

Stonestreet Green Solar

Environmental Statement

Volume 4: Appendices

Chapter 10: Water Environment

Appendix 10.5: Schedule of Watercourse Crossings

PINS Ref: EN010135

Doc Ref. 5.4

Version 1

June 2024

APFP Regulation 5(2)(a)

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



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1.0 Introduction

- 1.1 This Schedule of Watercourse Crossings has been prepared on behalf of EPL 001 Limited ('the Applicant') to provide information on the proposed temporary and permanent water crossings within the Order limits beneath or over watercourses in relation to the Development Consent Order ('DCO') application for Stonestreet Green Solar ('the Project'). It also provides information on existing crossings within the Order limits that will be used as a part of the Project.
- 1.2 The Project comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation.
- 1.3 The Project will include a generating station (incorporating solar arrays) with a total capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Project will allow the export and import of up to 99.9 MW of electricity to the grid. The Project will connect to the existing National Grid Sellindge Substation via a new 132 kilovolt ('kV') substation constructed as part of the Project and cable connection under the Network Rail and High Speed 1 ('HS1') railway.
- 1.4 The location of the Project is shown on **ES Volume 3, Figure 1.1: Site Location Plan (Doc Ref. 5.3)**. The Project will be located within the Order limits (the land shown on the **Works Plans (Doc Ref. 2.3)** within which the Project can be carried out). The Order limits plan is provided as **ES Volume 3, Figure 1.2: Order Limits (Doc Ref. 5.3)**. Land within the Order limits is known as the 'Site'.

2.0 Schedule of Watercourse Crossings

- 2.1 A schedule of the existing watercourse crossings within the Site that the Project will rely on is provided in **Annex A**.
- 2.2 A schedule of new watercourse crossings (both temporary and permanent) that will be created as part of the Project is provided in **Annex B**.
- 2.3 A summary of existing and proposed crossings is provided in **Section 4.0** and **Section 5.0** of this report, respectively.
- 2.4 Plans showing the location of both the existing and proposed watercourse crossings are provided in **Annex C (Figure 10.5.1 and 10.5.2)**.



2.5 For reference within the Annexes the following abbreviations are applied to different crossing types:

- WX – Existing Watercourse Crossing
- TBC – Temporary Bridge Crossing
- PFB – Permanent Foot Bridge
- HDD – Horizontal Directional Drilling
- TCC – Trench Cable Crossing

2.6 For reference within the two schedules (Annexes A and B) the following watercourse types are referenced:

- Main River – Watercourse (River East Stour) for which the Environment Agency ('EA') is the statutory drainage authority.
- Internal Drainage Board ('IDB') Managed Ordinary Watercourse - Ordinary Watercourses that are actively managed by the River Stour IDB. A number of these are present within the Order limits but no crossings of these features are required. Crossings are proposed on the channel that runs between Fields 23 and 23. This is not shown by IDB mapping¹ to be a channel that they formally manage. It is however the continuation of a channel that they maintain and therefore is also included under this classification to differentiate it from a Riparian Drain.
- Ordinary Watercourse (Riparian Drain) – Ordinary Watercourse within the River Stour IDB area that is not actively managed by the IDB but for which the River Stour IDB is the statutory drainage authority. These are sometimes referred to as Riparian Drains.

2.7 Other minor channels (Ordinary Watercourses) are present within the Order limits but outside of the River Stour IDB area. For these Kent County Council (the Lead Local Flood Authority ('LLFA')) is the statutory drainage authority. No crossings for these features are required.

2.8 Photos of proposed and existing watercourse crossing locations are provided within **Annex A** and **Annex B** and the location of these photos is shown in **Annex C**. These photos were taken during surveys of the Site undertaken by SLR in January and February 2024 using the internal camera and lenses within a Galaxy A33 5G phone.

3.0 Permitting Requirements

3.1 The DCO is not seeking to disapply any legislation relating to the water environment. As such all proposed works, on both existing and proposed



watercourse crossings, will be subject to separate approval from the relevant statutory drainage authority. On this basis both the EA and the IDB have confirmed that they do not require any protective provisions.

3.2 As detailed in the **Schedule of Other Consents and Licences (Doc Ref. 3.4)**:

- all works and structures within, over, beneath or within 8m and all excavations within 16m of the top of bank of a main river will be subject to receipt of a Flood Risk Activity Permit ('FRAP') from the EA; and
- all work and structures within, over or beneath an Ordinary Watercourse within the IDB area will be subject to Land Drainage Consent from the IDB.

3.3 It is also noted that Land Drainage (Ordinary Watercourse) Consent would need to be obtained from KCC, as the LLFA, for any works to ordinary watercourses that do not fall within the IDB area. However, based on the **Works Plans (Doc Ref. 2.3)**, no such works are expected to be required.

4.0 Existing Crossing Structures

4.1 Existing crossing structures to be retained are summarised in Table 4-1. Note that the **Draft Development Consent Order ('DCO') (Doc Ref. 3.1)** includes a power in Work No. 8 to alter, maintain, repair or replace existing crossing structures over non-navigable rivers and other watercourses and agricultural drains during construction, operation and decommissioning.

