OUTLINE CONSTRUCTION METHODOLOGY STATEMENT

1.0	**PROJECT NAME:**	Tribeca Footbridge	**PROJECT NO:**	BB1695		
1.1	**COMPANY:**	Beaver Bridges Ltd	**WORKS PACKAGE:**	N/A		
1.2	**TITLE/TASK:**	Outline Construction Phase Methodology for Tribeca Footbridge.	**MS NO:**	01	**REV NO:**	00
1.3	**DATE OF ISSUE:**	13/09/2024	**PROJECT MANAGER:**	Chris Simpson		

2.0	**PROPOSED START DATE:**	12/08/24	**PROPOSED WORKING HOURS**	0730 – 1700
2.1	**EXPECTED DURATION:**	8 months		
2.2	**EXACT LOCATION(S):**	**Camley Street Compound** - ///inches.backs.reap **Granary Street Compound** – ///dozen.stews.baking		
2.3	**DOCUMENT PREPARED BY:**	Chris Walne		
2.4	**PROJECT DETAILS:**	Installation of new substructure & superstructure and accompanying accommodation works.		
2.5	**SCOPE/METHODOLOGY:**			

Pre-Construction Phase

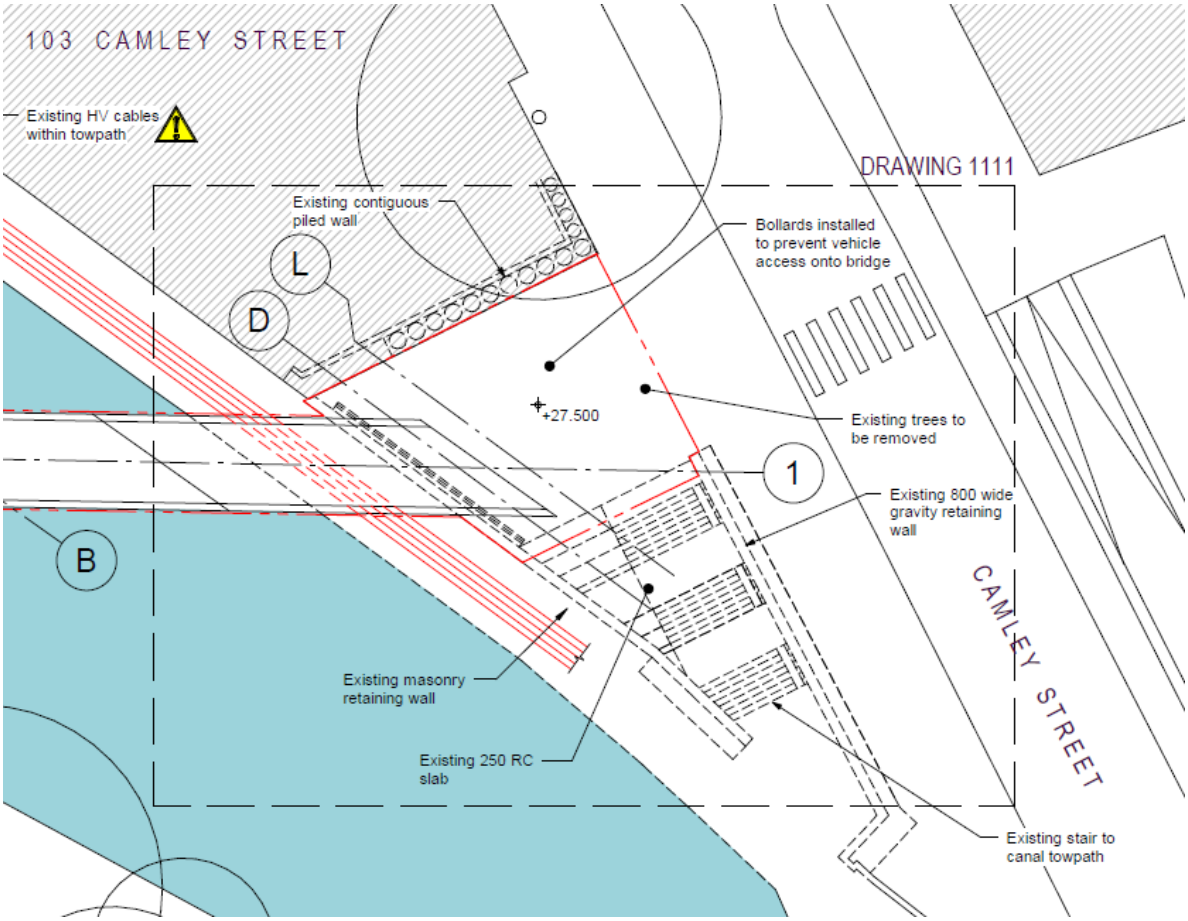
The purpose of this phase is to ensure that all prerequisites to the scheme are in place prior to the commencement of the construction phase; this is to include consent from 3rd parties, including statutory undertakers and local & national governing bodies. It will also ensure that all designs, whether permanent or temporary to the scheme, are in place and signed off. The final step will be to procure all sub-contractors, plants, labour and materials.

