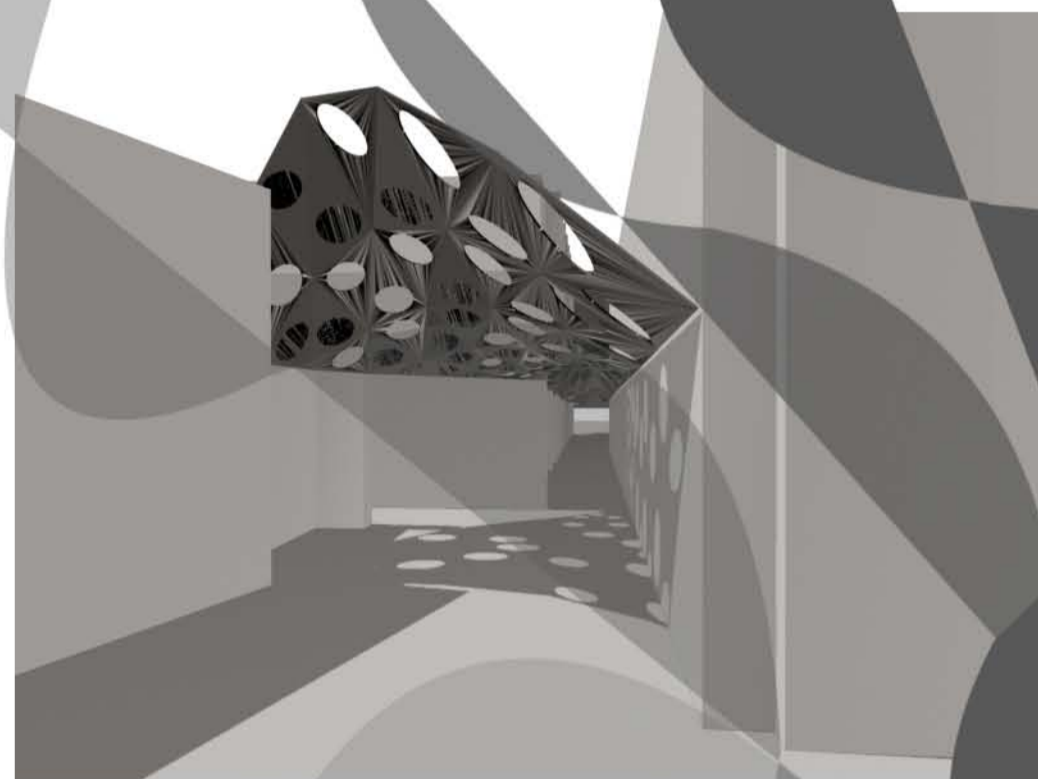


The idea for this pathway design flourish from the intent of having a temporal curvature spatial experience where it uses the shading level to form a duality in the design-having a between contrast of the floor and wall of existing site and the propose covering.

The approach is to introduce a non-euclidean form to an existing euclidean space. With this, a new can be identified with the experience of the 'old'.

Circular holes has been punctured to mimic the raindrops as having to oppose the idea of shading during the rainy days, and also to allow certain sunlight to penetrate into the interior spaces.

The overall form is designed to suggest movement and an entrance and an exit to and from the campus with curvatuue spatial experience.



