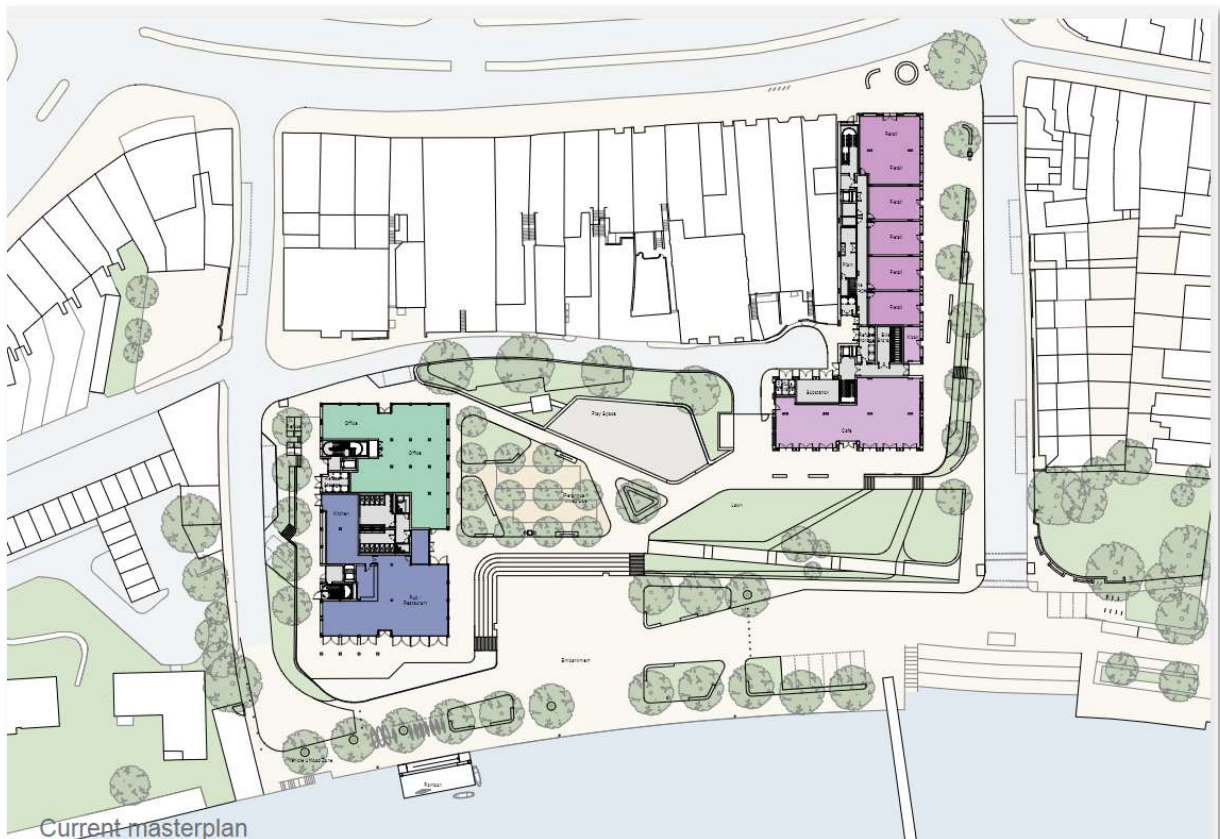



# River Piling Construction Method Statement

Twickenham Riverside

TW1 3DX



1	Method Statement Details:			
Kier Contract Name	Twickenham	Kier Contract Number	1000xxxx	
Contractor Name	Kier Environment			
Document No and Title	20240814/1100 Construction PLA Assessment <a href="#">Pontoon Construction</a>			
Author	Perry Dale	Date on MS	21 August 2024	
PLA Ref	TBC	EA FRAP Ref		

