

PILING NOTES

- PILES TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE 'SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALLS' PUBLISHED BY THE ICE AND BS EN 1997-1 EUROCODE 7 GEOTECHNICAL DESIGN, GENERAL RULES.
- FOR DETAILS OF THE GROUND CONDITIONS REFER TO THE GROUND INVESTIGATION REPORT. SHOULD THE PILING SUB-CONTRACTOR CONSIDER THE INFORMATION CONTAINED WITHIN THE REPORT TO BE INCONCLUSIVE OR DEFICIENT IN ANY WAY THEN THE TENDER MUST INCLUDE FOR ANY ADDITIONAL GROUND INVESTIGATION CONSIDERED NECESSARY.
- THE SPECIALIST PILING SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PILING SYSTEM AND SHALL BE DEEMED TO HAVE TAKEN DUE ACCOUNT OF THE PROPOSED LOADS AND ANY EFFECT ON ADJACENT STRUCTURES OR FEATURES.
- THE NATURE, EXTENT AND LEVEL OF THE PILING PLATFORM SHALL BE AGREED WITH THE PRINCIPAL CONTRACTOR.
- SETTING OUT DIMENSIONS, AS INDICATED ON THE DRAWINGS RELATE TO THE CENTRE OF THE PILES UNLESS NOTED OTHERWISE. SETTING OUT TO BE CHECKED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF THE WORKS.
- REFER TO CONTRACT DRAWINGS FOR PILE CUT OFF LEVELS.
- THE METHOD OF BREAKING DOWN THE PILES SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORKS.
- THE PRINCIPAL CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY KNOWN OBSTRUCTIONS PRIOR TO THE PILING AND BACKFILLING RESULTANT EXCAVATIONS AS DIRECTED BY THE ENGINEER. SHOULD UNKNOWN OBSTRUCTIONS BE ENCOUNTERED THE ENGINEER SHALL BE INFORMED IMMEDIATELY SO THAT THEY MAY CONSIDER ANY NECESSARY REMEDIAL WORK.
- FOR THE PILES, A DESIGN CHEMICAL CLASS OF DC-2 SHOULD BE ADOPTED.
- REFER TO PILING SPECIFICATION FOR PILE TESTING REQUIREMENTS. PILE TESTING TO BE UNDERTAKEN USING TENSION PILES OR KENTLEDGE.
- THE CONTRACTOR IS TO SUBMIT FULL CALCULATIONS AND DESIGN AND DETAILS FOR THE PILING DESIGN, TO THE ENGINEER FOR APPROVAL A MINIMUM OF SEVEN DAYS PRIOR TO COMMENCING THE WORKS ON SITE.
- A FULL ANCHORAGE LENGTH IS REQUIRED TO THE LONGITUDINAL PILE REINFORCEMENT ABOVE PILE CUT OFF LEVEL TO THE SATISFACTION OF THE STRUCTURAL ENGINEER.

