

# Appendix A River Condition Indicators

# **River Condition Assessment Report**

**Manor Farm Cables: Laleham Substation Corridor** 

**Juniper Energy Limited** 

SLR Project No.: 402.065673.00001

11 September 2025



#### **A.1 River Condition Indicators**

Table A- 1: Indicators derived from desk study and MoRPh field survey that contribute to assessing the river type and function

Source	Indicator Code	Indicator Name
Desk study	A1	Braiding index (BI)
Desk study	A2	Sinuosity index (SI)
Desk study	A3	Anabranching index (AI)
Desk study	A4	Level of confinement <sup>8</sup>
Desk study	A5	Valley gradient
Field survey	A6	Bedrock reaches
Field survey	A7	Coarsest bed material size class
Field survey	A8	Average alluvial bed material size class

Table A- 2: River condition indicators extracted from MoRPhMoRPh field surveys

Location of the Module	Indicator Code	Indicator Name	Positive/ Negative
Bank	B1	Bank top vegetation structure	Positive
Тор	B2	Bank top tree feature richness	Positive
	В3	Bank top water-related features	Positive
	B4	Bank top NNIPS <sup>9</sup>	Negative
	B5	Bank top managed ground cover	Negative
Bank	C1	Bank face riparian vegetation structure	Positive
Face	C2	Bank face tree feature richness	Positive
	C3	Bank face natural bank profile extent	Positive
	C4	Bank face natural bank profile richness	Positive
	C5	Bank face natural bank material richness	Positive
	C6	Bank face bare sediment extent	Positive
	C7	Bank face artificial bank profile extent	Negative
	C8	Bank face reinforcement material severity	Negative
	C9	Bank face reinforcement extent	Negative
	C10	Bank face NNIPS	Negative

<sup>&</sup>lt;sup>8</sup> The level of confinement has three categories: unconfined (U), partly confined (PC), and confined (C).

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<sup>&</sup>lt;sup>9</sup> Non-Native Invasive Plant Species (NNIPS)

Location of the Module	Indicator Code	Indicator Name	Positive/ Negative
Channel – water	D1	Channel margin aquatic vegetation extent	Positive
margin	D2	Channel margin aquatic morphotype richness	Positive
	D3	Channel margin physical feature extent	Positive
	D4	Channel margin physical feature richness	Positive
	D5	Channel margin artificial features	Negative
Channel	E1	Channel aquatic morphotype richness	Positive
Bed	E2	Channel bed tree features richness	Positive
	E3	Channel bed hydraulic features richness	Positive
	E4	Channel bed natural features extent	Positive
	E5	Channel bed natural features richness	Positive
	E6	Channel bed material richness	Positive
	E7	Channel bed siltation	Negative
	E8	Channel bed reinforcement extent	Negative
	E9	Channel bed reinforcement severity	Negative
	E10	Channel bed artificial features severity	Negative
	E11	Channel bed NNIPS extent	Negative
	E12	Channel bed filamentous algae extent	Negative





# Appendix B River Condition Assessment Results

# **River Condition Assessment Report**

**Manor Farm Cables: Laleham Substation Corridor** 

**Juniper Energy Limited** 

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### B.1 Watercourse 1 – River Ash

The River Ash is located within the southern third of the cable route and is being crossed at three separate locations. Three RCA surveys have been completed at all three locations: NGR: TQ 05320 71281 (sub-reach 3), NGR: TQ 06284 70875 (sub-reach 2), and NGR: TQ 04494 71780 (sub-reach 1). The watercourse averages 7.51m in width across the three survey points, resulting in each module being 20m in length. Each MoRPh survey conducted for this watercourse measured a length of 100m, providing a total field survey area of 300m along the River Ash. Therefore, the 20% survey requirement threshold was achieved.

The MoRPh surveys identified a varied habitat structure on the bank tops across the three sub-reaches which includes tall herbs and grasses, deciduous saplings/trees, short herbs and grasses, scrub, unvegetated ground, and mosses/lichens. Factor B4 returned a negative score for sub-reach 2 due to the presence of Non-Native Invasive Species (NNIS). Alongside a strong negative score across all sub-reaches for Factor B5 as a result of high levels of managed and artificial ground cover of the bank tops including: transport infrastructure, residential building, and permanently vegetated agriculture.

Numerous positive scores were returned for Factors C1-C6 relating to the bank face which reflects a range in vegetation structure, tree feature richness, bank profile, and bank material richness. Vegetation present along the bank faces of the watercourse included mosses/lichens, tall herbs and scrub. Bank profiles included vertical, steep and gentle slopes. Small quantities of tree feature richness were identified such as exposed tree roots and leaning trees. Negative scores were also obtained from features relating to the bank face as a result of the extent of whole bank face reinforcement from concrete material.

Factors relating to the channel bed returned numerous positive scores as a result of natural features including bare unvegetated mid channel bars, the presence of emergent linear and broadleaved vegetation, organic matter accumulation; and negative scores including artificial features such as wide bridges, culverts, low levels of large rubbish items and extensive siltation of the channel bed.

The watercourse has been classed as River Type K-a partly confined straight/sinuous alluvial watercourse with the average sediment size being silt and the coarsest sediment size being sand. The average preliminary condition score across the three sub-reaches returned as 0.317, which for this river type indicated a condition class of "Moderate".

The average "shape" factor score across the sub-reaches returned as 4.364 which is not indicative of the watercourse being over-deep<sup>10</sup>. Therefore, the final condition classification for the River Ash is maintained as "Moderate".

### B.2 Watercourse 2 - Stanwell Moor Ditch

This watercourse is located towards the north of the proposed cable route project, where the RCA survey was conducted adjacent to Horton Road and east of Hithermoor Road (NGR: TQ 04285 74662). The average width of Stanwell Moor Ditch is 2.7m, resulting in each MoRPh module being 10m in length. One MoRPhMoRPh survey was conducted measuring a total length of 50m, and therefore meets the 20% survey requirement threshold.

The MoRPh survey identified a range of habitats and tree features on the bank tops of the watercourse including short grasses, bare substrate, deciduous trees and leaning trees, mosses, and tall herbs/grasses resulting in positive scores for vegetation structure and tree richness. A proportion of the bank tops comprise artificial and managed land use such as a



<sup>&</sup>lt;sup>10</sup> Any score <2 is highly likely to indicate a river which is over-deep.

pedestrian footpath, transport infrastructure, permanently vegetated agricultural land and buildings which have resulted in a negative score relating to Factor B5.

Positive scores were returned for numerous factors relating to the bank face across all subreaches which reflects a diversity and richness of bank face features. The bank profile ranged between a gentle and vertical slope and contained a range of habitats including unvegetated bare substrate, scrub, straight and leaning trees/saplings. Negative scores were obtained as a result of whole bank reinforcement in modules 3, 2 and 1, made from concrete and wood piling/panels.

Further positive scores were obtained as a result of emergent linear leaved vegetation being present at the water margin which extended across the whole watercourse width in module 5. A negative score was returned as a result of pipe outfalls being present in modules 5, 4 and 3. The channel bed featured areas of unvegetated gravel and silt, alongside patches of emergent linear-leaved vegetation and submerged saplings or shrubs, which resulted in positive and neutral scores. A strong negative score was returned as a result of the wide bridge shadow from the culvert that supports Horton Road.

The watercourse has been classed as River Type K. The preliminary condition score for Stanwell Moor Ditch returned as -0.126, which for this river type indicated a condition class of "Fairly Poor".

The average "shape" factor score was returned as 4.485 which is not indicative of the watercourse being over-deep<sup>11</sup>. Therefore, the final condition classification for the Stanwell Moor Ditch is maintained as "Fairly Poor".

### **B.3** Watercourse 3 - Horton Road Drain

This watercourse is located towards the north of the proposed cable route project, where the RCA survey was conducted from Horton Road, north of Horton Road and south of Spout Lane (NGR: TQ 04232 74906). The average width of the Horton Road Drain is 1.08m, resulting in each MoRPh module being 10m in length. One MoRPh survey was conducted measuring a total length of 50m, and therefore meets the 20% survey requirement threshold.

The MoRPh survey returned no positive scores for factors relating to the bank top as a result of a lack of natural features, resulting in many neutral scores being observed. A strong negative result was returned for Factor B5 reflecting the extent of artificial ground cover of the bank tops predominantly comprising of transport infrastructure.

Two positive scores were returned relating to the bank face which reflects an accumulation of organic matter including small broken off branches and leaves. Strong negative scores were observed for factors C7-C9 which is as a result of the artificial extent of the bank profiles along the watercourse. The profiles of the banks along the full length of the MoRPh were entirely artificially reinforced with concrete, and laid brick/stone.

The channel bed was dry at the time of the survey, resulting in many neutral scores for factors relating to the water margin and channel bed of the watercourse. Unvegetated side bars of the right and left bank were present within modules 2, 3 and 4 which provided positive scores for two factors relating to the channel margin. Due to the channel bed being dry, many tall grasses and herbs were present along the channel bed alongside a small occurrence of saplings which provided a positive score for Factor E2. A further positive score was observed for Factor E6 which reflects the channel bed material richness, this being an accumulation of organic matter which was observed in modules 1, 2 and 5. A strong

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<sup>&</sup>lt;sup>11</sup> Any score <2 is highly likely to indicate a river which is over-deep.

negative score was returned from Factor E10 which reflects the regular occurrence of culverts within the MoRPh survey area.

The watercourse has been classed as River Type K. The preliminary condition score for Horton Road Drain returned as -1.117, which for this river type indicated a condition class of "Poor".

The average "shape" factor score was returned as 2.250 which is not indicative of the watercourse being over-deep<sup>12</sup>. Therefore, the final condition classification for the Horton Road Drain is maintained as "Poor".

### B.4 Watercourse 4 - River Colne

This watercourse is located towards the north of the north of the proposed cable route project, and was surveyed from Horton Road, adjacent to the Mill Heathrow Business Centre (NGR: TQ 04151 75186), and west of the business centre capturing the anabranch of the River Colne (NGR: TQ 04133 75217). The average width of the main River Colne channel is 12.26m, resulting in each MoRPh module being 30m in length. One MoRPh survey was conducted measuring a total length of 150m. The average width of the anabranch channel of the River Colne was 1.63m, resulting in each module being 10m in length. One MoRPh survey was conducted for this channel measuring a total length of 50m. A total survey area of 200m meets the 20% survey requirement threshold.

The MoRPh surveys identified a small range of habitats and tree features on the bank tops of the watercourse including short grasses, scrub, and deciduous saplings/trees which resulted in positive scores for vegetation structure and tree richness. Negative scores were also returned relating to the bank tops due to artificial and managed ground including footpaths, buildings, transport infrastructure and permanently vegetated agricultural land.

