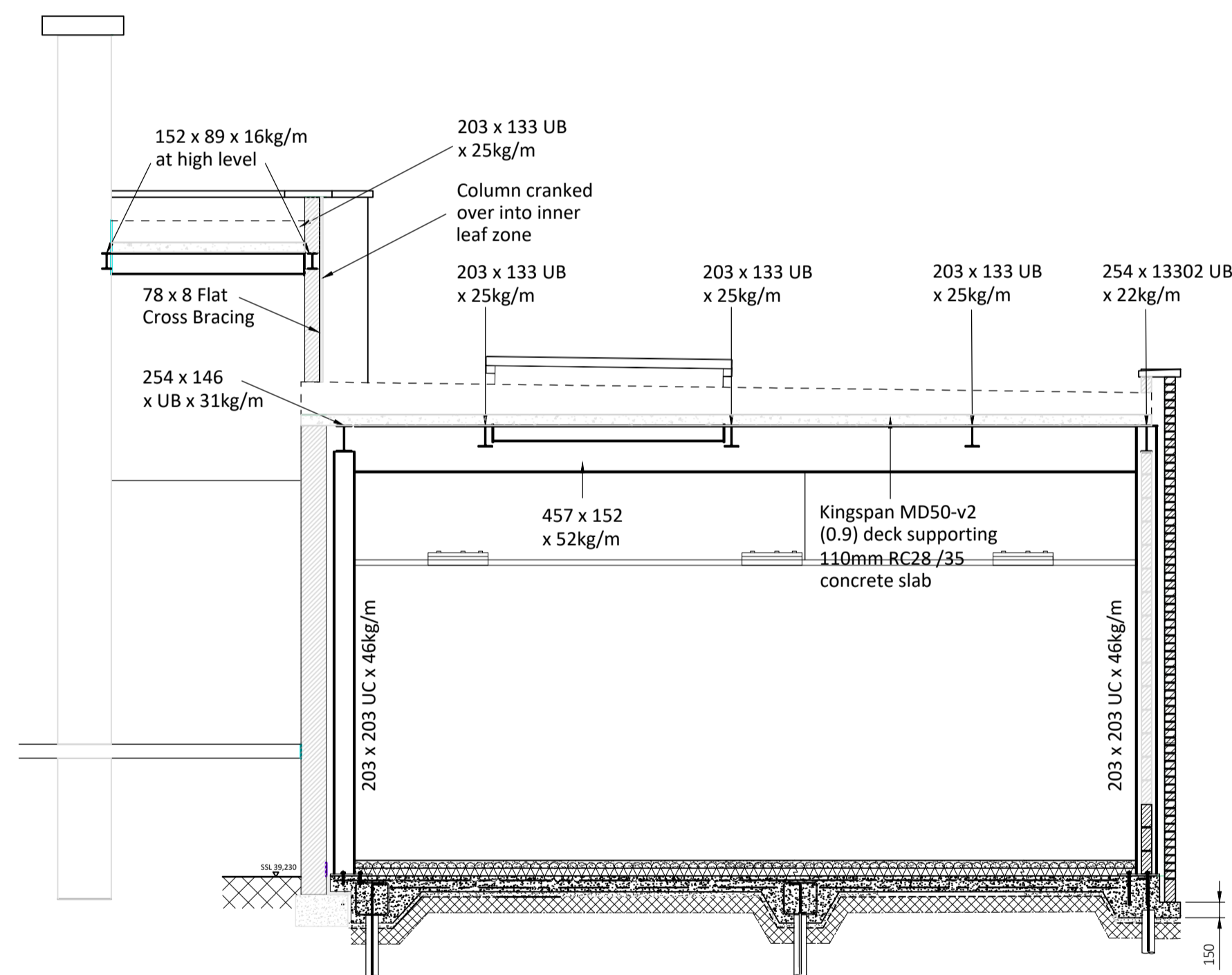


SECTION K-K
SCALE 1:50



SECTION L-L
SCALE 1:50

STEELWORK



- In the absence of a project specific specification the 'National Structural Steelwork Specification for Building Construction 6th Edition' is to be used. In the event of conflict in specific requirements the full text of BS EN 1090-1 and BS EN 1090-2 takes precedence.
- Structural steelwork has been designed to BS EN 1993-1-1 or BS 5950-1 where applicable.
- Design and detailing of connections to be by Steelwork Contractor in accordance with BS 5950-1 or BS EN 1993-1-8.
- Connection forces and moments indicated are factored values as defined by the relevant design code.
- Structural steelwork to be BS EN 10025-2 S355J0 unless noted otherwise.
- Cold formed hollow sections to be hot finished to BS EN 10210-1 or BS 7668.
- All steel products to be specifically tested in accordance with the relevant product standard as noted in table 2.1 of the NSSS 6th edn. and an inspection certificate type 3.1 to BS EN 10204 provided.
- Curved or bent components are to be accompanied by a certificate of conformity based on initial type testing in accordance with BS EN 1990-1 giving details of any effect on impact strength.
- Preloaded bolt assemblies or HSG bolts are not to be used.
- All structural fasteners are to be CE marked.
- Ordinary bolt and nut (and washer if used) are to be a min of Grade 8.8 (zinc coated) and conform to the requirements of BS EN 15048.
- Shear studs shall be in accordance with BS EN 13918.
- Welding shall be a metal arc process in accordance with BS EN 1011-1.
- All connections shall have a minimum of 2No M12 bolts and be designed for a minimum 75 kN reaction unless noted otherwise.
- Welds to be a minimum of 6mm CFW unless noted otherwise.
- Steel packs shall be supplied to allow the structure to be aligned and levelled and of sufficient size to avoid local crushing of concrete. Unless specified packing should not exceed 50mm.
- Safe erection of structural steel shall be in accordance with:
 - The BCSA safe handover certificate (SSH)
 - The recommendations given in the BCSA code of practice for erection of low rise and multi-storey buildings and the BCSA guide to steel erection in windy conditions.