_an intro to temporal curvature



pt08

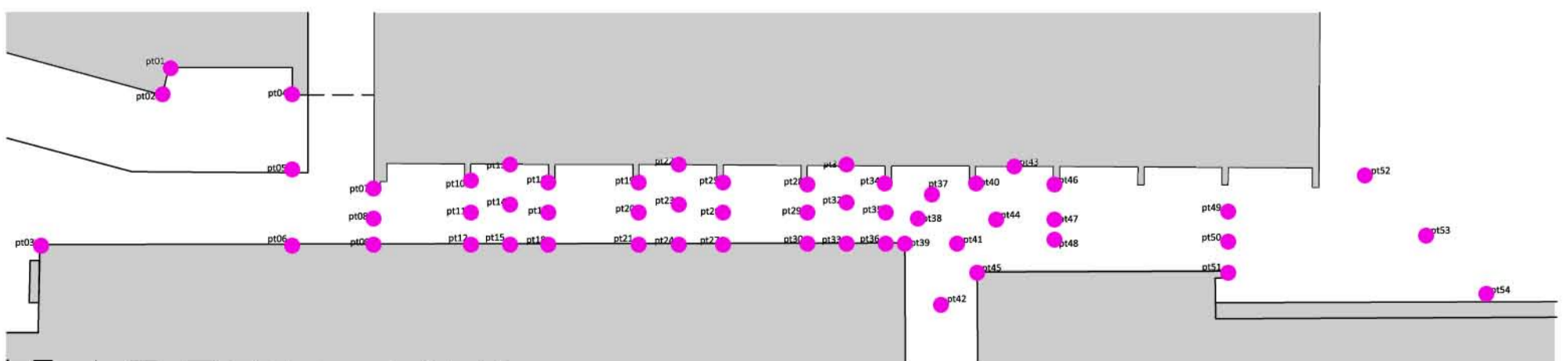
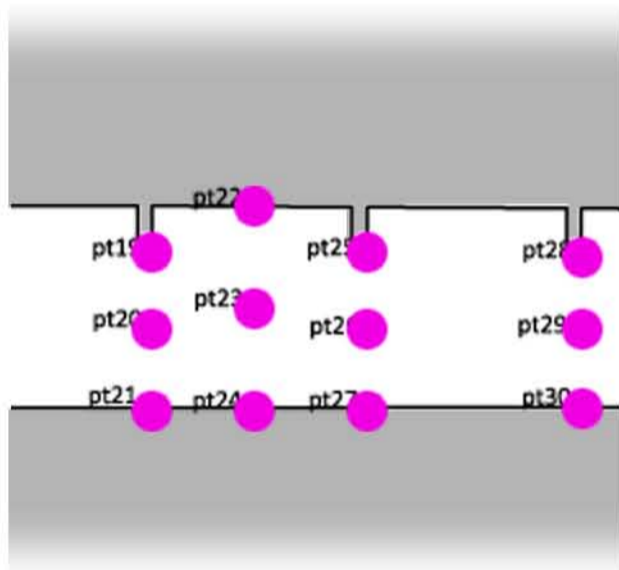
PointCloud_Table3

Since this project has taken up to a more site specific and fabrication level, a more accurate strategy is used to approach this design.

Base on the actually drawing of the site, a total of 53 pointcloud is located from AutoCAD and the X, Y, Z location of these points were then extracted to a database software- Microsoft Access, so that the design of the form can be approached in GenerativeComponents.

Count	Name	X	Y	Z
1	Point01	-34287.9486	11771.9477	0.0000
2	Point02	-29641.6053	17481.1139	0.0000
3	Point03	-29376.3956	18530.9494	0.0000
4	Point04	-24682.7505	14638.7927	0.0000
5	Point05	-24580.9771	17484.5691	0.0000
6	Point06	-24668.6257	11793.0507	0.0000
7	Point07	-21568.9645	13825.8586	0.0000
8	Point08	-21566.7585	12812.8271	0.0000
9	Point09	-21564.5560	11799.7782	0.0000
10	Point10	-17898.4968	14179.4402	0.0000
11	Point11	-17887.5871	12993.6769	0.0000
12	Point12	-17836.7290	11807.8895	0.0000
13	Point13	-16406.0127	14852.5431	0.0000
14	Point14	-16402.7037	13331.7800	0.0000
15	Point15	-16399.3947	11811.0436	0.0000
16	Point16	-14917.2233	14165.8504	0.0000
17	Point17	-14914.6649	12990.0518	0.0000
18	Point18	-14912.1065	11814.2532	0.0000
19	Point19	-11497.3211	14150.2157	0.0000
20	Point20	-11494.8821	13029.2945	0.0000
21	Point21	-11492.2545	11821.6944	0.0000
22	Point22	-10006.2695	14823.4580	0.0000
23	Point23	-10002.7649	13345.7056	0.0000
24	Point24	-9999.4559	11824.9691	0.0000
25	Point25	-8297.2308	14135.6248	0.0000
26	Point26	-8294.8089	12982.1394	0.0000
27	Point27	-8292.2991	11828.6571	0.0000
28	Point28	-5094.8280	12978.3471	0.0000
29	Point29	-5092.3416	11835.6199	0.0000
30	Point30	-5081.5213	14120.9528	0.0000
31	Point31	-3606.7275	14794.4074	0.0000
32	Point32	-3603.0272	13359.6801	0.0000
33	Point33	-3599.7182	11838.9436	0.0000
34	Point34	-2117.4139	14107.4759	0.0000
35	Point35	-2114.9473	12974.8158	0.0000
36	Point36	-2112.4808	11842.1557	0.0000
37	Point37	-1385.3512	11843.6859	0.0000
38	Point38	-888.0979	12757.9809	0.0000
39	Point39	-409.2965	13672.3130	0.0000
40	Point40	0.0000	0.0000	0.0000
41	Point41	0.0000	9522.2973	0.0000
42	Point42	651.2946	11807.1188	0.0000
43	Point43	1302.6194	14091.9781	0.0000
44	Point44	1369.5493	10728.4444	0.0000
45	Point45	2080.8507	12746.8670	0.0000
46	Point46	2792.1520	14765.2895	0.0000
47	Point47	4282.6742	14078.4873	0.0000
48	Point48	4287.1825	12708.3624	0.0000
49	Point49	4289.6132	11982.7794	0.0000
50	Point50	10915.0491	13027.3265	0.0000
51	Point51	10917.7354	11893.8830	0.0000
52	Point52	10922.7826	10760.4474	0.0000
53	Point53	16164.0810	14433.2499	0.0000
54	Point54	18444.7467	12160.6281	0.0000
55	Point55	20725.4125	9888.0063	0.0000