Small positive scores were returned for a number of factors relating to the bank face which indicated a range of natural habitats including short and tall grasses and herbaceous vegetation, scrub, and saplings/trees. In module 2 the left bank provided a natural gentle slope profile containing organic matter accumulation, alongside a vegetated side bar which further provided positive scores. Strong negative scores were returned for factors C7-C9 which reflects the level of artificial reinforcement of the banks throughout the MoRPh, comprising whole bank concrete, wood panel and laid brick reinforcements of both banks throughout modules 1, 3, 4 and 5. A small negative score was returned for factor C10 as a result of a trace amount of Himalayan Balsam being present on the left bank of module 2.

Vegetation and natural features at the water margin was reflected in positive scores for factors D1-D4, which includes emergent aquatic linear and broadleaved vegetation alongside a vegetated side bar of the left bank of module 2. The channel bed also supported emergent and submerged aquatic broadleaved and linear vegetation, alongside small quantities of free floating and floating rooted vegetation in modules 2 and 3 resulting in further positive scores. The channel bed material comprised of gravel and silt, with the water flow type ranging between smooth and upwelling. A strong negative score was returned for Factor E10, representing the level of shadow impact from the bridge present within the MoRPh survey area.

The watercourse has been classed as River Type K. The combined preliminary condition score for the River Colne returned as -0.836, which for this river type indicated a condition class of "Moderate".

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<sup>&</sup>lt;sup>12</sup> Any score <2 is highly likely to indicate a river which is over-deep.

The average "shape" factor score was returned as 4.621 which is not indicative of the watercourse being over-deep<sup>13</sup>. Therefore, the final condition classification for the Stanwell Moor Ditch is maintained as "Moderate".

### **B.5** Watercourse 5 - Wraysbury River

This watercourse is the northernmost watercourse of the proposed cable route project and was surveyed from Horton Road located west of the M25 and east of Calder Way (NGR:TQ 03508 75523). The average width of the watercourse is 4.74m, resulting in each module being 10m in length. One MoRPh survey was conducted measuring a total length of 50m, and therefore meets the 20% survey requirement threshold.

The MoRPh survey identified a small range of habitats and tree features on the bank tops of the River Wraysbury which including tall herbs and grasses, scrub, saplings/trees and bare unvegetated ground resulting in positive scores for vegetation structure and tree richness. Negative scores were encountered as a result of artificial and managed ground cover including pedestrian footpaths and transport infrastructure. A further negative score was returned as a result of the presence of Himalayan balsam and Japanese knotweed in modules 1, 2 and 3.

Small positive scores were returned for a number of factors relating to the bank face of the watercourse which is indicative of natural habitats including bare ground, tall grasses and herbs, dense scrub, and saplings/trees. The bank face material composition varied between natural and artificial, with modules 1, 2,and 3 bank profiles comprising organic matter on gentle and vertical profiles with a vegetated side bar on the right bank of modules 4 and 5; whilst in modules 4 and 5 the bank profiles were entirely artificially reinforced with concrete resulting in negative scores. further negative scores were encountered due to the presence of Himalayan balsam and Japanese knotweed within modules 2, 3, 4 and 5.

Further positive scores were returned for factors relating to the channel margin which is representative of the emergent linear-leaved aquatic vegetation present at the base of the banks along the MoRPh survey. Emergent linear-leaved aquatic vegetation was also recorded within the channel bed throughout all modules, alongside submerged linear-leaved and rooted floating leaved aquatic vegetation resulting in further positive scores relating to the channel bed. Negative scores were returned as a result of an intermediate shadow impact from the bridge present in modules 3 and 4, and the small occurrence of Himalayan balsam in module 5.

The watercourse has been classed as River Type K. The preliminary condition score for Wraysbury River returned as 0.008, which for this river type indicated a condition class of "Fairly Poor".

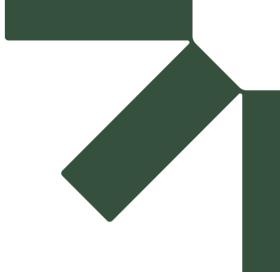
The average "shape" factor score was returned as 5.972 which is not indicative of the watercourse being over-deep<sup>14</sup>. Therefore, the final condition classification for the Stanwell Moor Ditch is maintained as "Fairly Poor".

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<sup>&</sup>lt;sup>13</sup> Any score <2 is highly likely to indicate a river which is over-deep.

<sup>&</sup>lt;sup>14</sup> Any score <2 is highly likely to indicate a river which is over-deep.



# Appendix C River Condition Indicator Results

# **River Condition Assessment Report**

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## C.1 Watercourse 1 - River Ash

**Table C-1: River Ash Condition Indicator Results** 

Summary	River	Ash			
	MoRF	Ph Sub-Reaches	1	2	3
	MoRPh survey module numbers		1-5	1-5	1-5
Cor		ition Score	0.162	-0.304	-0.810
	Condi	ition Class	Fairly Poor	Fairly Poor	Fairly Poor
	River	Shape	3.761	5.910	3.421
	Avera	ge river width (m)	8.44	7.6	6.5
	Avera	ge of positive indices	1.316	1.158	0.421
	Avera	ge of negative indices	-1.154	-1.462	-1.231
	River	Туре	K	K	К
River Type	A1	Braiding index	1	1	1
Indicators	A2	Sinuosity index	1.066	1.066	1.066
	A3	Anabranching index	1	1	1
	A4	Level of confinement	Partly	Partly	Partly
	A5	Valley gradient	0.00060	0.00060	0.00060
	A6	Bedrock reaches	No	No	No
	A7	Coarsest bed material size class	Silt	Silt	Silt
	A8	Average alluvial bed material size class	Silt	Silt	Silt
River	B1	Bank top vegetation structure	3	3	1
Condition Indicators:	B2	Bank top tree feature richness	1	2	0
Bank top	В3	Bank top water-related features	0	0	0
	B4	Bank top NNIPS cover	0	-1	0
	B5	Bank top managed ground cover	-4	-4	-4
River Condition	C1	Bank face riparian vegetation structure	1	0	0
Indicators: Bank face	C2	Bank face tree feature richness	1	1	0
	C3	Bank face natural bank profile extent	2	2	3
	C4	Bank face natural bank profile richness	2	3	3
	C5	Bank face natural bank material richness	2	1	0
	C6	Bank face bare sediment extent	1	2	0
	C7	Bank face artificial bank profile extent	0	0	0
	C8	Bank face reinforcement extent	-3	-4	-4



Summary	River	River Ash				
	C9	Bank face reinforcement material severity	-2	-3	-4	
	C10	Bank face NNIPS cover	0	0	0	
River Condition	D1	Channel margin aquatic vegetation extent	2	1	0	
Indicators: Channel- water	D2	Channel margin aquatic morphotype richness	1	0	0	
margin	D3	Channel margin physical feature extent	1	1	0	
	D4	Channel margin physical feature richness	1	1	0	
	D5	Channel margin artificial features	0	0	0	
River Condition	E1	Channel aquatic morphotype richness	2	1	0	
Indicators: Channel	E2	Channel bed tree features richness	0	1	0	
bed	E3	Channel bed hydraulic features richness	0	0	0	
	E4	Channel bed natural features extent	2	1	0	
	E5	Channel bed natural features richness	1	1	0	
	E6	Channel bed material richness	2	1	1	
	E7	Channel bed siltation	-2	0	0	
	E8	Channel bed reinforcement extent	0	-1	0	
	E9	Channel bed reinforcement severity	0	-2	0	
	E10	Channel bed artificial features severity	-4	-4	-4	
	E11	Channel bed NNIPS extent	0	0	0	
	E12	Channel bed filamentous algae extent	0	0	0	



### C.2 Watercourse 2 – Stanwell Moor Ditch

**Table C-2: Stanwell Moor Ditch Condition Indicator Results** 

Summary	Stanv	vell Moor Ditch	
	MoRF	Ph Sub-Reaches	1
	MoRPh survey module numbers		1-5
	Condition Score		-0.126
	Condi	tion Class	Fairly Poor
	River	Shape	4.485
	Avera	ge river width (m)	2.7
	Avera	ge of positive indices	1.105
	Avera	ge of negative indices	-1.231
	River	Туре	К
River Type	A1	Braiding index	1
Indicators	A2	Sinuosity index	1.031
	A3	Anabranching index	1
	A4	Level of confinement	Partly
	A5	Valley gradient	0.00157
	A6	Bedrock reaches	No
	A7	Coarsest bed material size class	Gravel/Pebble
	A8	Average alluvial bed material size class	Silt
River	B1	Bank top vegetation structure	1
Condition Indicators:	B2	Bank top tree feature richness	2
Bank top	В3	Bank top water-related features	0
	B4	Bank top NNIPS cover	0
	B5	Bank top managed ground cover	-4
River	C1	Bank face riparian vegetation structure	1
Condition Indicators:	C2	Bank face tree feature richness	1
Bank face	C3	Bank face natural bank profile extent	3
	C4	Bank face natural bank profile richness	2
	C5	Bank face natural bank material richness	2
	C6	Bank face bare sediment extent	2
	C7	Bank face artificial bank profile extent	0
	C8	Bank face reinforcement extent	-3
	C9	Bank face reinforcement material severity	-3
	C10	Bank face NNIPS cover	0
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River Condition	D1	Channel margin aquatic vegetation extent	2
Indicators: Channel- water	D2	Channel margin aquatic morphotype richness	1
margin	D3	Channel margin physical feature extent	0
	D4	Channel margin physical feature richness	0
	D5	Channel margin artificial features	-2
River	E1	Channel aquatic morphotype richness	1
Condition Indicators:	E2	Channel bed tree features richness	1
Channel bed	E3	Channel bed hydraulic features richness	0
	E4	Channel bed natural features extent	0
	E5	Channel bed natural features richness	0
	E6	Channel bed material richness	2
	E7	Channel bed siltation	0
	E8	Channel bed reinforcement extent	0
	E9	Channel bed reinforcement severity	0
	E10	Channel bed artificial features severity	-4
	E11	Channel bed NNIPS extent	0
	E12	Channel bed filamentous algae extent	0



