

Limerick City and County Council

Croom Local Area Plan 2009 – 2015
(extended for a further 5 years)

Amendment to incorporate additional lands at Skagh, Croom,
Co. Limerick.

**Strategic Environmental Assessment Screening,
Habitats Directive Assessment Screening Report and Flood Risk
Assessment Stage 1**



April 2015

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Appendix: Zoning map with proposed amendment

permission for a school campus with a capacity of 1000 pupils on this site. The first reason for refusal was that the “site is located on unzoned lands outside the boundary of the Croom Local Area Plan 2009”. The amendment to the plan will create a school site which is at distance 0.95 km from the existing school campus and 1.4 km from the town centre as the crow flies. It is proposed that the existing post primary school, which is inadequate in size and in a poor state of repair, will relocate to the proposed site.

One of the issues that arises is that of subsequent usage of the existing school complex when the campus moves. There is the danger that under use of this complex might lead to dereliction in the absence of a coherent plan for its use following the departure.

The movement of the school population may also have commercial implications for the town centre as the distance of the new campus from the established retail outlets it is likely that there will be significant fall off in passing trade from the school. Though insufficient information is available to quantify this it is likely that it will be significant.

1.2 Screening Statement

The Planning and Development (Strategic Environmental Assessment) Regulations 2004-2011 (S.I. No. 436 of 2004, SI 201 of 2011) require case by case screening of individual plans and programmes based on the criteria in Schedule 2A to the Planning and Development Regulations 2011. These criteria must be taken into account in determining whether or not significant effects on the environment would be likely to arise.

As outlined above, the amendment to the Croom Local Area Plan falls below the thresholds for which SEA is mandatory.

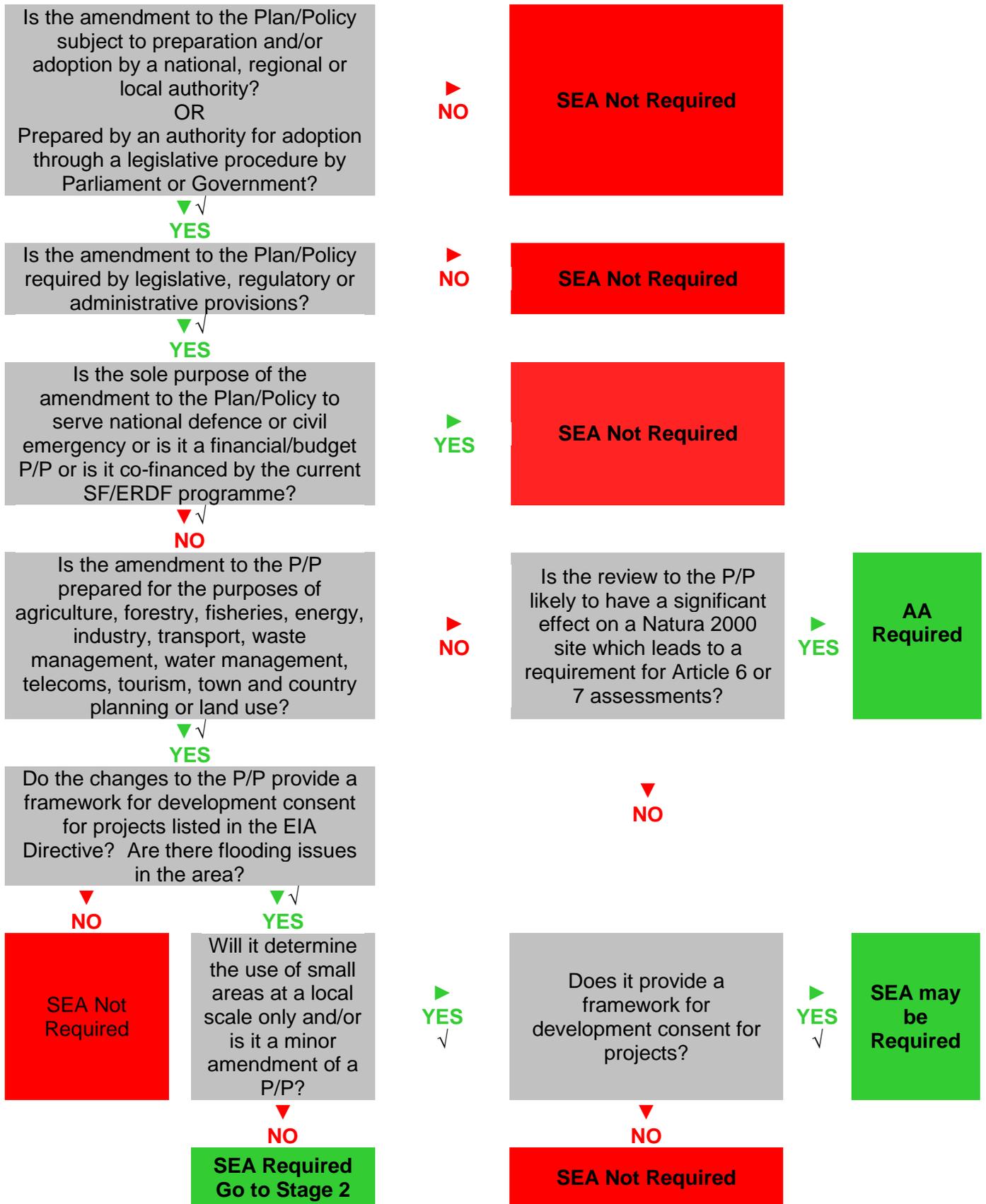
Stage One - Pre-Screening

The first step in determining whether the amendment to the Croom Local Area Plan would require an SEA involves a pre-screening check.

The pre-screening check places the proposed amendment in context with consideration of how the amendments fits in with larger policy issues.

Stage 2 assesses the environmental significance of the amendment by examining how it fits in with policy guidance documents and its possible environmental effects.

Figure 1 Pre-Screening Decision Tree



Stage Two - (A) Environmental Significance Screening

The application of environmental significance criteria is important in determining whether an SEA is required for small plans/policies or modifications to Plans/Policies. Annex II (2) of Directive 2001/42/EC sets out the “statutory” criteria that should be addressed when undertaking a screening assessment.

Criteria for Determining the Likely Significance of Environmental Effects

Characteristics of the Plan/Programme

- i. the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;*

The amendment seeks to incorporate an additional 9.38ha of land which currently lies outside the development boundary. This is intended for educational use. This will result in an increase of the zoned land area of the plan to 160.45ha.

- ii. the degree to which the plan or programme influences other plans and programmes including those in a hierarchy;*

An amendment to the Croom LAP to extend the boundary in order to provide additional zoning for educational uses would be contrary to the policies and Objectives of the County Development Plan, RPG's and Ministerial guidelines, as outlined below. Section 19(2) of the Planning and Development Act requires local area plans to be consistent with the objectives of the development plan, its core strategy, and regional planning guidelines.

- **The Mid West Regional Planning Guidelines 2010 - 2022:**

pg 100: "There is a need for City and County Councils to co-operate in order to seek to situate new schools within the existing / proposed catchments in a manner that aids ease of access from surrounding areas and encourages sustainable mobility by walking cycling and public transport."

- **The Core strategy set out in the 2010 County Development Plan states the following on page 2-7:**

“The reservation of zoned lands within Local Area Plans shall take place on a phased basis and in a sequential manner from the core centre of settlement outwards in accordance with the population and housing targets contained in the core strategy”.

The proposed zoning would also be contrary to a number of objectives in the County Development Plan as follows:

“Objective SS O5: Prevention of urban sprawl

In order to retain the identity of towns / villages, to prevent sprawl, and to ensure a distinction in character between built up areas and the open countryside, it is an objective to prevent linear roadside frontage development on roads leading out of towns and villages.”

“COM O11: Location of Schools:

It is the Council’s objective to facilitate the educational authorities in expanding schools in tandem with residential development. Educational facilities shall be located where possible, in close proximity to other community services, and accessible by various modes of transport and have regard to the principles of social integration. Multi-use of school facilities, for other community programmes and initiatives other than mainstream education shall be encouraged, in order to maximise resources and support sustainable communities”.

