

CRADDYS

CIVIL & STRUCTURAL ENGINEERING DESIGN CONSULTANCY

ALDI Store, Drive Through Unit & EV Charging Hub, London Road, Devizes Flood Risk Assessment & Drainage Strategy

For

PRZM
— REAL ESTATE —



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Engineer Record						
Name	Initials	Qualifications			Role	
Richard Hogarth	RJH	MEng (Hons) CEng MICE			Associate	
Lawrence Quigley	LBQ	MEng (Hons) CEng MStructE			Associate	
Andrew Rees	AMR	Beng (Hons) CEng MStructE			Director	
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Executive Summary

This Flood Risk Assessment (FRA) has been prepared to support a planning application for the proposed development of an ALDI foodstore, drive through unit and EV charging hub, located at land between London Road and Horton Road, Devizes.

The site is located within Flood Zone 1 as defined by the Environment Agency (EA) Flood Map for Planning, representing land at **low** probability of flooding from fluvial or tidal sources.

An assessment of flood risk from all sources has been undertaken, including:

- Fluvial and tidal flooding
- Surface water (pluvial) flooding
- Groundwater emergence
- Sewer surcharge
- Reservoir failure

Flood risk from all sources is assessed to be low or manageable subject to mitigation. Key mitigation measures include setting finished floor levels above the existing ground levels, provision of overland exceedance routing, and incorporation of a sustainable drainage system (SuDS) to manage runoff.

The proposed drainage strategy has been developed in accordance with national policy and the SuDS hierarchy and aims to discharge surface water to the ground via infiltration features. This is the preferred disposal option and referred to as Option A. Should further testing preclude this option, the proposed strategy is to discharge off site to a public storm sewer and limit discharge rates to a reduction on pre-development runoff rates, with attenuation storage sized for up to the 1 in 100-year plus climate change event. This is referred to as Option B.

Based on the findings of this FRA, the proposed development is considered to be acceptable in flood risk terms and meets the requirements of the National Planning Policy Framework (NPPF), subject to confirmation by the Local Planning Authority (LPA) and Lead Local Flood Authority (LLFA).





1. Introduction

1.1. Purpose of Report

This Flood Risk Assessment (FRA) has been prepared to support a planning application for the proposed development at land between London Road and Horton Road in Devizes. The report aims to assess the flood risk to and from the development in accordance with the National Planning Policy Framework (NPPF), Planning Practice Guidance (PPG), and Environment Agency (EA) standing advice.

It also considers site-specific topography, local drainage conditions, and the indicative development layout to outline appropriate mitigation and surface water management measures.

1.2. Scope and Limitations

This FRA is based on publicly available flood mapping, supplied topographical information, and outline development proposals provided by the client team. No hydraulic modelling has been undertaken as part of this report.

The assessment does not confirm the capacity of existing public drainage networks nor comment on their suitability for adoption or connection without further engagement with the statutory undertaker.

This FRA is intended to inform the planning process only. Should the development proceed, further design development and statutory approvals will be required.

1.3. National planning policy context and data sources used

This FRA has been prepared in accordance with:

- The National Planning Policy Framework (NPPF) and supporting Planning Practice Guidance (PPG);
- The Environment Agency's standing advice on development and flood risk;
- Local Strategic Flood Risks Assessments (SFRA)s
- EA product 4 and product 8 data (where available)
- The relevant Local Planning Authority (LPA) flood risk policy;
- Surface water drainage guidance from the Lead Local Flood Authority (LLFA);
- The requirements of Schedule 3 of the Flood and Water Management Act 2010, where applicable (e.g. in Wales).

The strategy set out in this document seeks to demonstrate that the proposed development is appropriate, safe, and compliant with the above planning policy framework.





2. Existing Site

2.1. Site Location and Description

The site is located at southeast of London Road and north of Horton Road in Devizes, within the administrative boundary of Wiltshire. The Lead Local Flood Authority (LLFA) for the development is Wiltshire Council.

