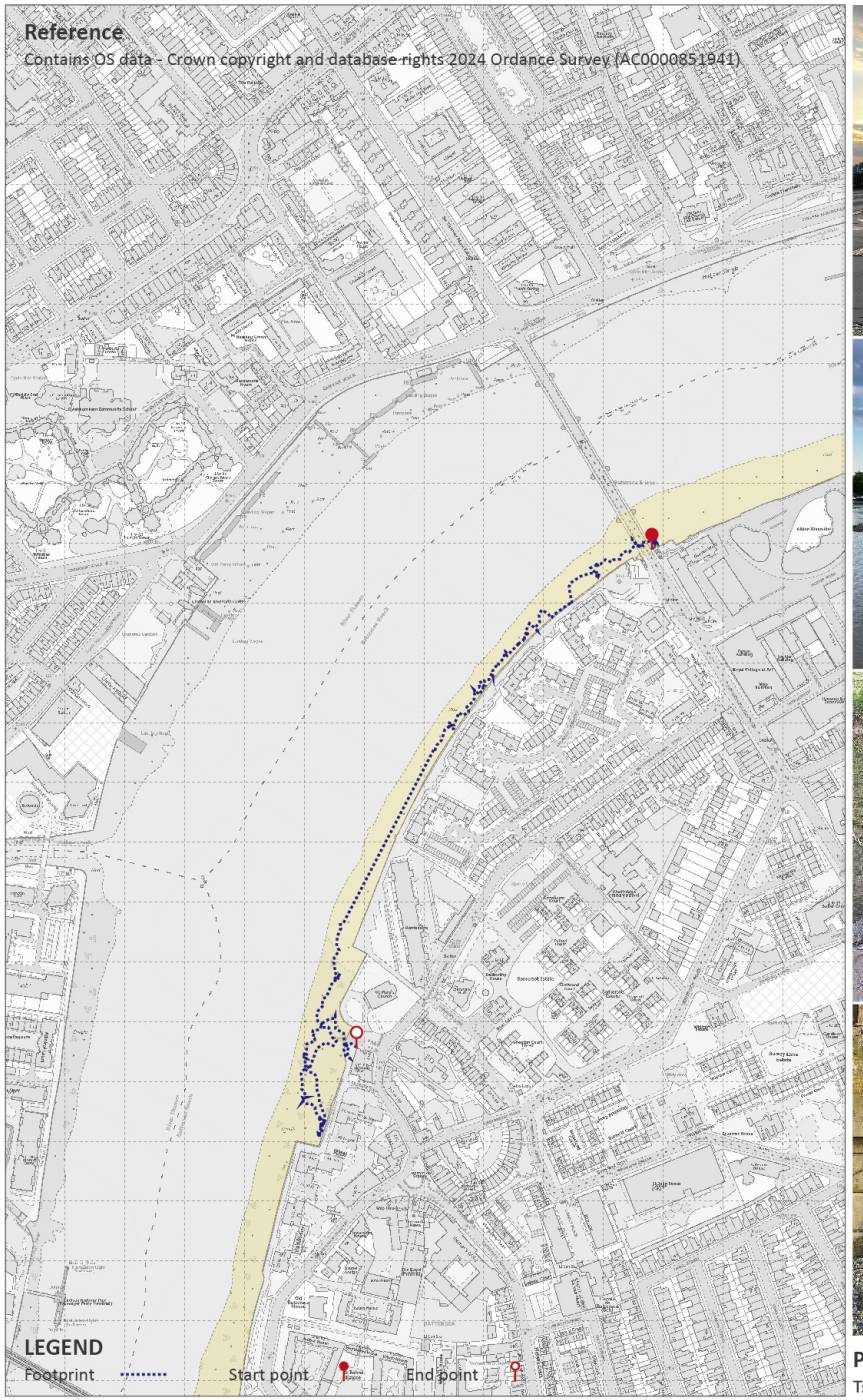


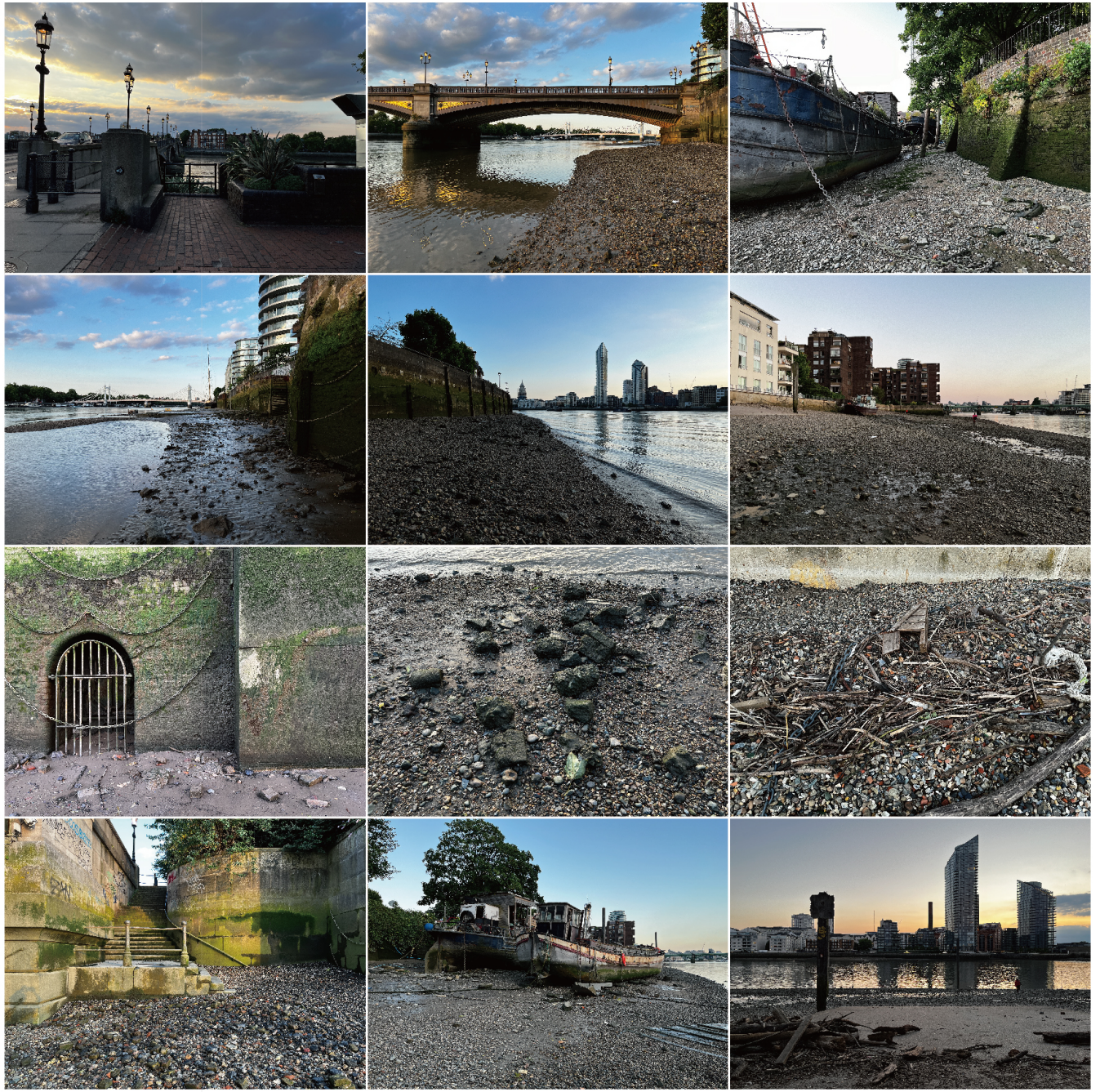
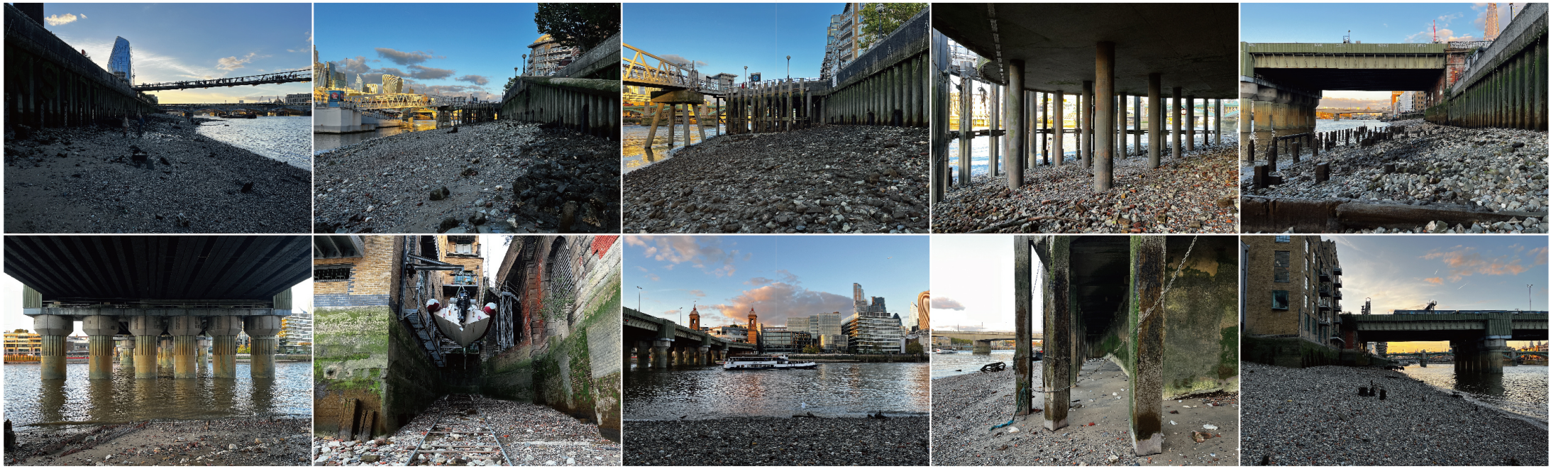


Photo:
Tseng, S-N. (2024) [The surrounding photo of Battersea Bridge].

0 20 40 60 80 100 120 140 160 180 200
Scale 1:5,000 metres

Photo:
Tseng, S-N. (2024) [The surrounding photo of Blackfriars Bridge].

0 20 40 60 80 100
Scale 1:2,500 metres



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Tseng, S-N. (2024) [The surrounding photo of Bankside Beach].

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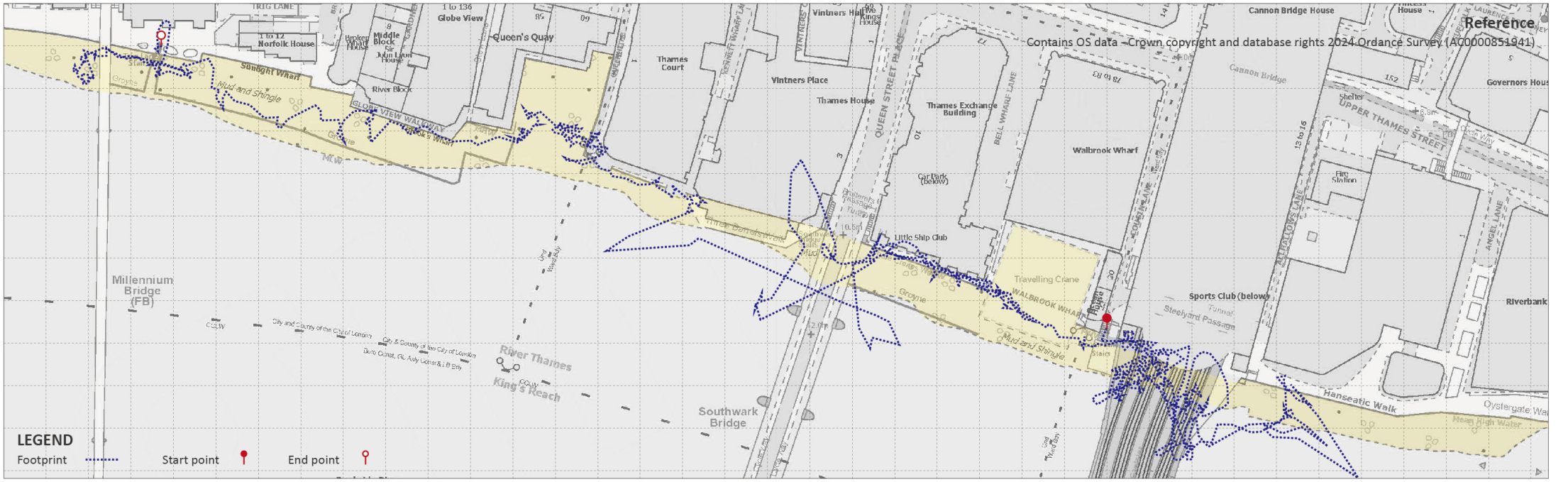