- **“Local Area Plans – Guidelines for Planning Authorities” June 2013**

Pg 30: “LAPs should contain policies and objectives that encourage smarter travel patterns through more compact, less sprawling, and better structured urban areas and facilitating more sustainable and healthier travel habits such as walking, cycling, and the use of public transport.”

Page 33: “reducing the costs to society of the maintenance and improvement of areas associated with sprawling, low-density patterns of development.”

Page 34: In relation to the causes of climate change, low density, sprawling, and car-dependent forms of development will exacerbate recent trends towards increasing carbon emissions, especially from the transport and residential sectors. Instead, by promoting compact urban development and a move towards smarter travel options, future development can become less carbon intensive.

Local area plans should, therefore, be consistent with the objectives of the National Climate Change Strategy, as amended.

Page 36: The provision of schools is an integral part of formulating a local area plan and can greatly assist in promoting the development of a compact and sustainable urban community, particularly so in the case of greenfield areas.

The location of sites for new schools should be centred on the existing/proposed population catchments and encourage sustainable mobility (i.e., walking/ cycling/ public transport) in accordance with the Department of Transport, Tourism and Sport’s “Smarter Travel” policy framework. In addition, local area plans should also identify the location of reserved school sites within areas of residential expansion including the option of developing development briefs for reserved sites in conjunction with the Department of Education and Skills.

Pg 37: promote the consolidation of urban growth in a phased and sequential way from the centre out of settlements by prioritising and maximising the development potential of brown field /existing sites for new residential and mixed-use development;

- **“The Provision of Schools and the Planning System – A code of practice for Planning Authorities”, July 2008, states the following:**

Page 10 “In so far as possible, reserve lands for educational purposes in locations close to the areas of greatest residential expansion and adjacent to community developments such as community centres, playing fields, libraries etc so that the possibility of sharing facilities can be maximised”.

- **Implementation of Regional Planning Guidelines Best Practice Guidance, 2010"**

"The evidence-based Core Strategy will be a foundation element of development plans. This will require that every development plan have a clear evidence-based rationale for future development, especially as regards the zoning of lands including the zoning of substantial areas of greenfield or brownfield land for development:

why the land is being zoned;

- the basis of the decisions regarding the nature, scale and location of the zoned land;
- any phasing proposed; and
- plans for providing public transport, roads, water/sewerage, schools and other facilities
- to service the land or the justification of the zoning in the absence of such plans.

The benefits of Core Strategies are that they will enable the prioritisation and targeting of scarce public investment, in both hard infrastructure (transport, water and wastewater, communications) and soft infrastructure (schools, community facilities, amenities, public spaces and parks etc.)."

iii the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;

The amendment of the Croom LAP is being prepared under the Planning and Development Acts 2000 (as amended) and takes into account relevant environmental and planning considerations, in particular that of the core strategy. The Circular letter PSSP 6/2010 *Core Strategies under the Planning and Development (Amendment) Act 2010* and the accompanying Guidance Note on Core Strategies November 2010 (pg. 2-3), mentions that the incorporation of the core strategy “*must integrate relevant EU directive related considerations that development plans must comply with,*”. It is clear from (ii) above that the amendment is not consistent with provisions of the core strategy or with planning guidance and good practice.

iv environmental problems relevant to the plan or programme;

The underlying environmental issues of the Croom LAP relate to the following:

- Sequential development of the town of Croom.
- Avoidance of pollution to the nearby Lisnakaltagh Stream from development that may take place within the expanded boundary.
- Rationalization of the zoning pattern to take into account the core strategy.

v the relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste-management or water protection).

The amendment of the school site is not likely to lead to overloading of the WWTP as there is spare capacity resulting from the fall off of development pressure since 2008. The plant has current capacity of 2000pe.

It is not likely that the provision of potable water to the school will be an issue as there is sufficient capacity in the current source.

Characteristics of the Effects and of the Area Likely to be Affected

i. the probability, duration, frequency and reversibility of the effects

The expansion of the development boundary, and its subsequent development as a school site cannot be reversed except in the very long term. This sets a bad precedent in terms of the implementation of planning policy in the county.

To minimize future effects and to avoid poor planning precedents it is considered that appropriate development of existing zoned land and structures closer to the town centre is more appropriate.

ii. the cumulative nature of the effects

Cumulative negative environmental effects are likely to be localised within the expanded plan boundaries and limited in nature. Though the boundaries are being expanded in an ad hoc fashion to cater for specific development in practical terms the effects are not regarded as significant. The reasons are as follows:

- 1 The lands are intensively managed improved grassland.
- 1 There are no natural history designations on site.
- 2 A walkover survey did not indicate areas of significant habitat potential in that the land is paddocked for intensive grazing and there is a network of grazing paddocks throughout.
- 3 No evidence of flooding was found on two separate days.
- 4 The overall area would expand the land area of the plan by only 7% approximately.

iii. the trans-boundary nature of the effects

There are no trans-boundary effects.

iv. the risks to human health or the environment (e.g. due to accidents)

None. The town is not close to a Seveso or heavy industrial site. The fall off in development pressure since 2008 has ensured that, for the time being, sufficient capacity remains in the Waste Water Treatment Plant (WWTP) for likely development uses.

v. the magnitude and spatial extent of the affects (geographical area and size of the population likely to be affected)

The area that will be directly affected is just outside the development boundary of Croom - this is just over 9 ha in total. It is intended to accommodate a school with a student population of 1000 and a teaching staff of 50.

vi. the value and vulnerability of the area likely to be affected due to

- special natural characteristics or cultural heritage;

None, the site is currently intensively managed grassland.

- exceeded environmental quality standards or limit values;

The use of the site itself for development purposes is not likely to cause any environmental issues to arise.

- intensive land-use;

The use of the site as a potential site for a school will result in an intensification of use over the current agricultural usage. However this is not regarded as significant in that it is not likely to lead to overloading of the WWTP in that development pressure on Croom has eased since 2009.

vii. the effects on areas or landscapes which have a recognised national, Community or international protection status.

No effects, none located within the expanded development boundaries of the plan area. See comments above in relation to features within the plan area that are of local importance.

1.3 Stage Two – Summary, Conclusions and Recommendation

Following the pre-draft consultation process responses were received from both the EPA and the Geological Survey of Ireland. The EPA noted the position with regard to the need for Strategic Environmental Assessment and stressed the need to ensure that the proposed Amendment is consistent with the County Development Plan Core Strategy and the Midwest Regional Planning Guidelines. This has already been referred to above – see pages 6 to 8.

The GSI submission noted that the possible effects on ground and drinking water should be taken into account. Internal discussions with the Environment Section indicate that the proposed amendment does not pose a risk to either.

At this stage in the plan process, no strategically significant environmental problems can be identified in relation to the above issues. However it must be said that the expansion of the boundaries to cater for educational zoning, which could be located within existing zoned land closer to the town centre runs counter to the sequential approach and compact settlement concept advocated by the DECLG Planning Guidelines.

Following the screening process whereby the specific context of the amendment to the Croom LAP has been assessed against the environmental significance criteria as contained in Annex II (2) of the SEA Directive, **it is concluded that a Strategic Environmental Assessment is not required for the amendment of the Croom LAP at this stage in the plan process.**

2.1 Appropriate Assessment Screening: introduction

This is an Appropriate Assessment Screening of the proposed amendment to the Croom LAP, in accordance with the requirements of Article 6(3) of the EU Habitats Directive (92/43/EEC).

The existing Croom LAP had originally been prepared in 2009. This review needs to be screened for 'Appropriate Assessment'. Based on the *Methodological guidance on the provision of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, a 'Screening Matrix' and a 'Finding of No Significant Effects Matrix' have been completed. The conclusions were that the revision of the LAP **did not require** an Appropriate Assessment.

The principal consideration for an Appropriate Assessment would be if the LAP were likely to have significant effects on a Natura 2000 site – Special Areas of Conservation and Special Protection Areas (SAC's and SPA's) are Natura sites. The Tory Hill SAC site and Lower River Shannon SAC and the River Shannon and Fergus SPA are closest to the plan area.

