



Boyne Bridge

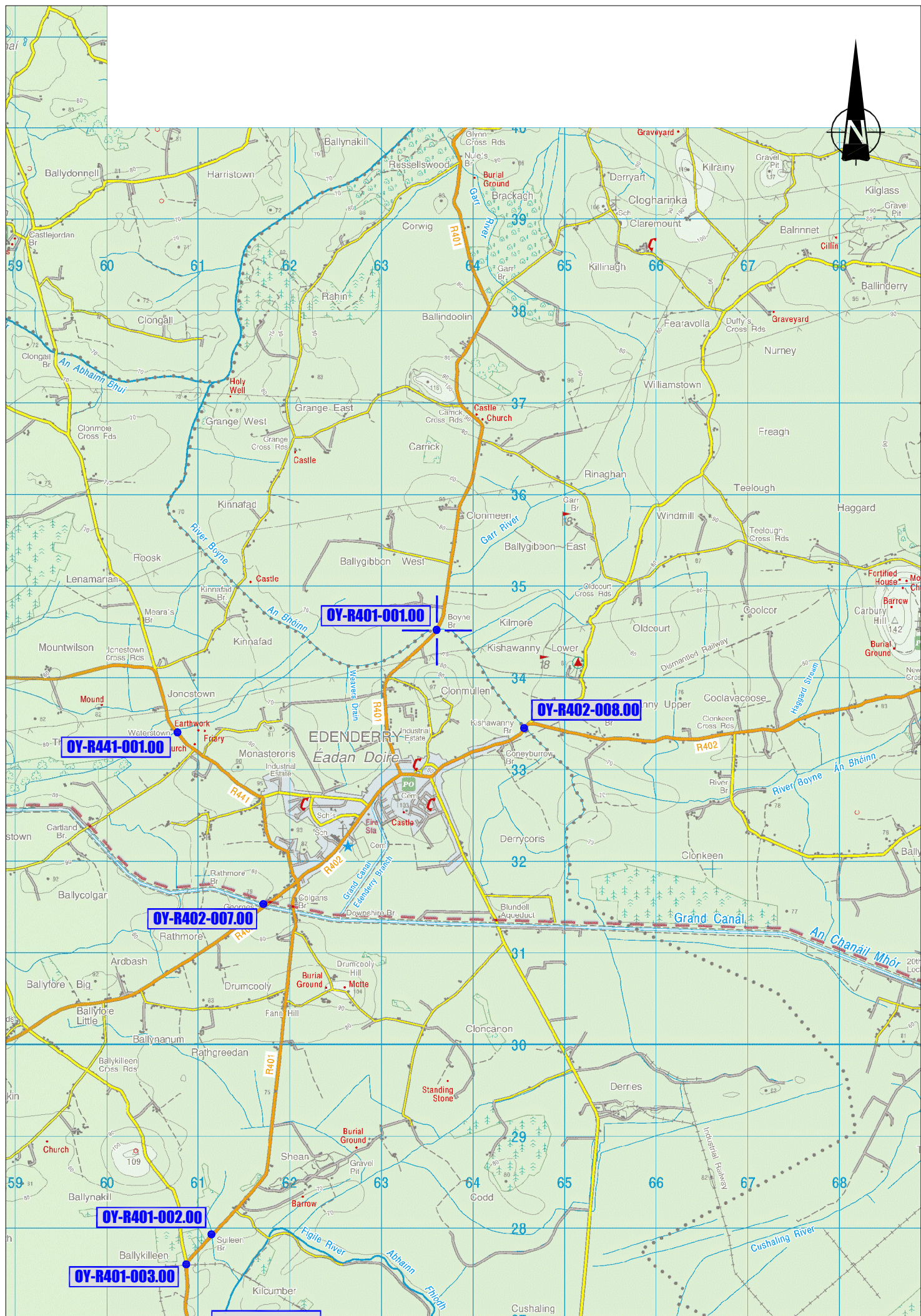
ID: OY-R401-001.00

Inventory and Principal Inspection Report



Author	Ronan Waters	
Checked	Damian Hanley	

DATE: 28 JANUARY 2015



Maintaining Agent.....:	26	OY - Offaly
Road.....:	Kinnegad, County Westmeath - Edenderry, County Offaly	
Side of road.....:		
Region.....:	2	Leinster
Struct. reg. no.....:	916	
Year of construction.....:		
Year of reconstruction.....:		
Primary passage Overbridge/Underbridge:	U	
Dir. of chainage on primary road.....:	S	
Access equipment needed.....:	0	Nothing
Data collected: Date	08 Jan 2015	
Inspector Initials.....:	RW	
Checker Initials.....:	DPH	

