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A University structure with Northwest flair



A new Oregon State University facility in Oregon City will feature prominent use of wood. The design was inspired in part by Timberline Lodge. (Courtesy of Soderstrom Architects)

BY JOSH KULLA

Oregon State University in recent years has played a major role in promoting the growth of mass timber in the Pacific Northwest. Now the university is doing so via its own 22,000-square-foot facility in Oregon City.

Designed by Soderstrom Architects, the new Extension Service Education Center will feature an array of mass-timber elements.

“It all comes from them,” said Michael Shea, a Soderstrom Architects principal. “They wanted a Cascadian sort of Northwest design ... like Timberline Lodge, so it’s very reminiscent of Timberline. Years ago we did some remodeling there, so we do have some expertise. The idea is that it’s a wood-framed, heavy-timber building with glulam columns and beams; they wanted to highlight wood products of the region.”

Clackamas County commissioners approved project plans in October 2019. The new building will be located on the southeast corner of the intersection of Beaver Creek Road and Warner Milne Road – about two blocks east of OSU’s existing Extension Service office on Clackamas County’s Red Soils campus.

Both cross-laminated timber and mass plywood manufactured by Freres Lumber Co. of Mill City will be used. The building will include a 150-seat meeting and training room, multiple smaller meeting rooms and even a kitchen to accommodate cooking and nutrition education.

“The second floor is all office space, like a big day-lit bar,” Shea said. “It’s a big hall with cubicles and little boxes, and everyone will get to see the nice-looking CLT up at the roof. The daylight is really quite spectacular too. There are large windows and some hidden clerestories that you can’t see from the street.”

Plus, the building is designed to achieve net-zero energy use by producing more energy than it consumes.

“The roof uses insulated metal panels to get the high R (insulation) value, and that’s mostly tempered with (photovoltaic) panels,” Shea said. “And then the mechanical systems are pretty much state of the art, while the PVs make up the difference.”

Instead of exposed mechanical systems typical of recent CLT designs, the new building will have an

18-inch-tall access space between the first and second stories. This will hide HVAC, electrical, plumbing, data and other systems.

“It’s nice to see the wood, but it would be great to see the wood without all that stuff in the way,” Shea said. “It should work out well visually and acoustically.” Heating, cooling and ventilation are separated. Heated and chilled water will come from Clackamas County’s central plant serving its Red Soils campus.

“We’re supplying 100 percent fresh, outdoor air,” Shea said. “There’s no recycled air. On the design side we know the dedicated outdoor air systems are healthier, and that’s part of the whole sustainability story of the building. It’s not something the Extension service was particularly interested in but I’m sure they appreciate it now.”

Also, the building will be constructed to Level 4 seismic resiliency so that it can serve Clackamas County officials as an emergency operations center.

Gardening education will take place within the building. A “Master Gardener Clinic” will be open to the public.

“The ground floor is where the Extension Service has its public service counter and suite for master gardeners,” Shea said. “It was interesting designing for them. They said ‘Our finishes have to be sturdy; people are going to be bringing in muddy, wet plants.’ They also have a lot of programs for the public and school kids, and they have a suite of offices there for that.”

Construction is expected to begin in June, Shea said. P&C Construction is set to serve as the general contractor.



Oregon State University’s Extension Service Education Center is expected to have net-zero energy consumption, thanks in part to a rooftop photovoltaic array. (Courtesy of Soderstrom Architects)