The main ecological threat to the Lower River Shannon SAC site is from potential run off from the site during development works.

There is no risk to the Tory Hill Special Area of Conservation site. Though the closest Natura 2000 site, there is no link, hydrological or otherwise with the lands in question and while part of the Tory Hill habitats range includes calcareous grassland, the grassland in question on the lands the subject of the amendment are improved heavily modified grassland.

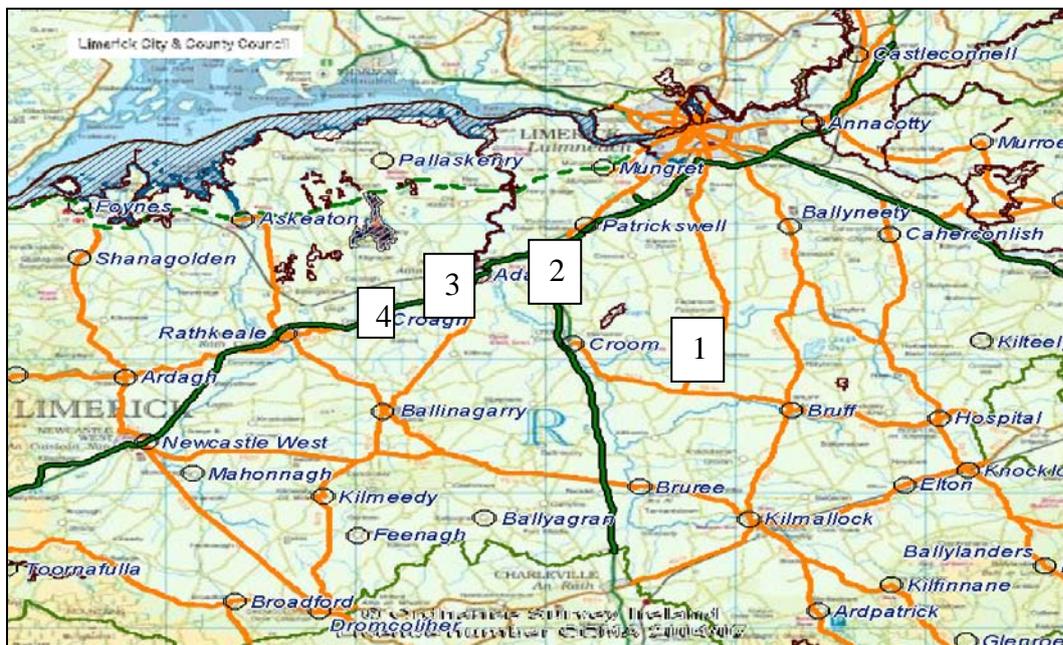


Figure 1: Showing the Tory Hill SAC (1) site to the east of the town and the Lower River Shannon (2) to the north- west. The other SAC sites listed below within a radius of 22 km are also shown numbered 3 and 4.

As indicated above the only site that might be affected by the works would be the downstream Lower River Shannon SAC site which may be affected by run of generated by preparing the lands for development works.



Figure 2: showing Special Protection Area sites within 26km of Croom. The numbering sequence continues from Figure 1. They are numbered from 5 to 7.

2.2 Screening Matrix

Brief description of the amendment to the project or plan:
The Croom LAP is being amended to incorporate 9.38ha of additional land within the development boundaries which will be zoned for educational use.
Brief description of the Natura 2000 sites:
The River Shannon and Fergus SPA (004077) is located downstream of Adare where the Mague is designated - see Figure 1, No. 6. The Lower River Shannon SAC (002165- see Figure 1 No 2) site is approximately five km upstream of the Plan area and to the northwest of the Croom. The SAC site has been selected because of a range of

riparian habitats and species such as wet woodlands, tidal mudflats, estuaries and for species such as otter, salmon and lamprey. Maintenance of high water quality is an important factor in ensuring the preservation of these habitats.

The River Shannon and Fergus SPA site has been selected because of its importance for wintering and migratory wild fowl. The site comprises all of the estuarine habitat west from Limerick City and it is the mud flats with its invertebrate community which is of particular importance as a feeding area for migratory wildfowl.

Askeaton Fen Complex SAC site (002279- see figure 1 No. 4) contains Calcareous fens and Alkaline fens 15km to the north west of Croom.

Curraghchase woodlands SAC site (0000174-see Fig 1 No. 3) a woodland site designated for the Lesser Horseshoe bat, is 12km to the north west.

Tory Hill SAC (000439- see Figure 1 No1) is an isolated wooded limestone hill situated about 2 km North East of Croom, Co. Limerick. Lough Nagirra is located within the Tory Hill SAC and has a thick fringe of Common Reed (*Phragmites australis*) and, in association with it, areas of alkaline fen and calcareous fen vegetation referable to the Caricion davallianae alliance with Saw Sedge (*Cladium mariscus*). Both of these fen types are listed on Annex I of the E.U. Habitats Directive, the latter with priority status. Tory Hill is also designated for areas of orchid-rich calcareous grassland, a habitat that is listed with priority status on Annex I of the E.U. Habitats Directive; it is found on the eastern side of the hill and on its summit. This is the closest site to Croom.

The Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161-see Figure 2 No7) is a very large site centred on the borders between the counties of Cork, Kerry and Limerick.

The site consists of a variety of upland habitats, though almost half is afforested. The coniferous forests include first and second rotation plantations, with both pre-thicket and post-thicket stands present. Substantial areas of clear-fell are also present at any one time. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for Hen Harrier.

The Slieve Felim Hills SPA (004165) is an upland site with forestry, upland grassland and fragmented peat-land habitats (Number 5 on Figure 2). This is within 26km of Croom and lies to the north east and is designated for the Hen Harrier.

Describe the individual elements of the plan (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site:

The main way in which ex-situ impacts could be created is through pollution that would affect water quality in the Lower River Shannon SAC site. Since the Maigue flows into the river Shannon system should pollution occur elements of this may eventually end up in the Shannon itself which is also an SPA.

It is not considered that there is the possibility of effects on the other Natura 2000 sites mentioned above in that the effects will be localised in the plan area and involve the development of intensively managed agricultural land.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:

- **Size and scale;**

There are no direct aspects of the amendment to the plan that would have an effect on the Natura 2000 site. It is the secondary impacts of the amendment i.e. the eventual development of the site and resulting run off that could have an effect on downstream water quality in the Mague and the Shannon Systems.

- **Land-take;**

There is no land take from Natura 2000 sites.

- **Distance from Natura 2000 site or key features of the site;**

The River Shannon and Fergus SPA site and the River Shannon SAC are located 7 and 10km respectively northwest of the town. The Askeaton Fen complex is 15km to the north west. Curraghchase woodlands are 12km to the north west and Tory Hill is 2km to the east. The West Limerick Hills SPA is 25km to the west, while the Slieve Felim SPA is 26km to the north east.

- **Resource requirements (water abstraction etc);**

No policies within the amendment indicate the need for abstraction of water from any designated site.

- **Emission (disposal to land, water or air);**

There is the risk of runoff from development activity to the Lisnakaltagh Stream to the Mague which in turn is designated when it reaches Adare 7km to the north west. This risk is regarded as small.

- **Excavation requirements;**

Any excavation which may be permitted under the scope of the plan will take place within the LAP boundaries and with the exception of the possible generation of sediment for site excavations in the lands the subject of the amendment are not expected to have any effects on Natura 200 sites.

- **Transportation requirements;**

It is not considered that any of the transport policies put forward in the plan or traffic flows resulting from the amendment will have any effect on any designated sites.

- **Duration of construction, operation, decommissioning, etc;**

No construction projects within the amended plan area will encroach upon designated sites due to the distance from them.

- **Other**

None.

Describe any likely changes to the site arising as a result of :

- **reduction of habitat area:**

None - all of the sites are at a distance from the lands that will be the subject of the amendment.

- **disturbance to key species;**

None- all of the sites are at a distance from the lands that will be the subject of the amendment.

- **habitat or species fragmentation;**

None- all of the sites are at a distance from the lands that will be the subject of the amendment.