2	Scope of Works (include sketch plans where possible)	
Description of Work (Reference to specific work locations, use sketches and drawings where possible)		
Works within c.16m of River Thames:		
Outline of construction of the pontoon.	 211116_pontoon (2).pdf	

3	Sequence and Method of Works					
Start Date	January 2025		Duration	24 months		
Sequence of Work (include programme if reference made to it)						
Name any subcontractors to be used. (providing Employer's funding is approved)		Method statements approved.		Method statements attached.		Comments
		Yes	No	Yes	No	
Outline Construction of the Pontoon Detailed design may slightly change profile					✓	RAMS to incorporate any comments from the PLA application

Detailed description and Method of Work (consideration of temporary works and services, public protection / interface, permit, inspection, test requirements, interface with other trades, working hours, access to site and work areas)
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Twickenham Riverside TW1 3DX

Overview (Specialist RAMS to be submitted later)

- All steel components will be fabricated within factory conditions and be delivered to site via floating pontoons pushed by tugboat to the works location.
- All marine plant and materials will be delivered by road to a separate quay where it can be uploaded onto the river Thames (TBC)
- The marine plant will consist of the following and will be transported by the Tugboat to the working area.
- Tugboat



- Jack up Pontoon



- 8T Tracked excavator complete with Vibro piling attachment which will be placed on the Jack Up Pontoon



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- Pontoon



- The jack up pontoon will be pushed into position with the base of the pontoon being lifted by hydraulic legs to above high-water line and fixed.
- The pontoon will then be moved into position and tied to the Jack up pontoon. The pontoon will have all materials required to complete the works strapped down.



- The excavator / piling rig will then vibrate each pile down into the existing riverbed. (line and level to be agreed).
- Each component will then be lifted into position in main sections.
- Pontoon base fixing will be bolted to the piles level to accommodate low tides, to keep the floating element of the pontoon level.
- Each segment of pontoon will then be fixed together around the piles.
- The landing will be fixed to the existing river embankment.
- Finally the ramp will be lifted into position from the landing to the lower pontoon.

All safe systems of work must adhere to Keir's policies, procedures, and minimum standards.

4	Competencies / Supervision		
Name of Supervisor in Charge:	TBC	Number of Persons:	Supervision Ratio 1:10
Qualifications	SMSTS/SSSTS, Kier Setting People to Work, 1 <sup>st</sup> Aid, CSCS		
Specific training requirements / Appointments (TWA, AP, First Aider etc)			
Temporary Works Coordinator (Kier)		CPCS Operators (Operators to have spill response training)	
First Aid (supervisors)			
Spill Response (within each gang of operatives)			

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5	Resources – Type of plant, certification and inspections			Number of Persons:	1: 30 Ratio
Equipment To Be Used		Yes	No	Equipment To Be Used	Yes No
Lifting / Slings / Chains		✓		Podiums / Ladders	✓
Mechanical hoist			✓	CAT & Genny	✓
Mobile elevating working platform			✓	Mechanical plant (On Water	✓
Scaffolding			✓	Tugboat	✓
Mobile scaffolds			✓	Rescue Boat	✓
Test Equipment			✓	Jack up Barge	✓
Task Lighting		✓		Piling Equipment	✓
Excavation shoring			✓	Crane / Excavator	✓
Mechanical tools		✓			
Materials Delivers and movement on site					
Materials will be delivered Via a pontoon along the river Thames to the working area. A crane will then lift items into position from a Jack up Barge.					
Waste is to be removed from the work areas to the site via pontoons along the river Thames to a designated loading area TBC.					

6	Emergency Arrangements
First Aid Measures Required	Rescue / Security Measures Required
All contractors' supervision	Recovery of materials from River Thames via a boat
	Site perimeter to be enclosed to prevent unauthorised access to work areas
	Rescue Plans to form part of S/C RAMS following PLA comments
Rescue	Spillage control requirements
By whom	All S/C to have operatives trained in spill response.
How	Adequate 240L spills kits to be placed around the site.