- The Steelwork Contractor is responsible for design and installation of temporary bracing or restraint that the Engineer identifies.
- The Steelwork Contractor shall ensure that no part of the structure is permanently distorted by excessive loads during erection.
- Site welding shall be carried out in accordance with note 12.
- All bolted connections are to be visually checked following alignment and missing bolts installed.
- Where possible protective coatings should be waterbased and compliant to PG 6/23 in accordance with Ciria R174.
- Protective treatment for external exposed steel:
 - Preparation - Blast clean to Sa2.5
 - Primer - Zinc-rich epoxy 75 microns thick, shop applied to BS4652.
 - Intermediate - Epoxy MIO 100-125 microns thick, shop applied.
 - Finish - Acrylic/Urethane, 50 microns thick, site applied. * This coat may be replaced with two coats of water-borne epoxy or acrylic each 50 microns thick.
- Protective treatment for internal steel:
 - Preparation - Blast clean to Sa2.5
 - Primer - Zinc-rich epoxy 50 microns thick, shop applied to BS4652.
- For details of fire protection to steelwork refer to Architect's details.
- All levels shown thus TOS (** ***) are to tops of beams or stanchions unless noted otherwise.
- All steelwork below ground level to be encased with 100mm concrete (mix as for foundations) and with D49 wrapping fabric or as directed by the Engineer.
- The Steelwork Contractor shall not form any holes through steel members other than those for connections without the written approval of the Engineer. Where dissimilar steels are to be connected a suitable isolating material shall be incorporated.
- All steel receiving timber wall plates, bearers etc are to be predrilled with 12mm dia holes at 450mm centers staggered (900mm pitch on line) or as indicated on the Engineers drawing.
- The Steelwork Contractor will be responsible for accurately positioning, leveling and plumbing all steelwork in accordance with the drawings.
- The Contractor shall be responsible for the execution of the works in accordance with the drawings and the specification and for the accuracy of all dimensions and setting out on site.
- The Steelwork Fabricator is responsible for checking and determining all dimensions on site prior to fabrication of any steelwork.

