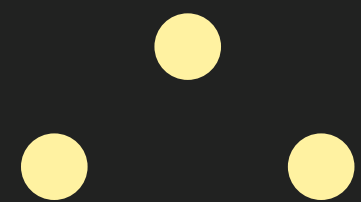


AlterProjects

The Globe Art Wall By ENESS Information for Planning



Project Overview

Artist Profile: ENESS



ENESS is an art and technology company. We design evocative interactive experiences for public, commercial and cultural entities.

Founded in 1997, ENESS has been commissioned to produce and install artworks worldwide for signature commercial buildings; urban and cultural precincts; festivals, galleries and museums of modern art.

ENESS is more than a studio. It is a mindset. It is a belief in the power of providing art in everyday life that fires the imagination; that provides joy, happiness and beauty in unexpected places – transformational experiences that change lives. We produce permanent sculpture; temporary art installations; interactive design outcomes; and artful play equipment.

<https://www.ENESS.com>



Project Overview: THE GLOBE ART WALL



This work uses an iconic element of the television medium to cast a modern metaphor about Manchester.

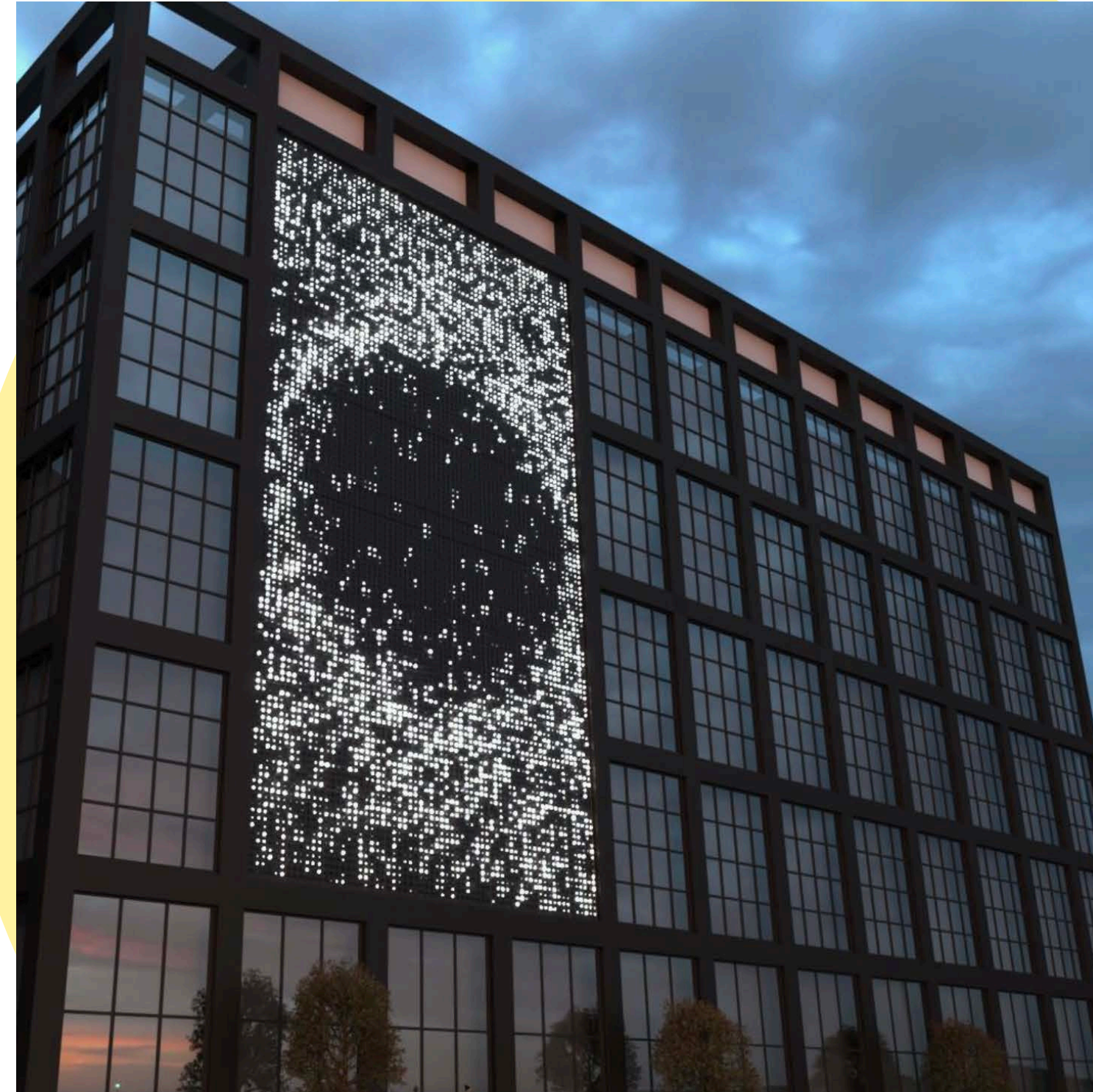
When an analogue TV is not tuned into a channel, it picks up random radio waves from various manmade and natural sources including deep space.

In the same way that your TV tunes into things that are bigger than itself, the edgy, left-field brilliance of Mancunians comes from tuning into the profundity of their local place – its potent, vibrant creative life filled with astounding historical milestones, mercurial thinkers, and maverick athletes.

From this fertile foment, new ideas crystallise. In this way, Mancunians are open, alive and responsive: just like white noise.

Project Overview:

THE GLOBE ART WALL - INTERACTIVITY

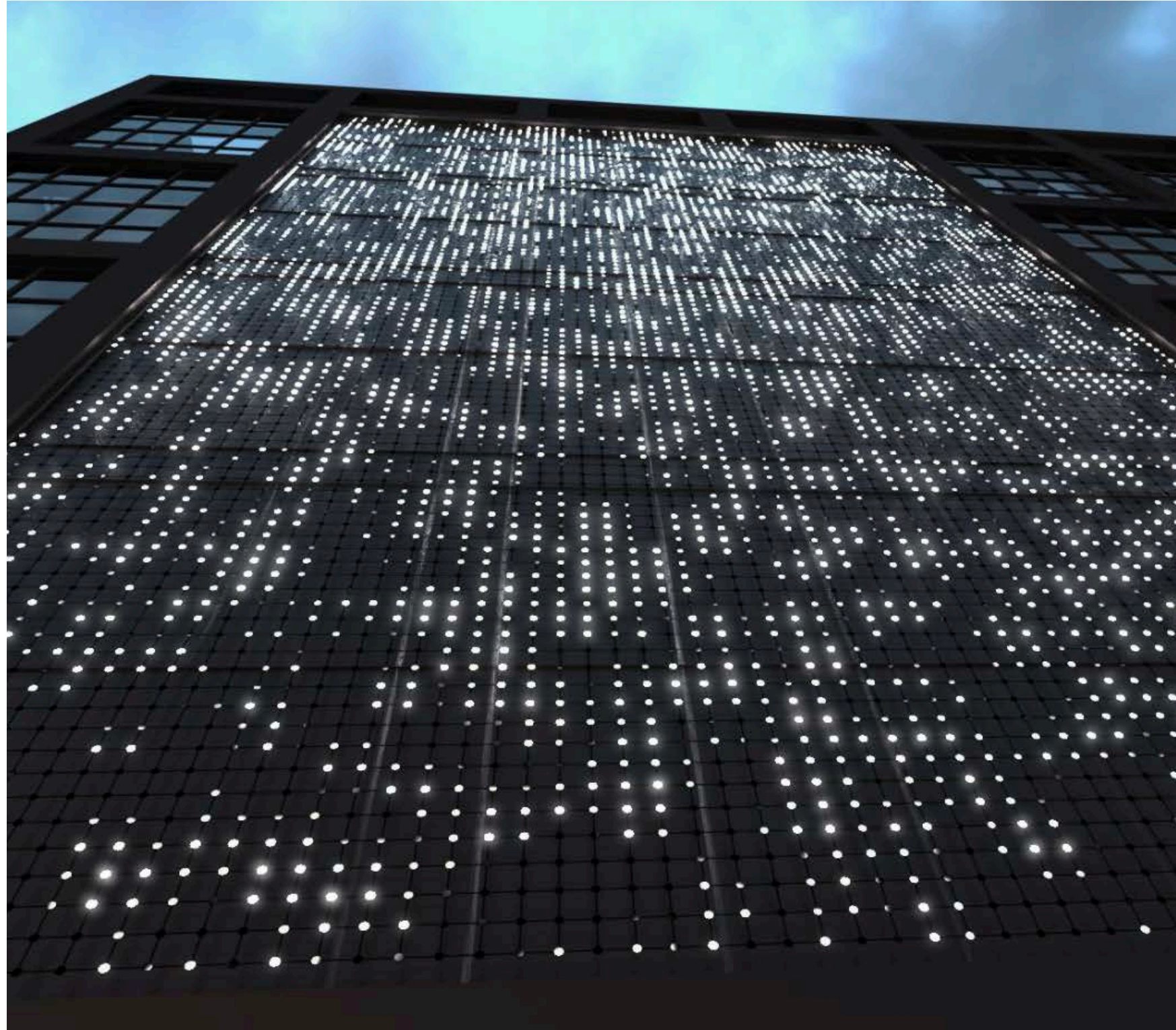
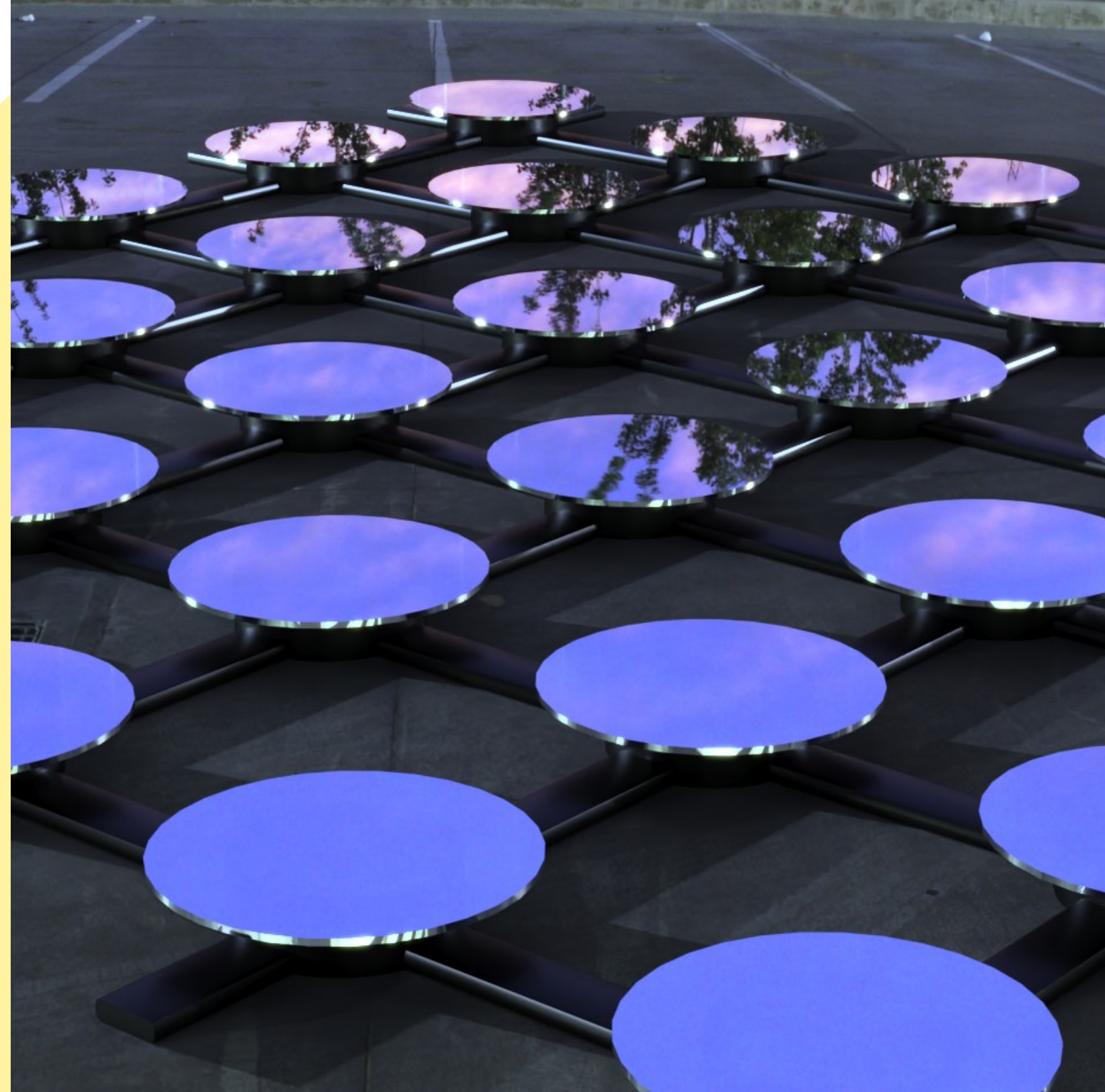
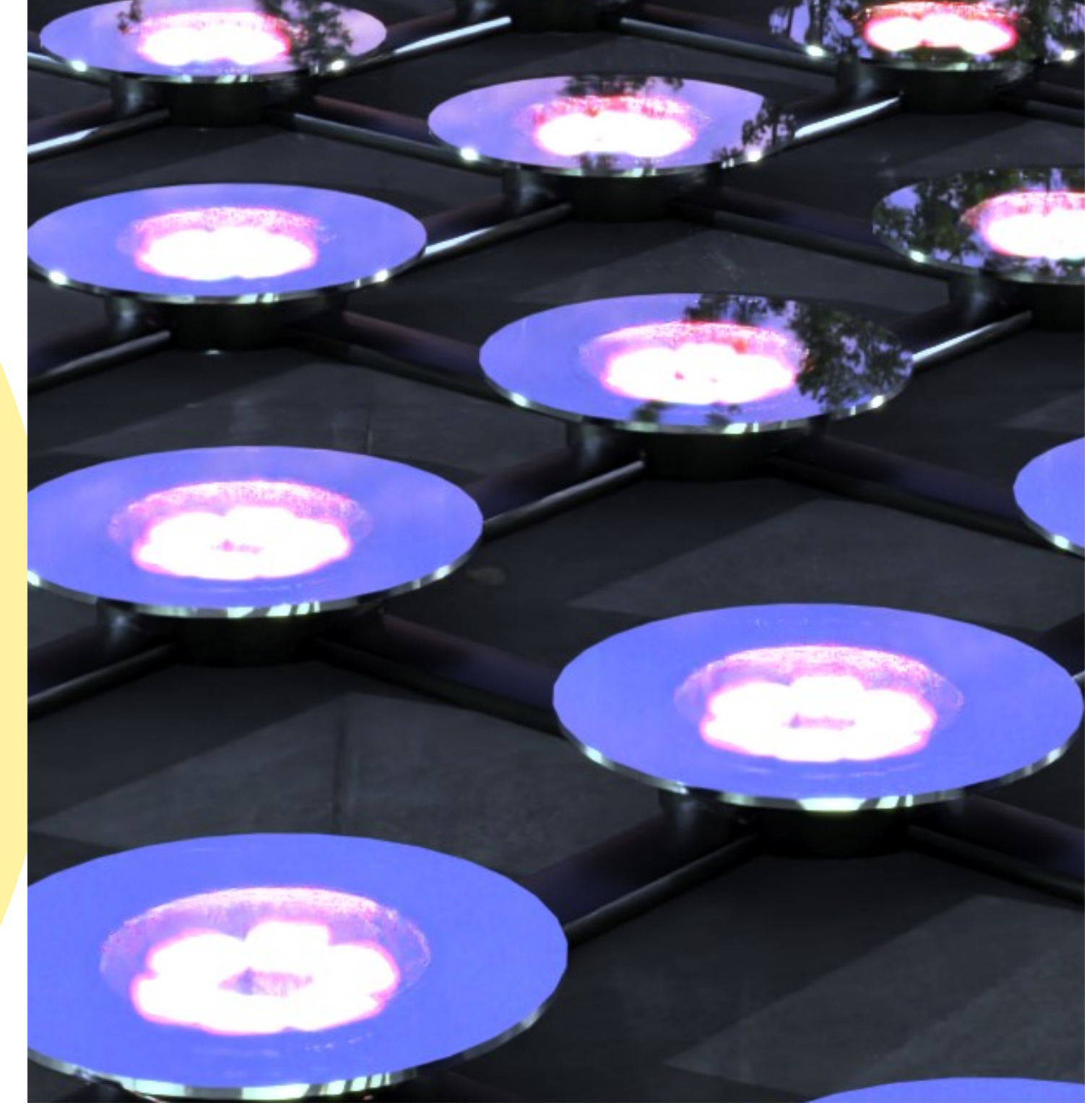


