Project Title	Slape Moor Footbridge Replacement
Scope	This specification/pre-construction information is for the replacement of a footbridge over the Hillfarrance Brook, Slape Moor to the south of Croford, in the parish of Wiveliscombe. The nearest postcode is TA4 2TS. The footbridge previously present at this location has already been removed after having been washed off its footings after bank erosion. The height of the soffit above invert of the original bridge was 600mm. The footpath at this location is WG 16/33. These works are to include: • Provision of photographic condition survey of bridge area and proposed access routes. • Install new standard concrete pads. • Collect steel frame from SC depot and install 1No. 10.5m span standard steel framed/timber clad footbridge with deck level with surrounding area. • Install steps either side of bridge with timber handrails. • Install gates at either end of bridge. Any questions and responses about the project raised at the site visits will be distributed to all Contractors requested to tender. Arrangements for visits to SC Highways depot in Glastonbury during quotation stage: ○ Site visits into the depot area will need to be pre-booked with the Client to enable an induction and escort around the site. ○ Full 6 point PPE to be worn as set out below. ○ Site visit dates/times: ○ Tuesday 9th July 2024 10:00-12:00 ○ Wednesday 10th July 2024 10:00-12:00 ○ Any questions and responses about the project raised at the site visits will be placed on the Portal for all Contractors to see. ○ No access will be given to Contractors who have not pre-booked and/or do not have the appropriate PPE.

Project Personnel	The Client - Somerset Council (SC) The Principal Designer – SC SC Project Manager – Ewan Tweedie ewan.tweedie@somerset.gov.uk, 07816 082531 Contractor – TBC on award
Key Dates	Start Date: TBC on award. Access Date: The access date for these works will be decided between the successful contractor, SC, and landowners/tenants but will not be before 01 August 2024 to allow for crops to the west of the bridge to be harvested. The successful contractor will be expected to be flexible. Completion Date: 01 November 2024. Defects Period: 12 months from Practical Completion.
Programme	The successful contractor will be expected to be flexible during the contract period to ensure delivery by the completion date. It cannot be discounted that some site works will be necessary during periods of inclement weather. The successful contractor will be expected to adopt working methods which would reasonably be expected of an experienced contractor working in such conditions. A detailed programme will be required to be prepared within one week of contract award which will identify key milestone dates to ensure delivery within the contract key dates as set out above. The detailed programme will need to be fully compliant with the potential lead in times for the Land Drainage Consents discussed below.
Landowner Details	TBC to successful Contractor.
Location Details (See Attachment 1 – Location Plan **Attachment 2 – Somerset Council Rights of Way)**	The bridge is located on footpath WG 16/33 at NGR 309903, 127124 within the Parish of Wiveliscombe. What3words: ///belonging.directors.certainly
Current Site Details	The Hillfarrance Brook, over which the bridge will span, is an ordinary watercourse which flows in a south westerly direction.

(See Attachment 2 - Site Photographs)	The stream is characterised by steep banks with mature deciduous trees growing along the eastern banks. The area to the west of the bridge is utilised for arable farming, with the field area currently sown to wheat. The margin around this field is currently managed under the Sustainable Farming Initiative as a 4m wide grass buffer strip (ALH4). *Geology* An initial review of geology for the site suggests that the bridge is underlain by superficial alluvial deposits which in turn are underlain by sandstones of the Tidcombe Sand Member. The Contractor should make themselves aware of the site and access routes and raise any concerns about the Works Specification with the Client during the quotation stage.
Access **(See Attachment 3 – Access Plan)**	To confirm, the steel frame for the bridge is prefabricated and is located at SC's depot in Glastonbury and will therefore require collection by the Contractor. Visits to the depot during the quotation stage will be subject to the following: • Site visits into the depot area will need to be pre-booked with the Client to enable an induction and escort around the site. Pedestrian access to the bridge location can be obtained via the public rights of way network. Main access for the works should be from the west with access to the eastern area to be limited where possible. The width of plant that will be useable on the eastern bank will be restricted by the width of the footpath where it passes through the adjacent woodland (1.00m at its narrowest). The contractor should allow for this restriction as part of their tender costings. The landowner to the west has agreed to allow access to the site via a farm track running from the B3227 and the along the field margin to the west of the bridge. It should be noted that the field track is deeply rutted, and vehicles should be selected accordingly. The landowner to the east has allowed access from Stones Tenement across the adjacent field and through a field gate following the public right of way to the bridge. This public right of way is a footpath which runs through a wooded but often waterlogged area. The footpath is in places, only

	1.0m in diameter and plant and methodology selection will need to take this restriction into account. The areas either side of the bridge have localised areas of waterlogging after periods of rain, and this should be considered when pricing the works. The access routes are shown on Attachment 3. **These vehicular accesses should not be used during the tendering period without prior written permission from SC.** All access during the tender period is to be via the Rights of Way network only. The Contractor should be aware that access will be through active farms and should make provision to any measures required to allow for safe access through these areas whilst minimising impact upon site activities. The Contractor should make themselves aware of the site and access routes and raise any concerns about the Works Specification with the Client during the quotation stage. The Contractor will be required to take a photographic record prior to any vehicular access onto to site. Any damage to the fields because of cross field vehicle movements will be the responsibility of the Contractor to correct. It will be the Contractor's responsibility to assess delivery routes to site and the coordination of loading/unloading.
Traffic Management	All works are to be in accordance with the New Roads and Street Works Act 1991 (NRSWA) and all other Traffic Management legislation and codes of practice. A Traffic Management Plan (TMP) must be prepared and implemented in accordance with Chapter 8 of the Traffic Signs Manual (2009) and consideration should be made for traffic control for the delivery of abnormal loads. The TMP should also provide for the requirement that the entrances and roads are kept clean and clear of obstructions, spillages, or mud during and immediately after the works are completed. All necessary applications and licences associated with restrictions and working along the highways network will be the responsibility of the successful Contractor. The Contractor should make themselves aware of the processes and timescales involved in these applications and ensure this is reflected in the work programme.

	Provide and maintain information signs along affected Public Rights of Way giving warning of upcoming construction works. Format of signs to the agreement of SC Project Manager. Signs should be placed a minimum of two weeks prior to works.
Existing Drawing and Health & Safety File	There is no existing health and safety file available for this project. However, it will be a requirement of these works for the Contractor to provide all relevant information for the inclusion in such a file upon the completion of the works.
Site Testing	No testing has been undertaken.
Site Survey	No site surveys in addition to those referred to elsewhere in the specification, have been undertaken.
Ecological Assessment	Ecological advice has been sought and the successful Contractor will be required to put in place pollution prevention methods, in line with current regulatory guidance and best practice, to avoid any pollution impacts to watercourse. Vegetation in work areas should be kept at a maximum of 100mm height before and during the contract. During the works, the Contractor shall use appropriate measures: (a) to minimise sediment mobilisation. (b) to minimise impact on biodiversity. (c) to ensure there is no increase to flood risk or detrimental impact on drainage. (d) for the storage and disposal of waste produced; and (e) to prevent and minimise environmental harm. All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the Contractor has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container. All measures are to be detailed within the agreed method statements for the site.
Project Management and Collaboration	The successful Contractor will be expected to liaise with the Client over all aspects of the project and keep the Client informed of progress on a regular basis. In addition, the successful Contractor will be expected to communicate and work with all the landowners and tenants

	involved and members of other organisations, e.g, Parish Councils where necessary. The existence of the public right of way means that the public will be in proximity of the site (except when excluded) and the successful Contractor will be expected to advise them when necessary. All general queries about the project can be directed to the SC Project Manager.
Utility Search **(See Attachment 4 – Utility Searches).**	The term 'utility' means all underground and overhead services such as electricity, gas, water, storm drain, foul sewer, and telecommunication services. A utility search, dated May 2024, has been carried out at the bridge location. The exact location and depth of utilities must be verified using appropriate methods, prior to ground penetration by mechanical means at any location. It should be noted that the locations shown on drawings may not be accurate and will always require on site verification. Prior to commencing works on site, it shall be the responsibility of the successful contractor to satisfy themselves that all utilities on site and along the access route have been located, identified, marked, and disconnected or diverted as required.
Site compound and storage	The location of the site compound for materials storage and welfare facilities will be agreed between the successful contractor, landowner, and SC. Provision should be made for the compound location to be to the west of the site. Materials, plant, and equipment shall be stored with due regard to the risks posed to pedestrians, livestock, vehicle traffic, site personnel and the environment. The compound shall be constructed to provide a fully secure enclosure. Due to the proximity of the watercourse no hazardous substances will be permitted to be stored on either site. Appropriate methods of containment for accidental leakage shall be implemented. Materials and spoil storage areas shall be detailed in the construction phase plan.
Working near, in or over Water	The footbridge will straddle a water course classed as an 'ordinary watercourse,' which comes under the remit of the Lead Local Flood Authority, Somerset Council. Please note that under section 23 of the Land Drainage Act there is a legal requirement to seek consent from the relevant authority before installing any temporary or permanent works to facilitate repairs including scaffolding/

	piping/ culverting or obstructing/extracting water from a watercourse. This may also include repairs to certain existing structures and maintenance works. Consent to carry out works in an ordinary watercourse is normally not required for the installation of a footbridge, where the proposed soffit at or above the original. This is likely to be the case in this instance and therefore only temporary works are likely to require a consent application. For quotation purposes all contractors are to include costs for supplying relevant information to enable the Client to make the application for any temporary works that may be required. It should be noted that a Land Drainage Consent Application can take up to 2 months to process and this should be considered as part of the Contractor's programme. The Contractor should be aware of the site and raise any concerns about the specification with the Project Manager before quotation. The Contractor should also make themselves aware of the documents and timescales involved in this process. See: https://www.somerset.gov.uk/waste-planning-and-land/apply-for-consent-to-work-on-an-ordinary-watercourse/
Works Details **(See Attachment 6 – Design Drawings & Specification)**	**Pre-Construction Services** • Supply documents required under Construction (Design and Management) Regulations 2015 prior to any applications/works commencing to be approved by SC Project Manager. • Supply a detailed site-specific risk assessment and method statement prior to any applications/works commencing to be accepted by SC Project Manager. To include: o Full details of how you intend to carry out the works, o Environmental protection details, o Site rules, o Location of welfare facilities and storage areas, o Proposed working hours, o Emergency procedures, and

	○ Project timetable. • Please note that a separate risk assessment and method statement are required for the bridge frame collection. • Supply documents to enable SC Project Manager to obtain Flood Defence Consent (if required). • Liaise with Landowners/Tenants and agree access route and placement of site compound. • Prepare Traffic Management Plan and Site Plan to be accepted in writing by SC Project Manager and apply for any consents from the Highway Authority if required. All site signage locations and wording will need to be detailed within these plans. • Supply a detailed lift plan in line with the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) prior to any applications/works commencing to be accepted in writing by SC Project Manager. • Note that no works are to be carried out on site until all the relevant documentation and consents have been received and accepted by SC or the relevant authority and evidence of consultations has been provided. All paperwork is to be received in suitable time and no later than 4 weeks prior to site works commencing on site to allow for any alterations SC may require. • Provide and maintain warning signs 2 weeks prior to construction works commences. Format of signs to be agreed in advance with SC Project Manager. • Provide a suitable and sufficient photographic record of site area and all access routes to SC Project Manager for written approval. No plant or vehicular access will be permitted until this approval has been provided. **Establish Site** • Install and maintain traffic management as set out in the TMP. • Install and maintain a secure site compound and all relevant signage, as set out in the TMP and site plan, to ensure public and livestock have no access for the duration of the site works. • Install and maintain site welfare facilities within the secure compound which meet CDM Regulations 2015.

	• Install and maintain suitable signs and fencing to stop the public and livestock from gaining access to the bridge work site during the works. • Maintain access route for the duration of the works. This may require removal of a number of tree branches overhanging the eastern access route; this will require assessment at the time of the works and a provisional sum is included in the bill of quantities to allow for this. All measures to be agreed with SC Project Manager and be removed upon completion of the site works. Contractors to use the same access routes throughout the project to minimise wider damage any deviation will need to be agreed with the SC Project Manager and landowner. • Clear vegetation from around bridges and maintain at a maximum of 100mm height for the duration of the works. **Temporary Works** • Install and maintain suitable pollution control methods to ensure there is no contamination of the watercourse during the project, to include but not limited to: o Spill kits stored at locations close to the stream, in case of emergency, o Tarpaulins secured to bridge to catch/prevent debris on the field and from entering the watercourse during construction, o Floatation boom downstream to prevent any floating debris/pollution moving downstream. or a Permeable filtration system, i.e., straw bales, across watercourse to catch any sediment during bank works. o All fixing methods for tarpaulins, boom, and filtration system to be agreed with Project Manager prior to site works commencing. • The tarpaulin and any in stream measures should be removed at the end of each working day and any debris cleaned off site.

Demolition and Enabling Works

- Remove existing timber gate, including posts, located on the western bank and dispose of appropriately from site.
- Excavate and remove existing wavin coil type land drain and covering slabs from location of the eastern foundation and dispose of appropriately from site.

Collection of the 10.5m span Bridge Frame from SC Highways Depot

Collection Address:

Highways Depot,
Avalon Trading Estate,
Wells Road,
Glastonbury,
Somerset,
BA6 9AS.

- Access only under supervision of the Client. The Contractor will be required to provide separate site specific risk assessment and method statement for bridge frame collections for agreement with the SC Project Manager and depot representative.
- Collection from the compound location marked on the location plan in **Attachment 5**. Area for the collection is approximately 30m long and 11m wide, **see site photographs in Attachment 5.**
- A suitable sized frame is in Stack 2. – **see Attachment 5, Drawing No 2.**
- Collection date to be agreed between Client, Depot representative, Car Salesroom representative and successful Contractor – two weeks suitable notice will be required as a minimum.
- Make appropriate arrangements for suitable road space to be available for collection of bridge purposes, if necessary.
- Access will only be during the hours of 09:30 and 15:00 and on the agreed collection date.
- All personnel to adhere to Depot rules and regulations including the following:

- Minimum PPE requirements are hard hat, steel toe cap boots with protective midsole, hi viz trousers and top, gloves and safety glasses.
- All staff to report to depot office or SC Project Manager for site induction.
- The site usually operates a one-way system. However, the collection vehicle will be directed to pull up and reverse into the compound area. Sufficient banksmen should be provided to facilitate this – **Depot staff <u>will not</u> be available to assist.**

- Barriers across compound entrance to be moved and replaced by the Contractor once collection complete. This will be the responsibility of the Contractor to move and replace.
- Please note that the moving of other furniture e.g., field and pedestrian gates, steel and timber posts, timber bridge kits, may be required to access the frames. This will be the responsibility of the Contractor to move to a location agreed with SC Project Manager.
- **All suitable machinery/vehicles required for safe collection will be the responsibility of the successful Contractor.** Please note that the bridge frames are stacked at the collection location and some moving of additional frames will be required. Contractor to ensure frames are suitably protected during lifting and are returned to the original stacking system carefully and neatly. **N.B. No stack to exceed 2m in height.**
- Protect frame whilst on collection vehicle, stacking carefully and level onto suitable timbers to prevent warping during transit.
- All bridge frames fully constructed. Dimensions and weights of steel frames given in **Attachment 5.**
- It is the contractor's responsibility to check frame size upon collection, assess delivery routes to site and logistics of loading/unloading.

Footbridge Construction

All the following works are to be done in line with the Design Drawings and the specification for Somerset Council's Standard Footbridge Design for 6 to 15m Span (referenced **ROW-SSFP-01, 160927 STD BR MED SPEC**

	DES RA Rev J, ROW-GEN-MED-01F, ROW-GEN-MED-02Ga and ROW-GEN-MED-05A). • The General Arrangements for the bridge frame are shown on drawing **ROW-SSFP-01**. The Contractor should check all measurements of the bridge frame against these drawings to ensure bearing points sit central to the foundations as required. Any deviations to the frames identified should be notified, in writing, to the SC Project Manager. • Contractors should make themselves fully aware of the design drawings and specification and raise any queries with SC as soon as possible, • Please note that SC are not able to provide further drawings and any fabrication drawings will be the responsibility of the Contractor. • Any deviation from the design or setting out will need to be agreed in writing with SC prior to works commencing. • Set out location of foundations in accordance with Drawing No **ROW-GEN-MED-02Ga Type A** (Minimum foundation footprint for base size for a 12.5m span bridge) to allow for a 10.5m span footbridge with an invert to mid soffit height of a minimum of 600mm. The front of the western foundation should be placed 0.5m from top of bank, as marked by top of localised erosion in the location of the current gate. To confirm, all retaining walls, where necessary, should be cast in situ concrete with a tampered surface. • Excavate foundations and install suitable formwork. Foundations to be installed to a minimum depth of 500mm below the bearings, deeper if roots are present, in accordance with the general requirements for minimum bearing capacity as detailed in the standard specification (ref **160927 STD BR MED SPEC DES RA rev J**). Excavations need to be extended to a depth to accommodate the necessary invert. For tender purposes allow for 500mm depth below ground level. **SC Project Manager to be present on site to agree final depth of excavation.** • Provision should be included for dewatering of excavations with desilting prior to discharge. • Install 10.5m span (10.8m long) steel framed footbridge in accordance with Drawings No **ROW-**

	GEN-MED-01F – **Contractors to quote for supply of timber parapet posts and using only hardwood timber throughout. All hardwood timber to be FSC certified.** ○ **Contractors to quote for timber parapet posts and only hardwood timber throughout.** ○ Contractor to supply and install neoprene pads, grout, and fixing bolts. ○ Deck boards to be flat with anti-slip strips and not grooved. Anti-slip strips to be pre-formed convex glass reinforced plastic strips to provide non-slip finish to BS7976-2 and fixed with glue and suitable screws. 1 strip per footboard. Also, with the following features/dimensions: ▪ Feathered edge, ▪ 50 or 100mm width to suit, ▪ 4mm depth, and ▪ Black in colour. • In accordance to Drawing No **ROW-GEN-MED-05A**, install concrete steps with equal riser heights, no greater than 150mm, 300mm tread and 1.1m wide using suitable formwork and 10mm air gap between bridge steel and steps. All formwork to be removed after suitable period. ○ Numbers to be agreed once bridge in-situ, however for quotation purposes, please allow for 1 step to the west of the bridge and 3 steps to the east. ○ Tread surface of each step to be brushed off to create non-slip texture. ○ Please note that the first step should not be more than 150mm down from top of deck board with longer tread to accommodate a timber section along the end of the bridge to protect users from trip hazard created by the gap between the new step and the base of the deck boards. • Install timber fenceposts at the bottom of and either side of the steps on both sides of the bridge. Install handrails to same specification as timber parapet found in Drawing No. **ROW-GEN-MED 01F**, to be

	installed to both sides of steps connecting to the timber fenceposts. • Provide and install galvanised, a one way operating self-closing closing galvanised steel mesh pedestrian gates at either end of the bridge. To include supply of all necessary materials. • Provide drainage trench to eastern upstream side of bridge to minimise flooding around bridge foundations. **Location and depth to be agreed with SC Project Manager.** Note, this is to replace the ground drain removed earlier in the works; it is not the intention to drain the wetland area but to provide some mitigation during periods of high rainfall. **Closure Works** • Clean bridge, if necessary, and ensure no earth/ vegetation is against the main steels and timbers of the • All excess materials and waste to be cleared from site and disposed of in line with current waste legislation and regulations. • Decommission work site. • Reinstate any damage to site and access route Species mix to be agreed with SC Project Manager. • Provide a suitable and sufficient photographic record of all site areas and access routes used. This record to be completed after all reinstatement works are completed.
Site health and safety hazards **See Attachment 7 – Construction (Design and Management) Regulations 2015 Designers Risk Assessment**	The successful contractor will be responsible for producing a comprehensive site-specific risk assessment and method statement and all other documentation required under CDM Regulations and that detailed within this Works Specification, all to be agreed with the Client, Display of notices to include but not limited to: o Advance warning notices. o All notices required to conform with TMP. o Access restrictions including footpath closed signs. o Emergency procedures and contact numbers. o The site rules. o Hazard warning signs.
Daily Rate	The daily rate (liquidated damages) is £200.

