Seismic steel trusses were installed over new white columns for additional load bearings. New ornamental plaster walls will hide these new structural steel reinforcement.
Massive steel shear wall shown is tied to the 30’X30’ mat foundation and 46’ deep piles below for structural rigidity.
Electrical conduits installed between vertical columns such as one shown in bottom right photo will power future historic lights, fire alarms, unit ventilator power, outlet plugs, PA systems, and security cameras. Geothermal heating/cooling is currently working in Amtrak’s operating space. This system will serve the waiting room area once rehabilitation effort completes.

Geothermal heating/cooling works like a car’s radiator. Since ground temperature is a stable temperature of 55F year round; it would take less energy to bring that temperature up to a comfortable 65F. The 67 geothermal wells are installed under Jackson Plaza and the west side bus turnaround.
Sometimes several subcontractors work together to troubleshoot an issue that involves installations between multiple parties. On a busy day, up to 75 personnel could be present on site for work.

Although construction hours are typically 8 hours a day, sometimes night and/or weekend shifts are demanded to keep the project on schedule.
600 tons of seismic steel and 150 tons of rebar have been used for the seismic upgrade to date. Still, another couple hundred tons of steel has yet to be installed. All welding smokes goes through particle filters before exhausted to outside air.
Steel shear wall shown is installed over a 15’X30’ mat foundation, deep driven piles and is also tied to the exterior 4’X4’ ring beam.
HVAC was installed at the previous electrical room and Amtrak cafeteria located along the east trackside perimeter. This area will be the future Men’s restroom. Two new double doors will be installed for access and egress. One of the new double door location is shown in the photo.
Ceiling in previous men’s restroom was opened up for a new stairwell installation that will connect the terminal to the 2nd and 3rd floor. Two stairwells and an elevator are the new interior access options for the station.
Some concrete are mixed onsite for structural steel embedment and floor pour backs.
Ornamental plaster casting was relocated to the larger waiting area.
Photos to the left shows craftman repairing original plaster details in place. Another worker is casting plaster from a Vytaflex rubber mold.
Once a Vytaflex rubber mold is casted, reproduction of new pieces is seamless. Hundreds of pieces can be made from a rubber mold. There are two main type of rubber molds. The green type is usually brushed on while the orange kind gets poured over.
Large structural steel sheets will cover most of the 2\textsuperscript{nd} and 3\textsuperscript{rd} floor. These steel floor sheets will be welded to existing beams and new columns. All seismic upgrades in the building are expected to be complete by February of 2013.
Terracotta dental trim repaired. All new anchorage attachments are stainless steel for longevity.
Stairway shown leads up to the tower levels. It has been and will be the only access for the clock tower. Large “I” beam was installed to support the original reinforced concrete slab on the above floor.
Part of level nine floor was damaged from the Nisqually earthquake. This damaged southwest quadrant is being demolished and replaced. Top left photos shows shoring in place to help support the stacking of demolished flooring debris.