- **reduction in species density;**

None- all of the sites are at a distance from the lands that will be the subject of the amendment.

- **changes in key indicators of conservation value**

No projects giving rise to significant adverse changes in key indicators of conservation value for Natura 2000 sites are likely given that policies are in place to control possible ex-situ effects and the distance from the Natura 2000 sites.

- **Climate change:**

None.

Describe any likely impacts on the Natura 2000 site as a whole in terms of:

- **interference with the key relationships that define the structure of the site;**

None.

- **interference with key relationships that define the function of the site;**

None.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

- **loss;**

Not applicable.

- **Fragmentation;**

Not applicable.

- **Disruption;**

Not applicable.

- **Disturbance;**

Not applicable.

- **change to key elements of the site (e.g. water quality etc);**

Not applicable.

Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts are not known.

Not applicable.

2.3 Finding of No Significant Effects Matrix

Name of Project or Plan:	Croom LAP 2009 amendment.
Name and location of Natura 2000 sites:	River Shannon and Fergus SPA site (004077) to the 14km from northern boundary of the LAP. Lower River Shannon SAC (Site Code 002165) to the 7km north of the town. Askeaton Fen Complex SAC site (002279) 15 km to the west and north west. Curraghchase woodlands SAC site (0000174) a woodland site designated for the Lesser Horseshoe bat, 12km to the north west. Tory Hill (00439) 2 km to the east. The West Limerick Hills SPA is 25km to the west, while the Slieve Felim SPA is 26km to the north east.
Description of the Project or Plan	As given in Screening Matrix above.
Is the Project or Plan directly connected with or necessary to the management of the site (provide details) ?	No. The amendment of the LAP is intended to provide for an extension to the development boundary of the Plan in order to facilitate the development of the school site that lies immediately outside the existing development plan boundaries.

Are there other projects or plans that together with the project of plan being assessed could affect the site (provide details)?		None.	
The Assessment of Significance of Effects			
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 sites:		Effects are most likely to from potential development of the school site which lies 7km upstream from the Lower River Shannon SAC site. There is the small possibility of runoff finding its way downstream to this site. This risk is not regarded as significant.	
Explain why these effects are not considered significant:		Distance from the SAC site and the fact that it will be possible in terms of any potential planning application to ensure that buffer areas and other measures to reduce potential run off will be implemented in the plan.	
List of Agencies Consulted: Provide contact name and telephone or email address:		AA Screening Reports are being sent to: <ul style="list-style-type: none"> • SEA Section, Environmental Protection Agency • Planning System and Spatial Policy Section • Department of the Environment, Community and Local Government • Department of Agriculture, Fisheries and Food • Department of Communications, Energy and Natural Resources • Development Applications Unit, Department of Arts, Heritage and the Gaeltacht, 	
Summary of Responses received for previous draft.		Not applicable	
Data Collected to Carry out the Assessment			
Who carried out the Assessment?	Sources of Data	Level of assessment Completed	Where can the full results of the assessment be accessed and viewed
Heritage Officer, Forward Planning Section, Limerick County	Existing NPWS. Site Synopses. Site visits during plan preparation	Desktop study, site visits	With plan documentation on request.

FLOOD RISK ASSESSMENT

3.1 Introduction: Flood risk In Croom

This is the stage 1 flood risk identification for the amendment of the 2009 – 2015 Local Area Plan for Croom. The plan is being amended to incorporate additional lands (9.38 ha) within the development boundary of the plan for the purposes of including land which will be zoned for educational purposes. The amendment is for this sole purpose and no further lands will be included within the development boundaries. There will be further assessments as the review process progresses on receipt of responses from the Environmental Authorities. A map showing the lands in question is in Appendix 1 page 31. Its position on the edge of the current zoned lands is shown on page 32, while an aerial picture showing its peripheral location relative to the town is on page 33.

3.2 Stage 1: Flood Risk Identification

The Technical Appendices of the *Planning and Flood Risk Management Guidelines (November 2009 p.9)* identify the following sources of information:

- 1 OPW Preliminary flood risk assessment indicative fluvial flood maps.
- 2 National Coastal Protection strategy study flood and coastal erosion risk maps.
- 3 Predictive and historic flood maps and benefiting land maps.
- 4 Predictive flood maps produced under CFRAM studies.
- 5 River Basin Management Plan and reports.
- 6 Indicative assessment of existing flood risk under Preliminary Flood Risk Assessment.
- 7 Previous flood risk assessments
- 8 Advice from Office of Public Works.
- 9 Internal consultation with Local Authority personnel, in particular water services engineers.
- 10 Topographical maps - in particular LIDAR
- 11 Information on flood defence condition and performance.
- 12 Alluvial deposition maps.
- 13 Liable to flood markings on old 6 inch maps. In addition these maps particularly the first edition, contain information on landscape features and infrastructure such as mills and weirs that can indicate hydrological features.
- 14 Local Libraries and newspaper reports.
- 15 Local consultation e.g. local groups.
- 16 Walkover surveys to assess potential sources of flooding and likely routes of flood waters and flood defences.
- 17 National, regional and local spatial plans and previous planning applications.

1. OPW preliminary flood risk assessment indicative fluvial flood maps

These were consulted. The report attached to the map indicated that the town centre was subject to medium risk, while the hospital, the nearest risk location to the proposed school site was indicated as low risk (OPW/Jacobs Jun 27th 2011, p.3).

2. National Coastal Protection Strategy Study flood and coastal maps

Maps for this study would not be of any assistance in dealing with specific flooding issues in Croom.

3. Predictive and historic flood maps and benefiting land maps (flood maps.ie)

These maps were consulted. These show benefiting lands to the north of the plan area in the area shown in red on the screen grab below. This takes in the lands that are the subject of the amendment which are located immediately to the north west of the hospital.

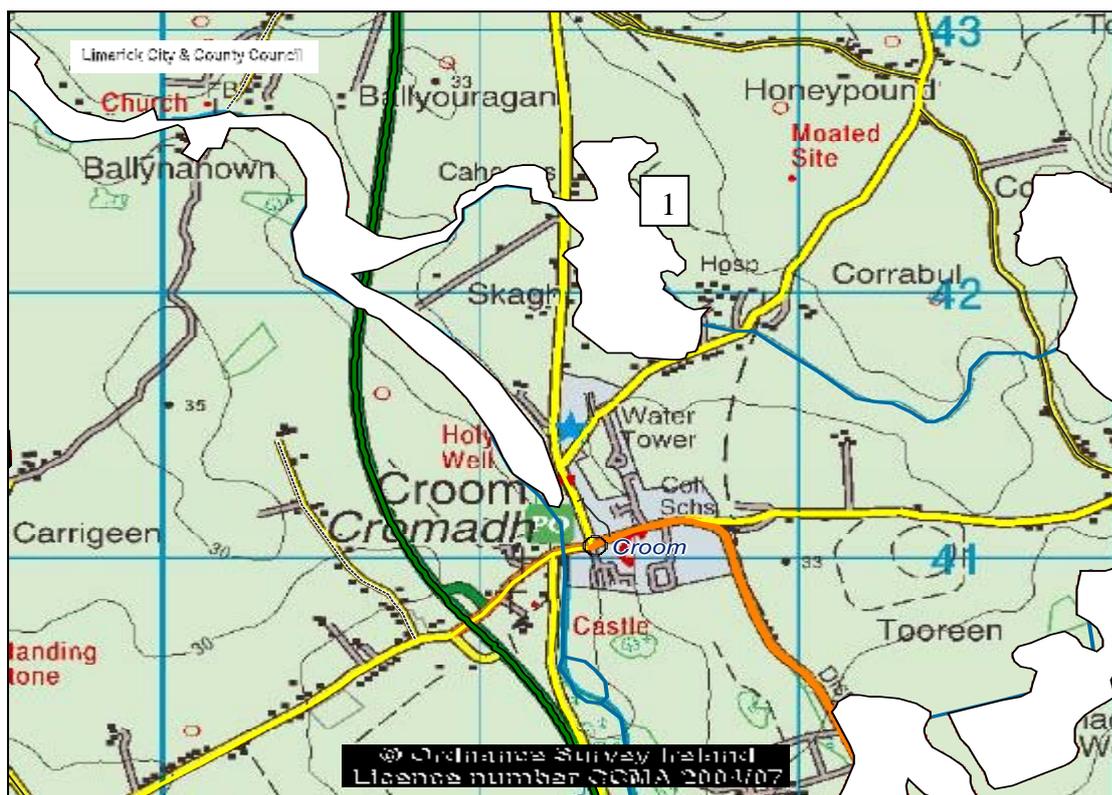


Figure 1: The red patches show location of flood benefiting lands. Flood benefiting lands indicate lands which would benefit from flood relief measures for use for agricultural purposes. The location of the school site is shown as 1 above.

