

Project Case Study



A379 Slapton Line Reconstruction

During Storm Emma in March 2018 the key link between Slapton and Strete Gate, known as the Slapton Line was completely washed away, resulting in diversions of over 8km.

Devon County Council (DCC) and local MP Sarah Wollaston acted quickly to secure £2.5m of government funding. Immediately after the DCC Design Team developed designs and by July had received planning consent for the Southern Section with Consent for the Northern Section granted in August.

In May, DCC engaged Griffiths to work with them in the pre-construction phase to develop a construction programme and methodology. Early engagement was critical to success as the site was constrained on one side by the beach and the other by a SSSI. Additionally, the site had Unexploded Ordnance Risks due to its use for WW2 training, was of archaeological significance and a reptile habitat.

Close liaison was required between Slapton Line Partnership, Field Studies Centre and Natural England along with an extensive public consultation to permit works to start in July moving the road 10m inland, requiring the diversion of the South West Coast Path.

There were two main sections of the road that had been identified for realignment and were to be reinstated further inland, with the old road providing protection for storms in the future. The works comprised of

- Vegetation and UXO clearance
- Ecological protection
- 1Km of new carriageway
- Reconfiguration of existing junction
- Removal of old tarbound carriageway from both the road and beach
- Reinstatement of shingle ridge
- New signs and footways
- Diversion of BT to facilitate junction realignment

The road was open to traffic in October, just over 7 months after it was washed away.

Project Details:

Client
Devon County Council

Location
Kingsbridge, Devon

Completion Date
October 2018

Value
£1m

Contract
NEC Option A

Key Project Aspects

- 7 Months from Storm Damage to Road Open, with just 3 months Construction Phase
- Griffiths assisted in pre-construction discharge of planning conditions
- Works undertaken in SSSI with both UXO and Archaeology Risks
- Use of Single Layer Asphalt System

Health and Safety

Due to its popular location with walkers fencing was installed on the beach for the full length of the scheme in addition to fencing on the landward side. The South West Coastal Path was also diverted to ensure passing walkers had a safe route of passage.

A detailed UXO Clearance was undertaken ahead of the works due to the high risk of unexploded ordnances.

The project elected to utilise 100% Cabbed Dumpers on the scheme to improve the Safety for the operators. The air-conditioned cabs meant that the operator was protected from the risk of dust during dry periods, cold driving rain during wet periods and fumes from tarbound material. This project was used as a trial project for Griffiths who have since introduced nearly 100 Cabbed Dumpers across the company.

A logistics plan was developed and advised to delivery drivers ahead of the delivery to ensure that on site deliveries were sequenced and well managed through use of trained banksman.

The project was delivered without a single Lost Time Injury which was a result of the high standards of H&S and the behaviour of all the project team.

Community Engagement

The Slapton Line Partnership consulted with residents during the planning process and drop in sessions were held before works commenced to inform local residents of the planned works. This was attended by key members of the construction team and DCC such that local residents could meet the team and discuss plans and also talk about the wider highway problems arising from the road closure.

Throughout the project regular drop-ins were organised at both ends of the project to ensure accessibility to all residents and businesses affected. Newsletters were delivered throughout the project to keep the public up to date with the works progress.

Innovation

The significant constraints of the site are its location, located in an environmentally sensitive area with roads that are not suited to large vehicles. As such DCC's design determined to keep the depth of road construction to a minimum. The finished road levels followed the existing ground levels as much as possible to reduce the requirement for earthworks and keep the footprint of the works as small as possible. With a view of reducing the amount of shingle excavated and the amount of material imported the construction incorporated a geogrid which enabled the depth of sub-base to be reduced from 400 mm to 280 mm. The construction depth was reduced by a further 25 mm through the Contractor's proposal to use a single layer asphalt product instead of the thicker, more traditional road construction. This was undertaken as a case study by Tarmac and a trial by DCC with a view to seeing whether cost and time savings could be achieved to benefit on future schemes.

Due to the site's location in an SSSI it was identified that granite sub-base was to be required as an inert alternative to traditional sub-base. This itself introduced significant challenges as the closest quarry was in Cornwall and as such delivery wagons could only make one delivery per day each. Detailed planning and stockpiling on site minimised impact on programme.

