Town of Laurel Park Summary of Tropical Storm Helene Damage 3/7/25

Tropical Storm Helene affected Western North Carolina and the Town of Laurel Park between September 25th through September 27th 2024. During that time, Laurel Park recorded 27.5" of rain over the three day period. Tropical storm force winds were also recorded in the area on the morning of September 27th. As a result of the storm, Laurel Park experienced significant flooding, landslides and downed trees. Most roads were impassable following the storm. A federal disaster declaration was issued for the area by the President on September 29, 2024.

The Town's Public Works staff immediately began cutting trees and moving vegetation blocking Town streets to provide access for emergency services vehicles. This effort expanded to include local contractors to assist in the vegetation removal to provide access. This work was considered an emergency Step 1 Project.

The Town also began assessments of roads, culverts and parks. Twenty seven landslides that affected Town roads were recorded along with numerous culvert failures and washouts. Many of these landslides and culvert failures directly affected roads, and in some cases, private property. The landslides and culvert failures that were deeded to be a public safety concern were categorized as Category C - Step 2 Projects.

Landslides and culvert failures that were not deeded to be public safety concerns were categorized as Category C - Step 3 Projects. In addition, damages to the Town parks were considered Category G - Step 3 Project. Those damages included significant sediment deposition at Laurel Green Park. Rhododendron Lake Nature Park was heavily damaged with trails being completely washed out and there was significant damage to the forebay of the lake. Finally, Wash Creek was heavily eroded in some areas and will likely have to be stabilized. At Crysal Springs Park, the arch above the spring was damaged due to a fallen tree.

In addition to Town roads and parks being affected by the storm, both the Town Hall and Public Works facility suffered water damage. These were considered Category E – Step 3 Projects.

Below is a summary of each category of work. Dimensions for the damaged facilities are provided on the attached cost estimate forms:

Category A Tree and vegetation removal to provide access. Category C - Step 2 Landslides and culvert wash outs. Category C - Step 3 Landslides and culvert wash outs that do not immediately affect public safety. Category G - Step 3 Damage to Town parks. Category E - Step 3 Damage to Town Hall and the Public Works facility.

Category C (Roads) - Slide Areas and Washouts

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Step 2 Projects (Public Safety Concern)

NCLP-FD#1S – Fairway Drive Major slide with impact to roadway and impact to golf course below.

NCLP-FD#2S– Fairway Drive Major slide with possible impact to roadway shoulder and roadway.

NCLP-FD#3S – Fairway Drive Major slide with impact to roadway and impact to property below.

NCLP-PD#1S – Panaroma Drive Major slide with impact to gravel road and impact to property below.

NCLP-LPH#1WO – Laurel Park Highway Wash out of shoulder to depth of 4 – 5 feet and loss of rip rap stabilization. Utilities exposed.

NCLP-OLD#1S- Old Laurel Drive Major slide with washout of retaining wall with impact to upper and lower roadway. Retaining wall will be required based on limited area between roads.

NCLP-OLD#2S- Old Laurel Drive Slide area on the upper side of Old Laurel Drive that has impacted drainage swale and culverts. Material must be removed from ditches, shoulder and roadway.

NCLP-WD#1S– Westwood Drive Major side with impact to roadway and stream below.

NCLP-DM#1S– Davis Mountain Road Slide area on the lower side of Davis Mountain Road that has impacted the road way and damaged homes below.

NCLP-DM#2S – Davis Mountain Road Just west of the DM#1S area, a portion of Davis Mountain Road has begun to settle. A large transverse crack has been observed.

NCLP-HR#1S – Hebron Road Slide area on lower side of Hebron Road above the Poplar Lodge that has impacted the shoulder and will impact the roadway.

NCLP-HR#2S– Hebron Road Major slide on lower side of the road with impacts to the roadway and stream below.

NCLP-HR#3S – Hebron Road Major slide on lower side of the road with impacts to the roadway, utilities and stream below.

NCLP-HR#4S– Hebron Road Major slide on lower side of the road with impacts to the roadway, utilities and stream below. NCLP-HR#5S – Hebron Road Minor slide on the lower side of the road with impacts to the roadway and utilities.

NCLP-RD#1S – Roberts Drive Major slide at the intersection of Roberts Drive and Rowland Drive below the road with impacts to the road and utilities.

NCLP-SR#1S— Sunny Ridge Road Slide affecting the road and blocking a culvert creating an impoundment of water. Culvert will likely have to be replaced.

NCLP-OC#1S – Orchard Circle Slide affecting the road and blocking a culvert creating an impoundment of water. Culvert will likely have to be replaced.

NCLP-LPH#2S— Laurel Park Highway Major slide both above and below the road affecting the ditch line and culvert with possible impact to the road.

NCLP-WH#1S – Winter Holly Lane Major slide affecting the roadway and utilities.

NCLP-WL#1S – Woodbyne Lane Major slide on lower side of the road with impacts to the roadway and property below.

NCLP-WL#1WO – Woodbyne Lane Major washout of the gravel road affecting shoulders, road surface, etc.

NCLP-CT#1S (PR) – Crossvine Trail Major slide below the road that has affected the shoulder and has the potential to impact the pavement section.

NCLP-TT#1S (PR) – Thistlewind Trail Slide area that has impacted the road and road shoulder.

Category C (Roads) - Slide Areas, Washouts and Pavement Damage Step 3 Projects (No Immediate Public Safety Concern)

NCLP-LPH #1S – Laurel Park Highway Multiple slide areas on the upper side of Laurel Park Highway that has impact drainage swales and culverts. Material must be removed from ditches, shoulder and roadway.