INTERACTIVITY: Images will sporadically emerge from the white noise, signifying the richness of the Manchester scene. The behaviour of the particles will change in response to the movement of passersby – a metaphor for the people of Manchester being the catalyst for creation. Exact content is still in development.

VIDEO LINK: <https://vimeo.com/874659312/94b745751d>

Project Overview:

THE GLOBE ART WALL - MATERIALITY



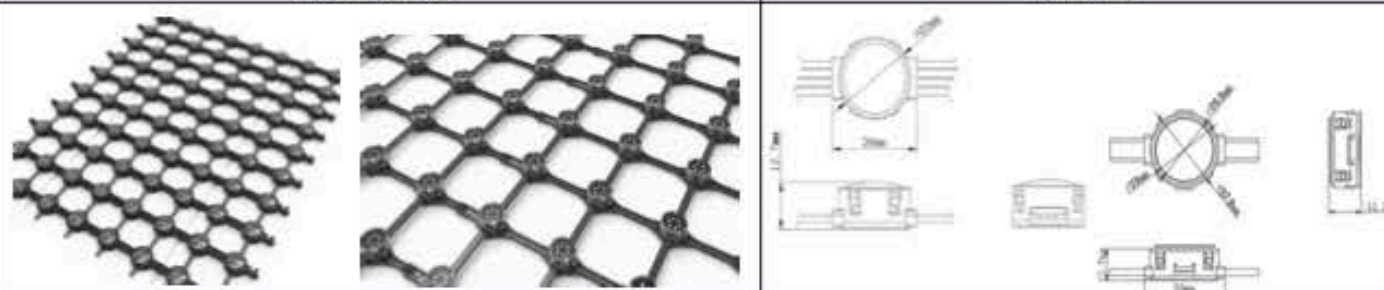
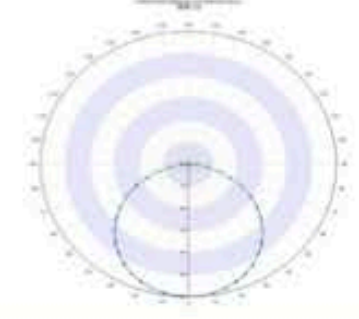
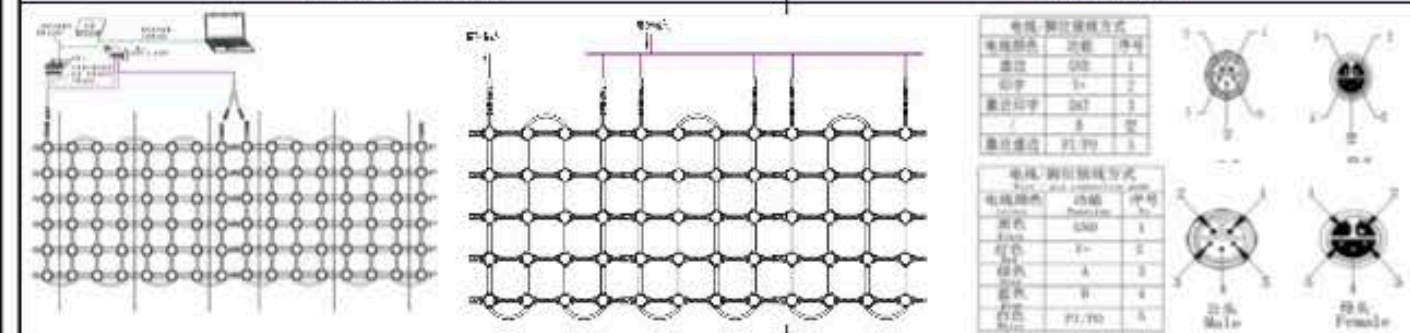
MATERIALITY: LED Mesh Curtain facade, mounted to tensioned stainless steel cables. LED RGB nodes at 200mm spacing, total of 13,500 dots in total.