It comprises approximately 1.126 hectares of brownfield land and is currently occupied by a motorcycle training centre, with several small buildings within the northwest of the site, with the majority of the remainder being asphalt and concrete hard surfacing. Access to the site is currently from London Road to the far northern end of the site.

The planning application Site Location Plan and Existing Site Plan are provided in Appendix A.

2.2. Existing Site Levels and Gradients

A topographic survey of the site has been reviewed and is provided in Appendix B.

Site levels generally range from approximately 136.1m and 133.9m AOD, sloping from north to south. The primary fall direction is towards Horton Road on the southern boundary.

The site is generally flat, with a small raised bund within the landscaping to the southern boundary. Aside from this, no significant depressions or raised features have been identified that would materially alter flood pathways or surface water management





3. Development Proposals

3.1. Proposed Development

The proposed development comprises a retail foodstore, drive through unit and EV charging hub with associated access, servicing, parking, hard & soft landscaping and drainage infrastructure. The foodstore element is included in full detail as part of a hybrid application, with the drive through unit and EV charging hub element being in outline at this stage, with all matters reserved except for access.

Access to the developed site is proposed to be via a new access formed off London Road, roughly midway along the northwestern boundary, via a new priority junction. There is an existing access to the site, however this will be retained and does not form part of this application.

The current proposed site layout is shown on drawing 240646-1301 in Appendix C and is subject to further development as part of the design process.

This report assesses flood risk based on this indicative layout and advises on mitigation strategies to ensure the site can be safely developed without increasing flood risk elsewhere.

3.2. Flood Risk Vulnerability Classification

The proposed development falls under the category of 'Less Vulnerable', as defined in *Annex 3 of the National Planning Policy Framework (NPPF): Flood Risk and Coastal Change*.

Table 1 - Summary of vulnerability classification and examples

Flood Risk Vulnerability Classification	Examples (from Annex 3)
Less Vulnerable	- Police, ambulance and fire stations which are not required to be operational during flooding. - <u>Buildings used for shops</u>; financial, professional and other services; <u>restaurants, cafes and hot food takeaways</u>; offices; general industry, storage and distribution; non-residential institutions not included in the 'more vulnerable' class; and assembly and leisure. - Land and buildings used for agriculture and forestry. - Waste treatment (except landfill* and hazardous waste facilities). - Minerals working and processing (except for sand and gravel working). - Water treatment works which do not need to remain operational during times of flood. - Sewage treatment works, if adequate measures to control pollution and manage sewage during flooding events are in place. - Car parks.

This classification is relevant to determine the applicability of the Sequential Test and Exception Test, as well as the level of flood risk mitigation required.

The vulnerability classification influences whether the proposed development is appropriate in Flood Zones 2 or 3, and this report has taken it into account when assessing site suitability and outlining mitigation strategies.





4. Site-specific flood risk review

The following subsections assess the risk of flooding from various sources in accordance with national guidance and publicly available datasets (e.g. EA Flood Maps for Planning, Strategic Flood Risk Assessments, surface water layers, BGS, and sewer undertaker records).

4.1. Fluvial and Tidal Flood Risk

The site is not located within an area identified by the Environment Agency (EA) as being at risk of fluvial or tidal flooding. Refer to Appendix D for respective mapping. Based on EA Flood Map for Planning data (Appendix D), the site falls within Flood Zone 1, corresponding to a low probability of flooding from main rivers or the sea.

Flood Zone 1 describes areas at <0.1% annual chance of flooding from rivers or the sea; FZ2 describes areas at 0.1%-1% annual chance of flooding from rivers or 0.1% to 0.5% annual chance of flooding from the sea; FZ3 describes areas at >1% annual chance of flooding from main rivers or >0.5% chance of flooding from the sea. All Flood Zone classifications do not take into account the effects of existing defences or climate change.

The nearest area of fluvial flood risk is approximately 1km to the south east, arising from a minor tributary of the River Avon. The site is therefore not considered to be at risk of fluvial or tidal flooding.