_pointcloud extraction



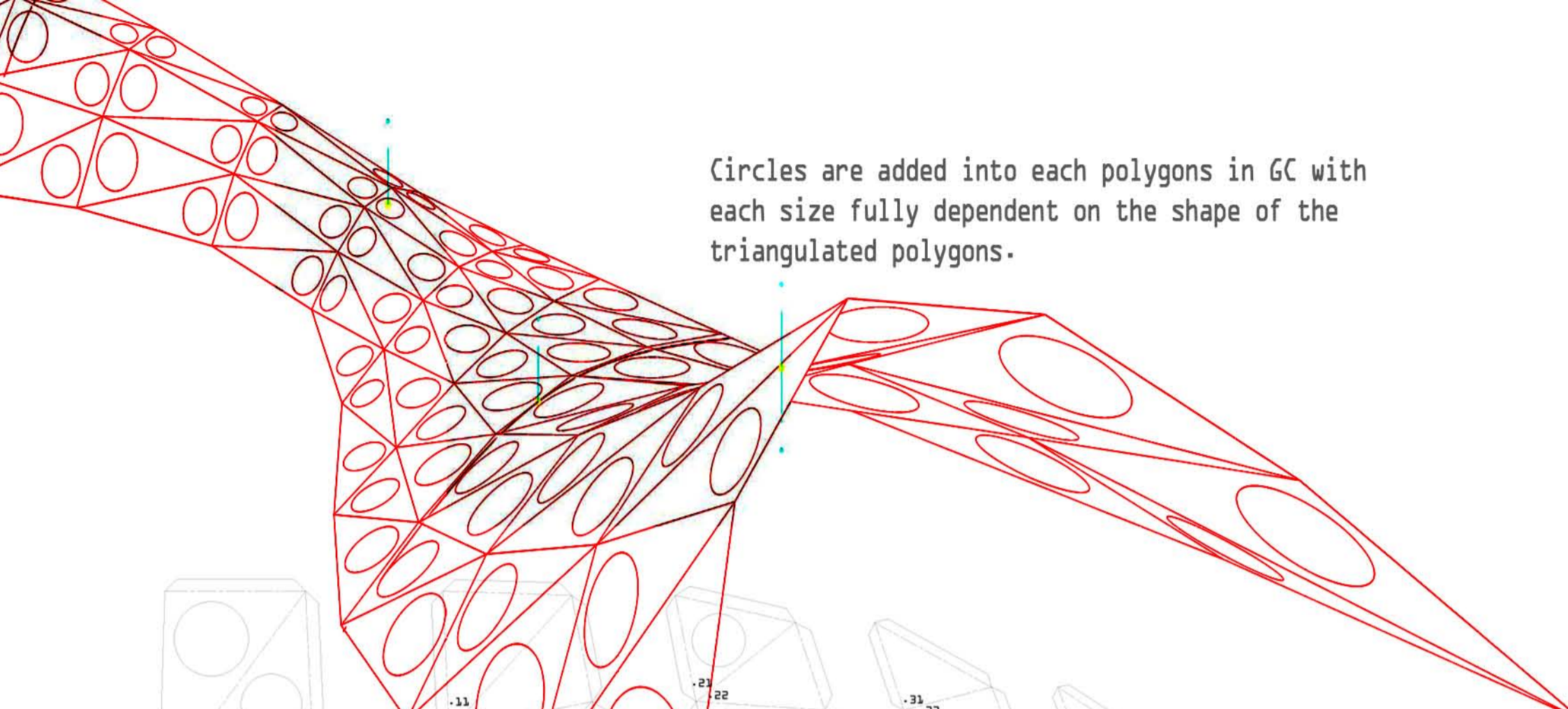


_non-euclidean form manipulation

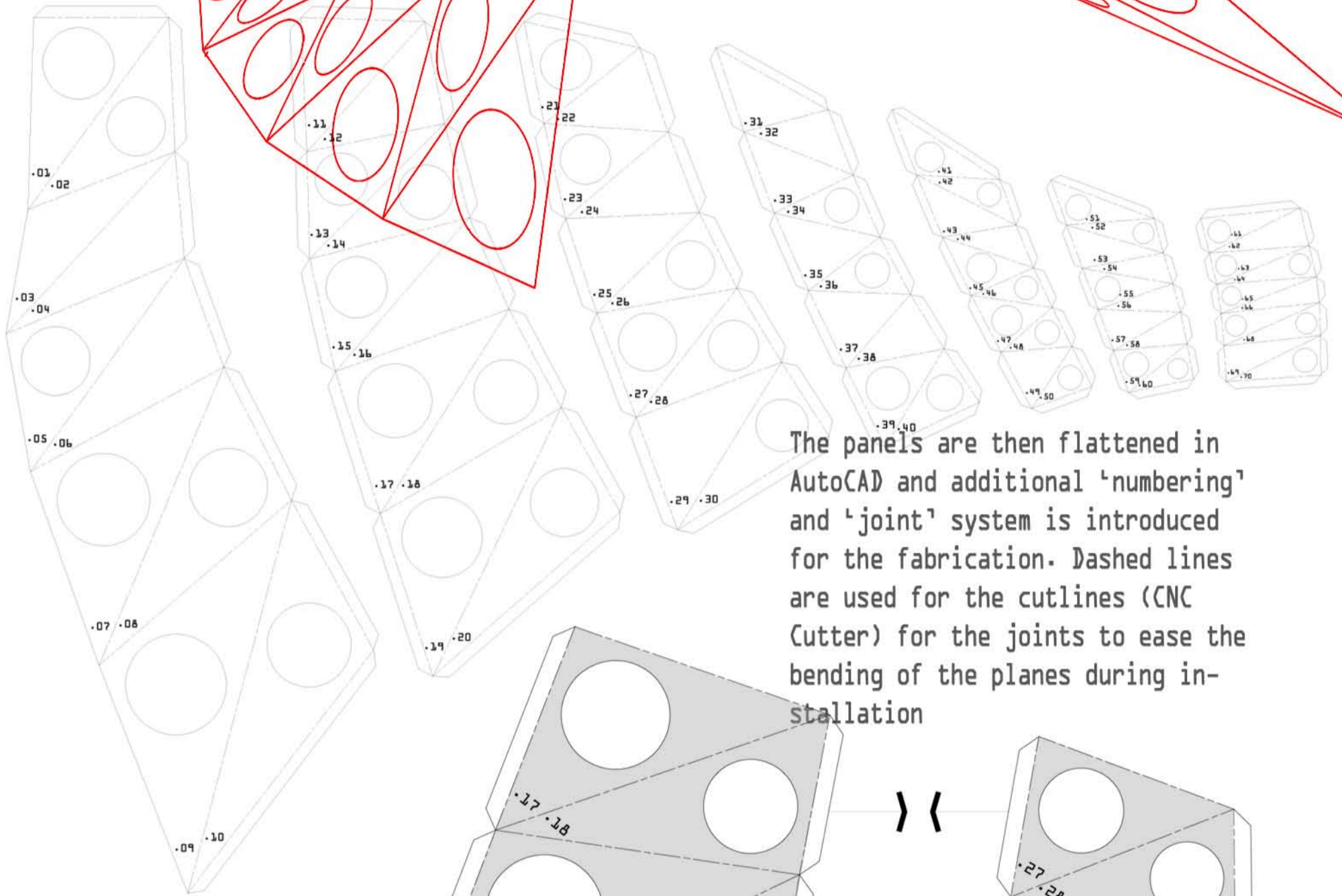
Pointclouds imported from GenerativeComponents are then added with splines (BSplineCurves) so that the form can be manipulated.

As opposed to the first initial conceptual proposal where quads polygons were used, this design takes on triangulation of polygons because of steep curvature intended in the design. Densifying the quads could help solve the problem however, it may lead to difficulty in fabrication because of the slight deviation of the non-planar polygons and the amount of quads needed to reduce these deviations of non-planar quads.