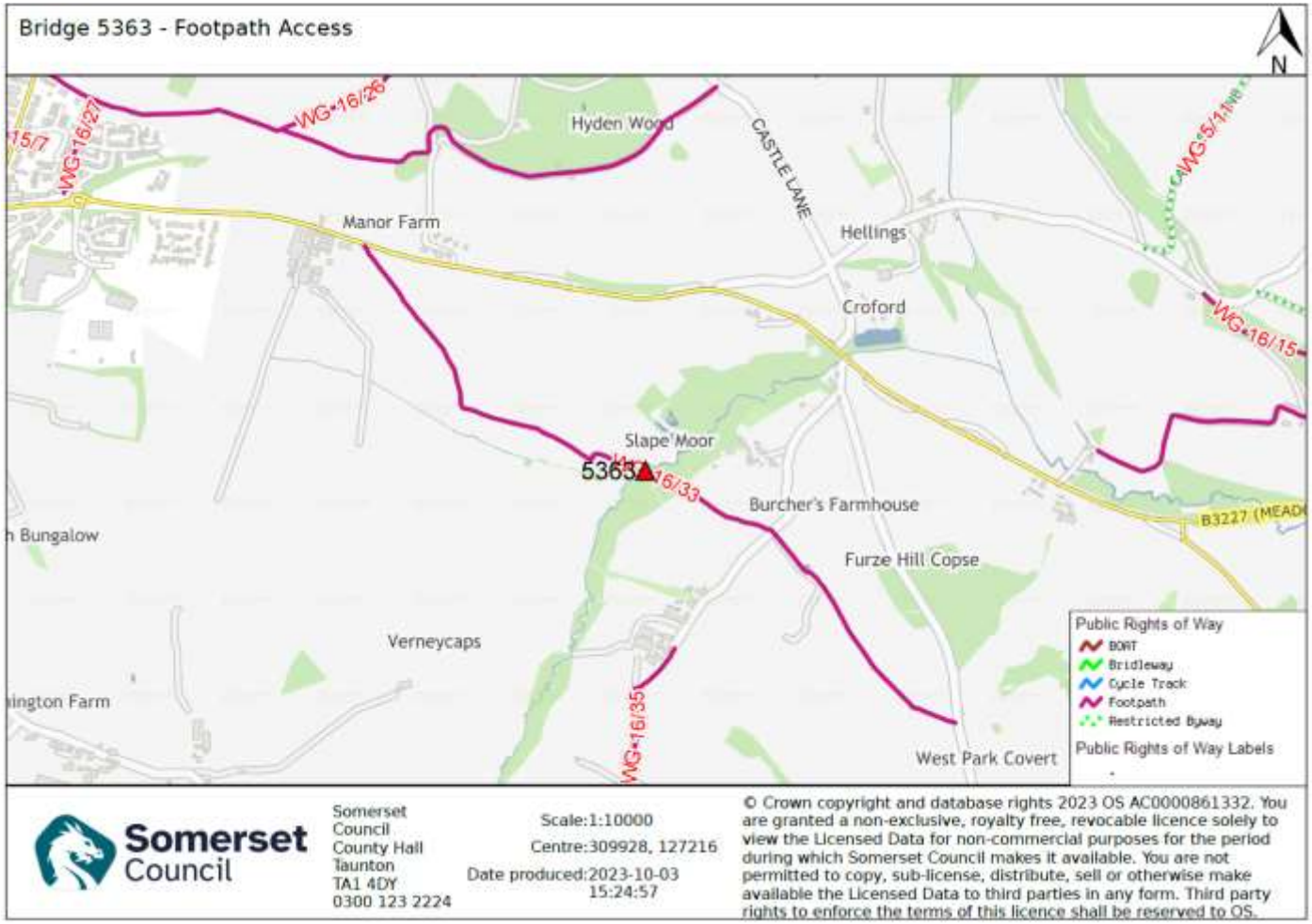
Construction (Design and Management) Regulations 2015 – CDM	All parties appointed to work on this contract must comply with all their legal duties contained within the Construction (Design and Management) Regulations 2015. Sub-contracting of works will only be allowed with the prior approval of SC.
Health and Safety File	It is SC's responsibility to produce and maintain a health and safety file for all projects. For this project we delegate the responsibility of producing this information to the successful contractor. At the end of this project the successful contractor must submit the following documents electronically to SC: • Finalised method statement to take into account any changes which occurred on site; • Details of any hazards which were not eliminated through the design and construction processes; • Design Drawings and calculations; • 'As Built' drawings; • Construction photographs taken at different stages of the project; • List of all subcontractors used; • List of all materials and suppliers used; • Certification (steel, welds, timber); • List of hazardous materials; • Information on future maintenance or a maintenance manual; • Nature and location of any services in close proximity to the structure. • Ground conditions and watercourse features; • Access and inspection; • Other information as necessary and likely to be identified during the construction phase. **Please note that the information will need to be set out in an ordered way with titles relevant to the information and provided in one and not sporadically following the completion of the site works. As set out in the terms and conditions, 10% of final payment will be withheld until SC have received all relevant information.**

Terms & Conditions	These works will be subject to Somerset Councils Rights of Way standard terms and conditions. Please do not attach any terms and conditions to your quotation as these will not be accepted and could result in the rejection of your quotation

List of Attachments:

- **Attachment 1 – Location Plan**
- **Attachment 2 – Site Photographs**
- **Attachment 3 – Access Plan**
- **Attachment 4 – Utility Searches**
- **Attachment 5 – Depot Details and Steel Weights Chart**
- **Attachment 6 – Design Drawings & Specification**
- **Attachment 7 – CDM Designers Risk Assessment**

Attachment 1 – Location Plan



Attachment 2 - Site Photographs

Photograph A: Bridge location facing east.

Photograph B: Line of bridge facing east.

Attachment 2 - Site Photographs (cont.)

Photograph C: Historic footbridge (now removed).

Photograph D: Foundation area on eastern bank. Land drain circled in red.

Attachment 2 - Site Photographs (cont.)

Photograph E: Footpath access through woodland to the east.

Photograph F: Field for access to footpath to east.

Attachment 2 - Site Photographs (cont.)

Photograph G: Rear yard at Stones Tenement to the east..

Photograph H: Field access to track to the west.

Attachment 2 - Site Photographs (cont.)

Photograph I: Track running north south to the west.

Photograph J: Field margin for access to the west of the bridge site running along the brook.

Attachment 3 – Access Route

Attachment 4 – Utility Plans

Statutory Undertaker	Site to Search or e-mail address	Date Enquiry Sent	Reference Number	Date Information Received	Potential Apparatus Yes/No (Ops Staff to analyse the maps and emails enclosed)	Reminder Sent
Verizon	C2	02/05/2024	None	02/05/2024	Yes	
Cityfibre Network	Own Website	03/05/2024	None	03/05/2024	No	
ES Pipelines	Linesearch	03/05/2024	33300299	03/05/2024	No	
Envoy (GTC)	Own Website	03/05/2024	4296235	03/05/2024	No	
National Grid - Electric	Linesearch	03/05/2024	33300299	03/05/2024	No	
National Grid – Gas	Linesearch	03/05/2024	33300299	03/05/2024	No	
National Grid Electricity Distribution (formerly Western P	Linesearch	03/05/2024	33300299	03/05/2024	No	
OCU (Formerly Global)	C2	02/05/2024	None	09/05/2024	No	
Open Reach - under 500 metres	Own website	03/05/2024	FHC08545L	03/05/2024	No	
Southern Electric - High Voltage	Linesearch	03/05/2024	33300299	03/05/2024	No	
Southern Electric - Low Voltage	Linesearch	03/05/2024	33300299	03/05/2024	No	
TATA Telecommunications Ltd.	Linesearch	03/05/2024	33300299	03/05/2024	No	
Traffic Counters	Ishare	24/04/2024	None	24/04/2024	No	
Traffic Signals	Ishare	24/04/2024	None	24/04/2024	No	
Virgin Media	Digdat	03/05/2024	None	03/05/2024	No	
Vodafone	C2	02/05/2024	None	08/05/2024	No	
Wales and West	Linesearch	03/05/2024	33300299	03/05/2024	No	
Wessex Water - Less than 500 metres	Own Website	03/05/2024	None	03/05/2024	No	
West Somerset Railway (Fwd Letter If In Bufferzone)	Ishare (if blue area appears, forward standard letter to West Somerset Railway)			NOT REQUIRED		NOT REQUIRED

Attachment 4 - Linesearch

Linesearch before dig

Enquiry Confirmation
LSBUD Ref: 33300299

Date of enquiry: 03/05/2024
Time of enquiry: 08:51

Enquirer			
Name	Miss Somerset County Council	Phone	03001232444
Company	Somerset County Council	Mobile	Not Supplied
Address	County Hall Taunton SOM TA1 4DY		
Email	plantenquiries@somerset.gov.uk		

Enquiry Details	
Enquiry type	Planned Works
Work category	Highways
Work type	Construction/realignment
Work type buffer*	25 metres
Start date	04/05/2024
End date	16/05/2024
Scheme/Reference	SC6241
Search location	XY= 309903, 127126
Confirmed location	-03 51
Site size	120 metres diameter
Site Contact Name	Somerset County Council
Site Phone No.	03001232444
Description of Works	REquired to support replacement of missing footbridge

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.

Site Map

Please note that the above map only displays the location of the proposed work site and will not display any of the Members' pipes and cables. It is imperative that this area accurately reflects the proposed work site.

Affected LSBUD members
(LSBUD Members who have assets registered on LSBUD within the vicinity of your search area.)
Do not proceed until all Members listed below have confirmed that your works can continue.

Asset Owner	Phone/Email	Emergency Only	Status
National Grid Electricity Distribution	08000963080	08006783105	Await response
Wales and West Utilities	02920278912	0800111999	Await response

Status explanation

Await Response means that the asset owner will contact you. This is typically by sending the plan response but they may ask for further information before being able to do so, particularly if any payments or authorisations are required.

Email Additional Info means that the asset owner needs further information about your works to assess your enquiry before providing a response. Please provide any details you have available including plans, method statements etc. if available.

Page 1 of 3

Attachment 4 – Linesearch (cont.)

Linesearch before dig

Enquiry Confirmation
LSBUD Ref: 33300299

Date of enquiry: 03/05/2024
Time of enquiry: 08:51

Important notices

It is very important that you correctly understand what the service does and the procedures in order for you to work safely. Please refer to the LSBUD Support Page (www.lsbud.co.uk/linesearchbeforeudig-support) for further guidance.
This information includes how to provide additional information to the LSBUD Members who request it to provide a response to your enquiry.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date and time of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LinesearchbeforeUdig (LSBUD) accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.lsbud.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

List of not affected LSBUD members (LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area.)		
Angus Energy	AWE Pipeline	B & D Energy Limited
Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)	Box Broadband
BP Exploration Operating Company Limited	BPA	Cadent Gas
Cambridgeshire County Council Climate Change and Energy Services	CATS Pipeline c/o Wood Group PSN	Cemex
Centrica Storage Ltd	CNG Services Ltd	Concept Solutions People Ltd
ConocoPhillips (UK) Teesside Operator Ltd	D.S.Smith	Diamond Transmission Corporation
DIO (MOD Live Pipelines)	Drax Power Limited	E.ON UK CHP Limited
EDF Energy Renewables Ltd	EirGrid	Eleclink Limited
Electricity North West Limited	Energy Assets Networks	ENI & Himor c/o Penspen Ltd
EnQuest NNS Limited	EP Langage Limited	ESB CCGT Power station (Carrington Gas Pipeline)
ESP Utilities Group	ESSAR	Esso Petroleum Company Limited
euNetworks Fiber UK Ltd	EXA Infrastructure	Exolum Pipeline System
Fulcrum Electricity Assets Limited	Fulcrum Pipelines Limited	Gamma
Gas Networks Ireland (UK)	Gateshead Energy Company	Gigaclear Ltd
Harbour Energy	Heathrow Airport LTD	Humbly Grove Energy
IGas Energy	INEOS FPS Pipelines	INEOS Manufacturing (Scotland and TSEP)
INOVYN ChlorVinyls Limited	INOVYN Enterprises Limited	Intergen (Coryton Energy or Spalding Energy)
Jurassic Fibre Ltd	Kensa Utilities	Last Mile
Mainline Pipelines Limited	Manchester Jetline Limited	Manx Cable Company
Marchwood Power Ltd (Gas Pipeline)	Melbourn Solar Limited	MUA Group Limited
National Gas Transmission	National Grid Electricity Transmission	National Grid Ventures
Neos Networks	Northern Gas Networks Limited	Northumbrian Water Group
NPower CHP Pipelines	NTT Global Data Centers EMEA UK Ltd	NYnet Ltd
Ogi	Oikos Storage Limited	Ørsted
Palm Paper Ltd	Perenco UK Limited (Purbeck Southampton Pipeline)	Petroineos
Phillips 66	Portsmouth Water	Premier Transmission Ltd (SNIP)
Redundant Pipelines - LPDA	RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station)	RWEnpower (Little Barford and South Haven)
SABIC UK Petrochemicals	SAS Utility Services Ltd	Scottish and Southern Electricity Networks
Scottish Power Generation	Seabank Power Ltd	SES Water
SGN	Shell	Shell NOP
SP Energy Networks	Spring Fibre Limited	Squire Energy Networks
SSE Generation Ltd	SSE Transmission	SSE Utility Solutions Limited

Attachment 4 – Linesearch (cont.)

Linesearch before dig

Enquiry Confirmation
LSBUD Ref: 33300299

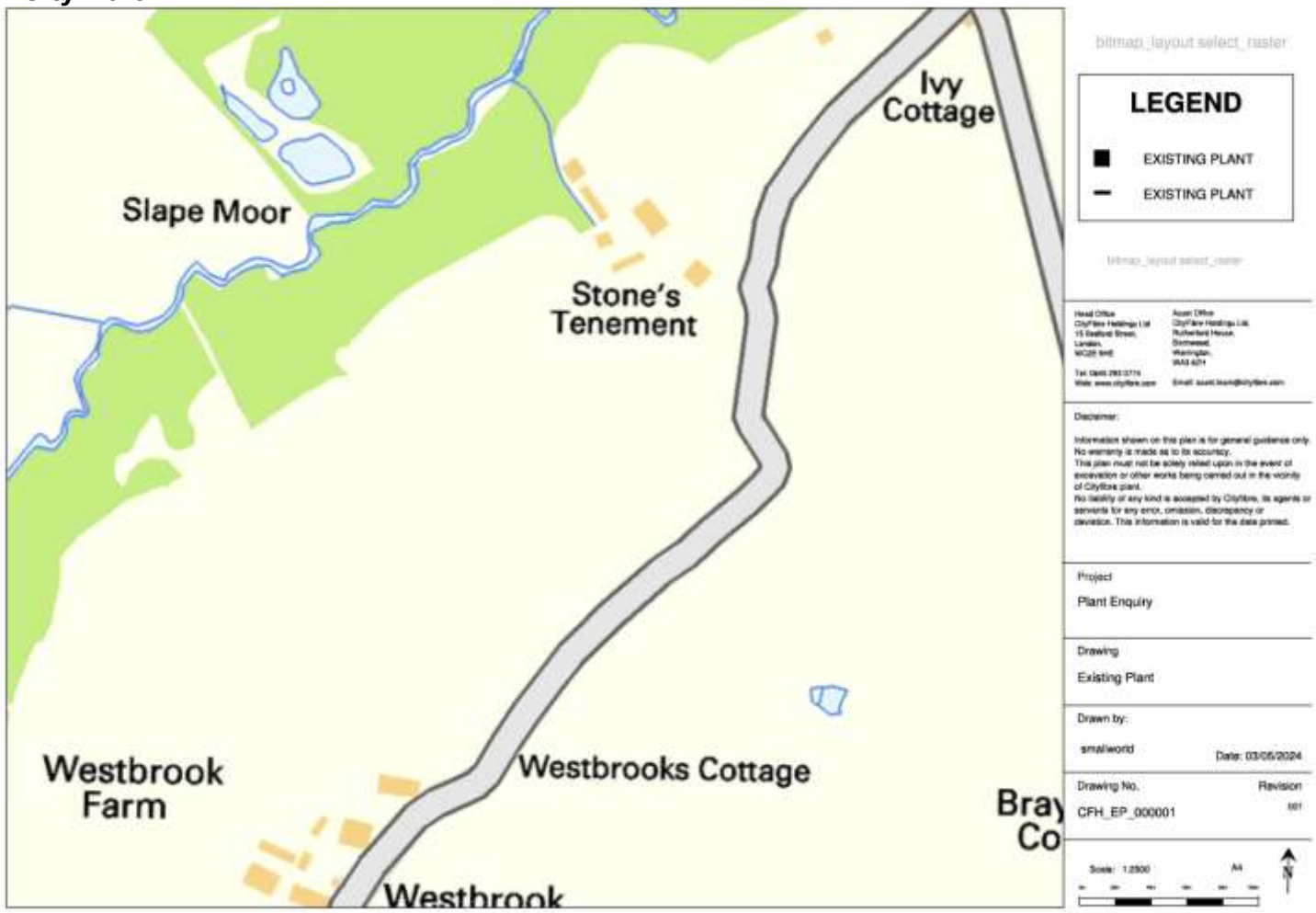
Date of enquiry: 03/05/2024
Time of enquiry: 08:51

Storengy	Tata Communications (c/o JSM Construction Ltd)	TfL – London Underground HV Cables (Road Side Cables)
toob Limited	Total Colnbrook Pipelines	Total Finaline Pipelines
Transmission Capital	Trojan Energy Limited	UK Power Networks
Uniper UK Ltd	University of Cambridge Granta Backbone Network	Vattenfall
Veolia ES SELCHP Limited	Veolia ES Sheffield Ltd	Voneus Limited
VPI Power Limited	Welsh Power	West of Duddon Sands Transmission Ltd
West Sussex OpenNetwork (Cooperative National Infrastructure)	Westminster City Council	Zayo Group UK Ltd c/o JSM Group Ltd