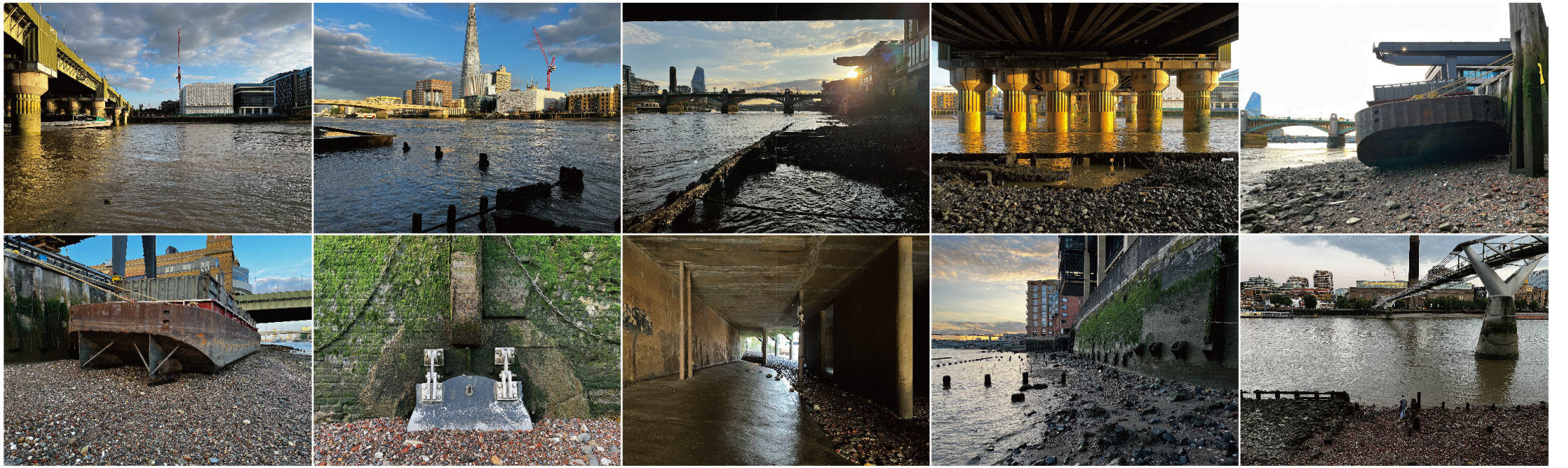

Photo:
Tseng, S-N. (2024) [The surrounding photo of Southwark Bridge].

0 20 40 60 80 100
Scale 1:2,500 metres

Photo:
Tseng, S-N. (2024) [The surrounding photo of Hidden Beach].

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Scale 1:5,000 metres

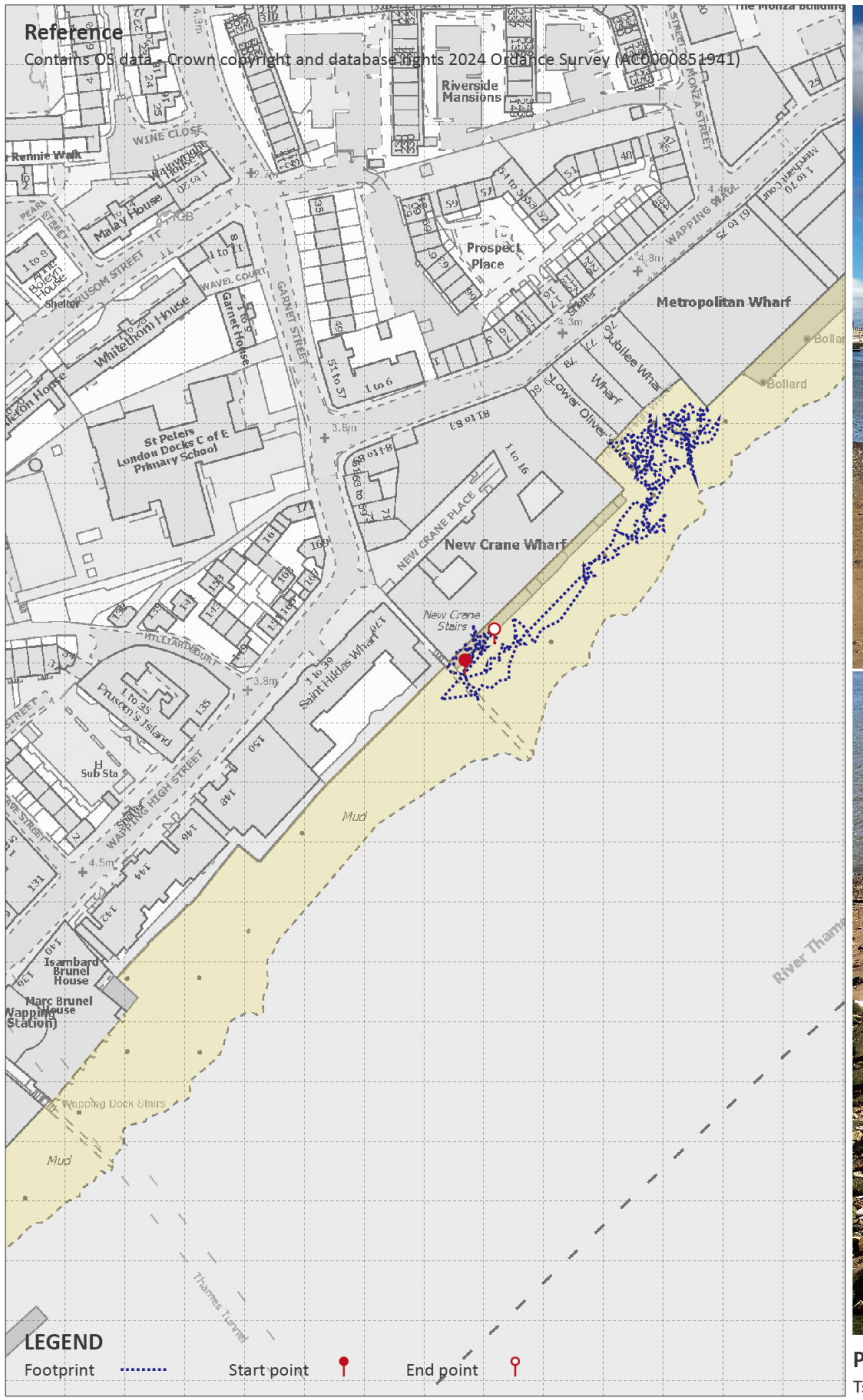
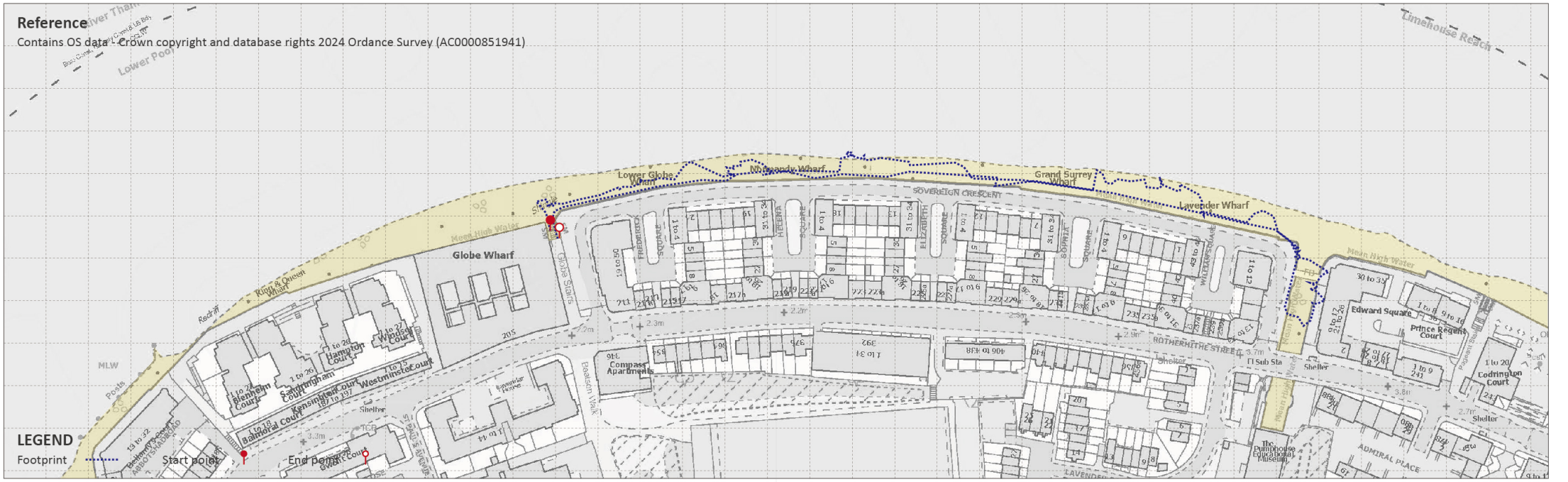


Photo:
Tseng, S-N. (2024) [The surrounding photo of Wapping-New Crane Stairs].

0 20 40 60 80 100
Scale 1:2,500 metres



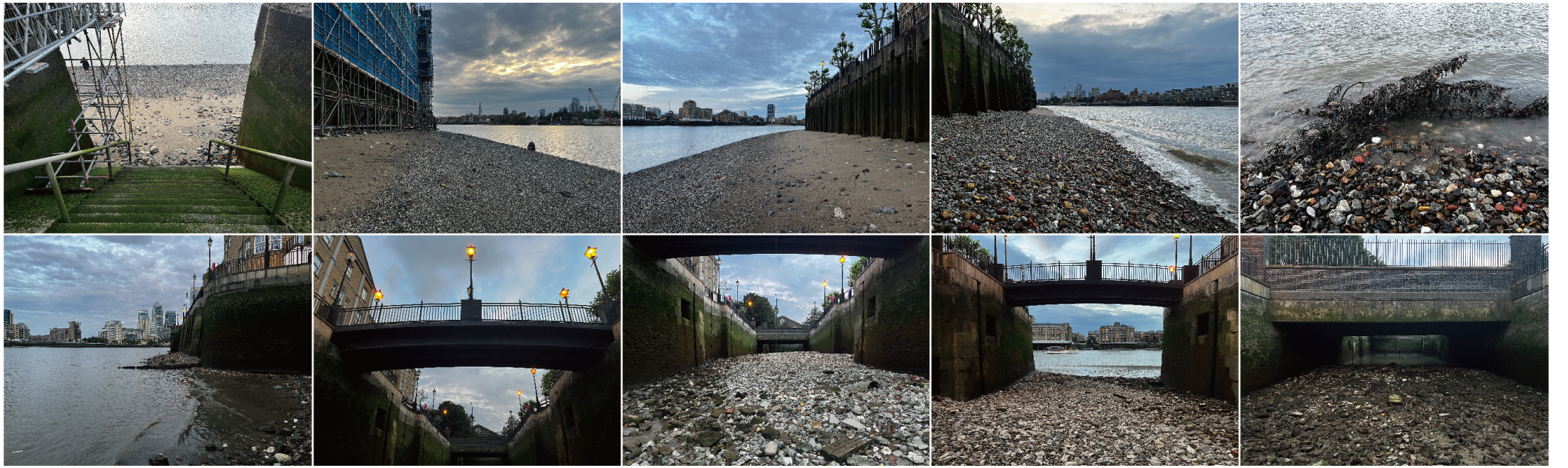


Photo:
Tseng, S-N. (2024) [The surrounding photo of Rotherhite-Globe Stairs].

