

Paving Process Outline

1. Pavement Condition Index (PCI)
 - a. Roads are evaluated for cracking/potholes, etc.
 - b. Road condition is used to generate a score
 - c. Roads are prioritized by the worst score to best
 - i. Vehicle counts are considered
 - d. Suggested list of streets to be paved in the next three years is created
2. Stakeholder input
 - a. Suggested list of streets for the next three years is sent out to stakeholders for feedback regarding their future projects
 - i. Bangor Water District
 - ii. Bangor Sewer Dept.
 - iii. Bangor Gas
 - iv. Bangor Stormwater
 - v. Bangor Engineering
 - vi. Versant
 - vii. Consolidated
 - b. Stakeholders send back list of streets where they have projects scheduled
 - c. Streets with projects planned for the next 3-5 years are put on standby
3. Budgeting
 - a. PW requests funding in Capital budget request to pave streets
 - b. PW requests fiscal support from the federal CDBG fund to pave in low-to-moderate income areas
 - c. Final budget is approved by June 30 of each year
 - d. Allocated budget is used to narrow down the list of streets to be paved
4. Final Paving List released
 - a. Final list of streets scheduled for paving is presented to Infrastructure Committee and is posted on City of Bangor website
5. Street preparation
 - a. Find edges of road to ensure full width and defects
 - i. Fill missing asphalt sections with grindings or base coat of asphalt
 - b. Sewer manholes are inspected for needed repairs
 - i. Repairs are made prior to scheduled paving
 - c. Storm basins are inspected for needed repairs
 - i. Storm drain top-offs or complete replacements are completed
 - d. Roadway patching or crack seal is completed to minimize water intrusion from below
 - e. Pavement milling takes place if roadway level must be maintaining current pavement height or if we need to shape for water flow
 - f. Entrances to driveways are milled to cleanly match new asphalt to existing asphalt
6. Sidewalk preparation
 - a. Sidewalks are assessed for needed repairs

- b. Residents are notified of potential for esplanade damage if sidewalk height needs to be adjusted, curbing install/replacement (if they have plantings there)
 - c. Tree roots are identified to avoid disruption/damage as much as possible
 - d. Milling may be done to create an even surface for paving
 - e. A base layer will be applied to areas where asphalt has been removed
 - f. Prep 6' wide, pave 5.5'
 - g. A shim (thin layer) of asphalt is laid down to create even surface
 - h. After the street paving is completed, a final surface is applied to the sidewalk
 - i. The esplanade is backfilled, seeded and mulched
7. Street Paving
- a. Contractor work
 - i. Grind beginning and end of section to be paved
 - ii. Apply tack coat to ensure adhesion
 - iii. Shimming (thin fill) takes place to fill in uneven areas (generally 1/2" 9.5mm coat)
 - iv. Manholes, catch basin covers, sewer manholes, gas & water shut offs all get raised to match the elevation of the final coat of asphalt
 - v. Driveway apron/approaches are matched in with new asphalt
 - vi. Final/wearing surface is applied (1"-1 1/2" 9.5 mm)
 - vii. Rollers compact new asphalt to City specifications
8. Finish Work
- a. Re-grind driveway aprons where necessary
 - b. Grind backside of driveway match-in
 - c. Clean, tack, apply asphalt, roll
 - d. Backfill w/ grindings in gravel driveway
 - e. Backfill curb/esplanade
 - f. Fill/loam/seed/mulch