Table 4-1: Existing Crossing Structures to be retained

ID No.	National Grid Reference	Location	Watercourse Type	Structure Type
WX 1	TR 05968 37886	Between Field 16 and Field 19	Ordinary Watercourse (Riparian Drain)	Agricultural Vehicle Access
WX 2	TR 05994 37837	Between Field 15 and Field 19	Ordinary Watercourse (Riparian Drain)	Agricultural Field Access
WX 3	TR 06119 37773	Between Field 18 and Field 19	Ordinary Watercourse (Riparian Drain)	PRoW Footbridge
WX 4	TR 06493 37838	Between Field 23 and Field 24	IDB Managed Ordinary Watercourse	PRoW Footbridge



ID No.	National Grid Reference	Location	Watercourse Type	Structure Type
WX 5	TR 06617 38124	Between Field 24 and Field 25	Main River	PRoW Footbridge
WX 6	TR 06811 38210	Between Field 26 and Field 28	Main River	Agricultural Vehicle Bridge
WX 7	TR 07204 38173	Between Field 27 and Field 29	Main River	PRoW Footbridge
WX 8	TR 07361 38177	Between Field 27 and Field 29	Main River	PRoW Footbridge

5.0 Proposed Crossing Structures

5.1 Proposed crossing structures to be installed as a result of the Project are summarised below.

Table 5-1: Proposed Temporary Bridge Crossings

ID No.	National Grid Reference	Location	Watercourse Type
TBC 1	TR 06395 37709	Between Field 18 and 19	Ordinary Watercourse (Riparian Drain)
TBC 2	TR 06408 37881	Between Field 23 and Field 24	IDB Managed Ordinary Watercourse
TBC 3	TR 06638 38131	Between Field 24 and Field 25	Main River
TBC 4	TR 06915 38205	Between Field 27 and Field 28	Main River
TBC 5	TR 07557 38201	Between Field 27 and Cable Route Corridor	Main River

Table 5-2: Proposed Permanent Footbridge Crossings

ID No.	National Grid Reference	Location	Watercourse Type
PFB 1	TR 06395 37709	Between Field 18 and 19	Ordinary Watercourse (Riparian Drain)



ID No.	National Grid Reference	Location	Watercourse Type
PFB 2	TR 06408 37881	Between Field 23 and Field 24	IDB Managed Ordinary Watercourse

Table 5-3: Proposed HDD Crossings

ID No.	National Grid Reference	Location	Watercourse Type
HDD1	TR 06408 37881	Between Field 23 and Field 24	IDB Managed Ordinary Watercourse
HDD2	TR 06543 37860	Between Field 23 and 24	IDB Managed Ordinary Watercourse
HDD3	TR 06638 38131	Between Field 24 and Field 25	Main River
HDD4	TR 07557 38201	Between Field 27 and Cable Route Corridor	Main River
HDD5	TR 08466 38060	Cable Route Crossing (between Cable Route Corridor and Sellindge Substation)	Main River

Table 5-4: Proposed Trench Cable Crossings



ID No.	National Grid Reference	Location	Watercourse Type
TCC 1	TR 05872 37965	Between Field 16 and Field 19	Ordinary Watercourse (Riparian Drain)
TCC 2 (located in proximity to WX2)	TR 05984 37851	Between Field 15 and Field 19	Ordinary Watercourse (Riparian Drain)
TCC 3	TR 06229 37770	Between Field 18 and Field 19	Ordinary Watercourse (Riparian Drain)





Annex A: Existing Watercourse Crossings



Appendix 10.5: Schedule of Watercourse Crossings

Unique Reference ID: WX 1				
Watercourse Crossing Details	National Grid Reference:	TR 05968 37886	Watercourse Name:	Watercourse A
	Location	Between Field 16 and Field 19		
	Culvert Diameter:	Culvert details and flow are unknown due to vegetation growth	Watercourse Type	Ordinary Watercourse (Riparian Drain)
	Culvert Construction:		Watercourse Width:	~4.5m
	Observed flow depth:		Watercourse Depth:	~1.5m
	Pre-Development Culvert Use:	Agricultural Vehicle Access	Post-Development Culvert Use:	Operational Vehicle Access
	The 5m wide crossing has a turf overgrown on top of it. It is used by tractors/heavy vehicles as well as pedestrians. The watercourse was obscured by the thick brush.			
Photograph Looking Upstream	 <p>11 Jan 2024 12:32:28 51.10319348517805N 0.9406754281371832E Smeeth Kent England</p>		Photograph Looking Downstream	 <p>11 Jan 2024 12:32:35 51.103214607574046N 0.9407149069011211E Smeeth Kent England</p>



Unique Reference ID: WX 1	
Summary of proposed works	From a visual survey the culvert currently appears to be structurally sound and is regularly used for agricultural vehicles. Given limitation on access and testing it is however not possible to confirm that the structural condition will remain fit for purpose through the lifetime of the development particularly given possible occasional requirements for access by slightly larger vehicles. The Draft DCO (Doc Ref. 3.1) includes a power in Work No. 8 to alter, maintain, repair or replace existing crossing structures over non-navigable rivers and other watercourses and agricultural drains during construction, operation and decommissioning. This culvert could be potentially used by both construction, operational and decommissioning traffic.
Permitting	Any future works to crossing would be subject to Land Drainage Consent from the River Stour IDB.





Unique Reference ID: WX 2				
Watercourse Crossing Details	National Grid Reference:	TR 05994 37837	Watercourse Name:	Watercourse A
	Location	Between Field 15 and Field 19		
	Culvert Diameter:	Culvert details and flow are unknown due to vegetation growth	Watercourse Type	Ordinary Watercourse (Riparian Drain)
	Culvert Construction:		Watercourse Width:	~2.5m
	Observed flow depth:		Watercourse Depth:	~1.0m
	Pre-Development Culvert Use:	Agricultural Field Access	Post-Development Culvert Use:	Operational Access
	The 2.5m wide crossing has overgrown turf on top of it. It is relatively narrow and appears to solely be a pedestrian crossing. The watercourse was obscured by the thick brush.			
Photograph Looking Upstream	 <p>11 Jan 2024 12:30:51 51.102783107198775N 0.9409723151475191E Aldington Kent England</p>		Photograph Looking Downstream	 <p>11 Jan 2024 12:30:35 51.10281596425921N 0.941028306260705E Aldington Kent England</p>



Unique Reference ID: WX 2	
Summary of proposed works	From a visual survey the culvert currently appears to be structurally sound. Given limitation on access and testing it is however not possible to confirm that the structural condition will remain fit for purpose through the lifetime of the development. The Draft DCO (Doc Ref. 3.1) includes a power in Work No. 8 to alter, maintain, repair or replace existing crossing structures over non-navigable rivers and other watercourses and agricultural drains during construction, operation and decommissioning. This culvert could be potentially used by both construction and operational foot traffic.
Permitting	Any future works to crossing would be subject to Land Drainage Consent from the River Stour IDB.





