Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	ELY.M4
	Location	Located off Angel Drove (A142) and Ely Train station. Situated on the south-east outskirts of Ely (554232 279500).
	Area	11.4 (ha)
	Current land use	Predominantly Brownfield Site
	Proposed land use	Mixed use
Sources of flood risk	**Existing drainage features**	• The River Great Ouse flows generally south to north along the site's eastern boundary before turning and flowing immediately adjacent to the northern boundary for approximately 105m before turning north again and flowing away from the site. • Unnamed drain (tributary of the River Great Ouse) flows immediately up to the site's western site boundary before entering into a culvert and flowing beneath the site. It exits the culvert at its confluence with the River Great Ouse 50m to the north of the site.
	Fluvial	**Proportion of site at risk**

FZ3b	FZ3a	FZ2	FZ1
<1%	50%	50%	50%

The fluvial flood risk is associated with the River Great Ouse. A small area in the north-eastern corner of the site is within FZ3b. Extents in FZ3a and 2 are shown to inundate much of the south and centre of the site, whilst slightly increasing extents in the north-eastern corner. However, Flood Zones represent the undefended scenario; as the River Great Ouse in this location has embankments and defences in place, the actual flood risk is likely to be less than that shown in the Flood Zones.

Surface Water

Proportion of site at risk (RoFfSW)

30-year	100-year	1,000-year
8%	13%	25%

The RoFfSW shows there are several isolated pockets of ponding water across the site in the 30-year event, the largest of which is located in the centre. The extents of these ponds increase and additional pockets of ponding water emerge sporadically across the site in the 100-year event. In the 1,000-year event, overland flow routes begin to emerge on Angel Grove (A142) and the unnamed road in the south of the site flowing in a generally south-west direction.

	Reservoir	The site is not shown to be at risk of reservoir flooding.
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.

Flood risk management infrastructure	**Defences**	**Defence Type**	**Standard of Protection**	**Condition**
		Embankment	100-years	3 (Worst condition 4)

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	ELY.M4			
	Location	Located off Angel Drove (A142) and Ely Train station. Situated on the south-east outskirts of Ely (554232 279500).			
	Area	11.4 (ha)			
	Current land use	Predominantly Brownfield Site			
	Proposed land use	Mixed use			
		This site is defended from the River Great Ouse by embankments that are situated to the south of the site, running along the northern bank of the River Great Ouse until the Stuntney Causeway (A142) bridge over the River Great Ouse.			
	Residual risk	In the event of a breach or overtopping of the embankments, flooding from the River Great Ouse may inundate the site.			
Emergency planning	**Flood warning**	The site is partially covered by the Environment Agency's Flood Warning Service. The site is within the River Great Ouse at Ely (052FWFEO1EL) Flood Warning Area.			
	Access and egress	Dry access and egress for the site is possible via Angel Drove (A142) in the fluvial events. Dry access and egress is also available via Angel Drove (A142) in the surface water events up to and including the 100-year but it is lost in the 1,000-year event.			
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**	**Central**	**Higher Central**	**Upper End**
		Anglian	25%	35%	65%
	% of site at risk		<1%	<1%	10%
	Implications for the site	Mapping shows there are no increases in extents on site in the Central and High Central scenarios when compared against the defended 100-year defended event. However, the Upper End extents do inundate the north-east corner of the site. As the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	**East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables**	

Site details	**Site Code**	ELY.M4
	Location	Located off Angel Drove (A142) and Ely Train station. Situated on the south-east outskirts of Ely (554232 279500).
	Area	11.4 (ha)
	Current land use	Predominantly Brownfield Site
	Proposed land use	Mixed use

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Mudstone, siltstone and sandstone
		  ○ Superficial – Pete
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	ELY.M4
	Location	Located off Angel Drove (A142) and Ely Train station. Situated on the south-east outskirts of Ely (554232 279500).
	Area	11.4 (ha)
	Current land use	Predominantly Brownfield Site
	Proposed land use	Mixed use

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the River Great Ouse to ensure flows are not exacerbated downstream within the catchment.
		• Developers should consider flood risk from any unnamed drains not present in the Flood Zones, for example the drain that enters a culvert immediately to the west of the site boundary, including the risk posed in the event of a blockage. This should be confirmed by detailed hydraulic modelling at the Flood Risk Assessment stage.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	ELY.M4
	Location	Located off Angel Drove (A142) and Ely Train station. Situated on the south-east outskirts of Ely (554232 279500).
	Area	11.4 (ha)
	Current land use	Predominantly Brownfield Site
	Proposed land use	Mixed use
Surface Water		The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	FRD.E1(C)				
	Location	Located off Fordham Road and Land Wade Road to the north west of Snailwell (563150, 268263)				
	Area	14.6 (ha)				
	Current land use	Mixed Greenfield and Brownfield Site				
	Proposed land use	Employment				
Sources of flood risk	**Existing drainage features**	• River Snail flows south to north past the eastern site boundary, 370m from it at the closest point. • Unnamed drain (side channel of River Snail) 320m to south • Unnamed drain 425m to west of the site				
	Fluvial	**Proportion of site at risk**				
		FZ3b	**FZ3a**	**FZ2**	**FZ1**	
		<1%	<1%	1%	99%	
		The fluvial flood risk is associated with the River Snail and the Unnamed Drain (side channel of River Snail). When the watercourses get out of bank to the south of the site they are shown to inundate along the railway line in a northern direction following the topography. A narrow strip of land inside of the site's western boundary and adjacent to the railway line is shown to be within the functional floodplain Flood Zone 3b, with slight increases in extents on site in the 100-year and 1,000-year extents.				
	Surface Water	**Proportion of site at risk (RoFfSW)**				
		30-year	**100-year**	**1,000-year**		
		1%	3%	8%		
		The RoFfSW shows there are area small pockets of sporadic surface water ponding on the site in the 30-year event. The area inundated grows in the 100 and 1,000-year extents, with the area of greatest ponding being located in the north of the site.				
	Reservoir	The site is not shown to be at risk of reservoir flooding.				
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.				
Flood risk management infrastructure	**Defences**	**Defence Type**	**Standard of Protection**	**Condition**		
		-	-	-		
		This site is not protected by any formal flood defences.				
	Residual risk	-				
Emergency planning	**Flood warning**	The site is not covered by the Environment Agency's flood warning service.				
	Access and egress	Dry access and egress during for the site is possible via Fordham Road to the east and Land Wade Road to the north in the fluvial and surface water flood events.				
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**		**Central**	**Higher Central**	**Upper End**
		Anglian		25%	35%	65%

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(C)			
	Location	Located off Fordham Road and Land Wade Road to the north west of Snailwell (563150, 268263)			
	Area	14.6 (ha)			
	Current land use	Mixed Greenfield and Brownfield Site			
	Proposed land use	Employment			
	% of site at risk		1%	1%	2%
	Implications for the site	Mapping shows there is a slight increase in the climate change extents on site when compared with the 100-year defended design event. These increases are along the western site boundary and increase during each successive climate change allowance increase. As the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	**East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables**	