1. Produce a Lift plan for the installation of the Superstructure.
2. Provide information to the Client to enable site considerations and constraints and consultation with statutory bodies
3. Provide relevant Method Statements and Risk Assessments to the Client for consultation with statutory bodies.
4. Conduct an on-site and dilapidation survey of existing river embankments, approach roads, adjacent structures/apparatus, and private property thresholds.
5. Procure Superstructure Steel Fabricator.
6. Procure Superstructure Coating Specialist.
7. Procure plant, equipment, and materials.
8. Procure a Subcontractor to install the Piles.
9. Procure a Sub-Contractor to install the reinforced Concrete Abutments
10. Produce a Detailed Temporary Works traffic management plan for the duration of the works, which will manage vehicles and pedestrians.
11. Produce Detailed Temporary Works design drawings for the installation of the Piles.
12. Produce Detailed Temporary Works design drawings for the Crane Pad to install the Superstructure.
13. Produce Detailed Temporary Works design drawings to contain the arisings and protect existing structures during the piling process. (Sheet Piles)

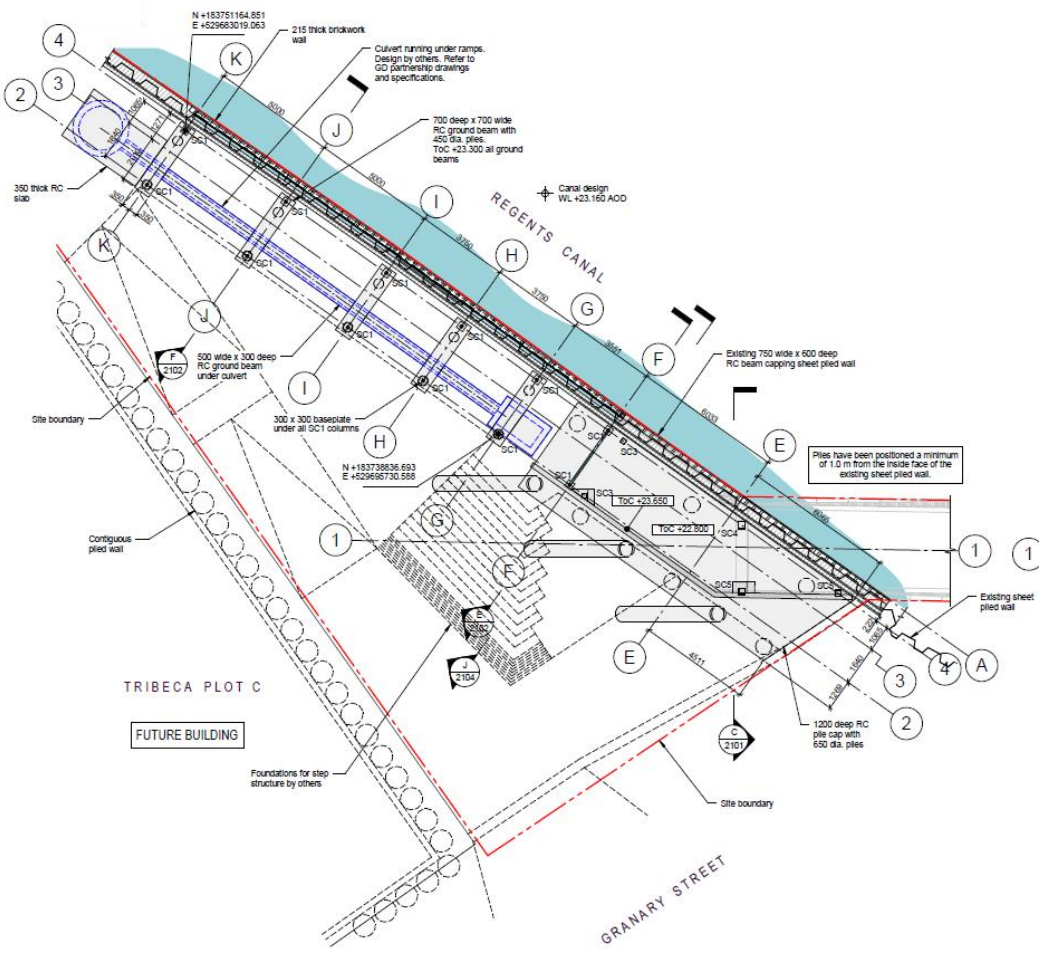
Site Setup Works

14. Carry out a dilapidation survey before any work, plant or equipment enters the working areas.
15. Set up welfare facilities within the designated area.
16. Carry out site inductions and signing of RAMS.
17. Set up traffic management and lane closure on Camley Street.
18. Mobilise plant and equipment to the site.
19. Set up a storage area for site waste on the ground above the flood risk zone.
20. Set up site material storage area.