### C.3 Watercourse 3 – Horton Road Drain

**Table C-3: Horton Road Drain Condition Indicator Results** 

Summary	Horto	n Road Drain	
	MoRF	Ph Sub-Reaches	1
	MoRPh survey module numbers		1-5
	Condi	ition Score	-1.117
	Condi	ition Class	Poor
	River	Shape	2.25
	Avera	ge river width (m)	1.08
	Avera	ge of positive indices	0.421
	Avera	ge of negative indices	-1.538
	River	Туре	К
River Type	A1	Braiding index	1
Indicators	A2	Sinuosity index	1.017
	A3	Anabranching index	1.0
	A4	Level of confinement	Confined
	A5	Valley gradient	0.0
	A6	Bedrock reaches	No
	A7	Coarsest bed material size class	Silt
	A8	Average alluvial bed material size class	Silt
River	B1	Bank top vegetation structure	0
Condition Indicators:	B2	Bank top tree feature richness	0
Bank top	В3	Bank top water-related features	0
	B4	Bank top NNIPS cover	0
	B5	Bank top managed ground cover	-4
River	C1	Bank face riparian vegetation structure	0
Condition Indicators:	C2	Bank face tree feature richness	0
Bank face	C3	Bank face natural bank profile extent	1
	C4	Bank face natural bank profile richness	1
	C5	Bank face natural bank material richness	0
	C6	Bank face bare sediment extent	0
	C7	Bank face artificial bank profile extent	-4
	C8	Bank face reinforcement extent	-4
	C9	Bank face reinforcement material severity	-4
	C10	Bank face NNIPS cover	0
River	D1	Channel margin aquatic vegetation extent	0
Condition	D2	Channel margin aquatic morphotype richness	0



Indicators: Channel-	D3	Channel margin physical feature extent	2
water	D4	Channel margin physical feature richness	1
margin	D5	Channel margin artificial features	0
River	E1	Channel aquatic morphotype richness	0
Condition Indicators:	E2	Channel bed tree features richness	1
Channel	E3	Channel bed hydraulic features richness	0
bed	E4	Channel bed natural features extent	0
	E5	Channel bed natural features richness	0
	E6	Channel bed material richness	2
	E7	Channel bed siltation	0
	E8	Channel bed reinforcement extent	0
	E9	Channel bed reinforcement severity	0
	E10	Channel bed artificial features severity	-4
	E11	Channel bed NNIPS extent	0
	E12	Channel bed filamentous algae extent	0



## C.4 Watercourse 4 - River Colne

Summary	River	Colne		
	MoRF	Ph Sub-Reaches	1	2
	MoRPh survey module numbers		1-5	1-5
Condi		tion Score	-1.372	-0.300
	Condi	tion Class	Poor	Fairly Poor
	River	Shape	1.925	7.315
	Avera	ge river width (m)	1.63	12.26
	Avera	ge of positive indices	1.316	0.474
	Avera	ge of negative indices	-1.615	-1.846
	River	Туре	К	К
River Type	A1	Braiding index	1	1
Indicators	A2	Sinuosity index	1.027	1.027
	A3	Anabranching index	1	1
	A4	Level of confinement	Partly Confined	Partly Confined
	A5	Valley gradient	0.00054	0.00054
	A6	Bedrock reaches	No	No
	A7	Coarsest bed material size class	Gravel/Pebble	Gravel/Pebble
	A8	Average alluvial bed material size class	Silt	Gravel/Pebble
River	B1	Bank top vegetation structure	2	1
Condition Indicators:	B2	Bank top tree feature richness	2	0
Bank top	В3	Bank top water-related features	0	0
	B4	Bank top NNIPS cover	0	0
	B5	Bank top managed ground cover	-4	-4
River Condition	C1	Bank face riparian vegetation structure	2	1
Indicators: Bank face	C2	Bank face tree feature richness	1	0
	C3	Bank face natural bank profile extent	1	3
	C4	Bank face natural bank profile richness	1	1
	C5	Bank face natural bank material richness	1	0
	C6	Bank face bare sediment extent	0	0
	C7	Bank face artificial bank profile extent	-4	0
	C8	Bank face reinforcement extent	-4	-4
	C9	Bank face reinforcement material severity	-4	-4
	C10	Bank face NNIPS cover	-1	0



River Condition	D1	Channel margin aquatic vegetation extent	2	0
Indicators: Channel- water	D2	Channel margin aquatic morphotype richness	1	0
margin	D3	Channel margin physical feature extent	1	0
	D4	Channel margin physical feature richness	1	0
	D5	Channel margin artificial features	0	-1
River	E1	Channel aquatic morphotype richness	3	1
Condition Indicators:	E2	Channel bed tree features richness	2	0
Channel bed	E3	Channel bed hydraulic features richness	1	1
	E4	Channel bed natural features extent	1	0
	E5	Channel bed natural features richness	1	0
	E6	Channel bed material richness	2	1
	E7	Channel bed siltation	0	0
	E8	Channel bed reinforcement extent	0	-4
	E9	Channel bed reinforcement severity	0	-4
	E10	Channel bed artificial features severity	-4	-3
	E11	Channel bed NNIPS extent	0	0
	E12	Channel bed filamentous algae extent	0	0



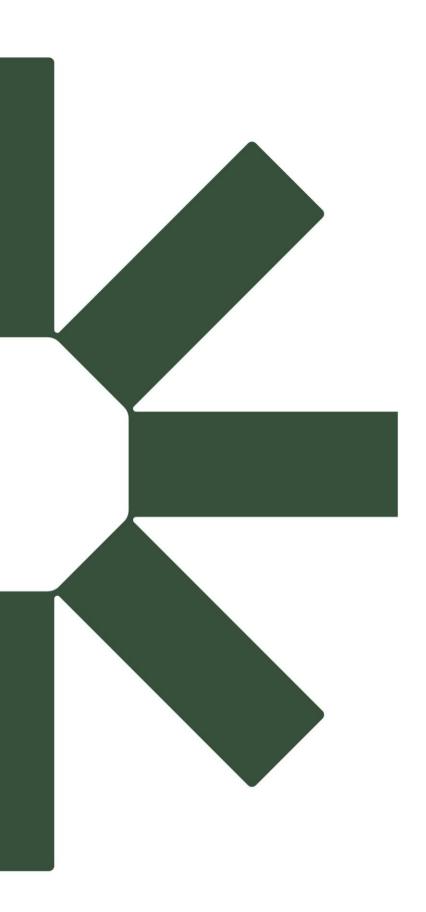
# C.5 Watercourse 5 – Wraysbury River

Summary	Horto	n Road Drain	
	MoRF	Ph Sub-Reaches	1
	MoRPh survey module numbers		1-5
Condi		tion Score	0.008
	Condi	tion Class	Fairly Poor
	River	Shape	5.972
	Avera	ge river width (m)	4.74
	Avera	ge of positive indices	1.316
	Avera	ge of negative indices	-1.308
	River	Туре	К
River Type	A1	Braiding index	1
Indicators	A2	Sinuosity index	1.058
	A3	Anabranching index	1
	A4	Level of confinement	Partly Confined
	A5	Valley gradient	0.00131
	A6	Bedrock reaches	No
	A7	Coarsest bed material size class	Silt
	A8	Average alluvial bed material size class	Silt
River	B1	Bank top vegetation structure	2
Condition Indicators:	B2	Bank top tree feature richness	2
Bank top	В3	Bank top water-related features	0
	B4	Bank top NNIPS cover	-3
	B5	Bank top managed ground cover	-2
River	C1	Bank face riparian vegetation structure	1
Condition Indicators:	C2	Bank face tree feature richness	1
Bank face	C3	Bank face natural bank profile extent	2
	C4	Bank face natural bank profile richness	2
	C5	Bank face natural bank material richness	1
	C6	Bank face bare sediment extent	1
	C7	Bank face artificial bank profile extent	0
	C8	Bank face reinforcement extent	-1
	C9	Bank face reinforcement material severity	-3
	C10	Bank face NNIPS cover	-3
River	D1	Channel margin aquatic vegetation extent	2
Condition Indicators:	D2	Channel margin aquatic morphotype richness	2
Channel-	D3	Channel margin physical feature extent	1



water	D4	Channel margin physical feature richness	1
margin	D5	Channel margin artificial features	0
River	E1	Channel aquatic morphotype richness	2
Condition Indicators:	E2	Channel bed tree features richness	2
Channel	E3	Channel bed hydraulic features richness	0
bed	E4	Channel bed natural features extent	1
	E5	Channel bed natural features richness	1
	E6	Channel bed material richness	1
	E7	Channel bed siltation	0
	E8	Channel bed reinforcement extent	0
	E9	Channel bed reinforcement severity	0
	E10	Channel bed artificial features severity	-4
	E11	Channel bed NNIPS extent	-1
	E12	Channel bed filamentous algae extent	0









# **Preliminary Land Quality Desk Study**

Manor Farm Cable - Laleham Substation Corridor

**Juniper Energy Ltd** 

Prepared by:

**SLR Consulting Limited** 

Cubo, Standard Court, Park Row, Nottingham, NG1

SLR Project No.: 402.065673.00004 Client Reference No: UK.080210

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Revision: 05

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### **Basis of Report**

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### 1.0 Introduction

### 1.1 Appointment

SLR Consulting Limited (SLR) was appointed by Juniper Energy Ltd in support of a planning application for a cable route between Laleham Substation, and the proposed Manor Farm Data Centre and Battery Energy Storage System (BESS), located to the west of Poyle, Slough. The proposed Manor Farm Data Centre and BESS planning application has been submitted to Slough Borough Council under Planning Reference P/10076/013.

The total cable length is circa 8.4km, passing through three different planning authorities (Slough Borough Council, Hillingdon London Borough Council and Spelthorne Borough Council) and would be routed beneath roads, highway verges and greenfield land. A route location plan for the proposed development ("the site") is provided as Drawing 01 within Appendix A.

Separate planning applications are being presented for the proposed Manor Farm Data Centre and BESS and proposed Iver Substation to Manor Farm Data Centre cable route.

### 1.2 Proposed Development & Regulatory Context

The proposed development comprises the construction and operation of a 132kV cable route (hereafter referred to as "CR"). Plans of the proposed CR and redline boundary are as provided in Appendix B.

The CR is noted to follow highways as per the below:

- Exit the Manor Farm Industrial Estate to the south upon which it will follow the access road east to Poyle Road.
- The CR will follow Poyle Road south to the Golden Cross Roundabout and joining on to Horton Road.
- Following Horton Road to the Poyle Interchange, before continuing east along Horton Road to Stanwell Moor Road (A3044). The finalised route traversing the Poyle Interchange is to be confirmed but will be within the red line boundary (RLB) including the portions of slip roads and the surrounding area.
- The CR travels south along the A3044, between the King George VI's and Staines Reservoirs.
- The CR reaches the Crooked Billet Roundabout, exiting east and follows the Staines Bypass (A308) in a southeast direction, onto Staines Road West before entering the Laleham Substation from the north.

The proposed development falls within the planning jurisdiction of three different councils these are:

- Slough Borough Council
- Hillingdon London Borough Council
- Spelthorne Borough Council

Slough Borough Council covers the section the CR between Manor Farm<sup>1</sup> and the eastern boundary of a large trading estate and along Horton Road. Hillingdon London Borough

-



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<sup>&</sup>lt;sup>1</sup> Planning Reference P/10076/013.