Site details	**Site Code**	FRD.E1(C)
	Location	Located off Fordham Road and Land Wade Road to the north west of Snailwell (563150, 268263)
	Area	14.6 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Chalk
		  ○ Superficial – Clay, silt and sand
		• The site is located within Groundwater Source Protection Zone 3. As such, infiltration techniques should only be used where there are suitable levels of treatment and following the granting of any required environmental permits from the Environment Agency, although it is possible that infiltration may not be permitted. Proposed SuDS should be discussed with relevant stakeholders (LPA, LLFA and EA) at an early stage to understand possible constraints.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable Infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(C)
	Location	Located off Fordham Road and Land Wade Road to the north west of Snailwell (563150, 268263)
	Area	14.6 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the River Snail and unnamed drains to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water	The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping	Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(C)
	Location	Located off Fordham Road and Land Wade Road to the north west of Snailwell (563150, 268263)
	Area	14.6 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	FRD.E1(D)
	Location	Located off Fordham Road, to the north west of Snailwell (563316 268781)
	Area	12.4 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment
Sources of flood risk	**Existing drainage features**	• River Snail flows south to north immediately adjacent to the eastern site boundary at the nearest point. • Unnamed Drain (tributary of the River Snail) is located 5m to the north of the site • Minor unnamed drainage features (tributaries of the River Snail) on site.
	Fluvial	**Proportion of site at risk** **FZ3b** 30% | **FZ3a** 39% | **FZ2** 42% | **FZ1** 58% The fluvial flood risk is associated with the River Snail that flows adjacent to the eastern site boundary. Much of the east of the site is located in Flood Zone 3b, particularly the north-east and south-east corners. There are slight increases in the extents of FZ3a and FZ2 with most of the eastern half of the site inundated in the FZ2 extent. The flood risk from the minor drainage features located on site is not shown in the fluvial flood mapping.
	Surface Water	**Proportion of site at risk (RoFfSW)** **30-year** <1% | **100-year** <1% | **1,000-year** 4% The RoFfSW shows the channel of a minor unnamed drain in the south of the site filling in the 30-year event. Extents increase only slightly in the 100-year event. Meanwhile in the 1000-year event sporadic pockets of surface water ponding have begun to develop in the north of the site.
	Reservoir	The north east and east of the site is shown to be risk of reservoir flooding.
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.
Flood risk management infrastructure	**Defences**	**Defence Type**: - | **Standard of Protection**: - | **Condition**: - This site is not protected by any formal flood defences.
	Residual risk	-
Emergency planning	**Flood warning**	The site is not covered by the Environment Agency's Flood Warning Service.
	Access and egress	Dry access and egress during for the site is possible via Fordham Road to the west in the fluvial and surface water flood events.

River Basin District	**Central**	**Higher Central**	**Upper End**

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(D)			
	Location	Located off Fordham Road, to the north west of Snailwell (563316 268781)			
	Area	12.4 (ha)			
	Current land use	Mixed Greenfield and Brownfield Site			
	Proposed land use	Employment			
Climate Change	**Climate change allowances for '2080s'**	Anglian	25%	35%	65%
	% of site at risk		43%	43%	45%
	Implications for the site	Mapping shows there are slight increases in the climate change extents on site when compared with the 100-year design event. These increases are greatest in the south east of the site and increase during each successive climate change allowance increase. As the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(D)
	Location	Located off Fordham Road, to the north west of Snailwell (563316 268781)
	Area	12.4 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Chalk
		  ○ Superficial – Clay, silt and sand
		• The site is located within Groundwater Source Protection Zone 3. As such, infiltration techniques should only be used where there are suitable levels of treatment and following the granting of any required environmental permits from the Environment Agency, although it is possible that infiltration may not be permitted. Proposed SuDS should be discussed with relevant stakeholders (LPA, LLFA and EA) at an early stage to understand possible constraints.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(D)
	Location	Located off Fordham Road, to the north west of Snailwell (563316 268781)
	Area	12.4 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the River Snail and unnamed drains to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• Developers should consider the flood risk posed by the minor drainage features on site.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water	The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(D)
	Location	Located off Fordham Road, to the north west of Snailwell (563316 268781)
	Area	12.4 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	FRD.E1(G)				
	Location	Located off Fordham Road and Snailwell Road, to the north west of Snailwell (563558 267907)				
	Area	20.0 (ha)				
	Current land use	Mixed Greenfield and Brownfield Site				
	Proposed land use	Employment				
Sources of flood risk	**Existing drainage features**	• River Snail flows south to north immediately adjacent to the eastern site boundary. • Unnamed Drain (tributary of the River Snail) flows immediately adjacent to the eastern site boundary with its confluence with the River Snail approximately mid-way along the boundary.				
	Fluvial	**Proportion of site at risk**				
		FZ3b	**FZ3a**	**FZ2**	**FZ1**	
		3%	3%	4%	96%	
		The fluvial flood risk is associated with the River Snail which flows adjacent to the eastern site boundary. A narrow strip of land along the inside of the eastern boundary is located within Flood Zone 3b. An additional narrow strip along the southern site boundary is also within Flood Zone 3b from an overland flow route from when the River Snail gets out of bank. Due to the steep topography around the boundary edges, increases in the Flood Zone 3a and 2 extents are very minor.				
	Surface Water	**Proportion of site at risk (RoFfSW)**				
		30-year	**100-year**	**1,000-year**		
		<1%	2%	8%		
		The RoFfSW shows there are several isolated, minor pockets of ponding water across the site in the 30-year event. The extents of these ponds increase and additional pockets of ponding water emerge sporadically across the site in the 100-year and 1,000-year events.				
	Reservoir	The site is not shown to be at risk of reservoir flooding.				
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.				
Flood risk management infrastructure	**Defences**	**Defence Type**	**Standard of Protection**	**Condition**		
		-	-	-		
		This site is not protected by any formal flood defences.				
	Residual risk	-				
Emergency planning	**Flood warning**	The site is not covered by the Environment Agency's Flood Warning Service.				
	Access and egress	Dry access and egress for the site is possible via Fordham Road to the west and Snailwell Road to the north in all the fluvial and surface water flood events.				
		River Basin District	**Central**	**Higher Central**	**Upper End**	

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(G)			
	Location	Located off Fordham Road and Snailwell Road, to the north west of Snailwell (563558 267907)			
	Area	20.0 (ha)			
	Current land use	Mixed Greenfield and Brownfield Site			
	Proposed land use	Employment			
Climate Change	**Climate change allowances for '2080s'**	Anglian	25%	35%	65%
	% of site at risk		4%	4%	4%
	Implications for the site	Mapping shows there are negligible increases in extents on site in the climate change scenarios with very minor increases in the southern corner of the site. However, as the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	**East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables**	

Site details	**Site Code**	FRD.E1(G)
	Location	Located off Fordham Road and Snailwell Road, to the north west of Snailwell (563558 267907)
	Area	20.0 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Chalk
		  ○ Superficial – Clay, silt and sand
		• The site is located within Groundwater Source Protection Zone 3. As such, infiltration techniques should only be used where there are suitable levels of treatment and following the granting of any required environmental permits from the Environment Agency, although it is possible that infiltration may not be permitted. Proposed SuDS should be discussed with relevant stakeholders (LPA, LLFA and EA) at an early stage to understand possible constraints.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(G)
	Location	Located off Fordham Road and Snailwell Road, to the north west of Snailwell (563558 267907)
	Area	20.0 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the River Snail to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water	The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping	Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	FRD.E1(G)
	Location	Located off Fordham Road and Snailwell Road, to the north west of Snailwell (563558 267907)
	Area	20.0 (ha)
	Current land use	Mixed Greenfield and Brownfield Site
	Proposed land use	Employment
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	LIT.E1
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555140, 287494).
	Area	33.0 (ha)
	Current land use	Mixed Greenfield and Brownfield land
	Proposed land use	Employment
Sources of flood risk	**Existing drainage features**	• Tidal River / Hundred Foot Drain – 4.1km to the west of the site • River Delph – 5.1km to the west of the site • Old Bedford River – 5.2km to the west of the site • Fodderfen Drain and Abraham's Drain (Ordinary Watercourses) – 1.30km to the west of the site • Unnamed drain located 520m to the north east of the site. • Unnamed Ditches located immediately along the northern and southern boundaries of the site. • Unnamed water features and ditches within the site boundary. • The site is located within the Littleport and Downham IDB (part of the Ely Group of Drainage Boards) and to the north, south and west of the site a dense network of IDB managed watercourses/ channels are present.
	Fluvial / Tidal	**Proportion of site at risk**

FZ3b	FZ3a	FZ2	FZ1
0%	51%	59%	41%

The fluvial / tidal flood risk to the site is associated predominantly with the Tidal River / Hundred Foot Drain, River Delph and Old Bedford River located over 4km to the west of the site. Despite the distance, the site is at risk due to the combination of tidal and fluvial flood risk interactions and the low-lying topography between the watercourses and the site, allowing the water to spread. The northern, southern and western most areas of the site are within FZ3a with a slight increase in the extent of FZ2. However, Flood Zones represent the undefended scenario and therefore as the Main Rivers in this location have flood defences in the form of embankments, the actual flood risk to the site is likely to be less than that shown in the Flood Zones.