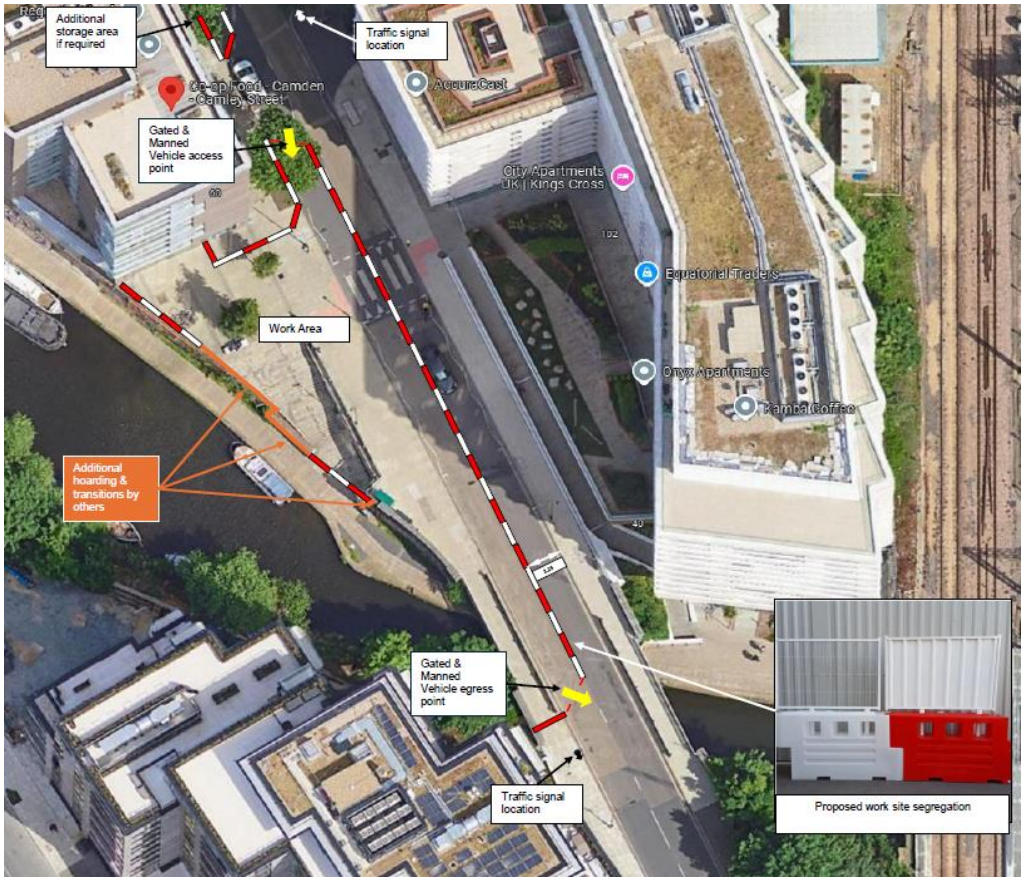
Inset A – Site Layout Camley Street:



Inset B – Site Layout Granary Street:



Inset C – Traffic Management Plan – Camley Street:



Camley Street Excavation

21. Set out the working areas on Camley Street
22. Undertake the main contractor's breaking ground permitting system before excavation.
23. During excavation, the designed excavation support must be installed to ensure the protection of surrounding structures.
24. Excavate down to the piling level
25. Imported granular materials will be used to form the piling and crane platforms; this material will be compacted in layers as per the temporary works design.
26. The works will be checked in accordance with the design post-completion, with documentation of this within the ITP

Insert D – Example of sheet pile excavation support

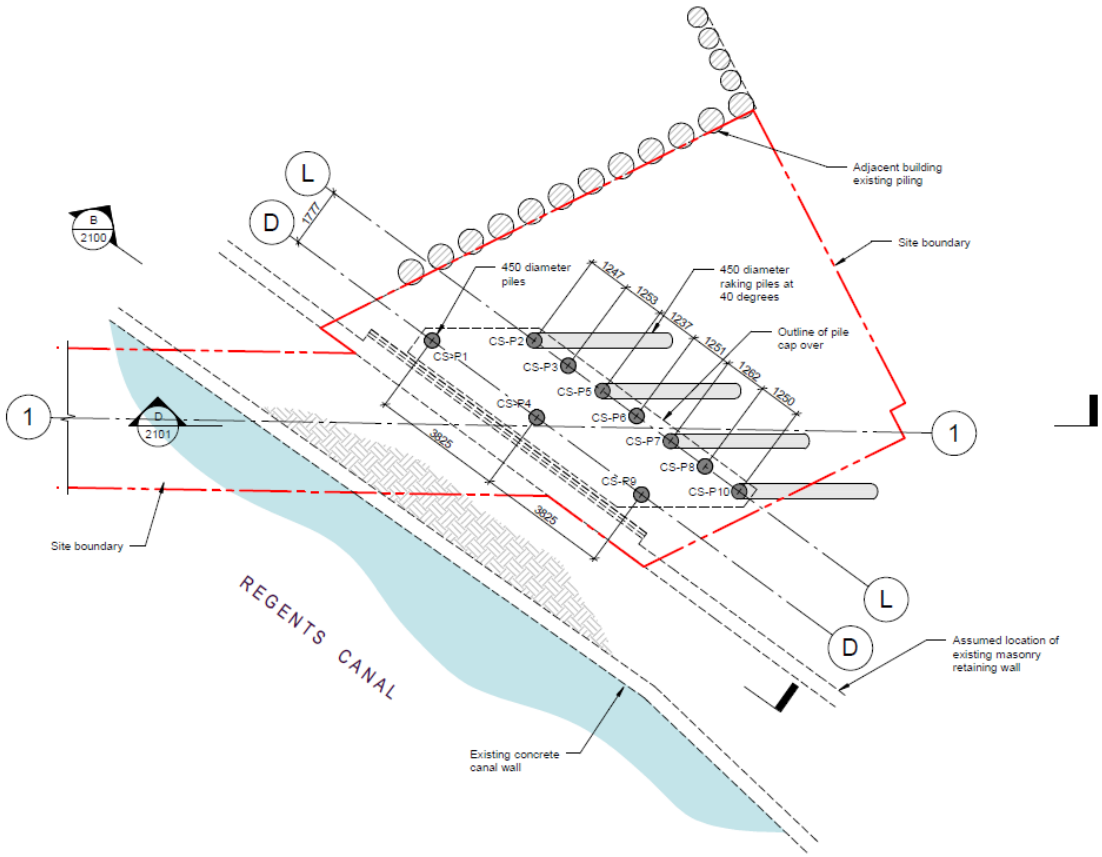
27. Load bearing tests will be carried out on the piling platform on completion of the pre-piling works to ensure the platform achieves the bearing pressures stated in the temporary works design

Piling Works – Camley Street

28. Once the working area has been constructed, the Piling Plant and Equipment will be brought in and set up as per the requirement to install the required piles in the contract documents
29. Pile positions will be set out, and a steel pin will be inserted at the pile centre at each location.
30. Piling plant will mobilise to site and set up to start piling.
31. Lift the Piling rig into the excavation to commence piling.
32. Piles will be installed as per the Piling Sub-Contractors RAMS.

