# POLE TESTING AND INSPECTION. INCLUDING MEASURING OVERHEAD LINES

MGroupServices
Telecom Division

## METHODOLOGY

**Guarding of Works**

All works must be in accordance with Safety at Street Works Code of Practice (RED Book) With the work area adequately guarded and protected.

**Measurement of Overhead lines**

Prior to any works taking place, overhead power line voltages must be established to determine if the lines are Low Voltage (1000volts ac or 1500 volts'dc) or High Voltage (greater than 1000 volts' ac or 1500 volts' dc). Under no circumstances shall Telescopic Rods be used to measure the height of any Power Line, Ultrasonic Cable Height Meters must be used. All equipment used for completing measurements must be within calibration.

1. Complete pre-use checks on Cable Height Meter, checking that it is operable and free from damage of defects.
2. Confirm location where height measurement is required and stand directly below the overhead line.
3. Cable Height Meter must be placed directly below overhead line, on a level area of ground and clear of walls, buildings or similar structures.
4. In accordance with the device user manual, use the device to measure the distance from ground and between any additional line (i.e. BT to HV, HV to HV) to the overhead line
5. and record the measurement.

**Pole Testing and Inspections**

PRIOR to climbing or working on any pole, you must check for evidence of any previous pole inspections, and to confirm that those inspections meet the criteria detailed below: (Refer to BT Pole test form in team pack for pole testing)

- Check the age / date of the pole itself, i.e. year of preservation, by reference to the three metre mark. This is also known as birth or Dobie mark
- Check for the existence of an A558 pole test label on the pole. If an A558 label exists, check for the year of the last inspection.
- Check for A1024 – Indicates a defect has been reported
- Measure the clearance of ALL wires and aerial cables attached to the pole, if this reading is 5.2 meters or more, then work may continue. (Only measure from the carriageway when the speed, visibility and the level of traffic permit. If it is not possible to measure the wire height because it is unsafe, assume the wires to be low and report to your line manager or the SHEQ team) Please note: measurements must only be made with the Ultrasonic Height measuring device
- Use the three metre mark to check that a pole is set at the correct depth. Stamp aside or cut away, grass or growth at the foot of the pole. The top of the 3m mark should be no more than 1.8m clear of the ground.
- Use a hammer to tap all-round the ground level, making occasional reference taps 600mm to 900mm higher up. Listen for a change in the tone to the dull or dead note indicating decay. If you are not sure, dig down about 300mm and repeat the tests on the exposed wood
- If the hammer test or anything else makes you suspect the pole is decayed, probe it lightly with a Probe, testing the area you suspect. If the wood is good, the tip of the Probe will be held. If the wood is rotten, the tip of the Probe will push in easily and the surface wood will scrape away easily.

Additional checks before climbing:

- Check stay wires for security of fixings and excessive weakening due to decay or corrosion.
- Where a strut is fitted to a pole this should be tested as part of the structure, in the same manner as the normal pole test
- All leaning poles should be reported via the A1024 system. If it is considered the pole has excessive lean, then it may be necessary to arrange for alternative access, ie: MEWP (over 15degree Tilt)

Once all elements of the Pre-Climb Check have been completed, you are required to write your CSS ID and date on the label with Pen Marker, and fix it to the base of the pole. The label should be fixed 75mm above ground level and no higher than 150mm above ground level. The label must be attached to the pole BEFORE climbing.

## HAZARD IDENTIFICATION

- Contact with Electrical Services
- Live Traffic
- Pedestrians
- Weather
- Flora / Fauna

## PLANT, EQUIPMENT, MATERIALS

- Gate Guards, Barriers, Signs, Cones
- Ultrasonic Height measuring device
- Probe & Hammer

## EMERGENCY ARRANGEMENTS

- Ensure you are familiar with the emergency arrangements detailed in the CPP. Including location of A&E
- All work vehicles to carry First Aid Kit and Fire Extinguisher. Ensure provisions are readily available and easily accessible.
- If a fall occurs, self-rescue procedure outlined in BT Accreditation unit (S8).
- Ensure MTS Incident Line Number is saved on Mobile device: 03301231092

## ENVIRONMENTAL

- Ensure good housekeeping is maintained at all times.
- Ensure a pre-work check is carried out for any environmental risks.
- Spill kits must be available on the vehicle at all times.

## PPE REQUIREMENTS

*PPE items shown below must be available and worn wear necessary during this task.*

- You must wear Avonline approved / issued PPE
- Suitable protective footwear with ankle support and steel toe caps.
- Hard hats must be worn in the designated work area / drop zone at all times
- Standard issued gloves to protect against splinters and creosote
- Wear safety glasses when the task requires. (During hammer test to prevent debris being ejected in to eye)
- High visibility clothing (long sleeve top and bottoms) must be worn at all times.

## COSHH

*Refer to COSHH Assessments for further information*

Creasot seepage from Pole during hot weather (wear gloves where applicable)