Council covers the Poyle Interchange. Spelthorne Borough Council the remainder of the CR to Laleham substation. A visual depiction of this is showing on Figure 002.

Each council is responsible for determining the planning application within their respective local planning authorities.

### 1.3 Objectives

To address the planning considerations, SLR have undertaken a preliminary desk-based assessment for the preferred CR. This report is intended to be a relatively 'high level' assessment of potential sources of contamination that may be present along the proposed CR as a result of current and historical land use activities, and whether these may require further targeted assessment moving forwards to quantify the nature and severity of the risks that could be posed to sensitive receptors. This report summarises the available relevant data to develop a Preliminary Conceptual Site Model (PCSM) to allow identification of any potential pollutant linkages (PPLs) along the CR that could have the potential to pose a risk to human, environmental and built receptors moving forwards. This phased approach to the assessment enables a preliminary assessment of the CR's suitability for use under Land Contamination Risk Management (LCRM) to be ascertained.

The scope of work for this report comprises:

- Review of current and historical maps to establish the development history of the CR.
- Assessment of site sensitivity and environmental setting undertake a review of geological and hydrogeological records (e.g. geological maps, groundwater sensitivity and vulnerability maps etc.).
- Collection of information from public registers and regulators obtain and review public register information that is available via online databases.
- Site visit a walkover of the CR and surrounding area has been undertaken to.
  - Assess visual evidence of contamination and identify potential sources of contamination associated with the CR.
  - Review the potential for pollution to have occurred at and within the area of the CR.
  - Identify the surrounding land uses.
  - Produce a photographic record of the CR and surrounds.
- Collation of information about the CR environmental setting and conditions to form a
  preliminary conceptual site model (PCSM), including a review of contaminant
  sources, pathways, and receptors applicable to the CR; and
- Preparation of this report, detailing the collated information and recommendations for further investigation works, if deemed necessary.

### 1.4 Sources of Information

This report has been produced following field reconnaissance (walkover survey) and a review of the sources of information summarised in Table 1-1.



**Table 1-1: Sources of Information** 

Information Type	Source		
Topography & Current Site Layout	Site reconnaissance carried out on 20 <sup>th</sup> June 2025.  Google Earth  Open Street Maps  Google Maps  Ordnance Survey (OS) mapping		
Site Setting & History	Defra Network WMS server provided by the Environment Agency ( <a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a> ) Map Tiler ( <a href="https://www.maptiler.com/">https://www.maptiler.com/</a> ) Health and Safety Executive: COMAH ( <a href="https://www.hse.gov.uk/comah/comah-establishments.htm">https://www.hse.gov.uk/comah/comah-establishments.htm</a> )		
Geology & Hydrogeology	British Geological Survey (BGS) borehole records BGS maps portal. BGS Mineral Resources (1:100,000) Surrey (comprising Surrey and London Boroughs of Croydon, Hounslow, Kingston upon Thames, Richmond upon Thames and Sutton) Defra Network WMS server provided by the Environment Agency (https://magic.defra.gov.uk/)		

### 1.5 Regulatory Context and Guidance

The environmental sections of this report are written in broad agreement with BS10175:2011+A2:2017, Land Contamination: Risk Management (LCRM, 2021) and AGS (2006) Good Practice Guidance for Site Investigations. The methods used follow a risk-based approach, with the first stage being a Phase 1 desk study and field reconnaissance (this report).

Remaining uncertainties and recommendations for further work are provided in the final section of this report.



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### 2.0 Site Details

## 2.1 Proposed Iver Substation to Manor Farm Cable Route

Table 2-1, below, provides a summary of the CR site details and environmental setting. The information has been obtained from published Ordnance Survey (OS), Environment Agency (EA) and British Geological Survey (BGS) mapping and from the site walkover.

Table 2-1: Site Details

Site Details	
Site Address (end points)	Southern end: Laleham Substation, Ashford TW17 0QR Northern end: Manor Farm, Poyle Rd, Colnbrook, Slough SL3 0BL
NGR	Southern end: Laleham Substation: 506449E, 170540N Northern end: Manor Farm: 502831E, 176213N
Route Length	132kV Final Primary Route – Length 8.4km (Laleham Substation to Manor Farm)
Elevation	The Laleham Substation is set at an elevation of c. 9m Above Ordnance Datum (AOD).  The proposed Manor Farm Data Centre and BESS is set at an elevation of between 15m and 17m AOD.
Topography and Gradient	The topography of the CR is expected to undulate gently along the route between of 8m and 17m AOD.
Site Description and Use	The majority of both cable routes traverses along the highway infrastructure as described in Section 1.2.



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# 2.2 Environmental Setting

Table 2-2, below, provides a summary of the sites environmental setting based on a review of published information.

**Table 2-2: Environmental Setting** 

Detail	Description	
Geology	Artificial Geology	Made Ground should be expected along most of the proposed CR given that it is to be installed within the various roads and highways.
	Superficial Drift Geology	The CR is recorded to be underlain by superficial geology of the various members which pertain the Maidenhead Formation (clays, silts, sands and gravel). This is recorded to include the Shepperton Gavel Member, Taplow Gravel Member, Kempton Park Gravel Member and Langley Silt Member. These can be collectively referred to as River Terrace Deposits.
		Alluvium interpreted to immediately underlay the CR along a c. 1.2km section of CR from Laleham Substation along the A308.
	Solid Geology	The CR is recorded to be underlain entirely by the London Clay Formation (clay, silt and sand).
	BGS GeoIndex Borehole Records	A single BGS borehole record is reported within the proposed Manor Farm Data Centre and BESS.  There are five BGS borehole records within the Laleham Substation.
		There are 16 BGS borehole records within 50m of the CR, with five of these being private.  Two boreholes (Refs: TQ07SE28 and TQ07SE29) to the north of the Laleham Substation reported "soil" to a maximum depth of c. 1.2m bgl, over sandy loam to 4.2m. Below these sands and gravels were recorded to a maximin depth of 8.2m bgl, with London Clay reported below. No depth to groundwater was reported.
		A borehole (Ref TQ07-104B) to the south of the Staines Reservoirs indicated ground conditions to compromise topsoil overlying clay and slits to c. 2.1m bgl. Below this 7.5m of interbedded bands of gravel and sand were recorded, with clay encountered from a depth of c. 8.10m bgl. Groundwater was encountered at c. 3.65m bgl.  Two BGS boreholes (TQ07NW18 and TQ07NW2) are located within 50m of Poyle Road Made Ground to c. 1.80m bgl, overlying interbedded sands and gravels. Blue clay (interpreted to be London Clay) was reported from c. 10m bgl. Groundwater was recorded at c. 1.6m bgl.
	Mining and ground workings	There are ten BGS recorded mineral sites located along or within 250m of the CR, and the BGS GeoIndex reports that in all instances operations at these sites as being 'ceased'. Some of these mineral sites were also observed within the historical mapping records (Section 2.3 Site History).
		Poyle Farm Gravel Pit (502755E, 176130N – Surface mineral working – Gravel pit) Status: Ceased. Historical mapping indicates an area of infilled land (water) on the 1937 to 1961 mapping.



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Langley Silt Member London Clay Formation

Detail	Description	
	Depth to groundwater	From the BGS boreholes recorded to be within a 50m radius of the site groundwater should be expected between 1.60m and 3.65m bgl between Manor Farm and the Staines Reservoirs. Between the Staines Reservoirs and Laleham Substation no groundwater depth was reported within the BGS borehole records.
	Source Protection Zone (SPZ)	The section of the CR between the Staines Reservoirs and the A308 Staines Bypass is classified as an SPZ 3. In the absence of any inner protection zones, it is judged that the CR is not located near any sensitive potable groundwater supplies.
Hydrology	Surface Water	The CR is noted to cross three rivers, several streams, an aqueduct and three unnamed water courses. The River Colne and Staines Aqueduct are crossed at multiple locations. Details of these and approximate coordinates are provided below. Several unnamed water courses are also reported to be running parallel to the CR.  Wraysbury River: 503507E, 175523N  River Colne: 504152E, 175187N (various other tributaries also crossing within close proximity)  Hithermoor Stream: 504017E, 175281N  River Ash: 505326E, 171301N and 506282E, 170867  Staines Reservoirs Aqueduct: 504375E, 171907N  Unnamed water course 1: 504305E, 174657N  Unnamed water course 2: 504432E, 172267N and 504356E, 172111N – interpreted to feed into the Staines Reservoirs Aqueduct.  Unnamed water course 3: 505246E, 171306N (not visible during site walkover)  The CR also passes directly between the King George VI Reservoir and the Staines Reservoirs and to the east of the Wraysbury Reservoir. The Laleham Substation is located to the northwest of the Queen Mary Reservoir. Each of these are used as drinking water reservoir and fall within a Drinking Water Protected Area.  Ponds and fishing lakes are located within 250m of the CR (Shortwood Pond, Intertype Lakes).
	Surface Water Flood Risk	The Laleham Substation to the south of the Staines Reservoirs, Horton Road to east of Poyle Interchange and west of Poyle Interchange to Manor Farm reported to be situated in Flodd Zones 2 and 3. The rest of the CR is recorded to fall within a Flood Zone 1.

### **Site History** 2.3

Table 2-3, Table 2-4, Table 2-5, and Table 2-6 provide a summary of the history of the CR and surrounding areas that is based upon a review of freely available online map information. For ease of reporting the site history has been split up in to segments along the CR. This is based on data supplied by the Ordnance Survey (OS), Environment Agency (EA) and British Geological Survey (BGS) mapping and from the site walkover.