Unique Reference ID: WX 3				
Watercourse Crossing Details	National Grid Reference:	TR 06119 37773	Watercourse Name:	Watercourse A
	Location	Between Field 18 and Field 19		
	Culvert Diameter:	No Culvert	Watercourse Type	Ordinary Watercourse (Riparian Drain)
	Footbridge Construction:	Free span crossing	Watercourse Width:	~3.0m
	Observed flow depth:	~0.2m	Watercourse Depth:	~2.0m
	Pre-Development PRow Footbridge:	AE378	Post-Development PRow Footbridge:	AE378 diverted and this footbridge would be removed from the PRow network.
The crossing is a wooden sleeper with a metal wire mesh attached. It is set on concrete, with a metal pipe guard rails on one side. It is narrow and likely solely a pedestrian crossing for the existing PRow.				
Photograph Looking Upstream			Photograph Looking Downstream	



Unique Reference ID: WX 3	
Summary of Proposed Works	While no longer required as a PRow this crossing will still be required for operational access within the Site. From a visual survey the footbridge currently appears to be structurally sound. Given limitation on access and testing it is however not possible to confirm that the structural condition will remain fit for purpose through the lifetime of the Project. The Draft DCO (Doc Ref. 3.1) includes a power in Work No. 8 to alter, maintain, repair or replace existing crossing structures over non-navigable rivers and other watercourses and agricultural drains during construction, operation and decommissioning. This footbridge could be potentially used by both construction and operational foot traffic.
Permitting	Any future works to crossing would be subject to Land Drainage Consent from the River Stour IDB.





Unique Reference ID: WX 4				
Watercourse Crossing Details	National Grid Reference:	TR 06493 37838	Watercourse Name:	Unnamed Tributary 3 (Aldington Dyke)
	Location	Between Field 23 and Field 24		
	Culvert Diameter:	No Culvert	Watercourse Type	IDB Managed Ordinary Watercourse
	Footbridge Construction:	Free span crossing	Watercourse Width:	~4.0m
	Observed flow depth:	~0.5m	Watercourse Depth:	~2.0m
	Pre-Development PRow Footbridge:	AE431/AE436/AE657	Post-Development PRow Footbridge:	AE657
	The crossing is made of wooden boards and planks, with metal rods underneath the structure and wooden guard rails on both sides in addition to a metal gate on one side. It is narrow and used solely as a pedestrian crossing for the existing PRow.			
Photograph Looking Upstream	 <p>11 Jan 2024 12:50:30 51 102683153003454N 0 9480608068406582E Goldwell Lane Aldington Kent England</p>		Photograph Looking Downstream	 <p>11 Jan 2024 12:48:32 51 102594807744026N 0 9481709450483322E Goldwell Lane Aldington Kent England</p>



Unique Reference ID: WX 4	
Summary of Proposed Works	During the operational phase of the Project, the footbridge would continue to serve as a PRow footbridge for the AE657. From a visual survey the footbridge currently appears to be structurally sound. Given limitation on access and testing it is however not possible to confirm that the structural condition will remain fit for purpose through the lifetime of the Project. The Draft DCO (Doc Ref. 3.1) includes a power in Work No. 8 to alter, maintain, repair or replace existing crossing structures over non-navigable rivers and other watercourses and agricultural drains during construction, operation and decommissioning. This footbridge could be potentially used by both construction and operational foot traffic.
Permitting	Any future works to crossing would be subject to Land Drainage Consent from the River Stour IDB.





Unique Reference ID: WX 5				
Watercourse Crossing Details	National Grid Reference:	TR 06617 38124	Watercourse Name:	East Stour River
	Location	Between Field 24 and Field 25		
	Culvert Diameter:	No Culvert	Watercourse Type	Main River
	Footbridge Construction:	Free span crossing	Watercourse Width:	~5.5m
	Observed flow depth:	~0.6m	Watercourse Depth:	~2.0m
	Pre-Development PRow Footbridge:	AE431	Post-Development PRow Footbridge:	AE431
The crossing is made of wooden boards and planks spaced apart, with metal rods underneath the structure and green metal guard rails on both sides. It is narrow and solely a pedestrian crossing for the existing PRow.				
Photograph Looking Upstream	 <p>11 Jan 2024 12:57:3 51.1050922377035N 0.9499973617494106 Station Road Smeeth Ker England</p>		Photograph Looking Downstream	 <p>11 Jan 2024 12:57:2 51.1050819279626N 0.949984872713685 Station Road Smeeth Ker England</p>



Unique Reference ID: WX 5	
Summary of Proposed Works	During the operational phase of the Project, the footbridge would continue to serve as a PRow footbridge. From a visual survey the footbridge currently appears to be structurally sound. Given limitation on access and testing it is however not possible to confirm that the structural condition will remain fit for purpose through the lifetime of the development. The Draft DCO (Doc Ref. 3.1) includes a power in Work No. 8 to alter, maintain, repair or replace existing crossing structures over non-navigable rivers and other watercourses and agricultural drains during construction, operation and decommissioning. This footbridge could be potentially used by both construction and operational foot traffic.
Permitting	Any future works to crossing would be subject to FRAP from the EA.