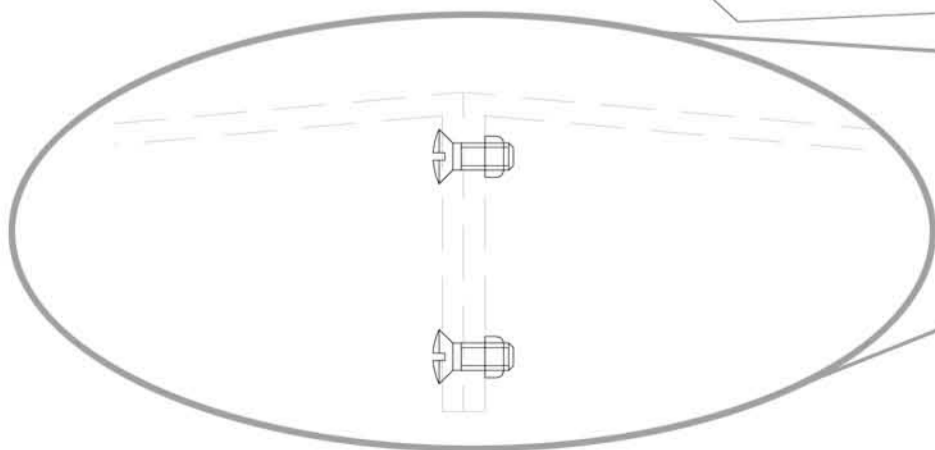
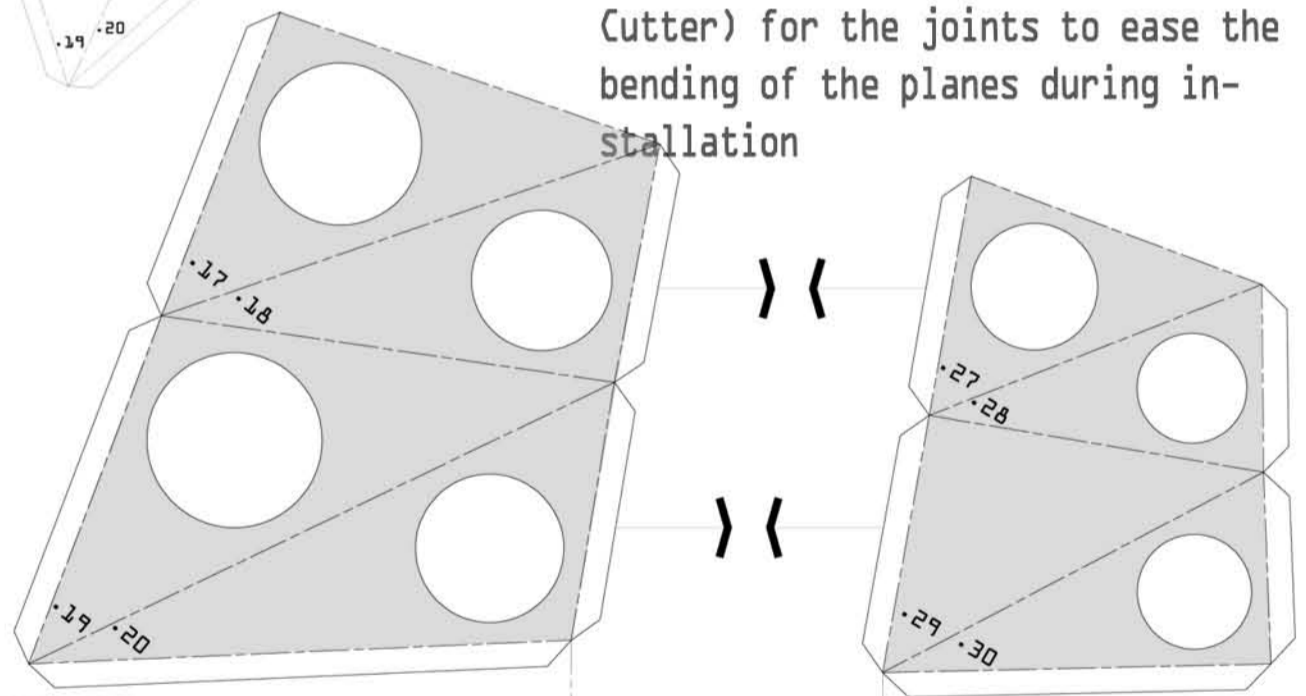
Since there are no deflections on the polygons, the panels don't need support structure to hold and maintain its form as long as the triangulated polygons are attached properly.



Circles are added into each polygons in GC with each size fully dependent on the shape of the triangulated polygons.



The panels are then flattened in AutoCAD and additional 'numbering' and 'joint' system is introduced for the fabrication. Dashed lines are used for the cutlines (CNC Cutter) for the joints to ease the bending of the planes during installation



Bolting system is introduced to allow slight deflection and movement in the structure.