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Date: 17th May 2016

Dear Sir/Madam

APPLICATION CONSULTATION RESPONSE

Application Number:	3/2016/0146
Location:	Old Row Whalley Road Barrow BB7 9AZ
Proposal:	Outline application with all matters reserved for residential development of 23 dwellings, following the demolition of Nos.23 25 Old Row and with indicative details submitted for access, parking and associated landscaping.

Thank you for inviting the Lead Local Flood Authority (LLFA) to comment on the above application. The Flood and Water Management Act 2010 sets out the requirement for LLFAs to manage 'local' flood risk within their area. 'Local' flood risk refers to flooding or flood risk from surface water, groundwater or from ordinary watercourses.

Comments provided in this representation, including conditions, are advisory and it is the decision of the Local Planning Authority (LPA) whether any such recommendations are acted upon. It is ultimately the responsibility of the Local Planning Authority to approve, or otherwise, any drainage strategy for the associated development proposal. The comments given have been composed based on the current extent of the knowledge of the LLFA and information provided with the application at the time of this response.

Flood vulnerability

It is evident that the proposed development will result in a change in Flood Risk Vulnerability Classification from Less Vulnerable to More Vulnerable under Paragraph: 66 of the Planning Practice Guidance.

Surface water discharge

The [Planning Practice Guidance \(PPG\)](#) establishes a hierarchy for surface water disposal, which encourages a SuDS approach:

Generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable:

- *into the ground (infiltration);*
- *to a surface water body;*
- *to a surface water sewer, highway drain, or another drainage system;*
- *to a combined sewer*

It is evident from the application form that the applicant intends to discharge surface water to an ordinary watercourse. Whilst other preferable runoff destinations should be considered first, namely infiltration to ground, it is noted from section 4.2 of the Flood Risk Assessment (Ref: 46648, Dated: February 2016) that infiltration systems for full disposal of surface water to the ground are unlikely to be viable. Under these circumstances, the Lead Local Flood Authority considers discharge to an ordinary watercourse to be acceptable, subject to sufficient evidence of permeability testing for the site and subject to an appropriate point of discharge being identified. **Failure to provide evidence of this at Reserved Matters would likely result in an objection from the LLFA.**

Whilst we are satisfied at this stage that the proposed development could be allowed in principle, the applicant will need to provide further information to ensure that the proposed development can go ahead without posing an unacceptable flood risk on or off site.

Sustainable Drainage Systems

[Paragraph 103 of the National Planning Policy Framework \(NPPF\)](#) and [Written Statement on Sustainable Drainage Systems \(HCWS161\)](#) requires that surface water arising from a developed site should, as far as it is practical, be managed in a sustainable manner to mimic surface water flows arising from the site prior to the proposed development, whilst reducing flood risk to the site itself and elsewhere, taking climate change into account.

The Lead Local Flood Authority encourages that site surface water drainage is designed in line with the [Non-Statutory Technical Standards for Sustainable Drainage Systems](#) and Planning Practice Guidance, including restricting developed discharge of surface water to greenfield runoff rates making suitable allowances for

climate change and urban creep, managing surface water as close to the surface as possible and prioritising infiltration as a means of surface water disposal where possible.

Regardless of the site's status as greenfield or brownfield land, the Lead Local Flood Authority encourages that surface water discharge from the developed site should be as close to the greenfield runoff rate as is reasonably practicable in accordance with Standard 2 and Standard 3 of the [Non-Statutory Technical Standards for Sustainable Drainage Systems](#).

Sustainable drainage systems offer significant advantages over conventional piped drainage systems in reducing flood risk by attenuating the rate and quantity of surface water run-off from a site, promoting groundwater recharge absorbing diffuse pollutants and improving water quality. Ponds, reedbeds and seasonally flooded grasslands can be particularly attractive features within public open space.

The wide variety of available sustainable drainage techniques means that virtually any development should be able to include a scheme based around these principles and provide multiple benefits, reducing costs and maintenance needs.

Prior to designing site surface water drainage for the site, a full ground investigation should be undertaken to fully explore the option of ground infiltration to manage the surface water in preference to discharging to a surface water body, sewer system or other means. For example, should the applicant intend to use a soakaway, they should be shown to work through an appropriate assessment carried out under Building Research Establishment (BRE) Digest 365.

The LLFA also strongly encourages that the developer should take into account designing drainage systems for exceedance working with the natural topography for the site. Should exceedance routes be used, the applicant must provide a site layout plan with these displayed, in line with Standard 9 of DEFRA's Technical Standards for SuDS.

Flow balancing SuDS methods which involve the retention and controlled release of surface water from a site may be an option for some developments at a scale where uncontrolled surface water flows would otherwise exceed the pre-development Greenfield runoff rate. Flow balancing should seek to achieve water quality treatment as part of a treatment train and amenity benefits as well as managing flood risk.