Unique Reference ID: WX 6				
Watercourse Crossing Details	National Grid Reference:	TR 06811 38210	Watercourse Name:	East Stour River
	Location	Between Field 26 and Field 28		
	Culvert Diameter:	No Culvert	Watercourse Type	Main River
	Vehicle Bridge Construction:	Free span crossing	Watercourse Width:	~8.0m
	Observed flow depth:	~0.7m	Watercourse Depth:	~2.0m
	Pre-Development Vehicle Bridge:	Agricultural Vehicle Access	Post-Development Vehicle Bridge / PRow Footbridge:	New 2 / Operational Vehicle Access
	The crossing is made of wooden sleepers, with metal girders bolted underneath the structure and no guard rails. There is a metal gate on one side only and this crossing appears wide enough to act as a plant/heavy-vehicle crossing.			
Photograph Looking Upstream	 <p>11 Jan 2024 11:13:44 51.105831395834684N 0.9528094902634621E Unnamed Road Kent England</p>		Photograph Looking Downstream	 <p>11 Jan 2024 11:13:34 51.105832108296454N 0.9528899565339088E Unnamed Road Kent England</p>



Unique Reference ID: WX 6	
Summary of Proposed Works	<p>During the operational phase of the Project, this bridge is proposed to serve as a footbridge crossing for the 'New 2' PRoW that connects to the 'New 3' PRoW on the northern side of the East Store River. In addition, this crossing is the only existing vehicle access into the landowner's agricultural fields south of the East Store River. The landowner requires access to these fields once the Project is decommissioned and thus the bridge must be available for vehicle access once the Project is decommissioned.</p> <p>From a visual survey the bridge currently appears to be structurally sound and is regularly used for agricultural vehicles. Given limitation on access and testing it is however not possible to confirm that the structural condition will remain fit for purpose through the lifetime of the development particularly given possible occasional requirements for access by slightly larger vehicles. The Draft DCO (Doc Ref. 3.1) includes a power in Work No. 8 to alter, maintain, repair or replace existing crossing structures over non-navigable rivers and other watercourses and agricultural drains during construction, operation and decommissioning. This footbridge could be potentially used by both construction foot traffic and operational foot and vehicle traffic.</p>
Permitting	Any future works to crossing would be subject to FRAP from the EA.





Unique Reference ID: WX 7				
Watercourse Crossing Details	National Grid Reference:	TR 07204 38173	Watercourse Name:	East Stour River
	Location	Between Field 27 and Field 29		
	Culvert Diameter:	No Culvert	Watercourse Type	Main River
	Footbridge Construction:	Free span crossing	Watercourse Width:	~7.5m
	Observed flow depth:	~0.7m	Watercourse Depth:	~1.5m
	Pre-Development PRow Footbridge:	AE657/AE457	Post-Development PRow Footbridge:	AE657/AE457
The crossing and railings are made of wooden boards and planks, with metal support rods throughout the structure and staircases on either side. It is narrow and solely a pedestrian crossing for the existing PRow.				
Photograph Looking Upstream	 <p>11 Jan 2024 11:25:56 51.105312053114176N 0.9584204200655222E Smeeth Kent England</p>		Photograph Looking Downstream	 <p>11 Jan 2024 11:25:20 51.10536846332252N 0.9583510179072618E Smeeth Kent England</p>



Unique Reference ID: WX 7	
Summary of Proposed Works	<p>During the operational phase of the Project, the footbridge would continue to serve as a PRow footbridge.</p> <p>From a visual survey the footbridge currently appears to be structurally sound. Given limitation on access and testing it is however not possible to confirm that the structural condition will remain fit for purpose through the lifetime of the development. The Draft DCO (Doc Ref. 3.1) includes a power in Work No. 8 to alter, maintain, repair or replace existing crossing structures over non-navigable rivers and other watercourses and agricultural drains during construction, operation and decommissioning. This footbridge could be potentially used by both construction and operational foot traffic.</p>
Permitting	Any future works to crossing would be subject to FRAP from the EA.



Unique Reference ID: WX 8				
Watercourse Crossing Details	National Grid Reference:	TR 07361 38177	Watercourse Name:	East Stour River
	Location	Between Field 27 and Field 29		
	Culvert Diameter:	No Culvert	Watercourse Type	Main River
	Footbridge Construction:	Free span crossing	Watercourse Width:	~6.5m
	Observed flow depth:	~0.6m	Watercourse Depth:	~2.0m
	Pre-Development PRow Footbridge:	None	Post-Development PRow Footbridge:	None
The crossing is made of wooden boards and with metal support rods, edges, and railings. It is very narrow and solely a pedestrian crossing.				
Photograph Looking Upstream	 <p>11 Jan 2024 11:30:04 51.10535224433988N 0.9606666024774313E Smeeth Kent England</p>		Photograph Looking Downstream	 <p>11 Jan 2024 11:30:55 51.10542965121567N 0.9606780018657446E Smeeth Kent England</p>
Summary of Proposed Works	During the operational phase of the Project, the footbridge would continue to serve as a footbridge for users of the PRow network.			



Unique Reference ID: WX 8


	From a visual survey the footbridge currently appears to be structurally sound. Given limitation on access and testing it is however not possible to confirm that the structural condition will remain fit for purpose through the lifetime of the development. The Draft DCO (Doc Ref. 3.1) includes a power in Work No. 8 to alter, maintain, repair or replace existing crossing structures over non-navigable rivers and other watercourses and agricultural drains during construction, operation and decommissioning. This footbridge could be potentially used by both construction and operational foot traffic.
Permitting	Any future works to crossing would be subject to FRAP from the EA.