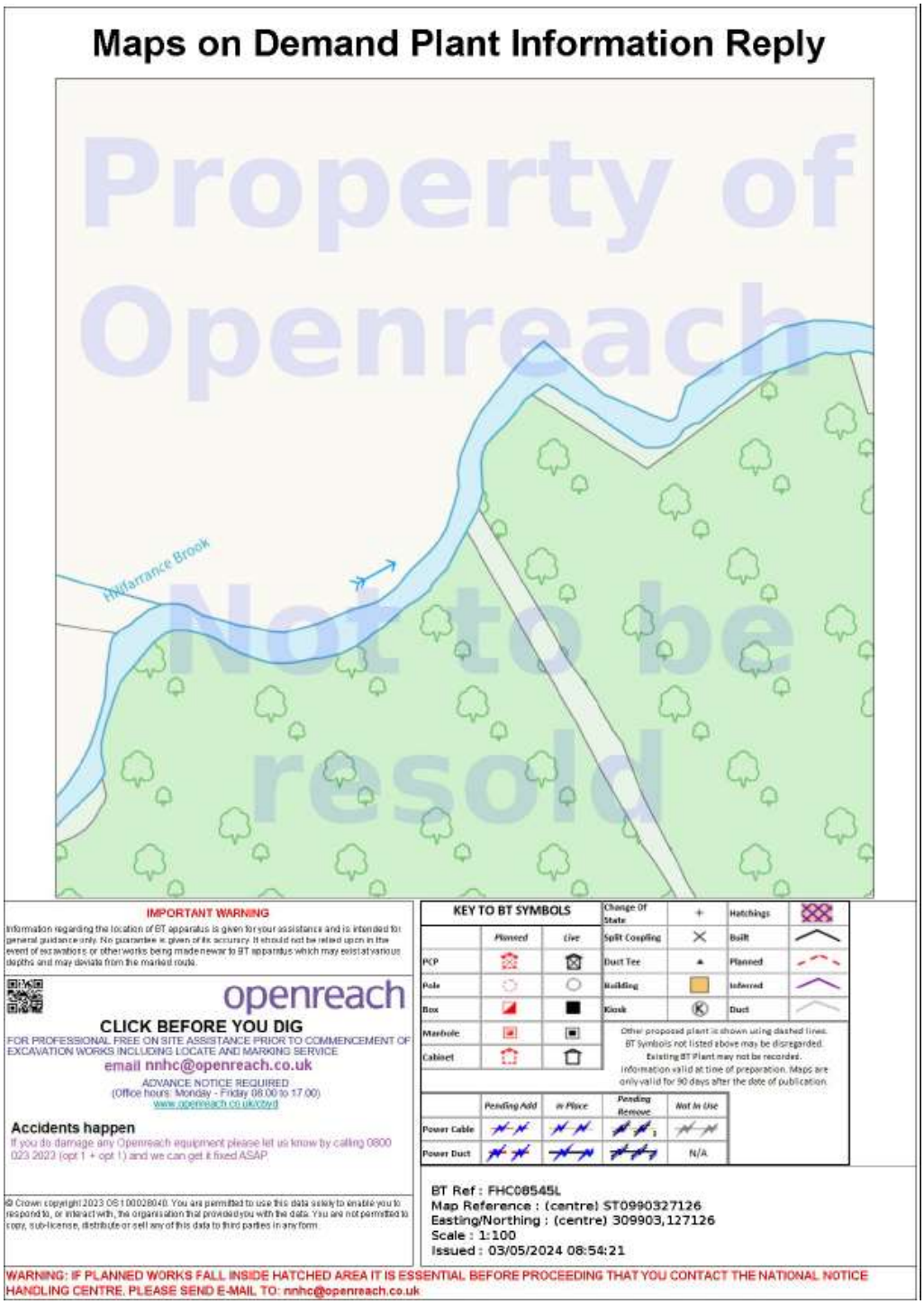
Non-LSBUD members (Asset owners not registered on LSBUD)
(The following Non-LSBUD Members may have assets in your search area. It is YOUR RESPONSIBILITY to contact them before proceeding.
Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.)

Asset Owner	Preferred contact method	Phone	Status
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08000232023	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Equans	nrswa.uk@equans.com	0800 130 3600	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
Lumen Technologies	plantenquiries@ocugroup.com	02087314613	Not Notified
Mobile Broadband Network Limited	mbnl.plant.enquiries@turntown.com	01212 621 100	Not Notified
Sky UK Limited	nrswa@sky.uk	02070323234	Not Notified
Somerset County Council	PlantEnquiries@somerset.gov.uk	01823483014	Not Notified
Sota	sota.plantenquiries@ocugroup.com		Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified
Wessex Water	Asset.enquiries@wessexwater.co.uk	01225526422	Not Notified

Attachment 4 – CityFibre



Attachment 4 – Openreach



Maps on Demand Plant Information Reply

Hilfarrance Brook

IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

openreach

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email nnhc@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08:00 to 17:00)
www.openreach.co.uk/cbyd

Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP.

KEY TO BT SYMBOLS

	Planned	Live
PCP		
Pole		
Box		
Manhole		
Cabinet		

Change Of State	+	Hatchings	
Split Coupling	×	Built	
Duct Tee	▲	Planned	
Building		Inferred	
Kiosk	Ⓚ	Duct	

Other proposed plant is shown using dashed lines.
BT Symbols not listed above may be disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.

	Pending Add	In Place	Pending Remove	Not In Use
Power Cable				
Power Duct				N/A

BT Ref : FHC08545L
Map Reference : (centre) ST0990327126
Easting/Northing : (centre) 309903,127126
Scale : 1:100
Issued : 03/05/2024 08:54:21

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Attachment 4 – OCU Group

Michele Kelly

From: Plantenquiries <Plantenquiries@ocugroup.com>
Sent: 09 May 2024 11:36
To: Plant Enquiries
Subject: RE: E05-24-2313 SC6241 C2 request for Bridge at Hillfarrance Brook Croford E 309903 N 127124

Dear Sir or Madam,
Thank you for your plant enquiry below.
We can confirm that Lumen Technologies (formerly CenturyLink Communications UK Limited, Level 3, Global Crossing (UK) Ltd, Global Crossing PEC, Fibernet UK Ltd and Fibrespan Ltd) do not have any apparatus within the indicated works area.
OCU responds to plant enquiries for all of the above and therefore you only need send one plant enquiry to cover all of these companies.
This response is only valid for 3 months. If your works do not commence within this time period, please resubmit your plant enquiry for assessment before any works commence.

Please note that our email address has changed from plantenquiries@instalcom.co.uk to plantenquiries@ocugroup.com. Could you please update your records accordingly.

Response times for plant requests are up to 10 working days. Please allow for 10 working days to pass before chasing requests unless they were urgent.

If you require any further information, please do not hesitate to contact us.

Regards

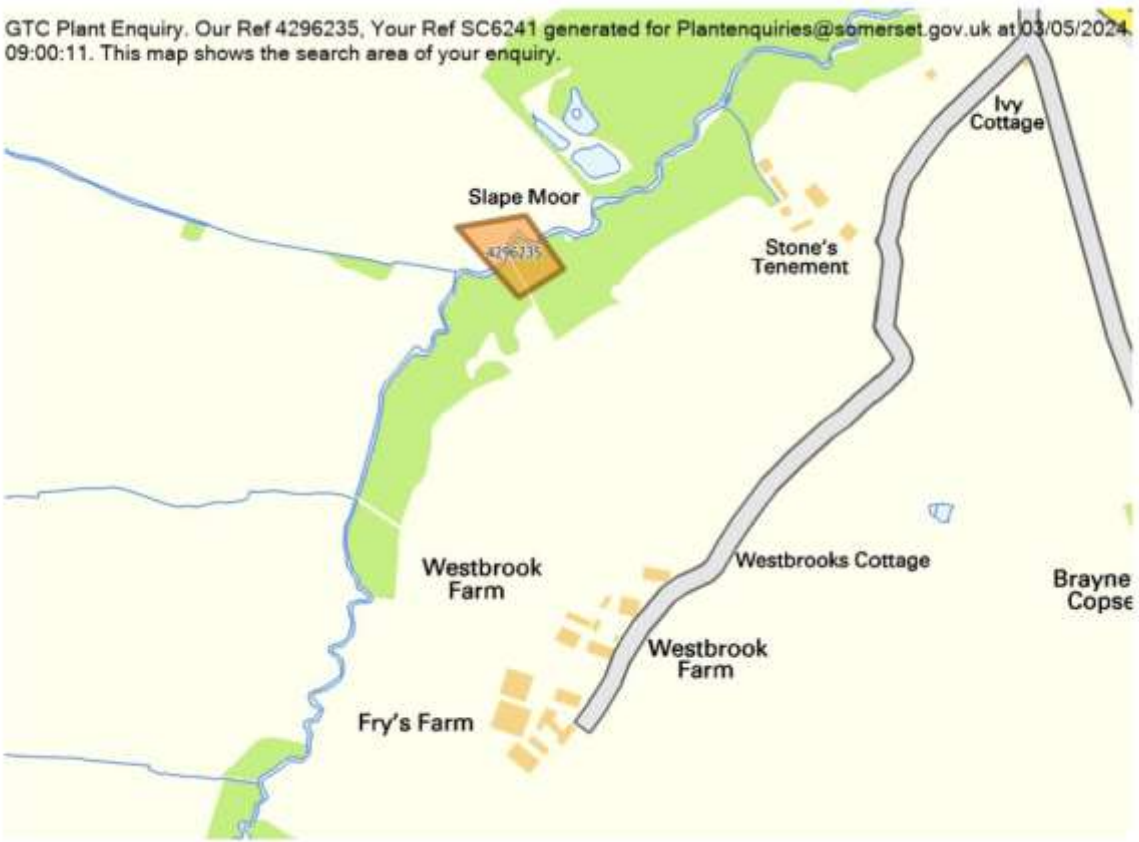
Plant Enquiries Dept
OCU
Borehamwood Ind. Park
Rowley Lane
Borehamwood
WD6 5PZ

Office: +44 (0)208 731 4613
Fax: +44 (0)208 731 4601
Email: plantenquiries@ocugroup.com
Web: http://www.ocugroup.com

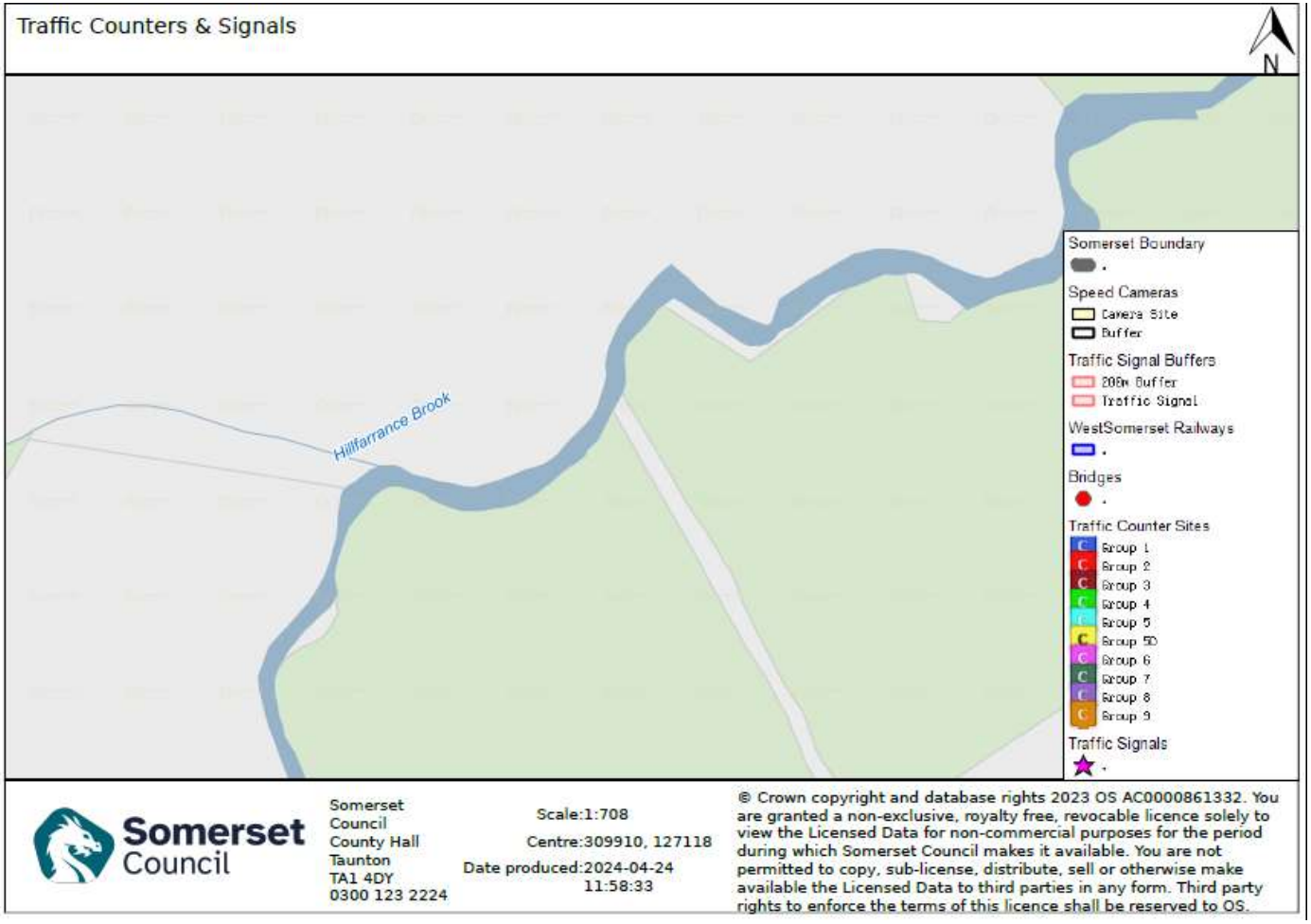
Plantenquiries|OCU Group|www.ocugroup.com
Email:Plantenquiries@ocugroup.com
Follow Us|LinkedIn|Social Links
Address -Artemis House, 8 Greek Street, Stockport, SK3 8AB

1

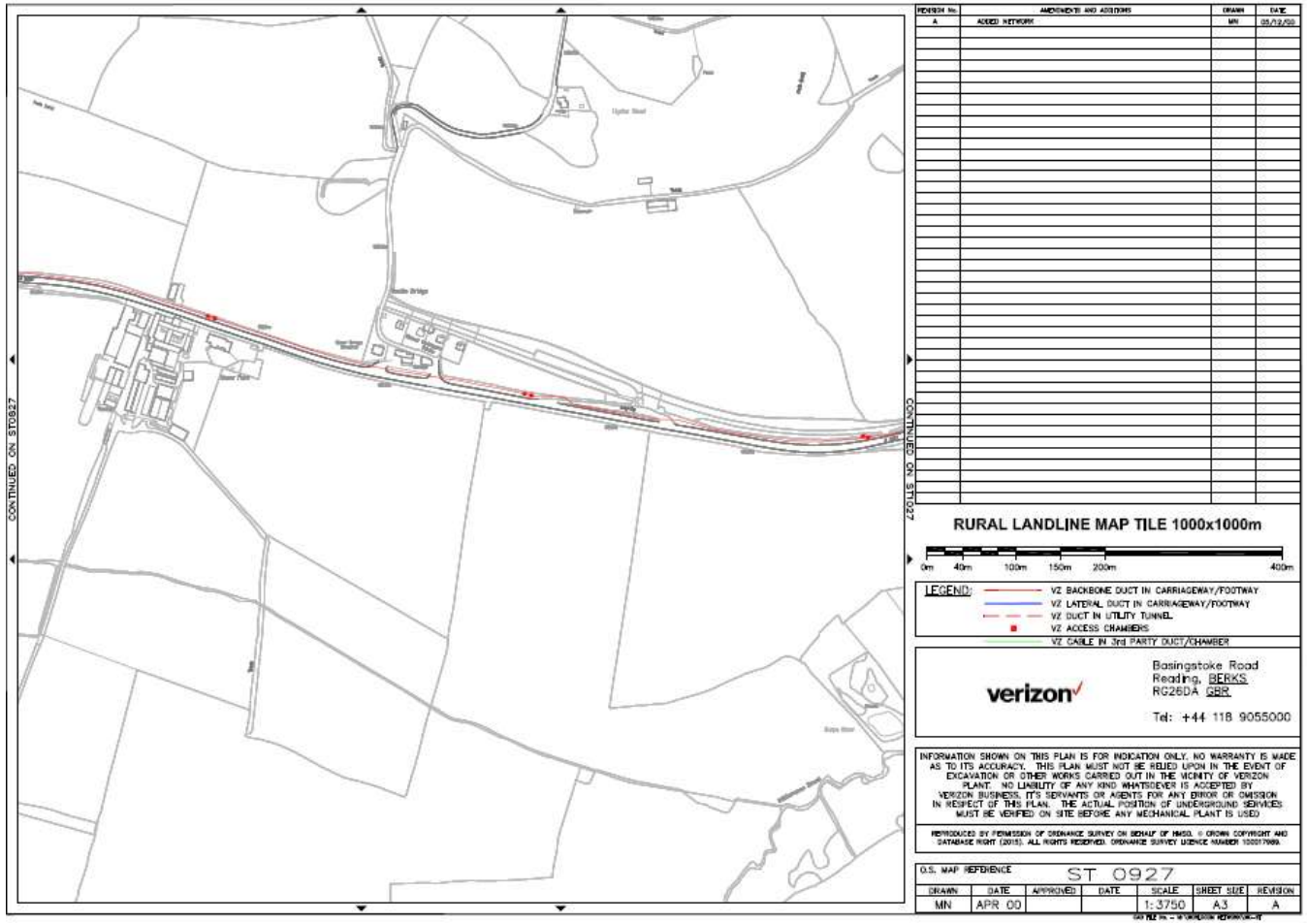
Attachment 4 – Envoy (GTC)



Attachment 4 – Somerset Council



Attachment 4 – Verizon



Attachment 4 – Virgin

Attachment 4 - Vodafone

From: National Plant Enquiries
To: Plant Enquiries
Subject: RE: SC6241 C2 request for Bridge at Hillfarrance Brook Croford E 309903 N 127124
Date: 08 May 2024 04:42:10
Attachments: image001.png

Please accept this email as confirmation that Vodafone: Fixed does not have apparatus within the vicinity of your proposed works detailed below.

Many thanks.

Plant Enquiries Team(DS)
T: +44 (0)1454 662881
E: osm.enquiries@atkinsglobal.com

This response is made only in respect to electronic communications apparatus forming part of the Vodafone Limited electronic communications network formerly being part of the electronic communications networks of Cable & Wireless UK (now re-named Vodafone Enterprise UK), Energis Communications Limited, Thus Group Holdings Limited and Your Communications Limited.

ATKINS working on behalf of Vodafone: Fixed

PLEASE NOTE:

The information given is indicative only. No warranty is made as to its accuracy. This information must not be solely relied upon in the event of excavation or other works carried out in the vicinity of Vodafone plant. No liability of any kind whatsoever is accepted by Vodafone, its servants, or agents, for any error or omission in respect of information contained on this information. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for the full cost of repairs to Vodafone's apparatus and all claims made against them by Third parties as a result of any interference or damage.