Table 2-3: Site Historical Mapping: Manor Farm to Horton Road

Date	Description	Map Excerpt
1885 to 1903	Poyle Farm is reported either side of the road (Poyle Road) surrounded by open agricultural land and fields beyond. The Manor Farm site open fields except for a track running along the CR.	Poyle Farm 64
1888 to 1913	Minor changes are observed with regards to structure and dwelling layout along the road and relating to Poyle Farm. A small unnamed stream is recorded to cross the CR and Poyle Road.	Proje Cottage  Proje Cottage  A se 656
1919 to 1947	The village of Poyle is becoming established to the immediate north to the CR. The small stream is no longer recorded to cross the CR, though this is still thought to be present, and the absence is due to the mapping scale.	Poyl
1937 to 1961	To the west of Manor Farm a large lake is present immediately west of the CR. This is likely related to the Poyle Farm Gavel Pit referred to in Section 2.2. The boundary of this waterbody observed to cross the CR.  The east of Poyle Road a large trading estate has been developed. Within the trading estate a small stream or ditch flows along the north side of one of the roads (Blackthorne Road), culverted under the CR. The stream that was missing on the previous historical record is now shown again (located to the north of Blackthorne).	oyle Farm Tra
1955 to 1961	No significant changes. The trading estate is recorded to have expanded to the northeast.	Poi
1999	The Manor Farm Industrial Estate can be partially observed within the Google Earth satellite imagery. The trading estate has undergone further expansion.	
2002	The Google Earth satellite imagery shows more of the Manor Farm Industrial Estate. To the west of this there is also evidence of ground workings. Various stockpiles of material and quarry related machinery can be observed alongside the southern extent of the Manor Farm Industrial Estate.	
2003	The area to the north and west of the Manor Farm Industrial Estate is now visible on the Google Earth satellite imagery. This shows additional areas of ground workings to the north/northwest of the Manor Farm Industrial Estate. The	



Date	Description	Map Excerpt
	layout of the mounds observed in 2002 have not changed substantially.	
2004	No significant changes. Minor stockpile alignments noted within ground works area to the north of Manor Farm Industrial Estate.	
2008	The area of ground working surrounding Manor Farm Industrial Estate is observed to have undergone some additional changes to the stockpile configuration. Directly to the north of Manor Farm Industrial Estate the area of ground working appears to have clearly defined boundaries. definition.	
2009 to 2014	No significant changes.	
2015	There have been minor changes to the unit layout within the Manor Farm Industrial Estate, mainly to the north.	
2017	The north of the Manor Farm Industrial Estate appears to now form an industrialised form of building materials supplies with aggregate loading bays.	
2018 to Present day (2025)	No significant changes	

Table 2-4: Site Historical Mapping: Horton Road to north of Staines Reservoirs

Date	Description	Map Excerpt
1885 to 1903	A smithy is reported within the Stanwell Moor. A mill is located to the west of Stanwell Moor along the road followed by the CR.  The CR passes over a set of railway lines running between Colnbrook Station (north) and Staines Station (south). The River Colne and Wraysbury River alongside other watercourses are also observed to the crossing the CR.	Ford Jinnell's The LB. Steinwelly Smith
1888 to 1913	Minor changes are observed with regards to building layout.	
1919 to 1947	No significant changes.	anwellmoor Stanwell Place



Date	Description	Map Excerpt
1937 to 1961	No significant changes. Three elongated bodies of water are noted to the south of Horton Road and west of the railway lines.	Peyple Pice South From Sound Upon And Sound Arth An
1955 to 1961	No significant changes.	HALD STATE Spout
1999	The Google Earth satellite imagery records the dismantling of the railway lines.  The M25 (est. 1975) is now present along with the Poyle Interchange (roundabout). The area surrounding the north of the Poyle Interchange is seen to be undergoing a large-scale redevelopment project related to the Poyle Interchange development.  The land to the south of Horton Road and the trading estate is observed to be used for heavy goods vehicle parking.  Stanwell Moor has intense development within its surrounding agricultural area.  Vermeulen's Industrial Estate has been established to the north of Horton Road and west of Stanwell Moor Road.  To the south of Horton Road and west of Stanwell Moor Road a large-scale groundworks project appears to being undertaken. This is within the same location as the Horton Road Gravel Pit identified in Table 2-2.  To the northeast of Stanwell Moor Road and the CR (c. 150m) evidence of ground workings can be observed. These are interpreted to relate to the Stanwell Quarries (I, II and III) noted in Table 2-2.	
2002	No significant changes along route. The Horton Road Gravel Pit and Stanwell Moor Quarries have been reconfigured.	
2004	Groundworks can be seen surrounding the slip roads south of the Poyle Interchange, from the M25.	
2008	Works surrounding the Poyle Interchange appear to have been completed.	
2009 to 2015	No significant changes along route. The Horton Road Gravel Pit and Stanwell Moor Quarries undergo various reconfiguration.	



Date	Description	Map Excerpt
2017	Gravel extraction at the Horton Road Gravel Pit has ceased. Redevelopment has begun for the Oakleaf Farm Industrial Estate.	
Present day (2025)	Oakleaf Farm Industrial Estate has been constructed to the south of Horton Road.	

Table 2-5: Site Historical Mapping: north of Staines Reservoirs to Crooked Billet Roundabout

Date	Description	Map Excerpt
1885 to 1903	Minimal residential dwellings are located around this section of the CR. A small pond is located to the east of London Road. The route follows the road, with open agricultural land and small tracks on either side.  The village of Stanwell is located c. 900m to the east of this CR section end point. The end of this section is reported to be surrounded by Stanwell Moor, with a few scattered dwellings and structures	Hammando Shortm
1888 to 1913	A fishpond is recorded to the east of the CR and south of Stanwell Moor. A small gravel pit and pond are recorded to the west of Staines Moor Road. A river 'Crooked Billet' is recorded crossing the CR at London Road. The 'Billet Estate' is located at the southernmost point of this section of the CR.	
1919 to 1947	The Staines Reservoirs have been constructed to the west of the CR (constructed date 1902). The Staines Aqueducts are now visible within the historical mapping, with a pumping station to the west of the bottom of this section.	Head 5 Staines Resident Met. W.B.



Date	Description	Map Excerpt
1937 to 1961	The King George VI reservoir has been constructed to the west of the CR. (completion date recorded to be 1913, though it is not present on the previous maps)	STANWELL STANGE STANGE ASSERVORS
1955 to 1961	No significant changes with exception of a small number of additional structures within area to the south of King George VI Reservoir.	Stanwel Place  Cemy
2002	A diversion of the Stanwell Moor Road has been constructed to route traffic to the Crooked Billet Roundabout (est. 1970's) and away from the residential road of 'Stanwell New Road'.	
2003 to Present day (2025)	No significant changes identified within the Google Earth satellite imagery.	

Table 2-6: Site Historical Mapping: Crooked Billet Roundabout to Laleham Substation

Date	Description	Map Excerpt
1885 to 1903	The site of Laleham substation and the surrounding area is shown to comprise undeveloped land and woodland. A public footpath is recorded along the north and west boundaries with a road also orientated east west along to the north. The River Ash is detailed to cross the CR at two points.  The CR is characterised by open agricultural land occasionally crossing footpaths, small roads. A unnamed river is noted to the east of Staines boundary. The village of Staines is located to southeast of the CR. Railway lines between Staines (southwest) and Feltham (northeast) cross the CR.	Shartwood S. J. J. Shartwood S. J. Shartwo



Date	Description	Map Excerpt
1888 to 1913	No significant changes.	
1919 to 1947	The Queens Mary Reservoir has been developed. Ashford and Staines have expanded. The Staines Aqueduct is now recorded to the south of the CR.	Shorteen Shorteen School Schoo
1937 to 1961	Ashford and Staines are recorded to have undergone further expansion with the two towns beginning to merge.	Green  Hegi
1955 to 1961	No significant changes.	STAINES School School School Staines School
2000	The Google Earth satellite imagery only has partial coverage during year 2000. The area surrounding the Laleham Substation is observed to have been constructed.	
2002	The A308 Staines Bypass has been constructed forming a dual carriageway (single carriageways ext. 1960s, dual carriageways est. 1980's). From the site walkover is observed to be generally elevated from the surrounding ground level.	
2003	No significant changes.	
2004	No significant changes.	
2005 to 2015	No significant changes.	
2018	Spelthorne Fire Station has been constructed to the south of the A303, between the Staines Reservoir Aqueduct and the Fordbridge Roundabout.	



Date	Description	Map Excerpt
2019 to Present day (2025)	No significant changes.	

The CR has followed highways infrastructure, leading from Poyle Road to Horton Road, crossing the Poyle Interchange and M25 (constructed early 1970's). The CR continues Horton Road to the junction with Stanwell Moor Road which is followed south to Stanwell New Road and the Crooked Billet Roundabout that was constructed in the 1970's. The final section of the CR follows the A303 which was constructed in the early 1960's and dualled in the 1970s.

Between the late 1890s and 1910's the CR was generally surrounded by agricultural fields and small villages with occasional residential dwellings, farmhouses, mills and smithies. A trading estate was constructed during the 1950's, Manor Farm Industrial Estate between 1960 and 1999. Vermeulen's Industrial Estate was developed pre-2002, when first observed on satellite imagery. The Oakleaf Farm Industrial Estate, previously the site of Horton Road Gravel Pit, was developed in the mid to late 2010's. The CR also passes the Staines Reservoirs and King George VI Reservoir, which were constructed in 1902 and 1913 respectively.

#### 2.4 Waste and Landfill

#### 2.4.1 Historical Landfill Sites

Thirteen historical landfills, identified from publicly available sources posted by Defra are listed in Table 2-7 below. No details on the permit numbers, landfill construction and type of waste accepted were available at the time of writing this report.

Table 2-7: Historical Landfill Sites within 500m

Location	Name	Details
c. 210m north of Manor Farm.	Poyle Manor North	License Holder Name: Hall Aggregates (Thames Valley) Limited
Grid Ref: 502900E,		Issued: April 1985
176000N		Surrender Date: April 1994
		Last Input: December 1988
c. 10m west of the Poyle Road	Poyle Manor South	License Holder Name: Wiggins Transport Limited
Grid Ref: 502600E,		Issued: December 1974
176000N		Surrender Date: December 1980
		Last Input: December 1983
c. 75m northwest of the Poyle Interchange	Horton Road	License Holder Name: Hales Containers Limited
Grid Ref: 503700E,		Issued: December 1974
176000N		Surrender Date: December 1978
c. 125m southwest of the Poyle Interchange	Hithermoor Farm	License Holder Name: Greenham Sand and Ballast Company Limited
Grid Ref: 503700E,		Issued: March 1978
175100N		Surrender Date: Unknown
Within Red Line Boundary. c. 105m	Hithermoor Farm Area C	<b>License Holder Name</b> : Greenham Construction Materials Limited



Location	Name	Details
southeast of the Poyle Interchange <b>Grid Ref</b> : 503700E,		Issued: July 1981 Surrender Date: Unknown
175100N		
Within Red Line Boundary. c. 80m northeast of the Poyle Interchange Grid Ref: 504000E, 175800N	Horton Road	License Holder Name: Hales Containers Limited Issued: November 1977 Surrender Date: Unknown
c. 15m southeast of Poyle Interchange <b>Grid Ref</b> : 504000E, 175300N	Horton Road	License Holder Name: Unknown Issued: Unknown Surrender Date: Unknown
c. 400m southwest of the Horton Road and Hithermoor Road Junction <b>Grid Ref</b> : 503400E, 174500N	Hithermoor Farm	License Holder Name: Greenham Sand and Ballast Company Limited Issued: March 1978 Surrender Date: Unknown
c. 5m north of Poyle Interchange <b>Grid Ref</b> : 504500E, 174900N	Stanwell Moor Road West	License Holder Name: H Streeter (Sand and Ballast) Limited Issued: August 1977 Surrender Date: February 1990
c. 5m north of Horton Road <b>Grid Ref</b> : 504500E, 174800N	Spout Lane Tip	License Holder Name: Unknown Issued: Unknown Surrender Date: Unknown
c. 45m east of Stanwell Moor Road <b>Grid Ref</b> : 504900E, 174500N	Stanwell No.2	License Holder Name: Hall Aggregates Issued: August 1977 Surrender Date: November 1989
c. 95m southwest of the A308, Staines Bypass. <b>Grid Ref</b> : 504700E, 171500N	Leacroft	License Holder Name: Greenham Construction Limited Issued: July 1977 Surrender Date: April 1994
c. 160m south of the Laleham Substation. <b>Grid Ref</b> : 506200E, 169100N	Reservoir Aggregates	License Holder Name: Reservoir Aggregates Ltd Issued: March 1996 Surrender Date: January 2019

In the area surrounding the Poyle Interchange three historical landfills are recorded within the red line boundary: Hithermoor Farm and the two historical landfills named Horton Road. Additional assessment should be undertaken following the detailed design of the cable route within the RLB to assess whether the historical landfills within this area pose risk to the cable infrastructure or, whilst unlikely, that the CR could connect landfill contaminants to receptors. It would be considered best practice to not lay the proposed infrastructure though these historical features.