33. The bored piling method is a foundation construction technique that involves drilling a hole into the ground, filling it with concrete, and reinforcing it with steel. The steps for bored piling are:
    a. Install a temporary casing: This casing supports the pile until the desired depth is reached.
    b. Drill out the soil: A piling rig with specialised tools, such as buckets and drills, removes soil and rock as the pile progresses. Additional Plant will be used to supply the Piling rig clear of debris before the installation of the reinforcement.
    c. Install reinforcing steel: Full-length reinforcing steel is lowered into the hole to the recommended depth per the contract documents.
    d. Fill with concrete: The hole is filled with concrete to create a sturdy foundation support. The concrete supply is to be located adjacent to the piling platform area; the washout skip will also be located within this area.
34. Once the Piles has received the concrete and reinforcement the pile will be checked for line and level as per the contract documents,
35. Once the Piling Operation has been completed the piling equipment, plant and excess material will be removed from site.

Insert E – Piling Layout – Camley Street



CAMLEY STREET PILING

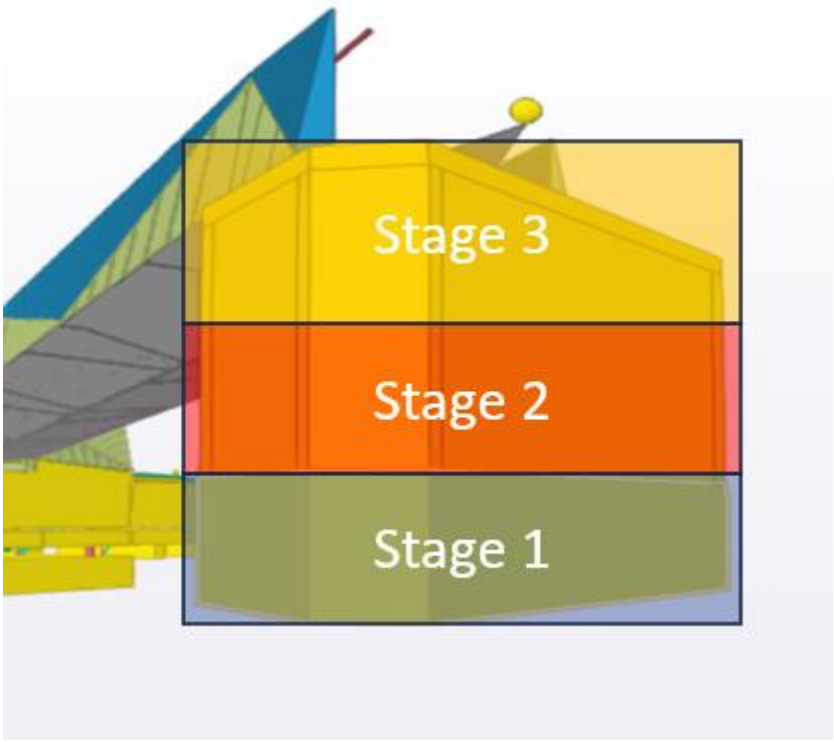
Construct Pile Cap and Abutments Camley Street

36. Once the piling operation has been completed and a minimum curing period of 48hrs is achieved, the newly constructed piles will be excavation down to the formation level, the arisings from these works will be removed from the site
37. When the excavation works are completed down to formation level, 100mm of concrete (Blinding) will be placed to line and level as per the design.
38. The pile will then be reduced to the cut-off levels utilising small handheld electric breakers (Hilti TE-1000 or similar) in accordance with HSE HAVS regulations. Once trimmed to levels as per the contract documents, the piling contractor will carry out integrity testing. All arisings from this process will be removed from the site.
39. Abutment bases will be set out on the blinding with a nail pin in each corner to provide a guideline. Once installed,
40. Stage – 1 Pile Cape
    a. The reinforcement can be fixed in position as per the contract documents. Mechanical lifting of reinforcement may be utilised where practicable via a 360 excavator on site. Steel will be tied as per design requirements.
    b. After the reinforcement is completed, the formwork will be installed and securely fixed in position according to a temporary works design.
    c. Cast in holding down bolts are to be set out and installed as per the design requirements.

d. Concrete will then be placed to the abutment base using a concrete pump to place the concrete into the formwork mould as per the contract documents.
e. Once the concrete has reached the required curing time of 24 hours, the formwork will be removed,
f. The site will be cleared of any material and equipment before the backfilling work.
g. Once constructed, the structure will be coated in a bituminous waterproofing solution.
h. Backfill around structure

41. Repeat the above process for stages 2 & 3 shown in Insert F below.
42. Backfilling behind the ballast wall will be levelled and compacted per design specification.

Insert F – Camley Street Abutments Stages



Install Substructure Steelwork Camley Street

43. To enable the bridge to be installed, structural steel is required in the Camley Street abutments to meet the bridge. This will be installed using small hand tools. Where practicable, the steelwork will be mechanically lifted into position.