Surface Water — **Proportion of site at risk (RoFfSW)**

30-year	100-year	1,000-year
<1%	1%	5%

The RoFfSW shows there are isolated pockets of ponding water across the site in the 30-year event, with the extents of these increasing in the 100-year and 1,000-year events.

Reservoir	The north, south and western-most areas of the site are shown to be at risk of reservoir flooding.
Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.

Defences

Defence Type	Standard of Protection	Condition
Embankment	100-years	3 (Worst condition 4)

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.E1			
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555140, 287494).			
	Area	33.0 (ha)			
	Current land use	Mixed Greenfield and Brownfield land			
	Proposed land use	Employment			
Flood risk management infrastructure		This site is defended from the Tidal River / Hundred Foot Drain by embankments that are situated 5km to the west of the site running along the eastern bank of the Tidal River / 100ft Drain.			
	Residual risk	In the event of a breach or overtopping of the embankments, flooding from the Tidal River / 100ft Drain may inundate the site.			
Emergency planning	**Flood warning**	The site is partially covered by the Environment Agency's Flood Warning Service. The site is within the Hundred Foot River Flood Defences (052FWFGO7HL) Flood Warning Area.			
	Access and egress	Dry access and egress for the site is possible via the A10 and Wisbech Road (A1101) in the fluvial and surface water events.			
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**	**Central**	**Higher Central**	**Upper End**
		Anglian	25%	35%	65%
	% of site at risk		0%	0%	0%
	Implications for the site	Mapping shows there are no extents on site in the climate change scenarios, as these scenarios take defences into account. Residual flood risk discussed above could have an impact at the site in a climate change event. As the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.E1
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555140, 287494).
	Area	33.0 (ha)
	Current land use	Mixed Greenfield and Brownfield land
	Proposed land use	Employment

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Mudstone, siltstone and sandstone
		  ○ Superficial – Diamicton and pete
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.E1
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555140, 287494).
	Area	33.0 (ha)
	Current land use	Mixed Greenfield and Brownfield land
	Proposed land use	Employment

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the watercourse(s) discharged into, to ensure flows are not exacerbated downstream within the catchment.
		• Developers should consider the flood risk to the site from the Unnamed Drains along boundaries and from the water features and ditches within the site. This may need to be confirmed by detailed hydraulic modelling.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Development in the near vicinity of a watercourse within an IBD area will require the consent of the relevant IDB.
		• The developer should contact the relevant IDB to determine the risk of flooding from IDB watercourses to the site.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information		
Flood Zones		Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.E1
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555140, 287494).
	Area	33.0 (ha)
	Current land use	Mixed Greenfield and Brownfield land
	Proposed land use	Employment
Climate change		The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water		The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	LIT.E2
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555555, 287481).
	Area	1.5 (ha)
	Current land use	Greenfield
	Proposed land use	Employment
Sources of flood risk	**Existing drainage features**	• Tidal River / Hundred Foot Drain – 5.3km to the west of the site • River Delph – 6.3km to the west of the site • Old Bedford River – 6.4km to the west of the site • Fodderfen Drain and Abraham's Drain (Ordinary Watercourses) – 2.00km to the west of the site • Unnamed drain located 500m to the north of the site. • Unnamed Ditches located immediately along the eastern and norther boundaries of the site. • Unnamed water features within the site boundary. • The site is located within the Littleport and Downham IDD (part of the Ely Group of Drainage Boards) and to the north and west of the site a dense network of IDB managed watercourses/ channels are present.
	Fluvial / Tidal	**Proportion of site at risk**

FZ3b	FZ3a	FZ2	FZ1
0%	11%	18%	82%

The fluvial / tidal flood risk to the site is associated predominately with the Tidal River / Hundred Foot Drain, River Depth and Old Bedford River located over 5km to the west of the site. Despite the distance, the site is at risk due to the combination of tidal and fluvial flood risk interactions and the low-lying topography between the watercourses and the site allow the spread of floodwater. The northern most area of the site is within FZ3a with a slight increase in the extent of FZ2. However, Flood Zones represent the undefended scenario and as the Main Rivers in this location have flood defences in the form of embankments, the actual flood risk is likely to be less than that shown in the Flood Zones.

Surface Water	**Proportion of site at risk (RoFfSW)**	

30-year	100-year	1,000-year
1%	1%	3%

The RoFfSW shows there are isolated pockets of ponding water across the site in the 30-year event, with the extents of these increasing slightly in the 100-year and 1,000-year events. The areas of ponding are largely confined to existing water features in the north of the site.

Reservoir	The northern most area of the site is shown to be at risk of reservoir flooding.
Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.

	Defences	**Defence Type**	**Standard of Protection**	**Condition**
		Embankment	100-years	3 (Worst condition 4)

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.E2			
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555555, 287481).			
	Area	1.5 (ha)			
	Current land use	Greenfield			
	Proposed land use	Employment			
Flood risk management infrastructure		This site is defended from the Tidal River / Hundred Foot Drain by embankments that are situated 5km to the west of the site running along the eastern bank of the Tidal River / 100ft Drain.			
	Residual risk	In the event of a breach or overtopping of the embankments flooding from the Tidal River / 100ft Drain may inundate the site.			
Emergency planning	**Flood warning**	The site is partially covered by the Environment Agency's Flood Warning Service. The site is within the Hundred Foot River Flood Defences (052FWFGO7HL) Flood Warning Area.			
	Access and egress	Dry access and egress for the site is possible via the A10 and Wisbech Road in the fluvial and surface water events.			
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**	**Central**	**Higher Central**	**Upper End**
		Anglian	25%	35%	65%
	% of site at risk		0%	0%	0%
	Implications for the site	Mapping shows there are no extents on site in the climate change scenarios as these take defences into account. Residual flood risk discussed above could have an impact at the site in the climate change event. As the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.E2
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555555, 287481).
	Area	1.5 (ha)
	Current land use	Greenfield
	Proposed land use	Employment

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Mudstone, siltstone and sandstone
		  ○ Superficial –Peat
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.E2
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555555, 287481).
	Area	1.5 (ha)
	Current land use	Greenfield
	Proposed land use	Employment

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the watercourse(s) discharged into to ensure flows are not exacerbated downstream within the catchment.
		• Developers should consider the flood risk to the site from the Unnamed Drains along the north and western site boundaries and from the water features within the site. This may require detailed hydraulic modelling to confirm the flood risk.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Development in the near vicinity of a watercourse within an IBD area will require the consent of the relevant IDB.
		• The developer should contact the relevant IDB to determine the risk of flooding from IDB watercourses to the site.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information		
Flood Zones		Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.E2
	Location	Located off the A10 and Wisbech Road. Situated on the western edge of Littleport (555555, 287481).
	Area	1.5 (ha)
	Current land use	Greenfield
	Proposed land use	Employment
Climate change		The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water		The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.M1			
	Location	Located off the A10, Wisbech Road and Woodfen Road. Situated on the western edge of Littleport (555458, 287002).			
	Area	17.3 (ha)			
	Current land use	Predominantly Greenfield Site			
	Proposed land use	Mixed use development			
Sources of flood risk	**Existing drainage features**	• Tidal River / Hundred Foot Drain – 5.0km to the west of the site • River Delph – 6.0km to the west of the site • Old Bedford River – 6.1km to the west of the site • Fodderfen Drain and Abraham's Drain (Ordinary Watercourses) – 1.83km to the west of the site • Unnamed Ditch located immediately along the western boundary of the site. • The site is partially located within the Littleport and Downham IDB (part of the Ely Group of Drainage Boards) and to the north and west of the site a dense network of IDB managed watercourses/channels are present.			
	Fluvial / Tidal	**Proportion of site at risk**			
		FZ3b	**FZ3a**	**FZ2**	**FZ1**
		0%	4%	6%	94%
		The fluvial / tidal flood risk to the site is associated predominantly with the Tidal River / Hundred Foot Drain, River Depth and Old Bedford River located over 5km to the west of the site. Despite the distance, the site is at risk due to the combination of tidal and fluvial flood risk interactions and the low-lying topography between the watercourse and the site allows the spread of flood waters. The south west corner of the site is within FZ3a with a slight increase in the extent of FZ2. However, Flood Zones represent the undefended scenario and as the Main Rivers in this location have flood defences in the form of embankments, the actual flood risk is likely to be less than that shown in the Flood Zones.			
	Surface Water	**Proportion of site at risk (RoFfSW)**			
		30-year	**100-year**	**1,000-year**	
		1%	6%	28%	
		The RoFfSW shows there are isolated pockets of ponding water across the site in the 30-year event, the majority of which is located in the south west corner. The extents of these ponds increase in the 100-year event with increased water ponding in the south-east corner and across the centre of the site. In the 1,000-year event, a prominent overland flow route develops flowing from the eastern site boundary in a south-westerly direction before pooling in the south-eastern corner of the site, due to presence of the raised A10 roadway.			
	Reservoir	The south-west corner of site is shown to be at risk of reservoir flooding.			
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.			
	Defences	**Defence Type**	**Standard of Protection**	**Condition**	