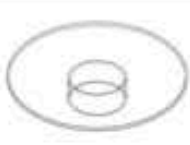
CUSTOMISATION: We will be customising a standard LED mesh with an acrylic cover which has a reflective quality (as you can see above). This will assist in muting yet spreading the light in the daytime, and when the wall is off, will still give a kinetic feeling with the reflections it will pick up from surrounding traffic and light pollution.

Technical

Product Spec and Drawing Pack

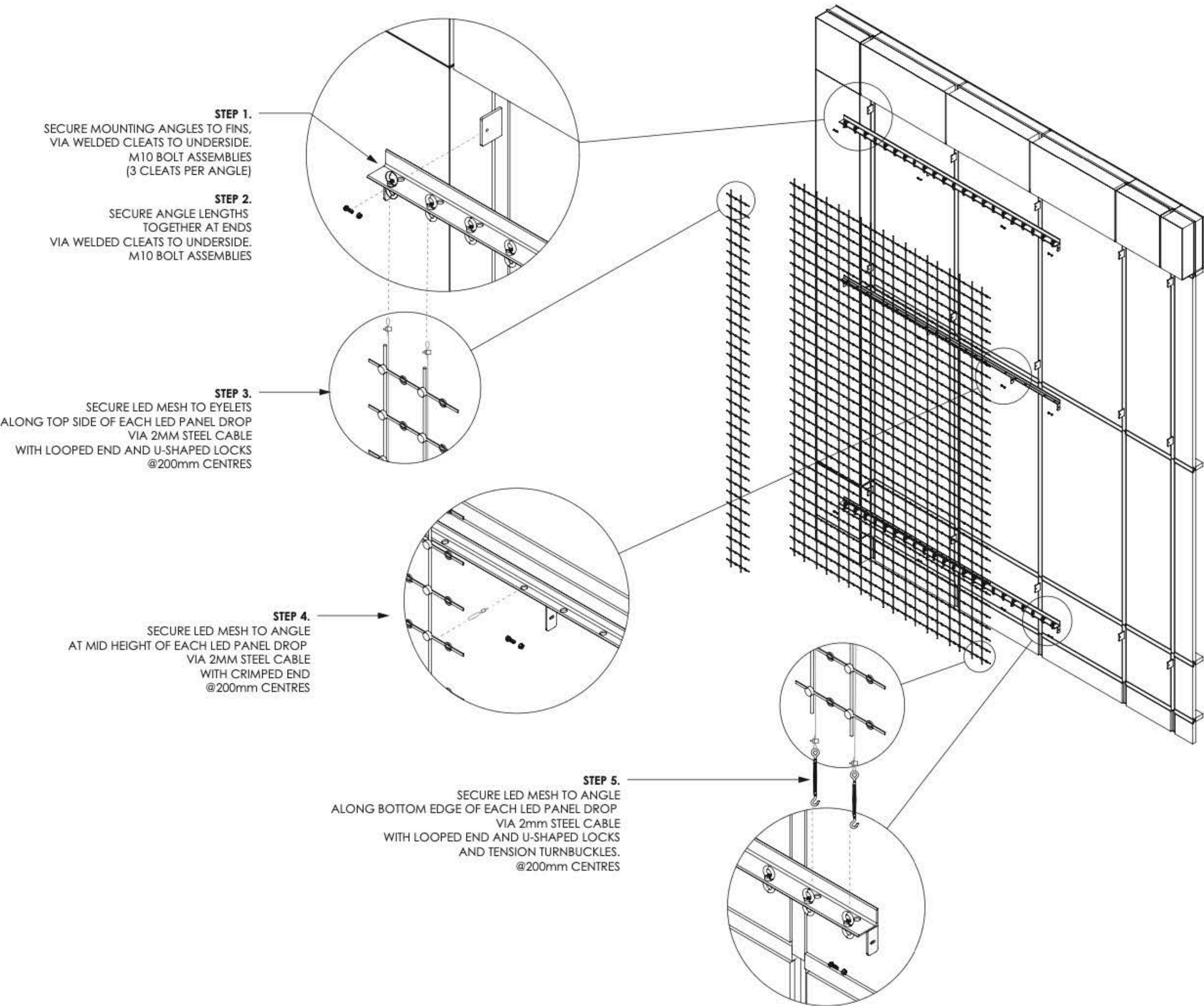
Technical PRODUCT SPECIFICATION

<div><div>SHLED 升宏光电</div><div>Shenzhen SH LED Technology Co., Ltd</div></div>			
Product specification			
Product name	LED point light source for mesh screen	Model	SH-E22/33
Product picture		Size picture	
			
Electrical parameters		Light source parameters	
Rated working voltage	DC12V/24V	LED Qty	3535RGB*2/3535RGB*3/3535RGB*6
Rated power	0.7/1.4W	LED Brand	Epistar/Cree/Osram
Lead wire specification	2*0.5mm²+2*0.3mm²/1.8mm and 2x0.75mm²+3x0.3mm²/2.9mm*9.7mm	Light source life	≥30000 Hr
Line sequence definition	Red: V+ / Green:A /Blue :B/White:PI/PO/Black:GND	Optical parameters	
Optional spacing(mm)	P40、 P50、 P80、 P100/P100 P150 P200	Gray scale	8/16 Bit = 256/65536
Lamps per square meter	625,400,156,100/100,44,25	Brightness	/
Control mode	RDMX512RGB EDMX512RGBW EDMX512W EON/OFF ESPIRGB	Luminous intensity	10.1lm,17.1lm,27.1lm/pixel (change by RGB*2/3/6)
Control chip	UCS512B3/UCS512C4	Wavelength	RGB(R:615-630nm G:525-545nm B:460-480nm)
Pixel segment	R1 E6 E8 E10 E12 E14	Color temperature	/
Mechanical parameters		LED Beam	110°±10%
Body	94-V0 Flame-Retardant PC	Color rendering index	CRI 94 minimum with R9 > 85
Cover	94-V0 Flame-Retardant PC	Lighting Distribution	
Shell color	Black or Light grey		
Net Weight(single pixel)	10.8gram/29.2gram		
Others			
Oper Temp	-20℃~+60℃		
Storage temp	-40℃~+75℃	Wiring diagram	
Degree of Protection	IP67		
Installation method			
			