Annex B: Proposed Watercourse Crossings



Appendix 10.5: Schedule of Watercourse Crossings

Unique Reference ID: TBC 1 / PFB 1				
Details of Cross Location	Approximate National Grid Reference:	TR 06395 37709 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance.		
	Location	Between Field 18 and Field 19	Watercourse Name:	Watercourse A
	Watercourse Width:	~2.0m	Watercourse Type	Ordinary Watercourse (Riparian Drain)
	Watercourse Depth:	~1.5m	Observed flow depth:	~0.2m (still – no flow)
	Pre-Development Use:	None	Post-Development Use:	AE378 Footbridge & Temporary Bridge Crossing
	This is the head of a channel that starts at Callywell Lane with no significant upstream length of catchment. The channel is heavily vegetated and bounded by fields.			
Photograph Looking Upstream	No upstream – channel starts at Callywell Lane	Photograph Looking Downstream	 <div>7 Feb 2024 11:32:47 51.10151748172939N 0.9469133242964745E Callywell Lane Aldington Kent England</div>	
Anticipated Works	Temporary Bridge Crossing – to be formed as a pre-engineered modular steel bridge with abutments set 1m back from the top of the bank with the soffit level set 600mm above the bank height. The temporary bridge crossings will be used mainly during			



Unique Reference ID: TBC 1 / PFB 1	
	<p>the construction and decommissioning phases. However, at limited times during the operational phase, temporary bridges may be required to be reinstalled to provide access for maintenance, repair and replacement activities.</p> <p>Permanent PRoW Footbridge Crossing – a PRoW Footbridge crossing to be formed of wooden boards and planks (subject to detailed design and agreement with KCC). The new PRoW Footbridge will be a pedestrian crossing for the diverted AE378 PRoW.</p>
Permit Requirements	Land Drainage Consent from the River Stour IDB will be required for both the temporary bridge crossing and the permanent footbridge.





Unique Reference ID: HDD1 / TBC 2 / PFB 2				
Details of Cross Location	Approximate National Grid Reference:	TR 06408 37881 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance.		
	Location	Between Field 23 and Field 24	Watercourse Name:	Watercourse B
	Watercourse Width:	~5.0m	Watercourse Type	IDB Managed Ordinary Watercourse
	Watercourse Depth:	~2.0m	Observed flow depth:	~0.5m
	Pre-Development Use:	None	Post-Development Use:	AE431 Footbridge; Temporary Bridge Crossing & Cable crossing
	At this location, the channel has shallow naturally profiled banks. The channel separates a field with a fenced and heavy vegetation to one side.			
Photograph Looking Upstream	 <p>25 Jan 2024 13:19:32 51.102956822142005N 0.9468523040413857E Goldwell Lane Aldington Kent England</p>		Photograph Looking Downstream	 <p>25 Jan 2024 13:19:34 51.10292974859476N 0.9468334447592497E Goldwell Lane Aldington Kent England</p>



Unique Reference ID: HDD1 / TBC 2 / PFB 2	
Anticipated Works	<p>Temporary Bridge Crossing – to be formed as a pre-engineered modular steel bridge with abutments set 1m back from the top of the bank with the soffit level set 600mm above the bank height. The temporary bridge crossings will be used mainly during the construction and decommissioning phases. However, at limited times during the operation phase, temporary bridges may be required to be reinstalled to provide access for maintenance, repair and replacement activities.</p> <p>Cable Crossing - HDD will be used to install the high voltage cables beneath the watercourse. The cable crossing will be set below bed level at a suitable depth as agreed with the IDB as required.</p> <p>Permanent PRow Footbridge Crossing – a PRow Footbridge crossing to be formed of wooden boards and planks (subject to detailed design and agreement with KCC). The new PRow Footbridge will be a pedestrian crossing for the diverted AE431 PRow.</p>
Permit Requirements	Land Drainage Consent from the River Stour IDB will be required for the temporary bridge crossing, the permanent footbridge and the HDD.





Unique Reference ID: HDD2				
Details of Cross Location	Approximate National Grid Reference:	TR 06543 37860 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance.		
	Location	Between Field 23 and Field 24	Watercourse Name:	Watercourse B
	Watercourse Width:	~4.0m	Watercourse Type	IDB Managed Ordinary Watercourse
	Watercourse Depth:	~2.0m	Observed flow depth:	~0.6m
	Pre-Development Use:	None	Post-Development Use:	Cable crossing
	At this location both banks are heavily vegetated with but with exposed mud banks separating a field and a fenced off field on the other side of the bank. There is a wooden telephone pylon on one side.			
Photograph Looking Upstream	 <p>25 Jan 2024 13:16:37 51.102757710032165N 0.9487891104072332E Goldwell Lane Aldington Kent England</p>		Photograph Looking Downstream	 <p>25 Jan 2024 13:16:46 51.10278721433133N 0.9488223865628242E Goldwell Lane Aldington Kent England</p>
Anticipated Works	Cable Crossing - HDD will be used to install the high voltage cables beneath the watercourse. The cable crossing will be set below bed level at a suitable depth as agreed with the IDB as required.			