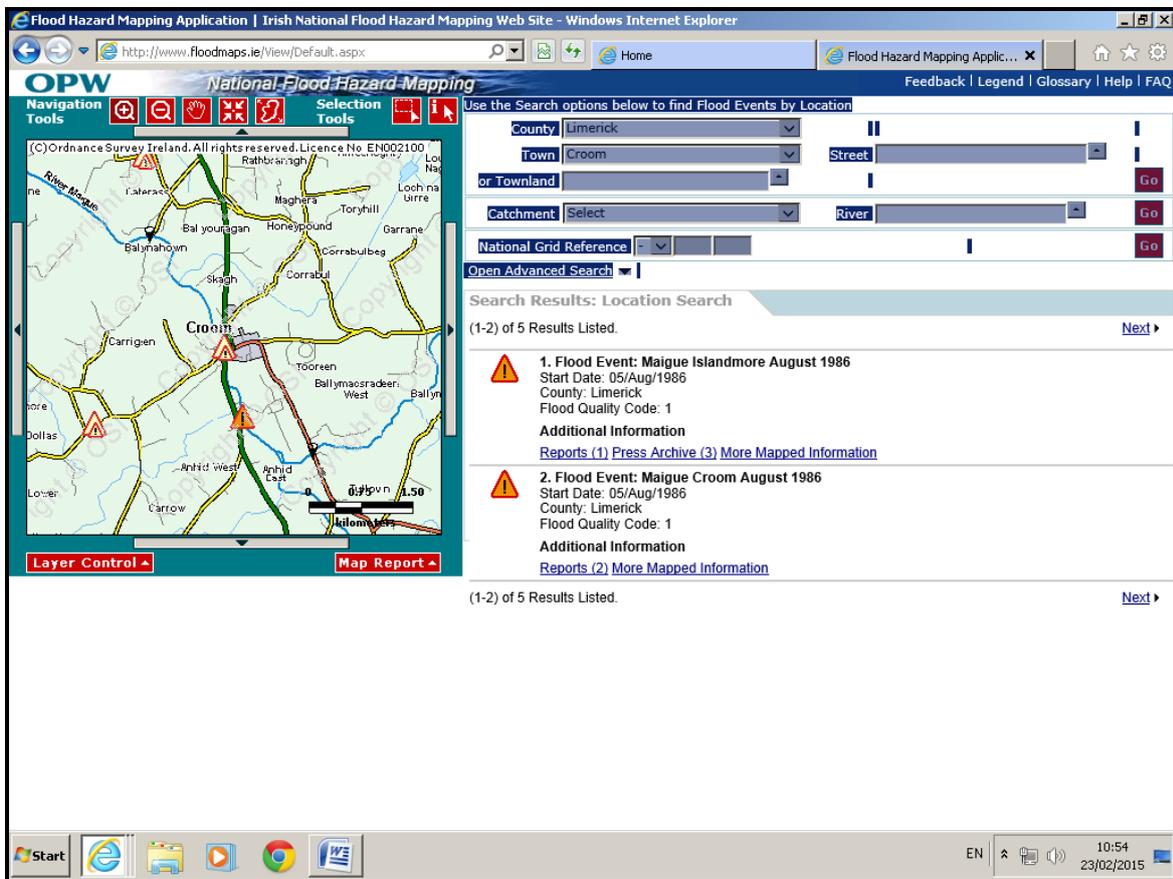


Figure 2: screen grab from Flood maps.ie showing flood events in town centre and to the south and south west of the town. No flood events are shown in the lands which are to be included in the plan boundary.

The Preliminary Flood Risk Assessment Maps from July 2011 based on the 1:50,000 scale show Croom as being subject to a 1:100 year flood risk. This includes both the main settlement core and the lands the subject of the plan variation. This map series also indicates that Croom is an area for further assessment. In this regard it should be noted that the draft CFRAM maps for Croom are currently on public display.

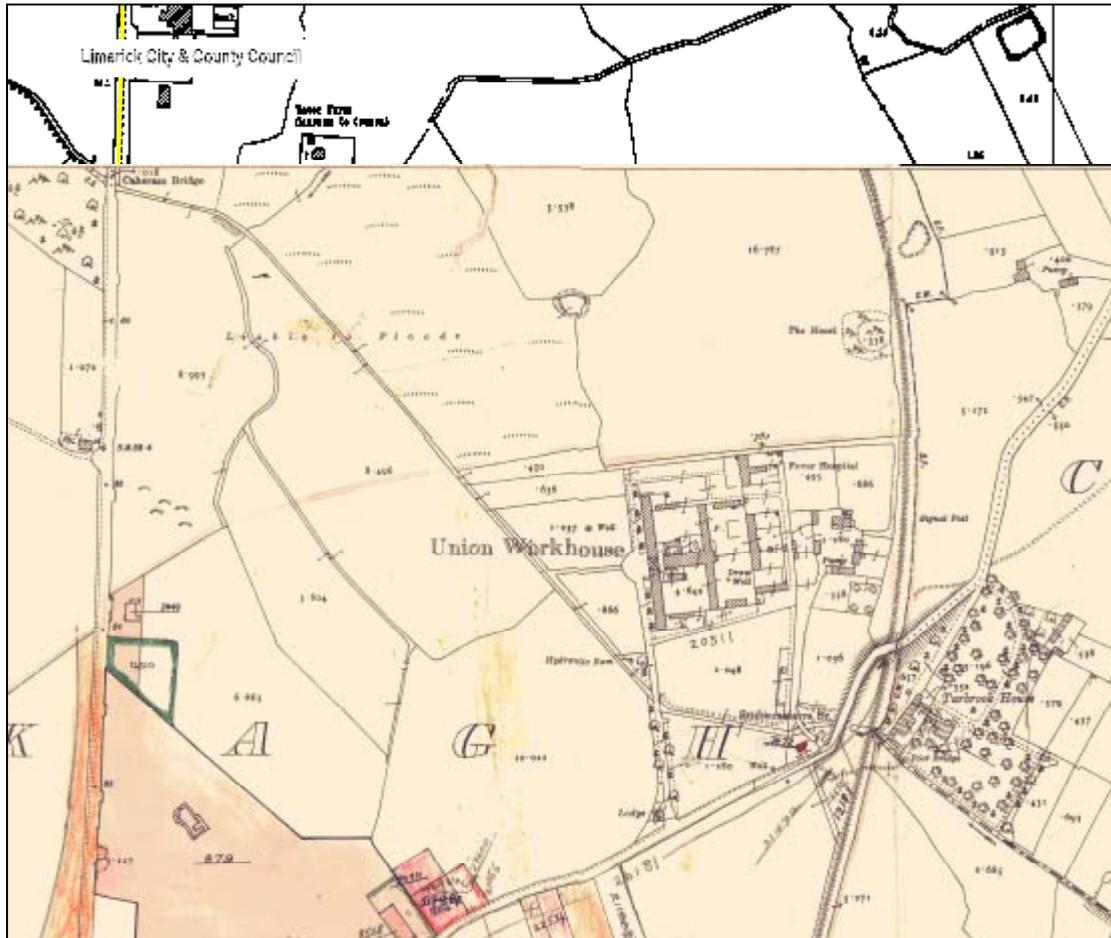


Figure 3: second edition six inch map series showing part of the subject area as being liable to flooding.