Three of the reported historical landfills (Poyle Manor, Sprout Lane Tip and Stanwell Moor Road West) are detailed to have boundaries adjacent to the proposed CR. The recorded



licensed dates for the Poyle Manor and Stanwell Moor Road West Landfills are dated 1974 and 1977 respectively. Historical mapping indicates that the highway was constructed and in use before these landfills were developed. Therefore, is reasonable to assume that the landfills do not extend under the highway. However further assessment of these areas may be required to confirm that any contaminants arising from the landfill have not migrated beyond the landfill boundary and impacted the CR. No additional details of the Spout Lane Tip are publicly available.

#### 2.4.2 Permitted Waste Sites / Authorised Landfills

There are three permitted waste sites / authorised landfills within 500m of the CR. Details of these permitted waste sites / authorised landfills are presented in Table 2-8 below.

Table 2-8: Permitted Waste Sites / Authorised Landfills within 500m

Location	Name	Details
c. 380m north of the Poyle Interchange	Longford II, Poyle	License Holder Name: Cemex UK Materials Limited
Grid Ref: 503690E,		Permit Number: 83081
176210N		<b>Waste type</b> : A04: Household, Commercial & Industrial Waste Landfill
		Issued: October 1989
c. 180m east of the Stanwell Moor Road	Stanwell III Landfill	License Holder Name: Cemex UK Materials Limited
Grid Ref: 505116E,		Permit Number 659140
174539N		Waste type: A06: Landfill taking other wastes
		Issued: June 1985
c. 300m east of the Stanwell Moor Road	Stanwell III Landfill	License Holder Name: Cappagh Public Works Limited
Grid Ref: 505000E,		Permit Number: 656455
174500N		Waste type: L05: Inert LF
		Issued: October 2006
c. 190m north of the A 308, Staines Bypass.	Hengrove Farm Landfill	License Holder Name: Henry Streeter (Sand & Ballast) Limited
Grid Ref: 505190E,		Permit Number: 636719
172220N		Waste type: L05: Inert LF
		Issued: May 2005

#### 2.5 Industrial / Land Use Activities

The walkover and publicly available data has provided information on current industrial activities along the CR. This indicates the nature of the surrounding site operations and helps to identify activities that might be a source of soil or groundwater contamination that might impact the CR. A summary of relevant information along the CR is summarised below.

- Control of Major Accident Hazards (COMAH) sites no records or observations.
- Evidence of fly tipping no significant observations during the site walkover.
- Records of active petrol filling stations Two currently active fuel station entries are reported 180m southwest of the Crooked Billet Roundabout and 240m northeast Fordbridge Roundabout on the A308.



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- Electrical Substation the Laleham Substation is located at the end point of the CR. 3no. smaller substations were observed along the CR during the site walkover.
- Heathrow Airport operates c. 500m northeast of the Stanwell Moor Road and Horton Road junction along the CR.
- Environmental Designations there are three Ramsar Sites adjected to the CR (Staines reservoirs, King George VI Reservoir and Wraysbury Reservoir). Five SSSIs are located adjacent to the CR (Shortwood Common, Staines Moor, Staines Reservoirs, King George VI Reservoir and Wraysbury Reservoir).

Given that the closest SPZ1 is located more than 2km from any part of the CR it can be interpreted that no groundwater abstractions are present within this radius of the CR. The King George IV Reservoir and Staines Reservoirs are used primarily for drinking water, though these have been constructed above the surrounding ground level and are contained within a surrounding embankment.

No other major concerns have been revealed with respect to the planned development from the above search data, which is broadly consistent with information obtained from historical records and the site walkover.



# 3.0 Site Walkover Survey

The site walkover survey was carried out by an SLR engineer on 20<sup>th</sup> June 2025. For ease in reporting the walkover was split up into sections, with subsequent text summarising the findings in these sections. A photographic log is included in Appendix B for reference.

#### Manor Farm to the Golden Cross Public House and Roundabout.

The Manor Farm Industrial Estate contains various commercial and industrial units. These included vehicular and transport services, welding, an aggregates supplier and a bakery (Plates 1 and 2).

To the north of the Manor Farm Industrial Estate, the Poyle Channel is visible from Poyle Road, which bridges it. The Poyle Channel is a tributary of the River Colne and is observed to flow in a westerly direction and was noted to be clear with no obvious indicators of contamination (Plate 4). The Proposed CR does not cross the Poyle Channel.

To the west of Poyle Road is Brittania Industrial Estate, within which various commercial, light industrial and office buildings are located. A dry shallow drainage ditch was observed located between the industrial estate and Poyle Road.

A pumping station is located to the west of Poyle Road, adjacent to an entrance into Brittania Trading Estate. A drainage ditch, running from Manor Farm Industrial Estate to the pumping station was dry at the time of the walkover. The unnamed watercourse at the northern edge of the pumping station was not observed due to the land being overgrown and obstructed by concrete blocks, skips and vehicles.

#### The Golden Cross Public House to Poyle Interchange.

The view to the south of the Golden Cross Public House is dominated by the Wraysbury Reservoir embankments. To the west of the Golden Cross Public House is the Poyle Poplars Woodland, located c. 20m west of the CR.

Horton Road is characterised by further access to the industrial estate along northern side of the road (plate 7). Towards the east of this section of Horton Road bridge crosses the Wraysbury River and a public footpath leads from the south side of the carriageway to cross the Poyle Interchange. The Wraysbury River was observed to flow in a southerly direction and with clear free flowing water. A large service pipe was observed crossing the Wraysbury River on the south side of the bridge, with a maintenance hatch and chamber located on the eastern bank (Plates 8 and 9).

The Poyle Interchange, a large roundabout constructed over the M25 with respective slip roads, has a public footpath for pedestrian crossings. Plate 10 details the entrance to the public footpath from Horton Road. The exact route details for this area were unknown at the time of the walkover; however the public footpath covers areas of vegetation and green space, underpasses and raised footpaths (Plates 11 and 12).

#### Poyle Interchange to Stanwell Moor Road

The footpath continues to the eastern side of the Poyle interchange, splitting into two, with various paved and unpaved cycle tracks. Here both footpath entrances were observed to be blocked by large concrete barriers where they join with Horton Road.

Traveling east along Horton Lane a bridge over a section of the River Colne was encountered. The River Colne is observed to be free flowing in a southern direction, with no obvious obstructions and is bordered by dense vegetation. A second bridge over the River Colne is located further east along Horton Road, adjacent to The Mill Heathrow Business Centre. The south side of Horton Road between the two bridges is bound by a drainage ditch. (Plates 15 to 18).



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The CR, still following Horton Road, continues towards the village of Stanwell Moor which was observed to be mainly houses with small commercial and community-based facilities. To the east of Stanwell Moor Village Hall is Hithermoor Stream tributary of the River Colne (Plate 21) observed to be flowing south to the side of Hithermoor Road.

Two substations were located along this stretch of the proposed CR, to the west of the River Colne crossing, the second located at the junction of Horton Road and Flintlock Close.

Towards the junction of Horton Road and Stanwell Moor Road the surrounding area of the CR changes to an industrial land use with land to the north occupied by Vermeulen's Industrial Estate (farm shop/café, joiners, tilers and stonemasons etc, see plate 22) and land south occupied by Oak Leaf Farm Industrial Estate (recycling centre and utilities depot).

#### **Stanwell Moor Road to Staines Bypass**

Stanwell Moor Road sits in a north south trajectory, with the CR following this from the Horton Road junction (Plate 23) to the Crooked Billet roundabout (Plate 27). The northern part of Stanwell Moor Road, around the Vermeulen's Industrial Estate, Oak Leaf Recycling, the Staines Reservoirs and King George IV Reservoir are raised steeply on either side of Stanwell Moor Road, with pastoral gazing observed on sides of the King George IV Reservoir (plate 24). Overhead pylons (Plate 25) and a pumping station are located within the perimeter of the King George IV Reservoir.

The approach to the Crooked Billet Roundabout is primarily in a residential setting, with water filled brick and concrete lined channels to the west and dry drainage ditches to the east. A second Thames Water Pumping Station is located on the northwest corner of the Crooked Billet Roundabout (Plate 26).

#### **Staines Bypass to Laleham Substation**

The Staines Bypass is located at a higher elevation than those surrounding areas to the north and south (Plate 29).

The River Ash and Staines Reservoir Aqueduct flow adjacent to and cross under the Staines Bypass at several locations, not all of which can be observed from lower lying areas to the north and south of the CR during the walkover. The River Ash can be observed at Woodthorpe Road (plate 30) flowing freely to the southeast. The Staines Reservoir Aqueduct (plate 32) was observed crossing under Ashford Road (B377), flowing in a west direction (plate 32).

The Laleham Substation can be accessed from both Ashford Road and the Staines Bypass (Plates 31 and 36 respectively). The proposed CR will enter the Laleham Substation from the north from the Staines Bypass, not to impede access to the Brett Aggregates site which is located to the southwest.

A Thames Water site is located to the immediate north of the Laleham Substation between this and the Staines Bypass (Plate 34).

#### Walkover Summary

Along the CR the Wraysbury River, River Colne, Hithermoor Stream, River Ash and Staines Reservoir were all observed and crossed. These were generally observed to be free flowing and clear of general detritus.

The CR passed the Wraysbury, King George IV and Staines Reservoirs, all of which were subject to high embankments which separate them from the surrounding areas. Between the Manor Farm data centre and Stanwell Moor Road the CR passes four industrial estates (Manor Farm, Brittania, Vermeulen's and Oakleaf). Two small substations were located along Horton Road, in the village of Stanwell Moor. The reminder of the CR passes



predominantly residential and open green space environments. Drainage ditches, some dry and some water bearings were observed sporadically adjacent to the route

No areas of gross fly tipping or other contamination were observed during the walkover.