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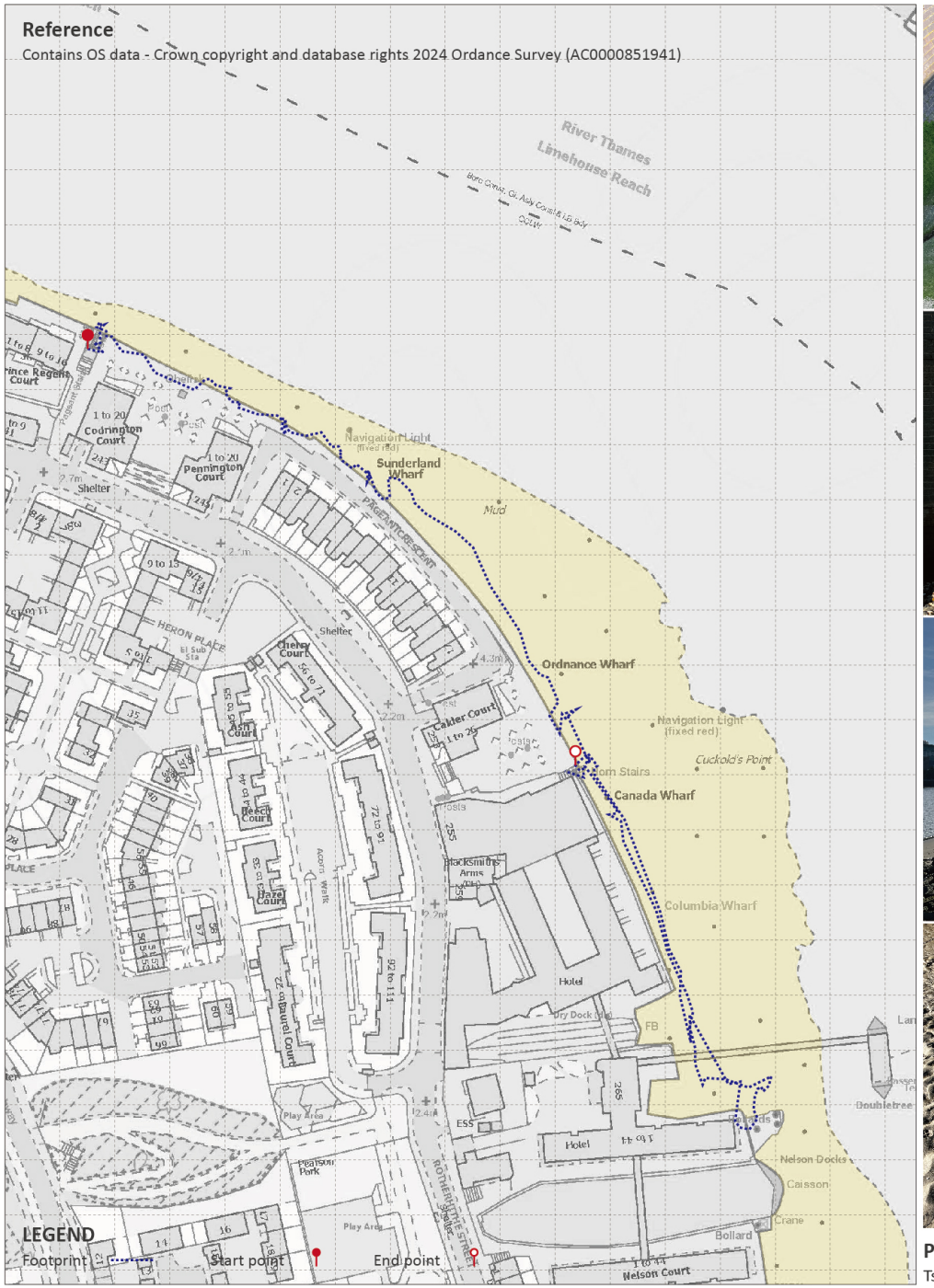
Scale 1:2,500 metres



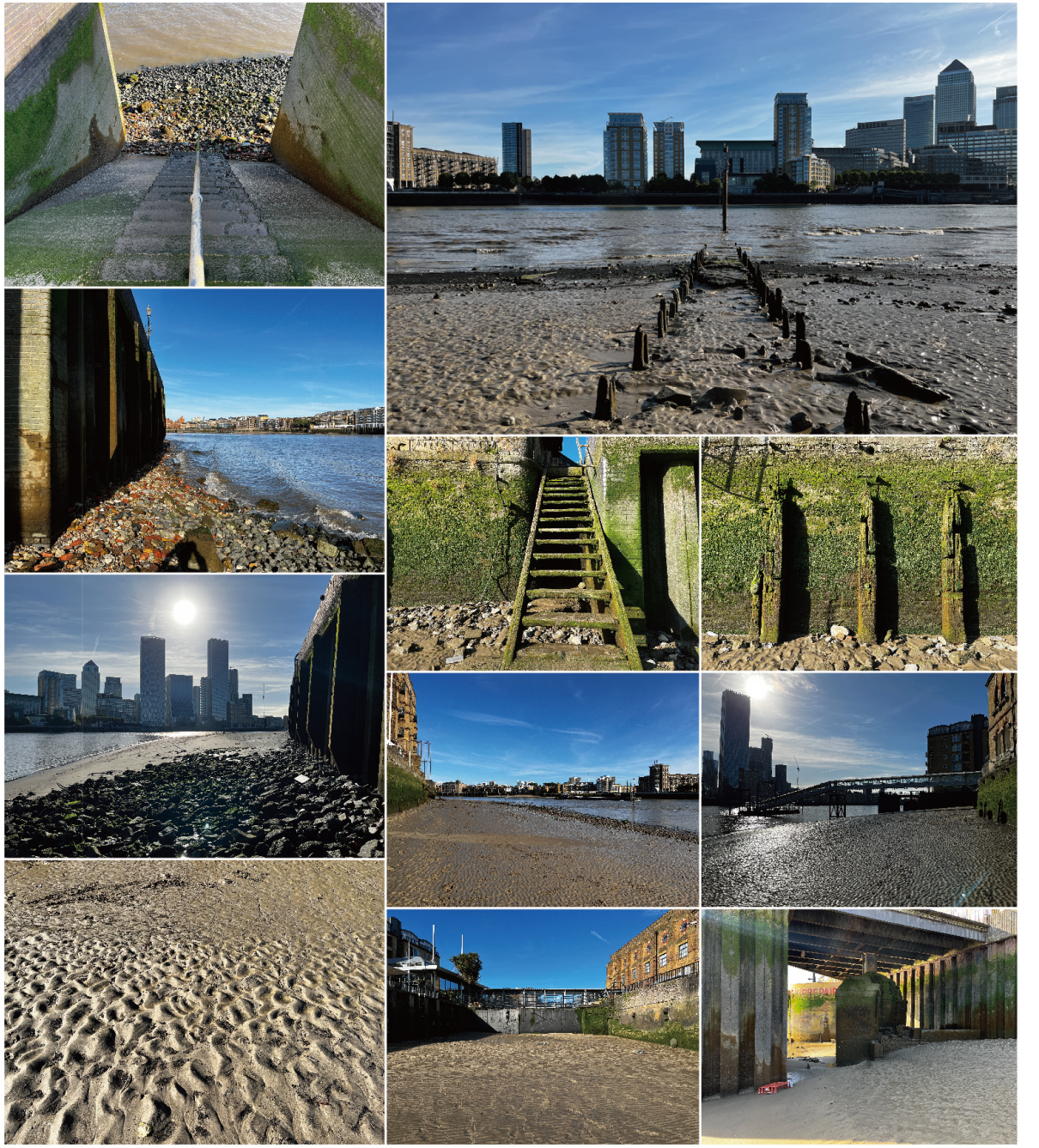
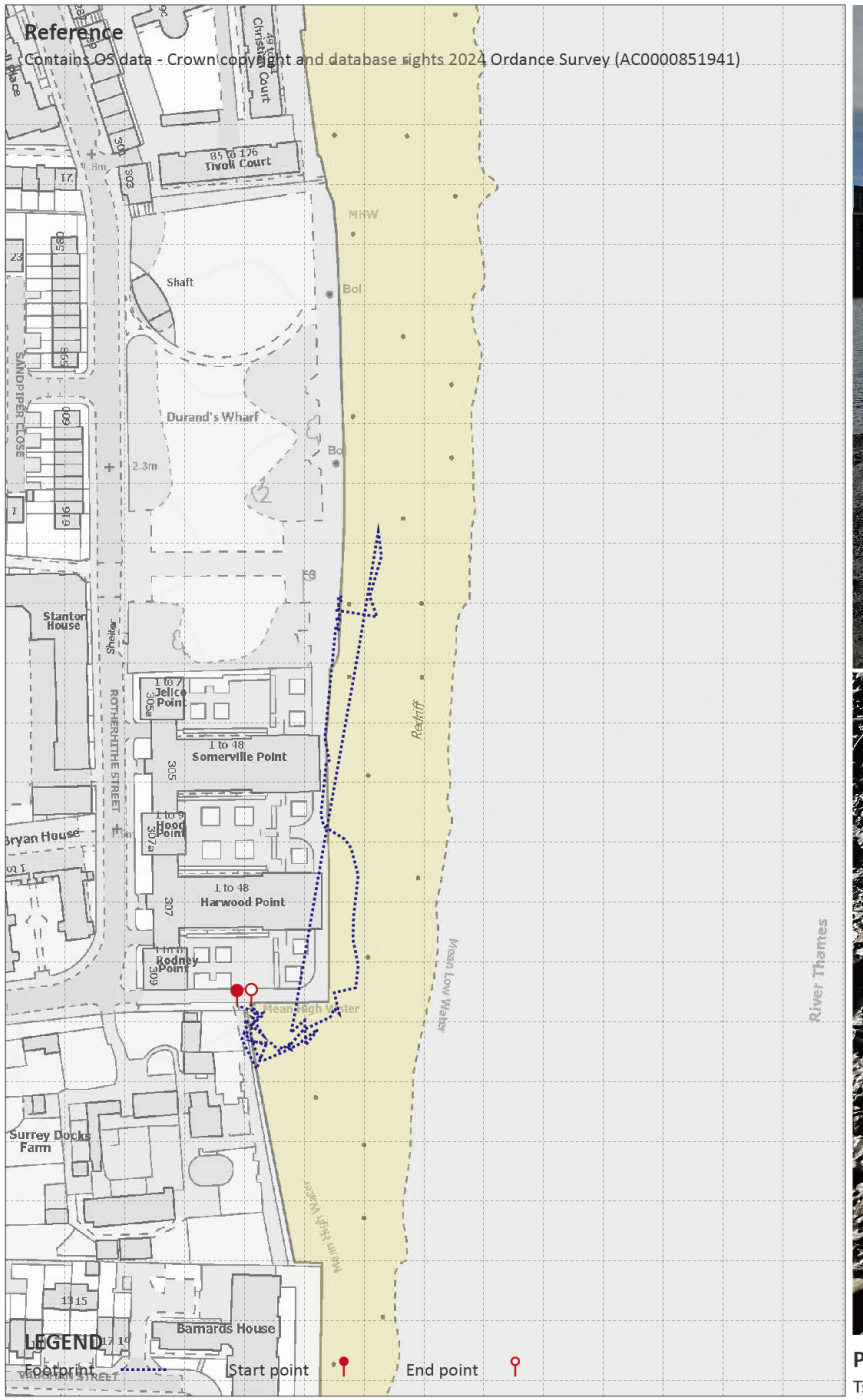


Photo:
Tseng, S-N. (2024) [The surrounding photo of Rotherhite-Pegeant Steps].