CONCRETE NOTES

- ALL CONCRETE IS IN ACCORDANCE WITH NATIONAL STRUCTURAL CONCRETE SPECIFICATION.
- DRAWINGS SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND OTHER CONSULTANTS DRAWINGS, SPECIFICATIONS AND DESIGNERS RISK ASSESSMENTS.
- 50mm THICK BLINDING CONCRETE IS TO BE PLACED UNDER ALL REINFORCED CONCRETE IN CONTACT WITH THE GROUND.
- REFER TO SPECIFICATION FOR CONCRETE GRADES.
- ALL CONCRETE MIX DESIGNS TO CONFORM TO BS8500-1:2015 AND -2:2015.
- POSITION OF CONSTRUCTION JOINTS AND SIZE OF BAY TO BE AGREED WITH THE STRUCTURAL ENGINEER PRIOR TO CONCRETING.
- REFER TO ARCHITECT'S DRAWINGS FOR ADDITIONAL REBATES, CHAMFERS AND CAST-IN ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL ARE CAST AT THE TIME OF POURING.
- THE CHAIRS AND SPACERS TO BE PROVIDED IN ACCORDANCE WITH CONCRETE SOCIETY PUBLICATION 'SPACERS FOR REINFORCED CONCRETE'.
- FOR DETAILS OF BUILDERS WORK PENETRATIONS INTO AND THROUGH THE STRUCTURE REFER TO ARCHITECT'S AND ENGINEERS' DRAWINGS. ANY ADDITIONAL PENETRATIONS MUST BE SUBMITTED TO CURTINS FOR REVIEW PRIOR TO ISSUE. ALL HOLES IN REINFORCED CONCRETE ARE TO BE FORMED U.N.O.
- HOLES / CHASES ETC OTHER THAN THOSE DETAILED ON THE STRUCTURAL DRAWINGS SHOULD NOT BE MADE WITHOUT THE APPROVAL OF THE ENGINEER.
- THE CONCRETE CONTRACTOR SHALL PROVIDE ADEQUATE METHODS OF CONTROLLING CURING.
- ANY WATERPROOFING REQUIRED TO BE INSTALLED AS SPECIFIED SPECIALIST DETAILS BY THE ARCHITECT IN ACCORDANCE WITH SPECIALIST DRAWINGS.
- NOMINAL CONCRETE COVER TO BE NOTED ON THE REINFORCEMENT DRAWINGS AND INCLUDES ΔC<sub>cov</sub> = 10mm.
- WHERE CONCRETE IS CAST DIRECTLY AGAINST NON-AGGRESSIVE SOIL, THE COVER TO REINFORCEMENT SHALL BE INCREASED A FURTHER 50mm.
- CONTRACTOR TO ENSURE THAT ALL OTHER WORKS ARE PROTECTED DURING CONCRETING WORKS.
- HAND SCABBLING OF CONCRETE IS NOT ALLOWED UNDER ANY CIRCUMSTANCES. CONTRACTOR TO ADOPT ALTERNATIVE (NON-VIBRATORY) METHODS FOR SURFACE ROUGHENING OF JOINTS PRIOR TO CASTING ADJACENT CONCRETE.
- ALL BASES MUST BE CAST A MINIMUM 7 DAYS PRIOR TO ERECTION OF STEELWORK/MASONRY WALLS.

REINFORCEMENT NOTES

- ALL REINFORCEMENT TO BE IN ACCORDANCE WITH BS4449: B – HIGH YIELD TYPE 2 DEFORMED BARS WITH STRESS OF 500N/mm².
- THE MINIMUM LAP LENGTHS TO BE AS FOLLOWS:  
A193 MESH = 300mm  
A252 MESH = 400mm  
A393 MESH = 500mm
- LAPS TO LOSE BAR REINFORCEMENT = 50xTHE SMALLER BAR
- ALL MESH TO BE PROVIDED WITH FLYING ENDS TO ALLOW REINFORCEMENT LAP IN PLANE.
- WELDING OF REINFORCEMENT IS NOT PERMITTED WITHOUT PRIOR APPROVAL.