4.2. Surface Water (Pluvial) Flood Risk

The EA's Surface Water Flood Risk Map (Appendix D) indicates that the site is predominantly at very low risk of surface water flooding (not affected during a 1 in 1000-year event), with isolated areas on the low boundaries being shown at low risk (would be affected during a 1 in 100-year event).

Localised surface water management measures will be incorporated into the site design to address this risk. Finished floor levels and overland flow routing are discussed in Section 8.

4.3. Groundwater Flood Risk

The British Geological Survey (BGS) mapping and EA data indicate the site is underlain by bedrock of Greensands Formation with a moderate susceptibility to groundwater emergence at the surface.

The site lies within an area identified by the EA as having potential for groundwater flooding to occur at the surface. Additionally, the site lies within an area of Wiltshire identified as having elevated potential for groundwater emergence at the surface in the current SFRA. Groundwater emergence may therefore occur on the site and present a flood risk to the development, and this risk should be mitigated in the proposed design of the site.

Intrusive site investigation has been carried out on the site including 18 boreholes and the associated borehole logs confirm that no groundwater was encountered. However these were undertaken in July and August during a long period of dry weather. A return visit was made in April 2026 and no ground water was recorded in any of the standpipes.

Six of the boreholes were fitted with monitoring equipment for groundwater as shown below.

Borehole reference	Depth of borehole (m)	EGL (mAOD)	Base level (mAOD)
WS.03	5	135.45	130.45
WS.06	4	134.88	130.88
WS.08	3.7	134.69	130.99
WS.10	3	134.25	131.25
WS.14	3	134.50	131.50





WS.18	3	134.30	131.30
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The above table summarizes the ground water monitoring undertaken showing that no ground water was encountered down to a level of 130.45mAOD. The lowest proposed ground level on site is at the base of the lorry ramp at 134.07mAOD some 3.6 metres above this.

Based on these initial findings, the site is considered to be at low risk of ground water flooding.

4.4. Sewer Flooding

The risk of flooding from public sewers is generally low and is not indicated in any published mapping.

Wessex Water and SFRA historic sewer flooding records have not identified any incidents at this location. The risk of sewer flooding affecting the site is therefore considered to be low.

4.5. Reservoir and Canal Flood Risk

The EA flood risk from reservoirs map indicates that the site is not at risk of flooding from large, raised reservoirs or other artificial water bodies.

The nearest artificial water body is the Kennet & Avon Canal, which lies approximately 1km to the south of the site, however the site is at higher elevation than the canal so would not be affected in the event of a breach.

4.6. Historical Flooding Records (EA / LLFA)

A review of EA and LLFA records does not indicate any known incidents of historical flooding affecting the site.

5. Climate change

5.1. Background

Making an allowance for climate change as part of the development will help to minimise vulnerability and provide resilience to flooding in the future over the design life of the development.

GOV.UK guidance titled "Flood Risk Allowances: climate change allowances" from the Environment Agency was first published 19th February 2016 and most recently updated on 27th May 2022. This details the latest guidance on appropriate allowances for climate change that should be taken into account as part of a proposed development.

Current guidance in the NPPF recommends a design lifespan of at least 100-years for residential development, and 75-years as a starting point for the design lifespan for non-residential development.

Assuming the development is completed in 2027, the effects of climate change to the year 2102 should be considered.

5.2. Future Fluvial Flood Risk

Fluvial flood risk is likely to increase with time since climate change is expected to increase rainfall intensities, which may produce increased runoff from catchments and induce greater flows within watercourses. GOV.UK guidance recommends a percentage increase in peak river flows as an allowance for climate change, with these percentages varying by management catchment areas around the country.

Since the site is currently located in FZ1 and elevated well above the nearest areas at elevated fluvial flood risk in the present day, the risk of fluvial flooding on the site is expected to remain low throughout the lifespan of the development.