Phase 1 Piling Works – Granary Street

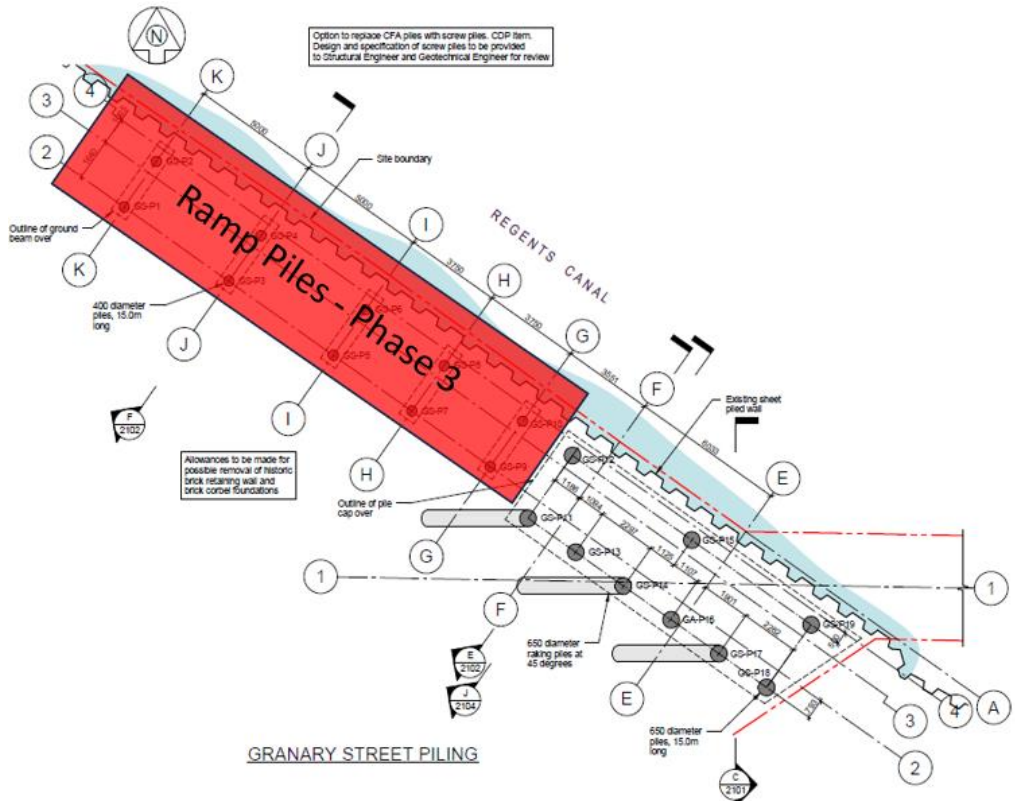
44. Excavate down to the piling level
45. Imported granular materials will be used to form the piling and crane platforms; this material will be compacted in layers as per the temporary works design.
46. The works will be checked in accordance with the design post-completion, with documentation of this within the ITP
47. Once the working area has been constructed, the Piling Plant and Equipment will be brought in and set up as per the requirement to install the required piles in the contract documents

48. Pile positions will be set out, and a steel pin will be inserted at the pile centre at each location.
49. Piling plant will mobilise to site and set up to start piling.
50. Lift the Piling rig into the excavation to commence piling.
51. Piles will be installed as per the Piling Sub-Contractors RAMS.

52. The bored piling method is a foundation construction technique that involves drilling a hole into the ground, filling it with concrete, and reinforcing it with steel. The steps for bored piling are:
    a. Install a temporary casing: This casing supports the pile until the desired depth is reached.
    b. Drill out the soil: A piling rig with specialised tools, such as buckets and drills, removes soil and rock as the pile progresses. Additional Plant will be used to supply the Piling rig clear of debris before the installation of the reinforcement.
    c. Install reinforcing steel: Full-length reinforcing steel is lowered into the hole to the recommended depth per the contract documents.
    d. Fill with concrete: The hole will be filled with concrete to create a sturdy foundation support. The concrete supply will be located adjacent to the piling platform area, where the washout skip will also be situated.

53. Once the Piles have received the concrete and reinforcement, the pile will be checked for line and level as per the contract documents,
54. Once the Piling Operation has been completed, the piling equipment, plant, and excess material will be removed from the site.

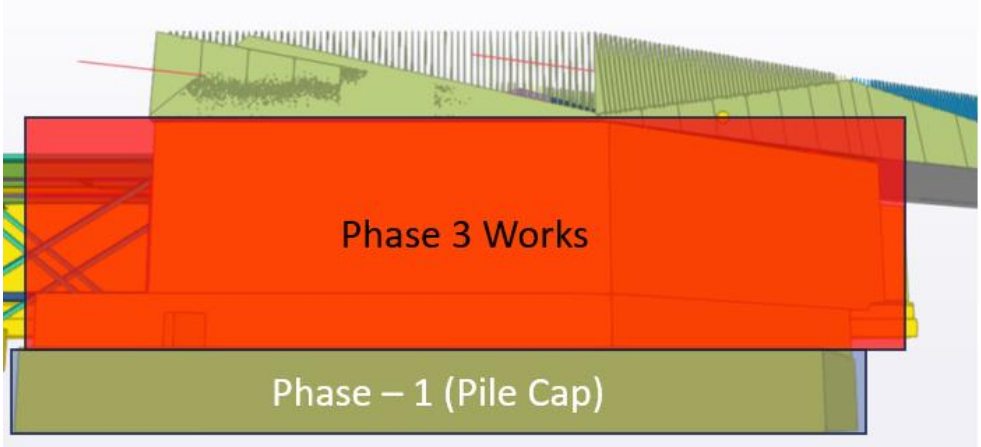
Insert G – Phase 1 Piling Layout - Granary Street



