STOCKLEY

Manchester College Co-Location Sculpture 465/09/SK001 Rev P03

Notes on structure

Formed from 12No 5-pronged 'petal' shaped profiled steel plates each measuring approx 3.0m across.

Each arm of 'petal' cut from curved plate sectionindividually and welded together at centre to form each 'petal' shape.

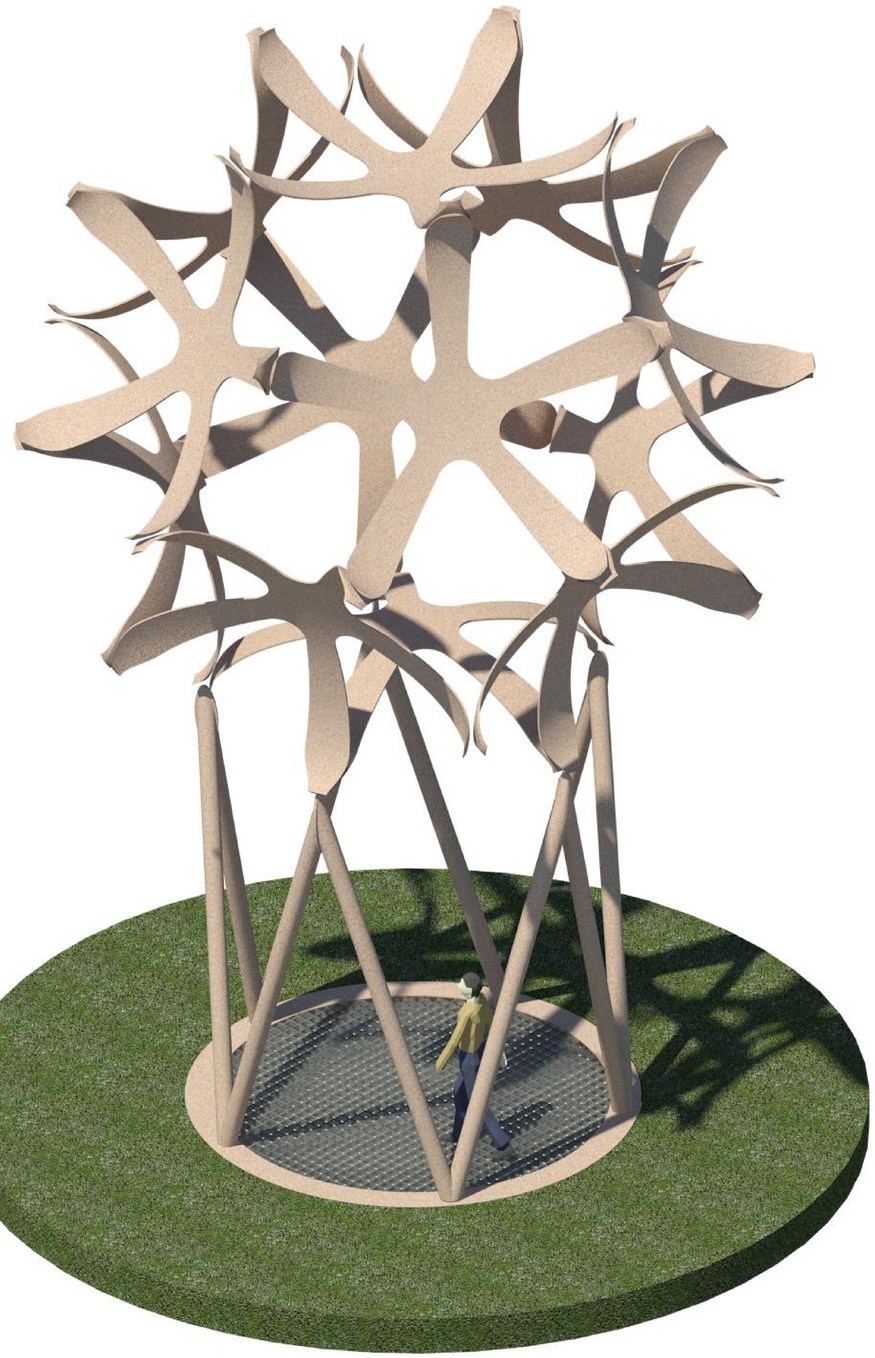
Connections between adjacent panels to be formed from steel gusset plates bolted through each 'arm' being connected. Node to provide bearing surface to transmit moment and space for several bolts.