5.3. Future Surface Water (Pluvial) Flood Risk

Surface water flood risk is likely to increase with time since climate change is expected to increase rainfall intensities, which will induce greater runoff from both impermeable and permeable areas and generate increased overland flows where surface water drainage systems and smaller watercourses may not have sufficient capacity to collect and convey this runoff.

The Flood Map for Planning and Long-Term Flood Risk Service “climate change” surface water maps show no significant change is expected to surface water flooding on the site to the year 2060, and this risk will remain very low or low.





6. Proposed site levels, topography and access

6.1. Proposed finished floor levels

It is proposed that the finished floor level (FFL) of the ALDI store is set at 135.370mAOD. This FFL is above the existing ground levels within the building footprint and is generally above the proposed external levels around the building. Details of the proposed drive through site are to be provided at a later date, however the FFL of the unit should also be set above existing ground level and external levels, as far as practicable.

This is consistent with EA guidance and industry best practice for protecting buildings from both pluvial and groundwater flood risks.

Preliminary proposed site levels are included in Appendix E.

6.2. Overland flow and external falls

Surface water will be directed away from building thresholds using a combination of external grading, kerb lines, and positive drainage.

Overland flow paths have been reviewed using EA surface water mapping and site topography, and no significant accumulation points within the site boundary are expected – refer to Appendix J for the pre and post-development exceedance flows sketch.

The proposed layout allows for uninterrupted flow across external areas, minimising the risk of surface water ponding against built structures. The site has been designed to ensure that any surface water flows in excess of the 1 in 100 year rainfall event are managed in exceedance routes that minimise the risk to people and property.

6.3. Site access / egress

Safe access and egress for occupants and emergency services is a critical design consideration. A new vehicular and pedestrian access is proposed off London Road, along with an additional pedestrian only access off Horton Road to the south of the site.

Since the site is located in Flood Zone 1 and is not at significant risk of other sources of flooding, there should be no issue with safe access or egress from the site even in an extreme flood event.



7. Suitability of the site for development

7.1. Sequential Test

Under the National Planning Policy Framework (NPPF), a Sequential Test is required for most development located in Flood Zones 2 or 3 or at medium or higher risk of surface water flooding. The objective is to steer development toward areas at lower risk of flooding wherever possible.

For this site:

- The site is in Flood Zone 1 and at low risk of surface water flooding, therefore a Sequential Test is not required.

7.2. Flood Zone Compatibility

The Environment Agency's Flood Map for Planning identifies the site as being located within Flood Zone 1, which represents low probability of fluvial or tidal flooding.

As mentioned in Section 3.2, the proposed development is classified as **less vulnerable**. Table 2: Flood risk vulnerability and flood zone "incompatibility" of the NPPF is reproduced below and confirms the proposed development would be considered "compatible" with the Flood Zone.

Table 2: Reproduction of NPPF Table 2

Flood Zone	Flood Risk Vulnerability Classification				
	Essential Infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
1	✓	✓	✓	✓	✓
2	✓	Exception Test req'd	✓	✓	✓
3a	Exception Test req'd	X	X	✓	✓
3b*	Exception Test req'd	X	X	X	✓
Key:					
✓	Exception Test not required				
X	Development should not be permitted				



8. Surface water drainage strategy

8.1. Design objectives

- The proposed surface water drainage system has been designed in accordance with:
- The SuDS hierarchy (as set out in the NPPF and CIRIA C753),
- Local Lead Flood Authority (LLFA) design guidance,
- Building Regulations Part H,
- And, where applicable, the principles of Schedule 3 of the Flood and Water Management Act 2010 (applicable in Wales, and expected to inform future guidance in England).

The system aims to:

- Manage runoff sustainably,
- Mimic natural drainage,
- Protect surrounding land and buildings from increased flood risk,
- And promote water quality, biodiversity potential and amenity value where feasible.