批准: 审核: 制表: 王斌			

<div><div>SHLED 升宏光电</div><div>Shenzhen SH LED Technology Co., Ltd</div><div>TEL : 0755-28015568 WEB : www.szshled.com</div><div>Project budget list - P200/HDMI</div></div>					
Client Name		ENESS		Project	
Link		James Ogilvie		SH Link	
Tel/email		james@eness.com		Tel	
No	Item	Pic ref.	Data	Unit	QTY
1	LED mesh screen - E33 P200		RGB-Cree chips*4/RGB/DMX/DC24V/1.2watt/200mm pitch/Input and output M16F 5 core male and female connector 150mm length/IP67/25dots each sqm and 13,500 dots in total	sqm	540
2	Mold cost of top cover		MATERIAL : MIRROR FINISH PLASTIC THAT ALLOWS LIGHT TO PASS THROUGH - RECOMMENDATIONS? REQUIREMENTS : PLASTIC TO BE UV STABLE AND WITHSTAND DIRECT SUNLIGHT OUTDOORS FOR 10 YEARS +	set	1
3	MR-MC02 Master Controller/HDMI input version		1. Applicable to projects with ultra-multiple points and HDMI/DVI control requirements. In actual projects, a single unit can load RGB within 2.3 million. 2. Universal HDMI master control, does not distinguish between DMX and TTL control methods. 3. It can be used as a single unit or multiple units through HDMI video splicer. 4. Can only be connected to a computer for playback, and cannot be played by inserting a card	set	1
4	228DW Sub Controller		DMX512/8 signal output port/input voltage AC110-240V	set	7
5	Power Supply		Mean Well/DC24v-320watt/waterproof	pc	93
6	Positive section open		Both ends of Male and Female connectors with 150mm length	pc	50
7	Female connectors		M16F 5pins type/PVC/150mm length standard	pc	48
8	Y slips		M16F 5pins/PVC/connected each string for power	pc	100
9	U-shaped latch		M3 type/304 stainless steel, locking wire rope	pc	800
10	Wire tightener		M4 type/304 stainless steel, used to fix the wire rope for tightening	pc	400
11	Coder/WT15		It is used to write a separate code for lamps for later maintenance	pc	1

Anticipated Candela:
550 cd/m2

Technical DRAWINGS



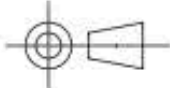
BILL OF MATERIAL		
ITEM	DESCRIPTION	QTY
1.	2MM STAINLESS STEEL WIRE ROPE	3000M
2.	100x75x6mm ANGLE (4400mm L)	20
3.	50x50x3mm ANGLE (4400mm L)	16
4.	6mm STEEL CLEATS	144
5.	M10 BOLT ASSEMBLIES	144
6.	M10 STEEL EYELETS	1584
7.	CAMERAS	2
8.	PC	1
9.	42RU SERVER CABINETS0	2
10.	RU CABINET SHELVES	80

ALL QUANTITIES APPROXIMATES ONLY.

eness

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T. +61 417027325
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THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM



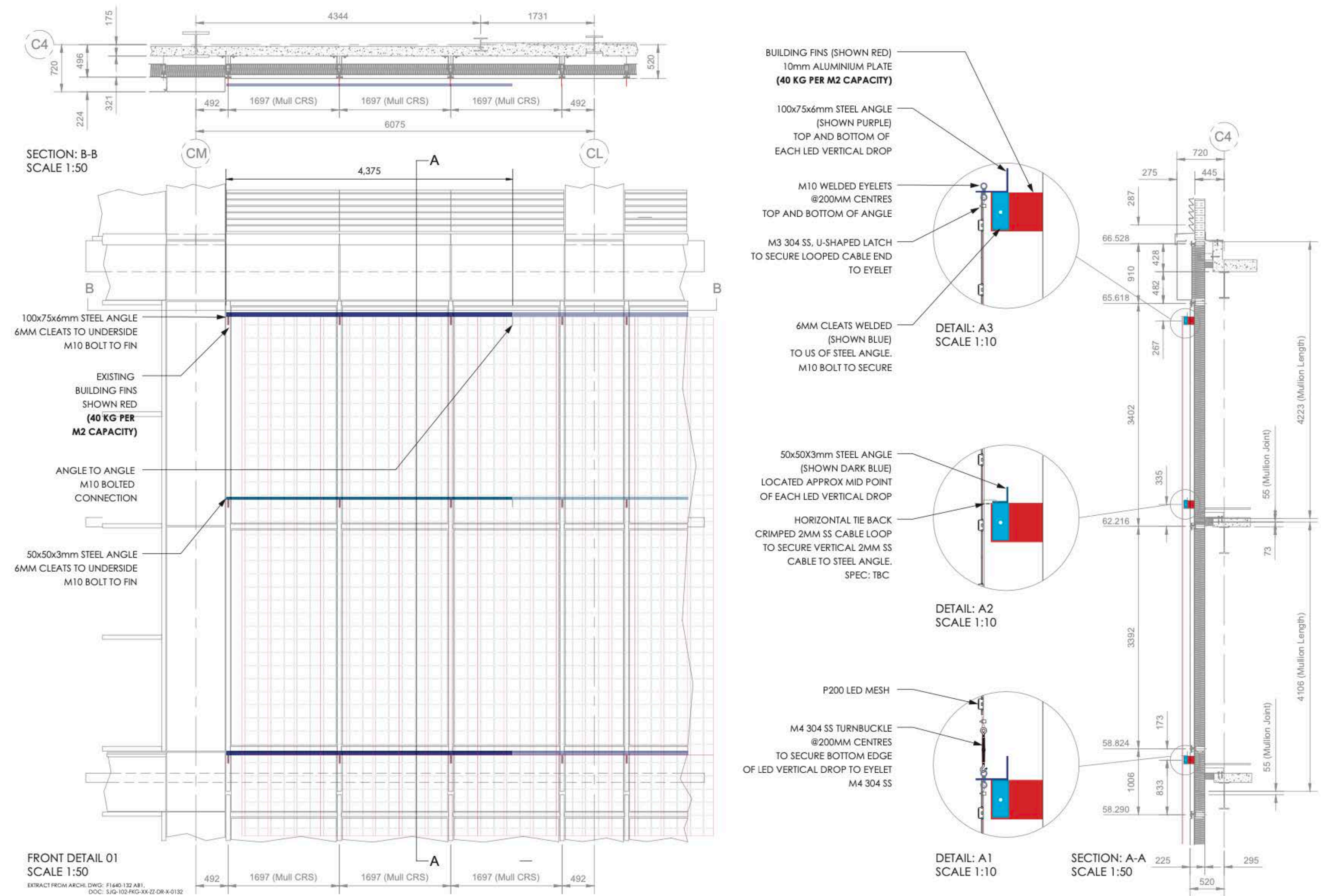
Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