DECKING NOTES

- PROFILED METAL DECK, POUR STOPS ETC, TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR MUST MAKE ALLOWANCE FOR EDGE TRIMS, POUR STOPS, TEMPORARY PROPPING AS REQUIRED IN HIS TENDER.
- ALL COMPOSITE STEEL ELEMENTS RECEIVING SITE WELDED SHEAR STUDS TO HAVE UNPAINTED TOP FLANGES.
- METAL DECKING TO EXTEND OVER THE FLOOR AREAS WITH EDGE TERMINATION TO DIMENSIONS AS NOTED ON TYPICAL EDGE SECTION. METAL DECKING TO HAVE A MINIMUM OF 75mm BEARING ON STEEL BEAMS WHERE TERMINATED. METAL DECKS MUST BE PROVIDED WITH ADEQUATE FIXINGS TO TOP FLANGES OF ALL SUPPORTING PRIMARY STEELWORK TO RESTRAIN SUCH ELEMENTS DURING ERECTION PRIOR TO AND DURING THE CONCRETE SLAB BEING POURED. EDGE TRIMS TO BE 2.0mm GAUGE WHERE 150mm OR GREATER SLAB EDGE CANTILEVER IS REQUIRED.
- ALL STEEL MEMBERS ARE TO EN 1993 EUROCODE 3 AND EN 1994 EUROCODE 4. BEAMS HAVE BEEN TAKEN AS ACTING UNCOMPOSITELY WITH THE CONCRETE DECKING WHICH COMPRISES 150mm (NOMINAL DEPTH) NORMAL WEIGHT GRADE C35 CONCRETE SLAB ON PROFILED METAL DECKING.
- SPECIALIST MANUFACTURER TO DETAIL DECKING LAYOUT TO MINIMISE SINGLE SPANS WHERE DECKING WILL REQUIRE PROPPING DURING CASTING OTHERWISE DECKING TYPICALLY DOES NOT REQUIRE PROPPING TO SUSTAIN THE DEAD WEIGHT OF THE WET CONCRETE AND ANY OTHER CONSTRUCTION LOADS.
- WHERE DECKING IS INDICATED AS RUNNING PERPENDICULAR TO FLOOR BEAMS, THE LATERAL RESTRAINT OFFERED BY THE DECK HAS BEEN RELIED UPON IN THE DESIGN OF THE BEAMS.
- MULTISPAN DECKING MUST NOT BE CUT WITHOUT THE CONSENT OF THE DECKING MANUFACTURER.
- DECKING MUST BE CLEAR OF GREASE AND DIRT, WHICH COULD ADVERSELY AFFECT THE BONDING. HOWEVER, ANY WATER-SOLUBLE OIL REMAINING ON THE DECKING FROM THE ROLLING PROCESSES NEED NOT BE REMOVED.
- WELDING THROUGH TWO THICKNESS OF SHEET STEEL SHOULD BE AVOIDED WHERE POSSIBLE.
- SHEAR STUDS TO BE MANUFACTURED FROM LOW CARBON STEEL WITH MINIMUM YIELD PT = 350N/mm² AND ULTIMATE TENSILE STRENGTH = 450N/mm².
- STEEL U-BARS ARE TO BE PROVIDED TO ALL EDGE BEAMS INCLUDING BEAMS ADJACENT TO LARGE OPENINGS.
- TRANSVERSE REINFORCEMENT TO BE LOCATED AT LEAST 15mm BELOW TOP OF THE SHEAR STUD CONNECTORS.
- ALL OPENINGS LARGER THAN 200mm SQUARE ARE TO HAVE LOCAL REINFORCEMENT OR TRIMMERS. SUPPLEMENTARY BAR REINFORCEMENT IS REQUIRED IN THE SLAB WHERE HOLES NOT TRIMMED BY STRUCTURAL STEEL EXCEED 200mm.
- OPENINGS IN THE FINISHED SLAB SHOULD PREFERABLY BE FORMED BEFORE CONCRETING AS CUTTING THE CONCRETE SLAB MAY GIVE RISE TO LOSS OF BOND BETWEEN CONCRETE AND DECKING. THE PREFERRED METHOD OF FORMING SMALL OPENINGS IS TO BOX OUT THE OPENING PRIOR TO CONCRETING AND CUT THE DECKING ONCE THE SLAB HAS CURED. BREAKING OUT THE CONCRETE WITH A HEAVY PERCUSSIVE TOLL SHOULD NEVER BE DONE.
- CONCRETE MUST BE POURED EVENLY TO THE PANEL END IN THE DIRECTION OF SPAN OF THE DECKING. HEAPING OF WET CONCRETE MUST BE AVOIDED. SHOULD DAY JOINTS BE REQUIRED, THESE SHOULD BE POSITIONED OVER A PERMANENT SUPPORT AT A SHEET END. WHERE THIS IS NOT POSSIBLE, NO MORE THAN THE END THIRD OF A SHEET SHOULD BE LEFT UN-POURED. AT RIGHT ANGLES TO THE SPAN, JOINTS SHOULD ONLY BE FORMED AT DECK BUTT JOINTS.
- CONCRETE MUST BE POURED EVENLY TO THE PANEL END IN THE DIRECTION OF SPAN OF THE DECKING. HEAPING OF WET CONCRETE MUST BE AVOIDED. SHOULD DAY JOINTS BE REQUIRED, THESE SHOULD BE POSITIONED OVER A PERMANENT SUPPORT AT A SHEET END. WHERE THIS IS NOT POSSIBLE, NO MORE THAN THE END THIRD OF A SHEET SHOULD BE LEFT UN-POURED. AT RIGHT ANGLES TO THE SPAN, JOINTS SHOULD ONLY BE FORMED AT DECK BUTT JOINTS.
- DECKING SHOULD BE CUT TO PROVIDE A TIGHT FIT INTO THE WEB OF THE COLUMN AND TAPE APPLIED TO MINIMUM CONCRETE LOSS. ALL FOUR EDGES OF THE DECKING (SHEET) MUST BE SUPPORTED DURING CONSTRUCTION USING PROPS ALONG THE SIDE OF THE DECKING'S FREE EDGE AS DEEMED NECESSARY. THE DECKING MUST BEAR ONTO PERMANENT SUPPORTS IN THE DIRECTION OF THE SPAN EXCEPT AT HOLES AS NOTED ABOVE.
- ADDITIONAL REINFORCEMENT MAY BE REQUIRED IF DECKING IS TO BE SINGLE SPAN SUBJECT TO SUBCONTRACTORS (FIRE) DESIGN..