8.2. Existing Site Conditions & Drainage Regime

The existing site is currently brownfield with an estimated impermeable area of 9810 m². However, for consistency, the existing discharge rates have been calculated based on the post-development positively drained area of 9000m².

Although the majority of the site is impermeable surfacing, no existing surface water drainage system is known to be present – several gullies are identified on the topographical survey however the discharge route of these is not currently known. Current runoff from the asphalt and concrete areas is therefore assumed to discharge via overland flow onto soft landscaped areas with no formal attenuation or treatment measures.

Since there is no confirmed positive drainage regime for the existing site, greenfield runoff rates have been calculated using the FEH Statistical Method (2025), and a Modified Rational Method runoff rate estimate has also been included for comparison, using a rainfall intensity of 50mm/hr (2.78 x 50 x 0.900) – these results are shown below and the full FEH calculation shown in Appendix G.

Table 3: Pre-development runoff rates

Method / Event	FEHS 1-yr	FEHS 2-yr	FEHS 10-yr	FEHS 100-yr	MRM
Runoff Rate (l/s)	1.6	1.9	3.0	4.9	125

8.3. Proposed Drainage Regime

As part of the proposed development, a new surface water drainage system will be included to manage runoff from the developed areas of the site. The discharge point for this system has been reviewed against the surface water drainage hierarchy, namely re-use of rainwater, followed by disposal of runoff to the ground via infiltration, to a watercourse or other body of water, to a surface water sewer or highway drain, or to other public sewers, in decreasing order of preference.

– Rainwater re-use

Re-use of rainwater on the proposed development is not considered to present a significant opportunity to reduce volume discharge as when compared to the annual runoff yield from the roof area, the non-potable water usage for the development is very low.

– Disposal to ground (soakaways / infiltration features)





Soil percolation testing was undertaken with the site investigation along the guidelines of BRE 365 in 3 locations across the site area. The locations of the testing are shown on the Exploratory Hole Location Plan in appendix G along with the Soil Percolation Testing Results. Two of the locations (SUDS1 and SUDS2) were located within the proposed ALDI car park area. The testing was undertaken at depths of 2.4 and 3.0 metres below ground level respectively within the Upper Greensand Formation. The rates recorded were 1.4×10^{-5} and 1.01×10^{-5} during the third fill of each trial pit. The testing locations are also shown on the drainage layout in appendix G.

These tests were generally not compliant with BRE 365 due to insufficient time to drain past the 25% effective depth and the SI report concludes that due to the proportion of fines within the Upper Greensand Formation, the use of infiltration features is unlikely to be viable.

However, by extrapolating beyond the run time of the infiltration tests, it appears that the tests would have become BRE365 compliant if they were allowed to run for longer.

It is therefore proposed that disposal to ground will be the primary disposal option (Option A) and further infiltration testing has been instructed, with the intention of waiting a sufficient time for the pits to drain such that a BRE365 compliant rate can be confirmed.

In the event that the further testing records poor infiltration potential, an alternative fall back solution has also been considered (Option B).

– Disposal to a watercourse

The nearest known watercourse is a shallow ditch to the southeast of the site, running parallel to Horton Road in the adjacent land. The ditch location, various site boundaries and the Highway Extent have been overlaid in sketch 13906sk0005 included in appendix G.

This shows that the ditch is located within private land, and therefore a connection to this ditch is unlikely to be possible.

– Disposal to a surface water sewer or highway drain

Wessex Water asset mapping is included in appendix F, which shows the nearest mapped surface water sewer in public land to be a 450mm diameter sewer located in London Road to the north of the car garage that lies adjacent to the site's western boundary, approximately 75m west of the sites westernmost corner. This sewer flows to the southwest, across the London Road / Horton Road roundabout. We have contacted Wessex Water suggesting connection to this sewer who have commented that the local network surcharges during the 1 in 1 year event and as such they have concerns over this discharge location.

