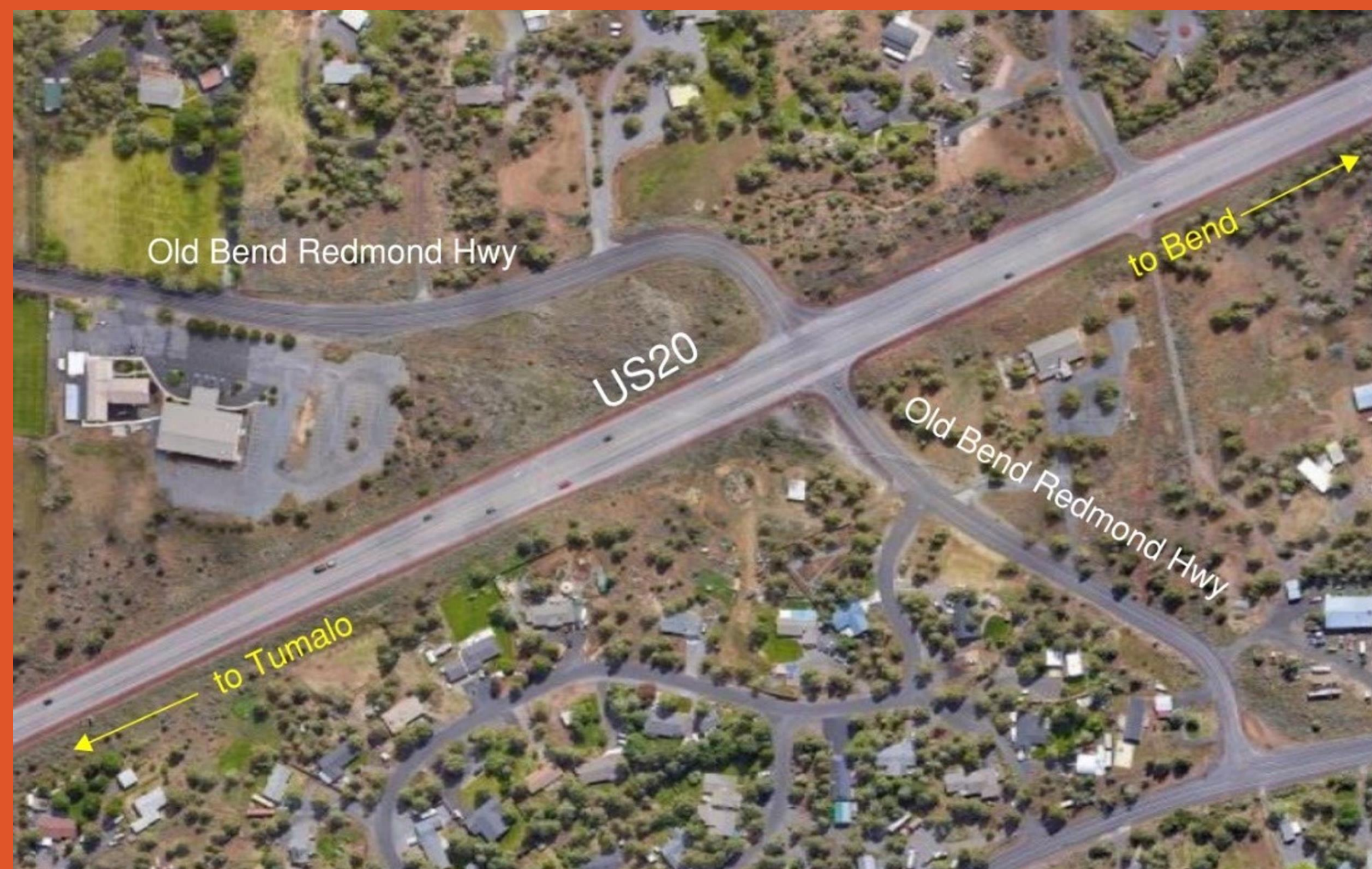


PROJECT OBJECTIVES

- Increase the safety and efficiency of the intersection with a long-lasting, economical, low-maintenance design.
- Address limited truck mobility and crash rates within the intersection.
- Design an effective stormwater management facility for the new intersection.



