# WESTMEATH - COUNTY GEOLOGICAL SITE REPORT

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| **NAME OF SITE** | **Mullingar Bypass** |
| Other names used for site | Mullingar Relief Road, N4 road cuttings |
| **IGH THEME** | **IGH8 Lower Carboniferous** |
| **TOWNLAND(S)** | **Culleen More** |
| **NEAREST TOWN/VILLAGE** | **Mullingar** |
| **SIX INCH MAP NUMBER** | **19** |
| **ITM CO-ORDINATES** | **643290E 756490N** |
| **1:50,000 O.S. SHEET NUMBER** | **41 GSI BEDROCK 1:100,000 SHEET NO. 12** |

**Outline Site Description**
A roadcut section along the N4 road north of Mullingar, exposing limestone strata.

**Geological System/Age and Primary Rock Type**
Thinly bedded dark grey limestones and shales of the Lower Carboniferous Derravaragh Cherts (Lucan Formation).

**Main Geological or Geomorphological Interest**
The Derravaragh Cherts unit occurs in the upper part of the Lucan Formation. The unit consists of unfossiliferous dark grey thinly bedded calcisiltites and wackestones with thin shales. At this location, the unit is highly silicified (chert). The cherts occur typically as nodules, but are also found occurring as seams and bands. Some beds are laminated and show traces of bioturbation (evidence of burrowing activity of organisms that lived in the sediment during Carboniferous times.). The Lucan Formation is representative of basinal marine facies, and is widely known as the Lower ‘Calp’ limestone.

**Site Importance – County Geological Site**
This is a good representative section for the Lucan Formation, and it is of County Geological Site importance. The site is familiar to regular passers-by who drive on this stretch of the N4.

**Management/promotion issues**
The limestone beds exposed at the site are prone to vegetation (bramble, ivy, dogwood, and other shrubs) overgrowth. When fresh bedrock was exposed after the roadcut was made, the site was noted for the presence of nodular cherts exhibiting festoon (chain-like) impressions, however weathering of the surfaces has since made these features difficult to find.

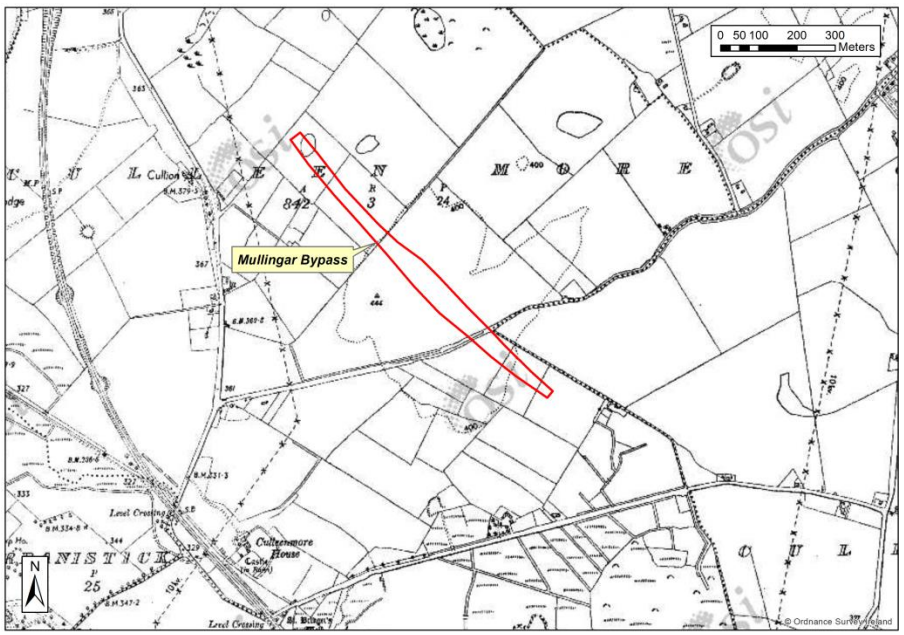
Lucan Formation beds exposed on east side of N4, viewed looking south.

Roadcut and flyover bridge looking south.

Limestone beds dipping gently to south on east side of N4.

Main section of limestones exposed on northeast side of flyover bridge. Beds dipping about 10-15° south.






Meehan *et al.* 2019. Geological Survey Ireland.