NCLP-OC#2S– Orchard Circle Slide above the road that has blocked a culvert and affected the road.

NCLP-TC#1S – Tower Circle Slide and evidence of slope instability on Tower Circle between Orchard Circle and Toms Drive.

NCLP-LPH#3S- Laurel Park Highway

Town of Laurel Park Page 3 Slide above the road blocking inlet and affecting the road.

NCLP-LPH#4S— Laurel Park Highway Slide above the road blocking inlet and affecting the road.

NCLP-PC#1S- Pinewood Circle Slide above the road blocking inlet and affecting the road and ditch line.

NCLP-PC#2S – Pinewood Circle Slide above the road blocking inlet and affecting the road ditch line.

NCLP PC#3S— Pinewood Circle Slide above the road blocking inlet and affecting the road and ditch line.

NCLP-BC#1S- Beechwood Circle Slide above the road blocking inlet and affecting the road and ditch line.

NCLP-OC#1PD – Orchard Circle Pavement damage from fallen trees.

NCLP-PD#1PD – Panorama Drive Pavement damage from fallen trees.

NCLP-PD#2PD – Panorama Drive Pavement damage from fallen trees.

NCLP-HR#5S – Hebron Road Roadway damage from a small slide. Has been reviewed by FEMA.

Category D (water control facilities) - Culverts Step 2 Projects (Public Safety Concern)

NCLP-DM#1C – Davis Mountain Road Culvert at intersection of Davis Mountain Road and Old Orchard Drive has partially washed out. The culvert will have to be replaced and the road repaired.

NCLP-DM#2C – Davis Mountain Road Culvert between Azalea Ridge Road and Country Ridge has washed out affecting the road and utilities. Culvert will have to be replaced and the road repaired.

NCLP-WL#1C – Woodbyne Lane Culvert washout with impact to the road at the intersection of Woodbyne Lane and Sliver Springs Drive. Culvert will have to be replaced and road repaired.

NCLP-PD#1C – Panorama Drive Culvert washout with impact to the road. Culvert will have to be replaced and road repaired.

NCLP-RD#1C – Ransier Drive Culvert and roadway completed washed out. Culvert will have to be replaced and road repaired.

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NCLP-OLD#1C- Old Laurel Drive Culvert and roadway partially washed out. Culvert will have to be replaced and road repaired.

NCLP-OC#1C- Orchard Circle Culvert blocked due to shoulder slide on the road. Slide will have to be repaired and culvert will likely have to be replaced.

NCLP-HR#1C – Hebron Road Culvert blocked due to slide area. Culvert will have to be cleaned out and assessed for replacement.

NCLP-HR#2C – Hebron Road Culvert damaged due to slide area. Culvert will have to be replaced.

NCLP-HR#3C – Hebron Road Culvert damaged due to slide area. Culvert will have to be replaced.

NCLP-SR#1C– Sunny Ridge Road Culvert blocked due to slide area. Culvert will likely have to be replaced.

NCLP-CW#1C– Camillia Way Culvert partially washed out. Area will have to be backfilled and repaired.

NCLP-BD#1C- Briarcliff Drive Culvert washout with damage to roadway.

NCLP – LD#1C culvert – Lake Drive Culvert washout with sink hole and damage to roadway.

Category D (water control facilities) - Culverts Step 3 Projects (No Immediate Public Safety Concern)

NCLP-WL#2C – Woodbyne Lane Culvert is blocked with mud and other storm debris. Area will need to be cleaned up and culvert assessed for replacement.

NCLP-SS#1C – Silver Springs Drive Culvert was partially washed out during the storm. Wash out area will have to be backfilled with stone and road repaired.

NCLP-PD#2C– Panorama Drive Culvert partially washed out with minor impact to the road.

NCLP-LPH#1C – Laurel Park Highway Culvert outlet impact by washout of runoff over the roadway. Culvert outlet and shoulder will have to be stabilized.

NCLP-LPH#2C – Laurel Park Highway

Culvert blocked and possibly damaged due to slide area.

NCLP-LPH#3C – Laurel Park Highway Culvert blocked and possibly damaged due to slide area.

NCLP-SD#1C – Skyway Drive Culvert damaged and sink hole beginning to form. Culvert will have to be replaced.

NCLP-PC#1C – Pinewood Circle Culvert blocked and possibly damaged due to slide area.

NCLP PC#2C – Pinewood Circle Culvert blocked and possibly damaged due to slide area.

NCLP-PC#3C – Pinewood Circle Culvert blocked and possibly damaged due to slide area.

NCLP-BC#1C- Beechwood Circle Culvert blocked and possibly damaged due to slide area.

NCLP-CW#2C – Camilia Way Culvert partially washed out with damage to the shoulder. Culvert will likely have to be replaced.

NCLP-OCL#1C- Old Creek Lane Pavement has settled around an existing inlet. Storm drainage inlet and pavement will have to be repaired.

NCLP-PL#1C- Primrose Lane Culvert blocked and possibly damaged from storm debris.

NCLP-LD#2C– Lake Drive Culvert blocked and possibly damaged from storm debris.

NCLP-WT#1C- Woodland Trail Pavement has settled at a sinkhole around an existing inlet. Storm drainage inlet and pavement will have to be repaired.

NCLP-WC#1C (PR) – Wash Creek Drive (private) Existing pipe section has been damaged from the storm and there are sink holes and washouts apparent adjacent to the culvert.