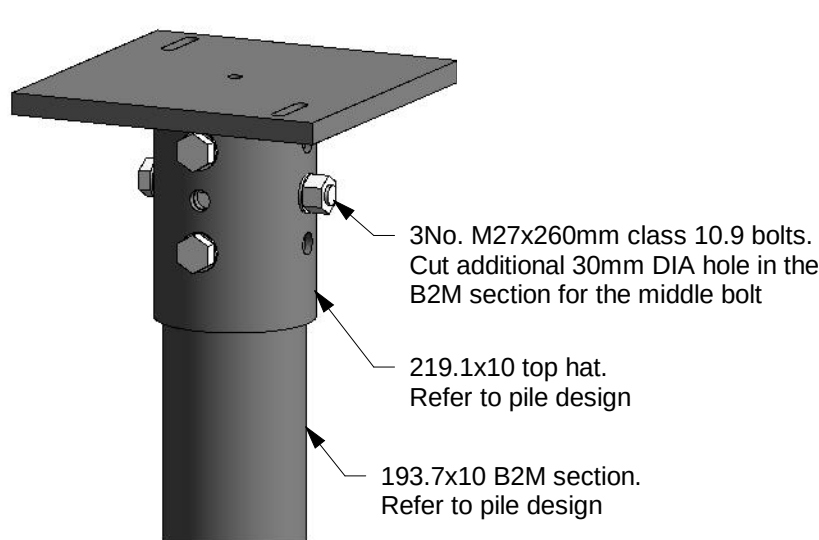
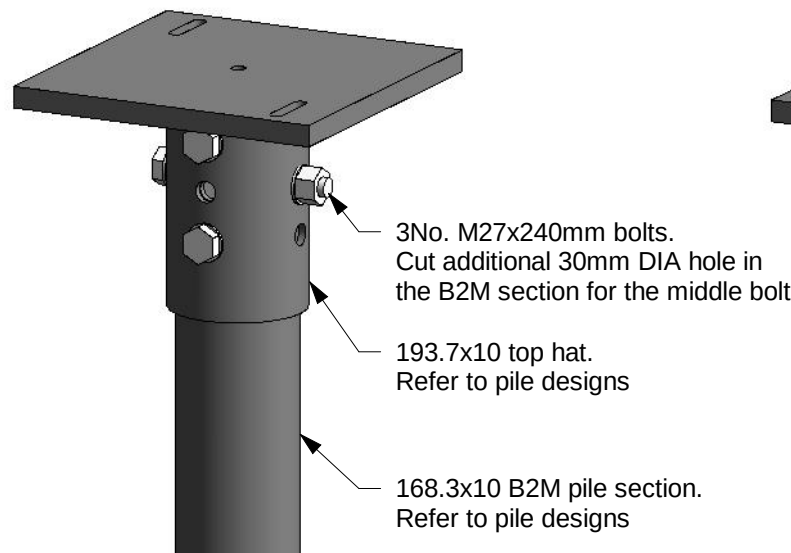
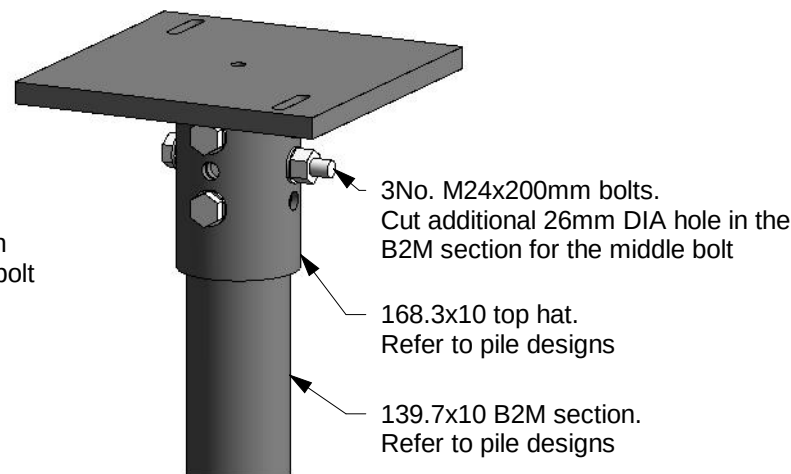