# 4.0 Outline Geo-environmental Conceptual Model and Preliminary Risk Assessment

#### 4.1 Preliminary Land Quality Risk Assessment (PLQRA)

In accordance with the procedure for assessing the significance of potential land contamination exposure risks as documented within LCRM, potential contaminants, pathways and receptors should be considered within the context of contaminant or pollutant linkages. An evaluation of the risks associated with each linkage should drive decisions regarding the status of the land as contaminated and requiring remediation, uncontaminated or requiring further investigation. SLR's approach to PLQRA including the regulatory context is included as Appendix D. Where the PLQRA indicates a low or negligible risk, no further investigation is recommended.

The information summarised in the previous sections has been used to identify the likely contaminant sources, receptors and pathways present at the site. The elements of the preliminary conceptual site model have been used to consider the potential pollutant linkages (PPL), their significance and acceptability. An evaluation of the risks associated with each linkage drives decisions regarding the status of the land as contaminated and requiring remediation, uncontaminated, or requiring further investigation.

The revised statutory guidance for Part IIA, DEFRA publication PB13735, defines the following:

- Contaminant: "a substance which is in, on, or under the land and which has the
  potential to cause harm to a relevant receptor, or to cause significant pollution of
  controlled waters".
- Pathway: "a route by which a receptor is, or might be affected by the contaminant";
   and
- Receptor: "something that could be adversely affected by a contaminant, for example, a person, an organism, an ecosystem, property, or Controlled Waters."

The term "contaminant linkage" means the relationship between a contaminant, a pathway and a receptor. All three elements of a contaminant linkage must exist in relation to particular land use before the land can be considered potentially to be contaminated land under Part IIA, including evidence of the actual presence of contaminants. The term "significant contaminant linkage", as used in the Guidance, means a contaminant linkage which gives rise to a level of risk sufficient to justify a piece of land being determined as contaminated land. The term "significant contaminant" means the contaminant which forms part of a significant contaminant linkage.

#### 4.1.1 Assessment Assumptions

The information summarised in the previous sections of this report has been used to identify the likely contaminant sources, pathways and receptors present at the site. The elements of the preliminary conceptual site model, Table 4-1, have been used to consider the PPLs, their significance and acceptability.

It is important to note that the assessment detailed herein comprises a relatively 'high level' assessment of potential contamination impacts along the proposed CR. Where sources of contamination conceptual PPLs have been identified there may be a requirement to carry out further targeted assessments to quantify the risks that could be posed to human, environmental and built receptors.

At the time of reporting, the proposed CR is intended to be developed though the existing highways, except for the Poyle Interchange section, where the final routing within the red line



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boundary will besubject to further detailed design. Within the highways and pavement, the CR will be finished with hardstanding, whereas verges alongside a pavement will require reinstatement as soft landscaping.

When developing the Conceptual Site Model, the following findings were taken into consideration:

- At the time of reporting the proposed development is to comprise a 132kV CR, measuring 8.3km in length, between Laleham Substation in the south and the Proposed Manor Farm Data Centre and BESS in the north. The route is generally noted to traverses along existing highways and verges with limited soft landscaping to be traversed and no demolition of surrounding structures or dwellings. The final CR surrounding the Poyle Interchange, is uncertain if the route will be places within the existing highways or within the surrounding soft landscaping, as such may need to be revisited following the completion of detail design works.
- The walkover survey established that the proposed CR, while mainly being located within the highways, will traverse areas of agricultural, residential, commercial, and industrial use. During the walkover, the Poyle Chanel, Wraysbury River, River Colne, River Ash, Staines Aqueduct, three water bearing drainage ditches and a single dry drainage ditch were observed. Three pumping stations and two electrical substations were also noted. The CR was generally free of gross fly tipping and no substantial evidence of contamination from adjacent land uses was observed.
- Historical maps dated 1885 to 1903 details the proposed CR between the Proposed Manor Farm Data Centre and BESS and the Crooked Billet Roundabout to be along roads and tracks. The route between the Crooked Billet Roundabout and the Laleham Substation was predominantly agricultural fields until the early to mid 1960's where upon the A303 Staines Bypass was constructed. The surrounding areas of the CR slowly developed from agricultural land to residential, industrial, and commercial usage. The construction of the Staines Reservoirs and King George IV Reservoir was completed in 1902 and 1913, respectively.
- Much of the CR is underlain by superficial geology of various members of the River Terrace Deposits, with limited presence of recorded Alluvium around the A308. These superficial deposits are underlain by bedrock geology of the London Clay Formation.
- Much of the CR is expected to span the existing highways and verges, variable Made Ground is expected to be encountered.
- The River Terrace Deposits are classified as Principal and Secondary A Aquifers. The London Clay Formation is classified as an Unproductive Strata.
- The section of the CR between the Staines Reservoirs and the A308 Staines Bypass is classified as an SPZ 3. This assessment failed to identify any evidence of sensitive groundwater abstraction in the vicinity of the proposed CR.
- The CR crosses a number of small streams, rivers and minor drainage ditches including the Wraysbury River, River Colne, Hithermoor Stream, River Ash, Staines Reservoir Aqueduct. The CR also runs adjacent to the King George VI Reservoir, Staines Reservoirs, Wraysbury Reservoir and Queen Mary Reservoir. The final alignment of the CR crossing of these water bodies, will fall within the RLB, but detailed design of the crossings at these points has not taken place yet.. The reservoirs are not considered to be potential receptors due to the steep embankments which surround them that would prevent impact from surface run off during the CR construction phase.
- Thirteen historical landfills have been identified within 500m of the CR. Two of these (Poyle Manor and Stanwell Moor Road West) are noted to bound the CR but not thought to be crossed by it. A third adjacent landfill (Spout Lane Tip) held no publicly



available details as to age. Surrounding the Poyle Interchange the Red Line Boundary for the CR is noted to include parts of three historical landfills (Hithermoor Farm and two named Horton Road).

- The closest permitted waste sites / authorised landfills are located 180m from the CR to the east of Stanwell Moor Road.
- Residential, industrial, and light commercial properties are located directly adjacent to the CR. While some of these surrounding land uses may may have given rise to localised sources of ground contamination this assessment failed to identify any evidence of significant off-site pollution events with the potential to impact the CR.
- The Staines reservoirs, King George VI Reservoir and Wraysbury Reservoir are designated as both SSSIs and Ramsar Sites, however given the embankments that surround these features, they are not considered to be sensitive receptors. A single SSSI is located to the far southwest of the red line boundary of the Poyle Interchange. Two other SSSIs, Staines Moor and Shortwood Common, are located adjacent to the proposed CR.

#### 4.1.2 Sources

From the findings of the desk study, and observations made during the site walkover, the following conceptual sources of contamination have been identified:

- Made Ground associated with historical and present land uses (highway development and redevelopment) which could contain contaminants including asbestos, PAHs, and metals.
- Onsite and adjacent landfills of unknown input material.

#### 4.1.3 Pathways

Potentially relevant exposure pathways specific to the site are considered to be as follows:

- Direct contact and ingestion
- Dust inhalation.
- Lateral migration of contaminants via shallow/perched groundwater.
- Vertical migration of contaminants via leaching

#### 4.1.4 Receptors

Potential receptors specific to the site are:

- Construction and maintenance workers.
- Users of adjacent residential properties, commercial sites and land users.
- Groundwater (Principal and Secondary A Aquifers) relating to the superficial geology).
- Adjacent and crossed water courses (Wraysbury River, River Colne, Hithermoor Stream, River Ash, Staines Reservoir Aqueduct and three unnamed watercourses) and drainage ditches.
- Buried services and structures; and
- Shortwood Common and Staines Moor SSSI sites.

## 4.2 Potential Pollutant Linkages (PPLs)

The following potentially complete pollutant linkages are considered



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- **PPL1** Risks to construction workers from direct contact with contaminated soils during construction phase.
- **PPL2** Risks to on and off-site human receptors, from the dust inhalation pathway.
- **PPL3** Risks to controlled waters (Principal and Secondary A Aquifers) from leaching of contaminants in soils and/or wastes deposited within adjacent landfills.
- **PPL4** Risks surfacing water receptors from migration of potentially mobile contaminates within shallow groundwater.
- **PPL5** Risks to buried structures and services in direct contact with contaminated soils and/or landfills.
- **PPL6** Risk to buried structures and services from combustible materials within contaminated soils and/or landfills.
- **PPL7** Risks to offsite SSSI designated site by during construction works from potentially contaminated airborne dust and migration of potentially mobile contaminates within the soil and/or landfills.

A summary of the likely nature and severity of the identified PPLs is presented in Table 4-1:

**Table 4-1: Preliminary Conceptual Site Model** 

	-	
PPL	Comments	Risk Classification
PPL1 Risks to (onsite) construction workers and off-site human receptors, commercial and industrial environments from potentially contaminated soils, during construction works from potentially contaminated soils and/or landfills and airborne dust via the ingestion, dermal contact and inhalation pathways	The proposed CR follows various highways from the Proposed Manor Farm Data Centre and BESS to Laleham Substation, and with the exception of the Poyle Interchange without crossing any agricultural land or green space.  The highways have been in construction since at least the earliest mapping records (dated 1885 to 1903) and will have undergone various phases of public utilities emplacement and resurfacing, and in some cased duelling.  While contamination may be present within the shallow soils and Made Ground along proposed CR, associated risks could be mitigated by suitable Method Statements, Risk Assessments and PPE for the construction workers undertaking the installation of the CR. It is recommended that a discovery strategy (with watching brief) is undertaken, and best practice health, safety and environmental procedures are followed to ensure risks to site workers and users are not adversely impacted as part of the proposed CR.  Surrounding the Poyle Interchange the proposed CR is subject to detail design and the finalised CR is not known Within this area should the proposed CR cross the historical landfills additional assessment is recommended.	Low
PPL2 Risks to on and off-site human receptors, from the dust inhalation pathway;	Alongside comments above from PPL1, there is a moderate likelihood of dust being created during the excavation process. Production of dust could be mitigated by suitable Method Statements, Risk Assessments and PPE and RPE for the construction workers undertaking the installation of the CR.  As good practice dust suppression should be adopted, particularly if undertaken in periods of dry weather.	





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can, in theory, present a combustion risk.