We have therefore suggested an alternative point of connection (POC) to Wessex Water at chamber 5917 in Corn Croft Lane to the south-east of the site. Wessex Water have confirmed that a connection at this location will be accepted in principle subject to evidence being submitted that all higher priority destinations have been utilised to their maximum extent. A maximum discharge rate of 1 litre / second will be required. Confirmation of this correspondence is included in appendix F.

8.4. Climate change – peak rainfall intensity allowances

Assuming a design life of 75-years as per the NPPF, climate change will need to be taken into account to the year 2102 assuming a 2027 opening date. The site lies within the Avon Hampshire Management catchment and therefore 40% and 45% increases in rainfall intensity should be allowed for in the 3.3% AEP (1 in 30-year) and 1% AEP (1 in 100-year) event respectively.

8.5. Proposed Surface Water Discharge Strategy

As outlined in section 8.3 above, it is proposed that surface water generated by the development be discharged to the ground via infiltration features. This is shown on the drainage layout drawing 13906-0050 and referred to as Option A. In the event that the further testing records an unviable rate, or that winter ground water levels rise to an unacceptable level, an alternative strategy (Option B on layout drawing 13906-0052) has been developed to discharge off site at an attenuated rate to the existing public storm sewer.



8.5.1. Disposal option A

As shown on the drainage layout in appendix G 13906-0050, surface water from the roof of the store will be collected in rainwater pipes and conveyed in an underground system to a large geocellular soakaway located beneath the car park.

Surface water from the car park and lorry ramp will be collected via drainage channels and also conveyed to the geocellular soakaway being routed through a class 1 bypass interceptor prior to discharge. In addition, permeable paving is proposed for the parking bays which will be allowed to infiltrate to the underlying strata. Finally three tree pits are proposed to add amenity and biodiversity aspects to the scheme.

The soakaway has been positioned at least 5 metres from the building and sized using the worst case infiltration rate recorded to date (1×10^{-5} m/s or 0.036m/hr). Silt traps are positioned upstream of each inlet to the soakaway to reduce silt ingress and clogging.

The ALDI store comprises a positively drained area of 6000m². An image showing the extent of this catchment is included in appendix G.

In order to prevent flooding on the site approximately 531m³ of storage volume will be required to contain the 1 in 100-year +45% event for the proposed ALDI store and access road. Initial storage calculations are included in Appendix G. These calculations show that:

- (a) The 1 in 30 year rainfall event is contained within the drainage system without causing flooding to any part of the site
- (b) The 1 in 100 year rainfall plus climate change rainfall event does not cause flooding to any building (no basements are proposed) or utility plant. The 1 in 100 year plus climate change rainfall event is also contained within the drainage system.

Included on the drainage layout is a typical detail through the soakaway to show the proposed level of the soakaway in relation to the potential ground water level. As no ground water has been encountered on site, in the absence of further monitoring we have shown the level down to which no ground water has been found. This shows a minimum unsaturated zone of 1.85 metres beneath the base of the soakaway.

A separate geocellular soakaway will be provided to discharge surface water generated by the drive through unit. This is indicated on the drainage layout and the associated Infodrainage calculations are included in appendix G.

8.5.2. Disposal option B

In the event that disposal option A is not viable, it is proposed to discharge from the site to the existing 300mm diameter Wessex Water surface water sewer in Corn Croft Lane, at a limited rate of 1 litre / second.

A new surface water lateral drain will need to be formed in the highway between the site and the sewer. The proposed route of this potential connection is shown on drawing 13906-0051 in appendix G. A connection will be provided through the ALDI store plot for future connection by the drive through unit. For clarity, all chambers serving the drive through unit are labelled "Sd.XX".

Wiltshire Council's Drainage and Betterment Strategy (June 2024) requires post development discharge rates of brownfield sites to be as close as reasonably practical to greenfield runoff rates for the same event. If discharging at greenfield rates is not possible, discharge rates should generally be restricted to provide a minimum 30% betterment over the existing discharge rates for the brownfield site.

