

M7/M8 PORTLAOISE MOTORWAY SCHEME



MILESTONES FOR THE PPP SCHEME

Contract Award14th June 2007

Contract
Signature14th June 2007

Road Open Autumn 2010

Construction Progress:

Compound

The site compound is now well established at Clonkeen just outside Portlaoise at the end of the existing Portlaoise bypass. The compound is now home to The NRA Site representatives, Celtic Roads Group (CRG), The Portlaoise Joint Venture (PJV) and members of the Design team from Roughan O' Donovan Faber-Maunsell (RODFM) Ltd.

The PJV are currently in the process of adding more offices to accommodate their growing team and also are constructing a cafeteria to serve the workforce.

Construction has also just been completed on a materials testing laboratory for CRG.

Site Investigation

A second round of Site Investigation works has just recently been completed along the scheme. This involved 'fine-tuning' of the existing investigation done previously by the NRA.

This information has helped the designers to further optimize the designs for structures and embankments etc.

Land Survey

A topographical survey was completed along the scheme since the last Newsletter. The results of this survey have been fed into the designers in order to complete the designs of interconnections with existing roads as well as to marry the new motorway drainage with the existing land and road drainage.

Property Surveys

Under the direction of the PJV, property condition surveys are being carried out along the scheme. Those landowners who have properties located near the proposed motorway are included as per prior agreement with the local Authority. The property surveyor is also undertaking to include surveys of other properties whose proximity to the scheme warrants inclusion. CRG wish to thank property owners for their assistance in this matter.

Environmental Monitoring

CRG and their contractor the PJV are currently working to finalize contracts with environmental monitoring firms such that monitoring can commence ahead of the construction activities.

Monitoring will continue for the duration of the project and shall include river water surveys and well monitoring, air (dust) and noise and vibration monitoring.

Fencing

External boundary fence installation commenced in Nov.'07 and is now well progressed. Approximately 75% of the mainline is fenced with completion expected by end of March 2008. Daily coordination is taking place between CRG and the impacted landowners along the scheme in order to progress the works with the minimum disruption possible. CRG wish to thank property owners for their assistance in this matter.

CRG will shortly commence construction of access tracks and secondary fencing in order to ensure access is maintained to fields affected by the fenced off motorway.

R435 Link Road

The main construction focus thus far has been on the R435 to M7 link road. Installation of culverts is in progress following site clearance from the N7 at the proposed Townspark roundabout towards the tie-in with the existing R435 at Derrinsallagh.

Road construction

The new Motorway is approximately 41km long. The “haul road” is about to be constructed. This means that top-soil will be removed and where there was soft ground present it will be excavated and replaced with good free-draining rock-fill.

Bridges

When completed there will be 46 over-bridges under-bridges crossing the new motorway. The bridges are generally constructed by placing pre-fabricated concrete beams on concrete supports on either side of the motorway and on concrete pillars in the middle.

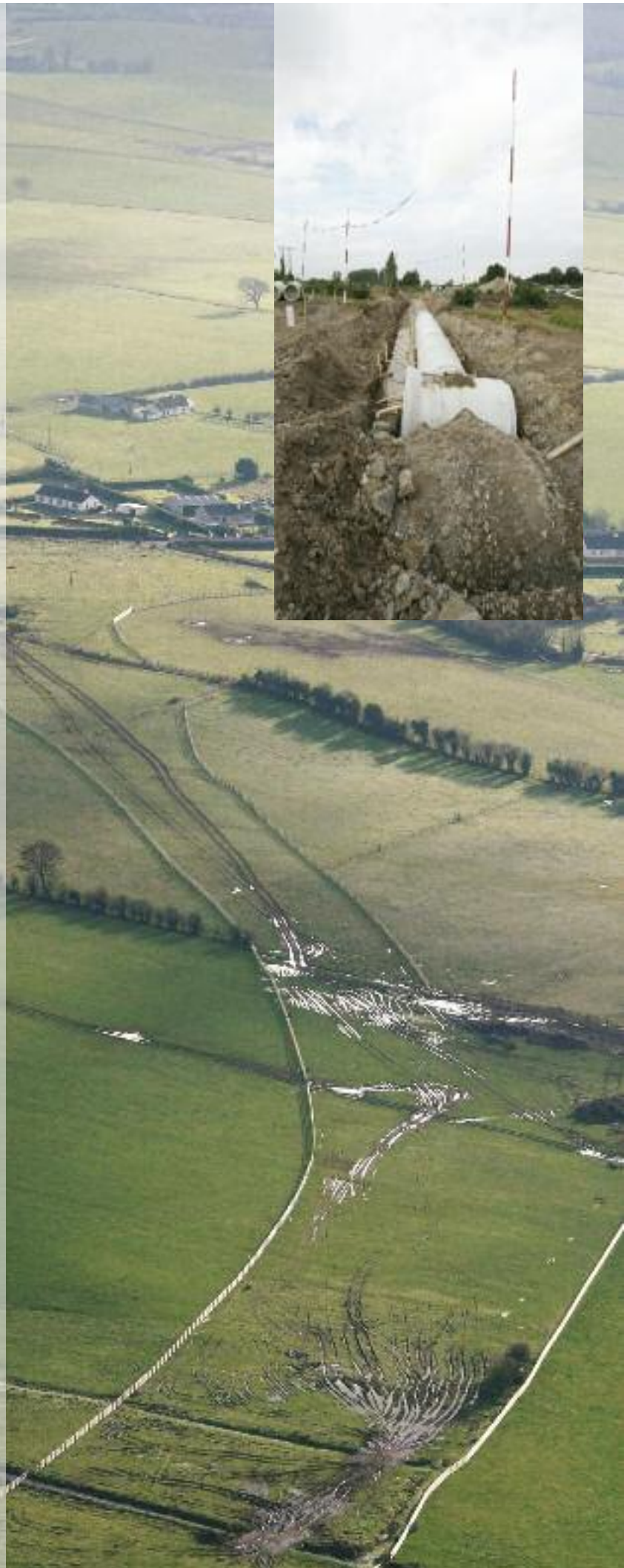
The bridge beams are transported to site by special road convoy. With some of the beams up to 34m in length, this can be quite a sight. A very large mobile crane is used to carefully place the beams. Some of the beams can weigh up to 80 tonnes.