Sheet : 5 of 9
Page : A3

Drawing title : INSTALLATION OVERVIEW
Scale : SHOWN @ A3 Date : 24-11-23

1.0

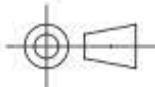
Technical DRAWINGS



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THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM



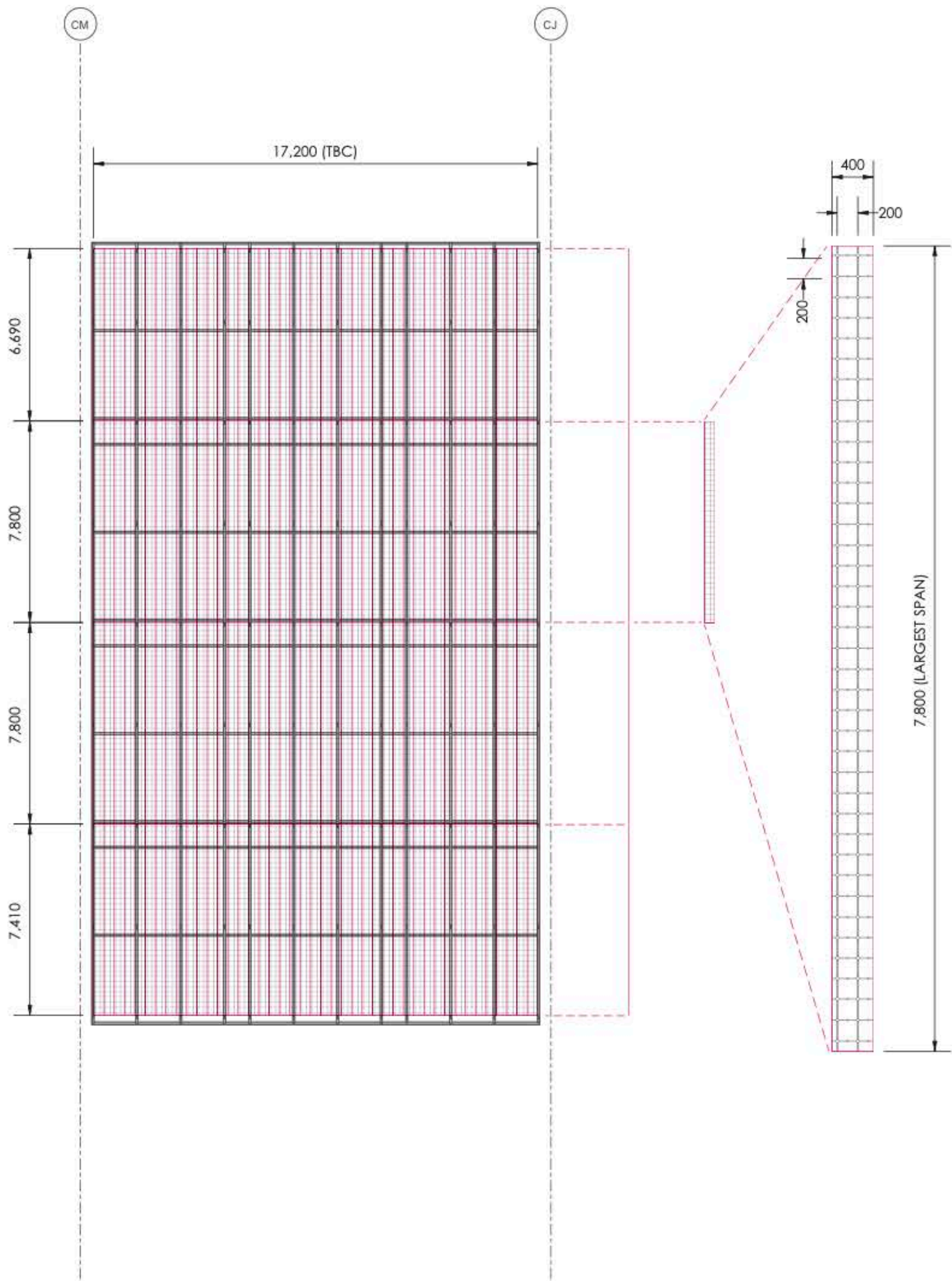
Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

