



Appendix 11-P4B-2: Part 4b Summary of Non Significant Effects

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Appendix 11-P4B-2: Part 4b Summary of Non Significant Effects

Table 1: Preliminary summary of likely non-significant effects

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
Designated Heritage Assets within the Preliminary Order Limits					
Two designated heritage assets overlap with the Preliminary Order Limits for Part 4b of the Proposed Development. These will be assessed at ES stage.					
Designated Heritage Assets within the 500 m Study Area for Part 4b of the Proposed Development					
There are 65 designated heritage assets located within the 500 m study area for Part 4b of the Proposed Development. These will be assessed at ES stage.					
Non-designated Heritage Assets within the Preliminary Order Limits					
Fornhill to Stony Stratford Turnpike (MBC34425)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset crosses the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
Watling Street (Road 1E) (MBC5588)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Medium	Small	Minor adverse (Not significant)	This asset crosses the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Hockcliffe to Stony Stratford Turnpike / Holyhead Road (MMK5878)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset crosses the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Viatores Route 173A-D (MBC6022)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological	Medium	Small	Minor adverse (Not significant)	This asset is recorded as a point in the Central Bedfordshire HER, however it forms a linear route with other points outside of the Part 4b Preliminary Order. It will experience direct partial loss as a

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	remains affecting its heritage value.				result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Medieval/Post Medieval Settlement, Sheep Lane (MBD8767)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Medium	Small	Minor adverse (Not significant)	This asset is partially within the Part 4b Preliminary Order. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Turnpike Road, Hockliffe to Leighton Buzzard (MBD10793)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset crosses the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
Cropmarks and Soilmarks, South of Potsgrove (MBD1822)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Earthworks, Near Fourne Hill Farm (MBD11645)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Medium	Minor adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Possible Ridge Earthwork (MBD11646)	Intrusive direct impact from construction activities on this asset resulting in permanent partial	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	loss of archaeological remains affecting its heritage value.				result in a negligible adverse effect which is not significant.
Branch Railway Line (LNWR), Linslade (Leighton Buzzard) to Dunstable (MBD2436)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Deer Park, Battlesden (MBD1370)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
Rectangular Earthwork (MBD11651)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Medium	Minor adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Ridge and Furrow, South of Leighton Road (MBD25338)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Medium	Minor adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Ridge and Furrow, West and South of Grange Farm (MBD26295)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological	Low	Medium	Minor adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	remains affecting its heritage value.				result in a minor adverse effect which is not significant.
Possible Archaeological Features, South of Leighton Road (MBD25339)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Medium	Minor adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Former Ridge and Furrow, South of Hawthorns Farm (MBD26144)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Rectangular Earthworks & Building (site of) (MBD11650)	Intrusive direct impact from construction activities on this asset	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	resulting in permanent partial loss of archaeological remains affecting its heritage value.				direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Medieval Earthworks, Hill Farm (MBD1864)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Hockliffe Grange Grounds (MBD7012) (non-designated park/garden)	Intrusive direct impacts from construction activities on these assets resulting in permanent partial loss of historic fabric, features or remains	Low	Small	Negligible adverse (Not significant)	Part 4b of the Proposed Development is located partially within the Hockliffe Grange Grounds (MBD7012) and has the potential to result in a partial loss of this historic garden. This would slightly change the physical form of the asset and slightly alter the ability to appreciate and

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	affecting heritage value				understand it. This would result in a negligible adverse effect which is not significant.
Former Ridge and Furrow, East of Grange Farm (MBD26294)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Ridge and Furrow, South of Stanbridge Village (former Stanbridge parish number) (MBD7769)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Linear Earthworks (MBD11654)	Intrusive direct impact from construction activities on this asset	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	resulting in permanent partial loss of archaeological remains affecting its heritage value.				direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Ridge and Furrow, North-West of Hill Farm adj to Woodland Copse (MBD26300)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Springs (MBD11683)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	remains affecting its heritage value.				
Ridge and Furrow, West of Hill Farm (MBD26301)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Medium	Minor adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Former Ridge and Furrow, Trinity Hall Farm (MBD24425)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Ridge and Furrow, Lower End, Totternhoe (former Totternhoe	Intrusive direct impact from construction activities on this asset	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
Parish Number) (MBD8553)	resulting in permanent partial loss of archaeological remains affecting its heritage value.				direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Ridge and Furrow, South of Castle Hill, Totternhoe (MBD26152)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Drainage System With Sluices (MBD11509)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Medium	Minor adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
Linear Earthworks, Dunstable Downs (MBD5114)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Group of Quarry Pits North West of the Chilterns Gateway Centre (MBD24463)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Medium	Minor adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Quarry Pits, Dunstable Downs (MBD24405)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	remains affecting its heritage value.				result in a negligible adverse effect which is not significant.
Suggested British Trackway, Kensworth-Totternhoe (MBD276)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset crosses the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Slough Wood, Ancient Woodland (MBD25519)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Lynchet, Codlings Bank (MBD15187)	Intrusive direct impact from construction activities on this asset resulting in	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	permanent partial loss of archaeological remains affecting its heritage value.				the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Lynchets, South West of Church End (MBD13579)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Windmill, Church End (MBD13582)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
Church End Medieval Settlement (MBD16912)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Quarry Earthworks, East of Beech Road (MBD24534)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Lynchets and Trackways, Blows Down (MBD153)	Intrusive direct impact from construction activities on this asset resulting in	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	permanent partial loss of archaeological remains affecting its heritage value.				the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Agger, Watling Street, South of Lodge Farm (MBD5146)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Medium	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the Proposed Development, resulting in a negligible adverse effect which is not significant.
Quarry Pits, Trackways and Linear Earthworks in Badgerdell, Bush and Round Woods (MBD24522)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
Icknield Way (MBD353)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Medium	Small	Minor adverse (Not significant)	This asset crosses the Part 4b Preliminary Order Limits in two places. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Possible Line of Roman Road, (Viatores no. 213) (MBD2801)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Medium	Negligible	Negligible adverse (Not significant)	This asset crosses the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Ridge and Furrow, South of Bridgewater Close, Totternhoe (MBD26151)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological	Low	Negligible	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience direct partial loss as a result of the construction activities associated within Part 4b of the

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	remains affecting its heritage value.				Proposed Development, resulting in a negligible adverse effect which is not significant.
Watling Street, (A5 Kensworth to Potsgrove) (MBD5508)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Medium	Small	Minor adverse (Not significant)	This asset crosses the Part 4b Preliminary Order Limits in two places. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Thiodweg (Theedway or Ede Way) (MBD10843)	Intrusive direct impact from construction activities on this asset resulting in permanent partial loss of archaeological remains affecting its heritage value.	Medium	Small	Minor adverse (Not significant)	This asset crosses the Part 4b Preliminary Order Limits in two places. It will experience direct partial loss as a result of the pipeline corridor. This would result in a minor adverse effect which is not significant.
Lynchets (MBD1474)	Intrusive direct impact from construction activities on this asset	Low	Small	Negligible adverse (Not significant)	This asset is partially located within the Part 4b Preliminary Order Limits. It will experience

Heritage Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect (with embedded design & control)	Rationale
	resulting in permanent partial loss of archaeological remains affecting its heritage value.				direct partial loss as a result of the pipeline corridor. This would result in a negligible adverse effect which is not significant.
Non-designated Heritage Assets within the 500 m Study Area					
There are 350 non-designated heritage assets located within the 500 m study area for Part 4b of the Proposed Development. These will be assessed at ES stage.					