SHEAR STUDS  
WELDING AND TESTING

Centre of studs to be 1 per trough or at 300 ctrs.

Welders to be certified by the equipment manufacturer or other recognised authority as competent for the work.

Trial welding; before starting, demonstrate stability of materials, equipment & welding system proposed for welding studs. Fix not less than ten studs for testing. During the work at the beginning of each shift, each welder is to fix not less than two studs for testing.

Testing trial welds visually inspect; each trial weld is to exhibit full 360° flash. Subject each trial stud to a 30° bend test, welds must show no sign of cracking.

Production welds; to be visually free from cracks & lack of fusion & capable of developing at least the ultimate strength of the studs.

STEELWORK NOTES

- THE STEELWORK IS TO COMPLY WITH THE NATIONAL STRUCTURAL STEELWORK SPECIFICATION, U.N.O.
- ALL STEELWORK TO BE GRADE S355 IN ACCORDANCE WITH BS EN 10025 FOR PLATES, FLATS AND ROLLED SECTIONS OR BE EN 10210 FOR OT ROLLED HOLLOW SECTIONS. THE SUBGRADE IS TO BE DETERMINED BY THE STEELWORK CONTRACTOR IN ACCORDANCE WITH BS EN 1993-1-10.
- THE STRUCTURE IS TO BE DESIGNED IN ACCORDANCE WITH BUILDING REGULATIONS TO LIMIT DISPROPORTIONATE COLLAPSE AND IS CATEGORISED AS A STRUCTURE CATEGORY 2A.
- ALL STEELWORK TO BE IN ACCORDANCE WITH EN1993 EUROCODE 3 & 4.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF STEEL CONNECTIONS WHICH ARE TO BE DESIGNED TO SATISFY DISPROPORTIONATE COLLAPSE REQUIREMENTS. LOADS TO BE ADVISED ON THE DRAWINGS AT RIBA STAGE 5, FOR COSTING PURPOSES (UP TO STAGE 4), ASSUME ALL CONNECTIONS TO BE DESIGNED FOR A MINIMUM SHEAR LOAD OF 0.5V<sub>Ed</sub> AND ALL BEAM TO COLUMN CONNECTIONS TO HAVE FULL DEPTH END PLATES UNO.
- CONNECTION DESIGN CALCULATIONS TO BE SUBMITTED TO THE ENGINEER AT LEAST 2 WEEKS PRIOR TO STEELWORK FABRICATION.
- STEELWORK CONTRACTOR TO PROVIDE FABRICATION DRAWINGS FOR ALL STEELWORK FOR ENGINEERS AND ARCHITECTS INSPECTION PRIOR TO FABRICATION. STEEL FABRICATOR TO OBTAIN AND CONFIRM ANY REQUIRED SITE DIMENSIONS. ALL SETTING OUT BE OBTAINED DIMENSIONS ARCHITECTS DRAWINGS. THE STEELWORK CONTRACTOR TO INFORM MAIN CONTRACTOR OF ANY DIMENSIONAL DISCREPANCIES FROM THOSE INDICATED ON THE DRAWING AT LEAST 14 DAYS PRIOR TO COMMENCEMENT.
