



2018 Construction Projects: Descriptions of Work Types

1. Overlays

What?

Asphalt overlay is an affordable solution to repair and extend the life of a roadway without total re-construction. It is a quick improvement that makes the roadway surface more durable and comfortable for roadway users. Overlays consist of adding additional inches of asphalt over the existing surface or using a mill-and-fill technique that removes some of the existing asphalt and placing new asphalt.

Why?

The moment the asphalt surface starts to age, there is a high chance that it will start to crack and become unstable. An asphalt overlay can restore the ability of the surface to handle all forms of heavy traffic on its sealed and smooth surface. Dust and loose stones from the old asphalt will also be minimized and covered beneath the overlay. This work can help reduce noise levels, enhance ride quality, as well as reduce the complete life cycle values of the surface.



Example Pavement Overlay

How?

The process of overlaying starts with the placement of crack-sealing and removing damaged asphalt areas, followed by a thin layer of asphalt. An asphalt overlay doesn't require any curing time, so there will only be minor traffic delays.

Where?

Crow Road, Fox Hollow Road, Anderson Lane, Aspen Street, Centennial Boulevard, Kellogg Road, Sequoia Avenue

Who?

For more information, contact Jeremy Somogy, Engineering and Construction Inspection Unit, 541-6929.

2. Slurry Seal

What?

A slurry seal is the application of a mixture of water, asphalt emulsion, aggregate (very small crushed rock), and additives to an existing asphalt pavement surface. The placement of this mixture (“slurry”) on existing pavement is intended to “seal” the pavement surface to prevent water from infiltrating the substructure and causing permanent damage to the road.

Why?

Slurry seal is applied in order to help preserve and protect the underlying pavement structure and provide a new driving surface. Roads chosen for slurry seal applications generally have low to moderate distress and narrow crack width.

How?

The asphalt emulsion and aggregates are mixed in a truck that distributes the slurry over the pavement. Works with squeegees follow behind and assist in spreading the mixture.



Where?

North Eugene Streets

Who?

For more information, contact Jeremy Somogye, Engineering and Construction Inspection Unit, 541-6929.

3. Chip Seal

What?

A chip seal is the application of a special protective wearing surface to an existing pavement.

Why?

- To keep water from penetrating the road structure surfaces
- To fill and seal cracks and raveled surfaces of old pavement



- To provide an anti-glare surface during wet weather and an increased reflective surface for night driving.
- To seal the pavement surface-minimizing effects of aging
- To provide a highly skid-resistant surface, particularly on wet pavements
- The cost of chip seals is 15% the cost of pavement overlays

How?

A dump truck full of chips (gravel) locks on to the chip spreader and is pulled backwards. A thin layer of liquid asphalt is sprayed down in front of the chip spreader.

Where?

Airport Road, Brabham Road, Buck Lane Road, Center Street, Davisson Road, Deberry Road, Deerwood Road, Dillard Access Road, Dilley Lane, Dunning Road, Edenvale Road, Enterprise Road, Fern Avenue, Fish Hatchery Road, Gibson Lane, Hills Creek Road, Howe Lane, Huss Road, Kensington Drive, Kitson Springs Road, LaDuke Road, Levage Drive, Linda Way, Mahr Lane, Mahr Road, Matthews Road, McCumber Road, Mill Road, Morningstar Road, Mosby Creek Road, Nestle Way, North Lane, Papenfus Road, Ridgeway Road, Scott Road, Shorecrest Drive, Stutton East Road, Sutton Lake Drive, Sutton Lake Road, Sutton Place, Tate Road, Texas Lane, Tillicum Avenue, Treadwell Road, View Drive, Westfir-Oakridge Road, Westminster Street, Willama Vista Street, Zephyr Road

Who?

For more information, contact Jim Jeffers, Zone 1 Road Maintenance Supervisor, 541-682-6948.

4. Mill and Fill

What?

Milling and filling is the process of grinding asphalt with a milling machine, removing the debris, and installing new pavement.

Why?

It is a more permanent fix that simply placing asphalt in potholes

How?

Asphalt is placed using a paver.

Where?

Coburg Road, South 2nd Street

Who?

For more information, contact Jeremy Somogye, Engineering and Construction Inspection Unit, 541-6929.



Example Mill and Fill Application

5. Safety Edge

What?