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.M1			
	Location	Located off the A10, Wisbech Road and Woodfen Road. Situated on the western edge of Littleport (555458, 287002).			
	Area	17.3 (ha)			
	Current land use	Predominantly Greenfield Site			
	Proposed land use	Mixed use development			
Flood risk management infrastructure		Embankment	100-years	3 (Worst condition 4)	
		This site is defended from the Tidal River / Hundred Foot Drain by embankments that are situated 5km to the west of the site running along the eastern bank of the Tidal River / 100ft Drain.			
	Residual risk	In the event of a breach or overtopping of the embankments, flooding from the Tidal River / 100ft Drain may inundate the site.			
Emergency planning	**Flood warning**	The site is partially covered by the Environment Agency's Flood Warning Service. The site is within the Hundred Foot River Flood Defences (052FWFGO7HL) Flood Warning Area.			
	Access and egress	Dry access and egress for the site is possible via the A10 and Wisbech Road in the fluvial and surface water events. Dry access and egress via Woodfen road is available in the fluvial events but would be lost in the 100-year surface water event.			
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**	**Central**	**Higher Central**	**Upper End**
		Anglian	25%	35%	65%
	% of site at risk		0%	0%	0%
	Implications for the site	Mapping shows there are no extents on site in the climate change scenarios as these take defences into account. Residual risk discussed above may have an impact at the site in the climate change event. As the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	**East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables**	

Site details	**Site Code**	LIT.M1
	Location	Located off the A10, Wisbech Road and Woodfen Road. Situated on the western edge of Littleport (555458, 287002).
	Area	17.3 (ha)
	Current land use	Predominantly Greenfield Site
	Proposed land use	Mixed use development

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Mudstone, siltstone and sandstone
		  ○ Superficial – Diamicton
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable Infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.M1
	Location	Located off the A10, Wisbech Road and Woodfen Road. Situated on the western edge of Littleport (555458, 287002).
	Area	17.3 (ha)
	Current land use	Predominantly Greenfield Site
	Proposed land use	Mixed use development

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the watercourse(s) discharged into, to ensure flows are not exacerbated downstream within the catchment.
		• Developers should consider the flood risk to the site from the Unnamed Drain that runs along the western site boundary. This may require detailed hydraulic modelling to confirm flood risk.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Development in the near vicinity of a watercourse within an IBD area will require the consent of the relevant IDB.
		• The developer should contact the relevant IDB to determine the risk of flooding from IDB watercourses to the site.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LIT.M1
	Location	Located off the A10, Wisbech Road and Woodfen Road. Situated on the western edge of Littleport (555458, 287002).
	Area	17.3 (ha)
	Current land use	Predominantly Greenfield Site
	Proposed land use	Mixed use development
Surface Water		The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LP7				
	Location	Located off the A1303. Located to the south east of Bottisham (555790, 259892).				
	Area	0.69 (ha)				
	Current land use	Predominantly Brownfield				
	Proposed land use	Gypsy and Traveller Pitches				
Sources of flood risk	**Existing drainage features**	• Unnamed watercourse that flows from the east up to the site's southern boundary, at which point it enters into a culvert and runs beneath the site in a north-westerly direction, exiting its culvert on the northern side of the A1303 (20m from the northern site boundary). It continues towards its confluence with an unnamed ditch 560m to the north of the site, at which point it becomes the Mill Stream.				
	Fluvial / Tidal	**Proportion of site at risk**				
		FZ3b	**FZ3a**	**FZ2**	**FZ1**	
		0%	13%	13%	87%	
		The flood risk to the site is associated with the unnamed watercourse that flows up to the site boundary and enters a culvert beneath the site. Overland flow routes are shown in the FZ3a and FZ2 extents that inundate the south and south-west corner of the site. There is no change in the extents of FZ2 compared to FZ3a within the site boundary.				
	Surface Water	**Proportion of site at risk (RoFfSW)**				
		30-year	**100-year**	**1,000-year**		
		0%	4%	23%		
		The RoFfSW shows that surface water a surface water overland flow route develops across the south and south-east corner of the site in the 100-year event following the topography. The extents increase in the 1,000-year event and begin to encompass areas of the east south and west of the site.				
	Reservoir	The site is not shown to be at risk of reservoir flooding.				
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.				
Flood risk management infrastructure	**Defences**	**Defence Type**	**Standard of Protection**	**Condition**		
		-	-	-		
		This site is not protected by any formal flood defences.				
	Residual risk	-				
Emergency planning	**Flood warning**	The site is not covered by the Environment Agency's Flood Warning Service.				
	Access and egress	Dry access and egress via the A1303 is available in the fluvial flood events. Dry access and egress via the A1303 is available in the 30 and 100-year surface water flood events but lost in the 1,000-year event.				
		River Basin District	**Central**	**Higher Central**	**Upper End**	

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LP7			
	Location	Located off the A1303. Located to the south east of Bottisham (555790, 259892).			
	Area	0.69 (ha)			
	Current land use	Predominantly Brownfield			
	Proposed land use	Gypsy and Traveller Pitches			
Climate Change	**Climate change allowances for '2080s'**	Anglian	25%	35%	65%
	% of site at risk		-	-	-
	Implications for the site	Climate change mapping is not available at this time and is to be undertaken by the developer (see Mapping Information for further details). As the site is affected by surface water flooding from the 100-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	**East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables**	

Site details	**Site Code**	LP7
	Location	Located off the A1303. Located to the south east of Bottisham (555790, 259892).
	Area	0.69 (ha)
	Current land use	Predominantly Brownfield
	Proposed land use	Gypsy and Traveller Pitches

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Chalk
		  ○ Superficial – none present
		• The site is located within Groundwater Source Protection Zone 3. As such infiltration techniques should only be used where there are suitable levels of treatment and following the granting of any required environmental permits from the Environment Agency, although it is possible that infiltration may not be permitted. Proposed SuDS should be discussed with relevant stakeholders (LPA, LLFA and EA) at an early stage to understand possible constraints.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LP7
	Location	Located off the A1303. Located to the south east of Bottisham (555790, 259892).
	Area	0.69 (ha)
	Current land use	Predominantly Brownfield
	Proposed land use	Gypsy and Traveller Pitches

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Detailed hydraulic modelling will be required to determine the flood risk from the unnamed watercourse that flows up to the site's southern boundary before entering a culvert beneath the site.
		• An assessment of the risk posed by a blockage of the culvert to the site should also be carried out at site-specific assessment stage.
		• Gypsy and traveller sites should not be located in areas at high risk of flooding, including functional floodplains, due to the particular vulnerability of caravans (DCLG guidance, 2015).
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the unnamed watercourse to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Consideration could be given to opening-up the culverted unnamed watercourse to connect the channel with its floodplain.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information		