- ALL STEELWORK TO BE SHOT BLASTED TO SWEDISH STANDARD Sa 2.5 IN ACCORDANCE WITH BS EN ISO 8501-1 PRIOR TO PAINTING.
- ALL STEELWORK TO BE CONCRETE ENCASED IS TO BE LEFT UNPAINTED.
- ALL STEELWORK BELOW GROUND IS TO BE ENCASED IN 50mm MIN CONCRETE.
- ALL STEELWORK BUILT INTO CAVITY WALLS OR ENCASED IN MASONRY IS TO BE GIVEN TWO COATS OF HIGH BUILD BITUMASTIC PAINT ON SITE BY THE MAIN CONTRACTOR TO 150 MICRONS DFT.
- ALL STEELWORK CONSIDERED AS VISUALLY EXPOSED TO HAVE REGARDS TO THE HIGH QUALITY AND APPEARANCE OF CONNECTIONS, WELDS, MEMBERS ETC, REQUIRED THROUGHOUT THE EXPOSED FRAME.
- ALL HOLDING DOWN BOLTS TO BE POSITIONED TO 0 (+/-) 5mm AND FIXING DESIGNED TO ALLOW A FREE MOVEMENT OF 40mm IN ANY DIRECTION.
- ALL BASEPLATES TO BE GROUTED USING HIGH STRENGTH NON-SHRINK GROUT AFTER STEEL HAS BEEN LINED AND LEVELLED.
- ALL COLUMNS TO BE CENTRALLY LOCATED ON INTERSECTIONS OF GRIDS UNO.
- CIRCULAR HOLLOW SECTIONS ARE TO HAVE NO VISIBLE FABRICATION SEAMS & SEALED.
- ALL WELDS TO BE 6mm FILLET WELD ALL AROUND UNO.
- ALL CONNECTIONS TO HAVE A MINIMUM OF 4 No. M16 GRADE 8.8 UNO.
- WHERE CLOSED SECTIONS ARE DRILLED TO FORM CONNECTIONS TO OTHER STEEL OR BUILDING ELEMENTS THE CONNECTION SHALL BE DETAILED TO ENSURE THE HOLE IS SEALED IN A MANNER TO PROVIDE ADEQUATE CORROSION PROTECTION TO THE INSIDE OF THE CLOSED SECTION AND PROTECTION AGAINST BIMETALLIC CORROSION AS REQUIRED.
- TEMPORARY STABILITY OF THE STEELWORK FRAME IS THE RESPONSIBILITY OF THE STEELWORK CONTRACTOR AND IS TO BE ADDRESSED IN THE STEELWORK SUB CONTRACTORS ERECTION METHOD STATEMENT.
- TEMPORARY LATERAL RESTRAINT TO COLUMNS PRIOR TO THEIR PERMANENT CONNECTION TO THE BRACED STRUCTURE SHALL BE PROVIDED. FOUNDATIONS HAVE BEEN DESIGNED FOR PINNED CONNECTIONS (UNO) AND IT IS NOT PERMISSIBLE TO ALLOW ANY COLUMN TO STAND SUPPORTED BY ITS HOLDING DOWN BOLTS ONLY, EXCEPT DURING CONTROLLED ERECTION SEQUENCE.
- ALL COLUMNS DESIGNATED AS "WIND POSTS" TO HAVE VERTICALLY SLOTTED HEAD CONNECTION TO ALLOW 25mm FREE VERTICAL MOVEMENT OF MEMBER ABOVE.
- CONTRACTOR TO MAKE ALLOWANCE FOR THERMAL BREAK CONNECTIONS WHERE STEELWORK PENETRATES THE BUILDING'S THERMAL LINE. REFER TO ARCHITECT'S DRAWINGS FOR DETAILS OF THERMAL BREAKS.
- CUTTING OR SITE WELDING IS NOT PERMITTED WITHOUT CONSENT OF ENGINEER.