7	Work Monitoring – Daily briefings, Supervisors SHE Is monitoring, SHE Adviser inspections, Temporary works inspections, inspection and test.				
River and water courses are to be included in the daily inspections. Any measures requiring action are to be recorded					
Permits / Check Lists Required			Assessments Required		
	Yes	No		Yes	No
Hot works	✓		COSHH	✓	
Excavation		✓	Noise	✓	

Confined space entry		✓	Manual handling	✓	
Crane check list	✓		Vibration	✓	
Riser / Lift shafts		✓			
Further monitoring / Security Requirements.					
Works are to be monitored as works progress.					

8	Environmental				
COSHH & Fuel Storage	<p>COSHH</p> <p>Monitor the activity to ensure the measures detailed in the assessment are in place and that the process has not changed from that described within the assessment. If the activity, use or exposure to the hazardous substance changes, a new assessment must be prepared.</p> <ul style="list-style-type: none"> <li>▪ Ensure monitoring of workplace exposure levels is carried out where exposure is critical to the health of personnel i.e. exposure to significant levels of solvent.</li> <li>▪ Changes to control measures or PPE are properly assessed and new substances are not introduced into the workplace without prior assessment.</li> <li>▪ Engineering controls (e.g. Local Exhaust Ventilation (LEV)) are properly and effectively maintained, monitored, and serviced/inspected periodically or as specified by the manufacturer.</li> <li>▪ Ensure employees are trained on the purpose and safe operation of all engineering controls. All LEV service/inspections will be completed every 14 months or as specified by the manufacturer.</li> </ul>				