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	LP7
	Location	Located off the A1303. Located to the south east of Bottisham (555790, 259892).
	Area	0.69 (ha)
	Current land use	Predominantly Brownfield
	Proposed land use	Gypsy and Traveller Pitches
Flood Zones		Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. Flood Zone 3b could not be derived as no detailed models for the unnamed watercourse that flows culverted beneath the site were available. As the watercourse is culverted beneath the site and no LiDAR is available in the area, 2D modelling methods were considered unsuitable at this time. Detailed hydraulic modelling to determine the Flood Zones should be undertaken by the developer.
Climate change		The climate change allowances for the '2080s' were not modelled for the Level 1 SFRA as no detailed models for the unnamed watercourse that flows culverted beneath the site were available. As the watercourse is culverted beneath the site and no LiDAR is available in the area, 2D modelling methods were considered unsuitable at this time. Detailed hydraulic modelling to determine the impact of climate change should be undertaken by the developer at site-specific assessment stage.
Surface Water		The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping		Depth and velocity mapping for the unnamed watercourse are not available as no detailed models for the unnamed watercourse that flows culverted beneath the site were available. As the watercourse is culverted beneath the site and no LiDAR is available in the area, 2D modelling methods were considered unsuitable at this time. Detailed hydraulic modelling should be undertaken by the developer to confirm flood depths, velocity an hazard rating.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	SOH.E1
	Location	Located off the A142 and East Fen Drove. Situated on the eastern edge of Soham (560330, 273714).
	Area	10.8 (ha)
	Current land use	Greenfield
	Proposed land use	Employment
Sources of flood risk	**Existing drainage features**	• The Soham Lode flows in an east to west direction 275m to the south of the site. • Unnamed ditch crossing the centre of the site from north east to south west. • The site is located within the Middle Fen and Mere IDB (part of the Ely Group of Drainage Boards) and is within a dense network of IDB managed watercourses/ channels.
	Fluvial	**Proportion of site at risk**

FZ3b	FZ3a	FZ2	FZ1
0%	17%	19%	81%

The fluvial flood risk to the site is associated with the Soham Lode located to the south of the site. FZ3a extents cover much of the northern most part of the site with a slight increase in extents in FZ2. However, Flood Zones represent the undefended scenario and therefore as the Soham Lode in this location has flood defences in the form of embankments, the actual flood risk is likely to be less than that shown in the Flood Zones.

Surface Water — **Proportion of site at risk (RoFfSW)**

30-year	100-year	1,000-year
<1%	1%	8%

The RoFfSW shows there are isolated pockets of ponding water on the site in the 30-year event. Extents increase in the 100-year event but remain largely confined to the ditch than runs across the site. Extents increase further in the 1,000-year event, particularly adjacent to the ditch but additional pockets of ponding water also develop.

Reservoir	The site is not shown to be at risk of reservoir flooding.
Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.

Flood risk management infrastructure — **Defences**

Defence Type	Standard of Protection	Condition
Embankment	100-years	3 (Worst condition 4)

This site is defended from the Soham Lode by embankments that are situated along the banks of the watercourse.

Residual risk	In the event of a breach or overtopping of the embankments, flooding from the Soham Lode may inundate the site.
Emergency planning — **Flood warning**	The site is not covered by the Environment Agency's Flood Warning Service.
Access and egress	Dry access and egress for the site is possible via the A142 and East Fen Drove in the fluvial and surface water events.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.E1			
	Location	Located off the A142 and East Fen Drove. Situated on the eastern edge of Soham (560330, 273714).			
	Area	10.8 (ha)			
	Current land use	Greenfield			
	Proposed land use	Employment			
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**	**Central**	**Higher Central**	**Upper End**
		Anglian	25%	35%	65%
	% of site at risk		21%	21%	22%
	Implications for the site	Mapping shows that flood extents in all climate change scenarios represent only a slight increase when compared to the 100-year defended extent, with the greatest increase between the 100-year baseline and the Central allowance extents. Climate change scenario extents inundate the much of the northern most part of the site. As the site is affected by surface water flooding from the 30-year event. Climate change may also increase the extent, depth and frequency of surface water flooding.			

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Mudstone, sandstone and limestone
		  ○ Superficial – Sand and gravel
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.			

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.E1
	Location	Located off the A142 and East Fen Drove. Situated on the eastern edge of Soham (560330, 273714).
	Area	10.8 (ha)
	Current land use	Greenfield
	Proposed land use	Employment

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the Soham Lode to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Developers should consider the flood risk posed by the ditch that flows across the site.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Development in the near vicinity of a watercourse within an IBD area will require the consent of the relevant IDB.
		• The developer should contact the relevant IDB to determine the risk of flooding from IDB watercourses to the site.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.E1
	Location	Located off the A142 and East Fen Drove. Situated on the eastern edge of Soham (560330, 273714).
	Area	10.8 (ha)
	Current land use	Greenfield
	Proposed land use	Employment
Surface Water		The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	SOH.H1
	Location	Located off The Causeway and behind Brook Street. Situated on the south-eastern edge of Soham (560107, 272954).
	Area	22.8 (ha)
	Current land use	Greenfield
	Proposed land use	Housing
Sources of flood risk	**Existing drainage features**	• The Soham Lode flows in an east to west direction immediately along the site's eastern and northern boundary. • Unnamed Ditches are located within the south-eastern corner of the site. • An unnamed drain (tributary of Soham Lode) flows along the western site boundary in the western most corner of the site. • The site is largely located within the Middle Fen and Mere IDB (part of the Ely Group of Drainage Boards) and to the north and east of the site a dense network of IDB managed watercourses/ channels are present.
	Fluvial	**Proportion of site at risk**

FZ3b	FZ3a	FZ2	FZ1
56%	69%	70%	30%

The fluvial flood risk to the site is associated predominantly with the Soham Lode that flows immediately along the site boundary. The majority of the north, east and south of the site is shown to be within FZ3b. Extents increase the most in the north of the site in FZ3a with additional minor increases in the FZ2 extent. However, Flood Zones represent the undefended scenario and as the Soham Lode in this location has flood defences in the form of embankments, the actual flood risk is likely to be less than that shown in the Flood Zones.

Surface Water — **Proportion of site at risk (RoFfSW)**

30-year	100-year	1,000-year
<1%	1%	9%

The RoFfSW shows there are isolated pockets of ponding water developing across the site in the 100-year event, with the extents of these increasing in the 1000-year event.

	Reservoir	The site is not shown to be at risk of reservoir flooding.
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.

Flood risk management infrastructure — **Defences**

Defence Type	Standard of Protection	Condition
Embankment	100-years	3 (Worst condition 4)

This site is defended from the Soham Lode by embankments that are situated along the banks of the watercourse.

	Residual risk	In the event of a breach or overtopping of the embankments, flooding from the Soham Lode may inundate the site.
	Flood warning	The site is not covered by the Environment Agency's Flood Warning Service.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H1			
	Location	Located off The Causeway and behind Brook Street. Situated on the south-eastern edge of Soham (560107, 272954).			
	Area	22.8 (ha)			
	Current land use	Greenfield			
	Proposed land use	Housing			
Emergency planning	**Access and egress**	Dry access and egress for the site is possible via The Causeway in the fluvial events. Dry access and egress for the site is possible via The Causeway up to and including the 100-year event, but is lost in the 1,000-year event.			
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**	**Central**	**Higher Central**	**Upper End**
		Anglian	25%	35%	65%
	% of site at risk		69%	69%	69%
	Implications for the site	Mapping shows that flood extents in all climate change scenarios represent only a slight increase when compared to the 100-year defended extent. The majority of the site is shown to be inundated in all three climate change scenarios. As the site is affected by surface water flooding from the 100-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Chalk
		  ○ Superficial – Sand and gravel
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.			