PROTECTION OF STEELWORK

- ALL STEELWORK TO HAVE CORROSION RESISTANCE SUITABLE FOR ENVIRONMENT CATEGORY C3. CONTRACTOR TO ENSURE COMPATIBILITY WITH THE PAINT SYSTEM.
- ALL EXTERNAL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH ENGINEERS SPECIFICATION.
- ADDITIONAL COATING TO BE ALLOWED FOR WHERE STEELWORK LEFT EXPOSED DURING CONSTRUCTION.
- FIRE PROTECTION ASSUMED TO BE PROVIDED VIA BOARDING - REFER TO ARCHITECTS DRAWINGS FRO DETAILS.
- ALL PROPRIETARY STEELWORK TO BE HOT DIP GALVANISED OR STAINLESS STEEL (SUITABLE FOR C3 ENVIRONMENT).

STEELWORK CONNECTIONS

All connections unless detailed to be designed by steelwork contractor to BS EN 1993-1-8:2005 - *Design of Joints*.  
For tender assume all connections to be designed for a min shear load of 0.5V<sub>pl</sub> together with an axial load of ± 15kN u.n.o.

In addition all connections to be designed for tie forces in accordance with Annex A of BS EN 1991-1-7:2006 - *Accidental Actions* for building class 2A as defined by The Building Regulations Approved document A.

All loads provided are Ultimate Limit State (ULS) in kN or kNm.

Detailed connections are to be fabricated strictly in accordance with the drawing. No deviation will be accepted without prior approval.

MASONRY NOTES

- ALL BRICKWORK BELOW DPC LEVEL IS TO BE A MINIMUM COMPRESSIVE STRENGTH OF 27N/mm² AND MAXIMUM WATER ABSORPTION OF 7%.
- ALL BLOCKWORK BELOW DPC LEVEL IS TO BE DENSE SOLID BLOCK WITH NO VOIDS AND A MINIMUM COMPRESSIVE STRENGTH OF 7.3N/mm².
- ALL MORTAR BELOW DPC LEVEL IS TO BE COMPRESSIVE STRENGTH CLASS M6. NO ADDITIVES WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT OF THE ENGINEER.
- ALL BRICKWORK ABOVE DPC LEVEL IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 27.0N/mm² AND A MAXIMUM ABSORPTION RATE OF 12%.
- ALL BLOCKWORK ABOVE DPC LEVEL IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 7.3N/mm².
- CAVITY WALL TIES TO HAVE A MINIMUM EMBEDMENT OF 50mm INTO MORTAR JOINT IN EACH LEAF, WITH MINIMUM TIE LENGTH IN ACCORDANCE WITH EN 1996 EUROCODE 6.
- ALL MORTAR ABOVE DPC LEVEL TO ARCHITECTS SPECIFICATION.
- ALL WALL TIES TO BE STAINLESS STEEL AND SHALL BE IN ACCORDANCE WITH EN 1996 EUROCODE 6.
- WALL TIES TO BE AT 450mm VERTICAL AND 750mm HORIZONTAL CENTRES. AROUND OPENINGS AND VERTICAL UN-BONDED OR RETURNED EDGES TIES SHALL BE PROVIDED AT 225mm VERTICAL CENTRES AND WITHIN 225mm OF THE EDGE.
- NO INDIVIDUAL BLOCK WEIGHT SHALL EXCEED 20kg.
- LIFT SHAFT WALLS WHERE PRESENT TO BE CONSTRUCTED IN 140mm THICK BLOCKWORK AND TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 10N/mm² AND REINFORCED WITH BRC BRICKFORCE BF45W175 @ 450mm VERTICAL CENTRES
- LOCATION OF MOVEMENT JOINTS SUIT ARCHITECTS SETTING OUT.
- ALLOWANCE IS TO BE MADE FOR LINTELS ACROSS OPENINGS IN MASONRY. PROPRIETARY LINTELS BY SPECIALIST MANUFACTURER. LINTEL SPECIFICATION IS TO BE CHECKED BY ARCHITECT/CONTRACTOR AGAINST FIRE PROTECTION REQUIREMENTS.
- INTERNAL WALLS ARE NOT DESIGNED FOR EXTERNAL WIND LOADS EXPOSED SHOULD BE PROPPED DURING CONSTRUCTION IF TEMPORARILY EXPOSED TO WIND LOADING. U.N.O.
- NO COLUMN OR PIER OF MASONRY (IN LOAD BEARING ON NON LOAD-BEARING MASONRY) SHOULD HAVE AN AREA LESS THAN 0.04m². ALTERNATIVE MEANS OF SUPPORT (EG POSTS OR ANGLES FIXED TO NEARBY SUPPORTS) SHOULD BE ALLOWED FOR WHERE THIS IS THE CASE.