	<p><b>Fuel Storage</b></p> <p>Connection and / or disconnection of hydraulically linked tanks and generators has been undertaken by a competent person.</p> <p>Consider location to minimise risk of fire and ensure a fire point and other necessary equipment is located at the oil / fuel storage area.</p> <p>Ensure Fuel is stored 10m or more from drains and watercourses (River Thames) Do not store on a roof or elevated ground where spilt oils / fuel could escape into drains, watercourses or to groundwater</p> <p>Store on stable, level ground (impermeable concrete surface if oil / fuel is going to be stored for more than 2 months)</p> <p>Ensure the location minimises risk of impact damage from vehicles and plant (may require the use of barriers and fences)</p> <p>The location to provide safe access to refill, refuel, remove, and replace containers, e.g. tanks, generators, and drums.</p> <p>Ensure the location is free from waste and other obstructions that could allow leaks to go undetected.</p> <p>Where applicable, above ground pipework is to be adequately supported and flexible hoses are steel armoured.</p> <p>Pipework and steel-armoured flexible hoses at ground level are protected by ramp(s) or other suitable means.</p> <p>Where applicable, the tank vent pipe will be visible from its filling point.</p> <p>Bunds are impermeable, free from drainage valves and do not contain oil / fuel (oil / fuel may indicate a leak)</p> <p>Bunds and containers are in good condition, and free from leaks, impact damage and worn pipework / hoses.</p> <p>Bunds are 110% of the largest single container or 25% of the combined volume of containers, whichever is greater.</p> <p>Where fitted, bund alarm and automatic over-fill prevention device has been tested Valves, gauges, pipework, and ancillary equipment are located securely within the bunded area.</p> <p>Where fitted, sight gauges can be read and are in good working order.</p> <p>The delivery valve built into refuelling nozzle closes automatically when trigger is released – it cannot be locked in place.</p> <p>Plant Nappy or equivalent pad and well stocked, appropriately sized spill kit(s) are located at the oil / fuel storage area.</p> <p>Enviro-tag and other notices are clearly displayed, i.e. COSHH, manufacturer, make and model, maximum quantity, maintenance dates, Kier Oil Spillage Procedure, red diesel - not for use as road fuel and no smoking.</p> <p><b>ROUTINE MONITORING</b> (undertaken as a minimum on a weekly basis)</p> <p>Fire point and other necessary equipment is located at the oil / fuel storage area Area around containment is free from waste and other obstructions that could allow leaks to go undetected.</p> <p>Where underground pipework is present, the route is marked and protected.</p> <p>Bunds are free of rainwater, debris, litter and oil / fuel (oil / fuel may indicate a leak) Bunds and containers are in good condition, no leaks and free from impact damage and worn pipework / hoses.</p> <p>Bunds are 110% of the largest single container or 25% of the combined volume of containers, whichever is greater.</p> <p>Valves, gauges, pipework, and ancillary equipment are located securely within the bunded area.</p> <p>Where fitted, sight gauges are in good working order and bund alarm and automatic over-fill prevention device has been tested.</p> <p>Where applicable, taps and valves through which oil / fuel can leave the container are locked shut when not in use.</p> <p>Interceptor cages and proprietary drip trays have a capacity equal to 25% of all the containers being stored.</p> <p>Plant Nappy or equivalent pad and well stocked, appropriately sized spill kit(s) are located at the oil / fuel storage area</p>
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	<p>Personnel have been trained on how to deploy the spill kit and dispose of any used materials.</p> <p>Defined refuelling procedure is being followed and oil / fuel deliveries are being supervised. Notices clearly displayed, e.g. maintenance dates and Kier Oil spillage Procedure (see Kier Sign Schedule)</p> <p>The maintenance plan is being followed and is up to date.</p> <p><b>Spill Response</b></p> <p>Should any spill occur that has the potential to affect the River Thames the VTS should be notified on channel 14 or the following telephone number +44(0)203 2607 711?</p> <p><b>Step 1:</b> Check that it is safe to enter the area and you know what substance has been spilt.</p> <p><b>Step 2:</b> Ensure you have the right Personal Protective Equipment to respond safely and put it on.</p> <p><b>Step 3:</b> Contain the spill to prevent it leaving the site using the spill kits and drain covers provided.</p> <p><b>Step 4:</b> Stop the spill at source e.g. close valves, right fallen containers, or block a hole using spill response putty.</p> <p><b>Step 5:</b> Clean up the waste absorbents used, bag them, and label as hazardous / special waste ready for disposal.