	Groundwater Source Protection Zone	The site is not located within a Groundwater Source Protection Zone.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H1
	Location	Located off The Causeway and behind Brook Street. Situated on the south-eastern edge of Soham (560107, 272954).
	Area	22.8 (ha)
	Current land use	Greenfield
	Proposed land use	Housing
	Historic Landfill Site	There is no historic landfill within the site boundary.
NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H1
	Location	Located off The Causeway and behind Brook Street. Situated on the south-eastern edge of Soham (560107, 272954).
	Area	22.8 (ha)
	Current land use	Greenfield
	Proposed land use	Housing

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the Soham Lode to ensure flows are not exacerbated downstream within the catchment.
		• Developers should consider and confirm flood risk to the site from the unnamed ditches in the south-east corner of the site and the unnamed drain in the western corner of the site.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Development in the near vicinity of a watercourse within an IDB area will require the consent of the relevant IDB.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water	The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H1
	Location	Located off The Causeway and behind Brook Street. Situated on the south-eastern edge of Soham (560107, 272954).
	Area	22.8 (ha)
	Current land use	Greenfield
	Proposed land use	Housing
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	SOH.H5
	Location	Located off the A142. Situated on the south-eastern edge of Soham (560665, 272326).
	Area	7.0 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Housing
Sources of flood risk	**Existing drainage features**	The Soham Lode flows in an east to west direction 275m to the north of the site.
	Fluvial	**Proportion of site at risk**

FZ3b	FZ3a	FZ2	FZ1
<1%	15%	16%	84%

The fluvial flood risk to the site is associated with the Soham Lode located to the north of the site. A small area along the northern boundary is within FZ3b. FZ3a meanwhile encompasses much of the north-west corner of the site with a slight increase in extent in FZ2. However, Flood Zones represent the undefended scenario, and as the Soham Lode in this location has flood defences in the form of embankments, the actual flood risk is likely to be less than that shown in the Flood Zones.

Surface Water — **Proportion of site at risk (RoFfSW)**

30-year	100-year	1,000-year
0%	<1%	11%

The RoFfSW shows there is an isolated pocket of ponding water in the south of the site in the 100-year event. Greater ponding extents in the south of the site and in the north-west corner are shown in the 1,000-year event.

	Reservoir	The site is not shown to be at risk of reservoir flooding.
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.

Flood risk management infrastructure — **Defences**

Defence Type	Standard of Protection	Condition
Embankment	100-years	3 (Worst condition 4)

This site is defended from the Soham Lode by embankments that are situated along the banks of the watercourse.

Residual risk	In the event of a breach or overtopping of the embankments, flooding from the Soham Lode may inundate the site.
Emergency planning — **Flood warning**	The site is not covered by the Environment Agency's Flood Warning Service.
Access and egress	Dry access and egress for the site is possible via A142 in the fluvial and surface water events.

Climate Change — **Climate change allowances for '2080s'**

River Basin District	Central	Higher Central	Upper End
Anglian	25%	35%	65%

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H5			
	Location	Located off the A142. Situated on the south-eastern edge of Soham (560665, 272326).			
	Area	7.0 (ha)			
	Current land use	Predominantly Greenfield			
	Proposed land use	Housing			
	% of site at risk		16%	16%	16%
	Implications for the site	Mapping shows that flood extents in all climate change scenarios represent only a slight increase when compared to the 100-year defended extent. Climate change scenario extents inundate the north-west corner of the site. As the site is affected by surface water flooding from the 100-year event. Climate change may also increase the extent, depth and frequency of surface water flooding.			

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Chalk
		  ○ Superficial – Sand, gravel and in some parts of the site no superficial deposits.
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.			

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H5
	Location	Located off the A142. Situated on the south-eastern edge of Soham (560665, 272326).
	Area	7.0 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Housing

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the Soham Lode to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water	The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping	Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H5
	Location	Located off the A142. Situated on the south-eastern edge of Soham (560665, 272326).
	Area	7.0 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Housing
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H6			
	Location	Located off the A142 and Greenhills. Situated on the eastern edge of Soham (560607, 272585).			
	Area	4.5 (ha)			
	Current land use	Predominantly Greenfield			
	Proposed land use	Housing			
Sources of flood risk	**Existing drainage features**	• The Soham Lode flows in an eastern to west direction 40m to the north of the site. • Unnamed ditch that flows immediately along the site's northern boundary. • The site is partially located within the Middle Fen and Mere IDB (part of the Ely Group of Drainage Boards) and to the north of the site a dense network of IDB managed watercourses/ channels are present.			
	Fluvial	**Proportion of site at risk**			
		FZ3b	**FZ3a**	**FZ2**	**FZ1**
		38%	59%	62%	38%
		The fluvial flood risk to the site is associated with the Soham Lode located to the north of the site. Much of the north, west and south west of the site is located in FZ3b. Extents increase across the centre of the site and north east in FZ3a with additional minor increases in FZ2. However, Flood Zones represent the undefended scenario and as the Soham Lode in this location has flood defences in the form of embankments, the actual flood risk is likely to be less than that shown in the Flood Zones.			
	Surface Water	**Proportion of site at risk (RoFfSW)**			
		30-year	**100-year**	**1,000-year**	
		0%	0%	5%	
		The RoFfSW shows that ponding surface water develops in the south west of the site and along the site's southern boundary in the 1,000-year event.			
	Reservoir	The site is not shown to be at risk of reservoir flooding.			
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.			
Flood risk management infrastructure	**Defences**	**Defence Type**	**Standard of Protection**	**Condition**	
		Embankment	100-years	3 (Worst condition 4)	
		This site is defended from the Soham Lode by embankments that are situated along the banks of the watercourse.			
	Residual risk	In the event of a breach or overtopping of the embankments, flooding from the Soham Lode may inundate the site.			
	Flood warning	The site is not covered by the Environment Agency's Flood Warning Service.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H6			
	Location	Located off the A142 and Greenhills. Situated on the eastern edge of Soham (560607, 272585).			
	Area	4.5 (ha)			
	Current land use	Predominantly Greenfield			
	Proposed land use	Housing			
Emergency planning	**Access and egress**	Dry access and egress for the site is possible via the A142 in the fluvial and surface water flood events. Dry access and egress via Greenhills for the site is possible in the surface water flood events; however, access is within the extent of FZ3b.			
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**	**Central**	**Higher Central**	**Upper End**
		Anglian	25%	35%	65%
	% of site at risk		62%	63%	64%
	Implications for the site	Mapping shows that flood extents in all climate change scenarios represent only a slight increase when compared to the 100-year defended extent. Climate change scenario extents inundate much of the north, west and south west of the site. The site is affected by surface water flooding from the 1,000-year event. Climate change may also increase the extent, depth and frequency of surface water flooding, if the upper end allowances are greater than the 1,000-year event.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H6
	Location	Located off the A142 and Greenhills. Situated on the eastern edge of Soham (560607, 272585).
	Area	4.5 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Housing

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Chalk
		  ○ Superficial – Sand and gravel
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable Infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H6
	Location	Located off the A142 and Greenhills. Situated on the eastern edge of Soham (560607, 272585).
	Area	4.5 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Housing

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the Soham Lode to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Developers should consider the flood risk posed by the unnamed ditch located along the northern site boundary, which may need to be confirmed by detailed hydraulic modelling.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Development in the near vicinity of a watercourse within an IBD area will require the consent of the relevant IDB.
		• The developer should contact the relevant IDB to determine the risk of flooding from IDB watercourses to the site.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.H6
	Location	Located off the A142 and Greenhills. Situated on the eastern edge of Soham (560607, 272585).
	Area	4.5 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Housing
Surface Water		The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	SOH.M1
	Location	Located off the A142, East Fen Drove and Kents Lane. Situated on the eastern edge of Soham (559883, 273658).
	Area	33.4 (ha)
	Current land use	Greenfield
	Proposed land use	Mixed Use
Sources of flood risk	**Existing drainage features**	• The Soham Lode flows in an east to west direction 110m to the south of the site. • Several unnamed ditches either cross the site or run along the site boundaries. • The site is largely located within the Middle Fen and Mere IDB (part of the Ely Group of Drainage Boards) and is within a dense network of IDB managed watercourses/channels.
	Fluvial	**Proportion of site at risk**

FZ3b	FZ3a	FZ2	FZ1
0%	10%	13%	87%

The fluvial flood risk to the site is associated with the Soham Lode located to the south of the site. When the watercourse gets out of bank, an overland flow route shown by FZ3a extends northwards across the centre of the site. It follows the topography, entering along the southern boundary and exiting along the northern boundary. The extents of this overland flow route increase slightly in FZ2. However, Flood Zones represent the undefended scenario and as the Soham Lode in this location has flood defences in the form of embankments, the actual flood risk is likely to be less than that shown in the Flood Zones.

