



Project Fact Sheet

M6/M7 KILCOCK TO KINNEGAD 10m SPAN



PRODUCT

ABM Design and Build, Matière CM4 14.25m span

Project

M6/M7 Kilcock to Kinnegad Structure 2

Client

West Meath County Council

Completion Date

Matière structure completed September 2004

Design Team

McCarthy, Hyder, Carl Bros.

Description

Design and construction of bridge over a live road and support two lanes of motorway.

FACTFILE

Structure

Matière Opti Cadre 10.0m x 6.0m

Span

10.0m (internal)

Height

6.0m (internal)

Length

32.5m (13 units@2.5m)

REQUIREMENTS

- Bridge structures to support east and west bound carriageways
- Reduce cost and construction time
- Installation over live road.

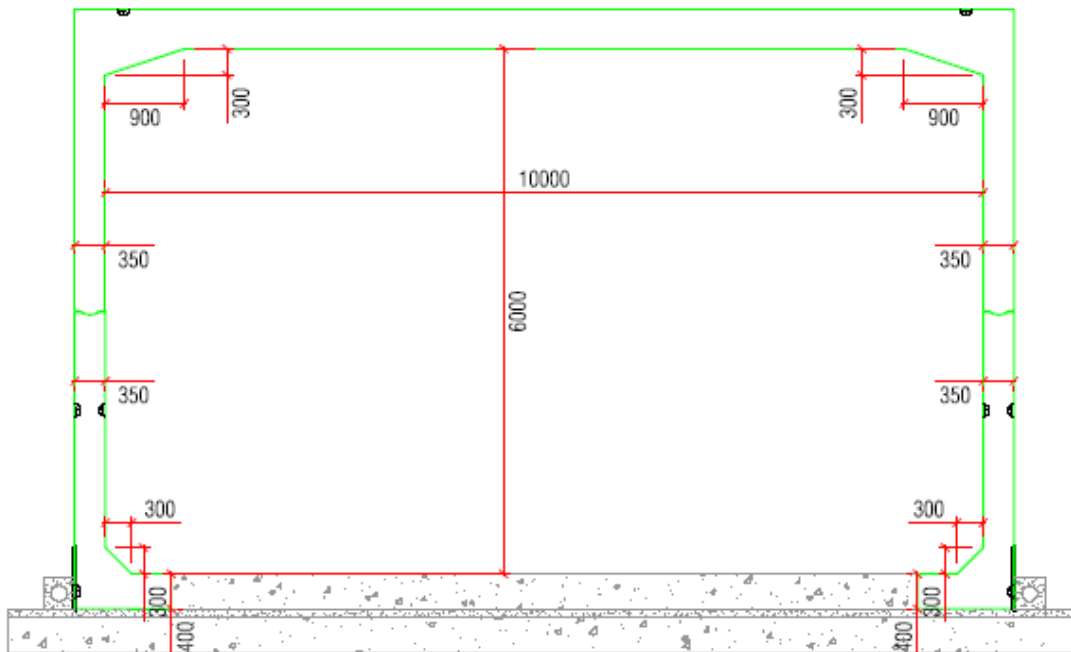
SOLUTION

- Matière Opti Cadre 10.0m x 6.0m comprising of precast wing walls. .
- Bridge installation took 3days.
- Road remained operational during entire construction phase.

Matière®

The Matière system was originally developed in France for hydraulic structures in the 1980's, since then the system has been developed into a modular range of arch, box and portal frames for a wide range of transport and infrastructure applications. Indeed, some 10,000 structures already exist worldwide exploiting soil structure interaction to minimise section sizes and allow rapid, cost effective on-site installation with precast units.

ABM hold the licence for the Matière system in the UK and Ireland.





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DETAILED SPECIFICATION

Upper Elements

Mould	Matière Opti Cadre
Span (internal point to point)	10.0m
Height (internal soffit to joint)	3.0m
Roof thickness	400mm
Number of units	13 total excluding wing walls
Volume of units	17.9m ³
Weight of units	44.75 tonnes
Additional information	

Lower Elements

Mould	Matière Opti Cadre
Height (top of toe to ball/socket joint)	6.0m
Length of toe (from inside of wall)	750mm
Wall thickness	350mm
Toe depth	400mm
Number of units	26
Volume of units	3.8m ³
Weight of units	9.5tonnes
Additional information	
Heel construction	NA

Additional Information

Concrete Grade	C50
Cement type	CEM1
Reinforcement cover	30mm int /35mm ext
Couplers	N/A
Finish	As struck from steel formwork



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