

<b>Location: O'Briensbridge, Co. Clare / Co. Limerick</b>		<b>Unique ID: 250434</b> (from PFRA database)	
<b>Initial OPW Designation</b>	<b>APSR</b> <input checked="" type="checkbox"/>	<b>AFRR</b> <input type="checkbox"/>	<b>IRR</b> <input type="checkbox"/>
<b>Co-ordinates</b>	<b>Easting: 166319</b>	<b>Northing: 166543</b>	
<b>River / Catchment / Sub-catchment</b>	<b>River Shannon / Shannon</b>		
<b>Type of Flooding / Flood Risk</b> (identify all that apply)	<b>Fluvial non-tidal</b> <input checked="" type="checkbox"/> <b>Fluvial tidal</b> <input type="checkbox"/> <b>Coastal</b> <input type="checkbox"/>		

<b>Stage 1: Desktop Review</b>	
<p><b>1.1 Flood History (include review of Floodmaps.ie)</b></p>	<p><b>River Flow Path</b></p> <p>The River Shannon flows through the town of O'Briensbridge. The Headrace Canal is also adjacent to the town on the northern boundary.</p> <p>Both the Headrace Canal and the River Shannon are crossed by the R466.</p> <p><b>Flood Event Records</b></p> <p>Eight flood records are listed in floodmaps.ie. These are based on flooding from the Shannon and include the 2009 and 1954 events.</p>
<p><b>1.2 Relevant information on flooding issues from OPW and LA staff</b></p>	<p><b>PFRA database comments (<i>in italics</i>):</b></p> <p><b>OPW comments</b> <i>Designated APSR on basis of reports of historical flood events and LA comments. On the Shannon? Historic (2 dated floods with 14+ properties flooding) - Strong LA Opinion No additional information provided - No change</i></p> <p><b>LA comments</b> <i>am)House estate flooding in Nov 09 – 14 houses 1990's the Shannon flooded and septic tanks effected Critical road infrastructure – Road bridge. (pm) All agree it is an APSR. Old Stone Arch Bridge over the Shannon at risk from flood damage. Needs to be clarified with ESB Inundation Study</i></p> <p><b>Meeting / discussion summary comments:</b></p> <p><b>OPW comments</b></p> <ul style="list-style-type: none"> <li>The Limerick – Clare county boundary splits this site north and south.</li> <li>Properties south of the river (east of the R525) flooded in 2009.</li> <li>A flow path was clear from the river to these properties. An embankment is now in place to block this flow path.</li> <li>Lands to the west of the R525, south of the river are prone to flooding.</li> </ul> <p><b>LA comments</b></p> <ul style="list-style-type: none"> <li>Old Shannon channel flooded in 2009 with 10 -12 properties affected.</li> </ul>

<b>1.4 PFRA Data</b>			
<b>1.4.1 PFRA hazard mapping</b>	<b>PFRA mapping available in GIS layer:</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	<b>PFRA mapping included on FRR map:</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<b>1.4.2 Summary of Principal Receptors</b>	<b>Type</b>	<b>FRI score (if available)</b>	
	Exchange	10	
	Arch_Regional	10.1	
	Monument_LV	40.1	
	<b>Total</b>	<b>175.5</b>	
<i>Flooding in 2009 exceeds PFRA mapping FRI score underestimated for O'Briensbridge.</i>			
<b>1.7 Stage 1 Evaluation</b>	<b>Aspect</b>	<b>Clearly APSR</b>	<b>Uncertain</b>
	<b>Flood History (1.1)</b>	<b>X</b>	
	<b>OPW / LA Information (1.2)</b>	<b>X</b>	
	<b>PFRA Evaluation (1.4)</b>	<b>X</b>	
	<b>Overall Desktop Evaluation</b> (if any above aspect is uncertain then overall designation is uncertain)	<b>X</b>	
<b>1.8 Proposed level of assessment for Stage 2 site visits</b>	<b>Level A Site Visit</b>		
	<b>Level B Site Visit</b>	<b>X</b>	