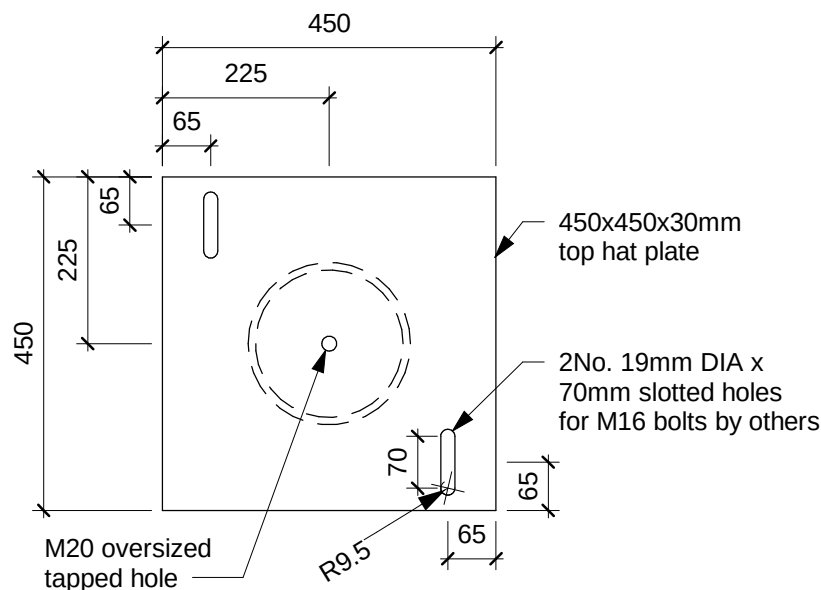
PILE T1 CONNECTION



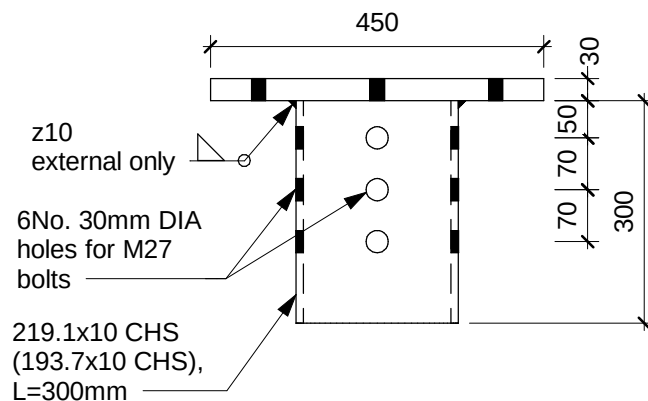
PILE T2 & T3 CONNECTION



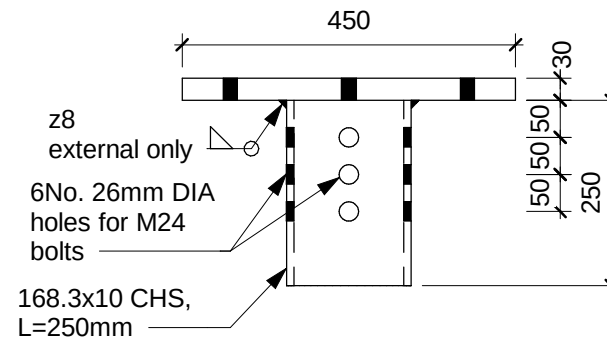
PILE T4 & T5 CONNECTION



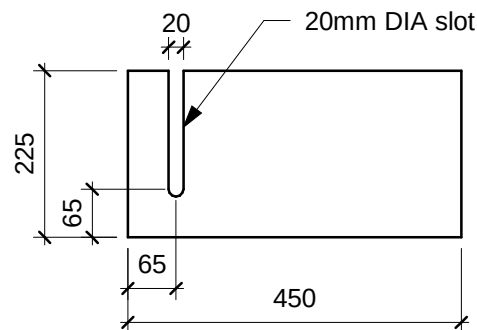
TOP HAT. PLAN VIEW
(all top hat types)



219.1x10 (193.7x10) TOP HAT. SIDE VIEW



168.3x10 TOP HAT. SIDE VIEW



5mm THICK SPACER PLATES FOR LEVELLING
BETWEEN TOP HATS AND SUPERSTRUCTURE
COLUMNS (STEEL S275)

General Notes:

1. Conforms to BS8888. All geometrical tolerances must not exceed steel execution tolerances specified in BS EN 1090 for the execution class specified in General Note 5.
2. All dimensions are in millimetres unless otherwise stated.
3. All levels are in metres related to site datum unless otherwise specified.
4. This drawing is to be read in conjunction with the relevant specification.
5. Design & fabrication to latest edition of BS EN 1993-1, BS EN 1993-5, BS EN 1990:2002+A1:2005 & BS EN 1090-2 (execution class 2) unless otherwise specified.
6. All constituent products to be CE marked and DoP's provided upon request.
7. All RHS, SHS and CHS to be minimum S355 J2H complying with BS EN 10219, BS EN 10210 unless otherwise stated.
8. All open sections and plates to be S355 J2 complying with BS EN 10025 unless otherwise stated. Plates greater than 55mm thick are to be grade S355 NL unless otherwise stated.
9. All welding to be by qualified personnel certified to BS EN ISO 9606-1 in accordance with client requirements and approved by Screwfast Foundations.
10. All welds to be BS EN 1011-1 and are specified as 'z - leg length' on drawing. Continuous fillet welds to all seams unless otherwise specified.
11. Trim or notch all mating ends of sections and prepare all edges of sections or plates for acceptable fit before welding.
12. Do not grind off welds unless otherwise specified.
13. All butt welds where specified to full penetration and capped over with additional cap weld where specified.
14. All structural bolts to be BS EN 15048 class 8.8. Bolts galvanised above ground and to a depth of 2.0m BGL. Pile bolts below 2.0m BGL to similar class but zinc coated unless otherwise stated.
15. All structural bolts to be torqued as per the installation requirements on the quality checklist. Fit & tighten lock nuts as required after primary nuts have been torqued.
16. All holding down bolts, washers, nuts & lock nuts as specified to be provided by others unless otherwise agreed.
17. Min. 40Mpa grout to be used where specified unless otherwise indicated.
18. Grout to be placed as soon as reasonably possible after placement of grillage.
19. All steelwork unless specifically indicated to be self colour, to be galvanised.
20. All galvanising to be in accordance with BS EN ISO 1461 min. cover 85 microns unless otherwise stated. All galvanising drainage holes to be fitted with plastic plugs during assembly.
21. It is the fabricators responsibility to perform all quality checks in accordance with Screwfast quality procedures and observe all normal good practice.
22. All health and safety regulations during fabrication, handling, loading or offloading and while transporting components or complete assemblies should be adopted.
23. The fabricator must assemble the grillage prior to delivery to ensure full design compliance. Failure to comply could necessitate in on site remedial work which will be at the cost of the fabricator.
24. Grillage and other structures or substructures to be delivered in fully or partially assembled form as confirmed by the Screwfast project manager prior to delivery on site.
25. Where required, the supply and installation of earth bonding equipment is by others. Where foundation earthing or equipotential bond testing is required, this is to be by others.
26. This design is copyright to Screwfast Foundations and some patents may apply.

AS BUILT

Design Residual Risk Assessment - Construction

Activity	Residual risk	Control
Piling near to existing structures	Causing minor damage to existing structure during piling operation	Undertake investigations to determine position and level of existing structure prior to piling
Piling installation including work on sloping ground	Personal injury	Use mechanical lift. Adequate lighting. Manual handling risk assessment. Create level access on sloping ground. Exclusion zone around work zone area.
Buried/overhead services	Damage to service and workers	Provide with information and drawings. contractor to ensure adequate steps are followed onsite to locate services
Unexpected ground conditions	Not being able to get piles into ground, or longer piles required	Pre-auger, to request redesign, or to request site move.
Piles installed out of position	Not being able to land structure in correct position	Ensure piles are installed within allowable tolerance
Lifting materials	Dropping materials	Certification for all lifting equipment and provide suitable supervision

Do not scale
Design life: 60 Years

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 4 SANDRIDGE PARK, PORTERS WOOD, ST ALBANS, HERTS, AL3 6PH TEL: 01727 735 550 FAX: 01727 828 098 EMAIL: info@screwfast.com ISO 9001:2008, NO. GB9498, UVDN NO. 77558, RAIL LINK NO. 18290 SCREWFEST PRODUCTS ARE PROTECTED BY COPYRIGHT & PATENTS FILED AND PENDING UK & FOREIGN PAT'S: Nos: 0104330.6, 0311022.6, 0400863.7, 0407062.7, 0408155.0, 0422062.0, 0426025.3, 0505127.1, 0505558.7, 0507345.7	CLIENT		CONTRACTOR		PROJECT TITLE		DESIGNED	DRAWN	CHECKED	APPROVED
					DOVERCOURT SUBSTATION		SM	APA	LC	AP
							06-12-17	07-02-17	07-02-17	08-02-17
	CONSULTANT		CHECKER		DRAWING TITLE		SFF No	DWG No	STATUS	REV No
XX XXXXX	XX	XX-XX-XX	XX		HELICAL PILE CONNECTIONS AND TOP HAT FABRICATION DETAILS		6014	03	C	0
REV	DESCRIPTION	BY	DATE	CHKD						