Unique Reference ID: HDD2

Permit Requirements	Land Drainage Consent from the River Stour IDB.
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Unique Reference ID: HDD3 / TBC 3				
Details of Cross Location	Approximate National Grid Reference:	TR 06638 38131 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance.		
	Location	Between Field 24 and Field 25	Watercourse Name:	East Stour River
	Watercourse Width:	~6.0m	Watercourse Type	Main River
	Watercourse Depth:	~2.5m	Observed flow depth:	~1.5m
	Pre-Development Use:	None (WX5 nearby)	Post-Development Use:	Temporary Bridge Crossing & Cable crossing (WX5 nearby)
	At this location, the channel has shallow naturally profiled banks with the adjacent land observed to be marshy and heavily vegetated.			
Photograph Looking Upstream			Photograph Looking Downstream	



Unique Reference ID: HDD3 / TBC 3	
Anticipated Works	<p>Temporary Bridge Crossing – to be formed as a pre-engineered modular steel bridge with abutments set 1m back from the top of the bank with the soffit level set 600mm above the bank height. The temporary bridge crossings will be used mainly during the construction and decommissioning phases. However, at limited times during the operation phase temporary bridges may be required to be reinstalled to provide access for maintenance, repair and replacement activities.</p> <p>Cable Crossing - HDD will be used to install the high voltage cables beneath the watercourse. The cable crossing will be set below bed level at a suitable depth as agreed with the EA as required.</p>
Permit Requirements	<p>A FRAP from the EA will be required for the temporary bridge crossing. For the cable crossing the HDD may be exempt from permitting under EA exempt activity 3². If following full design, the proposals do not meet the criteria for exemption a FRAP will be required.</p>





Unique Reference ID: TBC 4				
Details of Cross Location	Approximate National Grid Reference:	TR 06915 38205 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance.		
	Location	Between Field 27 and Field 28	Watercourse Name:	East Stour River
	Watercourse Width:	~8.0m	Watercourse Type	Main River
	Watercourse Depth:	~2.0m	Observed flow depth:	~1.5m
	Pre-Development PRoW:	None	Post-Development PRoW:	Temporary Bridge Crossing
	At this location, the channel has shallow and naturally profiled banks. The adjacent land is arable farmland.			
Photograph Looking Upstream			Photograph Looking Downstream	
Anticipated Works	Temporary Bridge Crossing – to be formed as a pre-engineered modular steel bridge with abutments set 1m back from the top of the bank with the soffit level set 600mm above the bank height. The temporary bridge crossings will be used mainly during the construction and decommissioning phases. However, at limited times during the operation phase temporary bridges may be required to be reinstalled to provide access for maintenance, repair and replacement activities.			



Unique Reference ID: TBC 4	
Permit Requirements	FRAP from the EA.





Unique Reference ID: HDD 4 / TBC 5				
Details of Cross Location	Approximate National Grid Reference:	TR 07557 38201 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance.		
	Location	Between Field 27 and Cable Route Corridor	Watercourse Name:	East Stour River
	Watercourse Width:	~7.0m	Watercourse Type	Main River
	Watercourse Depth:	~2.5m	Observed flow depth:	~1.0m
	Pre-Development Use:	None	Post-Development Use:	Temporary Bridge Crossing & Cable crossing
One bank is gently sloped with the adjoining land vegetated. The other bank is a steep and exposed face indicative of active erosion.				
Photograph Looking Upstream	 <p>25 Jan 2024 12:22:30 51.10388402827084N 0.9762076567858458E M20 Sellindge Kent England</p>		Photograph Looking Downstream	 <p>25 Jan 2024 12:20:34 51.103972918353975N 0.976162813603878E M20 Sellindge Kent England</p>



Unique Reference ID: HDD 4 / TBC 5	
Anticipated Works	<p>Temporary Bridge Crossing – to be formed as a pre-engineered modular steel bridge with abutments set 1m back from the top of the bank with the soffit level set 600mm above the bank height. The temporary bridge crossings will be used mainly during the construction and decommissioning phases. However, at limited times during the operation phase temporary bridges may be required to be reinstalled to provide access for maintenance, repair and replacement activities.</p> <p>Cable Crossing - HDD will be used to install the high voltage cables beneath the watercourse. The cable crossing will be set below bed level at a suitable depth as agreed with the EA as required.</p>
Permit Requirements	A FRAP from the EA will be required for the temporary bridge crossing. For the cable crossing the HDD may be exempt from permitting under EA exempt activity 3 ² . If following full design the proposals do not meet the criteria for exemption a FRAP will be required.





Unique Reference ID: HDD5				
Details of Cross Location	Approximate National Grid Reference:	TR 08466 38060 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance and physical constraint to north of railway line.		
	Location	Cable Route Crossing (between Cable Route Corridor and Sellindge Substation)	Watercourse Name:	East Stour River
	Watercourse Width:	~5.5m	Watercourse Type	Main River
	Watercourse Depth:	~2.0m	Observed flow depth:	~1.0m
	Pre-Development Use:	None	Post-Development PRoW:	Cable crossing
	One bank is gently sloped with the adjacent land observed to be marshy. The other bank is a steeper leading up to land vegetated with trees.			
Photograph Looking Upstream	 <p>25 Jan 2024 11:56:52 51.10553815495223N 0.9632025472819805E Smeeth Kent England</p>		Photograph Looking Downstream	 <p>25 Jan 2024 11:56:42 51.1055267136544N 0.9632307104766369E Smeeth Kent England</p>



Unique Reference ID: HDD5	
Anticipated Works	Cable Crossing - HDD will be used to install the high voltage cables beneath the watercourse. The cable crossing will be set below bed level at a suitable depth as agreed with the EA as required.
Permit Requirements	For the cable crossing the HDD may be exempt from permitting under EA exempt activity 3 ² . If following full design the proposals do not meet the criteria for exemption a FRAP will be required.