Phase 1 Pile Cap Granary Street

55. Once the piling operation has been completed and a minimum curing period of 48hrs is achieved, the newly constructed piles will be excavation down to the formation level, the arisings from these works will be removed from the site
56. When the excavation works are completed down to formation level, 100mm of ST2 concrete (Blinding) will be placed to line and level as per the contract documents.
57. The pile will then be reduced to the cut-off levels utilising small handheld electric breakers (Hilti TE-1000 or similar) in accordance with HSE HAVS regulations. Once trimmed to levels per the contract documents, the piling contractor will conduct integrity testing. All arisings from this process will be removed from the site.
58. Abutment bases will be set out on the blinding with a nail pin in each corner to provide a guideline. Once installed,
59. Stage – 1 Pile Cape
    a. The reinforcement can be fixed in position as per the contract documents. Where practicable, mechanical lifting of reinforcement may be utilised via a 360 excavator on site. Steel will be tied as per design requirements.
    b. After the reinforcement is completed, the formwork will be installed and securely fixed according to a temporary works design.
    c. Cast in holding down bolts are to be set out and installed as per the design requirements.
    d. Concrete will then be placed to the abutment base using a concrete pump to place the concrete into the formwork mould as per the contract documents.
    e. Once the concrete has reached the required curing time of 24 hours, the formwork will be removed,
    f. The site will be cleared of any material and equipment before the backfilling work.
    g. Once constructed, the structure will be coated in a bituminous waterproofing solution.
    h. Backfill around structure
60. Backfilling behind the ballast wall will be levelled and compacted per specification.
61. Phase 3 to follow once the bridge has been installed.

Insert H – Granary Street Abutments Stages



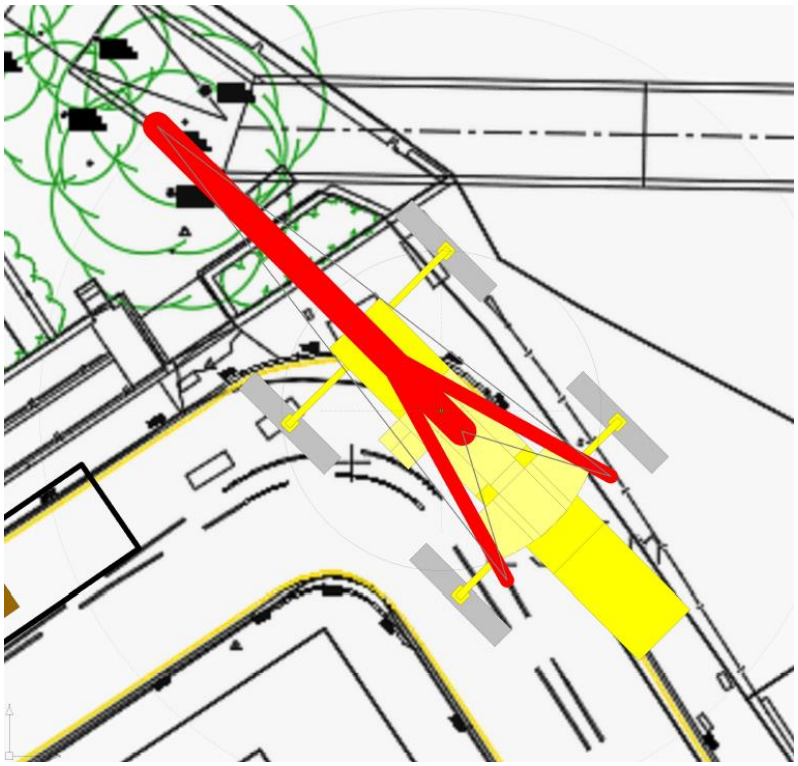
Install Substructure Steelwork Granary Street

62. To enable the bridge to be installed, structural steel is required in the Camley Street abutments to meet the bridge. This will be installed using small hand tools. Where practicable, the steelwork will be mechanically lifted into position.

Phase 2 - Bridge Install

63. A Road Closure on Granary Street will be implemented in accordance with the Traffic Management Plan. During the installation, access to the local hospital's delivery gate will be kept.
64. Pedestrian management was implemented, and the continuous monitoring of pedestrians was done throughout the installation.
65. Canal closure to be implemented. Traffic materials are to be situated at closure points to stop any traffic during the lifting operations
66. Canal Towpath on Camley Street is to be closed, and a diversion is in place for the lifting operation.
67. To enable the crane to be situated in its desired position in accordance with the lift plan, some street furniture may need to be removed, set aside, and reinstalled.
68. Simultaneously, the bridge bearings will be placed into the pockets provided, ready to be attached to the Superstructure.
69. Once the crane pad has been completed, the crane will arrive at the site and set up ready for the lift as per the lift plan:

Insert I – Proposed crane position.