Surface Water

Proportion of site at risk (RoFfSW)

30-year	100-year	1,000-year
1%	2%	9%

The RoFfSW shows there are isolated pockets of ponding water on the site in the 30-year event. Extents increase in the 100-year event but remain largely confined to the ditches than run across the site. Extents increase further in the 1,000-year with the greatest coverage being areas in the north and east of the site.

	Reservoir	The site is not shown to be at risk of reservoir flooding.
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.

Flood risk management infrastructure

Defences

Defence Type	Standard of Protection	Condition
Embankment	100-years	3 (Worst condition 4)

This site is defended from the Soham Lode by embankments that are situated along the banks of the watercourse.

	Residual risk	In the event of a breach or overtopping of the embankments, flooding from the Soham Lode may inundate the site.
	Flood warning	The site is not covered by the Environment Agency's Flood Warning Service.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.M1			
	Location	Located off the A142, East Fen Drove and Kents Lane. Situated on the eastern edge of Soham (559883, 273658).			
	Area	33.4 (ha)			
	Current land use	Greenfield			
	Proposed land use	Mixed Use			
Emergency planning	**Access and egress**	Dry access and egress for the site is possible via the A142, East Fen Drove and Kents Lane in the fluvial flood events. Dry access and egress for the site is possible via the A142, East Fen Drove in the surface water flood events. Dry access and egress is possible via Kents Lane up to and including the 100-year surface water event but is lost in the 1,000-year event.			
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**	**Central**	**Higher Central**	**Upper End**
		Anglian	25%	35%	65%
	% of site at risk		14%	15%	15%
	Implications for the site	Mapping shows that flood extents in all climate change scenarios represent only a slight increase when compared to the 100-year defended extent. Climate change scenario extents form an overland flow route that follows the topography across middle of the site. As the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.M1
	Location	Located off the A142, East Fen Drove and Kents Lane. Situated on the eastern edge of Soham (559883, 273658).
	Area	33.4 (ha)
	Current land use	Greenfield
	Proposed land use	Mixed Use

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Mudstone, sandstone and limestone, with some chalk in the south
		  ○ Superficial – Sand and gravel
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.M1
	Location	Located off the A142, East Fen Drove and Kents Lane. Situated on the eastern edge of Soham (559883, 273658).
	Area	33.4 (ha)
	Current land use	Greenfield
	Proposed land use	Mixed Use

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the Soham Lode to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Developers should consider the flood risk posed by the numerous ditches that flow across the site and along the site boundaries, which may need to be confirmed by detailed hydraulic modelling.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Development in the near vicinity of a watercourse within an IBD area will require the consent of the relevant IDB.
		• The developer should contact the relevant IDB to determine the risk of flooding from IDB watercourses to the site
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information		
Flood Zones		Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.M1
	Location	Located off the A142, East Fen Drove and Kents Lane. Situated on the eastern edge of Soham (559883, 273658).
	Area	33.4 (ha)
	Current land use	Greenfield
	Proposed land use	Mixed Use
Climate change		The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water		The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

Site details	**Site Code**	SOH.M3
	Location	Located off Mere Side and Spencer Drove. Situated on the western edge of Soham (558773, 273349).
	Area	4.1 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Mixed Use
Sources of flood risk	**Existing drainage features**	• The Soham Lode flows in a generally south to north direction immediately along the site's southern boundary and within 20m of the site's western boundary. • Unnamed ditches / water features located within the site.
	Fluvial	**Proportion of site at risk**

FZ3b	FZ3a	FZ2	FZ1
1%	1%	3%	97%

The fluvial flood risk to the site is associated with the Soham Lode located to the south and west of the site. Much of the north, west and south west of the site is located in FZ3b. Extents increase across the centre of the site and north east in FZ3a with additional minor increases in FZ2. However, Flood Zones represent the undefended scenario and as the Soham Lode in this location has flood defences in the form of embankments, the actual flood risk is likely to be less than that shown in the Flood Zones.

Surface Water — **Proportion of site at risk (RoFfSW)**

30-year	100-year	1,000-year
2%	9%	27%

The RoFfSW shows that pockets of ponding surface water develop across the site in the 30-year event. The extents of which grow in the 100-year event. In the 1,000-year event, overland flow routes propagate from the east of the site and begin to pool across the centre of the site.

	Reservoir	The site is not shown to be at risk of reservoir flooding.
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.

Flood risk management infrastructure — **Defences**

Defence Type	Standard of Protection	Condition
Embankments	10-years	3 (Worst condition 3)

This site is defended from the Soham Lode by embankments that are situated along the banks of the watercourse.

	Residual risk	In the event of a breach or overtopping of the embankments, flooding from the Soham Lode may inundate the site.
Emergency planning	**Flood warning**	The site is not covered by the Environment Agency's Flood Warning Service.
	Access and egress	Dry access and egress for the site is possible via Mere Side and Spencer Drove in fluvial events. Dry access and egress is lost for Spencer Drove in the 100-year event and for Mere Side in the 1000-year event.

		River Basin District	**Central**	**Higher Central**	**Upper End**

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.M3			
	Location	Located off Mere Side and Spencer Drove. Situated on the western edge of Soham (558773, 273349).			
	Area	4.1 (ha)			
	Current land use	Predominantly Greenfield			
	Proposed land use	Mixed Use			
Climate Change	**Climate change allowances for '2080s'**	Anglian	25%	35%	65%
	% of site at risk		4%	6%	11%
	Implications for the site	Mapping shows that flood extents in all climate change scenarios represent only a slight increase when compared to the 100-year defended extent. Climate change scenario extents inundate much of the north, west and south west of the site. As the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	**East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables**	

Site details	**Site Code**	SOH.M3
	Location	Located off Mere Side and Spencer Drove. Situated on the western edge of Soham (558773, 273349).
	Area	4.1 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Mixed Use

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Mudstone, siltstone and Limestone
		  ○ Superficial – Sand and gravel
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a and FZ3b. • More Vulnerable and Less Vulnerable infrastructure should not be permitted within FZ3b. • Essential Infrastructure in Flood Zone 3b will require the Exception Test.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.M3
	Location	Located off Mere Side and Spencer Drove. Situated on the western edge of Soham (558773, 273349).
	Area	4.1 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Mixed Use

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the Soham Lode to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Developers should consider the flood risk posed by the unnamed ditches / water features located within the site boundary. This may require detailed hydraulic modelling at site-specific assessment stage.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information	
Flood Zones	Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.
Climate change	The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water	The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	SOH.M3
	Location	Located off Mere Side and Spencer Drove. Situated on the western edge of Soham (558773, 273349).
	Area	4.1 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Mixed Use
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.

Mapping

East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables

<table>
<tr><td rowspan="5">Site details</td><td>Site Code</td><td colspan="4">WFD.M1</td></tr>
<tr><td>Location</td><td colspan="4">Located off A142, Mainstreet, Witchford Road, and Broadway. Located to the east of Witchford village centre.
The site includes two geographically isolated plots; a larger eastern plot (551136, 279017), and a smaller western plot (550649, 278962), separated by an unnamed watercourse that flows between them.</td></tr>
<tr><td>Area</td><td colspan="4">35.5 (ha)</td></tr>
<tr><td>Current land use</td><td colspan="4">Predominantly Greenfield</td></tr>
<tr><td>Proposed land use</td><td colspan="4">Mixed Use</td></tr>
<tr><td rowspan="3">Sources of flood risk</td><td>Existing drainage features</td><td colspan="4">• Tidal River / Hundred Foot Drain – 6.0km to the north west of the site
• River Delph – 6.9km to the north west of the site
• Old Bedford River – 7.0km to the north west of the site
• Unnamed watercourse / ditch that flows between the sites western and eastern plots flow in a north to south direction to its confluence with the Grunty Fen Catchwater 500m to the south of the site.
• Catchwater Drain that flows 275m to the north west of the site.
• Unnamed ditches / water features located within and along the boundaries of the western plot of the site.
• The site is largely located within the Littleport and Downham IDB (part of the Ely Group of Drainage Boards) and to the north west of the site a dense network of IDB managed watercourses/channels are present.</td></tr>
<tr><td>Fluvial / Tidal</td><td colspan="4">Proportion of site at risk
<table><tr><th>FZ3b</th><th>FZ3a</th><th>FZ2</th><th>FZ1</th></tr><tr><td>0%</td><td>11%</td><td>12%</td><td>88%</td></tr></table>The flood risk to the site is associated with the Tidal River / Hundred Foot Drain that flows over 6km from the site. Although the smaller western plot is completely outside the Flood Zones, the larger eastern plot is within the Flood Zone extents. The eastern plot is affected along its western boundary edge with the greatest FZ3a extents in the north-west corner of the site. The extents increase slightly in FZ2. However, Flood Zones represent the undefended scenario and as the Main Rivers in this location have flood defences in the form of embankments, the actual flood risk is likely to be less than that shown in the Flood Zones. The flood risk from the unnamed watercourse / ditch that flows between the site's two plots may pose flood risk but are not shown in the EA's Flood Zones.</td></tr>
<tr><td>Surface Water</td><td colspan="4">Proportion of site at risk (RoFfSW)
<table><tr><th>30-year</th><th>100-year</th><th>1,000-year</th></tr><tr><td>1%</td><td>2%</td><td>12%</td></tr></table>The RoFfSW shows that isolated pockets of ponding surface water develop across the site in the 30-year event with the highest concentration in the north of the eastern plot. The extents grow in the 100-year event particularly in the north and south of the eastern plot. In the 1,000-year event overland flow routes develop in the north and south of the eastern plot that follow the topography towards the unnamed watercourse / ditch that separates the two site plots.</td></tr>
</table>