<b>Stage 2: Site Inspection</b>		<b>Level B Assessment</b>		
<b>Date and Time of Inspection</b>		<b>Date: 02/06/11</b>		
		<b>Time: 17:30</b>		
<b>Names of inspection team (including OPW/LA staff if present)</b>		<b>Mathieu Valois</b>		
		<b>James Murray</b>		
<b>2.3 Local knowledge - on-site comments (OPW, LA and any info volunteered by local residents during visit)</b>	No on-site comments.			
<b>2.4 Comments on hydraulic constrictions (bridges, etc.) and conveyance routes</b>	<p>The bridge over the Shannon at O'Briensbridge is a twelve arch bridge with one of these arches overgrown with vegetation. Capacity is okay, however the bridge is old and its condition may not be good enough to withstand significant flood events.</p> <p>There is also a bridge over the headrace for Ardnacrusha power generating station.</p>			
<b>2.6 Defence Assets</b>				
<b>Formal and Informal Flood Defence Assets</b> <i>(include effective and ineffective assets to inform asset survey and potential mitigation measures)</i>	<b>Open Channel Watercourses</b>			
	Man-made river channel <input type="checkbox"/>	Flood relief channel <input type="checkbox"/>	Canal <input checked="" type="checkbox"/>	
	Mill leat <input type="checkbox"/>	Drainage channels / back drains <input type="checkbox"/>		
	<b>Bridges and Culvert crossings</b>			
	Single Arch bridge <input type="checkbox"/>	Multi-Arch bridge <input checked="" type="checkbox"/>		
	Single Span bridge <input type="checkbox"/>	Multi-Span bridge <input type="checkbox"/>		
	Box culvert(s) <input type="checkbox"/>	Pipe culvert(s) <input type="checkbox"/>	Arch Culvert(s) <input type="checkbox"/>	
	<b>Culverted Watercourses</b> (culvert length is greater than just a crossing)			
	Box culvert(s) <input type="checkbox"/>	Pipe culvert(s) <input type="checkbox"/>	Arch Culvert(s) <input type="checkbox"/>	Irregular Culvert(s) <input type="checkbox"/>
	<b>Walls and Embankments</b>			
	Embankment(s) <input checked="" type="checkbox"/>	Raised wall(s) <input type="checkbox"/>	Retaining wall(s) <input checked="" type="checkbox"/>	
	<b>Control Structures – weirs, gates, dams</b>			
	Fixed crest weir <input type="checkbox"/>	Adjustable weir <input type="checkbox"/>	Dam / Barrage <input type="checkbox"/>	
	Sluice gates <input type="checkbox"/>	Lock gates <input type="checkbox"/>	Radial gates <input type="checkbox"/>	
<b>Storage</b>				
On-line storage (natural) <input type="checkbox"/>	On-line storage (artificial) <input type="checkbox"/>	Off-line storage <input type="checkbox"/>		
<b>Outfalls</b>				
Flapped outfall(s) into watercourse <input type="checkbox"/>		Unflapped outfall(s) into watercourse <input type="checkbox"/>		
<i>i.e. from smaller watercourses, drains etc. into river / estuary / sea</i>				
Tidal flap(s) <input type="checkbox"/>	Tidal sluice(s) <input type="checkbox"/>			
<i>i.e. from main watercourse into estuary / sea</i>				
<b>Other</b>				

	Pumping Station <input type="checkbox"/> Erosion Protection <input type="checkbox"/> Sand Dunes <input type="checkbox"/> <b>Additional notes (if required):</b>
<b>2.8 Initial Potential Mitigation Measures</b>	
<b>Non-structural measures</b>	Planning and Development control <input checked="" type="checkbox"/> Sustainable Urban Drainage Systems <input type="checkbox"/> Flood forecasting / warning <input checked="" type="checkbox"/> Change in Operating Procedures for water level control: <input checked="" type="checkbox"/> Public awareness campaign <input type="checkbox"/> Individual property protection <input type="checkbox"/> Land use management <input checked="" type="checkbox"/>
<b>Structural measures</b>	<b>Strategic development management for floodplain development:</b> <input type="checkbox"/> <i>(integration of measures into strategic development proposals)</i> <b>Storage:</b> On-line <input checked="" type="checkbox"/> Off-line <input type="checkbox"/> <b>Flow diversion:</b> Flood relief channel <input type="checkbox"/> Flood relief culvert <input type="checkbox"/> <b>Increase conveyance:</b> Bridge works <input checked="" type="checkbox"/> Channel works <input type="checkbox"/> Floodplain <input type="checkbox"/> <b>Flood defences:</b> Walls <input checked="" type="checkbox"/> Embankments <input checked="" type="checkbox"/> <b>Localised works:</b> Defence raising <input type="checkbox"/> In-fill gaps <input type="checkbox"/> Trash screen <input type="checkbox"/> <b>Maintenance works:</b> Culvert / channel clearance <input type="checkbox"/> Asset maintenance <input type="checkbox"/> <b>Relocation of properties:</b> <input checked="" type="checkbox"/> <b>Improve existing defences:</b> <input type="checkbox"/> <b>(describe)</b>  <b>Other (describe):</b>

<b>Outcomes</b>	
<b>Recommended Designation</b>	<b>APSR</b> <input checked="" type="checkbox"/> <b>not an APSR</b> <input type="checkbox"/> <b>IRR</b> <input type="checkbox"/>
<b>Summary Comments (if required)</b>	O'Briensbridge has a history of flooding. The PFRA mapping predicts an ongoing significant flood risk with this conclusion supported by both the Local Authority and the OPW. O'Briensbridge was confirmed as an APSR following a desk based assessment, with no on-site verification required.



**Photo 1:** River Shannon at O'Briensbridge, downstream of bridge.



**Photo 2:** Downstream face of O'Briensbridge at O'Briensbridge.



**Photo 3:** Downstream face of O'Briensbridge at O'Briensbridge.



**Photo 4:** Upstream face of O'Briensbridge at O'Briensbridge.