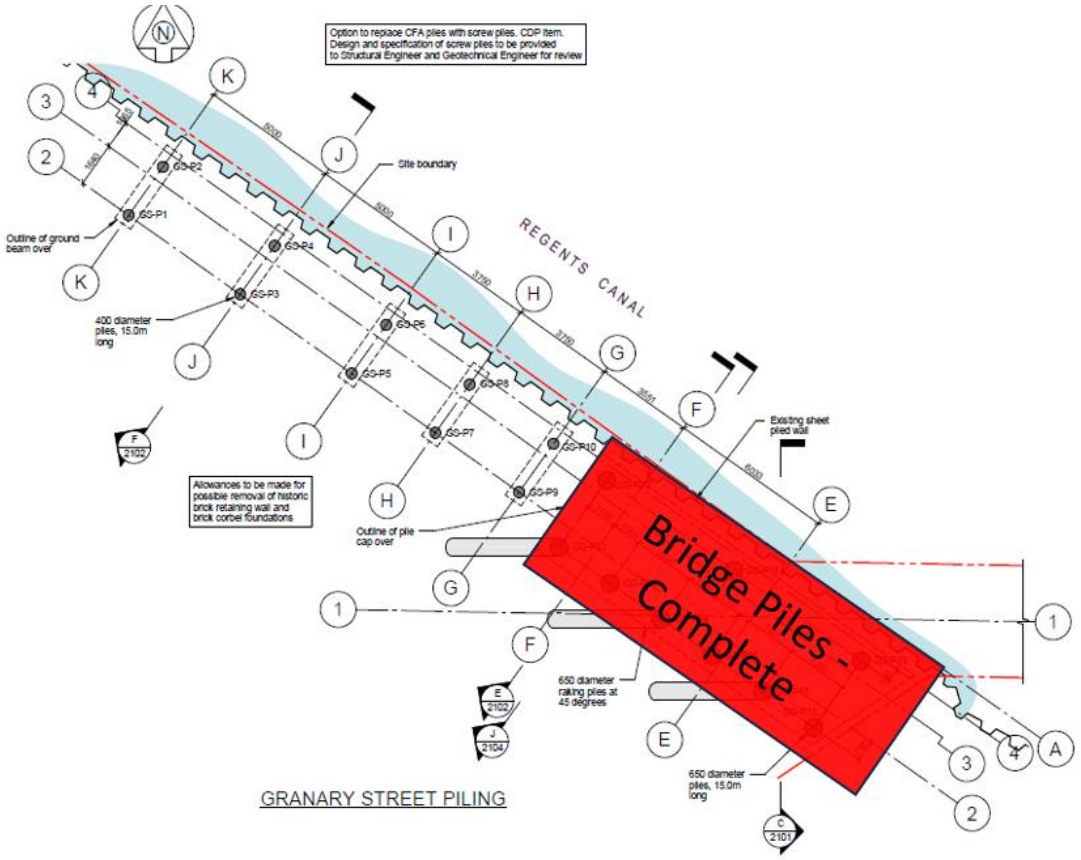


70. The Superstructure will be transported to the site in 3 sections once the crane has been set up.
71. Once on site, the Superstructure will be lifted off the transport as per the lift plan.
72. The Superstructure sections will then be lifted into place as per the lift plan. The outer sections are installed, followed by the centre section.
73. The centre section is to be sliced in situ while the section is attached to the crane. Operatives will access both sides via the previously installed outer sections.
74. Once the bridge is in its final position it will be secured to the abutments by grouting in the bridge bearings.
75. Temporary access to the bridge will be installed on Granary Street. A system access like Haki is to be used.

Phase 3 – Granary Street Piling

76. As per method stated in "Phase 1, Granary Street Piling"

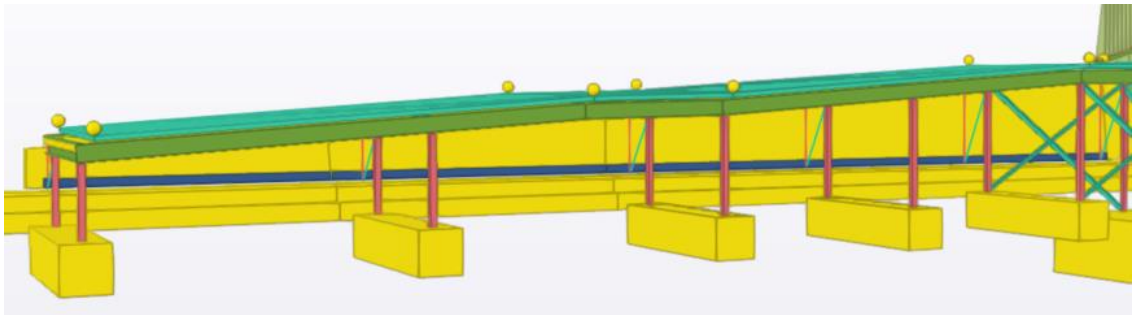
Insert J – Phase 3 Granary Street Piling Layout.



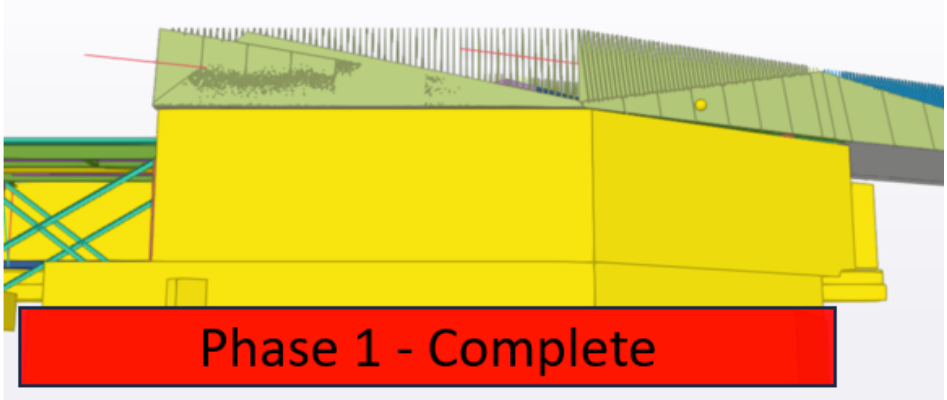
Phase 3 – Abutment Camley Street

77. Construct 5 No. pile caps as per the method stated in "phase 1 Granary Street pile cap"
78. Construct an abutment wall as per the method stated in Camley Street Civils methodology.