0 20 40 60 80 100
Scale 1:2,500 metres



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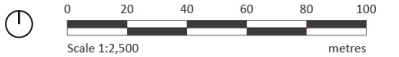
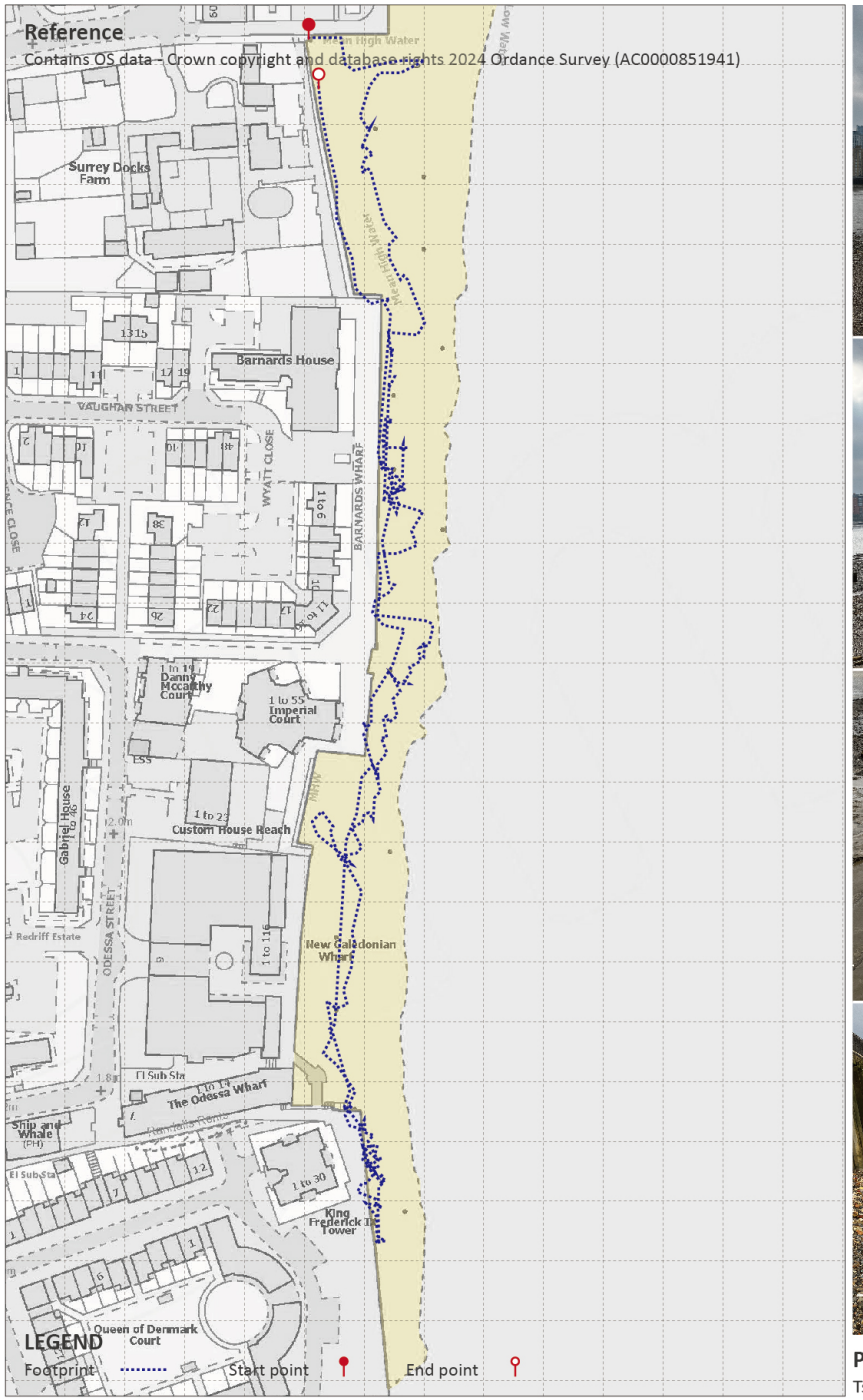
Tseng, S-N. (2024) [The surrounding photo of Wapping-Acorn Stairs].





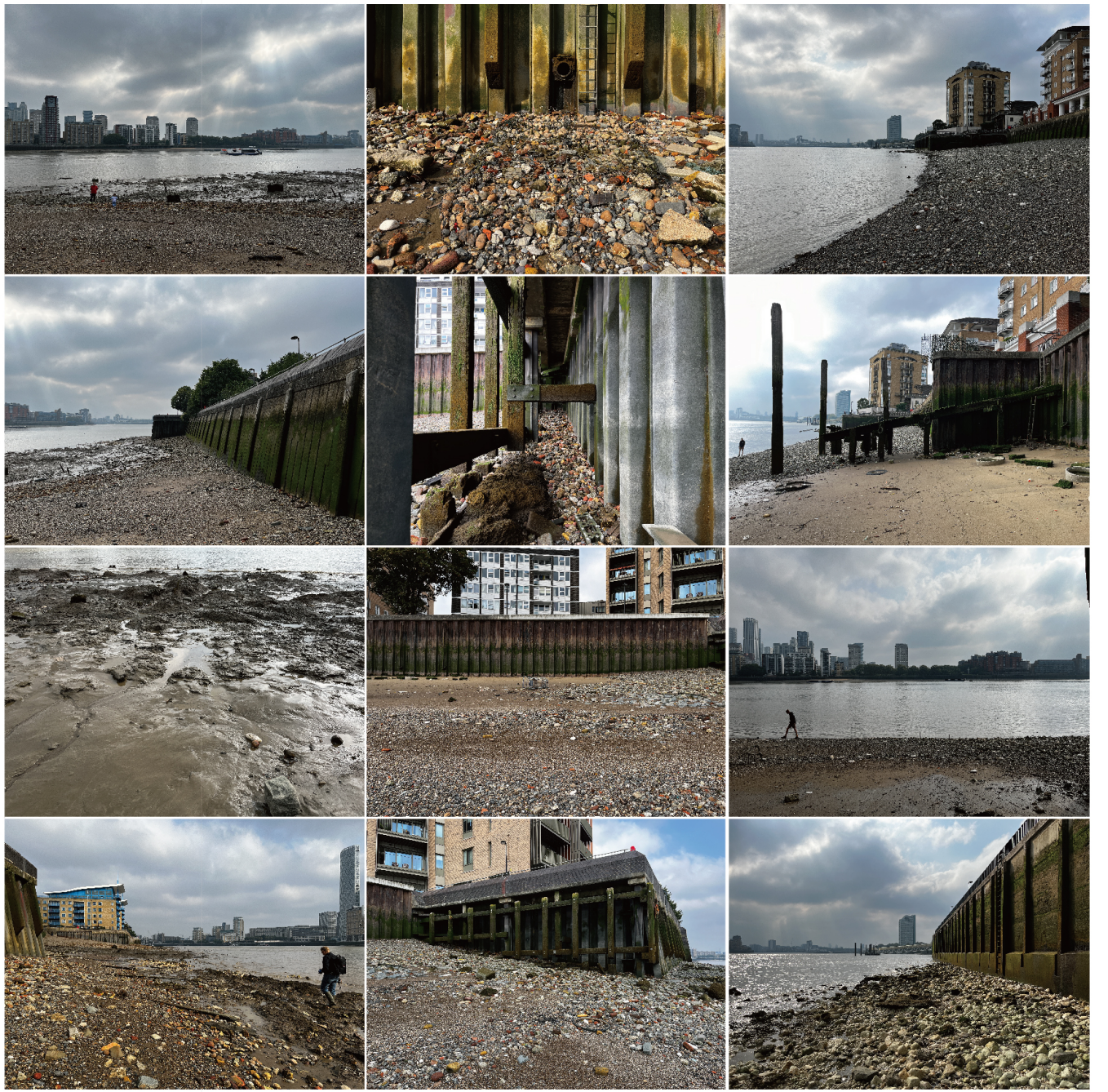
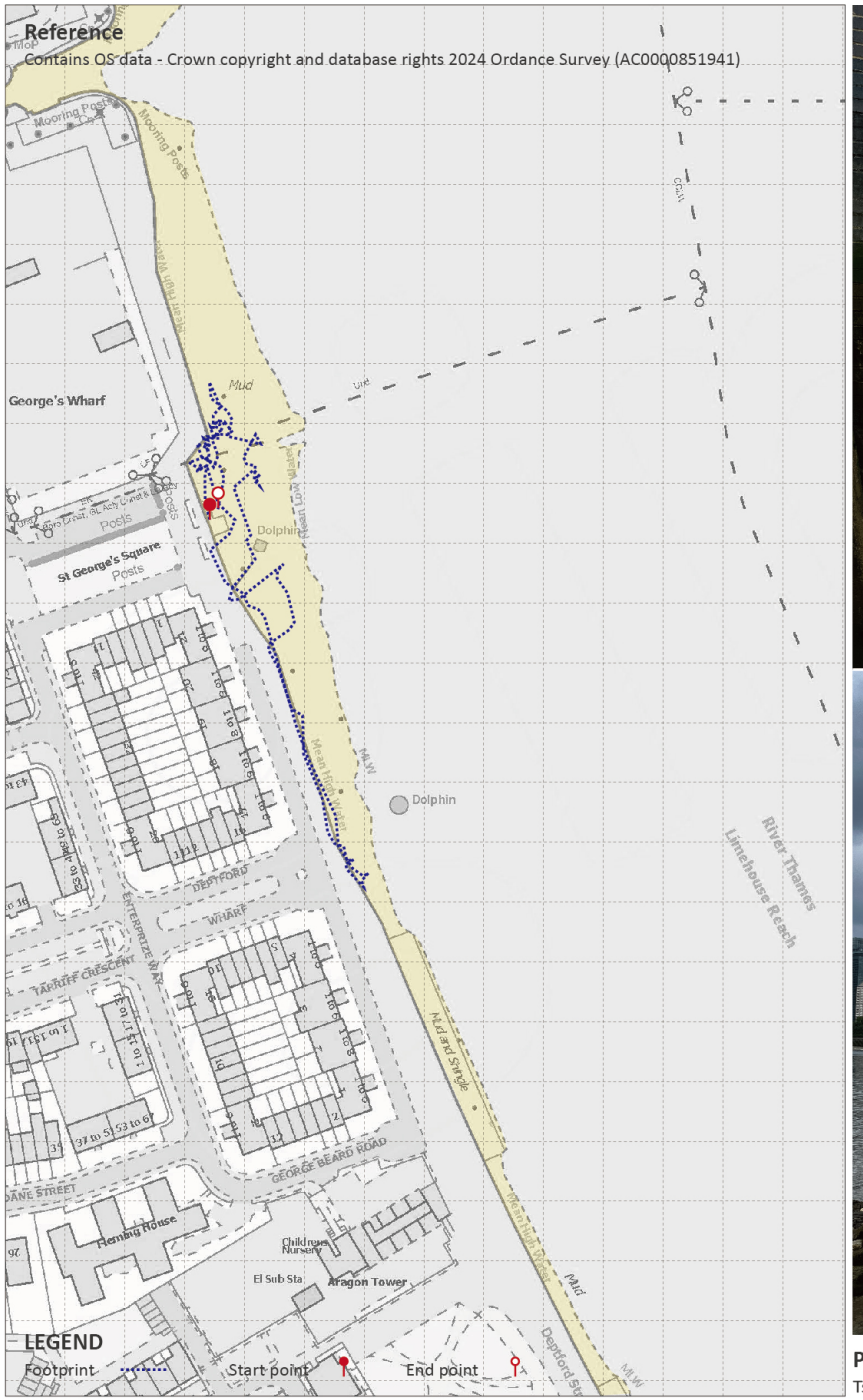


Photo:
Tseng, S-N. (2024) [The surrounding photo of Rotherhite-Dog and Duck Stairs].

0 20 40 60 80 100
Scale 1:2,500 metres



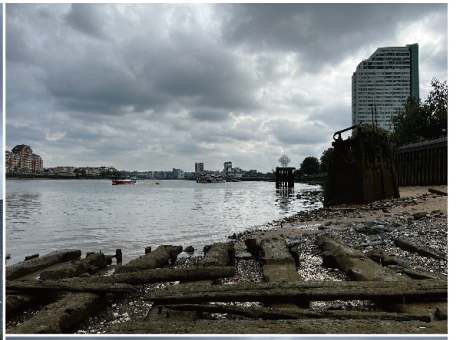


Photo:
Tseng, S-N. (2024) [The surrounding photo of Deptford Wharf-St. George's Stairs].

0 20 40 60 80 100
Scale 1:2,500 metres

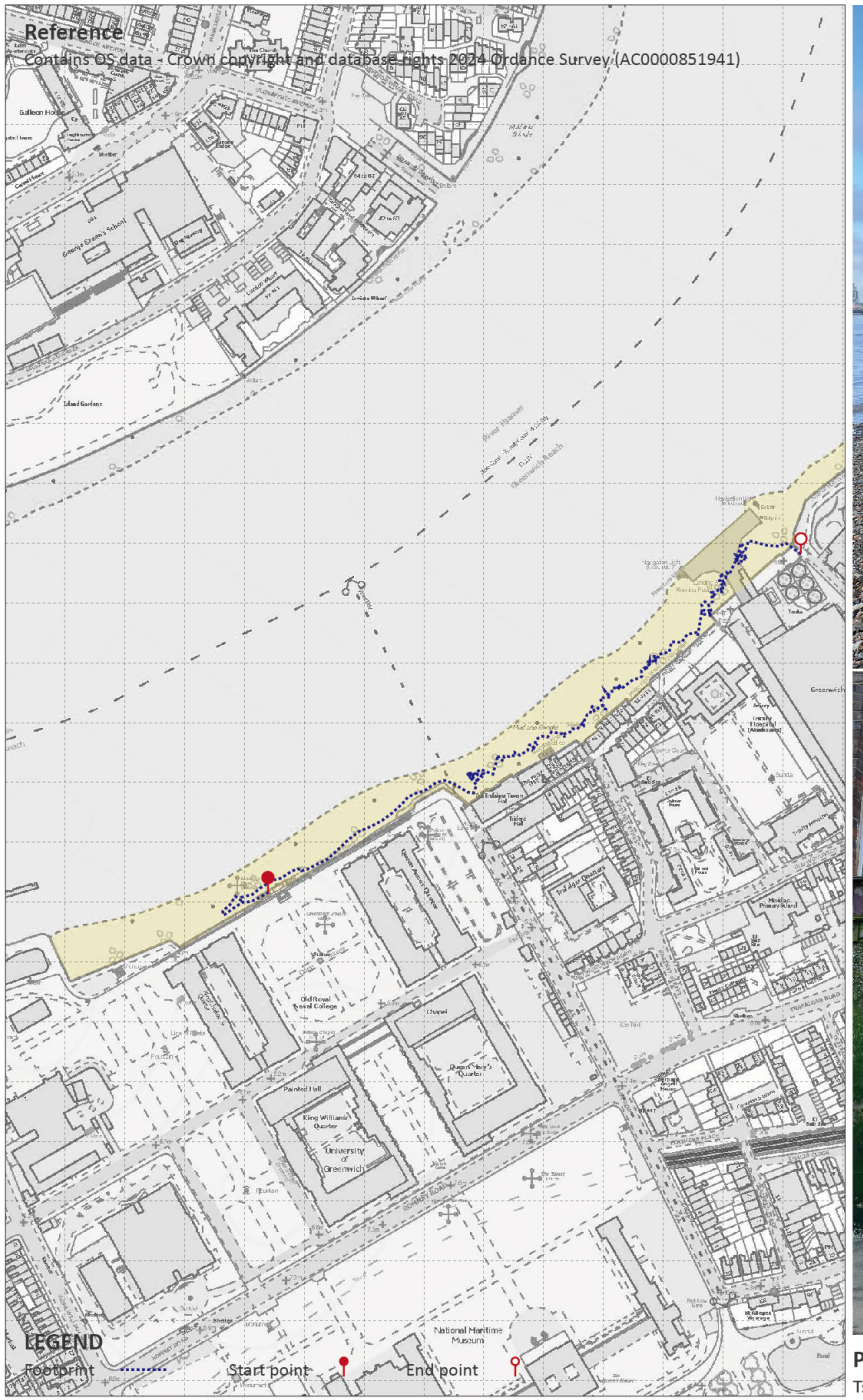


Photo:
Tseng, S-N. (2024) [The surrounding photo of Greenwich-University of Greenwich].