IMPORTANT - PLEASE READ:-

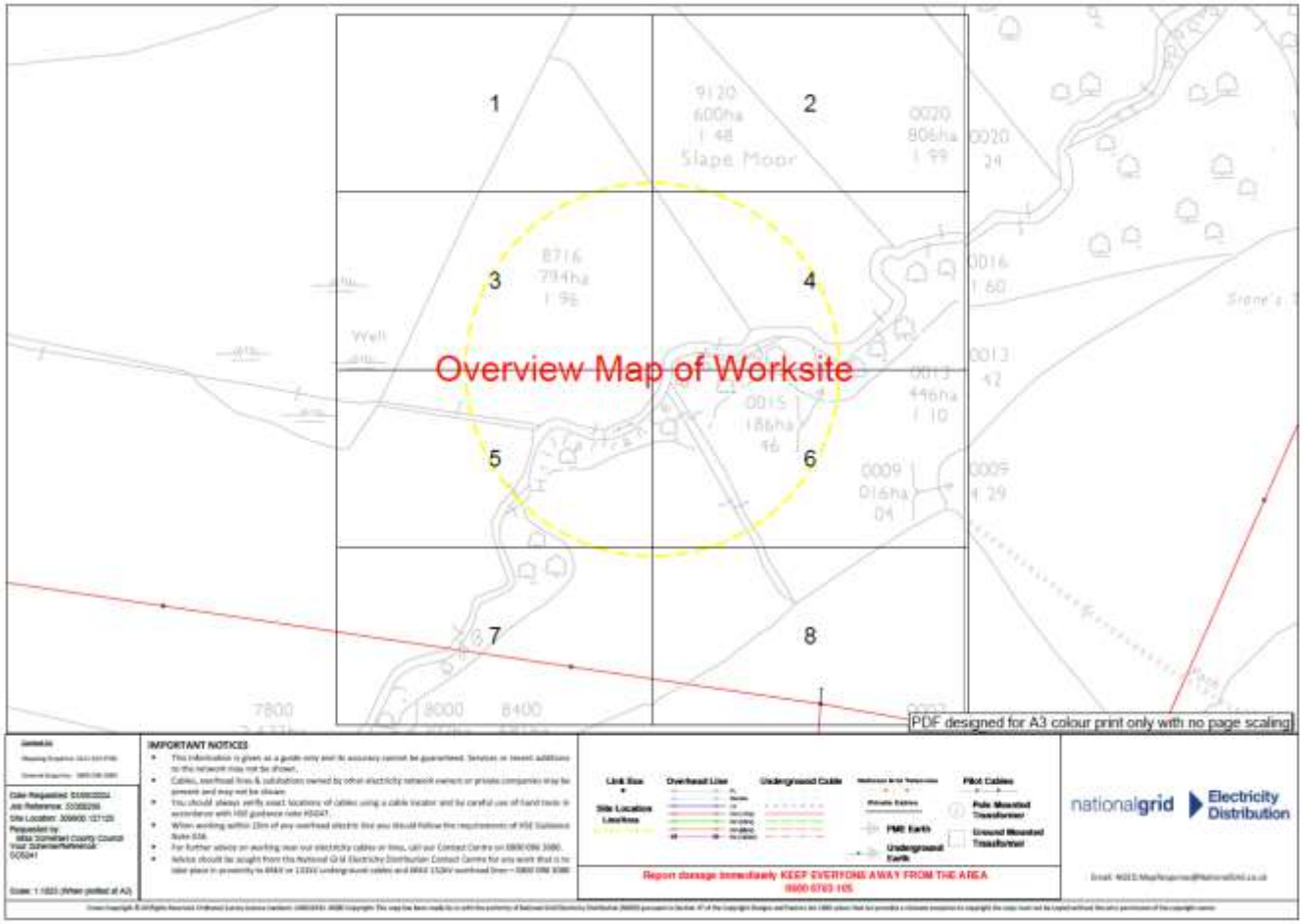
Diversionary works may be necessary if the existing line of the highway/railway or its levels are altered, where apparatus is affected. Where apparatus is affected and requires diversion, you must submit draft details of the proposed scheme with a request for a 'C3 Budget Estimate' to c3requests@vodafone.com These estimates should be provided by Vodafone normally within 20 working days from receipt of your request. Please include proof of this C2 response when requesting a C3 (using the 'forward' option).

Please consider the environment before printing this e-mail

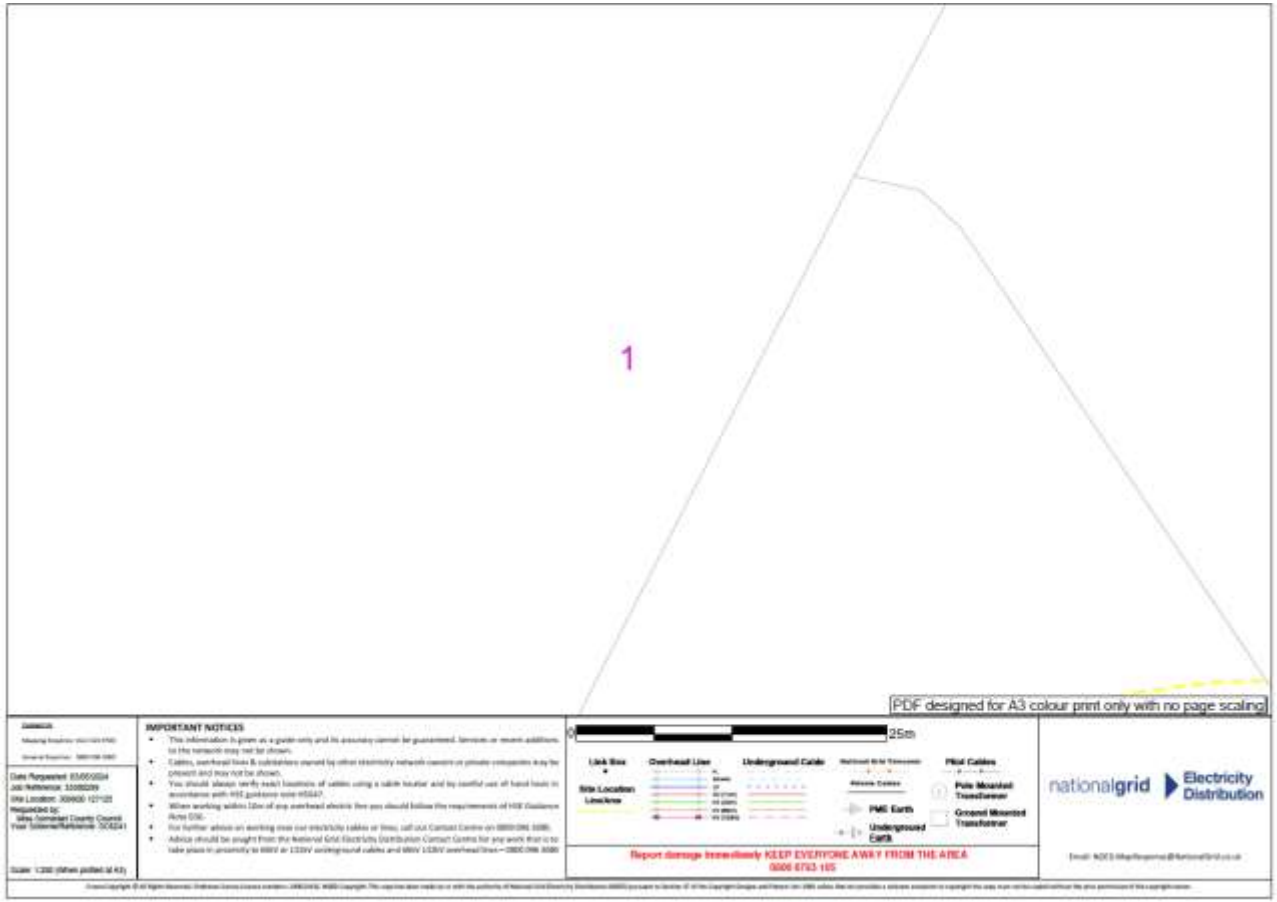
At Atkins - member of the SNC-Lavalin Group, we work flexible hours around the world. Although I have sent this email at a time convenient for me, I don't expect you to respond until it works for you.

Original Message

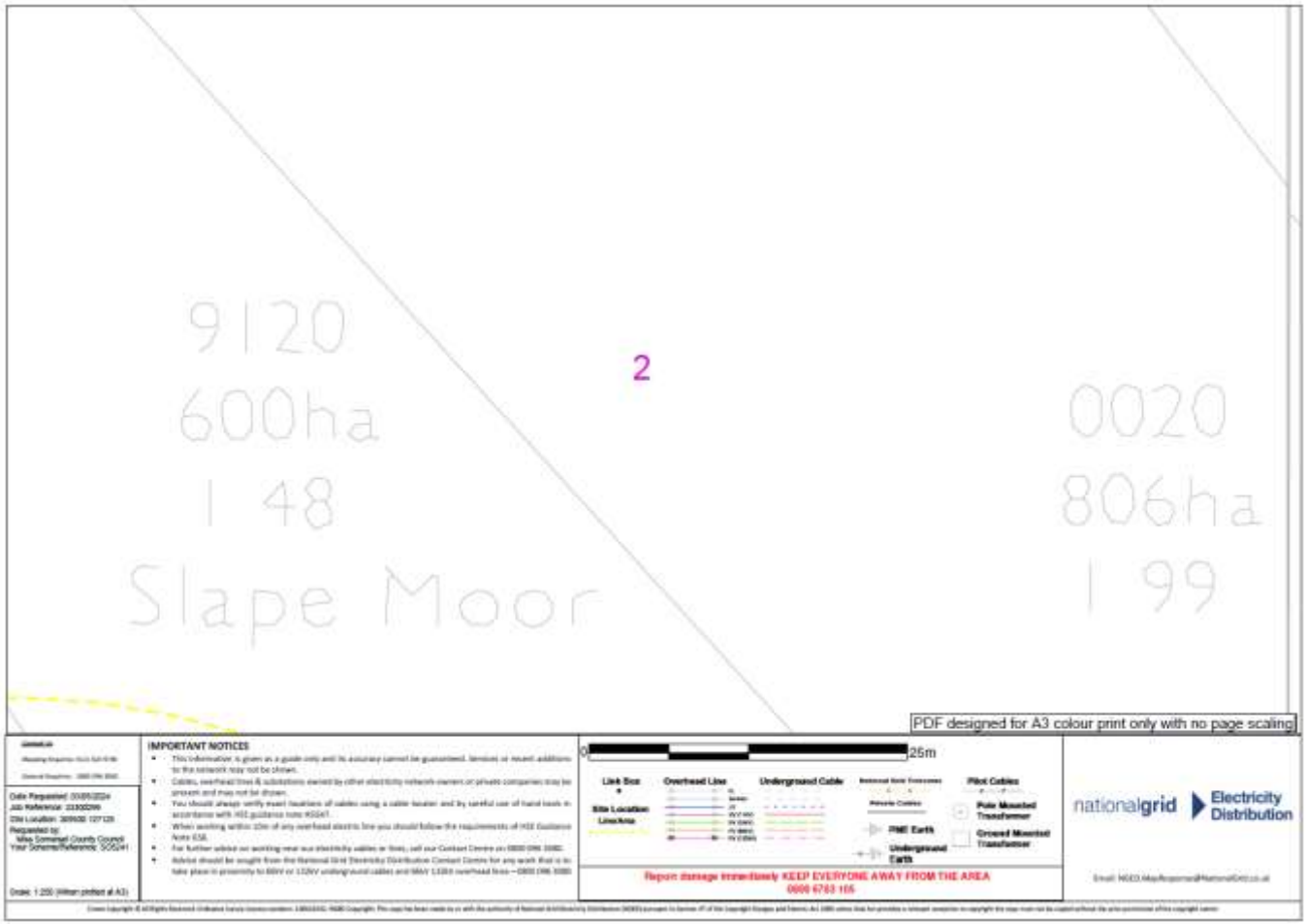
Attachment 4 – Nationalgrid – Electricity Distribution



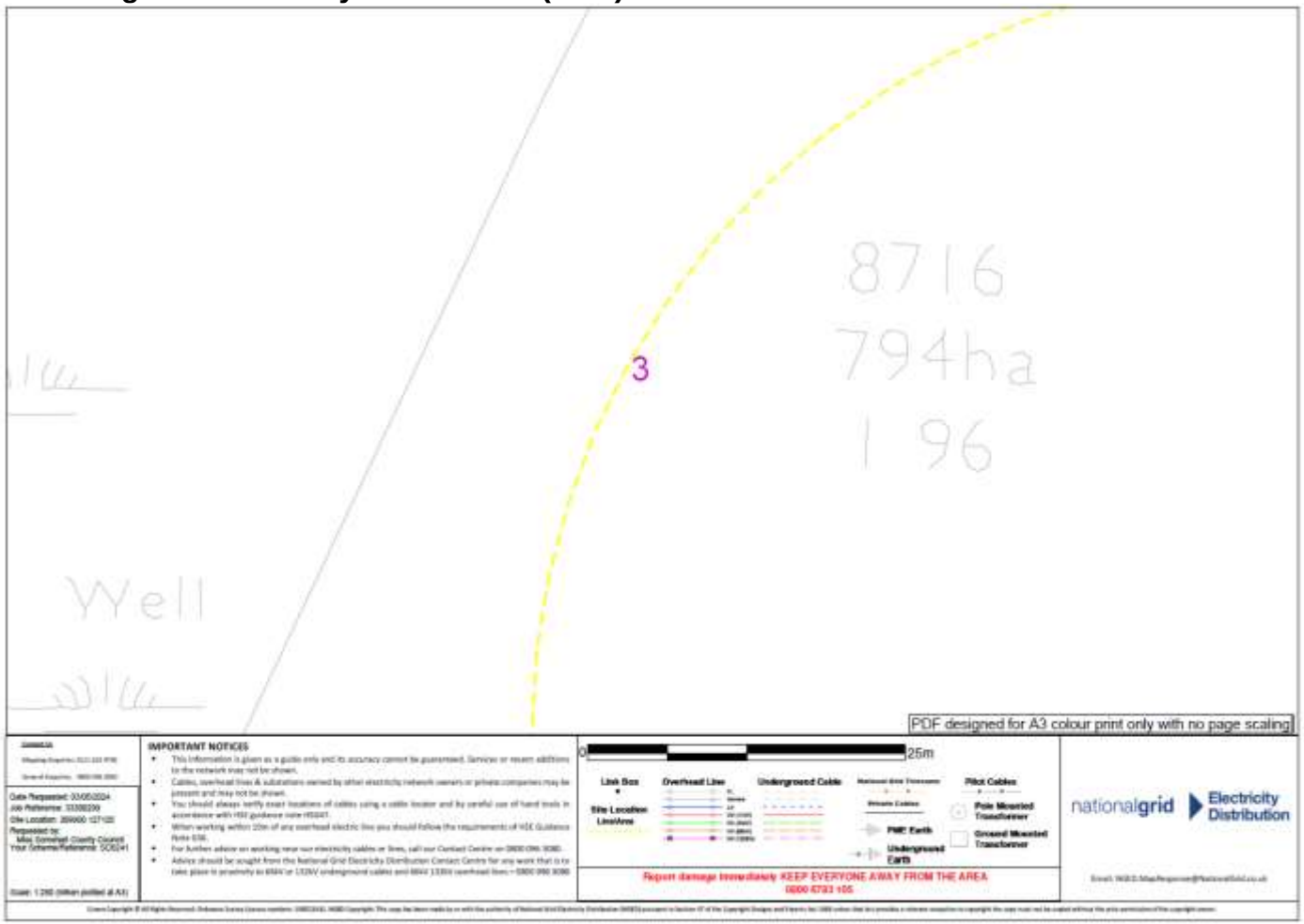
Attachment 4 – Nationalgrid – Electricity Distribution (cont)



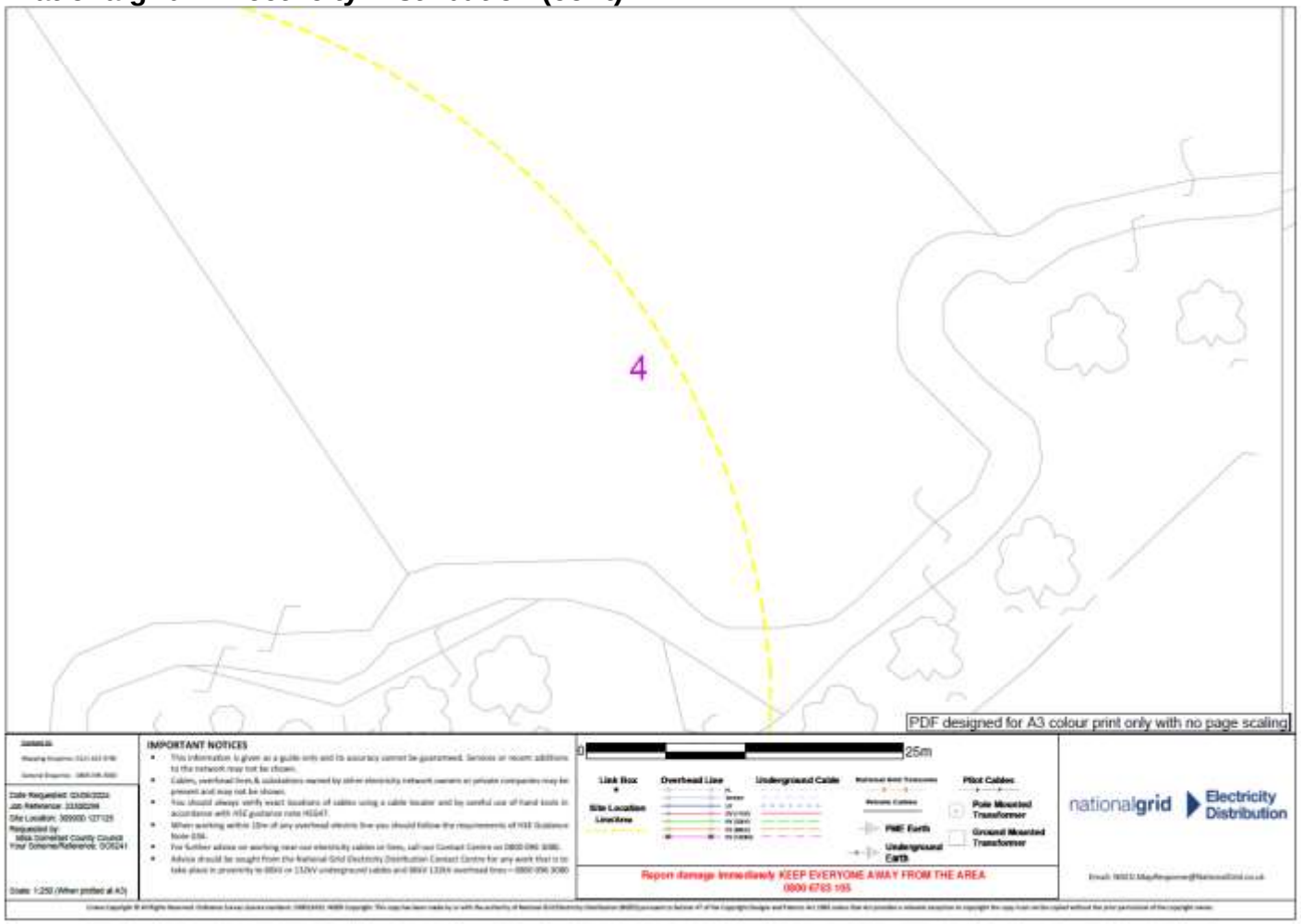
Attachment 4 – Nationalgrid – Electricity Distribution (cont)