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Geographical position:

Easting: 263609

Northing: 234527

Geometry:

Number of spans.....:	1
Min span length.....(m):	4.78
Max span length.....(m):	4.78
Overall length.....(m):	4.78
Width out-to-out.....(m):	8.65
Width of median.....(m):	0.00
Width of footway left.....(m):	0.00
Width of footway right....(m):	0.00
Width of carriageway.....(m):	4.70
Width kerb-to-kerb.....(m):	5.70
Width of approach.....(m):	5.20
Area.....(m2):	41.35
Minimum Parapet Height....(m):	0.90
Width of Soft Verge Left..(m):	0.60
Width of Soft Verge Right.(m):	1.3
Approach Skew 1.....(deg):	0.00
Approach Skew 2.....(deg):	0.00
Bridge curved.....(Y/N):	N
Skew.....(deg):	45

Span Lengths:

Span 1...(m): 4.775	Span 6...(m):	Span 11...(m):
Span 2...(m):	Span 7...(m):	Span 12...(m):
Span 3...(m):	Span 8...(m):	Span 13...(m):
Span 4...(m):	Span 9...(m):	Span 14...(m):
Span 5...(m):	Span 10...(m):	

Superstructure, principal type:

Standard design(Y/N):	Y	
Design of cross section.....:	60	Masonry arch
Design of elevation.....:	50	Arch, one or more spans
Material of primary members.....:	60	Stone masonry

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Superstructure, secondary type (if applicable):

Standard design(Y/N):
 Design of cross section.....:
 Design of elevation.....:
 Material of primary members.....:

Superstructure, tertiary type (if applicable):

Standard design(Y/N):
 Design of cross section.....:
 Design of elevation.....:
 Material of primary members.....:

Masonry arch (if applicable):

Span Length(m): 4.78
 Rise of arch barrel at crown.....(m): 0.85
 Rise of arch barrel, quarter points(m):
 Springing height above mudline...(m): 2.35
 Thickness of arch barrel.....(m): 0.35
 Average depth of fill.....(m): 0.12
 Parapet thickness.....(m): 0.57

Material:

Arch facing stones...: 10 Limestone
 Arch barrel sheeting.: 10 Limestone
 Spandrel walls.....:

Square cut/rubble (S/R):

S
 S

Average joint thickness:

Arch facing stones...: 10 Less than 10mm
 Arch barrel sheeting.: 10 Less than 10mm
 Spandrel walls.....:

**Mortar strength
 Soft/Hard:**

H
 H

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Abutment: Type.....:	10	Abutm. wall, integ. wing walls
Material.....:	10	Masonry
Foundation.....:	92	Unknown
Pier: Type.....:	91	Not applicable
Material.....:	91	Not applicable
Foundation.....:	91	Not applicable

Details:

Type of parapet.....:	20	Masonry
Type of safety barrier.....:	0	No guard rail
Type of wearing surface.....:	20	Bituminous surface dressing
Type of expansion joint.....:	91	Not applicable
Type of fixed bearings on support....:	91	Not applicable
Type of free bearings on support....:	91	Not applicable
Type of fixed bearings on girders....:	91	Not applicable
Type of free bearings on girders....:	91	Not applicable

Obstacle:

Type of passage.....:	31	River
Passage id.....:		River
Passage name.....:		River Boyne
Road side.....:		

Vertical Clearance:

Primary passage.....(m):	L:	LM:	RM:	R:
Secondary passage.....(m):	L: 3.00	LM:	RM:	R:

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Miscellaneous:

Design Load.....:
 Load Distribution.....:
 Technical Standards.....:
 Assessed Capacity Normal.....:
 Assessed Capacity Abnormal.....:
 Weight Restriction.....:

Owner:	24	Offaly County Council
Maintaining Agent.....:	24	Offaly County Council
Inspection Consultant.....:	52	Ryan Hanley/WSP
Designer/Consultant.....:	92	Unknown
Technical installations.....:	2	Other electrical installation
	5	Telephone installation

Remarks:

This is a single span stone masonry arch over the River Boyne.
 The Spandrel wall were not visible due to vegetation.

Chronological Overview			1	2	3	4	5	6	7	8	9	10	11	12	13	14
Date	Activity		Br	Ex	Fo	Pa	Em	Wi	Ab	Pi	Be	De	Be	Ri	Ot	St
08 Jan 2015	Principal inspection		3			?	1	?	2			2		1		2

NRA

DBA

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Principal Inspection:

Date.....: 08 Jan 2015
Team Leader Name.....: Ronan Waters
Initials.....: RW
Weather.....: Dry
Temperature.....(deg. C): 8

Traffic:Annual Average Daily Traffic.:
Percentage, light vehicles...:
Percentage, heavy vehicles...:

Year for next Principal Inspection....: 2018

Remark:

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No	Component				Repair Work				
	Repair work Damage description Type of damage	Con rtg	Mtn req	Spe Ins	T P	Qty	Year	Cost	Pho tos
	1 Bridge surface Z : Other repair work Consider vertical alignment at this location. There is a large depression in road surface at North West.	3	N	N					5
					Z	1	2017	5000	
	2 Expansion joints			N					0
	3 Footways/median			N					0
	4 Parapets/Safety barrier Not visible due to vegetation.	?		N					1
	5 Embankments/Revetments Vegetation.	1	Y	N					1
	6 Wing Walls/Spandrel Walls/Reta Not visible due to vegetation.	?		N					0
	7 Abutments D : Masonry repointing Loss of masonry pointing	2	N	N					2
					D	10	2018	1250	
	8 Piers			N					0
	9 Bearings			N					0
	10 Deck/slab/arch barrel D : Masonry repointing Loss of masonry pointing	2	N	N					3
					D	10	2018	1850	
	11 Beams/girders/transverse beams			N					0
12 Riverbed	1	N	N					0	
13 Other elements			N					0	
14 Structure in general	2		N					1	

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Total Cost:							8100
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OY-R401-001.00 Boyne Bridge**Component No. 1 Bridge surface**

Consider vertical alignment at this location.
There is a large depression in road surface at North West.

Condition/Mainten. 3 / N



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Condition/Mainten. 3 / N



OY-R401-001.00 Boyne Bridge**Component No. 1 Bridge surface**

Consider vertical alignment at this location.
There is a large depression in road surface at North West.
Condition/Mainten. 3 / N



OY-R401-001.00 Boyne Bridge

Component No.	1	Bridge surface
Consider vertical alignment at this location. There is a large depression in road surface at North West. Condition/Mainten. 3 / N		



OY-R401-001.00 Boyne Bridge

Component No.	1	Bridge surface
Consider vertical alignment at this location. There is a large depression in road surface at North West. Condition/Mainten. 3 / N		



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Component No.	4	Parapets/Safety barrier
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Not visible due to vegetation.

Condition/Mainten. ? /



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Component No.	5	Embankments/Revetments
Vegetation.		
Condition/Mainten.	1	/ Y
		

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Component No.	7	Abutments
Condition/Mainten.	2 / N	
		

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Component No.	7	Abutments
Condition/Mainten.	2 / N	



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Component No.	10	Deck/slab/arch barrel
Condition/Mainten.	2 / N	
		

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Component No.	10	Deck/slab/arch barrel
Condition/Mainten.	2 / N	
		

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Component No.	10	Deck/slab/arch barrel
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Condition/Mainten.	2 / N
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Component No.	14	Structure in general
Condition/Mainten.	2	/
		