Unique Reference ID: TCC 1				
Details of Cross Location	Approximate National Grid Reference:	TR 05872 37965 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance.		
	Location	Between Field 16 and Field 19	Watercourse Name:	Watercourse A
	Watercourse Width:	~3.5m	Watercourse Type	Ordinary Watercourse (Riparian Drain)
	Watercourse Depth:	~1.3m	Observed flow depth:	~0.2m
	The channel runs through open fields and was observed to be uniform and broadly trapezoidal in profile. Light vegetation growth on bank and in channel.			
Photograph Looking Upstream	 <p>7 Feb 2024 11:53:10 51.10395640600473N 0.9395762253552675E Smeeth Kent England</p>		Photograph Looking Downstream	 <p>7 Feb 2024 11:53:12 51.10395640600473N 0.9395762253552675E Smeeth Kent England</p>
Anticipated Works	Cable Crossing - Standard trenching techniques to be used to cross the agricultural drain.			



Unique Reference ID: TCC 1	
Permit Requirements	Land Drainage Consent from the River Stour IDB.





Unique Reference ID: TCC 2 (located in proximity to WX2)				
Details of Cross Location	Approximate National Grid Reference:	TR 05984 37851 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance.		
	Location	Between Field 15 and Field 19	Watercourse Name:	Watercourse A
	Watercourse Width:	~2.5m	Watercourse Type	Ordinary Watercourse (Riparian Drain)
	Watercourse Depth:	~1.5m	Observed flow depth:	Flow unknown due to vegetation growth
	The channel runs through open fields but was heavily vegetated and it was not possible to observe the channel base / water. Banks are steep.			
Photograph Looking Upstream			Photograph Looking Downstream	
Anticipated Works	Cable Crossing - Standard trenching techniques to be used to cross the agricultural drain.			



Unique Reference ID: TCC 2 (located in proximity to WX2)

Permit Requirements	Land Drainage Consent from the River Stour IDB.
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Unique Reference ID: TCC 3				
Details of Cross Location	Approximate National Grid Reference:	TR 06229 37770 The precise location will be micro sited taking into consideration local morphology and vegetation to minimise disturbance.		
	Location	Between Field 18 and Field 19	Watercourse Name:	Watercourse A
	Watercourse Width:	~ 4.5m	Watercourse Type	Ordinary Watercourse (Riparian Drain)
	Watercourse Depth:	~ 1.5m	Observed flow depth:	~0.3m
	The channel runs through open fields and was observed to be uniform and broadly trapezoidal in profile with fairly shallow sloped banks. Light vegetation growth on bank and in channel.			
Photograph Looking Upstream	 <p>7 Feb 2024 11:39:10 51.102130031213164N 0.9443581011146307E Calleywell Lane Aldington Kent England</p>		Photograph Looking Downstream	 <p>7 Feb 2024 11:39:14 51.10212944447994N 0.9443484619259834E Calleywell Lane Aldington Kent England</p>
Anticipated Works	Cable Crossing - Standard trenching techniques to be used to cross the agricultural drain.			



Unique Reference ID: TCC 3	
Permit Requirements	Land Drainage Consent from the River Stour IDB.