Sheet : 6 of 9
Page : A3

Drawing title : BUILDING / FRAME DETAIL
Scale : SHOWN @ A3 Date : 24-11-23

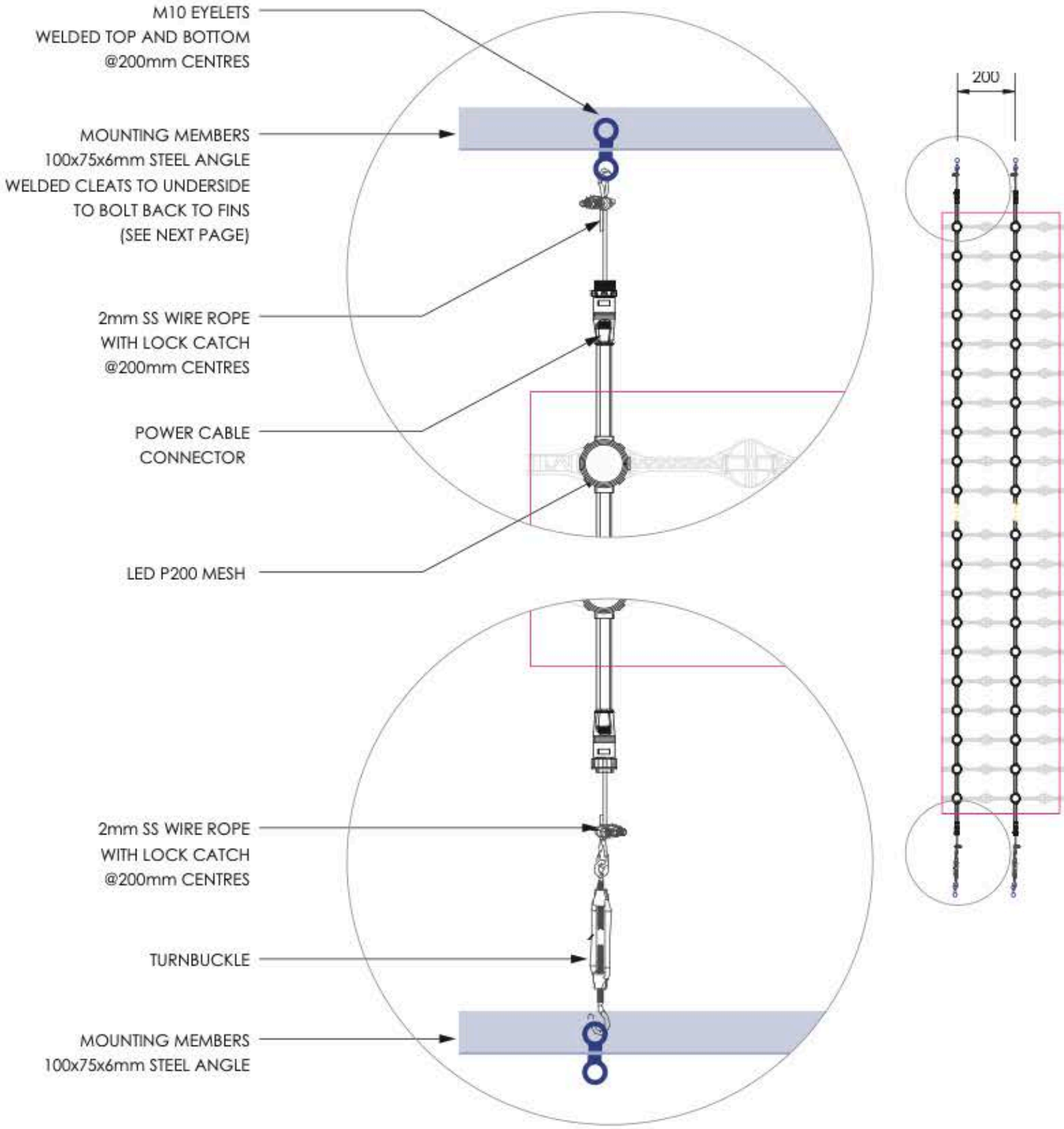
1.0

Technical DRAWINGS



FRONT ELEVATION - LED MEDIA MESH
SCALE 1:200

TYPICAL LED MEDIA PANEL
SCALE 1:50

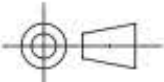


TYPICAL CONNECTION DETAILS
SCALE 1:10

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THIRD ANGLE PROJECTION
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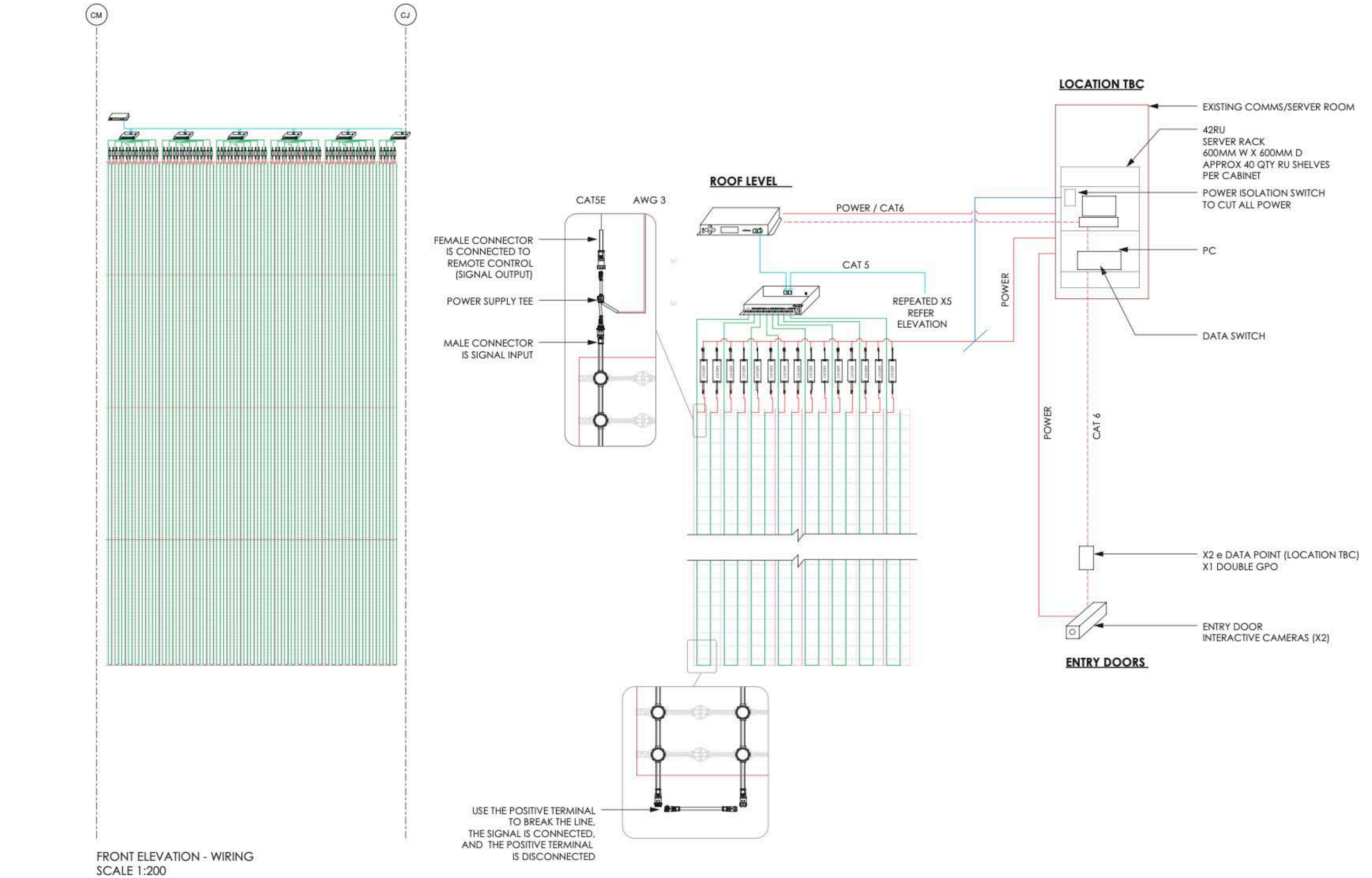
Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

Sheet : 7 of 9
Page : A3

Drawing title : LED MESH DETAILS
Scale : SHOWN @ A3 Date : 24-11-23

1.0

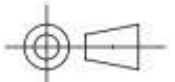
Technical DRAWINGS



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THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM



Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

Sheet : 8 of 9
Page : A3

Drawing title : ELECTRICAL LAYOUT
Scale : SHOWN @ A3 Date : 24-11-23

1.0

Trouble Shooting & Maintenance



Trouble Shooting

There are several things that could fail when working with any kind of LED installation. As part of the Artists contract with Allied, they will be preparing a robust maintenance and trouble shooting manual with a plan for all common eventualities.