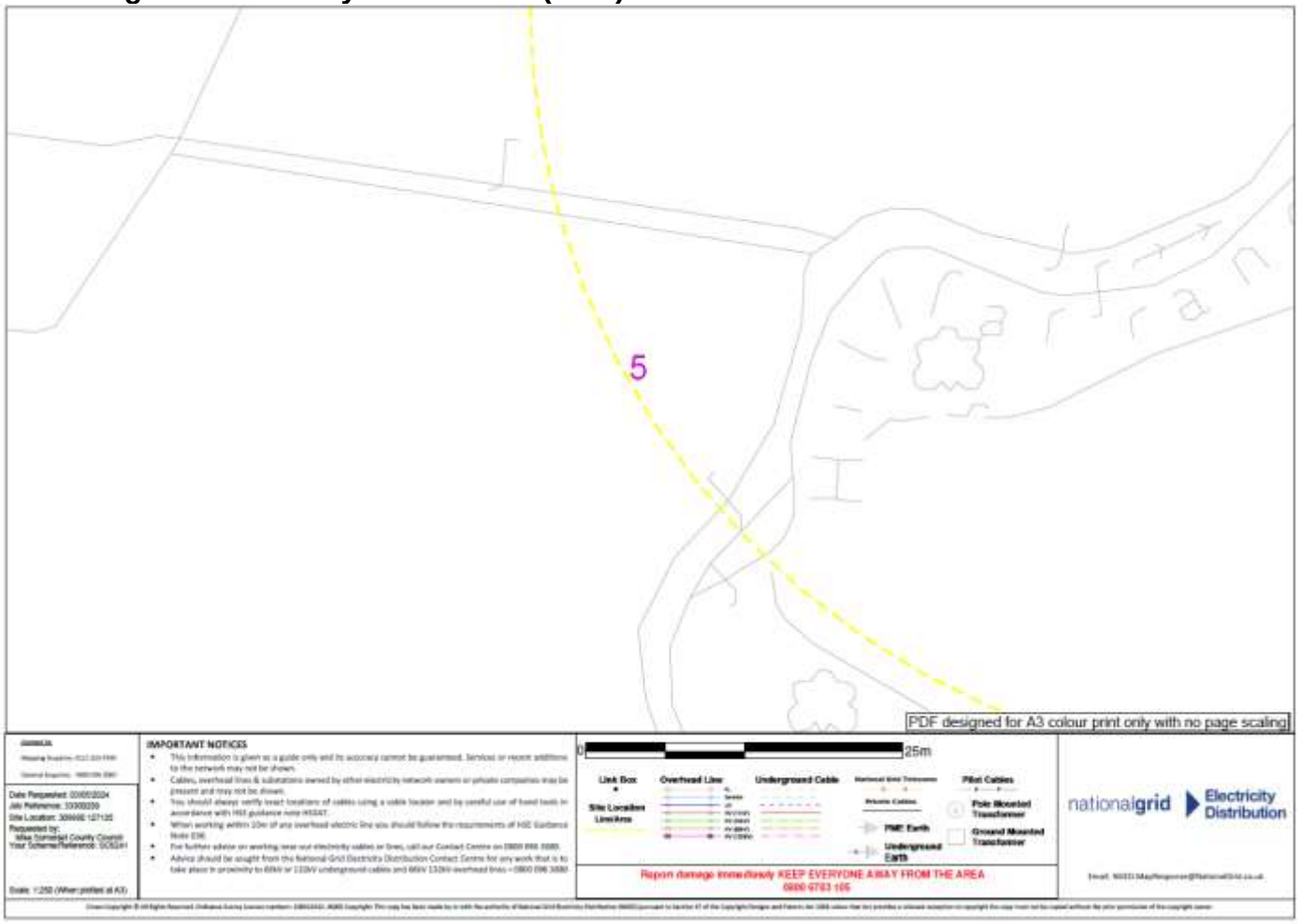
Attachment 4 – Nationalgrid – Electricity Distribution (cont)



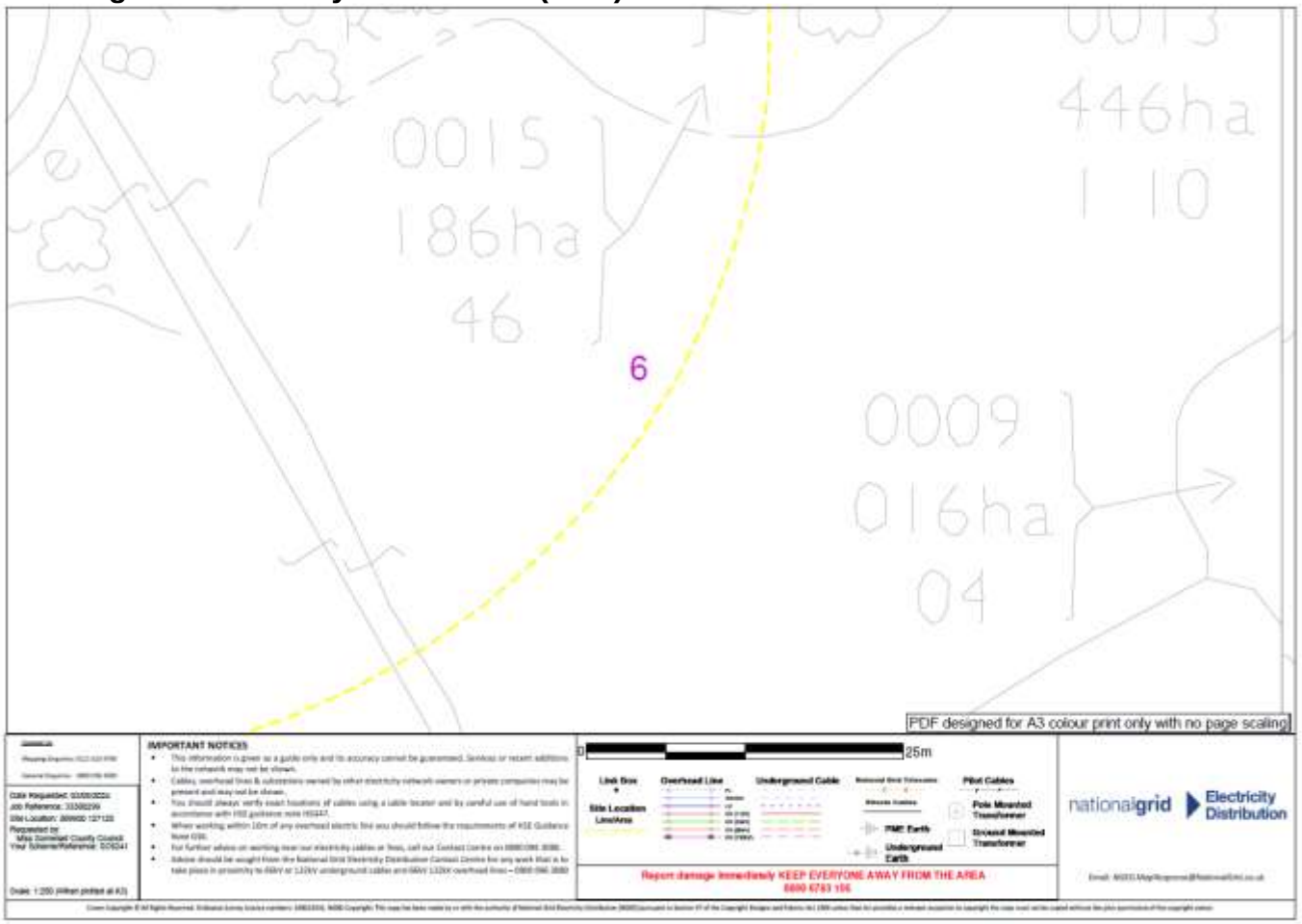
Attachment 4 – Nationalgrid – Electricity Distribution (cont)



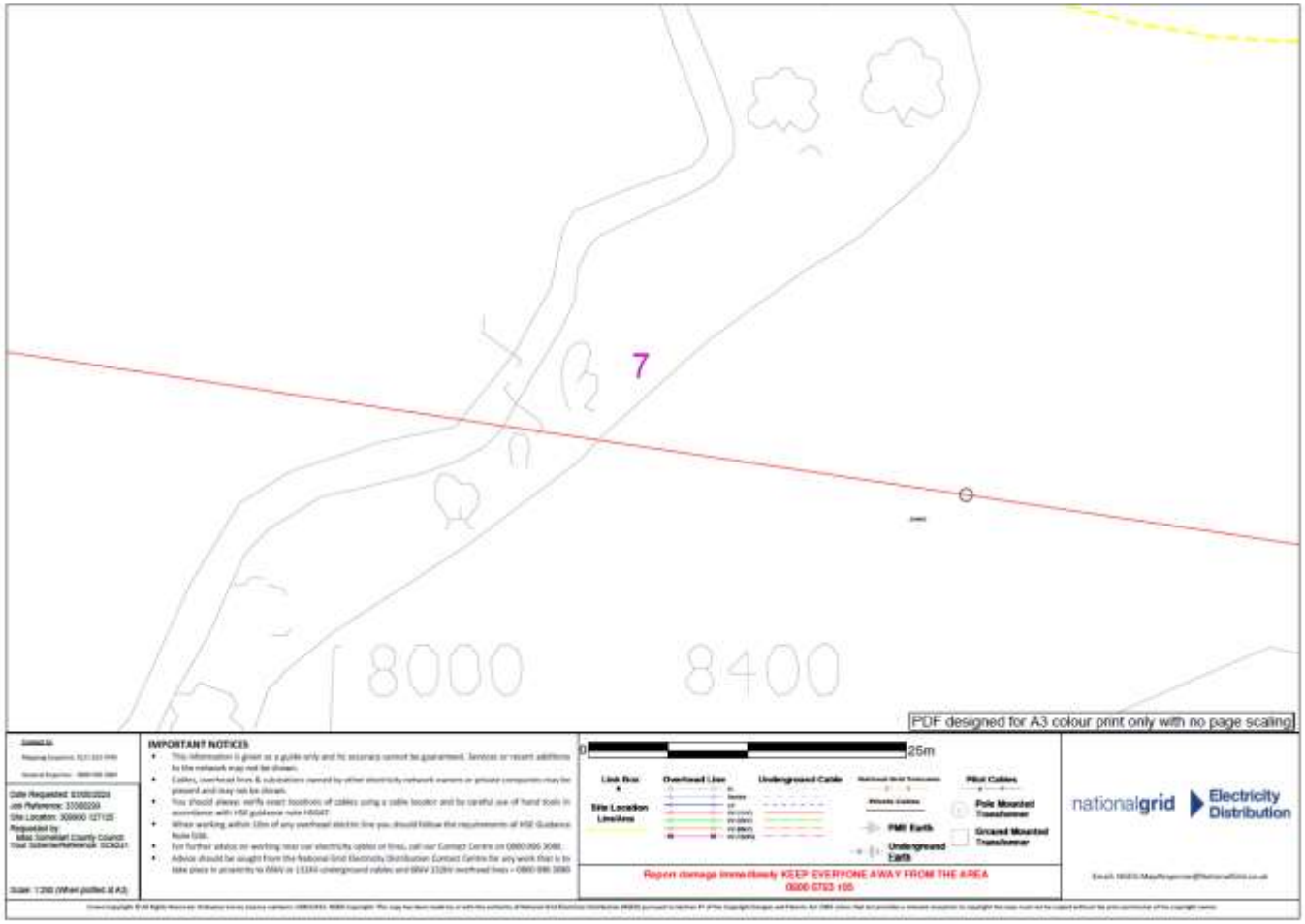
Attachment 4 – Nationalgrid – Electricity Distribution (cont)



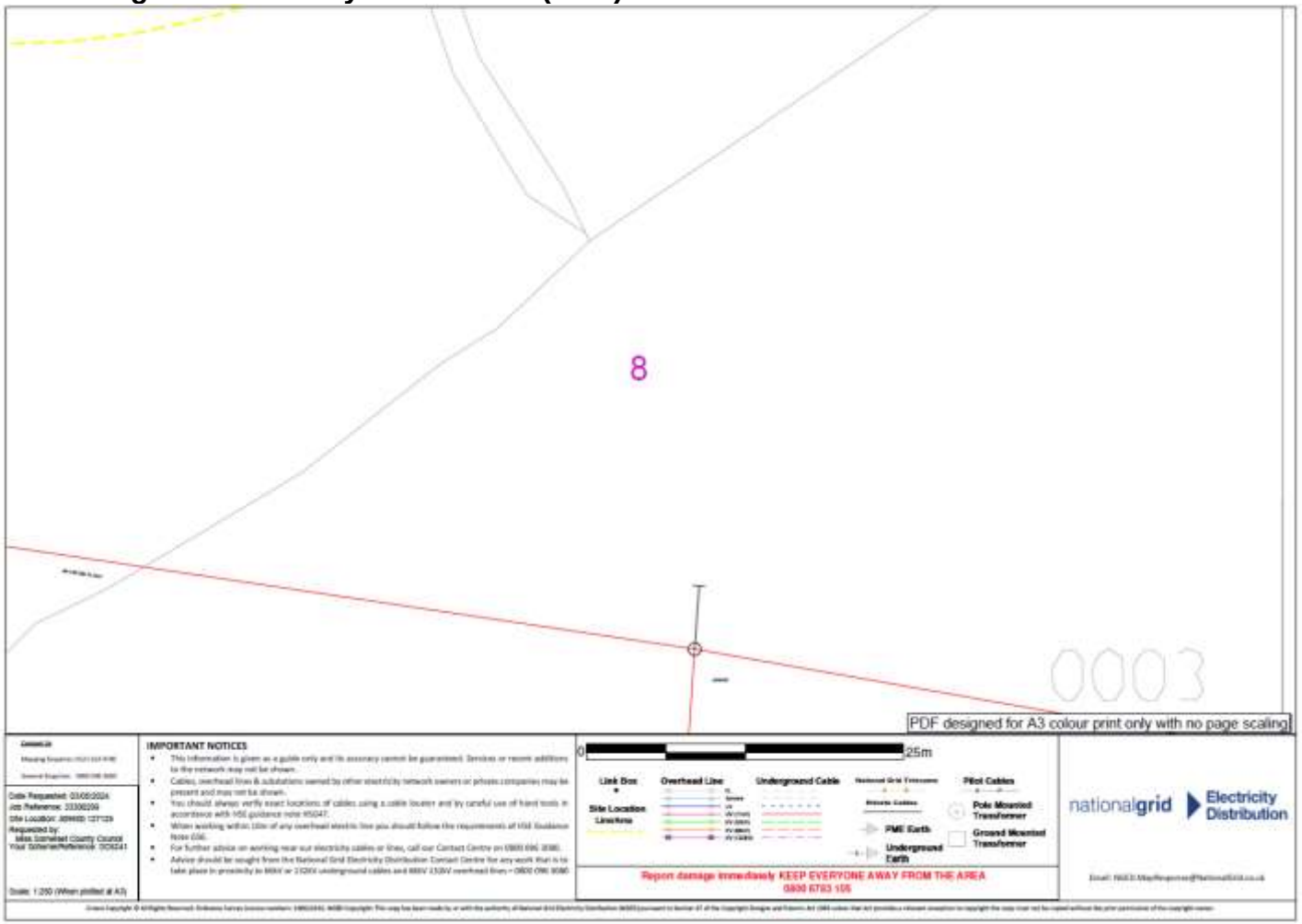
Attachment 4 – Nationalgrid – Electricity Distribution (cont)



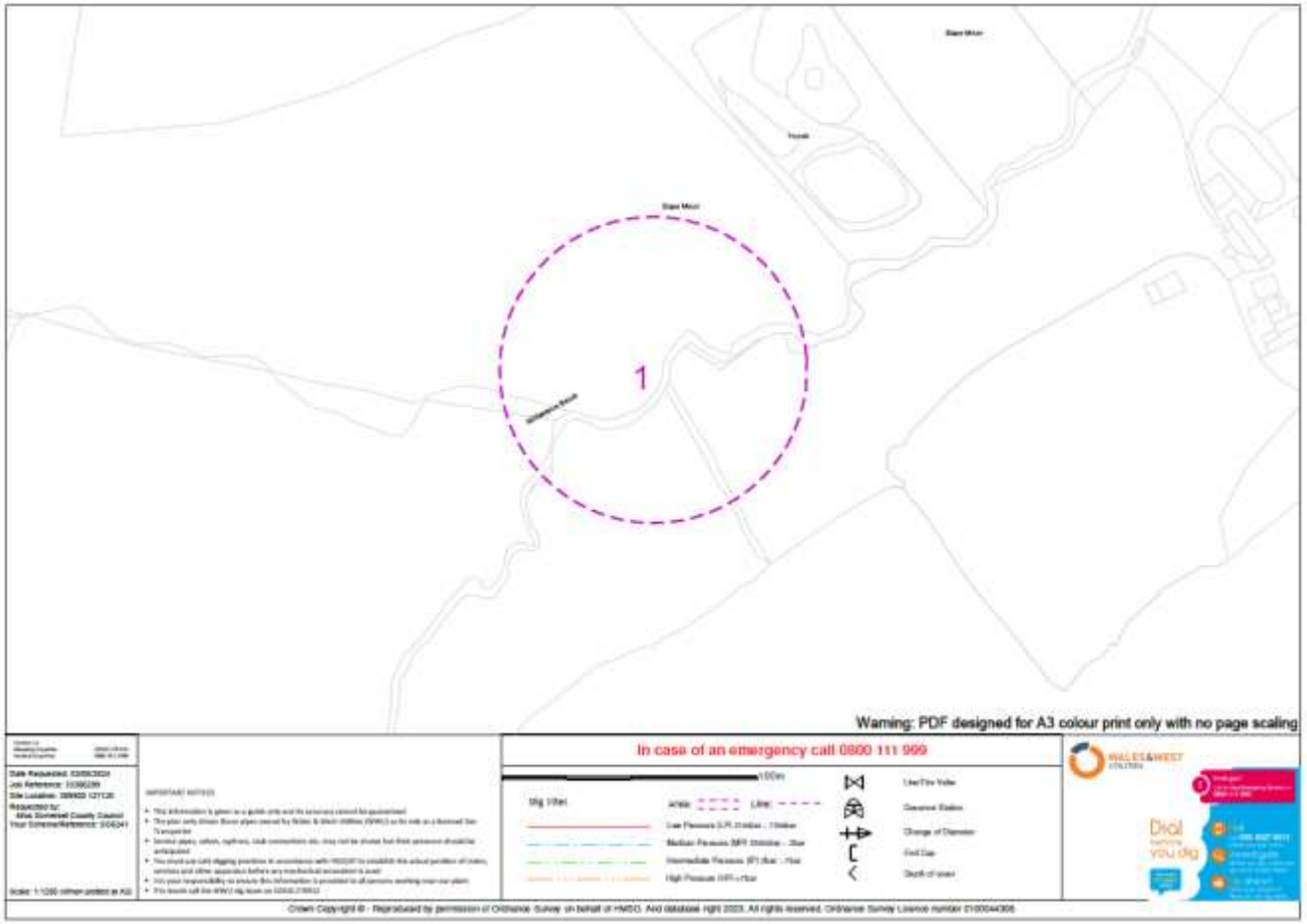
Attachment 4 – Nationalgrid – Electricity Distribution (cont)



