

# ARNHEM CENTRAL STATION

THE MAKING OF A FREE-FORM ROOF

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Concrete Valley / mbX  
28 October 2016

UNS

mbX<sup>®</sup>

sorba<sup>®</sup>

 bam

 Ballast Nedam

**ProRail**

**UNIS**



sorba®



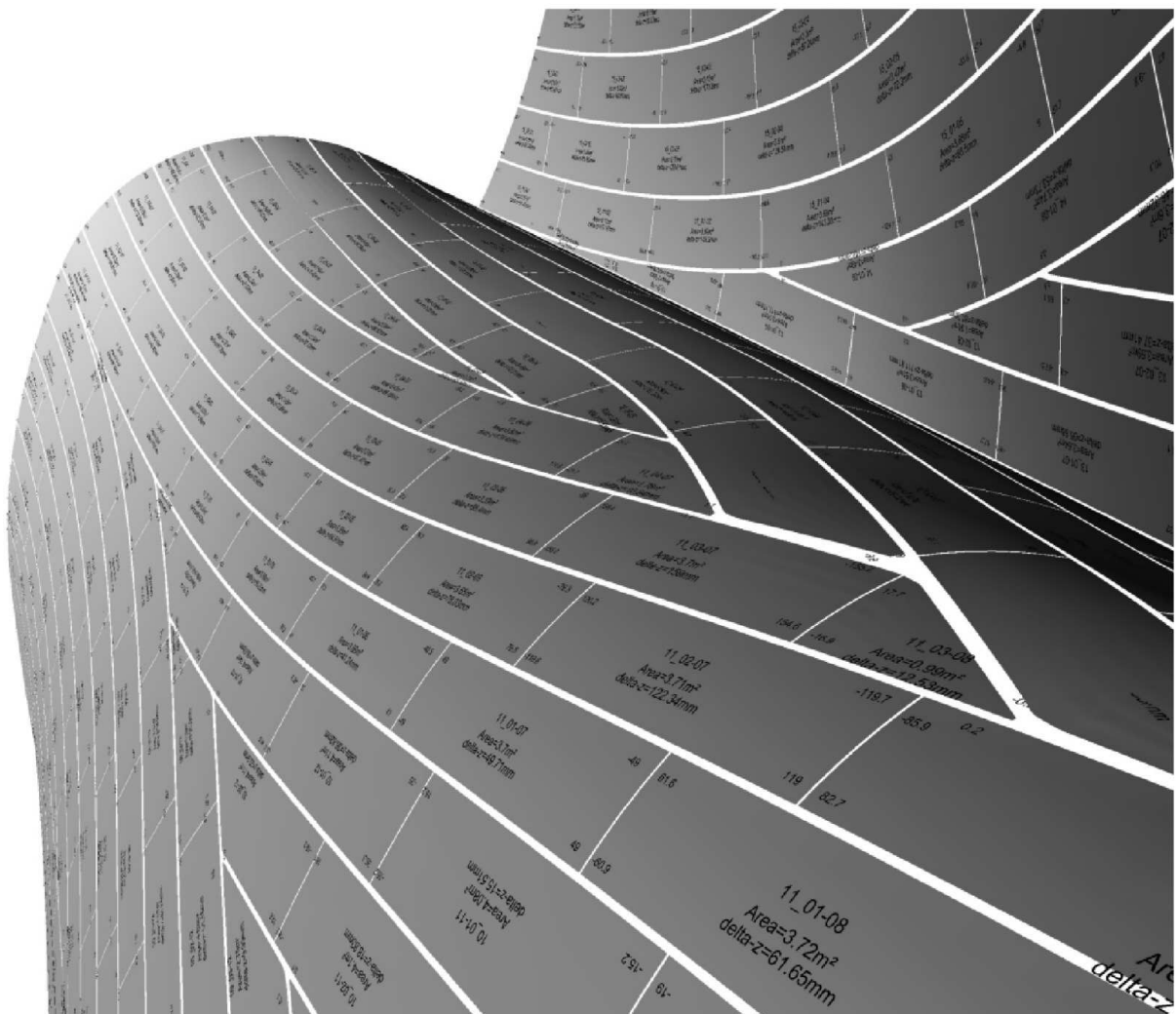
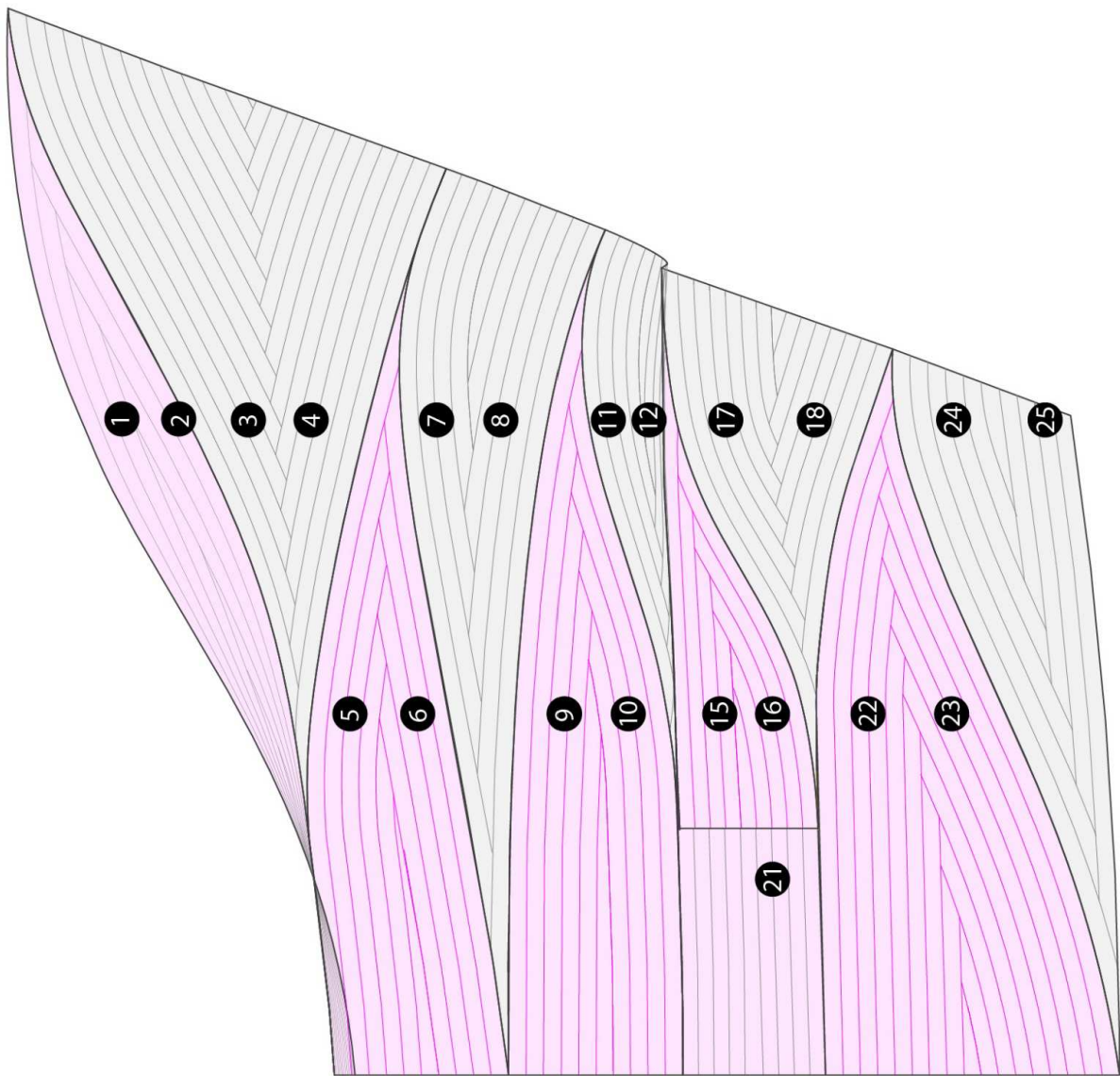
**mbX**®  
*Concrete Valley*®



