

General Notes

G.0 General

- G.1 This drawing is to be read in conjunction with all relevant Architects and Engineers drawings and specifications, as well as the structural Design Criteria report (LO1212-DC-001).
- G.2 Do not scale from this drawing. All details and dimensions are to be checked by the contractor prior to commencement of construction. Any discrepancies are to be reported to the Engineer.
- G.3 All dimensions are in millimeters unless noted otherwise.
- G.4 All proprietary materials are to be used in accordance with the manufacturers recommendations.
- G.5 Temporary stability of all parts of the structure at all stages of construction is the responsibility of the contractor.
- G.6 Refer to Architects drawings for the following:-
 - Water Proofing and membranes details
 - Thermal insulation details
 - Cladding and cladding systems
 - Finishes and screed details
 - Balustrade details
 - Landscaping
 - Concrete finishes spec.
- G.7 Refer to Services drawings for the following:-
 - Details of the holes required in the slabs.
- PL.0 Piles
- PL.1 Piles shall be accurately installed in the correct position, a maximum tolerance of 75mm on position of piles shall be accepted at the discretion of the engineer. The maximum tolerance to the perpendicular of vertical piles shall be 40mm variance in 3m provided that moments or forces created by inaccurate driving are taken directly by the piles within the accepted factor of safety.
- PL.2 The setting out of grid lines shall be done by the contractor who shall provide the permanent datum level and back mark for the purpose of establishing out off levels, setting out of individual piles shall also be carried out by the contractor.
- PL.3 The contractor shall accurately log each day total piling length, empty boring length, delay time, obstruction time etc. cross reference number.
- PL.4 The contractor shall provide the structural consultant with two copies of the driving record detailing items required by the engineer as the work proceeds.
- PL.5 Piles shall be concreted up to a level 300mm above the required cut off level, each pile shall have at least four bars of 12mm diameter each projecting 450mm above the required cut off level for tying into the ground beams.
- PL.6 All piles to be designed with a FOS = 3 and of sufficient size and strength and durability to transmit the working loads.
- PL.7 All piles to be integrity tested following installation.
- PL.8 All piles to be 450mm ϕ (Or as required by Piling subcontractor). To support the loads.
- PL.9 Concrete in piles to be 35N strength.

TWO Temporary Works

- TW.1 Design, installation and maintaining of all temporary works is to be carried out by the contractor
- TW.2 Contractor to advise the architect and structural engineer of their proposals for temporary works and sequence of works, prior to works commencing on site.

T.0 Timber

- T.1 All structural Glulam timber is to be in accordance with Curtins specification for Timber.
- T.2 All structural Glulam timber to be minimum grade GL28 to BS:EN1995 and to be preservative treated. All other structural timber to be minimum grade C16 and to be preservative treated.
- T.3 All timber members not visible to be supported on heavy duty joist hanger unless noted otherwise.
- T.4 All timber steel fixings eg. hangers, straps brackets, nails etc to be galvanised to BS729 - UNO.
- T.5 All joist hangers to have min. 675mm of masonry above to flange of joist hangers.
- T.6 All structural plywood diaphragms to be screw fixed using 12 gauge x 63 long windscrews @ 150mm c/c along edges and 300mm c/c elsewhere. All WPB decking to be staggered and joists to be screw fixed to TJI joists or nogginns when joint perpendicular to span of joist.
- T.7 Contractor to include full depth nogginns at every third point in accordance with BS5268.
- T.8 All timber joists spanning parallel to external masonry wall to be tied to wall with BAT M30's straps @ 1200mm centres.
- T.9 Timber joists spanning perpendicular to external masonry walls to be tied to wall with BAT M30's straps @ 1200 centres.
- T.10 All vertical restraint straps to be BAT M30's minimum 1100 long @ 1200mm centres, fixed to external masonry walls.
- T.11 Double up joists under all partitions. Double joists to be bolted using M12 bolts @ 600 centres UNO.

S.0 Steelwork

- S.1 All steelwork is to be in accordance with Curtins specification for Structural steelwork.
 - S.2 Steelwork to be grade S275 in accordance with BS.4360. - UNO-
 - S.3 Structural steel fabricator to provide fabrication drawings for Engineers and Architects approval prior to fabrication. Steel fabrication to adhere dimensions from site. Setting out dimensions to be obtained from Architects drawings
 - S.4 All connections to be minimum of 4No. M16 Grade 8.8 bolts unless noted otherwise.
 - S.5 All welds to be minimum 6mm fillet welds, or full strength butt welds to BS 5135
 - S.6 Point finish to steelwork to be in accordance with Curtins Specification for Protective Coating of Structural Steelwork. This is to be specified in consultation with the architect.
- Preparation:
Abrasive clean to BS 7079 equivalent to Swedish standard S1505.56.00 Grade 2.5
- Galvanizing:
Hot dip galvanised to a minimum coating of 610g/m² (86 microns) in accordance with BS 729 or EN 150 1461
- S.7 All viable connections to be of neat appearance utilising fin plates with rounded corners and ground flush butt welds.
 - S.8 Fire protection to be in accordance with architects specifications.
 - S.9 Structural steel fabricator to design all connections to the factored loads indicated. A nominal shear reaction of 100kN is to be allowed for all connections unless noted otherwise.
 - S.10 Contractor to include for anti sag rods & bracing for roof purlins.
 - S.11 Contractor to ensure that all steel beams are prepped or preamberbered laying wet concrete to prevent dead load deflection for spans over 3000mm.
 - S.12 All new external deflection steelwork is to be galvanised (UNO)

