

# **Method Statement**

# Knight Farm, Haunton Track and Gateway Resurfacing

#### December 2021

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## 1.0 Introduction

This Method Statement supports a Prior Approval notification for track surfacing improvements at Knight Farm, Haunton, B79 9HJ.

The application is in relation to resurfacing of an area of a field in use as a farm track. As the current track surface is bare soil it is leading to erosion and sediment run off which will be improved by surfacing with a permeable surface. The work is being undertaken by the landowner, Callum Wright, the applicant. The works are being supported by the Trent Rivers Trust, the Agent, who are delivering schemes under the River Mease Development Contribution Scheme.

# 2.0 Details of Proposed Activities

#### 2.1 Site Plan



Figure 1. Location of Track to be resurfaced.

The length of track to be resurfaced is 150m long and 2.5-3m wide. The work is due to take place in Spring/Summer of 2022 while ground conditions are dry enough.

### 2.2 Track Resurfacing Methodology

Resurfacing of degraded tracks improves the infiltration of water running over it and prevents the tracks from becoming conduits for dirty water run off. Recommended to be incorporated with cross drains for increased drainage and infiltration.

- Excavate a trench at least 2.4m wide and at least 150 millimetres (mm) deep, or down to a naturally occurring hard surface.
- Trach trench to be situated at least 2m to the east of the hedgerow to ensure suitable root protection zone.
- Profile the edge of the track with the excavated soil.
- Overlay the area with a geotextile membrane if the base of the trench lies on subsoil (a geotextile membrane is not needed if the base is bedrock or chalk).
- Fill the trench with clean stone or hardcore to a depth of at least 150mm, and compact it.
- Finish the top of the track with a finer material (of 18mm to dust) to a depth of 25 to 50mm, and compact it into a convex camber.
- Direct any track runoff towards the hedgerow and grass field.
- Machinery works to be undertaken from the eastern side of the track, on the grass, to avoid damage to the hedgerow to the west.

#### 2.2.1 Cross Drains

- Position the cross drain so it catches the water on the uphill side of the track or yard and transfers it to an outfall where it will not cause new erosion or runoff issues.
- Redirect water from the cross drain to a stable drainage outlet such as a ditch, swale or grass margin.
- Construct the drain either by digging a partially covered channel to collect sediment and redirect surface water, or by constructing a low hump to direct surface flows.
- Maintain drains and drainage outfalls or the areas around humps by removing built-up sediment or other clogging materials.
- Either construct an open channel:
  - excavate a channel across the width of the track or in a yard to a depth of at least 100mm and 100mm to 250mm wide.
  - o line the channel with concrete and install a gridded top that must be at least 150mm wide.
- Or construct a raised hump:
  - o excavate a foundation trench across the track or yard to a depth of at least 300mm
  - o fill it with concrete.
  - key in kerbstones across the trench so they protrude 60 to 100mm above the surrounding surface.

#### 2.4 Surface Water Management

Surface water will be able to infiltrate into the ground through the hardcore more effectively than the current bare compacted surface allows, so run off from the track will be greatly reduced.

Surface run off from the track will be directed towards the adjacent hedgerow to the west and grass field to the east by way of shaping the surface into a convex camper. Additionally, cross drains will force water away from the track into the grass and hedgerow base. The grass field where operations and machines will operate from, will be

reseeded if needed to encourage a thick sward to create roughage that will slow down the flow of the run off and encourage infiltration of water and settling of any sediment within it. Sediment run off will be greatly reduced with the addition of a hardcore surface, no bare soil will be exposed and at risk of erosion as is the current situation.

#### 2.5 Current Track Condition

The current surfaces are bare soil as the track and gateway have degraded overtime and experienced erosion. The surface is uneven due to erosion and the areas are acting as a source and pathway for sediment run off.

## 2.6 Proposed Track and Gateway Condition

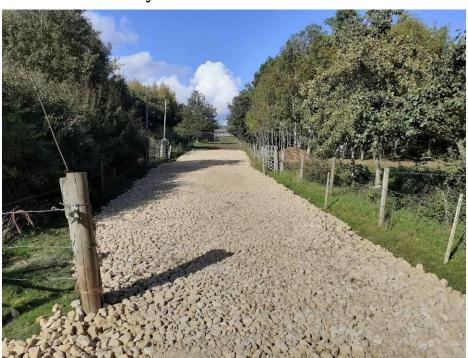


Figure 2. Example of recently resurfaced track using same hardcore resurfacing methods

#### 2.7 Track Usage

The track is for access to fields for farm operations. They are used by farm machinery.

# 3.0 Environmental legislation and pollution control

The proposals are within the catchment of the River Mease SSSI/SAC. The SAC and SSSI designation confers European and National protection for the site. Works will be undertaken with sensitivity to the designated site and to protected species.

#### 3.1 Nature Conservation

The proposals are considered as an improvement to the River Mease SSSI/SAC habitat. The current degraded and eroding track and gateway surfaces are sources and pathways of sediment and phosphate pollution to the

SAC. The resurfacing of these degraded areas will significantly reduce this pollution leading to improvements in water quality.

## 3.2 Protected species

No protected species have been identified within the site boundary when conducting site assessments.

The adjacent semi-improved grassland have low potential to support herpetofauna - reptiles and amphibians. It is proposed that these areas will be mown to 15cm in the herpetofauna activity season (April to October inclusive) before the start of works when herpetofauna are active and able to move away from the machinery.

The adjacent hedgerow has the potential to support nesting birds. The proposals do not include any removal or management of the hedgerow and the habitat will remain undisturbed apart from the proximity of the machinery. If works are to take place during bird nesting season (March to September inclusive) it is advised that fencing or markers are in place to mark a 2m buffer zone to prevent contact with the hedgerow and unnecessary disturbance.

Whilst the River Mease SAC/SSSI has the potential to support otter and watervole the ditches alongside the trackway are unsuitable to support these species.

#### 3.3 Pollution control

Silt and sediment

Works will take place in dry conditions, ideally summer months, when risk of run off from excavated materials and poached ground is lowest.

The status of the ground and flow paths will constantly be assessed during construction and the appropriate sediment control material will be laid.

# 4.0 Long Term Maintenance

The tracks will be maintained by the landowner. Sediment build up in and around cross drains will be removed, any loose or eroded hardcore will be replaced. Grass margins will be maintained and re-seeded when necessary. Trent Rivers Trust will advise the landowners on management of the adjacent features and field management to reduce further erosion risk.