It is proposed to limit the discharge rate from the development site to 1l/s as required by Wessex Water which is less than the 1 in 1-year greenfield runoff rate from the site. The proposed discharge rate is therefore considered to be in accordance with Wiltshire Council's Drainage and Betterment Strategy.

The proposed ALDI store and access road comprise approximately 65% of the site area. The remaining 35% of the site is for the future drive-through unit and EV charging hub. It is therefore

proposed to pro-rate the total discharge rate between the development parcels, to 0.65 l/s for the ALDI store and access road and 0.35 l/s for the proposed drive through and EV charging hub plot.

The on site drainage system is shown on drawing 13906-0052. The surface water drainage system generally falls in a southerly direction following the fall of the ground levels to a flow control device located inside the southern boundary.

Lined permeable block paving will be utilised as an inlet structure for the entire car park, this will provide water quantity and quality benefits. In addition, three tree pits are proposed between parking bays which will also be utilised as inlet structures. Bioretention planters will be used to collect the rainwater downpipes at the rear of the store with the overflow connected to the underground network.

In order to prevent flooding on the site, attenuation storage will be provided by way of a below ground geocellular storage tank – approximately 577m³ will be required to contain the 1 in 100-year +45% event for the proposed ALDI store and access road. InfoDrainage calculations are included in Appendix G. These calculations show that:

- (a) The 1 in 30 year rainfall event is contained within the drainage system without causing flooding to any part of the site
- (b) The 1 in 100 year rainfall plus climate change rainfall event does not cause flooding to any building (no basements are proposed) or utility plant. The 1 in 100 year plus climate change rainfall event is also contained within the drainage system.

For ease of comparison the pre-development and post development discharge rates have been tabulated below.

Table 5 : Pre and post-development runoff rate comparison

Method / Event	Pre-development (Based on area of 0.9ha)				Post development (Based on area of 0.901ha) 0.604 Ha for Aldi and 0.297 Ha for Drive Through Unit		
	Greenfield	Greenfield	Greenfield	Brownfield			
	FEHS 1-yr	FEHS 2-yr	FEHS 100-yr	MRM	1 in 2-yr	1 in 30-yr	1 in 100 yr
Rate (l/s)	1.6	1.9	4.9	125	0.6	0.9	1.0

Approximately 355m³ of attenuation storage volume would be required for the drive through and EV charging hub plot – this would be achievable within the site area by utilising permeable paving with for the entire car park area with a minimum stone depth of 0.5 metres.

Since the impermeable area of the site is reduced compared to the pre-development scenario, the discharge volume from site will reduce.

- (c) Management of everyday rainfall (interception)

The drainage catchment areas across the ALDI site are shown on drawing 13906-0053 included in appendix G. All permeable surfacing drains only its own area with no additional area being served and therefore is compliant with Standard 2 of the National SuDS standards. This applies to both the permeable paved car park and the permeable asphalt footway around the front of the store.

The ALDI roof and plant area are to be drained to an actively managed rain water harvesting system which is proposed to be located beneath the plant area to the rear of the store. These areas are therefore considered to be compliant with standard 2. To initially size the tank, we have been provided with a quotation from a supplier which is included in appendix G.

As shown on the catchment area plan, there are two small areas of the site which don't meet the interception criteria. The first is the fire escape ramp which is a solid raised ramp between retaining walls so won't be able to be permeable and the second is the HGV ramp which requires robust and maintenance free construction to prevent disruption to store operations. These areas represent



less than 3% of the total ALDI catchment.

9. Foul drainage strategy

9.1. Existing Foul Drainage Arrangements

The existing site is assumed to currently be served by a private septic tank system with no existing connection to the public sewerage network.

A review of sewer records from Wessex Water indicates that foul sewers exist in London Road to the west of the site, and within Ferozeshah Road to the south of the site, off Horton Road.

Public sewer asset plans are included in Appendix E.

9.2. Proposed Foul Water Strategy

The proposed development will generate domestic foul discharge from toilets in the proposed ALDI store and drive through unit.