</p> <p><b>Step 6:</b> Discuss / evaluate the effectiveness of the spill response and document any lessons learnt for improvement.</p> <p><b>Step 7:</b> If you have not already done so, report the spillage to your supervisor and / or put it directly onto Airsweb.</p> <p><b>Spill Response Steps - large scale spillages.</b></p> <p>Adler and Allan are a UK Spill Association accredited contractor who are working in partnership with Kier. They provide 24 hours a day, 7 days a week spill response services and have nationwide coverage.</p> <p>A three-step incident response service is available for spills that cannot be contained or cleaned up using site teams and equipment:</p> <p><b>Step 1:</b> <b>Report</b> Call 0800 592 827: experienced incident advisors will provide free initial telephone advice to help manage the situation.</p> <p><b>Step 2:</b> <b>Respond</b> If the spillage requires further intervention, the response team can mobilise to site to provide specialist assistance. Whilst the team is en-route, telephone support will continue to be available.</p> <p><b>Step 3:</b> <b>Restore</b> The call out team will thoroughly remediate and restore the site leaving the impacted area safe and hazard-free.</p>
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Noise and Vibration	<p><b>Noise</b></p> <p>Noise levels must be monitored to ensure legal limits are not exceeded. Employees, must be fitted with, issued, and required to wear hearing protectors whenever they are exposed to noise levels above a TWA of 80 dB.</p> <p>Employees must ensure that the use hearing protection where it has been mandated. Employees must use the controls provided and report any defects to their line manager.</p> <p>Actions where noise above the 'Lower exposure action value' of 80 dB(A)</p> <p>Affected employees must be provided with information instruction and training, including:</p> <ul style="list-style-type: none"> <li>▪ Risks to their hearing.</li> <li>▪ The findings of the risk assessment.</li> <li>▪ The legal exposure limits.</li> <li>▪ What they should do to minimise risk.</li> <li>▪ Detail how hearing protection can be obtained for employees who ask for them.</li> <li>▪ The need to report hearing loss.</li> <li>▪ Employees with existing hearing loss must be encouraged to wear hearing protection even at this lower risk level to prevent further hearing damage. Actions where noise above the 'Upper exposure action value' of 85 dB(A)</li> <li>▪ Areas where hearing protection is required must be clearly marked out – known as a hearing protection zone.</li> <li>▪ Suitable hearing protection to people exposed must be provided, who must in turn wear them.</li> <li>▪ Hearing protection must be used, maintained, and repaired as necessary.</li> <li>▪ Employees wearing the protection share this responsibility and should be informed.</li> <li>▪ Supervision must be provided to ensure that all who enter a hearing protection zone wear hearing protection.</li> </ul> <p>Actions where noise where the 'Exposure limit value' of 87 dB(A) or 140 dB (peak) is reached.</p> <ul style="list-style-type: none"> <li>▪ Work must stop and be reviewed.</li> <li>▪ Immediate action must be taken to reduce this exposure by either altering method of work.</li> <li>▪ Such events must be reported to the Business Unit SHE Manager.</li> </ul> <p><b>Vibration</b></p> <p>Ensure RAMS are appropriate to the task / process. Correct tool for the task.</p> <ul style="list-style-type: none"> <li>▪ Ensure the tool chosen is the most efficient, low vibration option available. ▪ Document any further action taken to eliminate and reduce the risk from vibration ▪ Ensure we have accurate data re: tool vibration levels.</li> <li>▪ Ensure we have visibility of maintenance record for all tools in use.</li> <li>▪ Ensure delivery of information education and training. Record all training provided and attendees.</li> <li>▪ Where available: Utilise an appropriate electronic recording device to ensure we can evidence the consistent / compliant monitoring and management of vibration advised for individuals.</li> </ul>
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	<ul style="list-style-type: none"> <li>▪ Comply with Annual Health surveillance (Tier 2). Managed and delivered by Group Occupational Health.</li> <li>▪ Report any deterioration of any existing conditions immediately to Occupational Health and your SHE advisor.</li> </ul>
Protection of watercourses	See COSHH and Fuel Storage section above.
Protection of wildlife	Works to be inspected regularly to check for nesting birds.
Waste (how is waste removed from work area and from site)	Waste is to be removed from the work area into skips. Skips are to be stored away from the River Thames and emptied (into a mobile compactor) or removed via a skip lorry.