Whilst it is evident from the Flood Risk Assessment that various SuDS techniques have been considered for the site, the LLFA recommends for the applicant to also explore the use of other SuDS features in order to further reduce the rate and volume of surface water draining from the site. Please note that some SuDS

features may require certain permitted development to be removed from land on or within close proximity to where it is located. It is advised that the Local Planning Authority take note of this and if minded to approve, an appropriate informative is attached to the formal Decision Notice.

It should be noted that any permeable paving used on driveways **must not** be included as part of the hydrological calculations. Occupants may change driveways to non-permeable materials in future which has the potential to increase surface water runoff which was previously unallocated for in the design of the sustainable drainage system. Where permeable paving is included in the hydrological calculations of a development proposal the local planning authority is advised to consider the removal of permitted development rights for permeable paving.

Land Drainage Consent

The proposals indicate that the applicant intends to carry out works on or near to an ordinary watercourse. Under the Land Drainage Act 1991 (as amended by the Flood & Water Management Act 2010), you need consent from the Lead Local Flood Authority if you want to build a culvert or structure (such as a weir) or carry out works within the banks of any ordinary watercourse which may alter or impede the flow of water, regardless of whether the watercourse is culverted or not.

As a minimum, the applicant will be expected to:

- Carry out studies of the existing culvert/watercourse condition and capacity;
- Undertake an examination of the downstream condition and implications of the development proposal, and;
- Restrict discharge rates so that the peak runoff rate from the development to the ordinary watercourse for the 1 in 1 year rainfall event and the 1 in 100 year rainfall event should never exceed the peak greenfield runoff rate for the same event.

As per Lancashire County Council Consenting and Enforcement Policy, it should be noted that the Lead Local Flood Authority will generally refuse consent applications which seek to culvert an existing ordinary watercourse. This is in line with Environment Agency guidance on protecting watercourses:

<http://evidence.environment-agency.gov.uk/FCERM/en/FluvialDesignGuide/Chapter8.aspx?pagenum=6>

You should contact the Flood Risk Management Team at Lancashire County Council to obtain Land Drainage Consent. Information on the application process and relevant forms can be found here:

<http://new.lancashire.gov.uk/roads-parking-and-travel/roads/flooding/alterations-to-a-watercourse.aspx>

For the avoidance of doubt, once planning permission has been obtained it does not mean that land drainage consent will be given.

Pollution Prevention and the Environment:

The Lead Local Flood Authority recommends that where there is any potential for the existing habitat of protected species (for example great crested newt, native white clawed crayfish, water vole, bats or otter species) on the proposed development site, the applicant should undertake an appropriate ecological assessment by a competent ecologist prior to starting works on site.

It is an offence to undertake works which adversely affect any legally protected species or habitat without appropriate mitigation measures in place.

Land alongside watercourses is particularly valuable for wildlife and it is essential that this is protected as development that encroaches on to it has a potentially severe impact on their ecological value. Retaining and enhancing coherent ecological networks adjacent to watercourses will help to ensure the biological and chemical quality of watercourses is not reduced as a result of development, which is a requirement of the Water Framework Directive.

As the applicant is intending to carry out works to an ordinary watercourse(s), it is advised that they contact the Lead Local Flood Authority early on in the process to discuss their proposals. This is to ensure that the development will not result in a negative impact on the water quality or ecology of the watercourse. For example, pollution control measures may be required. Information on pollution control measures can be found in Pollution Prevention Guidance which provides advice on how to prevent pollution and comply with environmental law when planning works near, in or over ponds, lakes, ditches, streams, rivers and other watercourses.

Pollution Prevent Guidance also gives information about planning the works, managing silt, concrete and cement, oils and chemicals, maintaining structures over watercourses, waste management and responding to pollution incidents. Pollution prevention guidance can be found on the Environment Agency's website via the following link:

<https://www.gov.uk/government/collections/pollution-prevention-guidance-ppg>

Condition of Culvert – Further Investigation Required:

It is evident from the indicative surface water drainage strategy provided within the Flood Risk Assessment Addendum (Ref: ENV/0604/12FRA, Dated: April 2016), that the applicant intends to discharge surface water via a culverted watercourse. In order to determine the feasibility of this option, further investigations would be required to establish the condition of the culverted watercourse.

Subject to the findings of these further investigations, the feasibility of discharging surface water to the culverted watercourse may be subject to appropriate mitigation measures and may be subject to an appropriate legal agreement. It is also noted from the addendum letter that consideration may be given to opening up the existing culverted watercourse as part of the proposed development. The Lead Local Flood Authority would welcome this approach; subject to obtaining land drainage consent.

It is advised that the Local Planning Authority take note of this and if minded to approve, an appropriate condition is attached to the formal Decision Notice.