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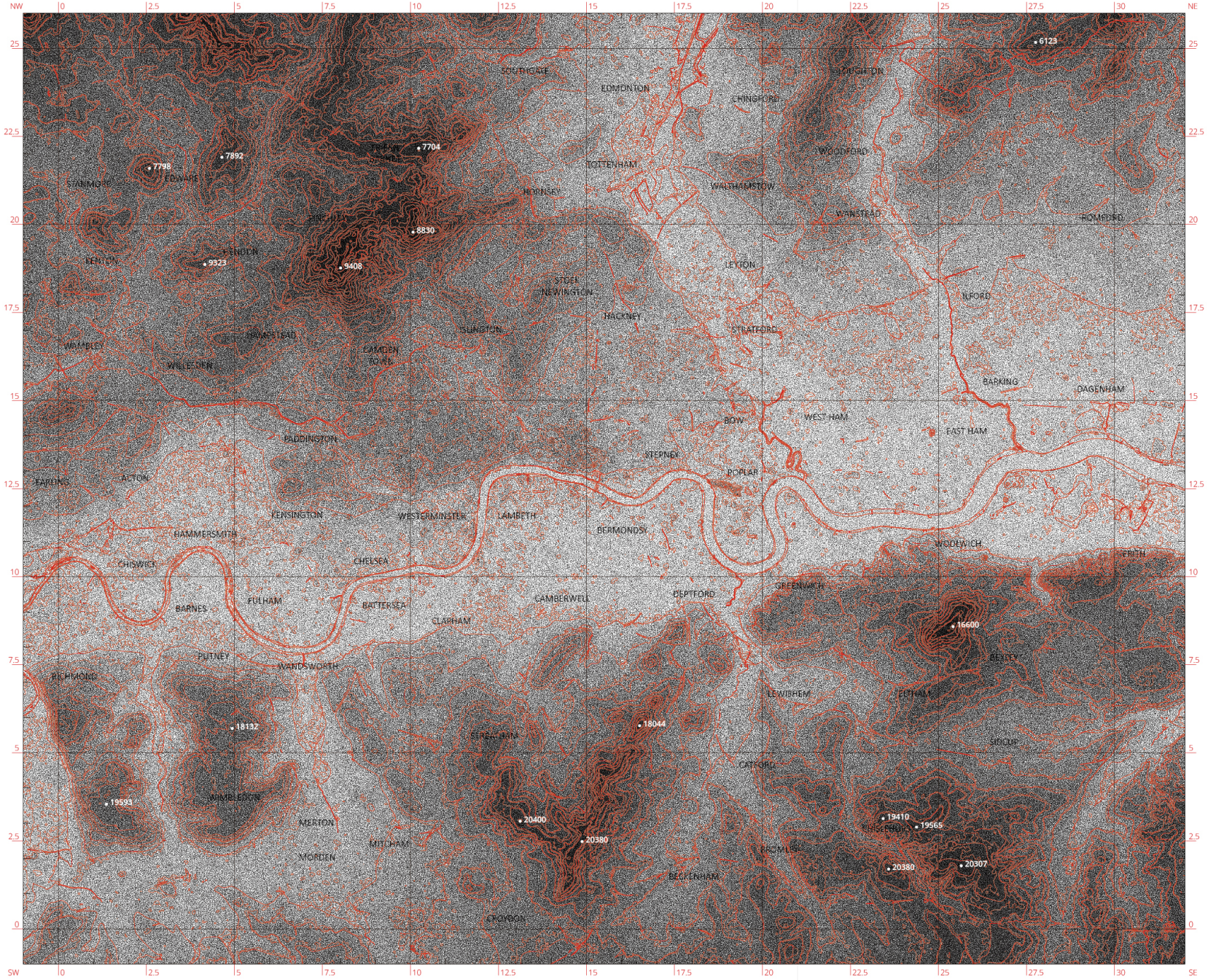
Scale 1:5,000 metres



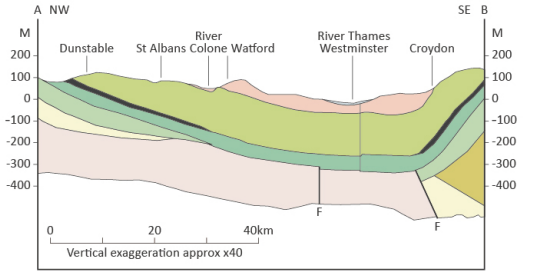
LEGEND

Spot elevation • 8830 Index contour Intermediate contour

The concept of mapping originates from an exploration of how human culture intertwines with nature and how location shapes human experiences, as seen in historical examples like the Roman-period Highgate Wood pottery industry and the development of Londinium along the Thames River.

Mapping, in this context, is an ongoing, evolving process that remains open and adaptable. This experiment involves creating a series of maps that capture various scales of the surrounding area, reflecting Earth's physical processes, geological features, and societal interactions. By focusing on local materials and historical context, these maps reveal layers of meaning within the landscape.

The generated footprints serve as a tool for participants to connect with the environment through a personal journey in the mud, gaining both an intimate and broader spatial awareness of the city. This approach invites people to understand their surroundings in a way that emphasizes the relationship between place and experience.



Section.

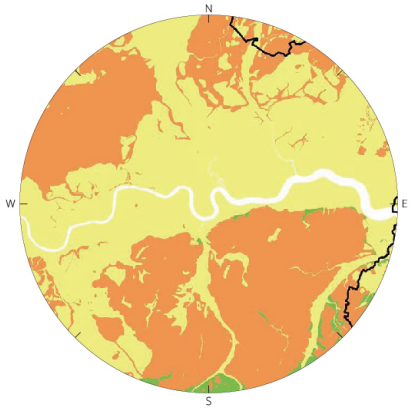
- QUATERNARY
- PALEOGENE AND NEOGENE
- CHALK GROUP
- UPPER GREENSAND FORMATION
- GAULT FORMATION
- LOWER GREENSAND FORMATION
- JURASSIC
- PALEOZOIC BASEMENT

Mapping:

Generalized digital geological map data based on the BGS's published poster maps of the UK (north and south), along with partial data collected from the Ordnance Survey.

Section:

Ferreira, A. et al. (n.d.) *London Region Atlas of Topsoil Geochemistry.* British Geological Survey.



Periods of Bedrock

Cretaceous: The Wealden Group mudstone, the oldest surface bedrock, is followed by layers of sandstone and mudstone in formations such as the Lower Greensand and Gault. The Cretaceous Chalk, visible in areas northwest and south of London, includes the Grey Chalk (with marl and occasional flints) and the White Chalk, which is rich in flint and consists primarily of calcium carbonate from ancient planktonic remains.

Palaeogene: The oldest Palaeogene unit, the Thanet Sand Formation, consists of silty sands sourced from the Scottish Highlands. The Lambeth Group, overlying the Thanet Formation, features layers of sand, clay, and flint pebbles, with sediment types varying across formations. The Thames Group includes the London Clay Formation, a silty clay layer with sandier components towards its top. Above it, the Bracklesham Group contains a mix of laminated silts, clays, and sands.

Quaternary: Pre-Anglian deposits like clay-with-flints and gravel terraces formed from erosion and solifluction. The Anglian glaciation introduced the Lowestoft Till, a clay-rich layer with boulders, mainly in northeastern London. Post-Anglian river terraces formed as the Thames settled into its current course, leaving behind gravel deposits on hilltops and loessic brickearth in valleys. The youngest deposits include river alluvium, found in floodplains, and solifluction "head" deposits reflecting the local geology.

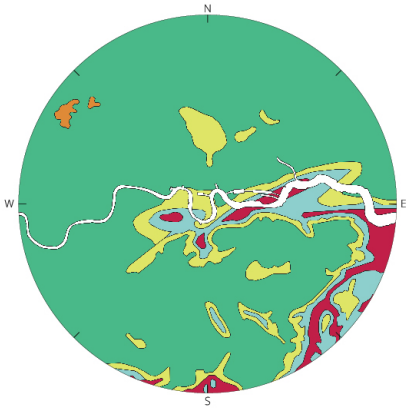
QUATERNARY PALAEOGENE CRETACEOUS

Age	Parent material (PM) class
Quaternary	Head (clay-silt)
	Head (gravel-sand)
	Alluvium
	Brickearth
	River terrace deposits
	Glacial till
	Plateau gravels
	Clay-with-flints
Paleogene	Bracklesham Group (sand-silt)
	Bracklesham Group (sand)
	Bagshot Formation
	Thames Group (clay)
	Thames Group (sand-gravel)
	Lambeth Group
	Thanet Sand Formation
Cretaceous	White Chalk Sub-group
	Grey Chalk Sub-group
	Gault Formation
	Upper Greensand
	Lower Greensand Group
	Wealden Group (mudstone)

Table. 1.

Period	Group	Formation	Thickness (m)
Paleogene	Thames	**Bagshot Formation:** sand, fine-grained with thin clay beds	10 - 25
		London Clay Formation: clay, silty; fine sand clay at base	90 - 130
		Claygate member: interbedded sand and clay at top	
		Harwich Formation: sand, clayey fine grained sand and pebble beds	0 - 10
	Lambeth	**Reading, Woolwich And Upnor Formations:** clay mottled with fine-grained sand, laminated clay, flint pebble beds and shelly clay	10 - 20
		Thanet Sand Formation: sand, fine-grained	0 - 30
Cretaceous	Chalk	**Seaford and Newhaven Chalk Formations Undivided:** chalk soft, white with flint courses	Up to 70
		Lewes Nodular Chalk Formation: chalk, white with hard, nodular beds	25 - 46
		New Pit Chalk Formation: chalk white to grey with few flints	30 - 50
		Holywell Nodular Chalk Formation: chalk white to grey, shelly, hard and nodular	11 - 18
		Zig Zag Chalk Formation and West Melbury Chalk Formation: chalk, pale grey with thin marls; glaconitic at the base	40 - 80
		Upper Greensand Formation: sand fine-grained, glauconitic	Up to 17
		Gault Formation: clay, silty	50 - 70
	Lower	**Folkestone Formation:** sandstone, fine to medium-grained	60
Concealed strata	Greensand	**Sandgate, Hythe and Atherfield Clay Formations:** sandstone and mudstone	34
	Wealden	**Weald Clay Formation:** mudstone	Up to 150
		Hastings Beds: sandstone and mudstone	
Jurassic		**Limestone and mudstone**	0 - c. 750
Silurian and Devonian		**Sandstone and siltstone**	

Table. 2.



Bedrock Geology

Bedrock geology (which we used to call 'solid' geology) is a term used for the main mass of rocks forming the Earth that are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time, ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago or older, up to the relatively young Pliocene, 2.6 million years ago.