Once the bridge beams are in place the bridge looks almost ready. However, there is still a lot of work to be done. The reinforced concrete deck must be built on top of the bridge beams and the deck must be waterproofed. Then parapets / handrails, ducting, footpaths and the road surface itself must be completed before the bridge can be opened to traffic.

Environmental

Most of the boundary fencing along the road has now been erected and we have started to install mesh on the fence in areas where badgers might want to cross. The mesh will prevent them from crossing the busy road and will guide them towards the special badger crossings that will be installed underneath the road.

Later on in the project, noise bunds will be constructed to reduce the noise levels generated by traffic on the new motorway. Trees will also be planted to screen views of the motorway and to break up the linear nature of the road.



Interview with Ray - Site Manager for PJV

Ray, you are the Site Manager in charge of road construction on this project. Can you please describe the main stages involved in building a road?

Initially we remove the topsoil from the area where the new road is going to be built. The topsoil is stored for landscaping at the end of the job. The soil underneath the topsoil is called subsoil. This must be reduced to the correct level (formation level), so that construction of the road can begin. At this stage, drainage pipes are also installed on either side of the road.

There are four main stages involved in the construction of this type of road and many different materials are used in the process:

Capping - When we have reached the formation level and the drainage is installed, capping stone may be laid. This is loose crushed stone that is compacted and rolled. The depth of the capping layer is dependent on the existing ground conditions.

Sub-base - After the capping layer is complete, the sub-base is installed. This is a finer material made up of smaller stones which is also rolled and compacted accurately to the required level. This layer is normally 150mm deep.

Pavement - A cement bound material known as CBM is usually placed on top of the sub-base at a thickness of approximately 180mm.

Blacktop (tarmac) - Various layers of tarmac are laid on the CBM including the final layer (or wearing course) which we drive on.

What is CBM?

Cement Bound Materials are what used to be called "lean mix" concrete. The CBM forms an integral part of the final road structure, therefore quality control is paramount, and only approved natural aggregates can be used. The materials are batch mixed and typically laid through a paver.

Once CBM is laid, how many layers of tarmac will be placed on top to make up the final surface?

On this project we will be placing three layers of tarmac on top of the CBM to complete the road construction. The layers will be base-course, binder course and finally the surface or wearing course, making up a total road construction sandwich.

Do weather conditions need to be considered and why?

Yes, weather conditions play a vital role during the construction of a quality road surface. Each product being laid will react differently to inclement weather conditions. Working in the right conditions can help maintain the characteristics and properties of each material. This will improve the overall quality and durability of the road.



Traffic Management up to April 2008

Anticipated Traffic Management up to end of April 2008:

Speed restrictions and/or temporary traffic management is expected to be put in place at:

- N7 at Clonkeen due to site traffic entering and exiting PJV compound.
- N7 West of Borris-in-Ossory during construction of new Townparks roundabout
- Along the R435 South of Borris-in-Ossory during construction of the new R435 to M7 link road
- Other areas along the route where access is required for construction operations

The Team

The Authority



The PPP Company



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PORTLAOISE LTD.

The Construction



PORTLAOISE JOINT VENTURE

The Design



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