PROJECT LOCATION

EXISTING CONDITIONS

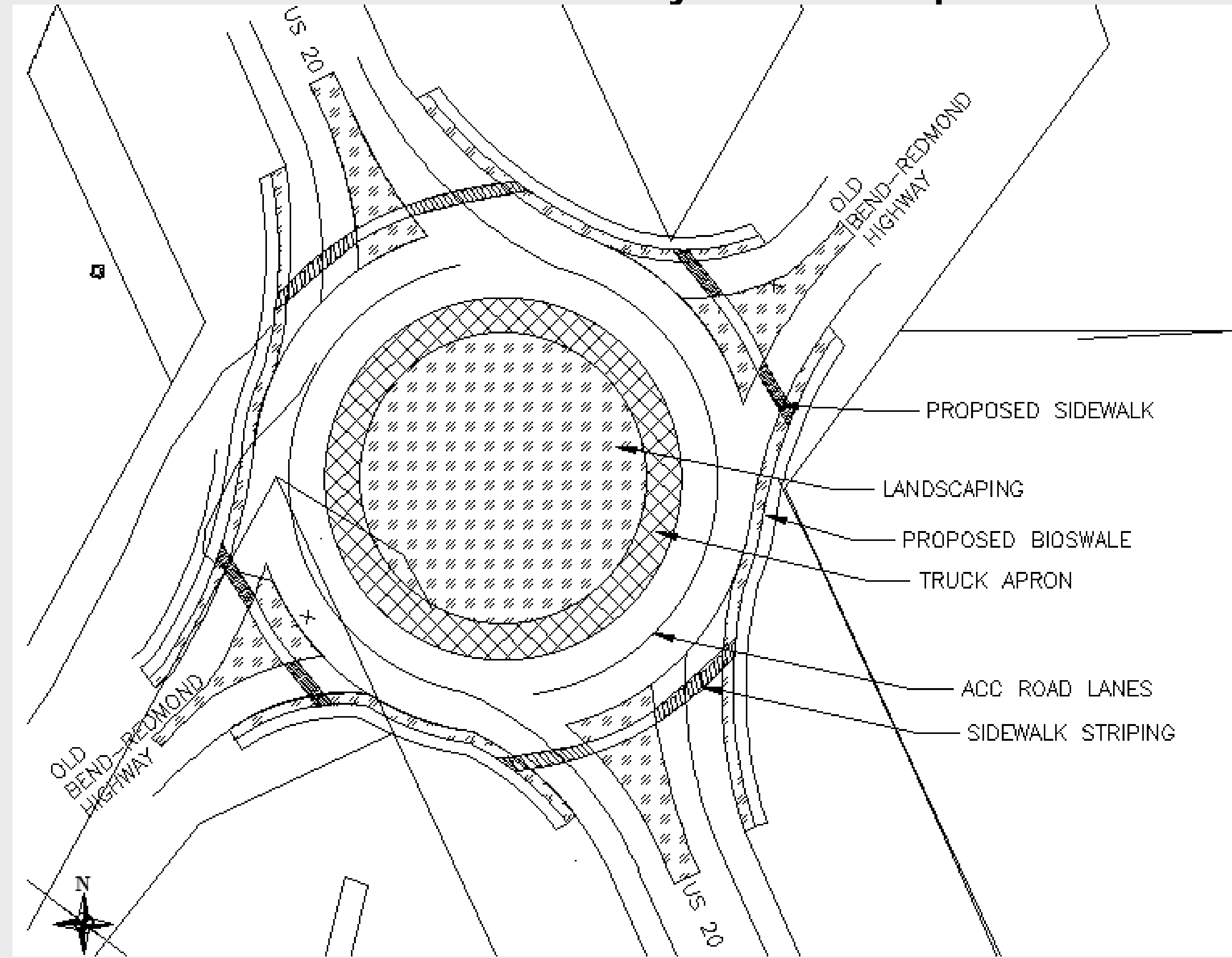
- High traffic volumes
- Freight mobility issues
- Deteriorating pavement
- Significant crash history