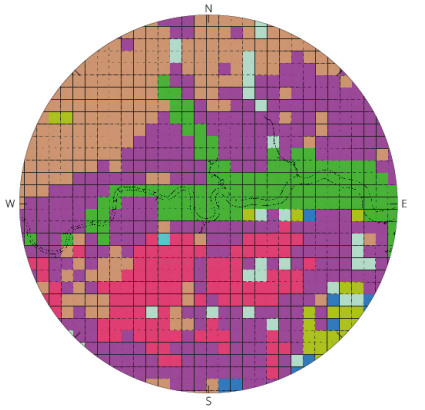
- NEOGENE TO QUATERNARY ROCKS (UNDIFFERENTIATED)
- THAMES GROUP - CLAY, SILT, SAND AND GRAVEL
- LAMBETH GROUP - CLAY, SILT, SAND AND GRAVEL
- BRACKLESHAM GROUP AND BARTON GROUP (UNDIFFERENTIATED) - SAND, SILT AND CLAY
- WHITE CHALK SUBGROUP - CHALK
- THAMES RIVER

Superficial Deposits

Superficial deposits (which we used to call 'drift') are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 2.6 million years from the present. They rest on older deposits or rocks referred to as bedrock.

Most of these superficial deposits are unconsolidated sediments, such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads. Almost all of these deposits were formerly classified on the basis of mode of origin with names such as 'glacial deposits', 'river terrace deposits' or 'blown sand', or on their composition such as 'peat'. Recently, some of them have been given formal lithostratigraphic names such as 'Lowestoft Formation'.

- CLAY, SILT AND SAND - ALLUVIUM
- SAND AND GRAVEL - RIVER TERRACE DEPOSITS
- UNKNOWN LITHOLOGY
- DIAMICTON - TILL



Soil Parent Material

Soils are the result of weathering processes that occur on the Earth's surface where the atmosphere meets the geosphere and hydrosphere. We live in this 'critical zone', relying on our soils to grow our food and sustain the biodiversity and health of our environment.

A 'parent material' is a soil-science name for a weathered rock or deposit from and within which a soil has formed. In Great Britain, parent materials provide the basic foundations and building blocks of the soil, influencing their texture, structure, drainage and chemistry.

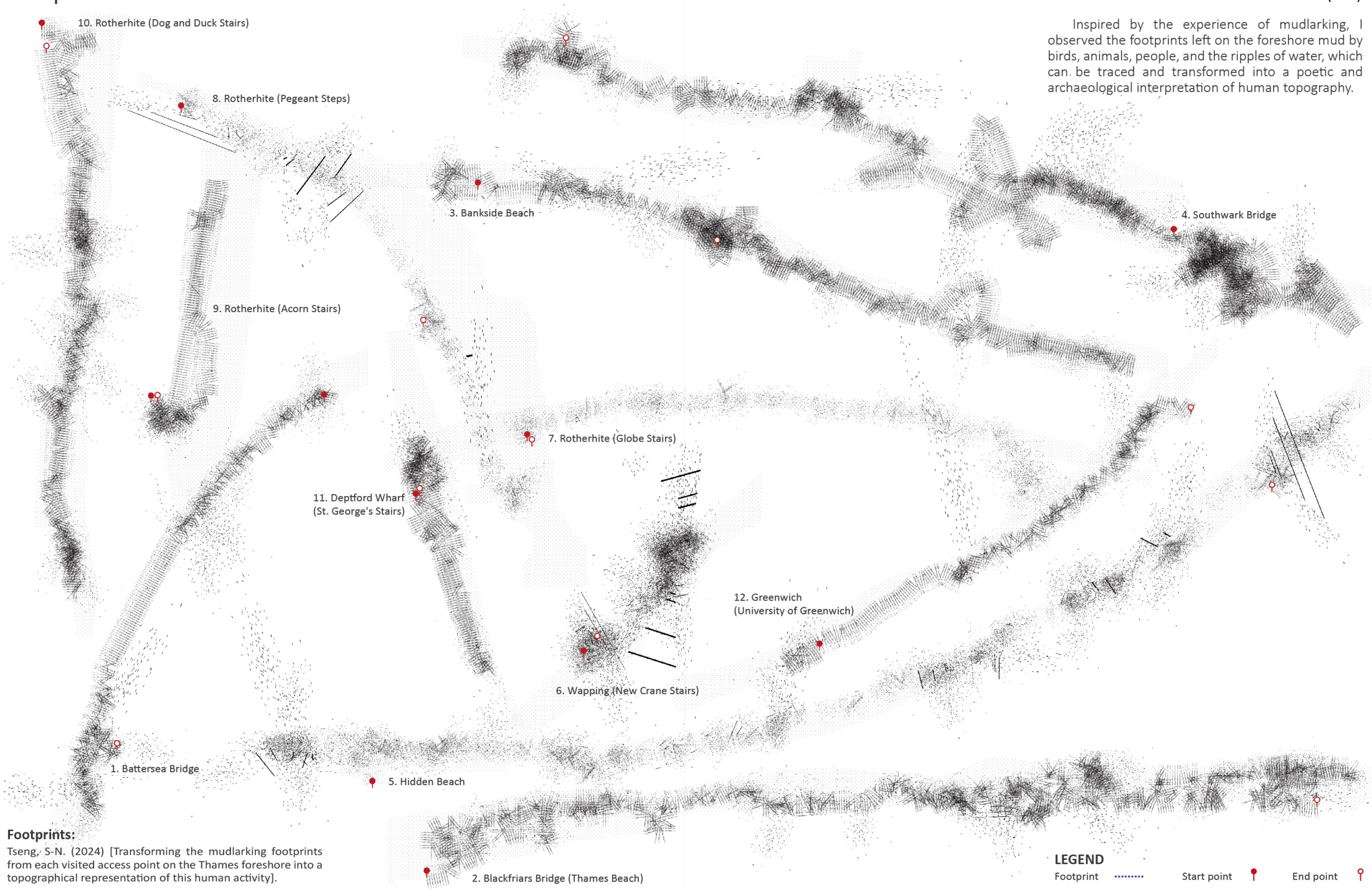
- ALL
- HEAVY
- HEAVY TO MEDIUM
- LIGHT TO MEDIUM
- LIGHT(SANDY) TO MEDIUM(SANDY)
- MEDIUM TO LIGHT(SILTY) TO HEAVY
- MEDIUM(SILTY) TO LIGHT(SILTY)
- MEDIUM(SILTY) TO LIGHT(SILTY) TO HEAVY

Mapping:
Generalized digital geological map data based on the BGS's published poster maps of the UK (north and south), along with partial data collected from the Ordnance Survey.

Table. 1.
Ferreira, A. et al. (n.d.) *London Region Atlas of Topsoil Geochemistry.* British Geological Survey.

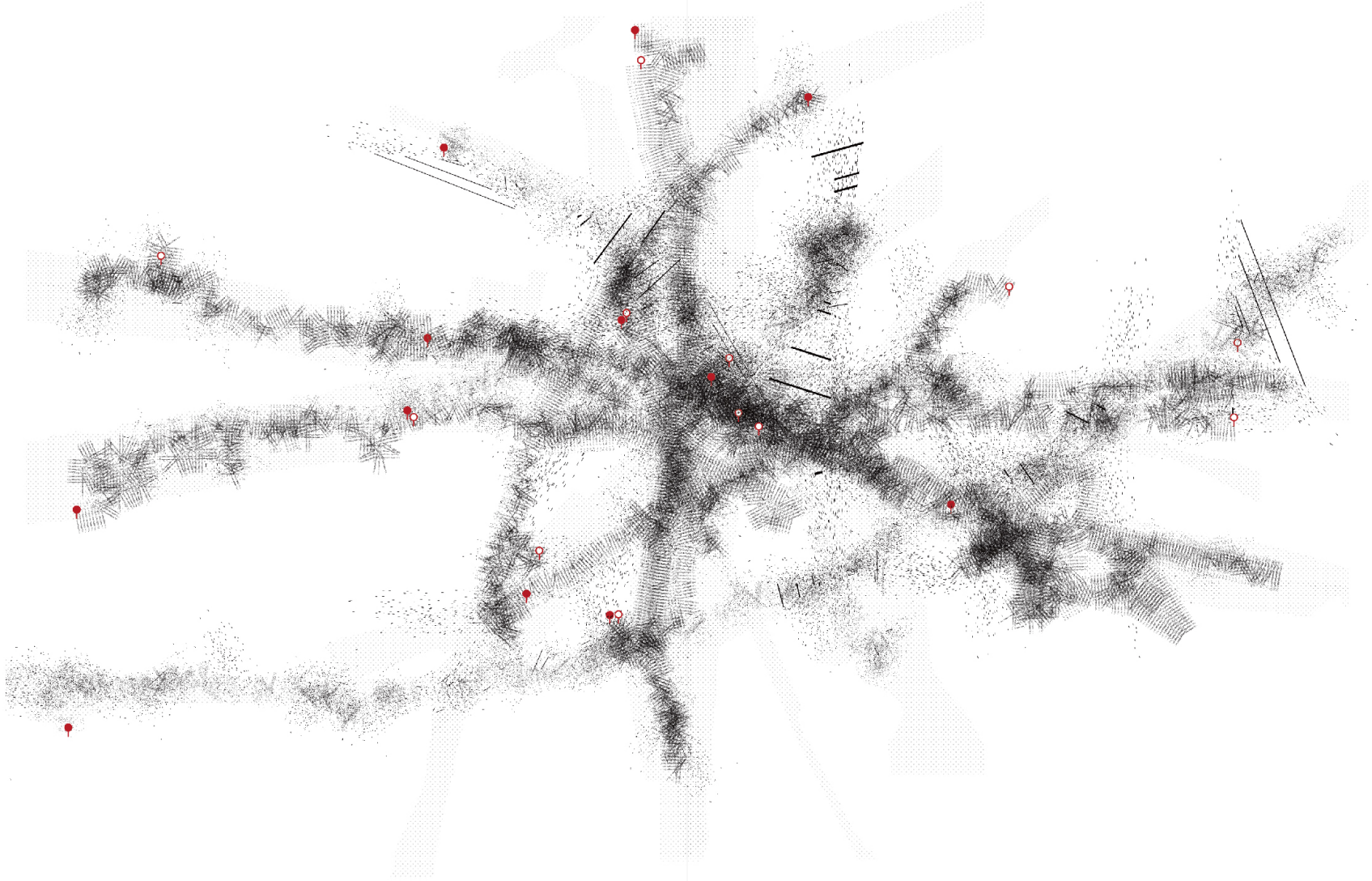
Table. 2.
Ellison, R.A. et al. (2004) *Geology of London: Special Memoir for 1:50,000 Geological Sheets 256 (North London), 257 (Romford), 270 (Dartford) (England and Wales).* British Geological Survey.

Inspired by the experience of mudlarking, I observed the footprints left on the foreshore mud by birds, animals, people, and the ripples of water, which can be traced and transformed into a poetic and archaeological interpretation of human topography.