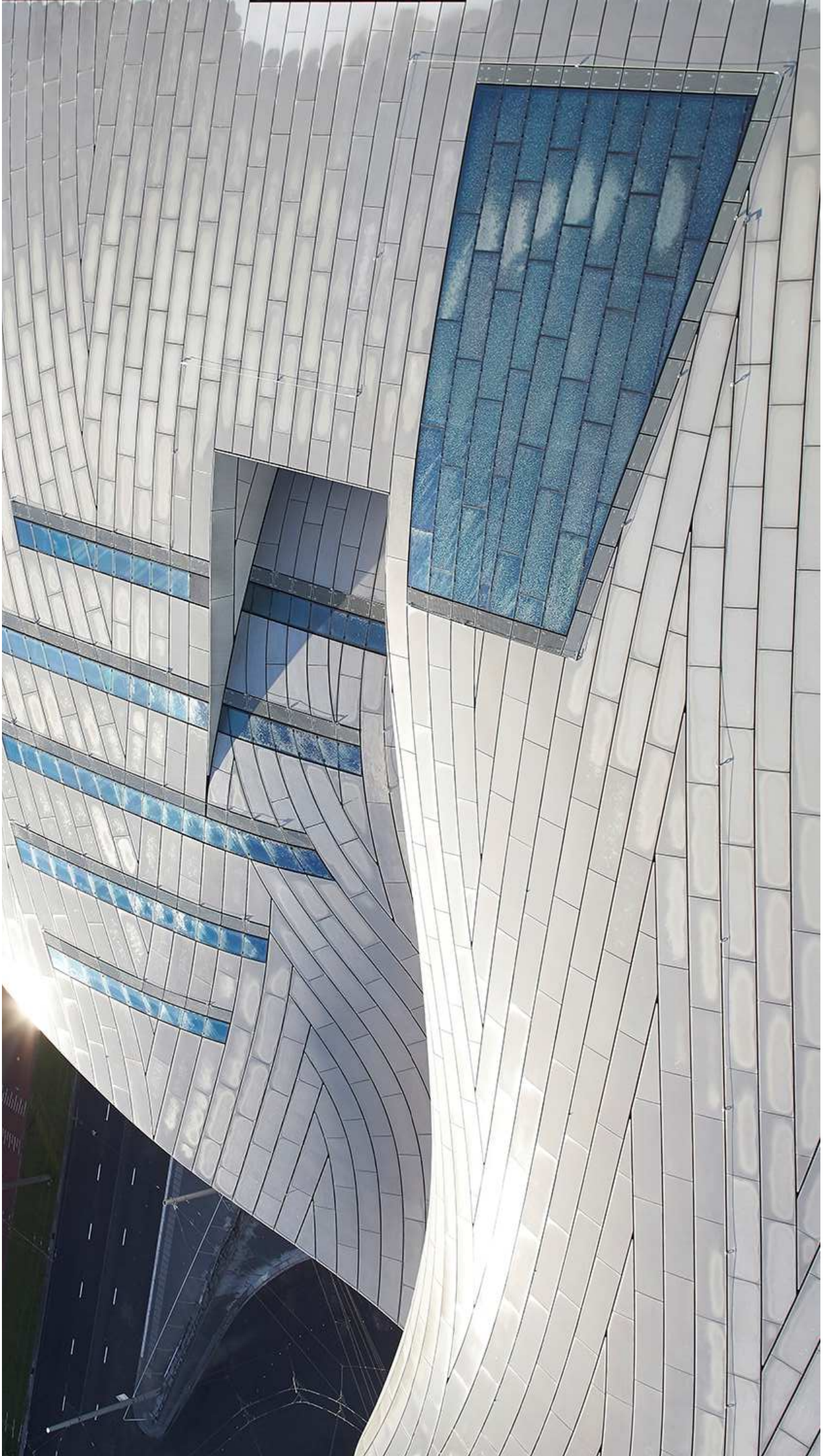








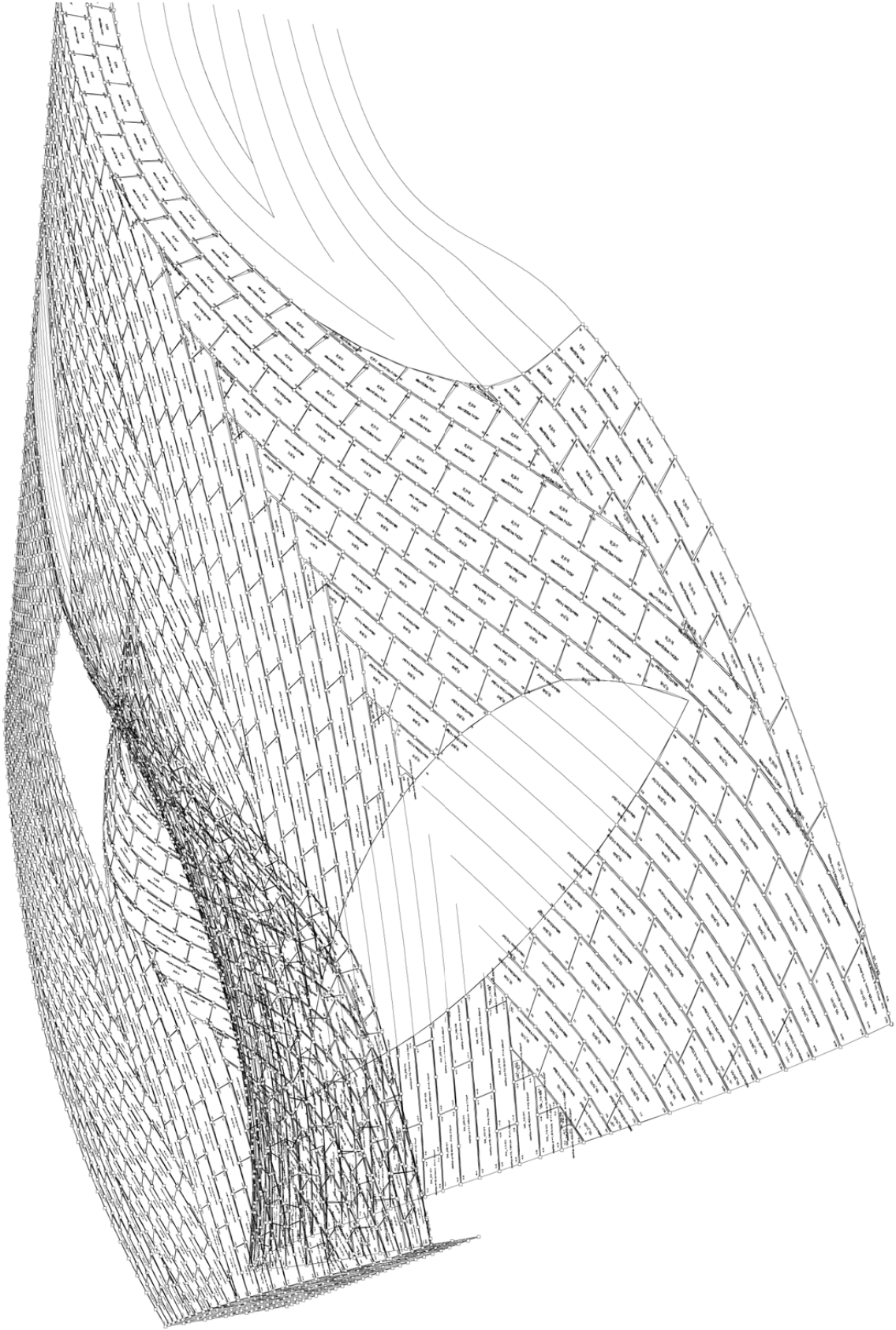




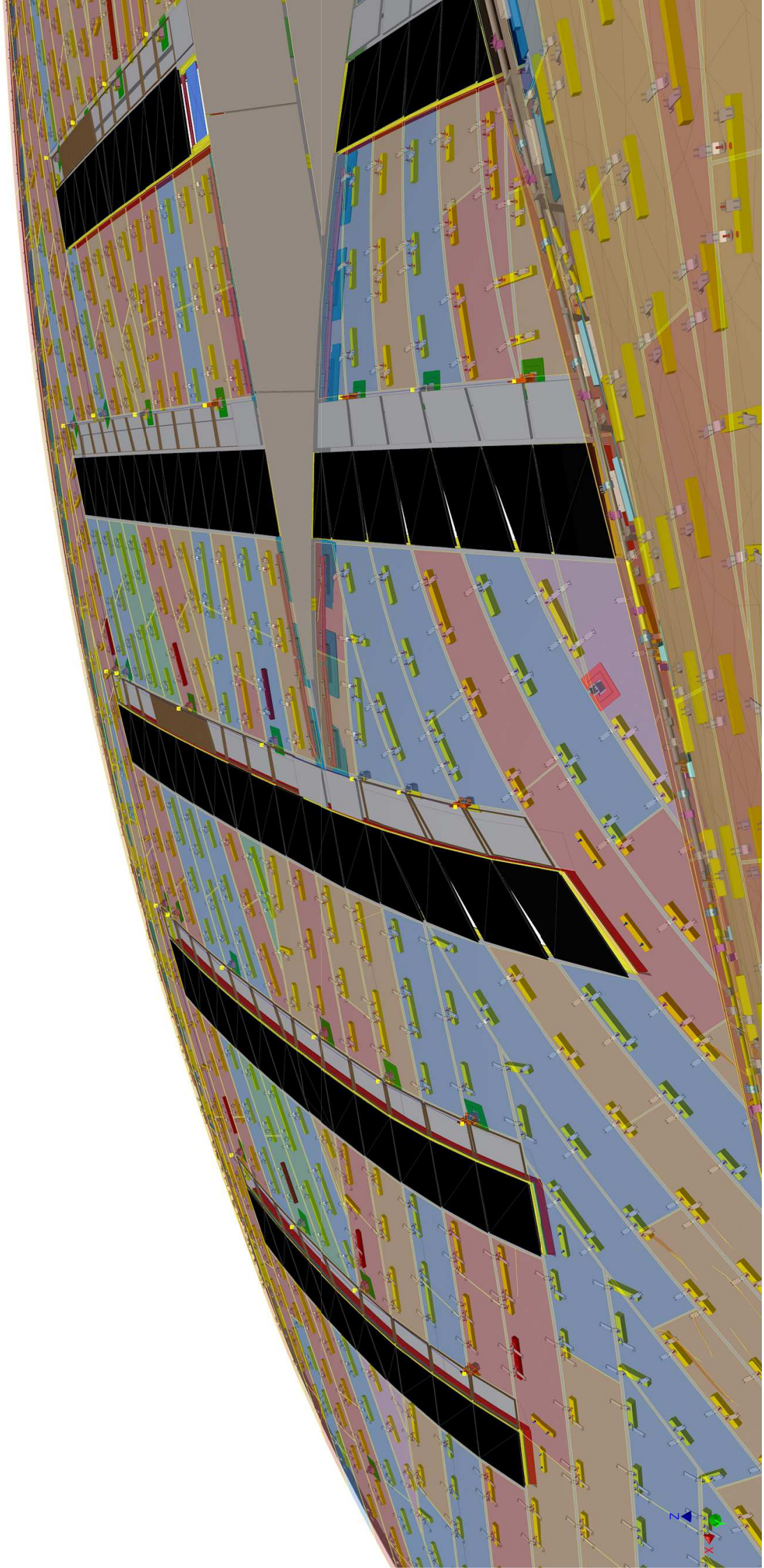








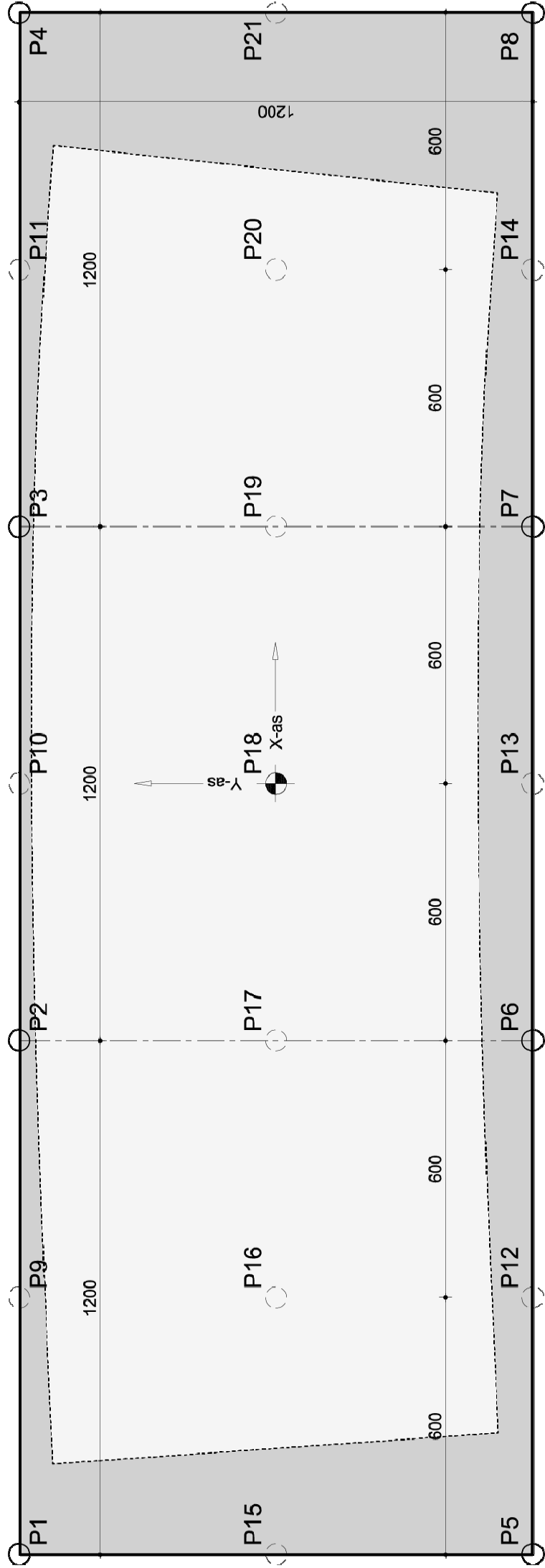




# MAKING UNIQUE PANELS

- 1600 unique elements
- In general maximum deflection 20 cm
- Horizontal and vertical dimensions
- Colour consistency and logistics
- Strength and flexible reinforcement





Batch	Name	revisor	angle	Area	measure	measure	type	P1	P2	P3	P4	P5	P6	P7	P8