9	Quality		
Specification requirements	ITP to be produced by each trade contractor. Hold Points to be defined.		
Compliance	Regular inspections from Trade supervision, Kier management, Design team and the employers approved inspectors.		
Drawings and Documents	Latest information to be uploaded to 4Projects.		
Equipment calibration and dates	Records to be kept on site		
Location and details of mock ups	Benchmark areas to be recorded		
Protection of completed works	S/C to protect incomplete works		
Non-compliance and corrective action	Corrective action requires or non-conformance records to be issued as required.		

10	Any Amendments to Current Systems		
Traffic routes	Yes	No	A Section of Stewart Street is to be closed for Kier's welfare.
Emergency arrangements	Yes	No	Each S/C to identify a rescue plan associated with their works.
Existing systems of work	Yes	No	N/A
Other	Yes	No	N/A

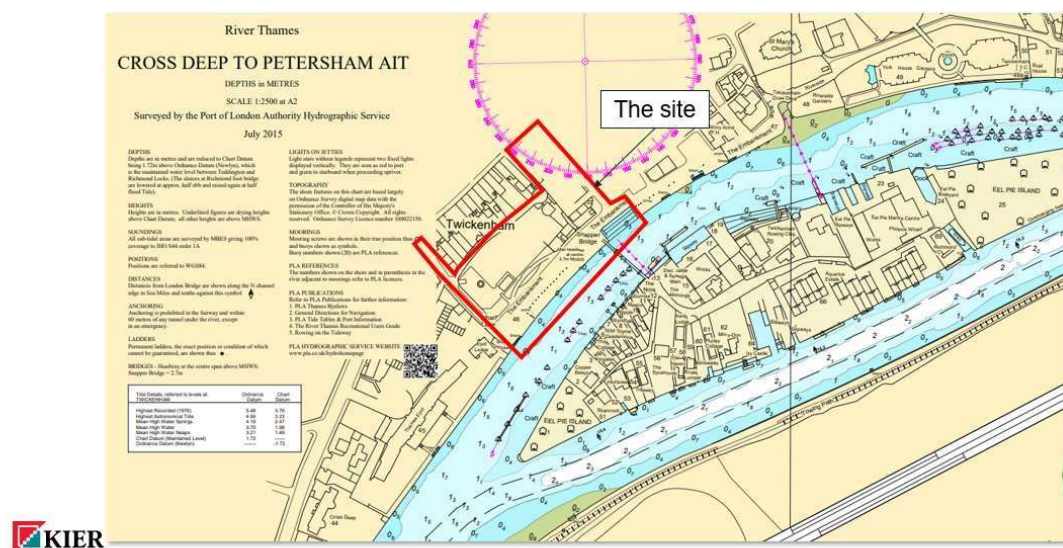
11	Appendices	
Risk Assessments		2021-08-05 Risk Assessment
COSHH Assessments & Controls		
Additional PPE / RPE		
Temporary Works designs		
Reference to any other relevant documents		See Appendix

12	Contractor Information control		
Method statement checked by	A Patter		



## Reference Documents

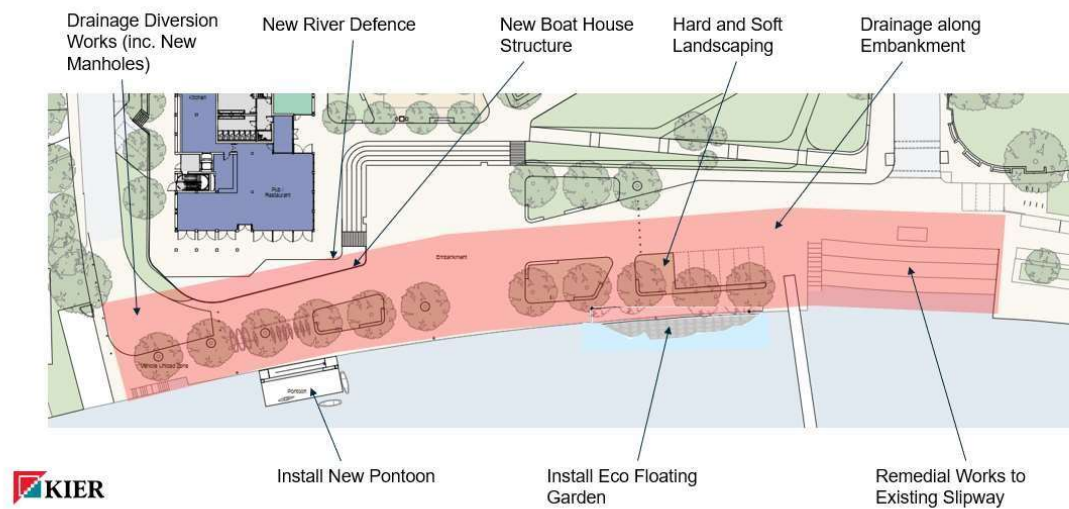
## Twickenham Riverside



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## Works Within 16m of Thames

Red Shaded Area Denotes Area within  
c.16m of River Thames



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