M.0 Masonry

- M.1 All new masonry and accessories to be in accordance with Curtins specifications for loadbearing brick and blockwork minimum average compressive strength unless noted otherwise to be:
Blockwork (non load bearing) 3.5N lightweight concrete blocks
Brickwork to be 20.5N facing brickwork laid in grade 2 mortar.
Cavity wall ties to be stainless steel by Ancon or similar approved, 250mm long D0140 typeS11 @ 450/c vertically and 900/c horizontally staggered. Closer centres vertically near openings. (225mm/c)
- M.2 For setting out details see Architects drawing.
- M.3 Refer to architects drawings for movement joint locations. Maximum spacing of movement joints in brickwork 12m and 6m from returns. Maximum spacing of movement joints in blockwork 8m and 3m from returns.
- M.4 New facing brickwork below DPC to be minimum F1. Durability bricks set in 1:3 mortar with SRPC, unless noted otherwise on drawings.
- M.5 All other masonry below DPC to be class B engineering bricks set in 1:3 mortar with SRPC, unless noted otherwise on drawings.
- M.6 Provide stainless steel bed-joint reinforcement 'Brixtor' by BRG or similar at 225mm and 450mm vertical centres above external doors and also above and below windows. Bed joint reinforcement to extend 500mm minimum past door/window line.

C.0 Concrete

- C.1 All concrete is to be in accordance with Curtins specifications for structural concrete.
- C.2 All reinforced concrete to be Grade 35N (designated mix RC 35) strength having a minimum cement content of 330kg/cu.m and a max w/c ratio 0.5 and a max aggregate size of 20mm unless noted otherwise.
- C.3 Cover to slab reinforcement to be minimum 35mm to exposed concrete surfaces and 20mm to internal concrete surfaces unless noted otherwise.
- C.4 Contractor to allow for dead load deflection in all concrete beams and slabs when erecting falsework & framework pre-camber span/400 on span over 3000mm.
- C.5 Contractor to refer to SI report for sulphate
- C.6 For special surface finishes refer to architects details.
- C.7 All structural concrete to be cast on 50mm blinding concrete where appropriate. Blinding concrete to be grade C10
- C.8 For details of cast-in elements such as gullies, ducts, pipes, manholes, lift shaft inserts, conduits, sensors, light fitting and lightning protection etc., refer to the relevant services drawings.
- C.9 Construction materials placed in the slabs must be spread out so as not to exceed the finishes and design live loading.

F.0 Foundations

- F.1 Concrete for new foundations is to be designated mix FND2 to BS 5328. " Suitable for class 2 sulphate conditions"
 - F.2 Variation from the anticipated founding strata are to be reported to the Engineer.
 - F.3 All excavations taken to formation level are to be protected from inclement weather with concrete foundation placed immediately after excavation.
 - F.4 Any formation softened due to inclement weather shall be re-excavated to sound surface and the over dig filled with mass concrete at Main Contractors expense.
 - F.5 Where trial pits are encountered below foundations, these shall be re-excavated and filled with mass concrete specified below.
 - F.6 Where necessary services are to be sleeved through mass concrete foundations with 1 layer of A142 mesh placed above the sleeve/facet.
 - F.7 Site strip shall generally be in accordance with the Architects requirements not with standing the foregoing:
The following shall apply:-
(1) Below ground bearing slab all topsoil organic fill unsuitable fill shall be removed (to the approval of the Engineer) until a suitable founding strata is achieved. The ground shall then be made good to level in compacted hardcore as specified.
 - F.8 Anti-Heave compressible material to be provided against the inside faces of all external wall foundations and to the underside of ground floor slabs.
- NOTE: may vary depending on clay shrinkage potential and type of foundation

BR.0 Relevant Building Regulations, Eurocodes and Design Guides

- BR.1 The building has been designed in accordance with the following Eurocode and UK National Annexes:
BS:EN1990
Eurocode: Basis of Design
BS:EN1991
Eurocode 1: Actions on Structures
BS:EN1992
Eurocode 2: Design of Concrete Structures
BS:EN1993
Eurocode 3: Design of Steel Structures
BS:EN1994
Eurocode 4: Design of Composite Steel and Concrete Structures
BS:EN1995
Eurocode 5: Design of Timber Structures
BS:EN1996
Eurocode 6: Design of Masonry Structures
BS:EN1997
Eurocode 7: Geotechnical Design
BS:EN1998
Eurocode 8: Design of Structures for Earthquake Resistance
BS:EN1999
Eurocode 9: Design of Aluminium Structures.

Concrete ground floors C & CA publications. NIBC standards - 2007.

SC.0 Suspended Ceilings

- SC.1 Connection and suspension system for suspended ceilings to be designed and load tested by specialist ceiling contractor.
- SC.2 Contractor to carry out load tests on connections as well.

H.0 Hazard Identification/ CDM / Health & Safety

- SC.1 Particular attention to be paid where the hazard symbol is placed on a drawing. This symbol highlights a particular concern in relation to Health & Safety and measures to mitigate risk should be considered at all stages of design development and construction.



GENERAL NOTES

Kensington Aldridge Grenfell Tower

TENDER

Scale: 1:1 @ A1 DWG. No.: LO1212-012 Revision: T1 Date: 01/11/2013

Drawing Number	Revision	Date	Drawing Number	Revision	Date	T1	01.11.2013	ISSUED FOR TENDER	CCP	TA	Curtins consulting
ARCHITECT DRAWING REFERENCES						Revision	Date	Description	By	Checked	