EXISTING PAVEMENT CONDITIONS

OLD BEND REDMOND - US 20 HWY INTERSECTION

Located on US 20 Hwy at Milepost 16.74



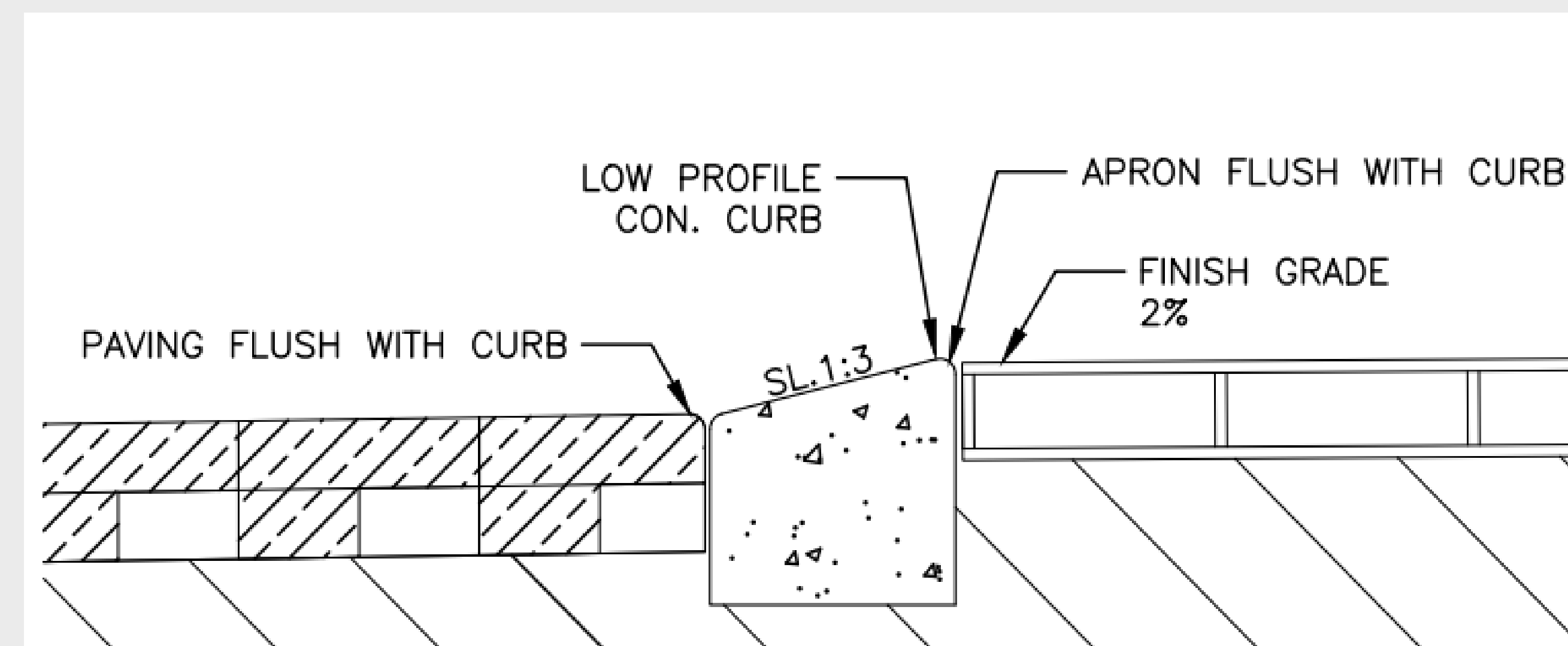
FINAL ROUNDABOUT DESIGN

TRANSPORTATION

- Roundabout intersection with two lanes on US 20 and single lanes on Old Bend-Redmond HWY.
- Sidewalks on all sides with bioswales as buffers between lanes and sidewalks.
- Reduces delay and improves the safety of traffic driving on Old Bend-Redmond.
- Allows WB-67 semitrailer traffic.
- Follows Oregon Department of Transportation Standards and Specifications.

