

Situation

All stakeholders are fully aware that TUF and pipe repair dollars can go further when they are not wasted on surface repairs of sections that will need to be excavated in the near future for below-grade work. Additionally, all stakeholders are aware that it is better to use Crack or Slurry Seal to prevent the need for more expensive Grind and Inlay work.

With that said, council goals focus on the older parts of our town, districts 1 and 3, which is fair and just. This must be balanced against the limitations imposed by our TUF dollars and flat state gasoline revenue shares.

As a result of these competing priorities, sealing and preservation work will likely be done in the newer sections of town, north of 99 and east, while Grind and Inlay, along with some Slurry Seal, will frequently be used in districts 1 & 3. More square feet are expected to undergo Slurry Seal or Crack Seal per year than Grind and Inlay (G & I). Put simply, we will continue to chip away at G & I with our capabilities limited by funding.

While road condition data can be described as fair due to existing Pavement Condition Index (PCI) survey work and the road conditions survey, our understanding will be enhanced using Newberg citywide roads LiDAR scans, starting in 2025. These scans will be repeated every three years (2025, 2028, 2031, etc.) These scans will update our GIS data with highly accurate and consistently up-to-date information.

As a point of reference, current funding is anticipated to allow for the enhancement of four or five sections per year, totaling less than 200,000 square feet.

Mission

The purpose of this procedure is to give clarity to both the Public Works Maintenance staff and Capital Engineering staff about the process by which new street sections will be chosen for road enhancing applications, including Crack Seal, Slurry Seal, Grind and Inlay, or rarely full-depth reconstruction. It is also to help the residents understand the thought process behind pavement repair selections. Appendix A illustrates the timeline of events.

Execution – Phase 1 PW Maintenance Identifies Target Streets for Below Grade Repairs

Each year in November, as part of regular work planning, PW Maintenance will suggest road sections of less than 200,000 square feet that can be targeted for improvement with each type of resurfacing. They will prioritize long, linear sections that are less expensive to execute.

This will be based upon the following criteria:

Crack Seal – long, linear sections with very positive PCI scores (80+), primarily not in districts 1 or 3. Crack Seal will be undertaken regardless of potential future below-grade repair work, as Crack Seal is relatively inexpensive (less than \$500 per 1000 square feet).

Slurry Seal – long, linear sections with positive PCI scores (70+). These can be in any District as it is anticipated these repairs will focus on heavily travelled primary collector streets. Slurry Seal targets will be streets that do not need below-grade repair in the following three years. Streets with scheduled below-grade repairs, such as the HB 2001 streets, **will not** be targeted. Note: It is acceptable to slurry seal a street that needs below-grade infrastructure work at year 4+, due to the expected 5-to-7-year lifespan of the Slurry Seal itself.

Grind and Inlay – The suggested street or streets will be those repaired in the preceding year for below-grade deficiencies. Grind and Inlay is expensive. Our 2026 pricing is over \$2,500 per 1000 square feet, so we need to ensure that below-grade repairs have occurred before this treatment.

Full Depth Rebuild – Generally, this will not be used unless assigned as a CIP Project (See CIP process).

PW Maintenance will also suggest below-grade repairs required to get the best value out of the road re-surfacing work for the chosen sections. They will choose sections, finding a balance between sections that do or do not need below-grade repairs, to create a cost-effective mix of choices.

Execution – Phase 2 Capital Engineering Approves Repairs

In December, Capital Engineering will review the suggestions, including camera footage and GIS data, and make selections from those offered. Q & A will likely occur with the PW Maintenance Superintendent about their choices.

Execution – Phase 3 Joint PM Maintenance / Capital Engineering Meeting

Near the end of December, there will be a joint meeting of Capital Engineering staff, PW Maintenance staff, and other interested stakeholders. This will occur around a large screen display of the city GIS. GIS layers on display will include:

- The conventional streets layer
- Any known large-scale below-grade projects (like HB 2001)
- Other relevant site-specific data sent to GIS prior to the meeting

In real time, the target streets chosen by Capital Engineering will be shared with the group and appended to the GIS layer for later pricing by the CM or the relevant Project Manager. This phase will end with a “warning order” given to relevant firms that RFP or re-surfacing orders are coming soon.

Execution – Phase 4 Capital Engineering Conducts Repairs

During the following months, the Capital Engineering Project Manager will procure and carry out the relevant repairs to the street or streets identified in phase 1 and approved in phase 2. Ideally, this will occur between January and April. CIP funds will be used to power this effort.

As part of these repairs, the PW Maintenance division will be made aware of the location and dates of the tasks and will be responsible for rapidly patching over any trenches created by the below-grade work. All trenches will be patched within two weeks of the conclusion of the below-grade work.

Execution – Phase 5 Capital Engineering Identifies TUF Targets

This will occur in January or February of a given year, but ADA elements may stretch out into May. Based upon the work completed in phases 1 and 2 above, the CM and Capital Engineering PMs will now be able to identify TUF target streets for the next summer construction season.

If possible, the relevant ADA upgrades will occur in this phase, using the sidewalk crew before the section is resurfaced. Obviously, the ADA work is weather-dependent and might extend out into May. The sidewalk crew ramps and other work will be inspected by the PW Maintenance Superintendent, once qualified. ADA work will be completed prior to TUF road resurfacing.

Execution – Phase 6 Capital Engineering / the CM Conducts Repairs

The CM will use I & I funds and CIP funds of the relevant categories to conduct repairs. Multi-year TUF contracts will be used to get the best possible price for each type of road application.

Some funding for these pipe repairs may still need to come from PW Maintenance in funds 02, 06, 46, 07, and 17. For example, categories like 538301, 538306, and 538307 may be used. The CM will be transparent with PW Maintenance about the need to use some funds, if the need arises.

Administration and Logistics

The timely upload of LiDAR or other PCI-modifying data into the GIS system is critical. Maintaining a healthy set of GIS resources and servers is critical. BCR request writers and CIP requestors will keep these below-grade priorities in mind.

As an additional input, streets that have just been repaired will have their PCI index reset to the visually inspected value. The Capital Engineering PM in charge will ensure that this occurs.

Command and Control

Phase 1 above will be under the general direction of the PW Director and PW Maintenance Superintendent. It will be their responsibility to ensure the Grind and Inlay and Slurry Seal targets are available for subsequent phases.

Phases 2 to 6, the arrangement of these repairs, and the subsequent negotiations with paving firms will be under the general direction of the CM, assisted by the relevant Project Manager.

After the conclusion of phase 3, the city PIO will ensure that the City Council and community are made aware of the targets for the next year's TUF work.

Appendix A – Flow of events Gantt chart

While scheduling changes or contractor difficulties may change this arrangement, the following chart illustrates an ideal chain of events for each year's TUF repairs and associated below-grade actions:

