40 LEADENHALL STREET, LONDON,

Proposed wind mitigation sculpture

Initial concepts

April 2023

Work in Progress





1.0 THE COMMISSION

1.1 BACKGROUND

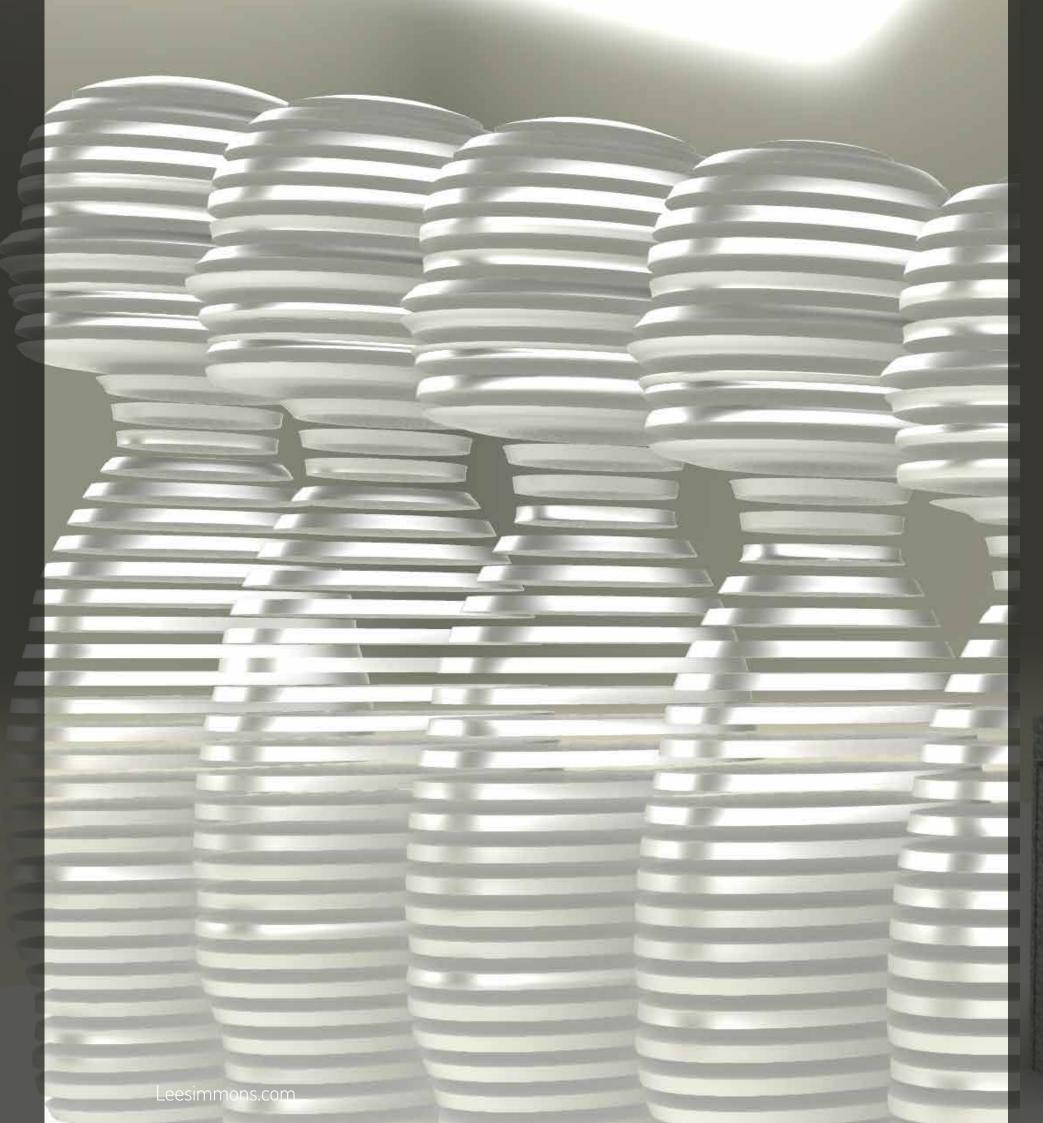
The development was granted planning permission in 2014, with mitigation measures comprising two trees on Leadenhall Street and a screen on Billiter Street informed by wind tunnel tests undertaken in 2013. These mitigation measures were secured by a planning condition which states that 'no construction work shall take place until de-tailed design of all wind mitigation measures has been submitted to and approved in writing by the Local Planning Authority'. Please refer Arup report "Details to Discharge Planning Condition 8, Planning Permission Ref. 13/01004/FULEIA 13th December 2019" for further details.

1.2 BRIEF

The developer of the project Nuveen Real Estate have engaged with Artist Lee Simmons to undertake initial concepts for a site-specific art installation that looks to take the briefing and findings of the Arup report noted above that recommends how wind migration and pedestrian comfort could be achieved on Bilter Street via a screen. Taking this initial design criteria as the bases for how the Artist will ensure that any artistic proposal will look to meet the wind mitigation recommendations outline, in conjunction to ensure the footprint of the sculpture remains within the red line demise of the development and take into consideration the hostile vehicle mitigation bollards that are located with the adjacent area. In conjunction to the building facade being able to be free and clear for cleaning and maintenance and allow clear access for the Local Authority to also maintain the street light that is situated above the area of the proposed wind mitigating Art installation.



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2.0 SITE & CONTEXT

40 Leadenhall Street The development between Leadenhall Street and Fenchurch Street, has been developed to form a range of buildings from 14 to 34 storeys and retaining the Grade II listed building of 19–21 Billiter Street,

The proposed wind mitigating art installation will be suited on the corner of Billiter Street sitting on the corner where Billter Street meets Leadenhall Street. The ground floor of 40 Leadenhall Street comprises of a wall of glass on the lower ground floor and refined stainless steel mullions that offers a clean back drop and canvass to give space for the proposed wind mitigating art installation that can take on a more human scale in connecting with the street scape and bases by.

The scale needs to be closely considered to be in keeping with some of the key visual markers of the facades gridlines however strike a balance with retaining a human scale.

3.0 CONCEPT

The initial concept looks to take the inhabitants of the city and their movements and daily activities at a street scape level as the bases for its initial starting point. Capturing the movement of the human form in motion on the move, coupled with the effects of taking the study of fluid dynamics to interact with the solid forms and sculpt, elongate, and remove sections of the forms. The initial forms and studies have evolved through a series of long exposure images and still studio photography that have been digitally manipulated with the interaction of fluid dynamics.

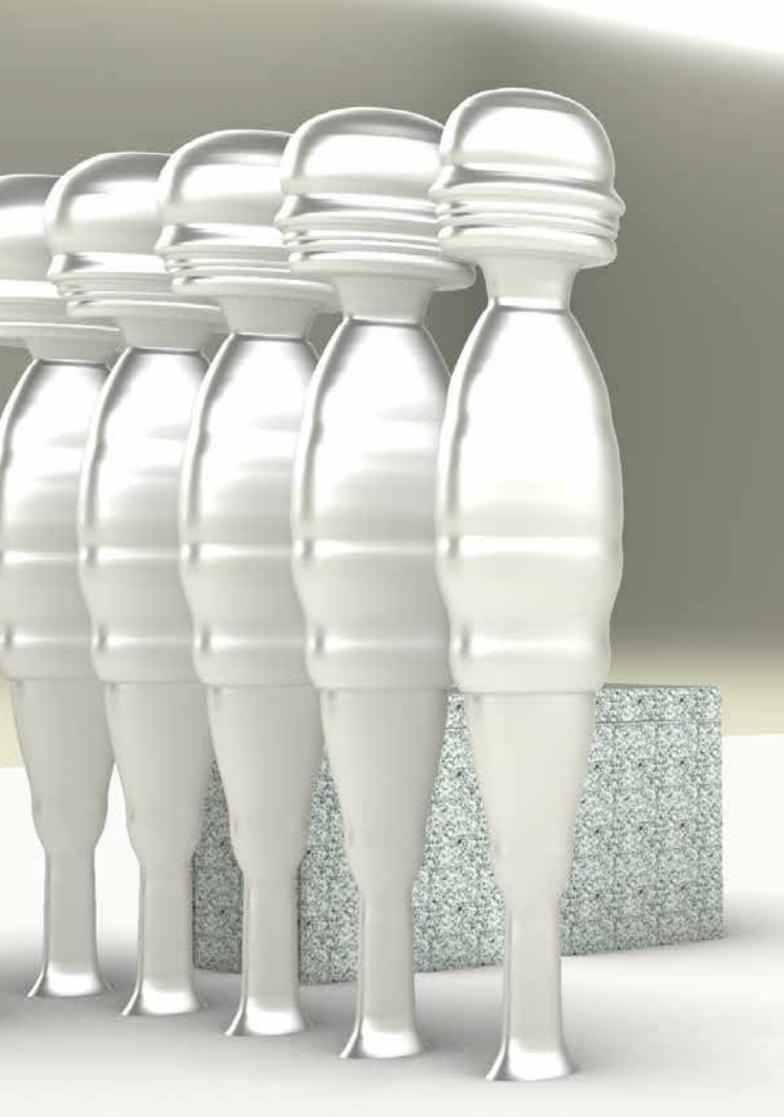
3.1 MATERIALS

The proposed materials for the sculptural forms are initially centred around looking at cast stainless steel or aliminium with a shot blasted finish. Material samples will be undertaken though design development.

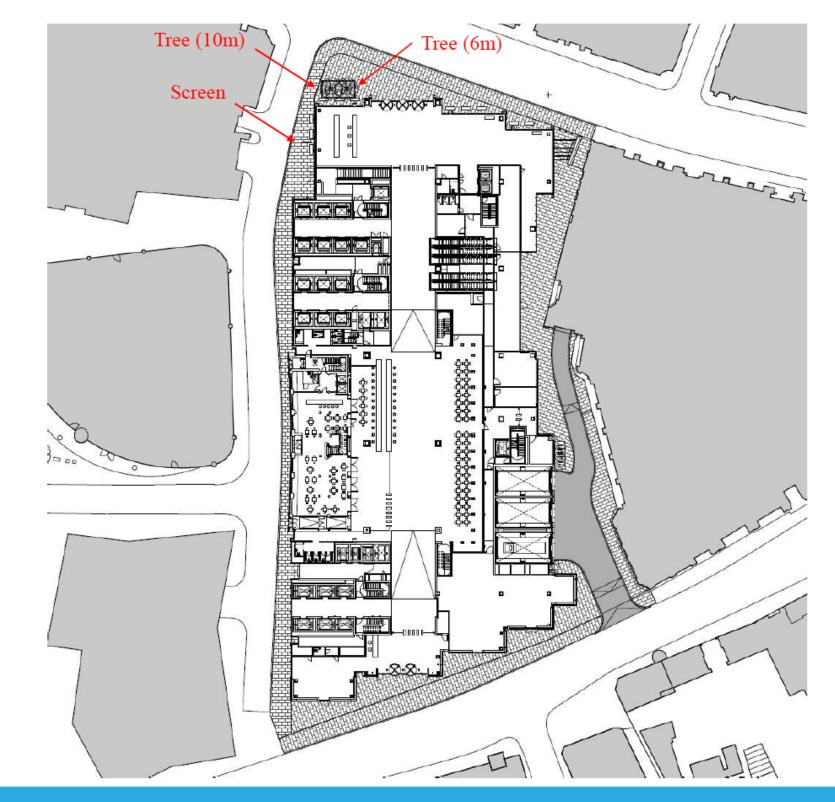
3.2 SCALE

There are currently several working designs ranging from 1.8m > 2.6m in height



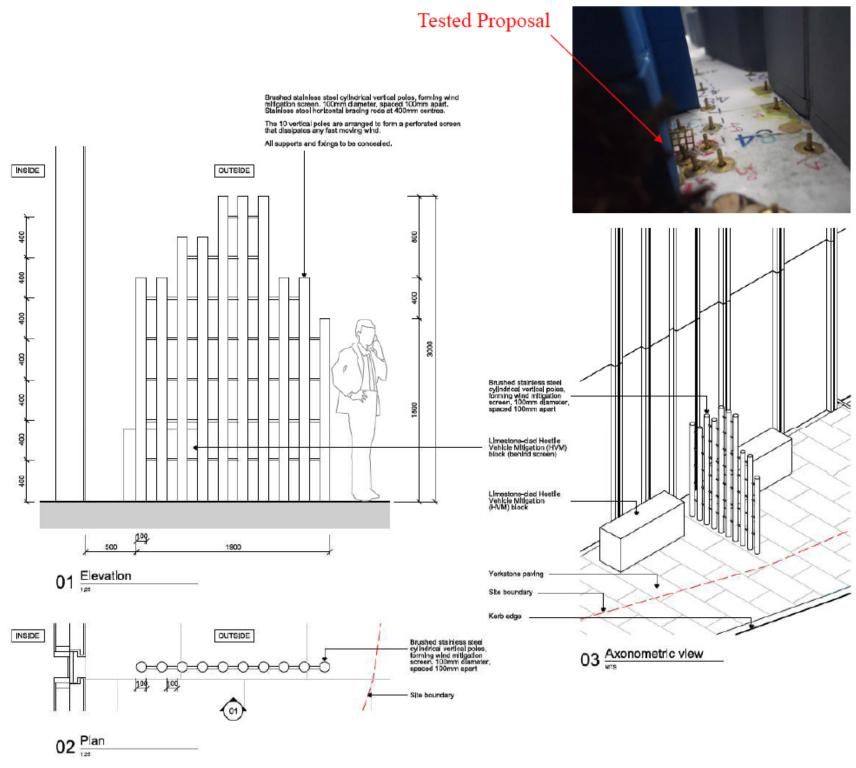


Ground Floor Plan View. Position of Mitigation



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Detailed Screen Proposals



ARUP

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A screen of 2m x 2m (50% solid) was wind tunnel tested and presented in the planning application.

Subsequent testing in 2015 demonstrated that ground level windiness within Billiter Street is not sensitive to the precise shape of the screen ('square' vs 'stepped').

The current proposal is that the screen will be made of equally spaced elements with circular cross section, with maximum height of 3m. The horizontal spacing between circular elements is 0.1m. The overall width of the screen is 1.9m.

Increasing the height to 3m and using a stepped configuration is not considered to have a detrimental effect on windiness within Billiter Street.

The vertical elements are tied together (to mitigate possibility of vibration).



XET

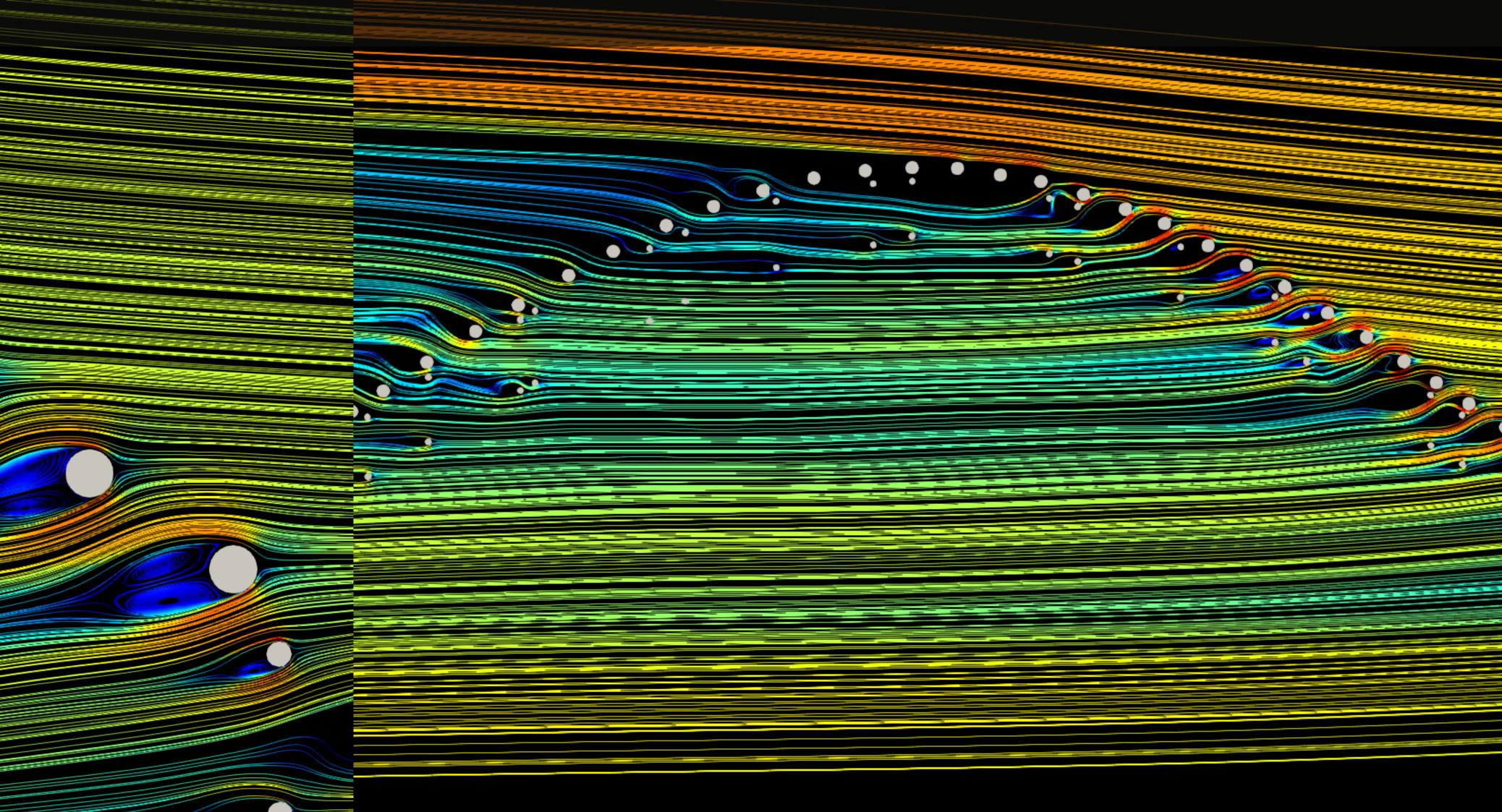


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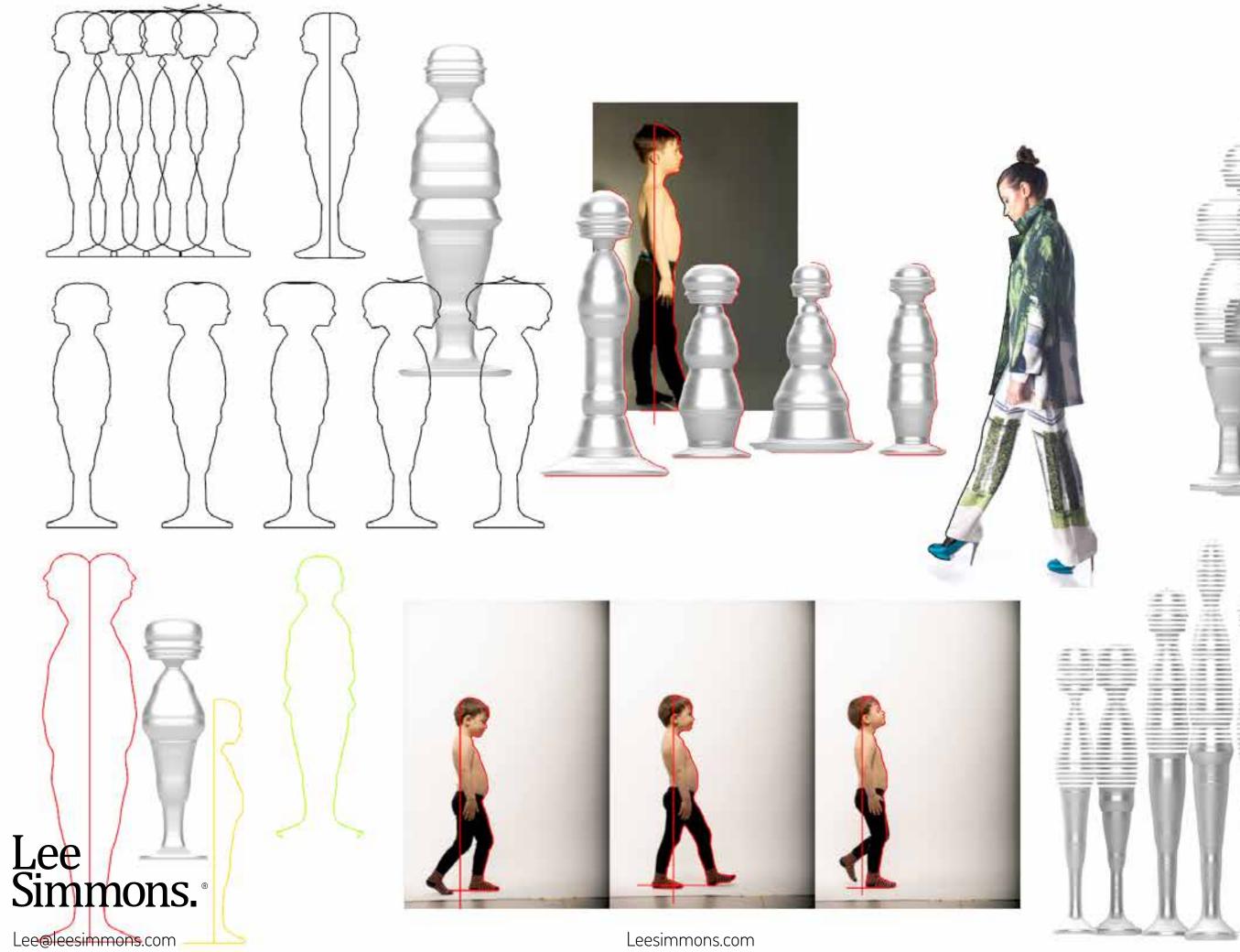


5.0 FLUID DYNANIMCS AND INTERACTION STUDY





5.0 INITIAL SKETCHES AND STUDIES



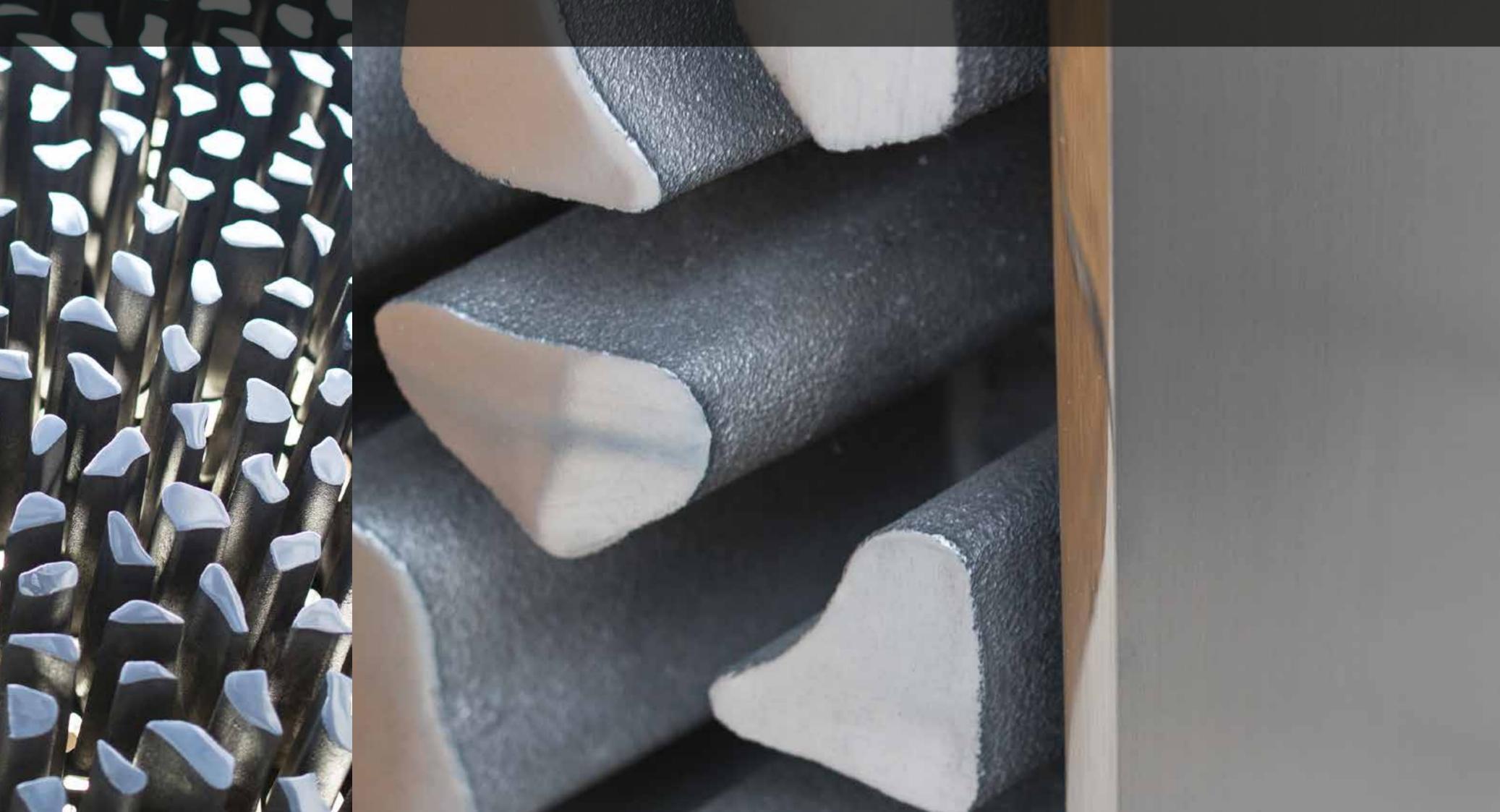
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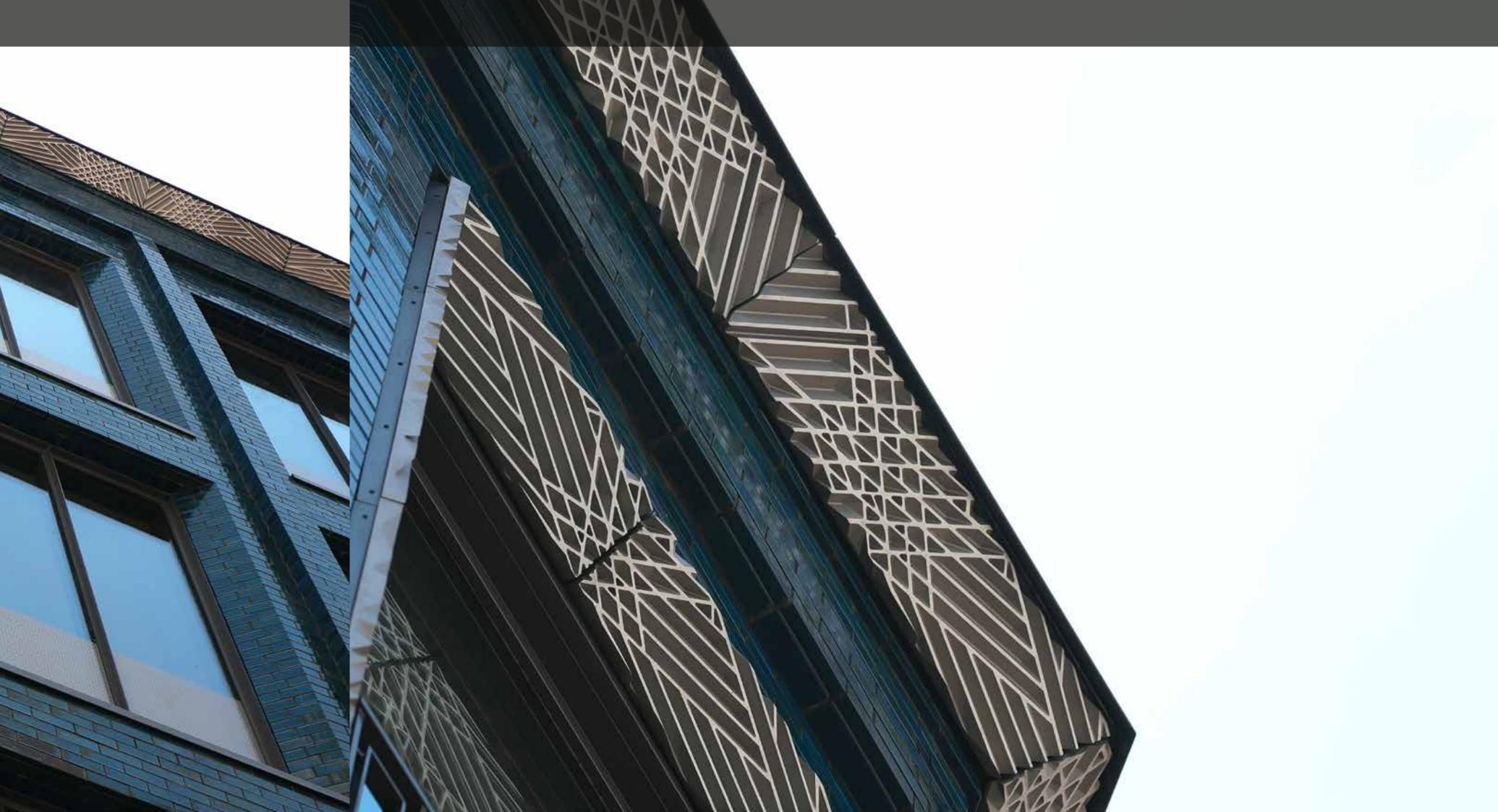




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LOCATION

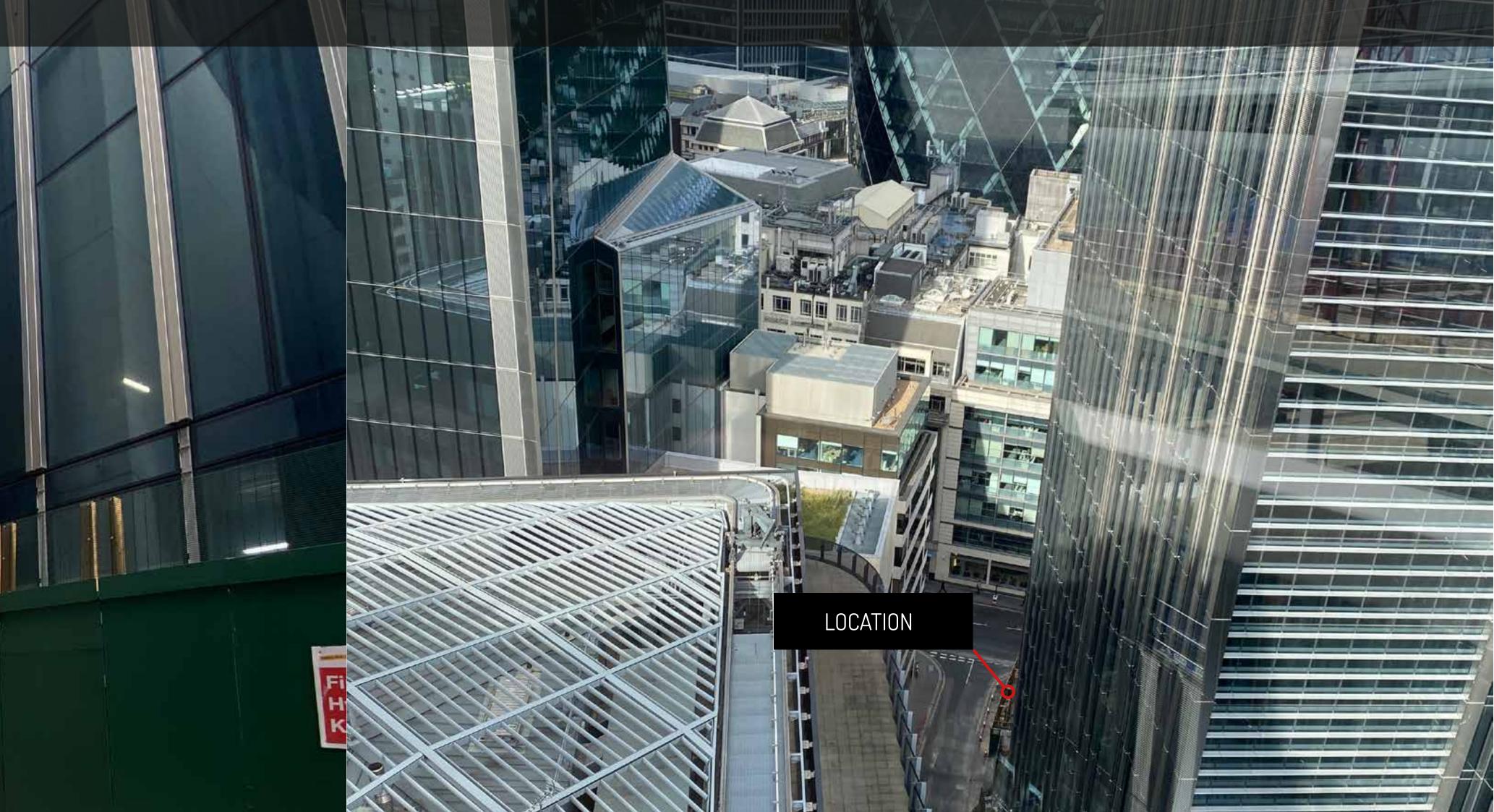
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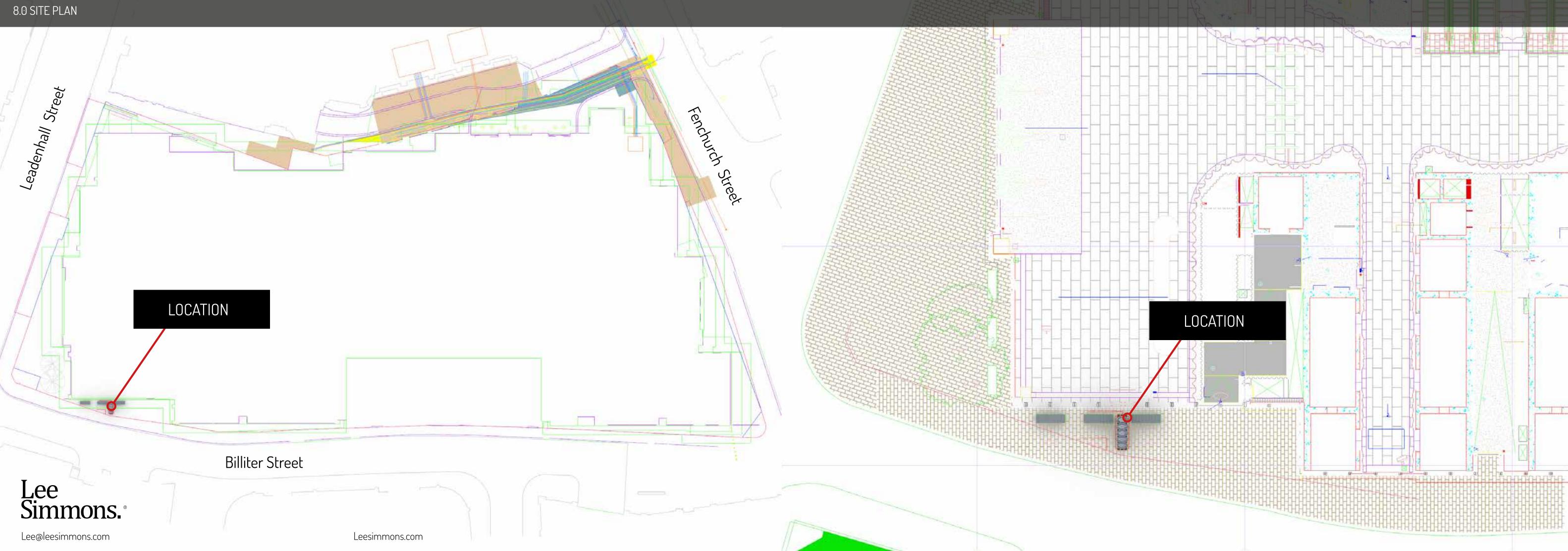


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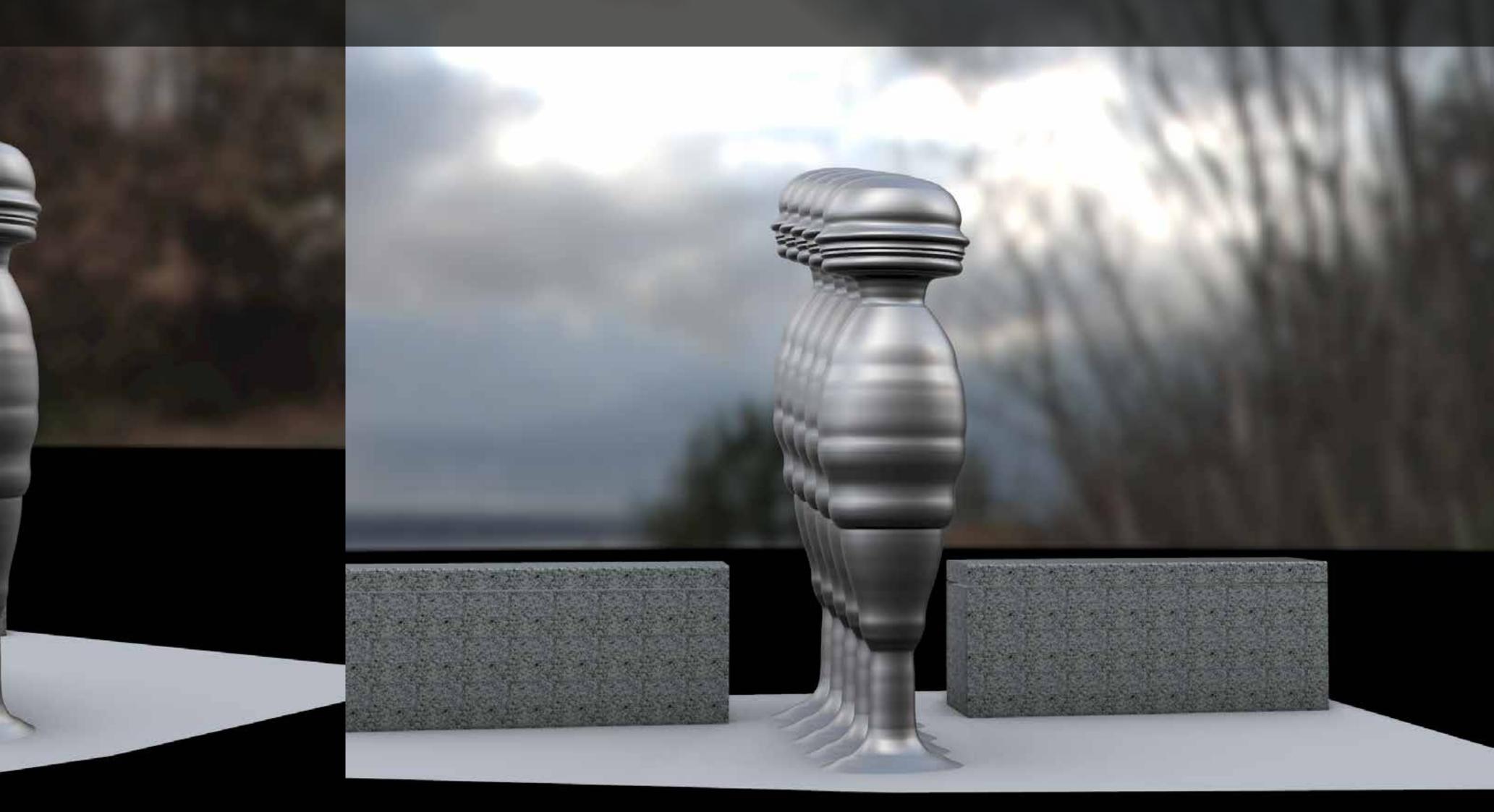




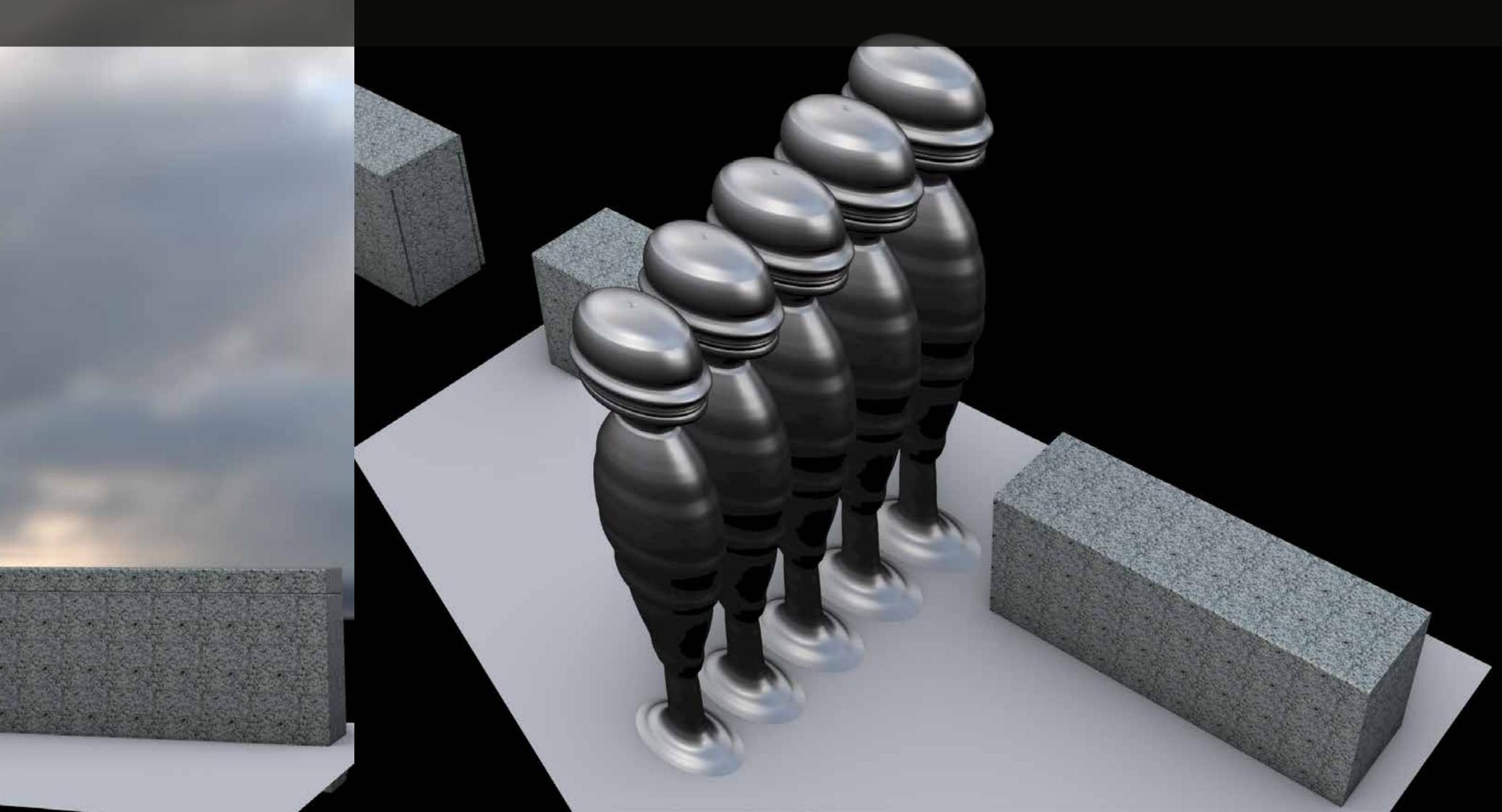


9.0 INITIAL FORM STUDIES_VIEW 1 & 2





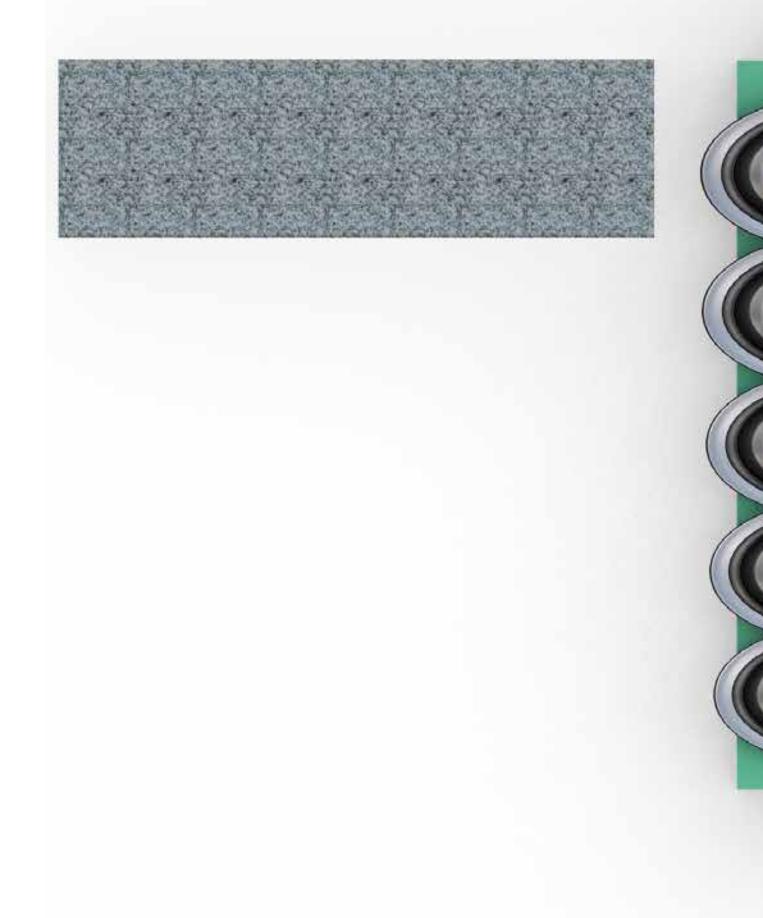


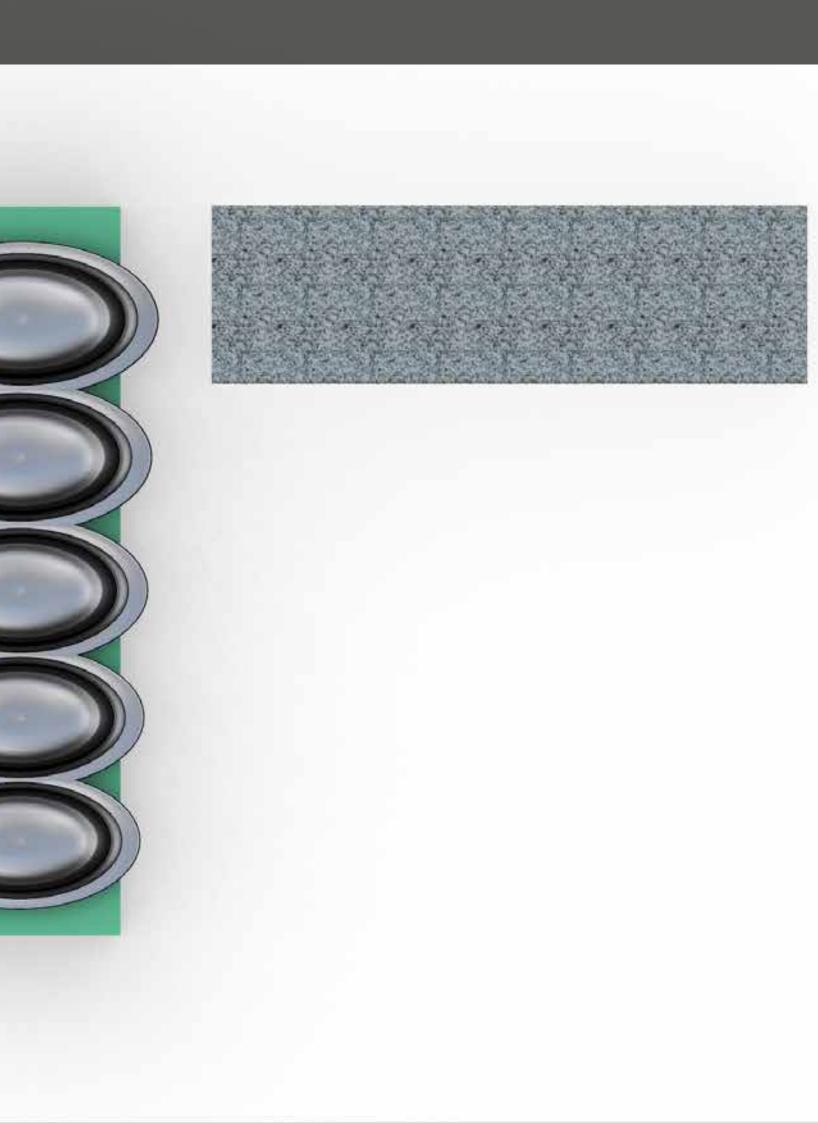


10.0 GRAPHIC OVERLAY OF PROPOSED SCLUPTURAL FORMS VS APPROVED WIND MITIGATION_VIEW 1 & 2



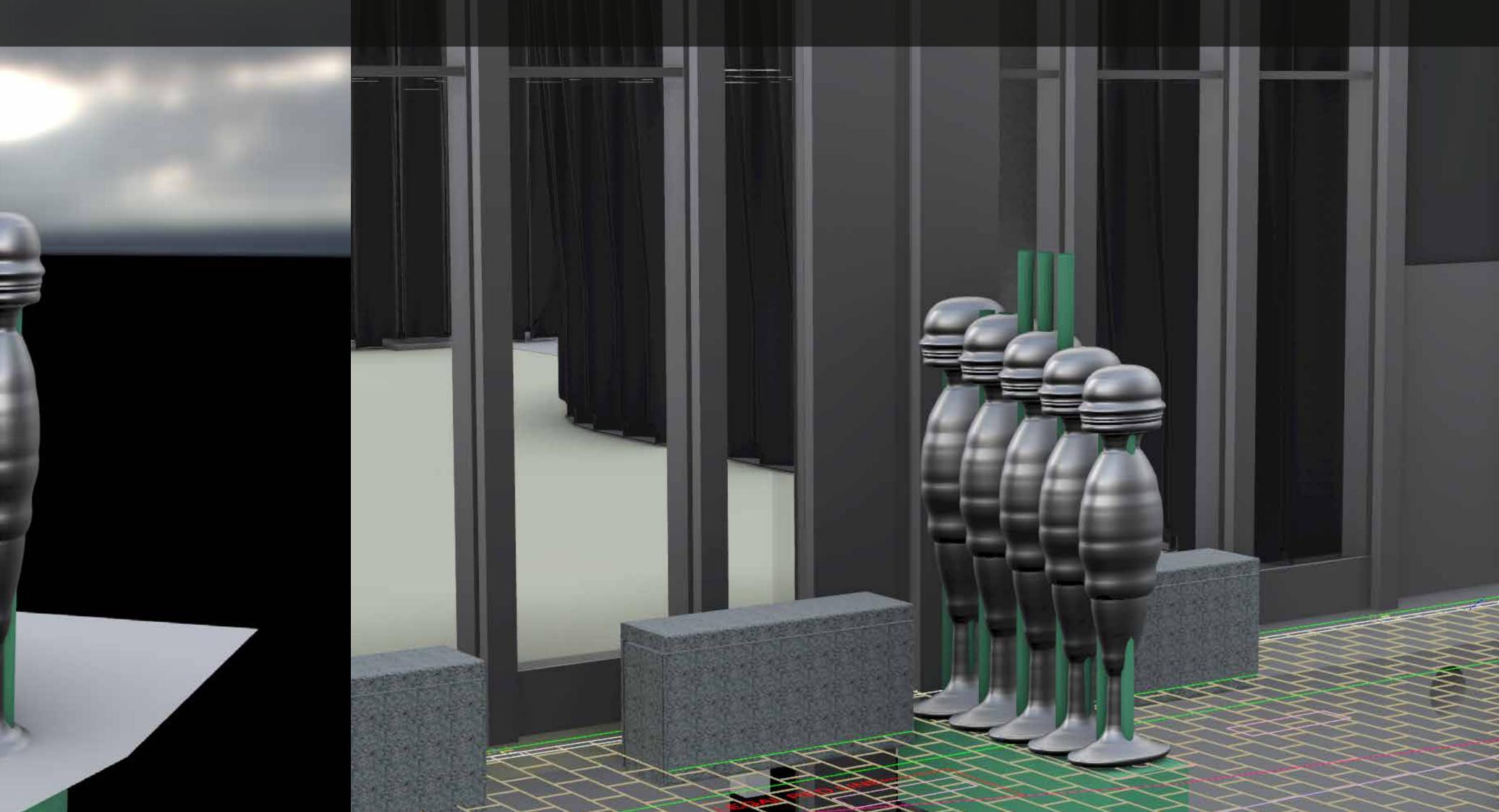






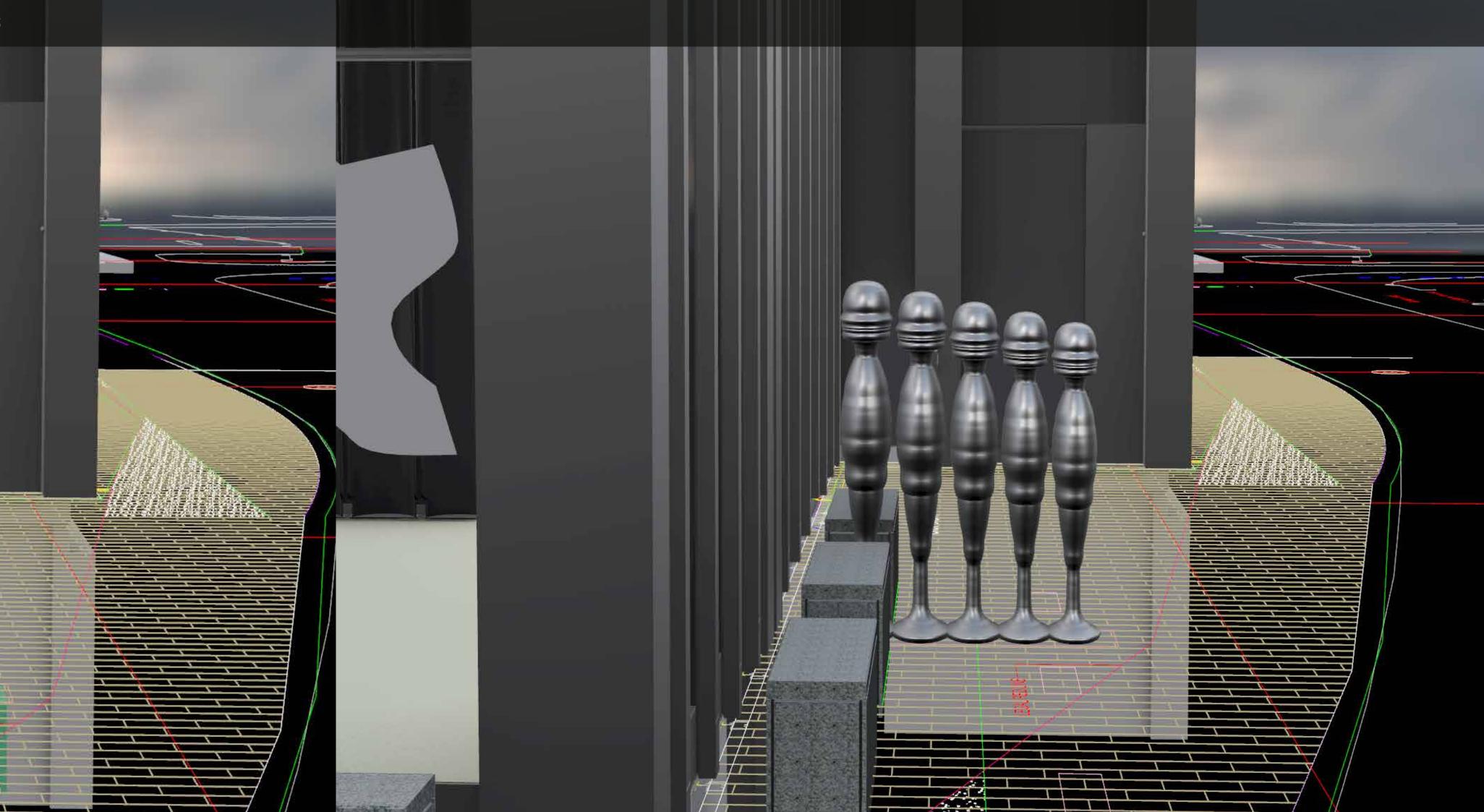
10.0 GRAPHIC OVERLAY OF PROPOSED SCLUPTURAL FORMS VS APPROVED WIND MITIGATION_ VIEW 3 &

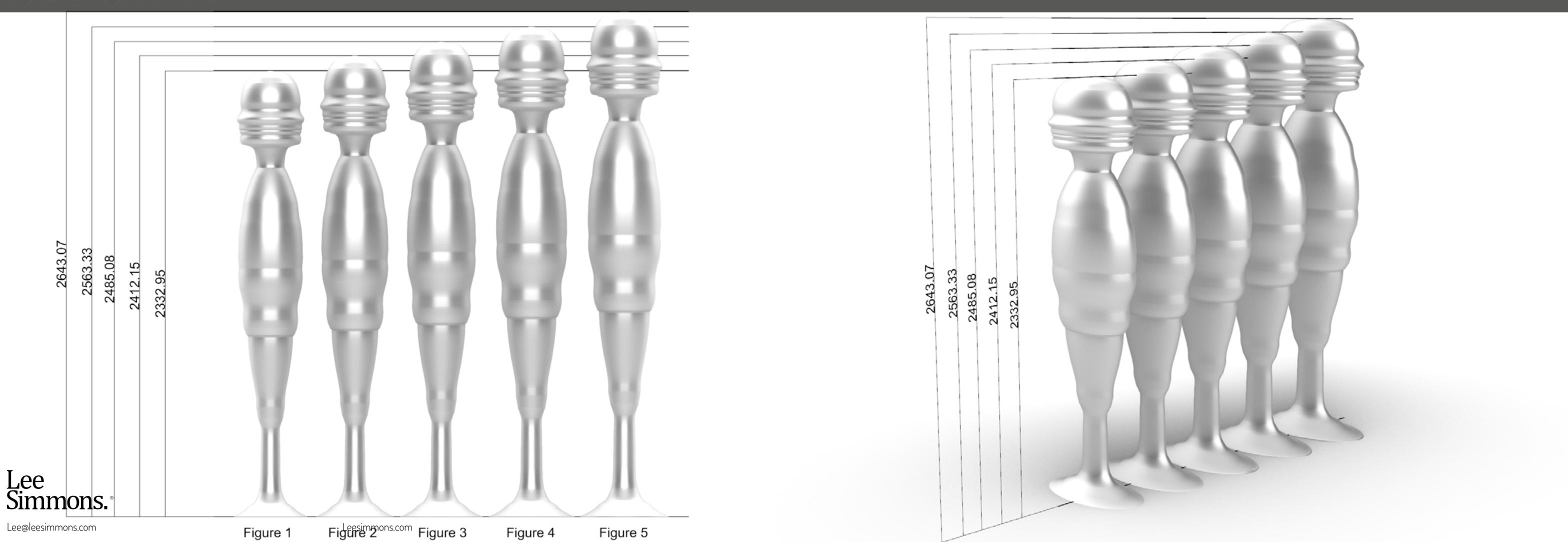




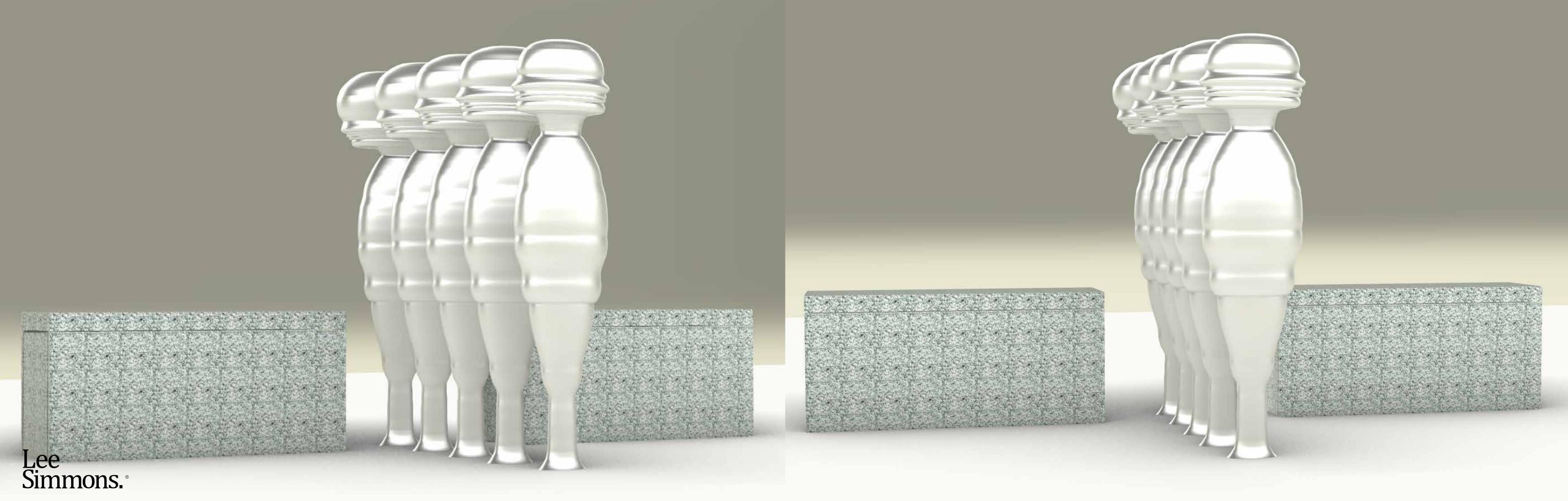
10.0 IN CONTEXT: GRAPHIC OVERLAY OF PROPOSED SCLUPTURAL FORMS VS APPROVED WIND MITIGATION_ VIEW 5 & 6







11.



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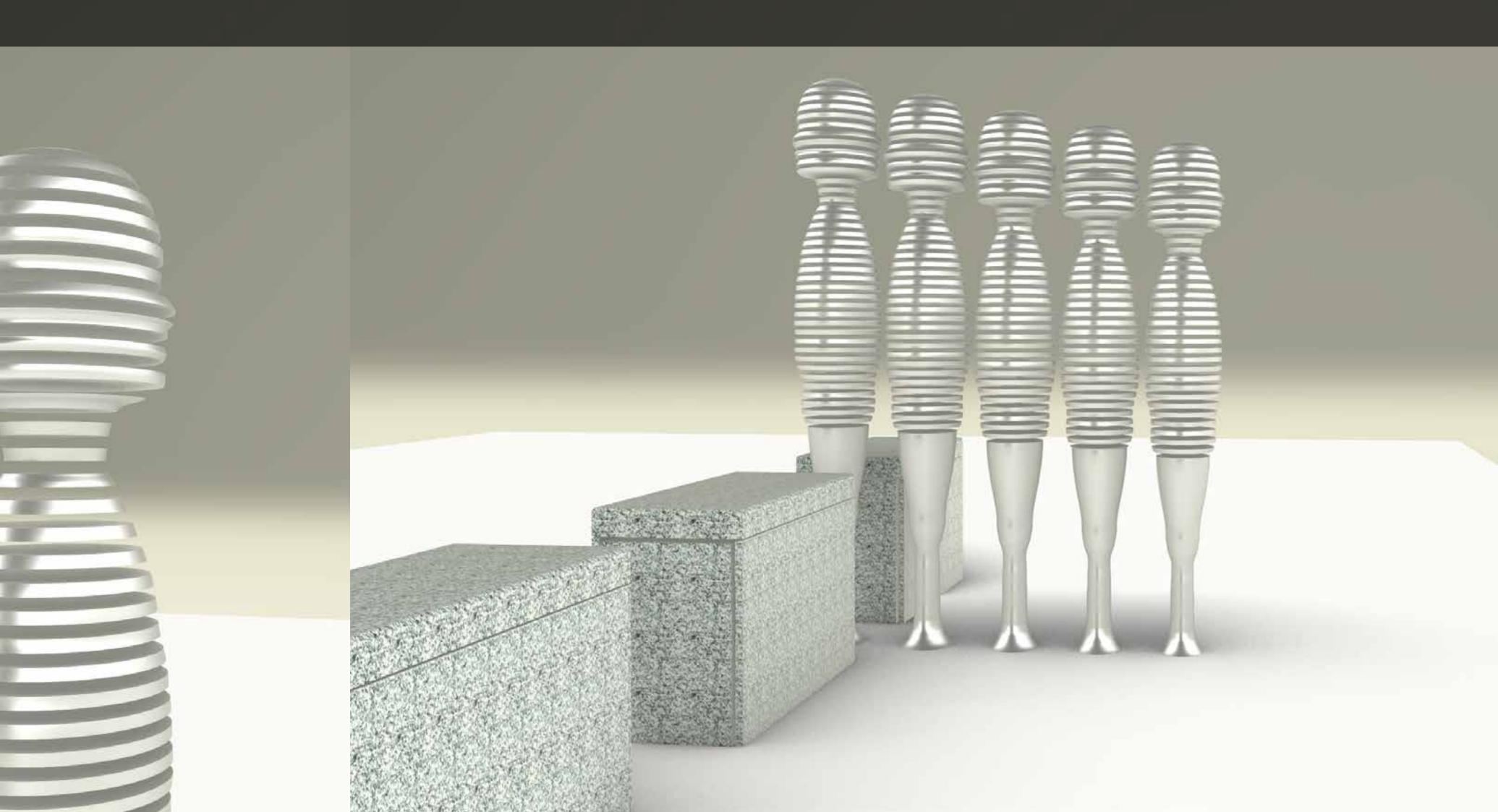
12.0 INITIAL FORM STUDIES – $001 _$ VIEW 3 & 4

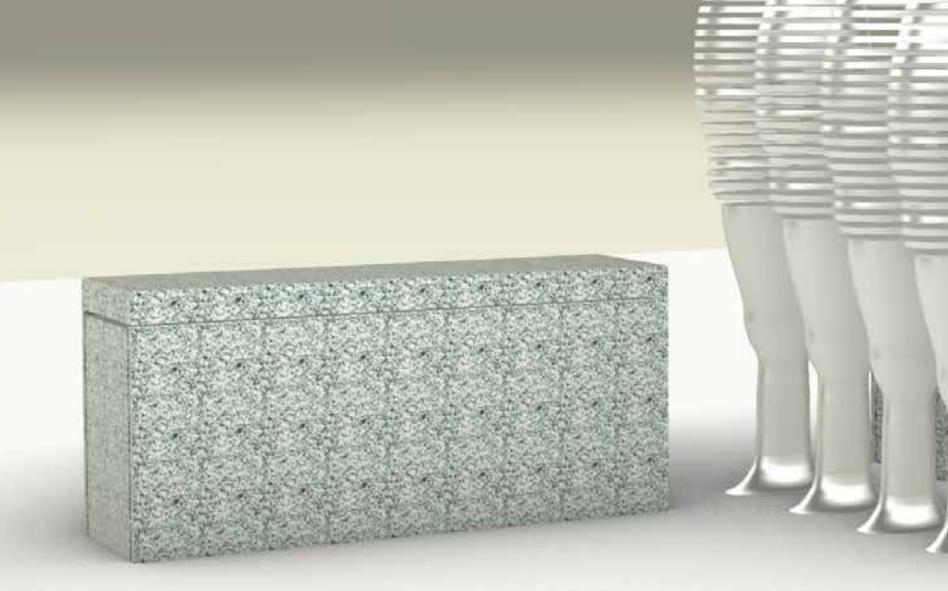


13.0 INITIAL FORM STUDIES – 002 _ VIEW 1 & 2



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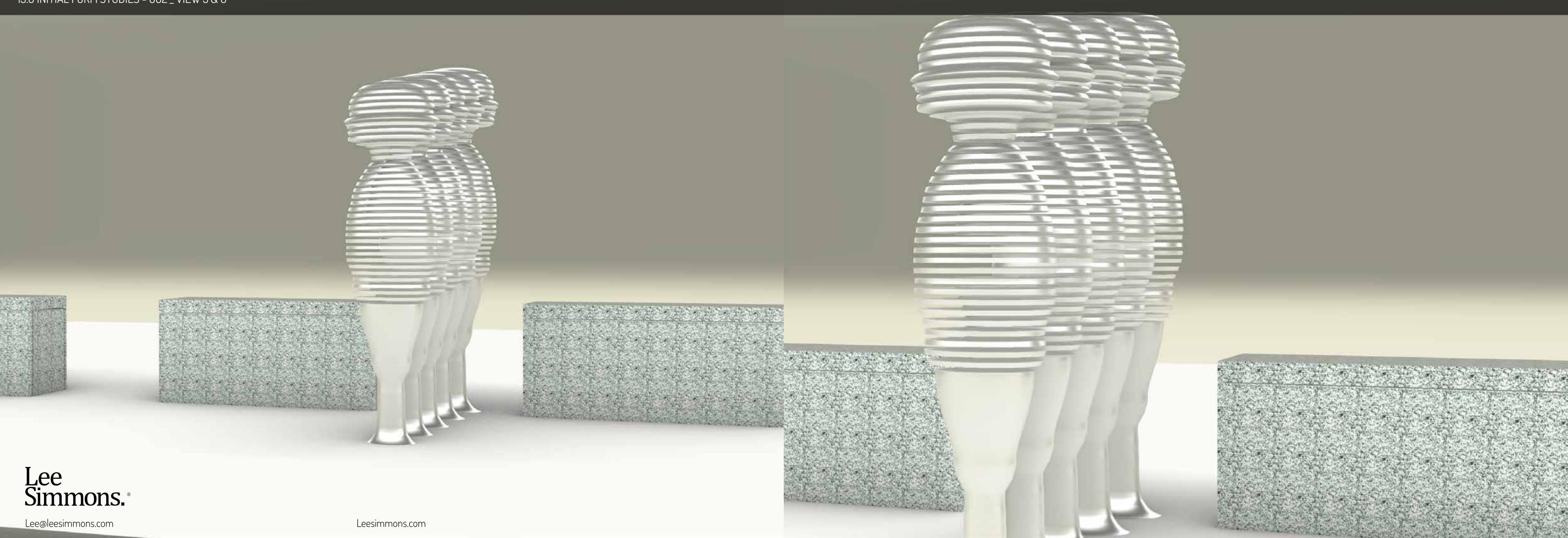






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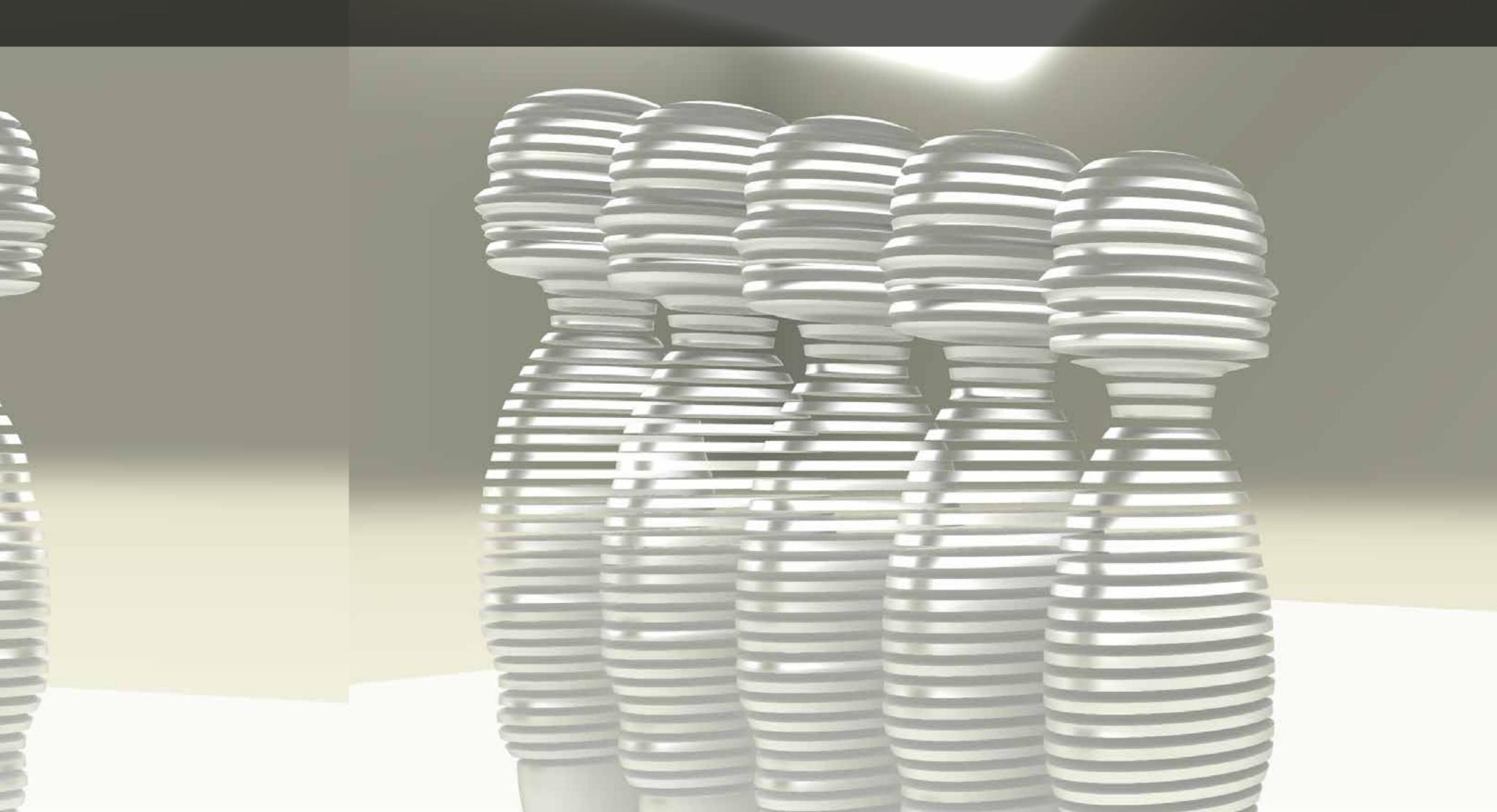




13.0 INITIAL FORM STUDIES – 002 $_$ VIEW 7 & 8



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14.0 ARTIST: LEE SIMMONS - Examples of the artist work

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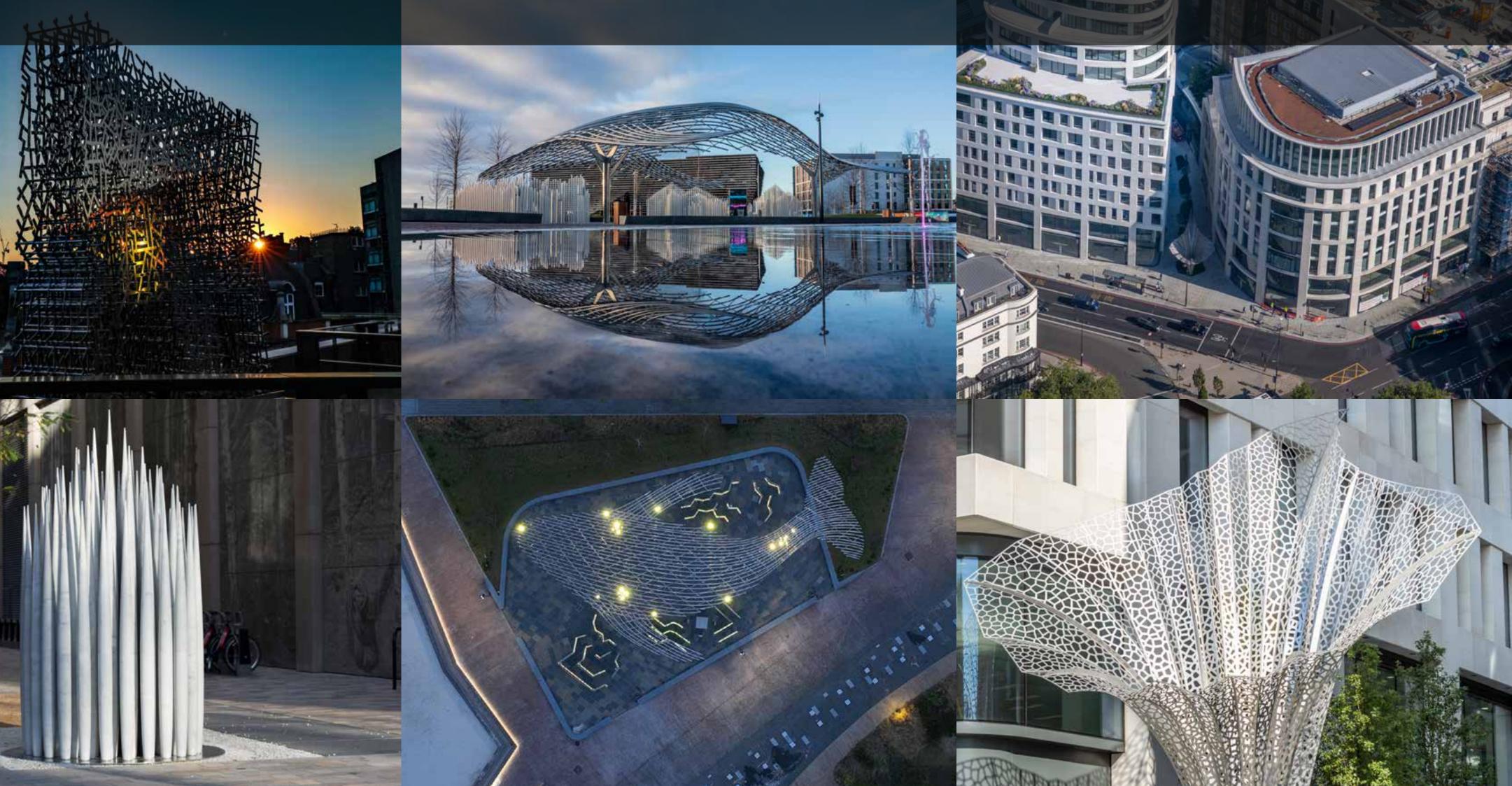
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ACTIONANULLEDING



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Lee Simmons

"The theory of a synthesis that brings together art, architecture and design." Lee Simmons induces this relationship and works between these blurred peripheries.



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Biography

	D.0.B		31st December 1987		20
	1999-2006		The John Henry Newman School		
	2006-	2000	Sheffield Hallam University		20
	2000-	-2003	B.A. (Hons) 1st Class Hons		20
	2009-	-2011	The Royal College of Art		20
	Collec	tions			20
	-				20
9	2012	The Worshipfu	l Company of Saddlers	A silver lectern to celebrate her Royal Majesty's Diamond Jubilee.	
	2011 The Royal Coll		ege of Art	Final show piece was purchased by the col- lege for their permanent collection.	20
	2010	10 Sheffield Town Hall		Commission by The Lord Mayor of Sheffield.	20
	2008	Millennium Gal	llery Sheffield	Commission for permanent collection.	20
	Commission Highlights				A٧
	2021	Tay Whale Waterfront Place, Du	Indee	36 Meter Whale sculpture on the banks of the River Tay.	20
	2021	Circadian Marble Arch Place, Le	ondon,	Sculptural installation at the gateway of London's westend.	20
	2019	Atrio Regent's park, Open	Air Theatre, London	Sculpture to celebrate the life of the director of the theatre.	20
	2018	Novum Increm The Wellesley Hotel,	nentum Knightsbridge, London,	Sculptural cast bronze screen for private cigar terraces.	20
	2018	The Wall of Far The London Palladiu	ne m, Great Marlborough Street, London	Facade installation / restoration to Great Marlborough Street.	
	2018	Quadrilinear 66 Wigmore Street, I	London	Sculpture to new building in Marylebone	20

- 018 Dendrite 40 Beak Street, London,
- 018 Great Portland Estates Tasman House, 55 Wells Street, London
- 17 The Ladbrokes Trophy Newbury Racecourse
- The Great War Memorial
 Westminster City Council, 66 Victoria Street, London
 Grandioso
 77 Wimpole Street, London
- 12 Lectern The Worshipful Company of Saddlers
- D12 St. Leger Stakes Trophy Doncaster Racecourse
- 11 Confessions at the Bench Royal College of Art
- 009 Sheffield Hallam University Retiring gift for Dean of University

ward Highlights

- 022 PSSA Marsh Awards
- 11 Armourers and Brasiers Award
-)11 Theo Fennel Award (Best Work in Silver)
- 010 Goldsmiths Craft & Design Council Awards

009 Winner of the Goldsmiths New Designers Award

Sculptural cast aluminium Frieze to new building in Soho.

A Portland stone sculpture to the entrance of the new building.

Perpetual winners trophy.

To commemorate council members who fought and died during WW1. Sculptural gate for new building.

Reading lectern for silver collection

Winners rose bowl trophy.

Degree show piece, now part of the RCA permanent collection.

Silver chalice / 'Reflection Cup' - sterling silver & silver gilt

- Shortlist excellence in public sculpture 'The Great War Memorial'

- RCA Show

- RCA Show

- Gold Award Best Junior Award

- Gold Award 3D Design Silversmith
- Gilian Packard Award

- Winning student from all graduates in the UK studying Metalwork & Silversmithing.

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