The Safety Edge is a technique applied at the pavement edge to form a 30 degree angle that reduces tire scrubbing when a vehicle has inadvertently drifted beyond the roadway and helps the driver self-correct and get back on the roadway without over-correcting.

Why?

Pavement edge drop-offs (height differences between a paved road and the adjacent graded material) have been linked to crashes. The Safety Edge is an effective solution to mitigate pavement edge-related crashes.



How?

A commercially available shoe is mounted on asphalt resurfacing equipment. The attachment acts as a screed extension. As the asphalt is extruded, it confines the asphalt into the desired 30 degree shape.

Where?

N. Coburg Road, Fox Hollow Road

Who?

For more information, contact Jeremy Somogyi, Engineering and Construction Inspection Unit, 541-6929.

6. Rumble Strip

What?

Rumble strips are a road safety feature involving pavement indentations that cause a tactile vibration and audible rumbling when driven over to alert drivers of potential danger.

Why?

Roadway departure is the leading type of crash involved in fatal



collisions in Lane County. Rumble strips are effective (and cost-effective) at reducing collisions due to inattention.

How?

There are several different ways to install rumble strips. They can be rolled into newly laid asphalt pavement while it is still warm and moldable or milled into existing hardened asphalt or concrete roads.

Where?

N. Coburg Road, Fox Hollow Road, Crow Road, Marcola Road

Who?

For more information, contact Jeremy Somogye, Engineering and Construction Inspection Unit, 541-6929.

7. Guardrail

What?

A guardrail a structure designed to prevent an errant vehicle from hitting a roadside obstacle (signs, structures, culvert inlets, utility poles, trees, rock outcroppings) or running off the road (into an embankment, ravine or oncoming traffic).

Why?

Although guardrails have usually prevented far more serious crashes, guardrails are considered a roadside obstacle as well and have been ranked as a high source of injury and fatal collisions. Engineers must weigh whether placing guardrail will reduce the severity of an impact as compared to what may be impacted if the guardrail were not in place.



Example Guardrail

How?

Modern installations of guardrail are designed to allow the guardrail to deform und the load of the crash and safely redirecting the vehicle back onto the roadway at a somewhat shallow angle.

Where?

South 2nd Street, Coburg Road, Fox Hollow

Who?

For more information, contact Jeremy Somogye, Engineering and Construction Inspection Unit, 541-6929.

8. Americans with Disabilities Act (ADA) Ramps

What?

Ramps are an inclined plane installed where required by the Americans with Disabilities Act, such as on sidewalks at street intersections.

Why?

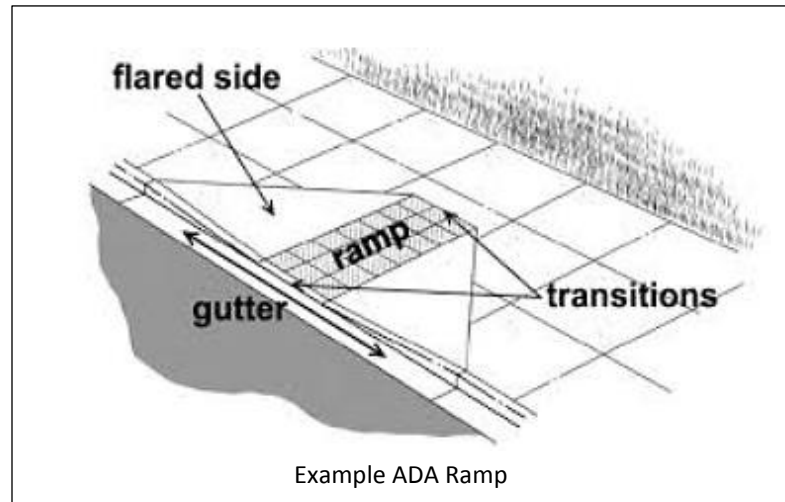
Ramps permit wheelchair users, as well as people pushing strollers, carts, or other wheeled object, to more easily access the sidewalk.

How?

Ramps must be carefully design in order to be useful and meet applicable specifications for width and slope.

Where?

Anderson Lane, Aspen Street,
Centennial Boulevard, Kellogg
Road, Sequoia Avenue, South 2nd
Street, Coburg Road, N. Coburg
Road



Who?

For more information, contact Jeremy Somogye, Engineering and Construction Inspection Unit, 541-6929.