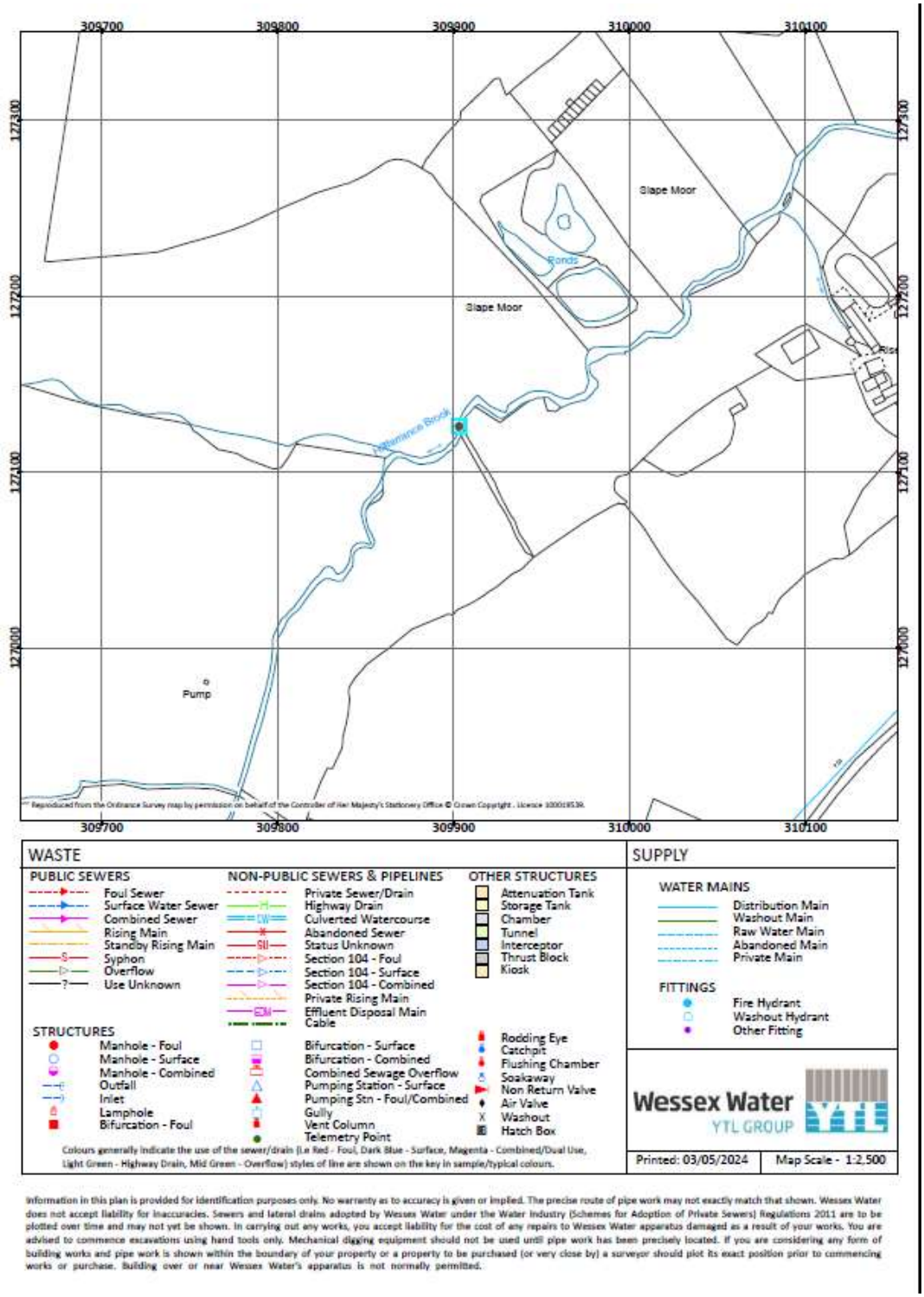
Attachment 4 – Nationalgrid – Electricity Distribution (cont)



Attachment 4 – Wales & West Utilities



Attachment 4 – Wessex Water



Attachment 5 – <u>Standard Bridge Stock Detail – Glastonbury Depot</u>

Arrangements for visits to SC Highways depot in Glastonbury during quotation stage:

- Site visits into the depot area will need to be pre-booked with the Client to enable an induction and escort around the site.
- Full 6 point PPE to be worn as set out below.
- Site visit dates/times:
  - Thursday 30th May 2024 10:00-12:00
  - Tuesday 4th June 2024 10:00-12:00
- Any questions and responses about the project raised at the site visits will be placed on the Portal for all Contractors to see.
- No access will be given to Contractors who have not pre-booked and/or do not have the appropriate PPE.

• Arrangements for collection of a 10.5m span bridge frame from SC Highways depot in Glastonbury:

- Access only under supervision of the Client.
- Contractor to provide separate site specific risk assessment and method statement for bridge frame collections for agreement with the Client and depot representative.
- Collection date to be agreed between Client, depot representative, car salesroom representative and the successful Contractor - suitable notice will be required and 2 weeks as a minimum.
- Access for collection will only be during the hours of 09:30 and 15:00 and on the agreed date.
- Make appropriate arrangements for suitable road space to be available if required for collection.
- All suitable machinery/vehicles required for the collection of the bridge frame will be the responsibility of the successful Contractor.
- All personnel to adhere to Depot rules and regulations including the following:
  - Minimum PPE requirements are Hard hat, steel toe cap boots with protective midsole, hi viz trousers and top, gloves and safety glasses.
  - All staff to report to depot office or SC Project Manager for site induction.
  - The site usually operates a one-way system, however the collection vehicle will be directed to pull up and reverse into the

compound area. Sufficient banksmen will be required to facilitate this – Depot staff **will not** be available to assist.

- Collection from the compound location marked on the attached plan, for the delivery is 30m long and 11m wide, see site photographs below. Please note that the moving of other furniture, for example: field and pedestrian gates, steel and timber posts, timber bridge kits, may be required to ensure this space is clear. Location of where to move this furniture to be agreed with the SC Project Manager.

- Collection Address:
  Highways Depot,
  Avalon Trading Estate,
  Wells Road,
  Glastonbury,
  Somerset,
  BA6 9AS.
  SC Contact: Ewan Tweedie

- Barriers across compound entrance to be moved and replaced once collection complete. This will be the responsibility of the Contractor.

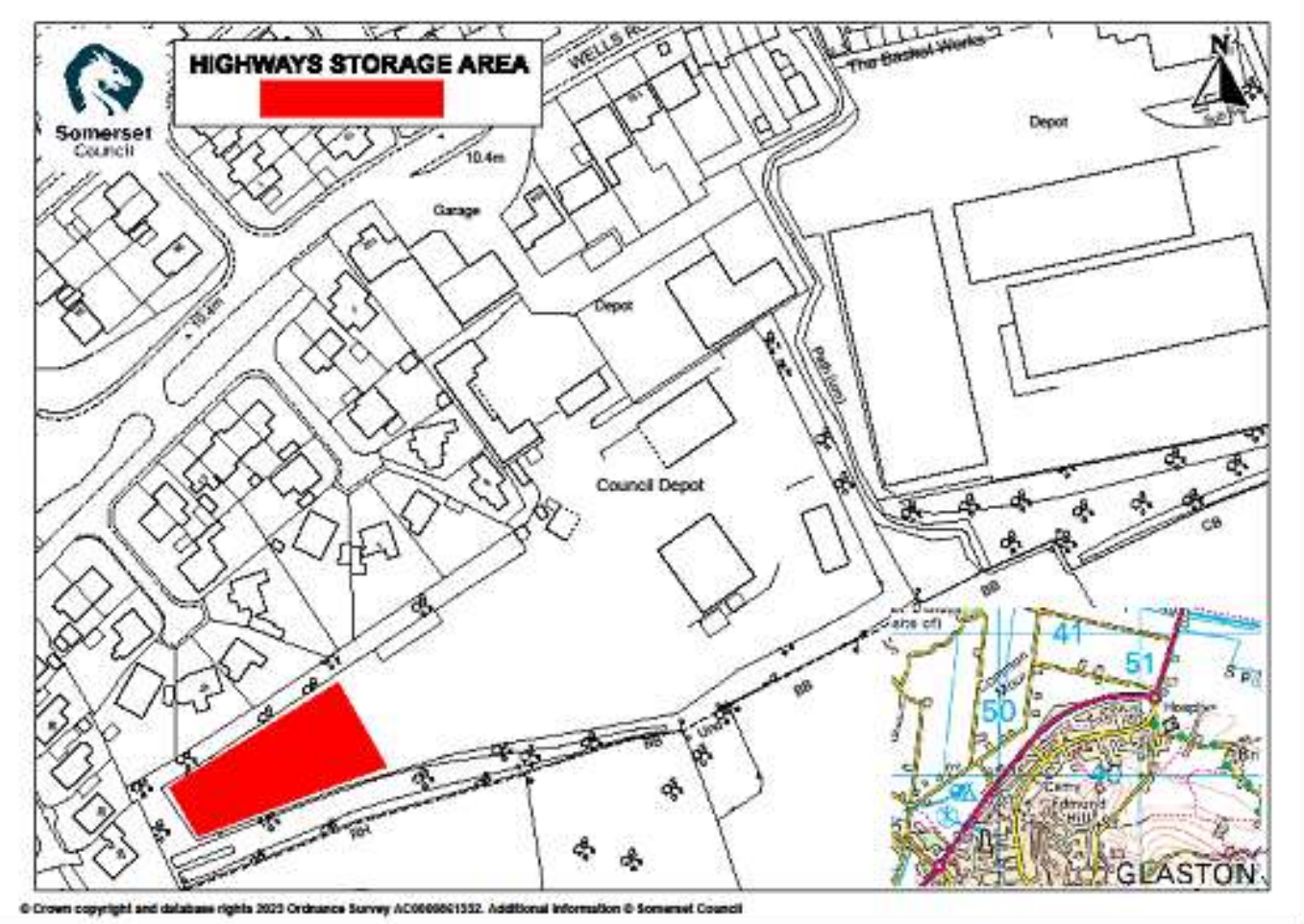
- Other bridge frames may need to be moved out of the way for access and collection purposes. The Contractor is to ensure that the bridge frames are suitably protected during lifting and temporary stacking and returned to the original stacking system carefully and neatly. Please note that no extra stacks are to be formed and no stack is to be in excess of 2m in height.

- All of the bridge frames are fully constructed. Sizes and weights are found below. It is the Contractors responsibility to check the frame sizes on collection.

- The frame being collected must be stacked and secured on to the collection vehicle carefully and level onto suitable timbers to prevent warping and movement during transit.

- It is the Contractors responsibility to assess the collection and delivery routes to the depot and onto the project site as well as the logistics of loading and unloading.

Location Plan



Attachment 5 – Glastonbury Depot Photographs

Photo 1 - Shows roadside entrance to garage and depot on right hand side of photo.

Photo 2 shows access adjacent to the garage.

Attachment 5 – Glastonbury Depot Photographs cont.

Photo 3 – Rights of Way compound area (26 April 2024) with location of steels to right of photo.

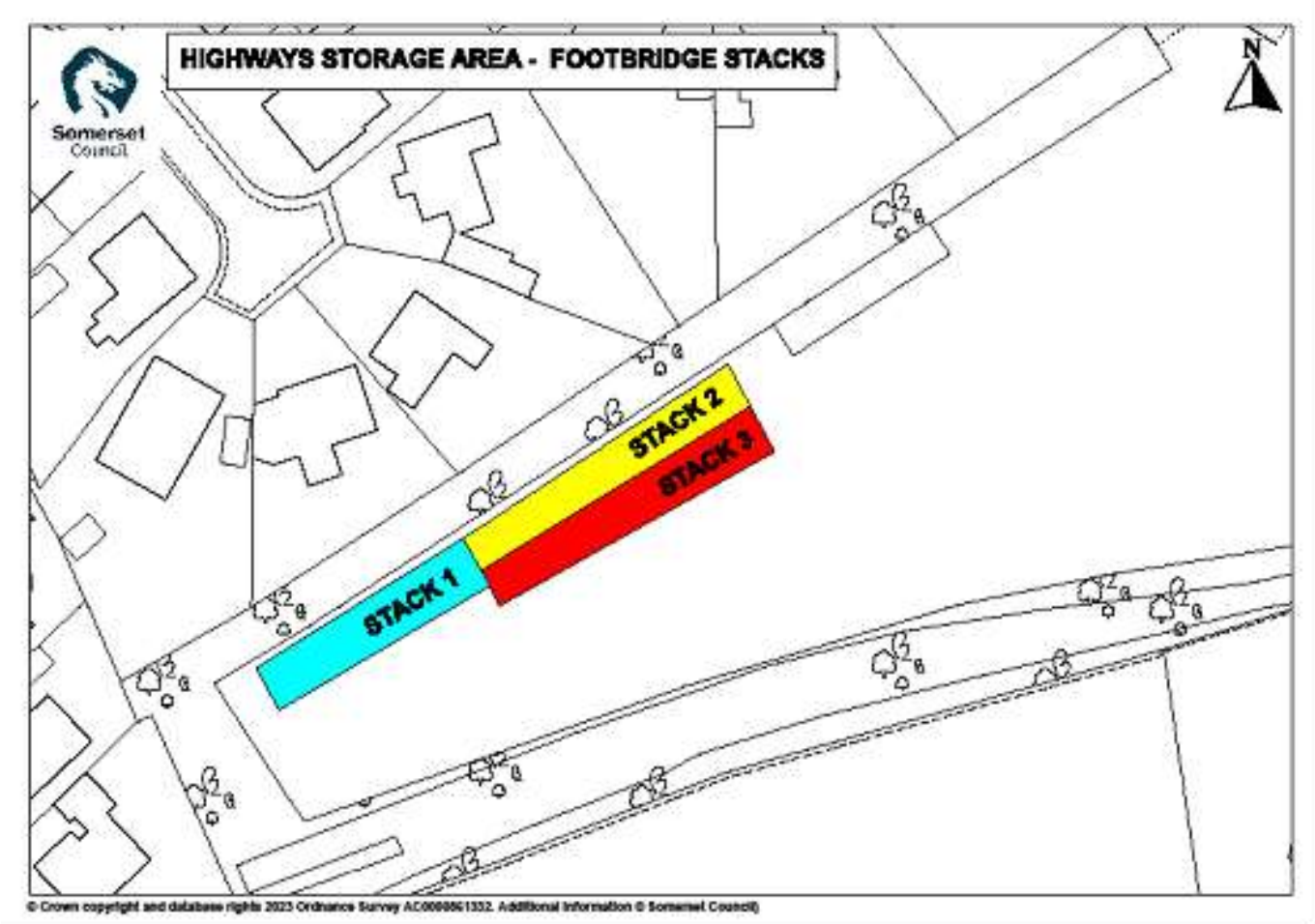
Photo 4 –Compound area (26 April 2024) with frames showing types of furniture/materials to be moved before collection possible.

Attachment 5 – Glastonbury Depot Photographs cont

Photo 5 - Stack 1 9.5m span (9.8m total length) – 06/04/23

Photo 6 - Stack 2 & 3 with span sizes (+300mm total length) – 06/04/23

Attachment 5 – Glastonbury Depot Stack Locations



Attachment 5 – Glastonbury Depot Stock Frame Details

Span (m)	Number in stock	Beam size	Beam length	No. of uprights	Upright spacing	Cross Bearer Size	Cross Bearer spacing 'X'	Cross Bearer No.	Total Frame Weight (Tonnes)
9.5	1	300x100x46 PFC	9800	10	End: 590 Mid: 1185	End: 260x75x28 PFC Mid: 203x203x46 UC	2375	End: 2 Mid: 3	1.22
10	1	300x100x46 PFC	10300	10	End: 625 Mid: 1250	End: 260x75x28 PFC Mid: 203x203x46 UC	2500	End: 2 Mid: 3	1.27
10.5	1	380x100x54 PFC	10800	12	End: 525 Mid: 1050	End: 300x100x46 PFC Mid: 203x203x46 UC	2100	End: 2 Mid: 4	1.63
11	2	380x100x54 PFC	11300	12	End: 550 Mid: 1100	End: 300x100x46 PFC Mid: 203x203x46 UC	2200	End: 2 Mid: 4	1.69
11.5	1	380x100x54 PFC	11800	12	End: 575 Mid: 1150	End: 300x100x46 PFC Mid: 203x203x46 UC	2300	End: 2 Mid: 4	1.75
12	2	380x100x54 PFC	12300	12	End: 595 Mid: 1200	End: 300x100x46 PFC Mid: 203x203x46 UC	2400	End: 2 Mid: 4	1.8
12.5	1	380x100x54 PFC	12800	12	End: 625 Mid: 1250	End: 300x100x46 PFC Mid: 203x203x46 UC	2500	End: 2 Mid: 4	1.86