Lead Local Flood Authority (LLFA) Position:

The Lead Local Flood Authority has **no objection** to the proposed development subject to the inclusion of the following conditions, in consultation with the LLFA:

Condition 1 - Reserved Matters to include an appropriate surface water drainage scheme:

As part of any reserved matters application and prior to the commencement of any development, the following details shall be submitted to, and approved in writing by, the local planning authority, in consultation with the Lead Local Flood Authority.

1. Surface water drainage scheme which as a minimum shall include:

- a) Information about the lifetime of the development design storm period and intensity (1 in 30 & 1 in 100 year +30% allowance for climate change), discharge rates and volumes (both pre and post development), temporary storage facilities, means of access for maintenance and easements where applicable, the methods employed to delay and control surface water discharged from the site, and the measures taken to prevent flooding and pollution of the receiving groundwater and/or surface waters, including watercourses, and details of flood levels in AOD;
- b) The drainage scheme should demonstrate that the surface water run-off must not exceed the peak greenfield runoff rate for same event. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed.

- c) Any works required off-site to ensure adequate discharge of surface water without causing flooding or pollution (which should include refurbishment of existing culverts and headwalls or removal of unused culverts where relevant);
- d) Flood water exceedance routes, both on and off site;
- e) A timetable for implementation, including phasing where applicable;
- f) Site investigation and test results to confirm infiltrations rates;
- g) Details of water quality controls, where applicable.
- h) Details of finished floor levels

The scheme shall be fully implemented and subsequently maintained, in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reasons:

- 1. To prevent flooding by ensuring the satisfactory storage of/disposal of surface water from the site.
- 2. To reduce the risk of flooding to the proposed development, elsewhere and to future users.
- 3. To ensure that water quality is not detrimentally impacted by the development proposal.
- 4. To ensure a satisfactory standard of development.

Condition 2 - No Occupation of Development until completion of SuDS in accordance with agreed SuDS Scheme and Management & Maintenance Plan:

No development hereby permitted shall be occupied until the sustainable drainage scheme for the site has been completed in accordance with the submitted details. The sustainable drainage scheme shall be managed and maintained thereafter in accordance with the agreed management and maintenance plan.

Reasons:

- 1. To ensure that the drainage for the proposed development can be adequately maintained.
- 2. To ensure that there is no flood risk on- or off-the site resulting from the proposed development or resulting from inadequate the maintenance of the sustainable drainage system.

Condition 3 - Surface Water Lifetime Management and Maintenance Plan:

No development shall commence until details of an appropriate management and maintenance plan for the sustainable drainage system for the lifetime of the development have been submitted which, as a minimum, shall include:

- a) the arrangements for adoption by an appropriate public body or statutory undertaker, management and maintenance by a Residents' Management Company
- b) arrangements concerning appropriate funding mechanisms for its on-going maintenance of all elements of the sustainable drainage system (including mechanical components) and will include elements such as:
 - i. on-going inspections relating to performance and asset condition assessments
 - ii. operation costs for regular maintenance, remedial works and irregular maintenance caused by less sustainable limited life assets or any other arrangements to secure the operation of the surface water drainage scheme throughout its lifetime;
- c) Means of access for maintenance and easements where applicable.

The plan shall be implemented in accordance with the approved details prior to first occupation of any of the approved dwellings, or completion of the development, whichever is the sooner. Thereafter the sustainable drainage system shall be managed and maintained in accordance with the approved details.

Reasons:

- 1. To ensure that appropriate and sufficient funding and maintenance mechanisms are put in place for the lifetime of the development
- 2. To reduce the flood risk to the development as a result of inadequate maintenance
- 3. To identify the responsible organisation/body/company/undertaker for the sustainable drainage system.

Condition 4 - Further Investigations:

No development shall take place until further investigations are carried out to establish the location, capacity, condition and discharge point of the culvert referred to in Flood Risk Assessment. The surface water drainage strategy and Flood Risk Assessment should be revised to accommodate findings as appropriate. Prior to

commencement of development, the revised surface water drainage strategy should be submitted to and approved by the Local Planning Authority in consultation with Lancashire County Council in their role as Lead Local flood Authority.

Reason:

To ensure that the watercourse does not pose a flood risk, on-site or off-site.

Informative 1 - Response does not grant permission to connect to the ordinary watercourse:

For the avoidance of doubt, this response does not grant the applicant permission to connect to the ordinary watercourse(s) and, once planning permission has been obtained, it does not mean that land drainage consent will be given.

The applicant should obtain Land Drainage Consent from Lancashire County Council **before** starting any works on site. Information on the application process and relevant forms can be found here:

<http://new.lancashire.gov.uk/roads-parking-and-travel/roads/flooding/alterations-to-a-watercourse.aspx>

If there are any material changes to the submitted information which impact on surface water, the local planning authority is advised to consider re-consulting the LLFA. The LLFA also wishes to be formally consulted on all subsequent drainage strategies for this proposed development.

Should you wish for further information or clarification to the contents of this letter please contact the case officer on the number provided on this letter.

Yours faithfully,

Chris Dunderdale
Flood Risk Management

