# Briefing to Internal Scrutiny Committee

Defect Repairs

12<sup>th</sup> November 2021 Kirstie Williams – Highway Manager



# **Defect Repairs**

## Variety of factors determine type of repair

- Existing road construction
- Traffic volume and type
- Weather/ Climate season
- Road geography
- Quantity / clustering of defects
- Locations of defect within the carriageway
- How traffic can be managed to carry out the repair
- Urgency



# Quality

## Permanent repairs -Getting it right first time

- Clear methodology and good decision making
- Training our crews
- Managing our sub contractors
- Quality Auditing our works
- Defending claims

## **Challenges**

- Severe weather
- Complex access
- Urgency







# Types of repair

Patching with a hot material

- Excavate and Reinstate method
- Infill method

Spray Injection patching

Cold applied instant material



# Patching with a hot material

#### **SAW CUTTING**

- Provide a clean vertical face to the repair
- Cleaner surface for bond coat adhesion
- Better opportunity for compaction
- Material interlock
- Neater edges
- Better public perception of the repair







## Surface removal









#### **SWEEPING**

- loose material
- thoroughly swept
- free from water







# BONDCOAT and TACKCOAT

- Sides <u>AND</u> bottom
- Liberally bond coated
- Brush applied
- Obtain a seal
- Reduce any further water ingress.







## Material

## Hot material

- Highly durable permanent repair
- Suitable for most locations and surfaces
- Can be used all year round

## **Cold Material**

- Emergency make safe
- Forms a permanent repair
- Is activated in water







## COMPACTION

- Hand tamped using a punner very small defects
- vibrating plate
- rollers









# New - Overbanding









# Jet Patching





- Most effective on rural roads with low traffic
- Can be used with care on urban roads
- Best used in warmer weather
- Find and fix approach



# Thermal Repairs

- Most effective on hot rolled asphalt surfaces
- High quality permanent repairs
- Not suitable for deeper structural repairs
- Good for cracking and fretting defects





## Innovation









### **Utility Works**

- Utility works account for many of the excavations in Lancashire's highway network.
- There are approx. 26,000 excavations every year this has been consistent for the last 15 years.
- Works undertaken by the utilities are for the repair, replacement, maintenance and installation of our essential services.
- Utility companies have their own statutory powers to dig up the highway for the reasons above.
- Utility companies are legally responsible for the works they do and reinstating the area excavated.
- After 2/3 years that responsibility passes back to Lancashire County Council.





### **Utility Works**

- Utility reinstatements must comply with specific statutory codes of practice & guidance. These set the specification and standards they must follow.
- Lancashire County Council's role is to undertake a random, sample inspection of 20% of the reinstatements each year.
- This amounts to approx. 5,200 inspections per year. Based on 20/21 figures approx. 12% of the reinstatements inspected failed.
- Utility companies are then responsible for rectifying those defects and officers undertook a further 2,000 chargeable inspections to ensure the defects are rectified.