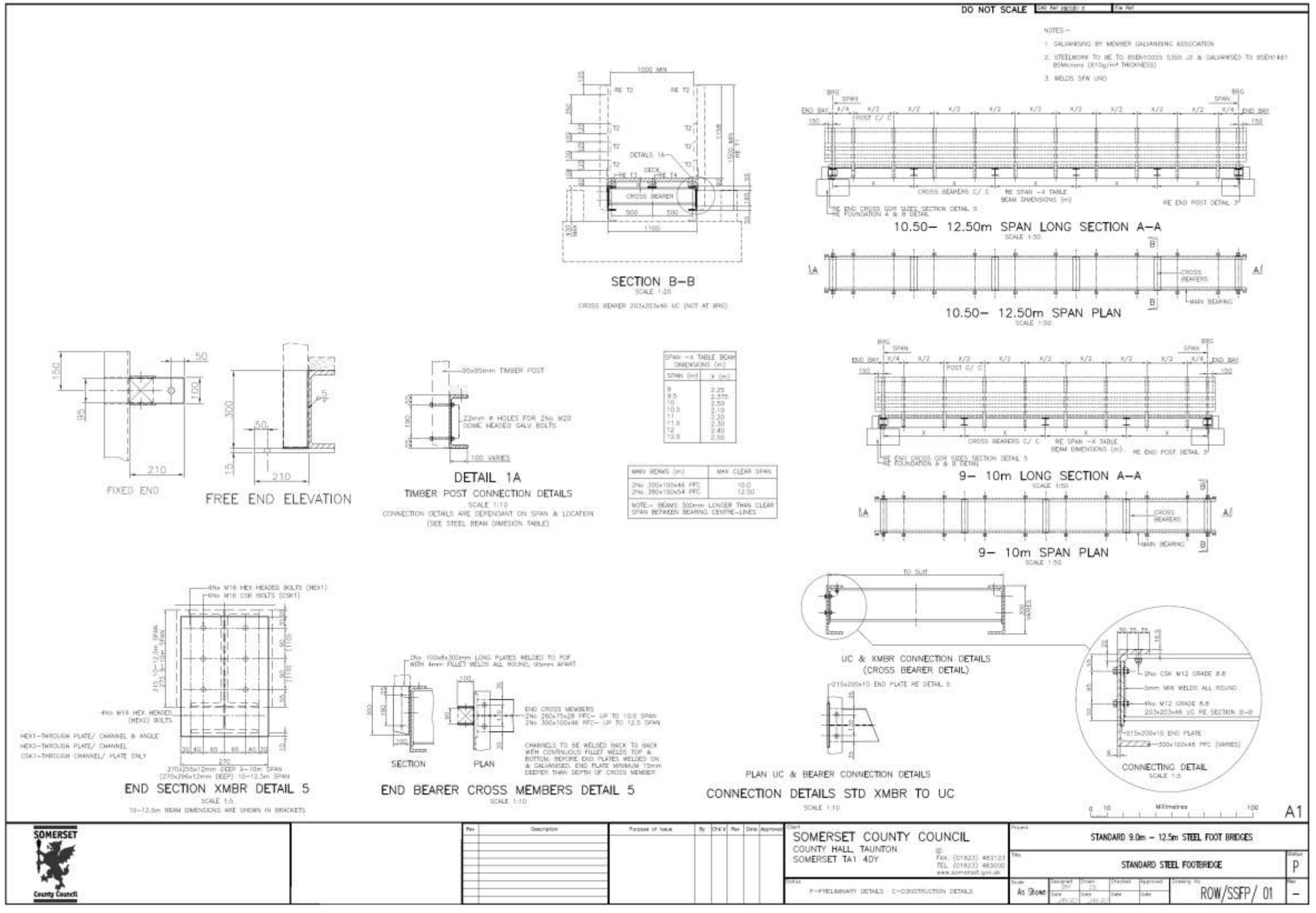
Attachment 6 – Design Drawings

Document	Title
ROW-SSFP-01.dwg (1).pdf	ROW-SSFP-01 – Rights of Way Standard Steel Footbridge 9.0m to 12.5m span
ROWGENMED 01F.pdf	ROW-GEN-MED-01F - Rights of Way Standard Design Bridges 6.0m to 15.0m SPAN
ROWGENMED 02Ga.pdf	ROW-GEN-MED-02Ga - Rights of Way Standard Design Bridges 6.0m to 15.0m Foundation & end of deck details
ROWGENMED 05A-STEPS DETAILS FOR M	ROW-GEN-MED-05A – Steps Details for medium Span Bridges

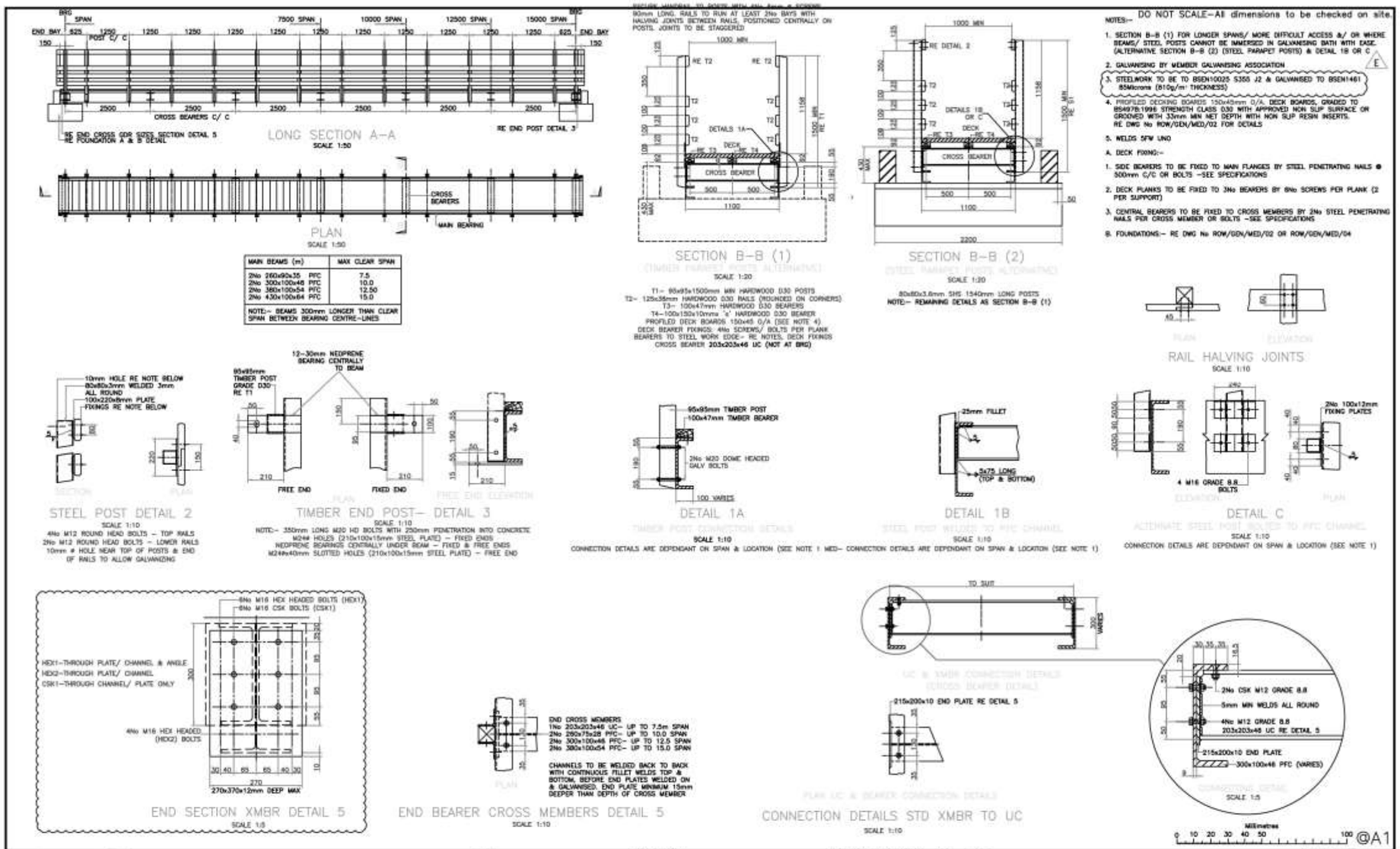
Note, if you are unable to open these documents please submit requests through the procurement portal.

Somerset Council	RFQ – Works Specification & Pre-construction Information			
	Structure No	5363	Structure Name:	Slape Moor Footbridge

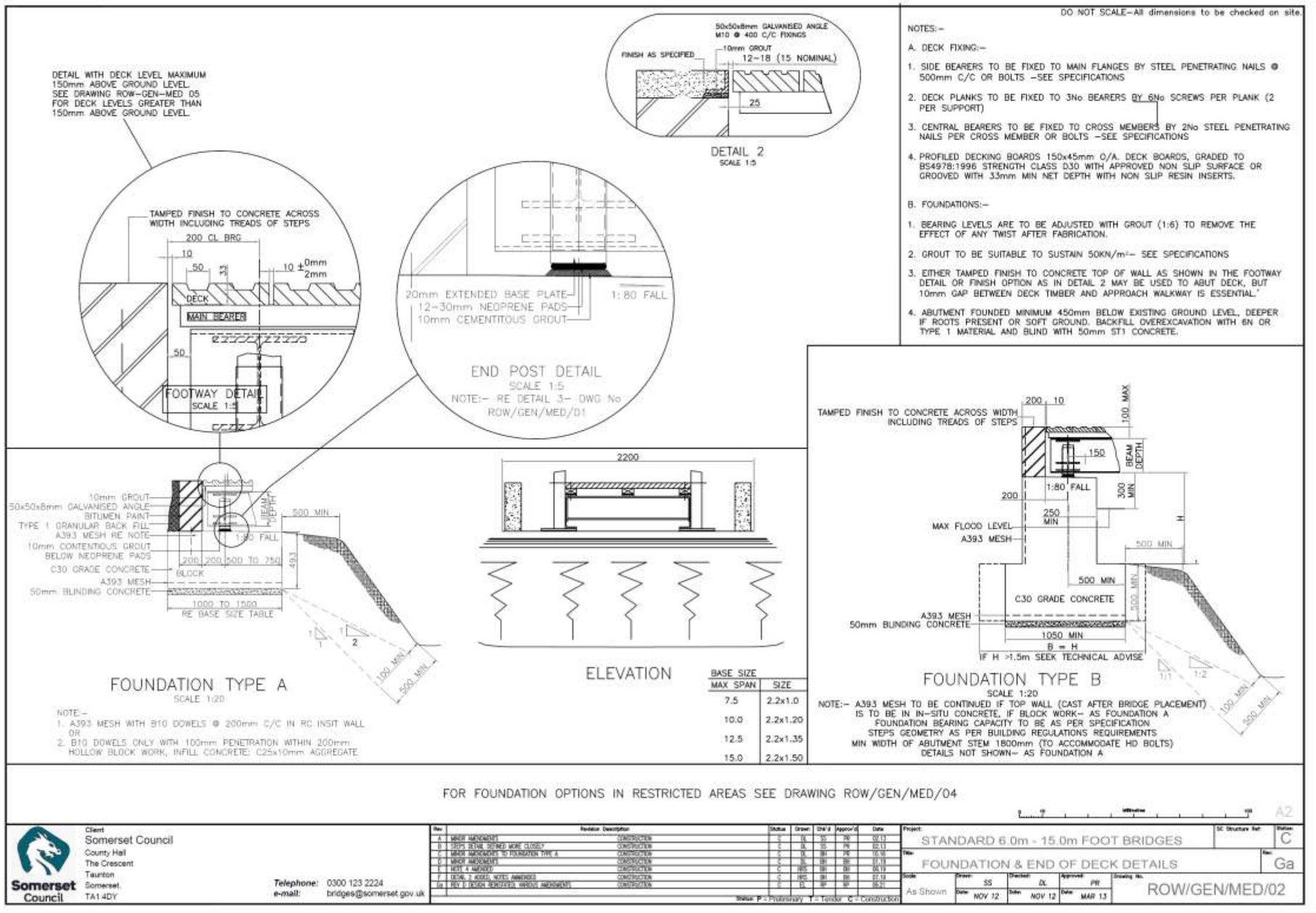
Attachment 6 – ROW-SSFP-01



Attachment 6 - ROW-GEN-MED-01F



Attachment 6 - ROW-GEN-MED-02Ga

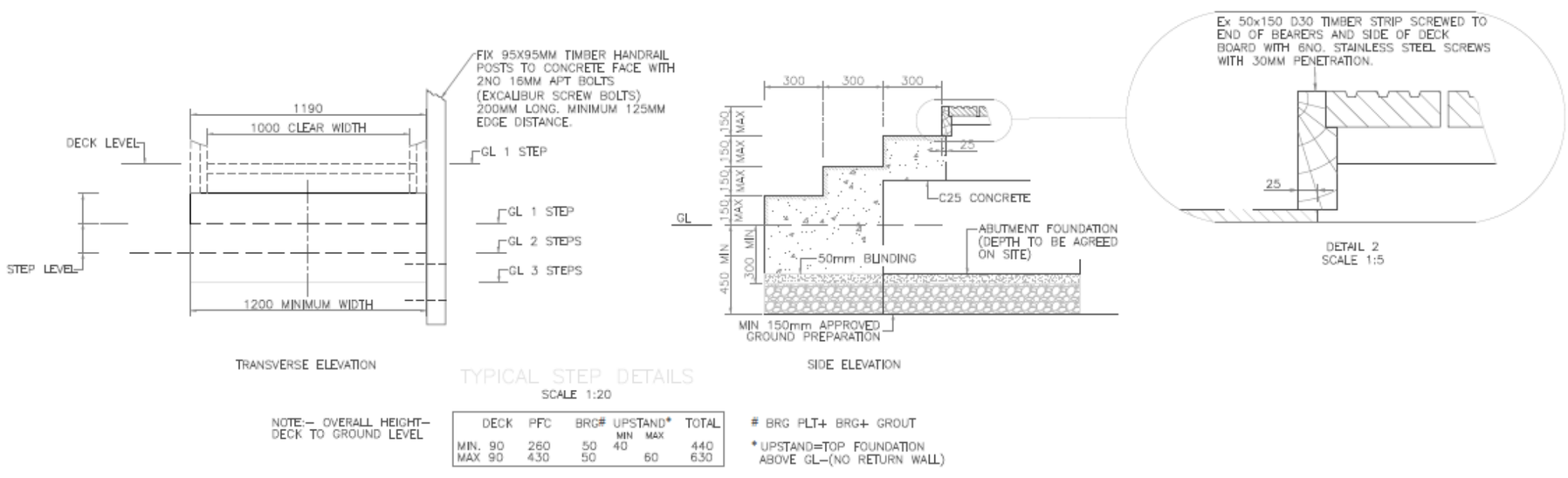


	RFQ – Works Specification & Pre-construction Information			
Somerset Council	Structure No	5363	Structure Name:	Slape Moor Footbridge

Attachment 6 - ROW-GEN-MED-05A

NOTES :–

1) STEPS ARE TO BE PROVIDED ONLY IF REQUIRED IN THE WORKS DETAILS FOR THE SPECIFIC BRIDGE SITE. (THIS APPLIES TO ALL FOUNDATION TYPES IF SO REQUIRED).
2) THE NUMBER OF STEPS REFERRED TO IS THE NUMBER OF NEW RISERS WITHIN THE STEPS CONSTRUCTION. THUS THERE WILL NOT USUALLY BE A NEED FOR HAND RAILS WITH MEDIUM SPAN BRIDGES WHERE THE DIFFERENCE IN LEVEL IS LESS THAN 600mm. THUS THERE WILL BE A NEED FOR GUARD RAILS WITH LONG SPAN BRIDGES.
3) THE NUMBER OF STEPS WILL BE APPROPRIATE FOR THE SECTION SIZE OF THE BRIDGE TABULATED IN THIS DRAWING, UNLESS THE BRIDGE IS WHOLLY OR PARTIALLY DEPRESSED BELOW GROUND LEVEL, OR CONVERSELY THE BRIDGE IS UNUSUALLY RAISED ABOVE GROUND LEVEL.
4) THE BRIDGE WIDTHS SHOWN ON THIS DRAWING IS APPROPRIATE TO THAT SHOWN ON THEIR BRIDGE DRAWINGS, BUT IF 3 ABOVE APPLIES, THEN HAND RAILS WILL NEED MODIFYING APPROPRIATELY, AND WIDTHS OF STEPS ARE TO BE ADJUSTED TO SUIT THE CLEAR BRIDGE DECK WIDTH.
5) 125X38 ROUND EDGE HARDWOOD WILL BE USED AS HANDRAILS AND SHALL HAVE UNINTERRUPTED SURFACES, I.E. THERE SHALL BE NO RAISED EDGES, GAPS, WHERE FINGERS COULD BE TRAPPED, ROUGH OR SHARP EDGED FINISHES. SCREWS, BOLTS, STUDS AND SIMILAR TRAPPING/CUTTING PROTRUSIONS SHALL BE AVOIDED.
6) STEPS WILL FORM CURTAIN WALL. GROUND TO BE EXCAVATED TO A MINIMUM DEPTH OF 450mm, DEEPER IF ROOTS ARE PRESENT OR GROUND SOFT. BACKFILL WITH 6N OR TYPE 1 MATERIAL CLAUSES 610–612 OF THE SPECIFICATION TO WITHIN 350mm OF THE EXISTING GROUND LEVEL AND BLIND WITH 50mm ST1 CONCRETE.
7) CAST STEPS WITH C25 CONCRETE. GOINGS OF STEPS TO BE TAMPED PARALLEL TO TREAD, OR BRUSH FINISHED TO GIVE ROUGH SURFACE. PROVIDE NOSINGS SHALL HAVE ARISSES OF 10mm RADIUS FORMED WITH A SMALL TIMBER FILLET WITH EXTERNAL CORNERS FINISHED WITH FINE CARBORUNDUM STONE.



TYPICAL STEP DETAILS

SCALE 1:20

NOTE:– OVERALL HEIGHT– DECK TO GROUND LEVEL

	DECK	PFC	BRG#	UPSTAND* MIN	UPSTAND* MAX	TOTAL
MIN.	90	260	50	40		440
MAX	90	430	50		60	630

BRG PLT+ BRG+ GROUT

* UPSTAND=TOP FOUNDATION ABOVE GL–(NO RETURN WALL)

A3

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Rev:	Revision Description	Status	Drn:	Chkd:	Appr:	Date:
A	End of bearing detail and notes changed	C	DL	BH	BH	16.07

Status: P – Preliminary, T – Tender, C – Construction

Project:	STANDARD 6.0m - 15.0m FOOT BRIDGES
SC Structure Ref:	
Status	C
Title:	STEPS DETAILS FOR MEDIUM SPAN BRIDGES
Rev:	A
Scale: As shown	Drawn: DL Date: MAR 15
	Checked: BH Date: MAR 15
	Approved: BH Date: MAR 15
Drawing No.	ROW-GEN-MED 05

Attachment 6 -160927 STD BR MED SPEC DES RA rev J

STANDARD FOOTBRIDGES DESIGN [C] 6[C] M to 15M SPAN

SPECIFICATION AND DESIGNERS RISK ASSESSMENT - Rev J (Marked thus: [I])

Original Issue: 03/02/12, Rev A 21/02/12, Rev B: 28/02/13, Rev C: 13/02/15, Rev D: 27/09/16, Rev E: 24/01/19, Rev F: 13/06/19, Rev G: 03/07/19, Rev H 08/07/19, Rev I 13/09/2021, Rev J 13/10/2022

1) **Specification**

These notes are to be read with the [F] following drawings
ROW/GEN/MED/01E or ROW/GEN/MED/01F[I] (Internal or external bearing plates respectively): General arrangement & details
ROW/GEN/MED/02E or ROW/GEN/MED/02Ga or b [I] (Internal or external bearing plates respectively): Foundation and end details of deck
ROW/GEN/MED/3A: Alternative 3 Post and rail & spindle
ROW/GEN/MED/4 or ROW/GEN/MED/4A [I] (Internal or external bearing plates respectively): Options for foundations.
ROW/GEN/STEPS/01 Step details for medium span bridges.[F]
This specification shall be taken as a supplement to these [F] drawings including notes thereon. [F]

Steelwork:

- Steelwork to be in accordance with BS EN 1090-2 execution class 3. [G]
- Steel to be in to grade S355 J2 [G] accordance with BS EN 10025 and galvanized to BS EN ISO1461 [B] with a covering of 85□m (micron) [B] minimum [B].
- All welding to be in accordance with BS EN1011 parts 1 & 2 [G] or other approved welding standard. All weld joint preparation to BS EN 9692-1 [G].
- All bolts to be spun galvanized or alternative protection, which does not require further overcoating.
- All structural connection Bolts to be Grade 8.8 in accordance with BS EN 24014 and BS EN 24032 for nuts.
- HD bolts to be Grade 4.6 in accordance with BS EN 24016
- Bolts through timber posts[E] to be Grade 4.6 in to with BS EN 24016
- Provide galvanized washers between head of bolts and timber face with diameter of 3 x bolt diameter.[E]
- Construction tolerances to be generally as BS EN 1090-2 [G].
- Soffit levels of bearings – especially if bridge is all welded, are to be to +/- 5mm.
- Three alternative connection details are set out in the drawing 01 noted above [B]:
  - a) Timber posts bolted to PFC's – Section B - B (1) and Detail 1 [B]
  - b) Steel posts welded to PFC's – Section B - B (2) and Detail 1 [B]
  - c) Steel posts bolted to PFC's – Section B - B (2) and Detail C [B]

Timber

- [C] Timber species and preservation treatment to be selected to provide a minimum 30 year design life in accordance with BS 8417:2011 - Preservation of wood, and BS EN 335-1:2006 - Durability of wood and wood based products – Definition of use classes, as set out below:

Timber Component	Environment class (BS EN 335 Table 1)	Natural durability class to[H] BS 8417 Table 3 (Min) *3	Treatment for 30 year design life tables 4 & 6 of BS 8417 *4	Comment
Parapet Posts	UC 3.1 *1	1	NP5 *5	Hardwood used.[D] Treatment needed
Parapet rails & spindles	UC 3.1	2	NP5	
Deck Boards	UC 3.2 *2	2	NP5	
Bearers	UC 3.2	2	NP5	

Notes to table: *1: UC 3.1 = limited wetting
*2: UC 3.2 = prolonged wetting
*3: This the durability classification against wood-destroying fungi set out in clause 4.2.2 of BS EN 350-2, ranging from 1 to 5 – 'very durable to not durable'.
*4: The aqueous Boron compounds have inadequate protection for the use class.
*5 = NP5 is penetration class in Table 7 of BS 8417 as 'full sapwood penetration' required.

