



## VISION, GOALS & OBJECTIVES

United Services is proposing to develop a two story professional office building of approximately 28,000 sf from which they can offer social services and programs for their clientele within the Windham area. The vision for the facility centers on providing for their future needs in terms of social wellness and energy conservation.

### ENERGY

- Integrate the best onsite energy production systems while minimizing annual energy consumption.
- Simplify building systems and design to show that a high performance building does not have to be complex and costly to maintain.
- Meet or exceed the US DOE EnergyStar certification requirements for commercial buildings.

### HEALTHY & RESOURCE EFFECTIVE MATERIALS

The design team will select materials and furnishings to positively affect the well-being of the occupants using the following goals and criteria:

- Recycled content
- Toxicity including low or no volatile organic compounds (VOC)
- Environmental impact
- Daylighting enhancement
- Increased energy savings and lowering carbon footprint

### KEY FEATURES

#### SUSTAINABLE SITES

- Bus route and bike racks will be provided to encourage alternate transportation to the site.
- Site design exceeds local zoning requirements for open space.
- Aquifer protection includes best management plans for storm water, infiltration & treatment as well as the use of fertilizers and other chemical applications to minimize the risk of groundwater contamination.
- Significant light pollution reduction with effective selection of interior and exterior light fixtures.
- LED lighting for exterior fixtures.

#### WATER QUALITY & EFFICIENCY

- No irrigation and low flow water toilets and urinals.

#### ENERGY EFFICIENCY & RENEWABLE ENERGY

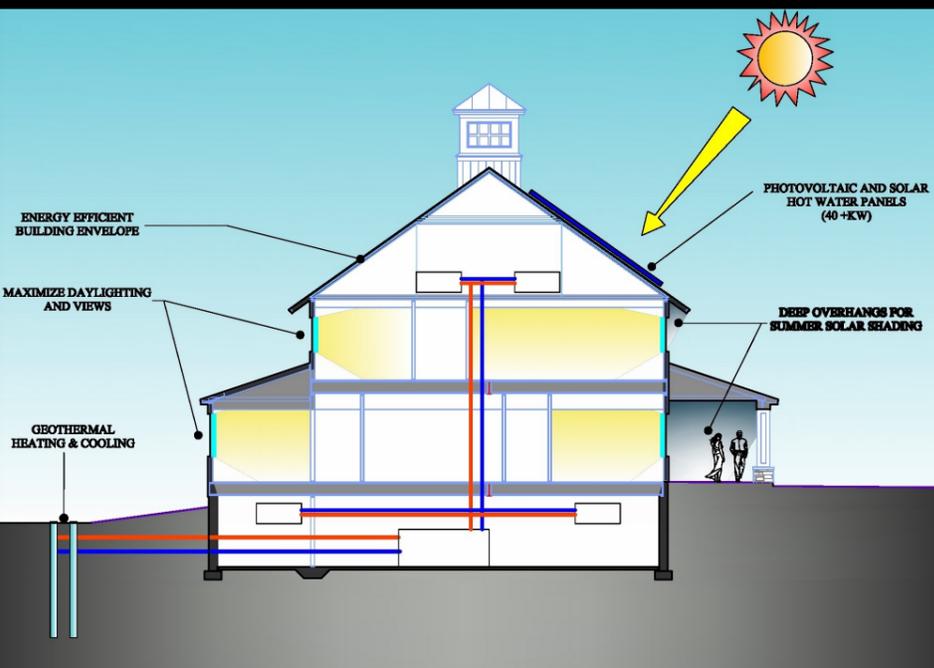
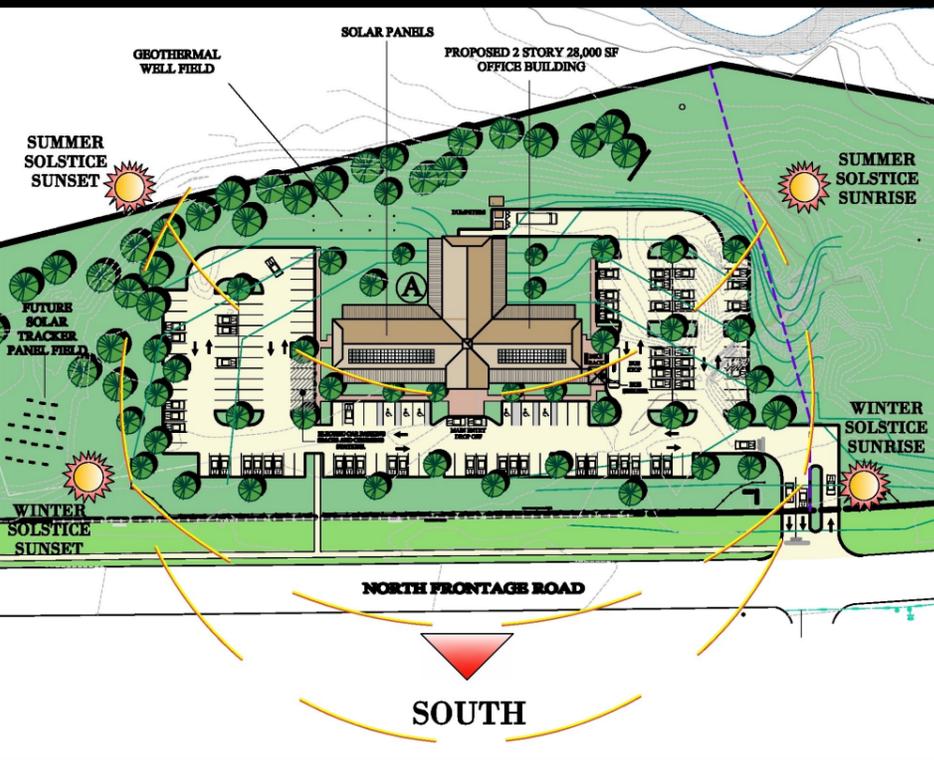
- Elongated East / West axis to maximize daylighting and solar exposure.
- Detailed energy modeling will be conducted to assess various envelope and building system configurations. The selection of an optimized combination for best long-term benefit and financial investment.
- Ground source heat pump system coupled with roof-mounted solar photovoltaic and hot water collectors as renewable energy sources to help offset a portion of the building's energy requirements.
- Energy-efficient lighting and low-energy equipment motors.
- Occupancy and daylight sensors to control lighting.
- All ventilation on occupancy and carbon dioxide sensors.
- Heat recovery on building exhaust air and ventilation air.
- Building Envelope Design—By establishing the EnergyStar performance goals, the design team will optimize insulation levels and construction details to manage construction costs.
  - EnergyStar insulation levels in the perimeter envelope with all HVAC equipment and ducting within the conditioned space.
  - Detailing to avoid air infiltration and thermal bridging.
  - Blower door testing to assess air-sealing and to take corrective measures to seal leaks.
- Commissioning of HVAC equipment to maximize performance.

#### HEALTHY, RESOURCE EFFECTIVE MATERIALS

- Use of materials with recycled content.
- Construction waste management practices to reduce disposal.
- Low or nearly no VOC paints, finishes and adhesives used. No chlorofluorocarbons (CFC's)

#### INDOOR AIR QUALITY

- Use of materials with recycled content.
- CO2 monitoring for indoor air quality.
- Smart Building Energy Management System to maximize building efficiency and occupant comfort.



**United Services, Inc.**  
*Creating healthy communities*