STAIRCASE SUB-CONTRACTOR

- THE FINAL DESIGN OF ALL STAIRCASE MEMBERS AND FIXINGS WILL BE THE RESPONSIBILITY OF THE RELEVANT SUB-CONTRACTOR, FOLLOWING THE DESIGN AND INTENT DRAWINGS PRODUCED BY THE ENGINEER AND ARCHITECT.
- ALL CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO THE CA 4 WEEKS BEFORE COMMENCEMENT OF ANY WORKS.
- MATERIALS: ALL STEELWORK, CONCRETE OR TIMBER SHALL BE TO THE RELEVANT EUROCODE STANDARDS.
- LOADINGS ALL STAIRCASES SHALL BE DESIGNED FOR AN IMPOSED LOAD ALLOWANCE OF 4kN/m²
- DEFLECTION THE LIMITATIONS OF DEFLECTION OF ALL STAIRCASE MEMBERS ARE LISTED BELOW:  
IMPOSED LOAD DEFLECTION  
CONTINUOUS OR SIMPLY SUPPORTED MEMBERS SPAN + 360  
CANTILEVER MEMBERS SPAN + 125 BUT NOT MORE THAN A  
MAXIMUM LOAD DEFLECTION OF 35mm.
- ALL PRECAST TREADS AND LANDING ELEMENTS SHALL BE FABRICATED TO SUIT FINAL SITE DIMENSIONS ENSURING ARCHITECTURAL GAPS ARE MAINTAINED. PRIOR TO THE FABRICATION OF STAIR, A DETAILED SITE SURVEY SHALL BE UNDERTAKEN TO ESTABLISH THE EXACT DIMENSION BETWEEN SUPPORT WALLS AND FLOOR BEAMS. THE STRUCTURAL STEEL ELEMENTS SHALL THEN BE FABRICATED TO SUIT THESE SITE DIMENSIONS.
- THE DETAILING OF THE CONNECTIONS OF THE PRECAST TREADS MUST ACCOMMODATE THE DEVIATIONS OF THE 'AS BUILT' STRUCTURE WHICH WILL VARY AT EACH FLOOR.
- THE DESIGN AND DETAILING OF THE STAIRCASE SHALL ACCOMMODATE THE TOLERANCES, MOVEMENTS AND DEFLECTIONS OF THE PRIMARY STRUCTURE.
- ALL PRECAST FLIGHTS AND LANDINGS ARE TO BE POSITIVELY FIXED BACK TO THE PRIMARY STRUCTURE TO AVOID ACCIDENTAL COLLAPSE.

CONTRACTOR DESIGN ELEMENTS

- PILES
- PRECAST CONCRETE STAIRS
- PROPRIETARY COLD ROLLED STEEL SUCH AS:  
WALL TIES  
SECONDARY WINDOW SUPPORTS
- STEELWORK CONNECTIONS
- ARCHITECTURAL METAL WORK INCLUDING BALUSTRADES, HANDRAILS, ACCESS LADDERS, CLADDING AND ASSOCIATED FIXINGS INCLUDING FEATURE WINDOWS
- COMPOSITE METAL DECKING
- CONCRETE MIXES
- TEMPORARY WORKS
- PAINT / CORROSION PROTECTION (BY STEEL FABRICATOR)
- CEILING AND SERVICES SUPPORT AND FIXINGS

NOTES

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All other design team elements, where indicated, have been imported from the consultant's drawings/model and reference should be made to the individual consultant's drawings for exact setting out, size and type of component.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING

CONSTRUCTION  
UNKNOWN BURIED SERVICES

MAINTENANCE / CLEANING  
Nothing significant to note.

DECOMMISSIONING / DEMOLITION  
Nothing significant to note.

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT

|     |                          |     |          |      |
|-----|--------------------------|-----|----------|------|
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Client

M4NCHESTER ONE LTD

Project

SPEAR STREET,  
MANCHESTER

Drawing

STANDARD NOTES

|                         |            |         |       |                  |
|-------------------------|------------|---------|-------|------------------|
| Purpose of Issue        |            |         |       |                  |
| CONSTRUCTION            |            |         |       |                  |
| Project No.             | Scale @ A1 | Date    | Drawn | Checked          |
| 13468                   |            | Apr '23 | AMT   | PJK              |
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| project                 | origin     | zone    | level | type             |
| SSM-MaG-ZZ-XX-DR-S-1000 |            |         |       | revision         |
|                         |            |         |       | C1               |

WORK IN PROGRESS (CONSTRUCTION)

This drawing is based upon the available consultant design team information as of 04/05/23. As such the information provided may be subject to change based upon external influences through design development such as client brief and scope changes, M&E services design and B.W.I.C., and following the receipt of detailed design information for sub-contractor designed elements.  
In respect of sub-contractor designed elements, the cladding/curtain walling design, roofing design, M&E services design including B.W.I.C., the design of precast concrete elements and other proprietary frame components all have an interface with the primary frame structure. If this drawing is used for construction purposes in advance of final sub-contractor details for these elements, then the main contractor acknowledges the risk of variations to the frame details in response to such design information and accepts the responsibility for the consequences thereof.