited mechanical impact on generator sizeQuiter system than base optionIncreased equipment lifeSimplified maintenance which is consolidated to mechanical areas onlySystem reliability - Impact of loss of any single piece of equipment limited to handful of rooms.	-Less energy efficient than base optionAdditional cost in equipment from base optionTroubleshooting and maintenance more complex than base option.	160 (kBtu/st-yr) 140 120 100 100 100 100 100 100 100 100 10
Option 3 Chilled Beams and Hydronic Heat Boiler System	\$ 125,000.00	\$ 4,915,672.00	116	-Least maintenance of all options consideredQuietest of all optionsLess ductwork than all systems considered which leads to approximately 1 less foot of building height requiredLongest equipment life expectancyLeast mechanical impact on generator sizing of all options being considered.	-More energy consumption than bas optionIncreased first cost from options 1 and 2Equipment failure impacts entire building Troubleshooting and maintenance more complex than all options being considered.	20 0 RTU'S W Hea
Option 4 Ground Source With High Efficiency Rooftop Heat Pumps With Backup Electric Heat	\$ 103,000.00	\$ 4,743,672.00	86	-Increased control of thermal comfort from options 1 and 2Quiter system than base optionIncreased equipment life from base optionSimplified maintenance which is consolidated to mechanical areas onlySystem reliability - Impact of loss of any single piece of equipment limited to handful of roomsLess noisy than options 1 and 2Projects image to city that energy efficiency is important to your company.	-Highest energy efficiency. -Higher cost than options 1 and 2.	\$140,000



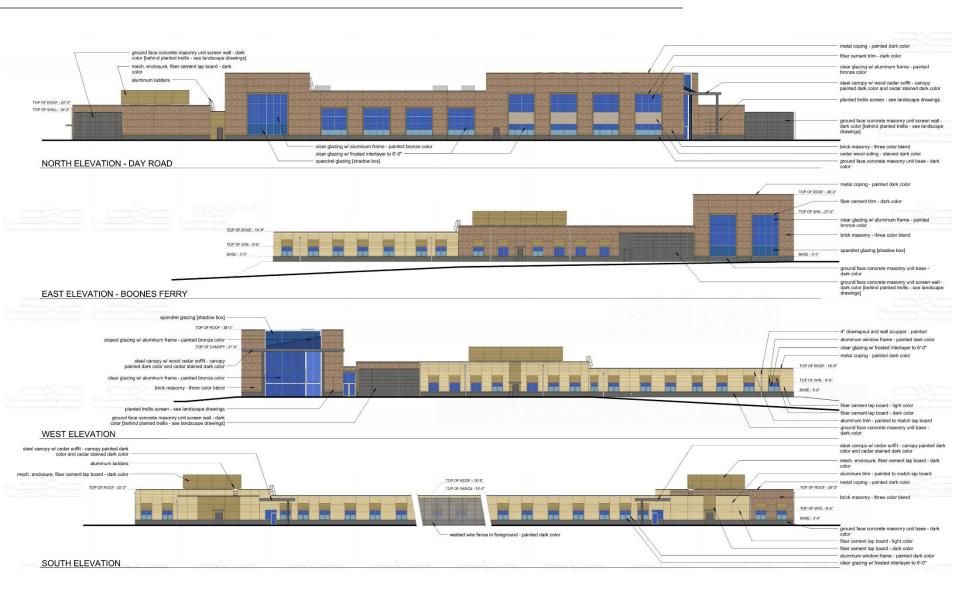








# **Building Elevations**







# From Day Road







# From Boones Ferry Looking South







# From Boones Ferry Looking North







# Gateway