Foul drainage will be discharged to the public sewer in Corn Croft Lane via a new connection. A new lateral drain will need to be formed in the Horton Road between the site and the nearest manhole, and a drain will be provided through the ALDI store plot and access road for future connection by the drive through unit. For clarity, all chambers serving the drive through unit are labelled "Fd.XX".

It is anticipated that this lateral drain will allow for gravity connection from the ALDI store, and EV charging hub plot, subject to detailed design. The detailed design of the drainage for this part of the development would be approved under reserved matters.





10. Residual risks and mitigation measures

Even where flood risk has been mitigated through design measures, there remains a potential for exceedance events, system failure, or blockage to occur. This section outlines how such residual risks will be managed.

These residual risk measures contribute to the demonstration of a safe development in line with Exception Test criteria, where required

10.1. Exceedance Events

In the event of rainfall exceeding the 1 in 100-year plus climate change design standard:

- Excess surface water will be routed away from buildings using defined overland flow paths (See Appendix J)
- External levels will be profiled to direct flow toward landscaped or non-critical areas,
- Ponding will be permitted in designated hardstanding areas where appropriate.

10.2. System blockage or failure

The drainage system will be designed to include:

- Access points and inspection chambers to allow maintenance,
- Redundancy in flow paths where feasible.





11. Maintenance and adoption responsibilities

The long-term success of any surface and foul water drainage system depends on effective maintenance. This section outlines the anticipated responsibilities for the drainage infrastructure serving the development.

11.1. Surface water system

The surface water drainage system includes the following elements:

- Flow controls (e.g. orifice or vortex controls),
- Soakaway tanks, attenuation storage tanks
- Permeable paving (where applicable),
- Catchpits and inspection chambers,

These components are intended to remain private and be maintained by the site occupiers (ALDI Stores Ltd. and the drive through/EV charging hub operator). In accordance with a maintenance schedule such as that outlined in Appendix H.

The off-site surface water lateral drain will be offered for adoption to Wessex Water.

11.2. Foul drainage system

The foul system will remain private and maintenance responsibilities will fall to the site occupiers as per the surface water system. Maintenance schedules should include:

- Periodic inspection and rodding of foul pipework,
- Pumping station servicing (where applicable),
- Regular checks of manhole integrity and covers.

The off-site foul water lateral drain will be offered for adoption to Wessex Water.





12. Conclusions and recommendations

12.1. Conclusions

This Flood Risk Assessment and Drainage Strategy has been prepared to support a planning application for the proposed development at London Road, Devizes.

Based on the available information, the following conclusions have been reached:

- The site lies within Flood Zone 1 and is considered to be at low risk of flooding from the majority of sources, with a possibly elevated risk of groundwater flooding on the site.
- The proposed development incorporates appropriate flood mitigation measures including:
 - Raised finished floor levels compared to existing ground level,
 - SuDS drainage strategy with on-site attenuation,
 - Safe overland flow routing and exceedance planning.
- Surface water runoff will be managed in accordance with the drainage hierarchy, discharging to ground with further testing to confirm that this is viable.
- Should infiltration testing not be favourable, surface water will be discharged to the public surface water sewer. It is anticipated that a gravity connection is achievable.

Post-development discharge rates will be limited and reduced compared to pre-development, with sufficient attenuation storage to accommodate the 1 in 100-year + climate change event.

- Foul water will be discharged to the public foul sewer. It is anticipated that a gravity connection is achievable.
- The systems will remain private within the development site, with maintenance responsibilities outlined in Appendix H. Off-site drainage will be offered for adoption to Wessex Water.
- Residual flood risks have been identified and appropriately mitigated through the layout and design of the development.

Accordingly, the proposed development is considered to be:

- **Compliant** with the National Planning Policy Framework (NPPF),
- **Acceptable in flood risk terms**, and
- **Unlikely to increase flood risk elsewhere.**