1 04_01-04 -	14.8400599	4.111	1154.39681	3608.21428	DC	200.28977	204.6454	206.057877	206.923982	206.723287	209.36141	206.895092	200.419132		
1 04_01-05 -	16.1478396	4.09	1147.04076	3597.42248	R	180.329307	188.043567	195.14366	201.185911	201.164571	197.908118	190.466143	180.346249		
1 04_01-06 -	17.9897472	4.091	1146.3425	3597.85035	R	181.281551	190.313906	197.057914	201.262188	201.262888	194.938832	188.022829	181.418241		
1 04_01-07 -	19.2183213	4.092	1147.45496	3599.74407	R	192.439666	194.232944	196.185319	201.521449	201.088368	196.421337	193.604757	193.134571		
1 04_01-08 -	20.0285584	4.093	1149.10984	3604.54958	R	186.947277	187.299696	192.618648	202.312016	201.897056	195.022816	190.395941	187.851893		
1 04_01-09 -	21.3709868	4.092	1148.71014	3606.48023	R	183.299851	187.318558	193.927558	203.544986	202.792824	196.243633	190.49032	184.779166		
1 04_02-05 -	16.7846502	4.122	1149.05884	3627.05929	R	200.017699	202.707264	207.422635	215.562671	215.615121	210.756518	205.253108	200.135547		
1 04_02-06 -	18.4832246	4.111	1146.87905	3615.13033	R	177.617211	185.793013	193.861524	201.013668	201.115941	194.562153	186.787719	177.625052		
1 04_02-07 -	20.6989237	4.113	1147.11169	3617.23726	R	177.062888	187.230663	194.819967	201.168501	201.137362	195.648824	187.478513	177.228018		
1 04_02-08 -	23.0204283	4.118	1147.71119	3622.8991	R	199.904475	203.475855	212.390356	229.272442	229.251494	215.52082	205.039461	200.376629		
1 04_02-09 -	25.8769357	4.126	1149.46042	3632.6987	R	162.391294	167.605509	180.368944	202.052878	202.077051	185.090969	172.20363	163.049505		