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	WFD.M1			
	Location	Located off A142, Mainstreet, Witchford Road, and Broadway. Located to the east of Witchford village centre. The site includes two geographically isolated plots; a larger eastern plot (551136, 279017), and a smaller western plot (550649, 278962), separated by an unnamed watercourse that flows between them.			
	Area	35.5 (ha)			
	Current land use	Predominantly Greenfield			
	Proposed land use	Mixed Use			
	Reservoir	The site is not shown to be at risk of reservoir flooding.			
	Flood history	The Environment Agency's historic flood map does not show the site as having flooded in the past.			
Flood risk management infrastructure	**Defences**	**Defence Type**	**Standard of Protection**	**Condition**	
		Embankments	100-years	3 (Worst condition 4)	
		This site is defended from the Tidal River / Hundred Foot Drain by embankments that are situated 6km to the north west of the site running along the eastern bank of the Tidal River / 100ft Drain.			
	Residual risk	In the event of a breach or overtopping of the embankments, flooding from the Tidal River / Hundred Foot Drain may inundate the site.			
Emergency planning	**Flood warning**	The site is not covered by the Environment Agency's Flood Warning Service.			
	Access and egress	Currently OS mapping shows no formal roads are available for access and egress for the smaller western plot of the site. For the eastern plot of the site, dry access and egress is available for the A142, Witchford Road and Mainstreet in all fluvial / tidal return periods. Access and egress via Broadway is located within FZ3a. Dry access and egress in surface water flood events is lost onto Witchford Road and Mainstreet in the 100-year event whilst in the 1,000-year event it is lost for the A142 and Broadway. Furthermore, there is extensive flooding of the surrounding road network in the 1,000-year event.			
Climate Change	**Climate change allowances for '2080s'**	**River Basin District**	**Central**	**Higher Central**	**Upper End**
		Anglian	25%	35%	65%
	% of site at risk		0%	0%	0%
	Implications for the site	Mapping shows there are no extents on site in the climate change scenarios as these take defences into account. Residual risk discussed above may have an impact at the site in the climate change event. As the site is affected by surface water flooding from the 30-year event, climate change may also increase the extent, depth and frequency of surface water flooding.			

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	WFD.M1
	Location	Located off A142, Mainstreet, Witchford Road, and Broadway. Located to the east of Witchford village centre. The site includes two geographically isolated plots; a larger eastern plot (551136, 279017), and a smaller western plot (550649, 278962), separated by an unnamed watercourse that flows between them.
	Area	35.5 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Mixed Use

Requirements for drainage control and impact mitigation	**Broad scale assessment of possible SuDS**	• Geology at the site consists of:
		  ○ Bedrock – Mudstone, siltstone and sandstone
		  ○ Superficial – Pete (western plot only), no deposits underlie eastern plot.
		• The site is not located within a Groundwater Source Protection Zone.
		• Source control techniques are likely to be suitable for this site. Mapping suggest groundwater flooding may be an issue at the site as such infiltration techniques may not be suitable.
		• Infiltration techniques are likely to be suitable, providing the site is not at medium to high risk from groundwater flooding.
		• Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues.
		• Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site has contamination issues, or at risk from groundwater, then a liner will be required.
		• All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows.
		• The site is not designated by the Environment Agency as previously being a landfill site.

NPPF and planning implications	**Exception Test requirements**	The Sequential Test will need to be passed before the Exception Test is applied. The Exception Test will need to be applied if: • More Vulnerable and Essential Infrastructure development is located in FZ3a and for Highly Vulnerable development located in FZ2. • Highly Vulnerable infrastructure should not be permitted within FZ3a.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	WFD.M1
	Location	Located off A142, Mainstreet, Witchford Road, and Broadway. Located to the east of Witchford village centre. The site includes two geographically isolated plots; a larger eastern plot (551136, 279017), and a smaller western plot (550649, 278962), separated by an unnamed watercourse that flows between them.
	Area	35.5 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Mixed Use

	Requirements and guidance for site-specific Flood Risk Assessment	• At the planning application stage, a site-specific Flood Risk Assessment will be required if any development is located within Flood Zones 2 or 3 or is greater than one hectare. Other sources of flooding should also be considered.
		• Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.
		• Resilience measures will be required if buildings are situated in the flood risk area.
		• Onsite attenuation schemes would need to be tested against the hydrographs of the watercourse(s) discharged into to ensure flows are not exacerbated downstream within the catchment.
		• New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff.
		• Developers should consider the flood risk posed by the unnamed ditches / water features located within the site boundary, which may need to be confirmed by detailed hydraulic modelling.
		• Assessment for runoff should include allowance for climate change effects.
		• Safe access and egress will need to be demonstrated.
		• New development must seek opportunities to reduce overall level of flood risk at the site, for example by:
		  ○ Reducing volume and rate of runoff
		  ○ Relocating development to zones with lower flood risk
		  ○ Creating space for flooding.
		• Development in the near vicinity of a watercourse within an IBD area will require the consent of the relevant IDB.
		• The developer should contact the relevant IDB to determine the risk of flooding from IDB watercourses to the site.
		• Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Mapping Information		
Flood Zones		Flood Zones 2 and 3a are based on the Environment Agency's Flood Zone 2 and 3. The SFRA has identified Flood Zone 3b as land which would flood with an annual probability of 1 in 20 years. Flood Zone 3b has been derived from Environment Agency's detailed hydraulic models.

Mapping	East Cambridgeshire District Strategic Flood Risk Assessment Level 2 Detailed Site Summary Tables	

Site details	**Site Code**	WFD.M1
	Location	Located off A142, Mainstreet, Witchford Road, and Broadway. Located to the east of Witchford village centre. The site includes two geographically isolated plots; a larger eastern plot (551136, 279017), and a smaller western plot (550649, 278962), separated by an unnamed watercourse that flows between them.
	Area	35.5 (ha)
	Current land use	Predominantly Greenfield
	Proposed land use	Mixed Use
Climate change		The climate change allowances for the '2080s' epoch were modelled for the Level 1 SFRA using the Environment Agency's detailed hydraulic models (defended scenario) for the purposes of the SFRA. It should be noted that these extents will differ from the Flood Zones if compared, given that the Flood Zones consider the undefended scenario and do not take into account any defences.
Surface Water		The Risk of Flooding from Surface Water has been used to define areas at risk from surface water flooding.
Depth, velocity and hazard mapping		Depth and velocity mapping for the 1 in 100-year event (defended) have been taken from the Environment Agency's detailed hydraulic models.
Reservoir		The Environment Agency's online 'Long term flood risk information, Flood risk from reservoirs, Extent of flooding' viewer was used to define areas at risk from reservoirs.