- All timber shall be cut to size, holes drilled according to the agreed design and Kiln Dried to moisture content 20% prior to treatment.
- Supplied to site (as distinct from timber cut and fitted in the shop) shall also be treated to provide a 30 year design life.
- Cutting after treatment: All cutting, drilling, profiling and shaping of the timber should be carried out, as far as possible, before treatment. Where unavoidable, surfaces exposed by minor wood working procedures during installation (cross cutting, boring, notching) shall be given two liberal brush coats of the preservative the preservative used in the original treatment process, or compatible with it. [Ref WPA Manual of Wood preservation page 39].
- All Timber supplied by the contract to be FSC certified [C]
- All timber to be in accordance with BS EN 338:2016[H] Table 1 [G]. with strength classes [B] as set out there: typically [D], D30 Oak (UK or German) [B] or similar approved, or D40 Iroko [B] or similar approved. [D] Also ref New Standard BS EN1912: 2012 which relates strength class and grading rules to species and grading countries and timber source countries.] [B]
- [A] Bearers to be [C] D30 oak [C] or similar approved. To be fixed to steelwork by either: steel penetrating nails, grade 8.8 M6 countersunk bolts from

above, or similar grade and size screws/coach bolts from below. Nails/Bolts at 500 centres in PFCs, and 2No per cross girder.

- [F]Profiled decking boards 150 x 45mm D30 oak or similar approved. Boards shall be provided with approved non-slip surface with 10 year warranty. [E] or grooved with 33mm minimum net depth with[E] non-slip inserts comprising a resin base with aggregate overlay with 10 year warranty. Decking to comply with the requirements of BD 29/17[H] Design criteria for footbridges, clause 10.3, of the Design Manual for Roads and Bridges – Part 8; to achieve a mean corrected pendulum test value of 45 units when tested in accordance with BS EN 13036 - 4. [Surface to be standard product provided by deck timber supplier unless otherwise approved]. [C]
- Maximum 12mm gap between deck boards, 10mm minimum.[E]
- All rails to be rounded on corners by 10mm to remove sharp corners.
- [C] Stainless steel wood screws – deck to bearer, bearer to steelwork, cladding battens [E] and spindle to rails, to be 6 x 70mm or better. [C] Rail to post 4 No 6 x 90mm or better in lieu of M10 coach bolts. [E]

[C] **Bearings**

- Bearings rubber to be natural rubber or neoprene with a minimum hardness grade of 50 IRHD tested to BS ISO 48:2007 (formerly to BS 903 A26) and designed as set out in BS EN 1337-3:2005 (formerly designed to BS 5400: section 9.1:1983).
- Bearing pads to be to sizes specified on drawing 02[F].
- Grout as specified above and on drawing 02[F] to be provided under natural rubber or neoprene bearings to prevent [B] pad moving during the life of the structure. [C]

Foundations [C] (Ref Drawings ROW/GEN/MED/01, 02 & 04) [C]

- [B] For normal bridges without abutments (Type A), span to be determined as shown on the drawing and agreed with the clients' representative.[F]
- Foundation size and type[F] – to be determined on site with Client's representative depending on ground level, ground conditions, access and bridge span.
- Ground at founding level to be assessed to have a minimum bearing capacity of 50kN/m2. (This to be determined to be grade V or better of attached Building regulation sheet 4.) Client/engineer to be consulted prior to blinding being laid.
- Type A foundation: Pad foundation: Backfill retaining wall to be as shown and extend across whole width of foundation. If bridge deck is to be depressed below ground, walls to be returned parallel to span and leave a [D] 200mm [C] gap between parapet posts and face of those walls.
- Type B Foundation: Abutment: This is generally for the case where the bridge is to be raised up above the existing ground and there is limited length to fit the approaches within the land constraints. The stem height is

to equal the base width unless it needs to be > 1.5m when the client/engineer shall be consulted.

- Blockwork backfill retaining wall to have mortar with a mix of 1:0.25:3 cement:lime:sand.
- Infill concrete to be C25 grade with 10mm aggregate, or if site mixed to be 1:1.5:3 cement:sand:aggregate mix with 10mm aggregate.
- Bearing pad finished top of concrete levels to be to +/- 5mm between adjacent pads. Grout as specified above and on [C] Drawing 02 [C] to be provided under neoprene bearings and to prevent neoprene pad moving during the life of the structure.
- Steps if allowed for a particular site, [D] [See Works details for particular bridge site] [C] are to be in accordance with drawing ROW/GEN//STEPS/01[F] and the following notes.[D]
  - Steps shall generally in accordance with BS5395-1 Stairs due cognisance of those areas
  - of BS8300 relevant to external stairs.
  - Steps shall be constructed of either precast or in-situ concrete Grade RC35 or of approved
  - natural stone. All materials used in their construction shall be capable of maintaining a
  - minimum in-service slip resistance of no less than 45SRV when measured using a standard
  - slider and pendulum-type skid resistance meter.
  - where there are 4 or more risers a handrail shall be provided. The treads should have a going of 300mm and have 6mm head fall, shall have a non-slip finish to the surface and the nosings shall have arises of 10mm radius.
  - Steps to be founded on a firm subsoil, all topsoil and roots to be removed to form a firm bed a minimum of 450mm below finished ground level. Backfill with Type 1 or 6N granular material fill laid and compacted in accordance with Clauses 610-612 of the Specification to within 75mm of the base level of the steps and blind with 75mm ST1 concrete.
  - Handrails to be to a design approved by the Engineer. Posts and rails shall be designed for the loadings in BS7818:1995 for Class 2 restraint systems. (700N/m). Handrails shall be provided on both sides of steps and on footways and footpaths whenever the gradient exceeds 8%.

- [C] It is essential that the 10mm gap shown between the deck timber and bearers and the top finishing of the blockwork walls is provided. This should be +/-2mm. No structural timber is to be in contact with backfill. [C]

Weights of Different span bridges

- Weights of different span bridges (inc timber) based on 880kg/m3 timber density:

  7.5m 10m 12.5m 15m

1.8tonne 2.6tonne 3.5tonne 4.6tonne

- Weights of different span bridges (steelwork only)
  780kg 1195kg 1730kg 2400kg
- Individual single beams:
  275kg 475kg 695kg 990kg
- Abutment reaction including imposed load
  36.75kN 51kN 66.25kN 83.5kN

2) <u>Risk Assessment</u>

- Crane Toppling: The weights have been given to assist the contractor in deciding the appropriate lifting devise for the bridge span proposed. The crane ground bearing capacity needs to be evaluated allowing for the nearness of the river bank to the proposed crane position. It is taken that a competent crane supplier and operator will be employed.

- Proximity to bank: The nearness of the sloping river bank to the foundation position when deciding on the span required needs evaluation for the river gap. A 1m zone should be left from the foundation front face, or suitable personal safety lines will need to be used for any work down the face of the banks.

- Working over water: The erection of the whole bridge is to be preferred if access to the site allows it as this substantially avoids this hazard. However site access constraints may prevent this alternative. Thus two alternative designs have been prepared:
- a) Whole bridge erected as one with parapets and deck complete
- b) The individual channels are structurally stable, but the cross members should be erected working from the banks and loose bolted together. After tightening, the deck planks and parapets will need erecting in a similar manner. The operatives will need personal safety lines. The beams are not deep enough to prevent one arm each side of the section to facilitate bolting and nut application for one man.

- Access to site: This is difficult to assess for a generic design where the site is unknown. However 15m length is normally accessible with possible removal of hedges etc. Rough terrain vehicles and bogies will be required with tractor movement will be required in such situations.

- Traffic Hazard: The movement of the construction vehicles off the public highway is usually a potential hazard. The control of vehicles on the highway will need addressing, especially if alternative b) is to be used where the public road vehicle needs to transfer its load to site rough terrain vehicles to bring the bridge or components to site.

- Deep Excavation Collapse: The foundations are kept shallow to avoid the dangers of deep excavations. They are also kept at a high level above the river to minimize water ingress into the excavations.

- Erosion by River: The foundations are to be kept well back from the edge of the river to both prevent instability of the front edge following flood times, and to prevent operatives working too near the river.

- Stability under flooding: The individual site level will need selection to satisfy the relevant water authority and prevent washing away under flood. HD bolts of larger size are specified to give some additional measures in the case of such events.

- Stability under Wind: The bridge is designed to resist the normal wind as given in BD 37/01, including uplift application to the HD bolts.

- Parapet safety: The designs have been done to better than BS 7818 in respect of main and infill members, including the 100mm maximum gap criterion – except for the gap between the top and next rail which is greater. However, the mesh as required for urban bridges has not been specified and it is suggested that the urban proximity is considered for individual bridges, but is not appropriate in rural sites where the hazard of the particular river may not be large. The client/engineer will specify for individual sites.

APPENDIX A – RELATIONSHIP BETWEEN FOUNDATION CAPACITY AND SOIL DESCRIPTION

Taken from Building Regulations Section A Page 32

FOUNDATIONS OF PLAIN CONCRETE A1/2

Table 10 **Minimum width of strip footings**

Type of ground (including engineered fill)	Condition of ground	Field test applicable	Total load of load-bearing walling not more than (kN/linear metre)					
			20	30	40	50	60	70
			Minimum width of strip foundations (mm)					
I Rock	Not inferior to sandstone, limestone or firm chalk	Requires at least a pneumatic or other mechanically operated pick for excavation	In each case equal to the width of wall					
II Gravel or sand	Medium dense	Requires pick for excavation. Wooden peg 50mm square in cross section hard to drive beyond 150mm	250	300	400	500	600	650
III Clay Sandy clay	Stiff Stiff	Can be indented slightly by thumb	250	300	400	500	600	650
IV Clay Sandy clay	Firm Firm	Thumb makes impression easily	300	350	450	600	750	850
V Sand Silty sand Clayey sand	Loose Loose Loose	Can be excavated with a spade. Wooden peg 50mm square in cross section can be easily driven	400	600	Note: Foundations on soil types V and VI do not fall within the provisions of this section if the total load exceeds 30kN/m.			
VI Silt Clay Sandy clay Clay or silt	Soft Soft Soft Soft	Finger pushed in up to 10mm	450	650				
VII Silt Clay Sandy clay Clay or silt	Very soft Very soft Very soft Very soft	Finger easily pushed in up to 25mm	Refer to specialist advice					

The table is applicable only within the strict terms of the criteria described within it.

DESIGNER HAZARD IDENTIFICATION AND RISK ASSESSMENT

Ref:	Hazard	P	S	R	Response/Control Measure	P	S	R
Note to assessor: Refer to Note on Risk Classification attached to this pro forma to determine appropriate P/S value and R rating. Complete header and footer - delete/add assessment rows, as necessary. **This risk assessment is to be read in conjunction with Section 9 - Works Specification**								
1	Access & Traffic Movements (Livestock/Pedestrians)	3	4	12	Appropriate identified TM will be always used for the duration of the works and be installed by qualified, trained, and competent operatives with Chapter 8 training. Traffic control will be required at this point for the duration of the works. All precautionary steps should be taken to prevent public and livestock access to the site compound and working areas. The ground bearing capacity needs to be evaluated by the contractor and vehicle selection undertaken accordingly. The width of the access to the east of the bridge is limited to 1m in places. The Contractor should take appropriate precautions with respect to this limitation both in the selection of plant and the method of access and working. Site compound is to be always left secure to prevent pedestrian and livestock access. There is the potential for mud to be traffic onto the B3227. The Contractor should take due care to minimise this and provide road sweeping if necessary.	2	4	8
2	Working over, in, or near a watercourse	4	3	12	Always ensure two operatives on site, no works in times of flooding. Contractors to sign up to EA (Environment Agency) Flood warning alerts and adhere to Drainage Authority permitting and licensing	3	3	9

DESIGNER HAZARD IDENTIFICATION AND RISK ASSESSMENT

Ref:	Hazard	P	S	R	Response/Control Measure	P	S	R
					requirements. Any access arrangements to be kept secure overnight to ensure no public access. Appropriate PPE (Personal Protective Equipment) to be always worn. Specialist PPE may be required, i.e., safety lines, lifejackets when undertaking works on riverbank and over watercourse.			
3	Emergency communications	2	3	6	It is anticipated that mobile communication on site may be variable or patchy. The Contractor is to be aware of this and make necessary alternative arrangements.	1	3	3
4	Manual handling/Mechanical Lifting	3	3	9	Although the manual lifting of large objects is not expected, ensure operatives are trained in correct lifting techniques and activities are staffed appropriately in accordance with the Approved Code of Practice for the Manual Handling Regulations 1992 and, if necessary, the LOLER Regulations 1998. Principal Contractor to ensure that all plant is suitable for its task and kept in good working order.	2	3	6
5	Slips, trips, falls related to works and access	3	4	12	Vigilance to avoid trip hazards. Contractor to ensure that areas accessed by public are always clear. All access aids should be checked for serviceability and suitable to the task. Specialist PPE may be required, i.e., safety lines and lifejackets, when undertaking works on stream embankments and over water.	2	4	8
6	Environmental Hazards	4	3	12	All precautionary measures possible to protect the local environment from pollution such as debris and oil/fuel spills. Appropriate mitigation measures should be set in place by suitably trained staff using appropriate PPE.	2	2	4

DESIGNER HAZARD IDENTIFICATION AND RISK ASSESSMENT

Ref:	Hazard	P	S	R	Response/Control Measure	P	S	R
7	Soft Ground Conditions	3	3	9	Access to the bridge will be by field margins. Whilst some of these are vegetated, a number are open soil, and therefore there is the potential for encountering soft ground, particularly during wet weather. All efforts should be made to minimise rutting of the ground surface and vehicle movements should be planned to minimise this.	1	3	3
8	Excavation collapse	3	4	12	Excavation of foundations to be fully planned by contractor. Spoil to be placed away from excavation site to make work area safe. No individual should access the excavation at any time. Excavations to be supported by suitable formwork. Excavator machine operators to be trained and qualified.	3	3	9
9	Vegetation removal	5	4	20	Where chainsaws/strimmers or other methods are required, operatives should be suitably competent, trained and hold the relevant certification, ensuring PPE is suitable and relevant to the task.	2	4	8
10	Lifting bridges/Machine Toppling	3	5	15	The bridge installation lift to be fully planned by suitably trained contractor in accordance with the Approved Code of Practice for the Manual Handling Regulations 1992 and the LOLER Regulations 1998. Bridge weight to be fully assessed by the Contractor when deciding the appropriate lifting device for installing the bridge. Standard bridge design weights given to assist Contractor. Ground bearing capacity needs to be evaluated by the Contractor and the bank movement should be considered when planning the lift. Trained and qualified machine operator to be used.	2	5	10

DESIGNER HAZARD IDENTIFICATION AND RISK ASSESSMENT

Ref:	Hazard	P	S	R	Response/Control Measure	P	S	R
11	Covid-19	5	5	25	Contractors to adopt suitable safe systems of work and produce a specific Covid-19 Risk Assessment with reference to all government guidance including: https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19/construction-and-other-outdoor-work.	3	4	12

EXPLANATORY NOTE ON RISK CLASSIFICATION

Risk is the likelihood of potential harm from a hazard being realised. The extent of risk will depend on:

- The likelihood/probability of that harm occurring
- The potential severity of that harm, i.e., of any resultant injury or adverse health effect
- The population which might be affected by the hazard, i.e., the number of people who might be exposed.

The risk assessments should be reviewed if there is reason to suspect that they are no longer valid or there has been a meaningful change in the matters to which they relate.
(Ref: Management Regulations – Regulation 3).

Risk classification and required action:						
Probability (P) *		**Severity (S)**				
		1	**2**	**3**	**4**	**5**
		Trivial	**Minor**	**Moderate**	**Serious**	**Fatal**
1	**Remote**	1	2	3	4	5
2	**Unlikely**	2	4	6	8	10
3	**Possible**	3	6	9	12	15
4	**Likely**	4	8	12	16	20
5	**Very Likely**	5	10	15	20	25

Risk rating/classification (R)		
1-8	**Low**	**Continue - Review periodically to ensure controls remain effective.**
9-12	**Medium**	**Continue - Implement additional reasonably practicable controls where possible and monitor regularly.**
15-25	**High**	**Activity not permitted – Identify new controls. Activity must not proceed until risks are reduced to a low or medium level.**

*** Probability that harm will occur:** *** Potential severity of harm: e.g.**

1	Remote	Almost never	1	Trivial	Discomfort, slight bruising, self-help recovery
2	Unlikely	Occurs rarely	2	Minor	Small cut, abrasion, basic first aid need
3	Possible	Could occur, but uncommon	3	Moderate	Strain, sprain, incapacitation > 3 days
4	Likely	Recurrent but not frequent	4	Serious	Fracture, hospitalisation >24 hrs, incapacitation >4 weeks
5	Very Likely	Occurs frequently	5	Fatal	Single or multiple