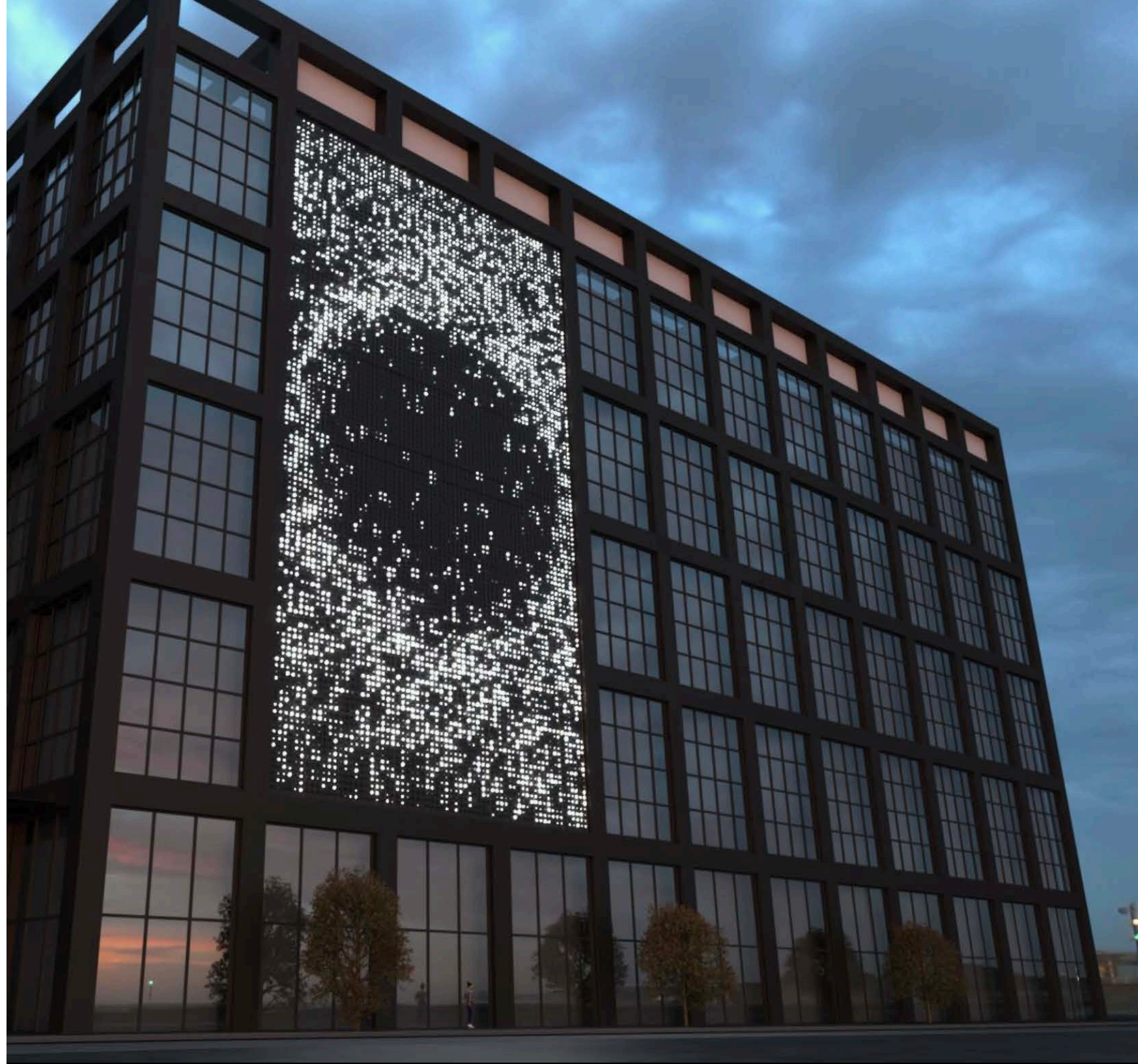
The key issues that could arise and the plan we will enact for these are as follows:

- LED Controller or Power Supply Fail - These will all be located within the building in a specially designated control room within a server rack meaning that if these need to be changed out, this can be done easily without further access to the facade needed. A surplus of LED controllers and Power Supplies will be supplied for this eventuality. Further components can be bought at a later date by Allied as needed.
- Programming Error - In the unlikely eventuality there is a programming error, possibly because of a power cut, this will be fixed by the designers remotely.
- LED Node fails - This will happen at some point. We will provide a surplus so that they can be replaced as required. Due to the nature of the artwork, if any nodes failed, chances that this would be noticeable are very slim, which means that the switching out of any nodes can wait until the yearly maintenance. However, if for any reason the nodes that went out caused any disturbance to the artwork, it could be reprogrammed remotely so that they were no longer an issue, and could be swapped out during the annual maintenance. This would be organised by Allied.

Yearly Maintenance

There will be a yearly maintenance contract put in place by Allied for the AV installer to come to site and inspect the LED wall to ensure the wall is still operating as required, that fixings are still in good working order, and to carry out any maintenance work required (such as swapping out any malfunctioning LEDs).

Environmental Controls



Light Pollution

The estimated candela from the manufacturers engineers is 550 cd/m². As We will not be using all the LEDs at anyone time at 100% brightness this is likely to reduce and we can update you when we have final numbers.

However, we have taken into consideration the environment and are looking at running the screen at reduced hours and avoiding anti social hours. We will look to only run between the hours of 7am and 11pm depending on approval (exact timing within this still tbc).

We are also looking at using the camera's as sensors so that the LEDs will be dimmer after dark (as the requirement for brightness will reduce) which will also go some way towards mitigating any possible negative effects.

Traffic disturbance

Taking into account the fact that the art wall overlooks a road, the content for the screen will be programmed to ensure the transitions between artwork is not too quick or jerky to not impact on passing traffic.

AlterProjects

Thank you