The older six inch map series showed the portions of the land area in question closer to the water course as being subject to flooding. They also show lands on the opposite bank to the south west as being liable to flooding. This is relevant in that these lands had been the subject of an application for a school which showed the entrance laneway as running through this area. This would need to be taken into account in any potential future applications as the any interference with the flood regime in this area may have implications for the hospital.

4. Draft Predictive flood maps produced under CFRAM studies

The draft predictive flood maps show only the area to the south of the lands in question at risk of flooding with only a narrow strip north of the Laskiltagh river shown as being subject to a 1:10 year risk of flooding. The land to the south of the school site is shown as number 2 in figure 4 below. The CFRAMs map is shown below with the educationally zoned site hatched in red.

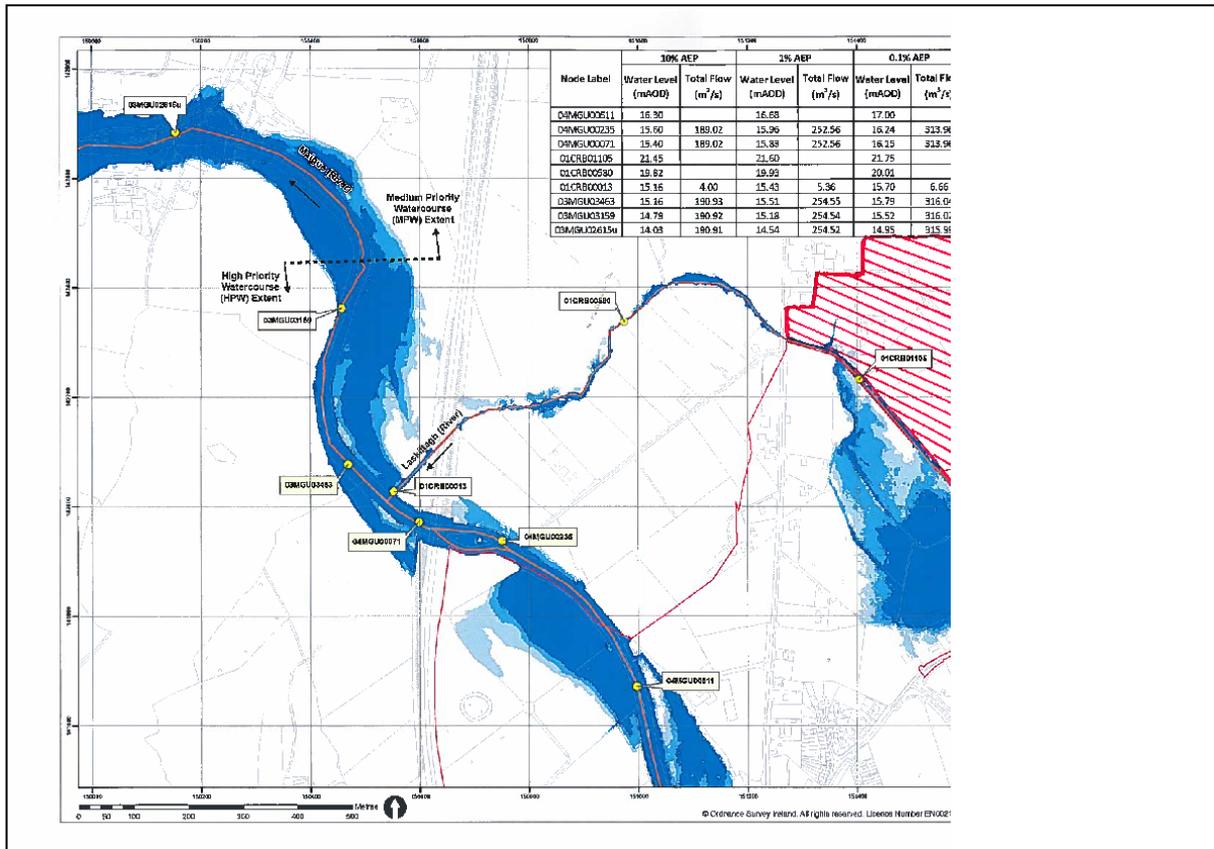


Figure 4: Draft CFRAMS map showing educationally zoned area hatched in red. This area with the exception of a narrow strip- less than 10m at the edge of the water course- is shown as free of flood risk. This is also true of the area immediately upstream which is not shown on this map. The dark blue areas indicate a 1:10 risk of flooding, the light blue indicates a 1:100 risk, while the lightest shade indicates a 1:1000 risk.

5. River Basin Management Plan and reports

Insufficient detail available to inform responses at LAP level.

6. Indicative assessment of existing flood risk under Preliminary Flood Risk assessment

In these maps Croom town centre is shown as being subject to 1:100 year flood risk and as being a probable area for further assessment.

7. Previous flood risk assessments

Flood maps.ie consulted - see 3 above. See 18 below for assessments submitted with previous applications.

8. OPW advice

This will be sought as part of the public consultation process.

9. Internal consultations with Council personnel

Discussions regarding drainage and flooding issues took place with council engineers, which supported the views shown in 6 and 4 above.

10. Information on flood defences and condition

While there are no flood defences present in the plan area there are some issues that arise in relation to infrastructure. Walk over surveys and local sources indicate that the bridge arch in Caherass Bridge just downstream of the site, indicated as 1 below, can prove to be a constraint to water flow during high flow conditions. This had been mentioned in the Flood Risk Assessment submitted with Planning Application 13/680, the previous application for the school. This should be borne in mind in any applications on the lands in question. Any such applications should incorporate measures that reduce run off to agricultural rates in order to avoid additionally overloading on the capacity of the river channel and the constriction posed by the bridge arch.

The walkover survey has also indicated that the lands shown as location 2 in Figure 5, which had been shown as liable to flooding on the older six inch map series, has since 2009 undergone drainage and re-seeding. Some of the open drains have been in-filled with stone and the water piped through them. This has reduced the storage capacity of the drains themselves and has speeded up flow to the river. Previous walk over surveys for this area in April 2009 during the preparation of the current local area plan showed that vegetation characteristic of wetland areas such as Yellow Flag Iris and Creeping Buttercup and Meadowsweet.

This change to the local hydrological regime should be taken into account in future applications to this area.