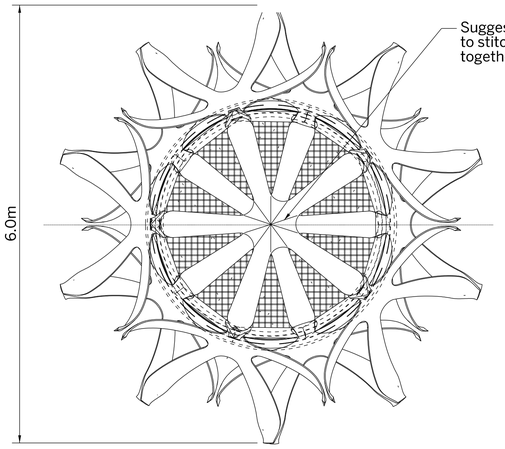
Due to torsional moments which arise in the structure, steel plates would need to be stiffened to minimise twist of the section. See detail for stiffening form.

Steel left unfinished and allowed to naturallyform a coating of rust.

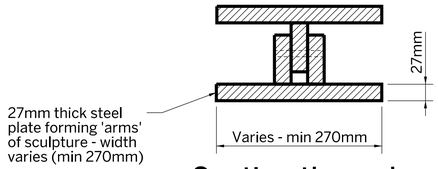
Each 'petal' shape will arrive on site complete and craned into position. Falsework required to assist in erection of structure and provide temporary stability.

RC raft foundation already in-situ. Lateral column loads will be resisted by steel spreader beams at the base of the columns.

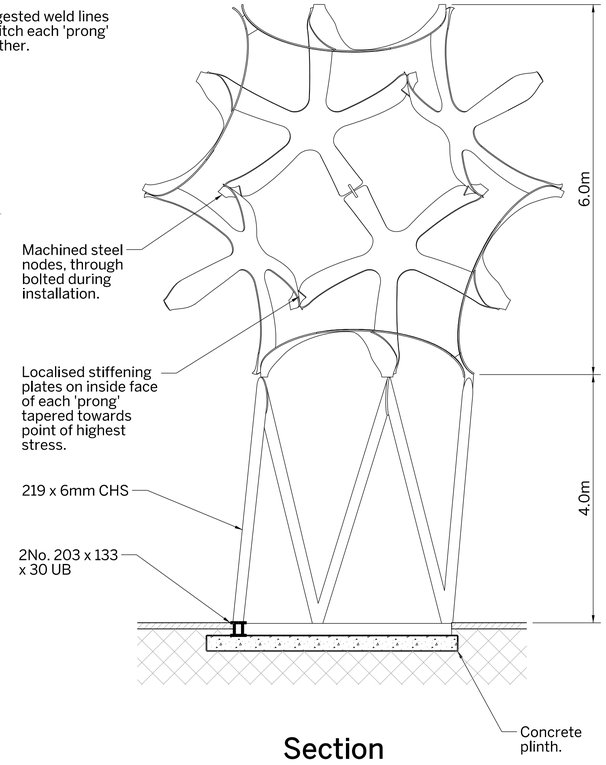




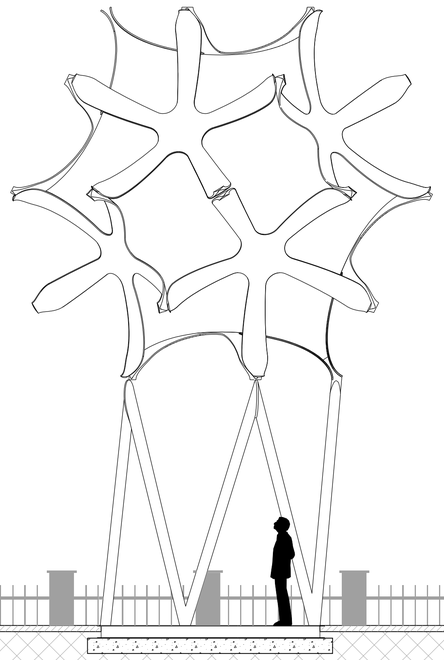
Plan
(Scale 1:50@A1)

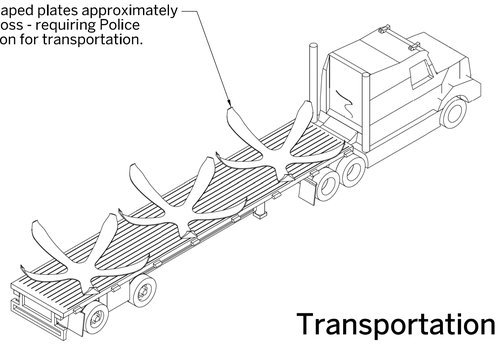


Section through typical steel 'arm' at intersection
(Scale 1:5@A1)



Section
(Scale 1:50@A1)





Transportation

Overall Section (Scale 1:50@A1)