PPL	Comments	Risk Classification
	SLR recommends the use of thermally designed filler (i.e. fine sand or mortar) as suitable backfill material to surround the HV cables within the cable corridor.	
	While potential contamination may be present within the shallow soils and Made Ground along proposed CR, this	Low

#### 4.3 Geoenvironmental Conclusions

Based on the findings of the data review and accompanying risk assessment it is interpreted that there is relatively low risk of the site being subject to significant or widespread contamination that may pose potentially unacceptable environmental risk in the context of the proposed end use.

The site history details that the main route proposed for the installation of the 132kV cable between the Laleham Substation and proposed data centre and BESS at Manor Farm, Poyle has remained of a similar land use, being that of highways from the earlier 1960s if not before.

The proposed CR is to be located within existing highway infrastructure, with no alteration of the current land use given the presence of existing utilities. In the absence of any significant alteration of the existing land use, any potential risks can be mitigated during the construction phase with appropriate method statements and working practices, to be outlined within the supporting Construction Environmental Management Plan (CEMP) for the proposed development.

The area surrounding the Poyle Interchange, where the finalised CR is yet to be established and is subject to detail design, additional works in the form of a revised CSM and site investigation would be required to appropriately characterise that area of the CR.



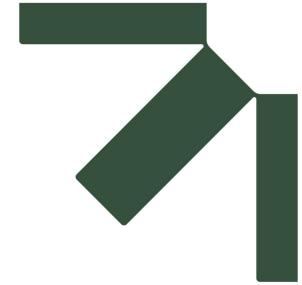
## 5.0 Summary and Recommendations

In summary, this report outlines the conceptual risks of contamination in relation to the cable route only. Due to the low potential environmental impact to the receptors identified and limited scale of development, no significant precautionary measures are required. However, it is recommended that a discovery strategy (with watching brief) alongside a CEMP is undertaken, and best practice health, safety and environmental procedures are followed to ensure risks to workers, site users and environmental receptors are not adversely impacted as part of the proposed cable route.

Given the extent of site works, the potential to encounter unexpected sources of contamination, such as in the form of historical mineral workings, former excavations and infilled ground, needs to be considered across the wider CR. As such, there will be a requirement to undertake a discovery strategy and watching brief as the works progress and to adopt a soils management approach to the handling and re-use of excavated site-won material. Those undertaking the watching brief should be suitably trained and competent with regards to identifying those contaminates of concern. It is recommended that these personnel to have also undergone asbestos awareness training. It will need to be demonstrated that site-won soils and material import will be suitable for their intended use in accordance with a design specification (including chemical re-use/import criteria). Best practice measures should be undertaken in relation to the segregation, storage and stockpiling of soil material. Where groundwater is required to be dewatered, it is considered that with appropriate regulatory permits and licenses in place, and with possible pretreatment required (e.g. de-silting, filtration), such water could be discharged in accordance with a Surface Water and Drainage Management Plan.

At the Poyle Interchange, where the final cable route (CR) is subject to detailed design, further work, including a revised Conceptual Site Model (CSM) and site investigation, may be needed to appropriately assess and characterise the area.





# **Appendix A** Figures

# **Preliminary Land Quality Desk Study**

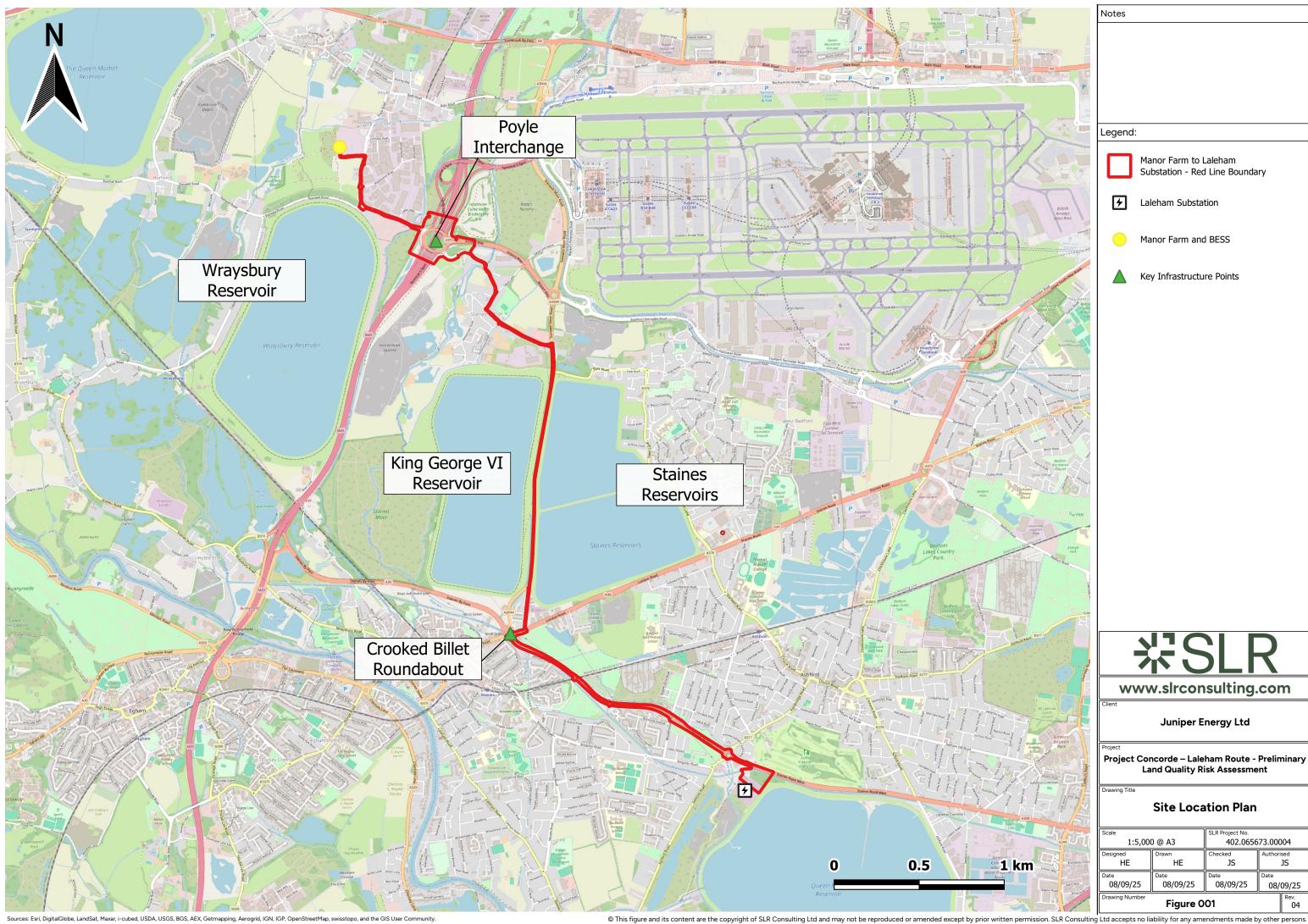
Manor Farm Cable - Laleham Substation Corridor

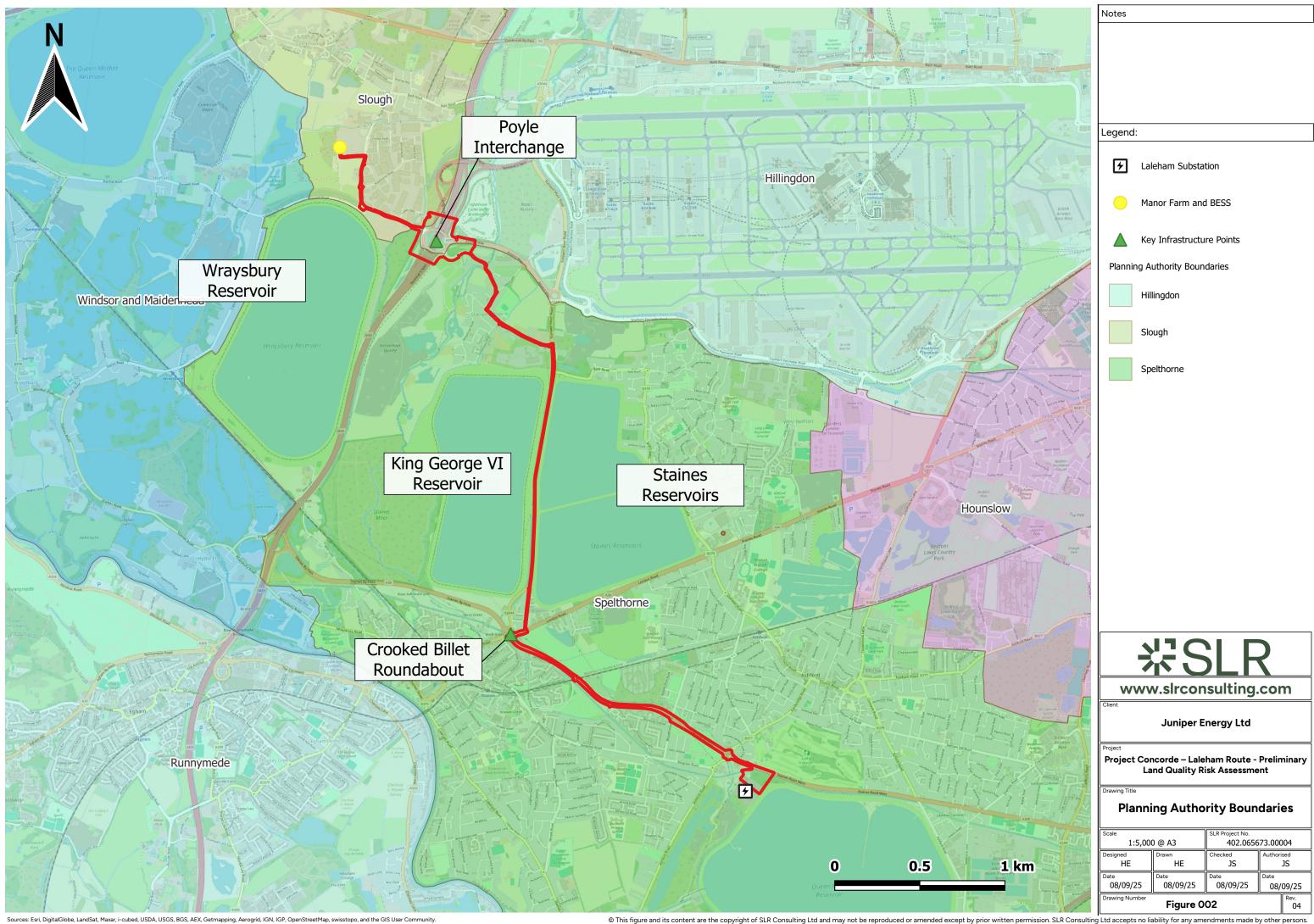
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# Appendix B Client Supplied Plans – Red Line Boundary

## **Preliminary Land Quality Desk Study**

Manor Farm Cable - Laleham Substation Corridor

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