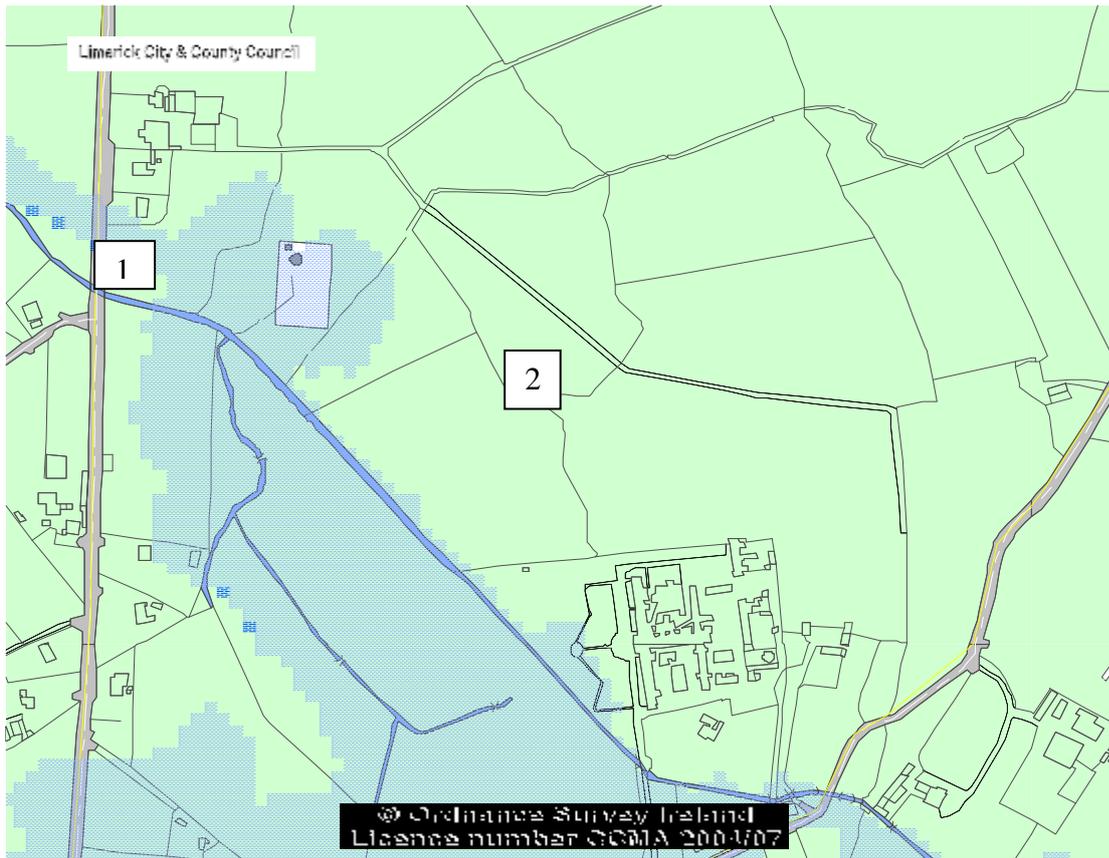


Figure 5: showing location of Caherass bridge at 1 which has constricted arch. Number 2 shows the locations of the lands which have been improved.

11. LIDAR maps:

The council has purchased LIDAR mapping which has been used to provide more accurate information in relation to flood risk. This has been used with the JBA maps, a screen grab for which is shown below. Please note that the contents of the CFRAM maps when they are finalised will supersede these maps as a source of flooding information. The JBA maps are predictive in nature and have been used by the council since 2011.

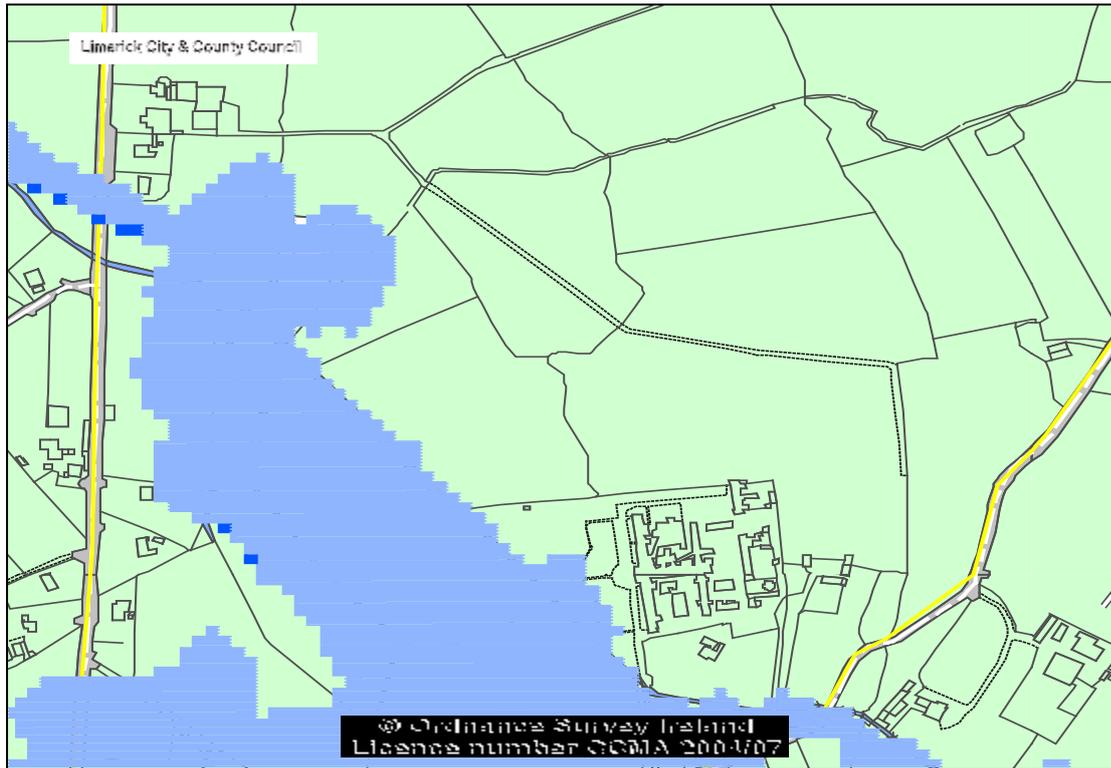


Figure 6: JBA flood maps. The light blue is Flood Zone A, the darker blue is flood Zone B. These zones are explained below.

Flood Zone A – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);

Flood Zone B – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding);

12. Alluvial deposition maps

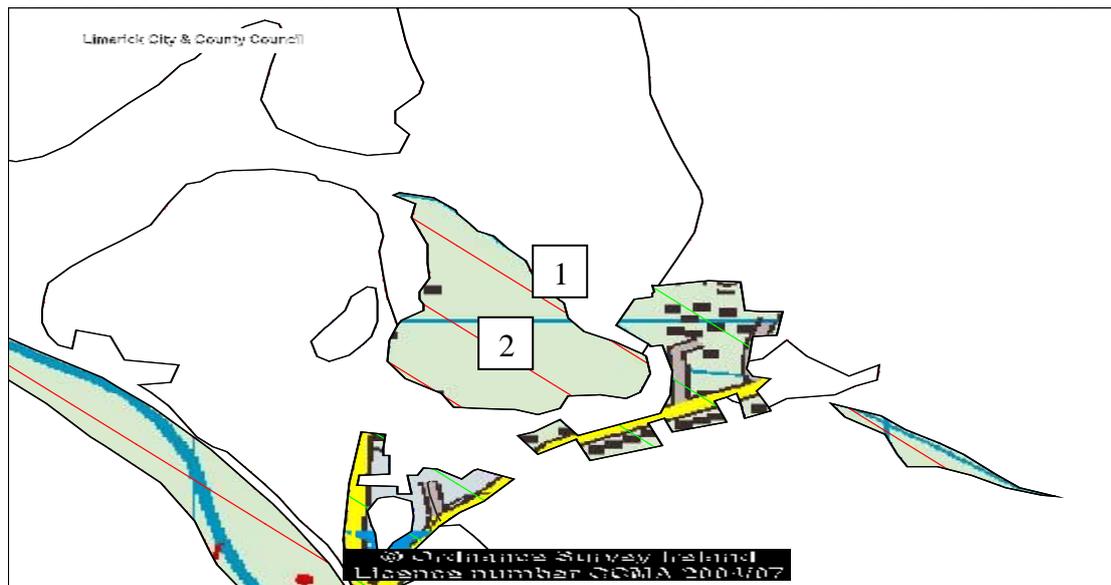


Figure 7: the soils shown on the map above show alluvial soils to the south of the lands in question, this is shown as 2. The soils on the lands in question are described as mineral soils. These are shown as number 1 above.

The alluvial soils on the map correspond with the liable to flood lands that are shown on the six inch map series and are consistent with the lower ground levels to the south of the proposed school site.

13. Liable to flood markings on old 6 inch maps

Areas liable to flood were shown on the 6 inch maps dating from 1920 (surveyed in 1841- revised 1920). The screen grab from the OSI website shows areas liable to flooding to the south west of the lands in question. The entrance route way to the school was shown on these lands in planning application 13/680.