Insert K – Granary Street Phase 3 Pile Caps



Insert L – Granary Street Phase 3 Abutments



Install Ramp Steelwork Granary Street

79. Once the civils is completed, the ramp steelwork can be installed using small hand tools. Where practicable, the steelwork will be mechanically lifted into position.

Demobilisation

80. Demobilise the site and clear all materials, plant, and equipment.
81. Remove welfare and site compound areas.
82. Reinstate kerbs and paved Areas where required.
83. Reinstate any street furniture.
84. Hand over site to Client.

3.0	**No OF PERSONNEL/JOB TITLE (NAMES IF APPLICABLE):**	BB Project Manager (1) BB Site Agent (1) BB Civils operatives (3) BB sub-contractors for piling & RC works (10) BB Lift Operatives (5)
3.1	**COMPETENCES REQUIRED FOR TASK:**	All site personnel to have relevant CSCS card / Supervisors: SSSTS/SMSTS
4.5	**ACCESS / EGRESS:**	Access to the Camley Street compound will be via Camley Street. Any deliveries should arrive from the North. This is due to the access being to the north of the compound and to prevent any vehicle from turning in the compound.
		Access to the Granary Street is via A5202 or Granary Street.
6.0	**MANDATORY SITE PPE (DELETE AS APPLICABLE):**	Safety Helmet (with chinstrap), steel toecap and soled boots, hi-vis long-sleeved vest, hi-vis full-length trousers, gloves suitable for the task, and safety glasses.
6.1	**TASK SPECIFIC PPE:**	Lanyards must be used on all small hand tools

	Identified as per risk assessment.	FFP3 masks for cutting operations
		Hearing protection as required
		Harness/inertia reels/safety lines when working at height
7.0	**EMERGENCY ARRANGEMENTS FOR:**	First Aid
7.1	**RESCUE:**	ACTION IN THE EVENT OF INJURY OR ILLNESS: Summon assistance from the nearest first aider
		IF AN AMBULANCE IS REQUIRED PICK UP THE NEAREST TELEPHONE AND DIAL 999
		NEAREST GENERAL HOSPITAL A&E: University College Hospital, 235 Euston Road, London, NW1 2BU
		When the operator replies ask for Ambulance
		When the Ambulance Control Centre replies - give the following message distinctly:
		Ambulance Required At: For Camley Street: Outside Co-op Foods, Camley St, London N1C 4PF (///inches.backs.reap) For South Side: Outside Tribecca, Granary Street, N1C 4DU ///dozen.stews.baking
		Give details of the casualty, the emergency and the action taken.
		This will assist the control centre to prioritise your request.
		Remain with, and reassure the casualty that assistance is coming. Do not give them food or drink
7.2	**FIRST AID (QUALIFIED PERSON):**	BB Site Supervisor + BB Operatives
8.0	**PEDESTRIAN / TRAFFIC REROUTING ARRANGEMENTS:** ***Will your works interfere with current pedestrian / traffic arrangements?***	All pedestrians to be diverted as per traffic management plan and towpath diversion.
		Any movement of BB construction traffic is to be overseen, wearing high visibility clothing, by BB Site Representatives, or designated person instructed by the BB Site Supervisor.
8.2	**FIRE SAFETY ARRANGEMENTS:**	Dry Powder Extinguisher is to be always carried on company vans; a hot works permit system will also be implemented for any works requiring such.
		Dry powder & CO2 extinguishers are to be present at point of work
8.3	**RESPONSIBILITY FOR TASK LIGHTING:** ***Consideration should be given to site hours; this may immediately highlight the need for artificial lighting if work starts before first light or continues after dusk. Additionally, the requirement for general site lighting and specific task lighting would be inserted here***	N/A

9.0	**TO WHOM THE INFORMATION / WILL BE COMMUNICATED AND HOW?**	All BB site operations team & sub-contractors will be briefed on the constraints when working on client property.
		All operatives will attend an on-site induction talk by the principal contractor which will include site rules - this method statement together with any other H&S matters relevant to the site will then be briefed by the BB supervisor.
9.1	**CONFIRMATION OF OPERATIVES BRIEFING:**	SEE ATTACHED / APPENDIX
10.0	**PERSON RESPONSIBLE FOR MONITORING SAFE SYSTEM OF WORK AND ENSURING COMPLIANCE:** **Show here who the contracts manager, site manager, foreman/supervisor is, what each will be responsible for, and their contact numbers.**	BB Project Manager: Chris Simpson (07944 869730)
		BB Health & Safety: Wayne Perry (07483 822014)
		BB Site Supervisor / Agent: TBC
		Client Representative: TBC
		Engineer (Client) Representative: N/A
		Sub-Contractor Site Representative: N/A
		Client Contracts Manager: TBC
		Client Health and Safety Manager: TBC
10.1	**REVIEW DATE / SCHEDULE:**	Should a variation to this method statement be required.
10.2	**AMENDMENTS AUTHORISED BY:**	Chris Walne & Chris Simpson
10.3	**AMENDMENTS COMMUNICATED TO:**	BB Site Supervisor for distribution to BB site team

BEAVER BRIDGES

Feedback to Author for future Safety improvements / Amendments on similar activities:

The following people have been instructed in the contents of the Risk/COSHH Assessment or Method Statement below and agree to comply with its requirements.

Name:		**Name:**	
Signature:	**Date:**	**Signature:**	**Date:**
Name:		**Name:**	
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Name:		**Name:**	
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