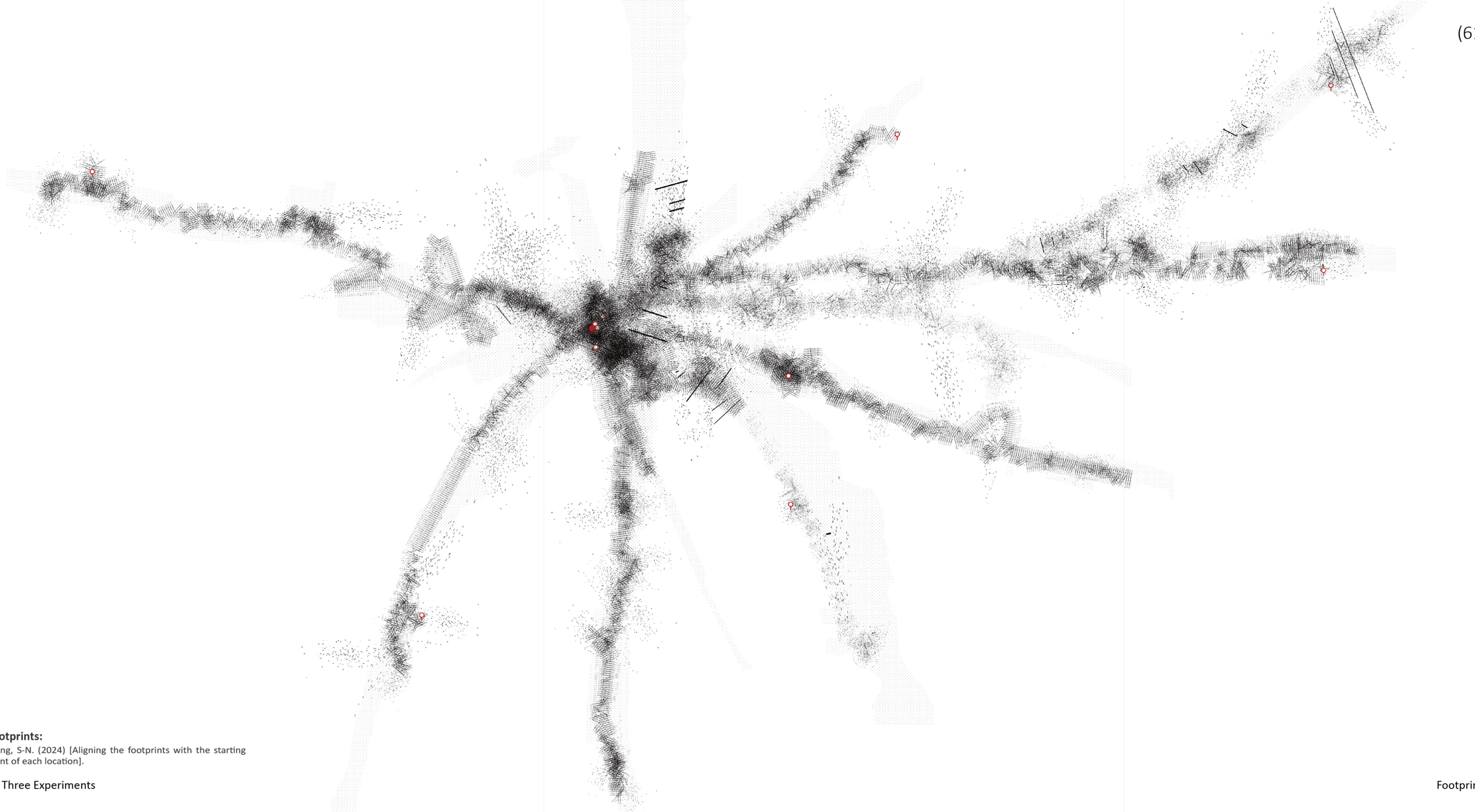


Footprints:

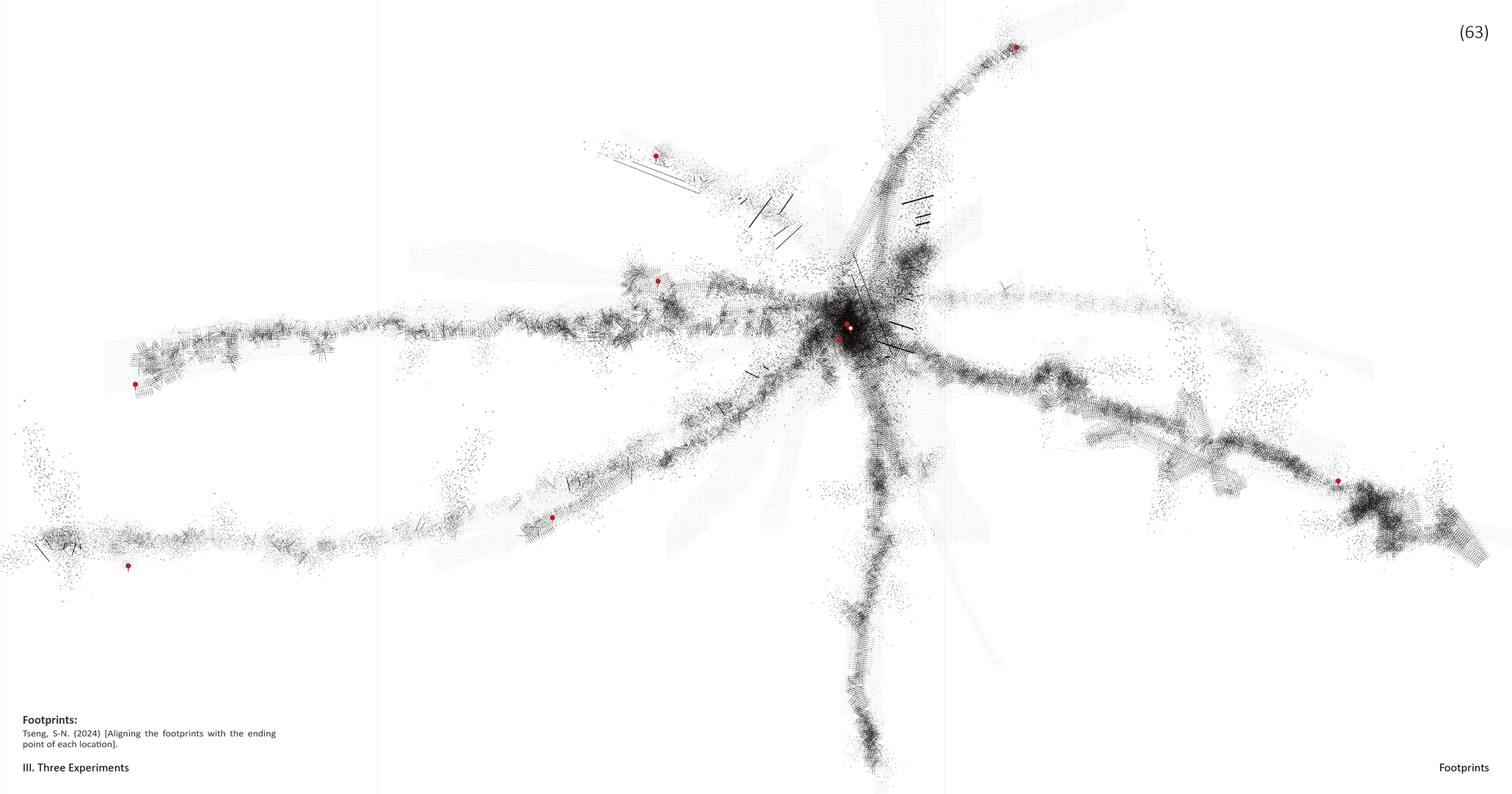
Tseng, S-N. (2024) [Transforming the mudlarking footprints from each visited access point on the Thames foreshore into a topographical representation of this human activity].



Footprints:
Tseng, S-N. (2024) [Centering the midpoint of each footprint to explore different patterns].



Footprints:
Tseng, S-N. (2024) [Aligning the footprints with the starting point of each location].



Footprints:
Tseng, S-N. (2024) [Aligning the footprints with the ending point of each location].

The process of wheel-throwing and kiln-firing pottery is often a lengthy and intricate undertaking in ceramic production. Traditionally, shaping pottery on a throwing wheel creates vessels for specific functions, such as food storage or water transport, with each stage often infused with cultural practices and local materials. This process typically unfolds over a week, involving molding, drying, trimming, decorating, and two rounds of firing. After shaping, the vessel must dry thoroughly, usually requiring two to three days per stage before progressing. The first firing, or bisque, at approximately 900°C, is followed by glazing to make the pottery watertight, then a second high-temperature firing at approximately 1250°C to harden it for practical use. Variables such as weather, material consistency, and the potter's condition can influence the timeline of each stage.

In archaeology and anthropology, vessel terminology provides insights into the subtle details of artifacts. The term fabric refers to the material composition, while form describes the shape, like a jug or dish. Ware is a broader classification encompassing specific features—such as form, fabric, decoration, manufacturer, or a combination these. Pottery is often categorized as earthenware, distinguishing it from higher-quality materials such as China and porcelain, both types of stoneware. Analyzing a thin section of a vessel under laboratory conditions can reveal its geological composition, helping to identify the clay's origin. This analysis aids in locating workshops or kilns and sheds light on trade distances, thereby enhancing our understanding of historical and cultural contexts.

Pottery artifacts find their way into the ground through various means. Broken pottery, often sharp until weathered, was frequently discarded with care to prevent injury. Historically, household waste, including broken pots, was disposed of in manure heaps or cesspits, which would later be spread as fertilizer—leading to pottery fragments appearing in rural areas far from their origin. Pottery could also end up in middens or be used to fill ditches or abandoned structures. Over time, natural processes, such as the collapse of buildings and earthworm activity, contribute to the gradual burial of these artifacts. In some cases, pottery was deliberately buried, as in pots used to conceal valuables. Large clusters of similar pottery may signal an archaeological site, with plowing sometimes revealing remnants of ancient cemeteries. In urban areas, debris from demolished structures often served as foundations for new buildings, creating layers up to 4 meters deep. Erosion or human activities, like plowing, can eventually bring pottery and other artifacts back to the surface.

Understanding the process of making pottery and how broken artifacts cycle through the ground and back to the surface has guided me toward a more responsible perspective on our environment. This knowledge has inspired me to explore the concept of recycling existing materials. I aim to create a series of vessels that highlight the impact of industry and climate change, encouraging greater awareness of these pressing issues.

Photo:
Tseng, S-N. (2024) [Site photos of Highgate Wood Park, revealing the use of the area after archaeological excavation of the Roman pottery industry].

Another project that has profoundly influenced my research is Black Chapel by Theaster Gates. This structure captivated me for its ability to scale ceramic concepts into an architectural form, creating a spiritual sanctuary akin to a 'vessel.' Serving as a space for meditation, reflection, and dialogue, the artist integrates traditional elements from diverse cultural contexts, including kiln structures and architectural features reminiscent of graves and churches. Inspired by this project and Gates's philosophy of creativity, I am drawn to the transformative potential of seemingly insignificant materials, which can become valuable within the right context and conditions.

The relationship between pottery and bricks—both originating from clay—exemplifies this idea. Despite their shared material foundation, they find distinct applications across crafts and architecture, shaped by their contexts. I propose that these two realms are intrinsically connected, with the material's presentation and use varying according to environmental scales. The versatility of clay, evident in its roles spanning planting, rituals, household utensils, and construction, underscores its deep connection to human behavior and the development of civilization over time.

In my previous research, I have explored relevant themes such as vernacular architecture and the history of London's brickfields. These investigations have deepened my understanding of the materiality of clay and its dual significance—both functional and symbolic—within spatial contexts, enhancing my comprehension of the interior and exterior meanings embodied in clay vessels.

Photo:
Serpentine Galleries. (2022) [Photo of Black Chapel, designed by Theaster Gates].

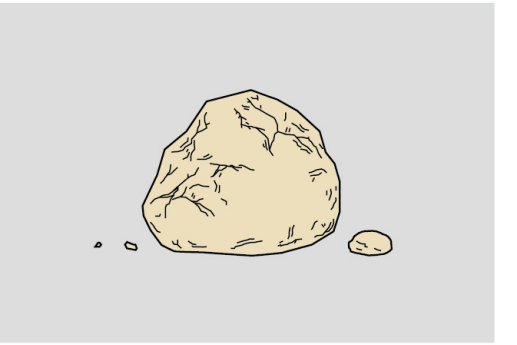
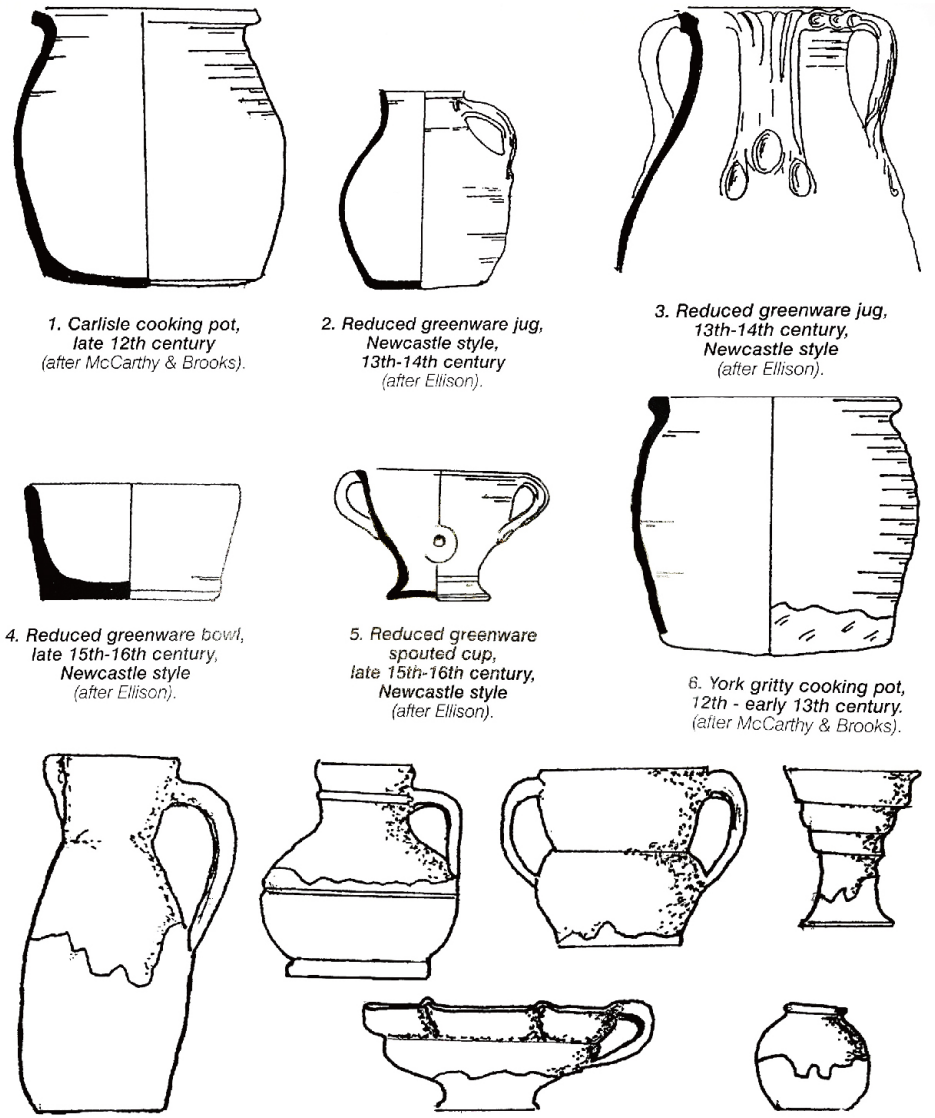


Diagram:
Tseng, S-N. (2024) [Diagram of clay, illustrating how pottery clay is typically composed of very small particles of decomposed rock].

This experiment explores the essence of ceramics as a bridge between human activity, environment, and history, examining how form, texture, material, and technique connect us to ancient practices and contemporary concerns. By shaping clay into vessels, this collection invites reflection on the transformative journey of natural elements as they move from the landscape into everyday objects. Each piece embodies the relationship between the body and earth, crafted from the foreshore materials of the Thames and designed to echo the resilience and memory of London's history.

Divided into four main sections—form, texture, material, and technique—this chapter delves into the distinct qualities of each, showing how they collectively enhance the narrative embedded in each vessel. Through these elements, the works are not only functional but also meditative, capturing moments of interaction with nature and paying homage to traditional craft methods while addressing modern environmental awareness. Ultimately, this chapter highlights how ceramics can be a powerful medium for rediscovering balance, where the past and present converge within the tangible and the spiritual.

The forms of these ceramic pieces are inspired by British pottery styles spanning from 4000 B.C. to A.D. 1900. By drawing on historical designs, this collection cultivates an indigenous atmosphere, reshaping collective memory through a blend of historical and contemporary aesthetics. Each piece is crafted as an everyday object—bowls, plates, and cups—representing fundamental, timeless shapes. Their forms aim to bridge the past and present, translating archaeological insights into functional, evocative items that connect us to ancient human experiences.



1. Carlisle cooking pot, late 12th century (after McCarthy & Brooks).

2. Reduced greenware jug, Newcastle style, 13th-14th century (after Ellison).

3. Reduced greenware jug, 13th-14th century, Newcastle style (after Ellison).

4. Reduced greenware bowl, late 15th-16th century, Newcastle style (after Ellison).

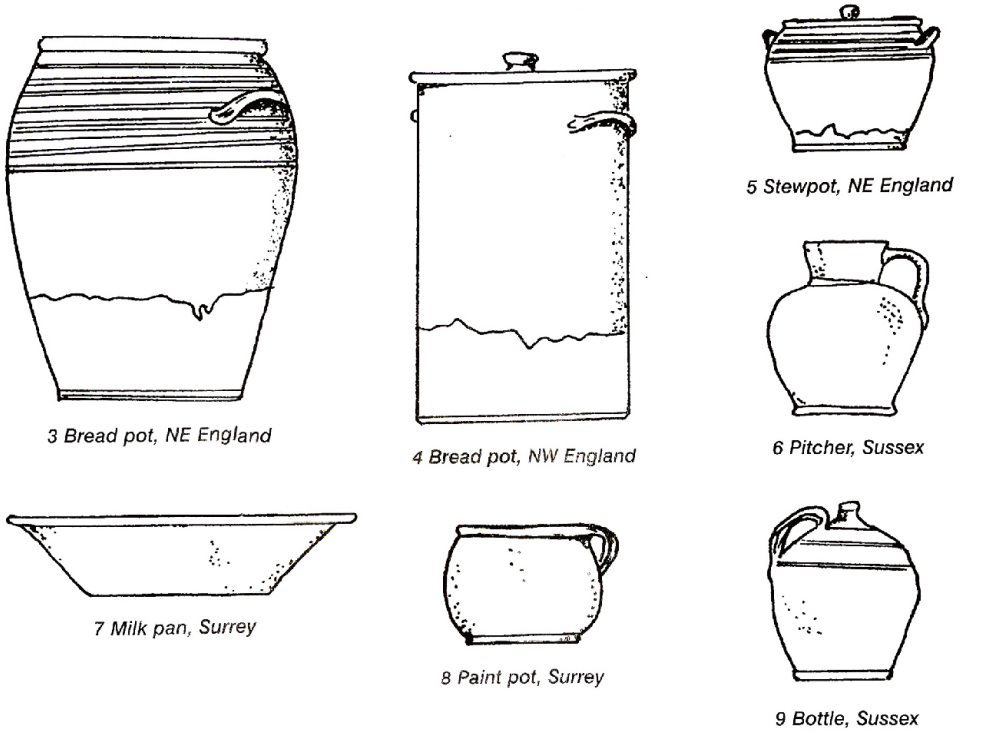
5. Reduced greenware spouted cup, late 15th-16th century, Newcastle style (after Ellison).

6. York gritty cooking pot, 12th - early 13th century. (after McCarthy & Brooks).

Photo:

Laing, L. (2014) *Pottery in Britain 4000BC to AD1900.* [The reference to Medieval pottery from Northern England and Tudor greenware from the 16th and 17th centuries].

Professionals rely on reconstructions made from sherds found during excavations to identify materials and examine artifact forms. For this purpose, rims and feet or bases are often more crucial than body sherds, though the angle of the body is also significant and must be carefully measured. Pot sherds are typically drawn to scale—a task made challenging by uneven fractures—while angles are observed and used to build a profile. As a result, the vast majority of pottery types are not displayed in museum cases, and complete or near-complete examples are rare.



3 Bread pot, NE England

4 Bread pot, NW England

5 Stewpot, NE England

6 Pitcher, Sussex

7 Milk pan, Surrey

8 Paint pot, Surrey

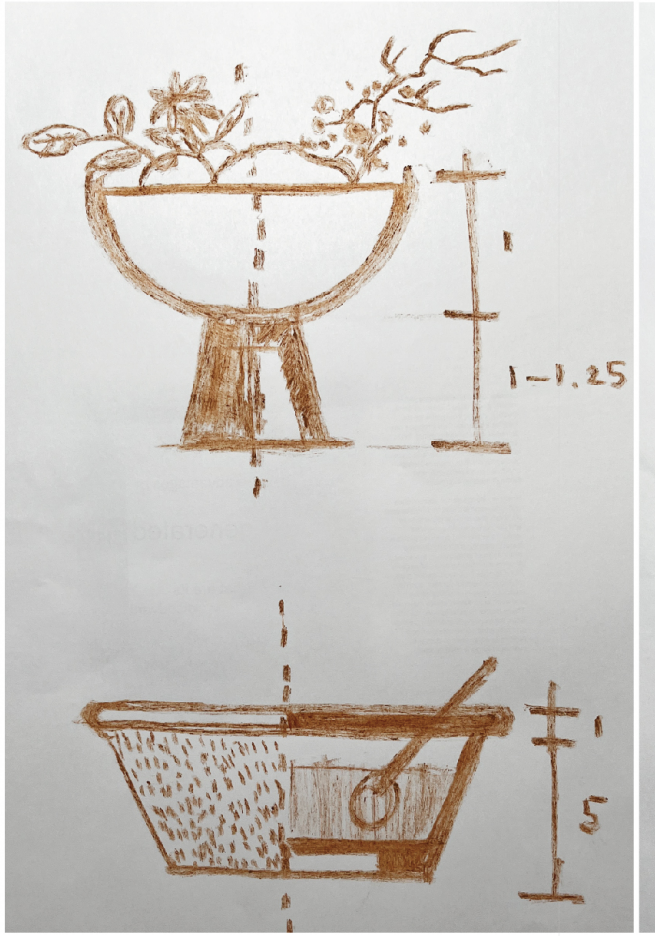
9 Bottle, Sussex

Photo:

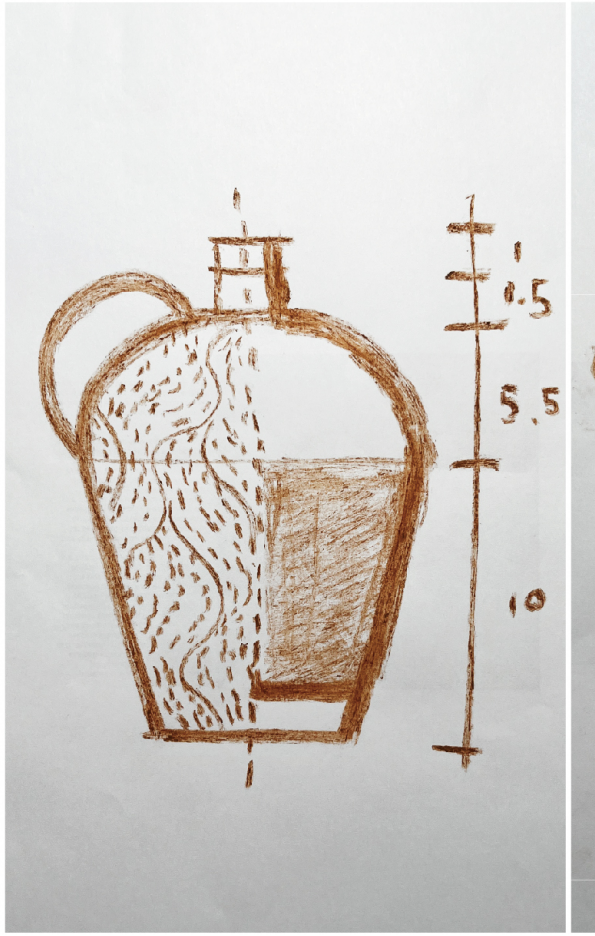
Laing, L. (2014) *Pottery in Britain 4000BC to AD1900.* [The reference to regional pottery forms from the 18th and 19th centuries].

In most archaeological publications, findings are often presented using a standard type of drawing that includes a theoretical cross-section of the pot. This approach illustrates the interior features on the left-hand side and the external appearance on the right, enabling detailed comparisons of the pots' characteristics and design. Building on this approach, I applied similar methods while developing the forms of clay vessels in my pottery practice. This process has proven valuable in deepening my understanding of the variations in British pottery throughout history and how cultural influences have shaped these techniques over time.

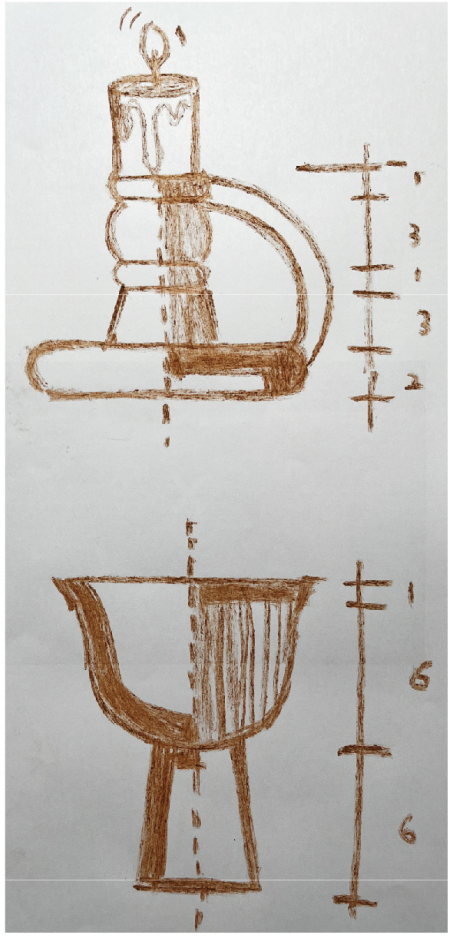
Plate and Potting, the former referencing the Samian pottery form



Roman Bowl and Milk Pan, the latter referencing Surrey domestic earthenware



A bottle inspired by the pottery style of Sussex



Referring to Midlands Yellow Ware from the 16th to 17th centuries

Photo:
Tseng, S-N. (2024) [Photos of drawings using terracotta clay as a pigment to illustrate the body scale of tableware].