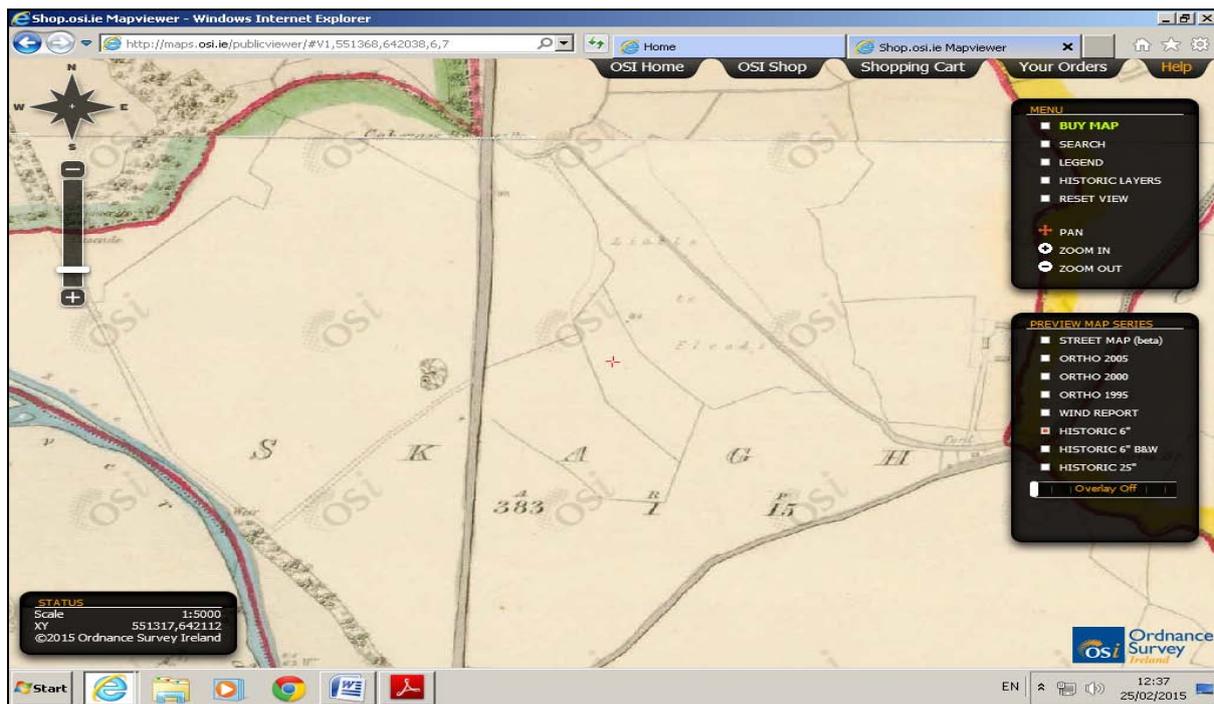


Figure 8: the liable to flooding maps are shown mid picture.

These lands are lower than the site that is the subject of the variation. These are between 1 and 2m lower than the lands which are intended as the school site. Local sources also indicated that this area was subject to flooding. They have been improved but on the walkover they did show signs of ponding as the water levels in the river did not permit the field drains to fully discharge to the river channel. This was following heavy rainfall.

14. Local libraries and reports

OPW reports consulted these date from 1986.

15. Local consultations

None to date, with the exception of speaking with one of the adjacent householders which confirmed that the lands shown as liable to flood are still subject to temporary flooding events and ponding.

16. Walkover surveys

See above.

17. National, regional and local spatial plans

Insufficient detail was present in other plans or strategies in order to inform the current survey.

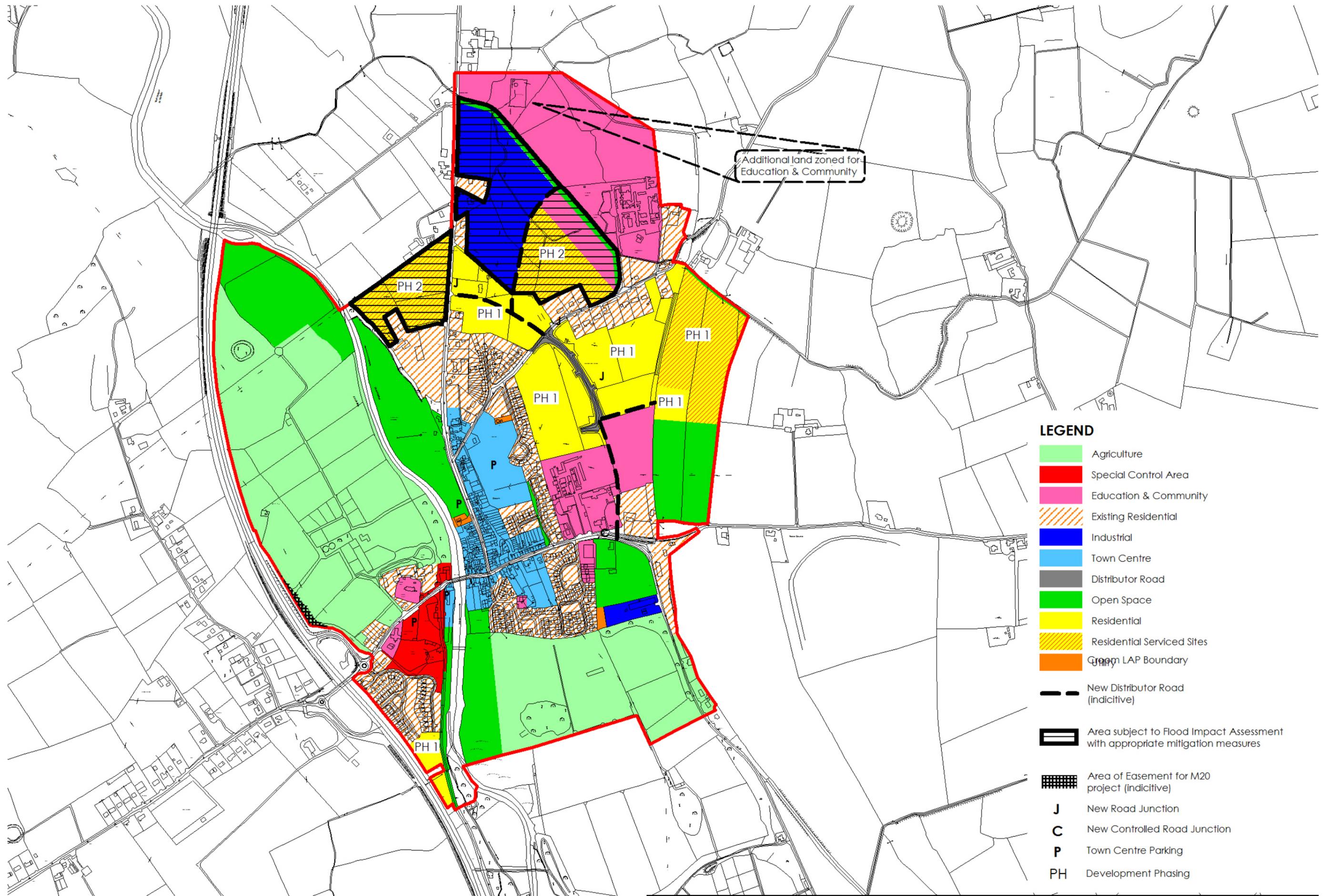
18. Previous planning applications

One planning application was received in recent years (13/680). Water services recommended refusal on the application for the school based on flood risk.

A report from JBA consultants was commissioned by the council (dated March 2014) which concludes that the finished floor levels are based on sound analysis (S 5.1, p. 7) and concludes that the methodologies employed in the FRA were suitable for the catchment and the site in question. The original FRA for the school site had been prepared by Hyder Consulting.

3.3 Comments and Overall Conclusion

While the lower lying land to the west are shown as being subject to flood risk and the walkover survey of the 24th of February had shown this land to be subject to ponding regardless of the improvements to drains, no sign of flooding was noted on the proposed school site itself. Nonetheless the ponding and low-lying lands to the south must be considered as an impediment to development should any access be considered though this area as was the case in the recent planning application for the school (13/680). Any use of this land for access should include adequate measures to minimise loss of flood plain area and design elements to reduce chances of flood risk either up or down stream. This is particularly important with the hospital nearby.



Additional land zoned for Education & Community

LEGEND

- Agriculture
- Special Control Area
- Education & Community
- Existing Residential
- Industrial
- Town Centre
- Distributor Road
- Open Space
- Residential
- Residential Serviced Sites
- Green LAP Boundary
- New Distributor Road (Indictive)
- Area subject to Flood Impact Assessment with appropriate mitigation measures
- Area of Easement for M20 project (Indictive)
- J** New Road Junction
- C** New Controlled Road Junction
- P** Town Centre Parking
- PH** Development Phasing