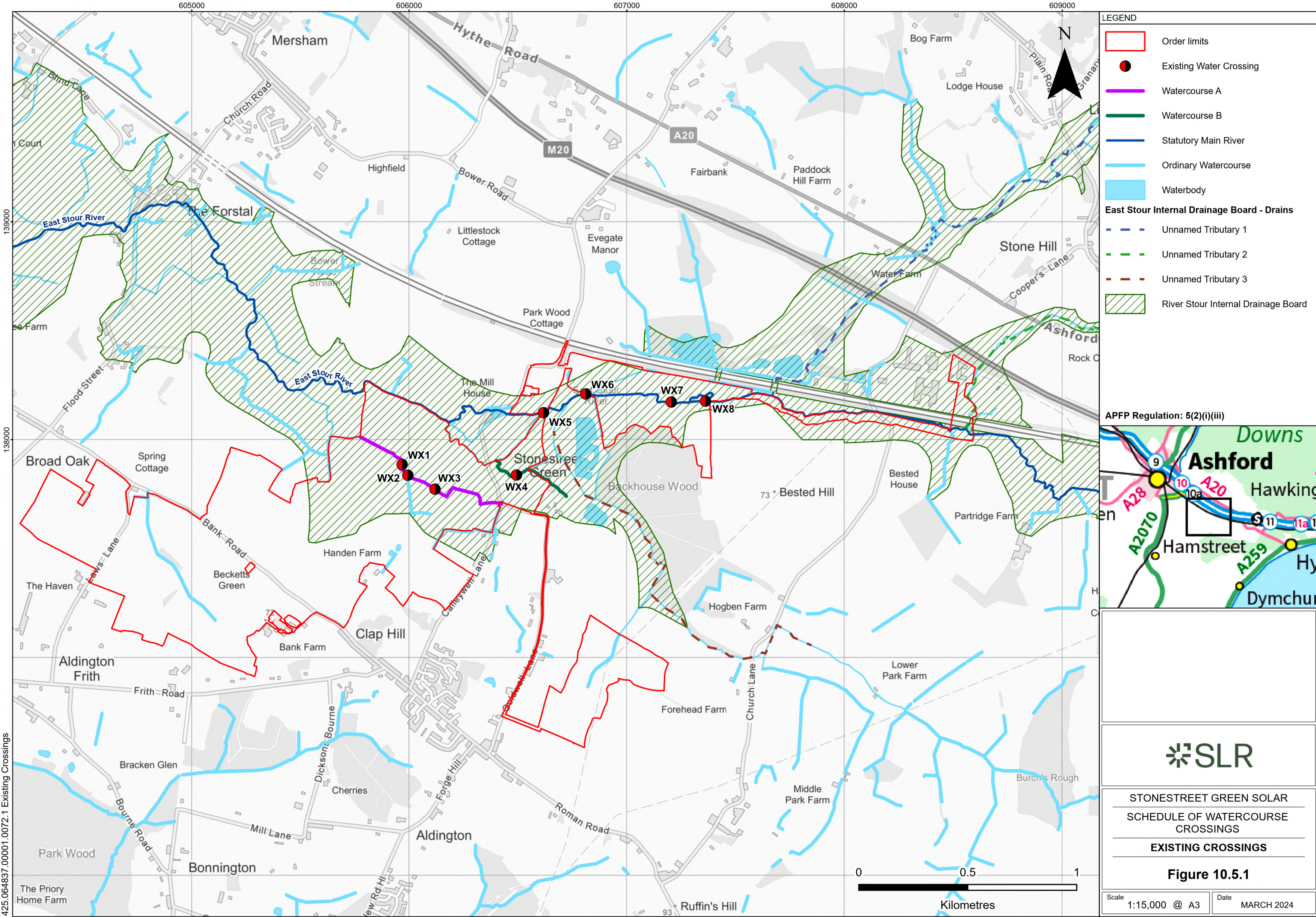




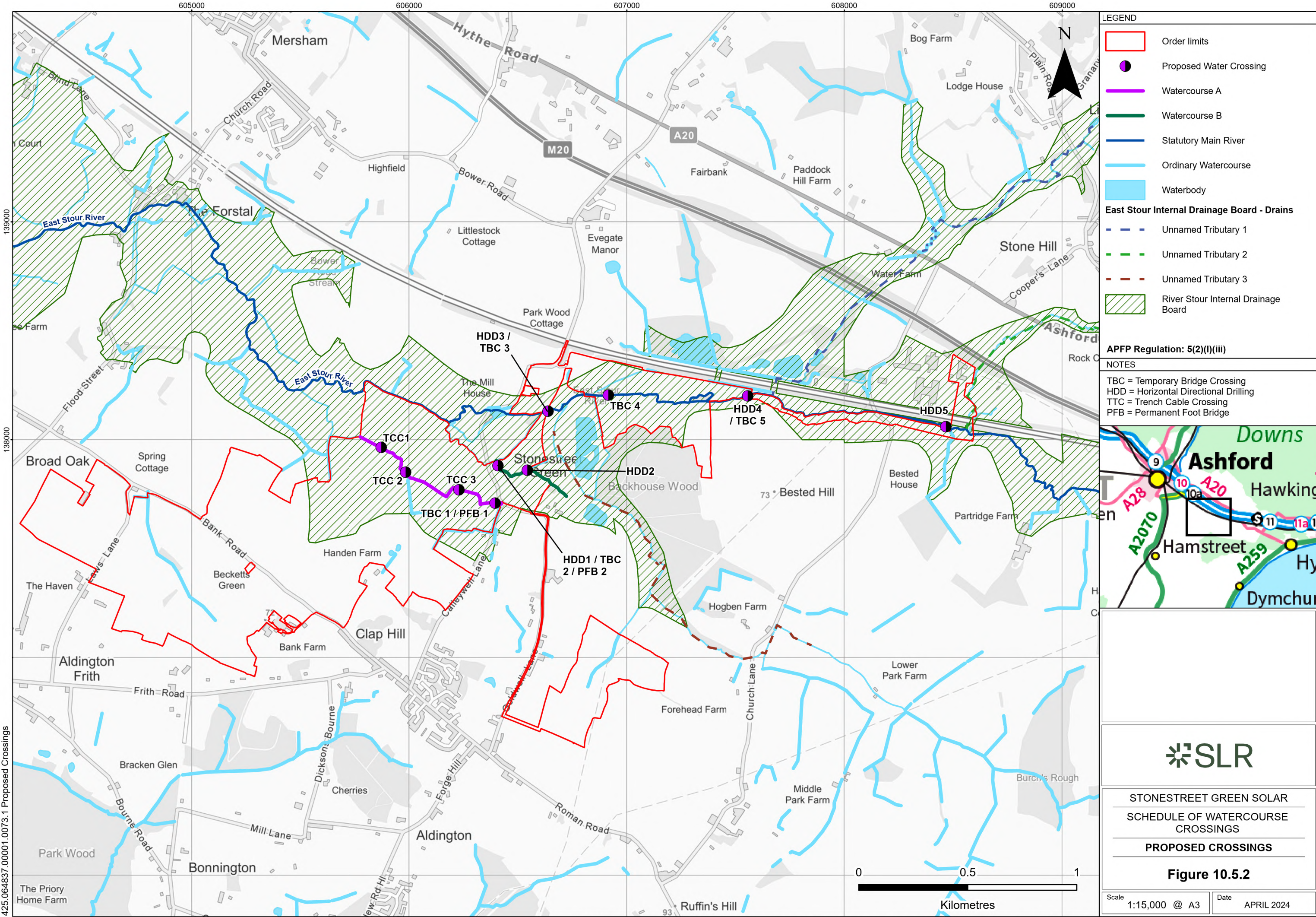
Annex C: Location of Watercourse Crossings Plans

Appendix 10.5: Schedule of Watercourse Crossings





425.064837.00001.0072.1 Existing Crossings



425.064837.00001.0073.1 Proposed Crossings

References

- 1 River Stour IDB district map, Available at [REDACTED]
[REDACTED] Accessed April 2024)
- 2 Defra (2020), Guidance, Exempt flood risk activities: environmental permits, Updated 25 February 2020, Available at <https://www.gov.uk/government/publications/environmental-permitting-regulations-exempt-flood-risk-activities/exempt-flood-risk-activities-environmental-permits> (Accessed April 2024)