- General Notes**
- DO NOT SCALE.
 - This drawing is to be read in conjunction with all other project drawings and specifications.
 - All dimensions are in millimetre's unless otherwise stated.
 - Should there be any conflict between the details indicated on this drawing and those indicated on other drawings the Project Engineer shall be informed PRIOR to construction on site.
 - Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site work prior to such approval being given, it is entirely at his own risk

FOUNDATIONS

- All organic material / topsoil / made ground is to be stripped from within the areas of the buildings and external works, levels to be taken after site stripping and agreed with the supervising officer as the work proceeds.
- All foundations shall be a minimum 400mm Wide unless noted otherwise.
- Foundations have been designed using an allowable nett bearing pressure of 75kN/m². To be founded on an undisturbed, naturally occurring strata OR improved weak and/or made ground as applicable. Any over dig to reach a suitable formation level (or to accommodate adjacent deeper drainage) is to be made up in Gen 3 concrete. All formations to be approved by the L.A inspector.
- The Engineer shall be informed of the location and species of any new trees to be planted as they may generate variations in foundation depth requirements, it is the responsibility of the landscape Architect (or planting specifier) either to ensure planting does not affect the designed depths of foundations, or to specify depths greater than those indicated on the Engineer's drawings, all in accordance with NHBC guidelines (latest revision).
- Construction joints and steps in foundations are to be in accordance to NHBC standards chapter 4.4 (latest revision).
- All foundation shall have a common top level unless noted otherwise.
- Foundation concrete to be cast against vertical earth faces. Any over excavation to be filled to the appropriate levels indicated, monolithically, with the appropriate grade of concrete specified.
- All excavations for foundations shall be excavated checked for safe bearing capacity (see note 3) and blinded with min 50mm concrete in one working day. The excavations shall be kept free from water, loose material and rubbish etc.
- Any services passing through the structure are to be sleeved and waterproofed to the service Engineers details.
- Sufficient cover and protection to be provided to all services in accordance with the service providers and services Engineers requirements. Final service location/routes to be agreed.
- Refer to Architects drawings for layout and locations of penetrations through slab.
- All sub-floor ventilation (both internal and external walls) shall be as specified by the Architect.
- All concrete generally to be in accordance with BS EN 206-1 and BS.8500-2.
- Mass concrete to strip/trench fill footings and concrete pad foundations is to be designated mix GEN1 - Class AC-1 / with a corresponding design chemical class DS1 as defined by BRE special digest (TBC by Ground Investigation Report).
- Mesh and bar reinforced concrete to reinforced ground beams, strip/trench fill footings and concrete pad foundations is to be designated mix RC32/40 - Class AC-1 / with a corresponding design chemical class DS1 as defined by BRE special digest (TBC by Ground Investigation Report).

P01	Preliminary Issue	AH	KJ	11-09-20	
REV	AMENDMENT	BY	CHK	DATE	
 PROJECT EXECUTION CLASS: All materials supplied in relation to those specified on this drawing are to be CE marked in accordance with the European Union Declaration of conformity.					
DRAWING STATUS					
 CONSULTING ENGINEERS LTD CIVIL STRUCTURAL DESIGN The Old Church Offices Shelton New Road Harshill, Stoke on Trent ST4 4DP Email: mail@c2cconsulting.co.uk Telephone: 01782 980330					
CLIENT					
Nantwich Town Council					
PROJECT					
Nantwich Civic Hall Extension					
DRAWING TITLE					
Detail Sheet 02					
SHEET SIZE	SCALE	DATE	DRAWN	CHECKED	STATUS
A1	1:50 & 1:20	11/09/20	AH	KJ	S3
PROJECT No.	DRAWING No.				REV
200525	C2C - P - 00 - DR - S				004 P01