CROSS-SECTION DESIGN

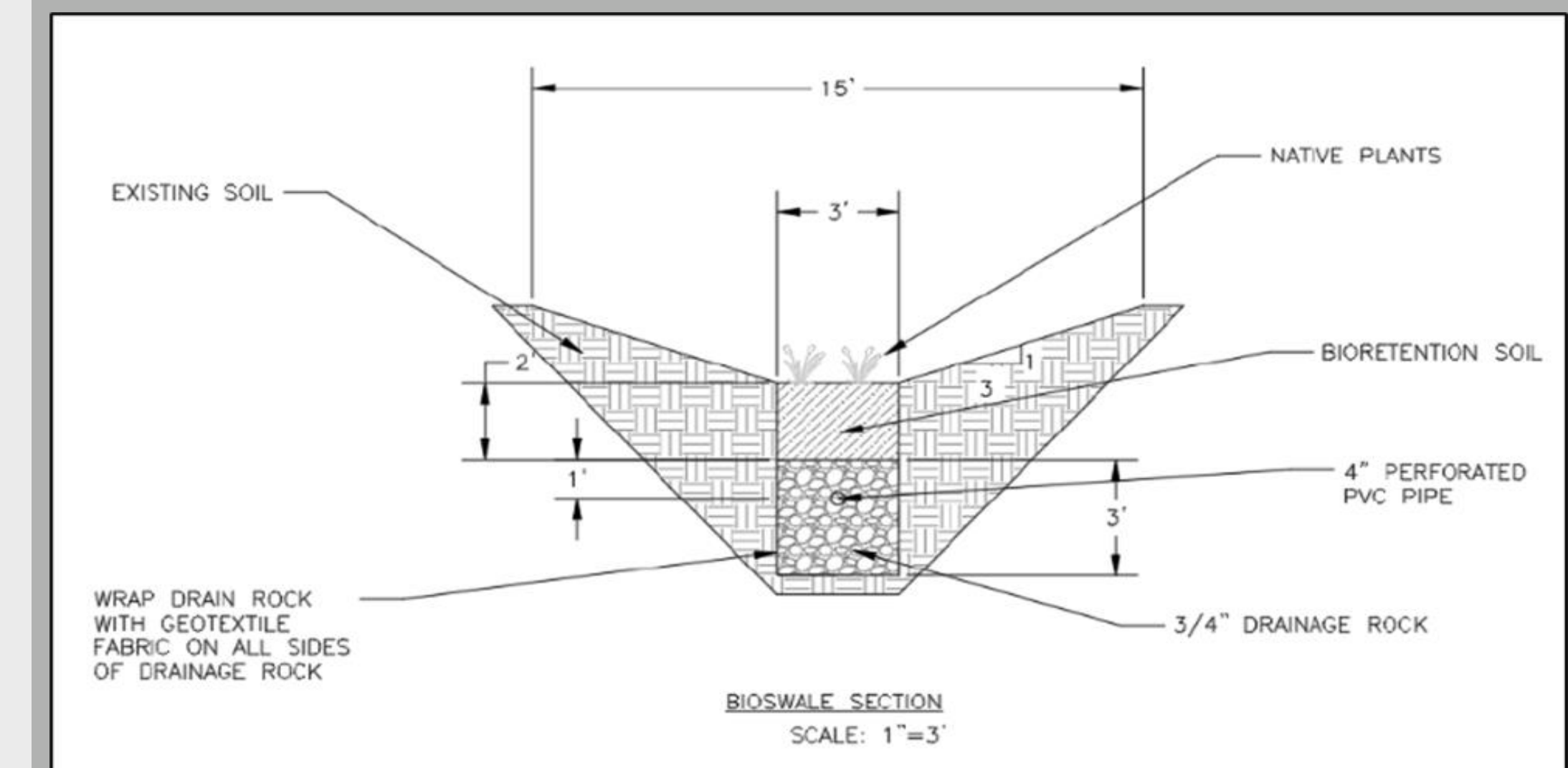
- Asphalt Cement Pavement roadway and Portland Cement Concrete truck apron.
- Flushed curb allows for passing vehicles.
- Consistent slope to the outer edge reduces splash zones for pedestrians.



TRUCK APRON CURB

WATER RESOURCES

- Final design uses bioswales and rain gardens to manage stormwater.
- Designed to store, treat, and infiltrate the 100-year design storm.
- Bioswales and rain gardens will be planted with native species that will treat the runoff before it is infiltrated into the ground.
- Designed according to the ODOT Hydraulic Design Manual and the Central Oregon Stormwater Manual.



SAFETY

- Truck apron to provide an increase in large truck maneuverability.
- 16ft lanes for driver comfortability and truck traffic.
- Signs and striping to guide drivers safely through the intersection.
- Elevated central island is placed to increase driver awareness of the intersection.
- Accessibility for all pedestrians (following ADA regulations) with the use of curb ramps, median crossings, and signage/striping.



Source: <https://highways.dot.gov/safety/proven-safety-countermeasures/medians-and-pedestrian-refuge-islands-urban-and-suburban-areas>