

1.0 COMPANY ABBREVIATIONS

- 1.1 ENGINEER - AECOM
1.2 CONTRACT ADMINISTRATOR -
1.3 EMPLOYER - UNIVERSITY COLLEGE LONDON HOSPITALS CHARITY

2.0 DRAWING NOTES

- 2.1 ABBREVIATIONS: FFL - FINISHED FLOOR LEVEL, FGL - FINISHED GROUND LEVEL, SSL - STRUCTURAL SLAB LEVEL, SOP - SETTING OUT POINT, TYP - TYPICAL, UNO - UNLESS NOTED OTHERWISE, THK - THICKNESS
2.2 DO NOT SCALE DIMENSIONS FROM THESE DRAWINGS. ONLY CALCULATED DIMENSIONS OR DIMENSIONS GIVEN ON THESE DRAWINGS SHALL BE USED. DIMENSIONS IN MM UNLESS NOTED OTHERWISE LEVELS TO BE IN METRES A.O.D UNLESS NOTED OTHERWISE.
2.3 THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH (AECOM) SPECIFICATIONS.
2.4 THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS, ENGINEERS AND OTHER SPECIALISTS' DRAWINGS AND SPECIFICATIONS.
2.5 REFER TO ARCHITECTS DRAWINGS FOR INFORMATION ON FINISHES, DOORS, WINDOWS, NON STRUCTURAL WALLS, WATERPROOFING AND FIRE PROTECTION OF STRUCTURAL MEMBERS. ALL BRACKETS AND FIXINGS FOR THE SUPPORT OF THE FINISHES ARE TO BE SHOWN ON THE ARCHITECTS DRAWINGS.
2.6 ANY DISCREPANCY BETWEEN AECOM DRAWINGS AND ARCHITECTS/ENGINEERS/SPECIALISTS DRAWINGS ARE TO BE REPORTED TO THE CONTRACT ADMINISTRATOR IMMEDIATELY.
2.7 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SITE AND SETTING OUT DIMENSIONS AND LEVELS, INCLUDING "AS BUILT" PORTIONS OF RETAINED STRUCTURE AND TEMPORARY WORKS, BEFORE COMMENCING THE WORKS.
2.8 WHERE THESE NOTES DIFFER FROM THE SPECIFICATION CLARIFICATION SHOULD BE SOUGHT FROM THE ENGINEER.
2.9 THE CONTRACTOR SHALL, AT THE OUTSET, ESTABLISH WITH THE LOCAL AUTHORITY THEIR REQUIREMENT FOR INSPECTING THE WORKS AND ADHERE TO THESE.
2.10 IF IN DOUBT ABOUT THE INFORMATION SHOWN ON THIS DRAWING OR ANY RELATED DRAWING - ASK
2.11 ALL PLANT AND ITS SUPPORTS TO BE ADEQUATELY ISOLATED FROM THE STRUCTURE (I.E ANTI VIBRATION MOUNTINGS TO BE PROVIDED. REFER TO DETAILS BY OTHERS)

3.0 CONSTRUCTION

- 3.1 THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS AND THEIR PROPOSALS MUST BE SUBMITTED TO THE STRUCTURAL ENGINEER SUFFICIENTLY IN ADVANCE OF THE WORKS STARTING TO PERMIT COMMENT. UNDER NO CIRCUMSTANCES WILL ANY STRUCTURAL ALTERATIONS BE CARRIED OUT PRIOR TO THE STRUCTURAL ENGINEER COMMENTING ON THE CONTRACTORS TEMPORARY WORKS PROPOSALS
3.2 IF AN INDEPENDENT CHECK ON THE TEMPORARY WORKS IS DEEMED TO BE NECESSARY BY THE ENGINEER, THE CONTRACTOR SHALL SUPPLY SUCH INFORMATION AS IS REQUIRED BY THE CHECKER TO OBTAIN APPROVAL.
3.3 NO CONSTRUCTION METHODOLOGY THAT CAUSES A MODIFICATION OF THE PERMANENT WORKS WILL BE ACCEPTED.
3.4 THE CONTRACTOR SHALL PREPARE HIS OWN PROPOSALS FOR SEQUENCE OF CONSTRUCTION FOR WHICH HE SHALL REMAIN ENTIRELY RESPONSIBLE. THESE PROPOSALS SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR (CA) PRIOR TO COMMENCEMENT OF WORK ON SITE. WHERE A SEQUENCE OR METHOD OF CONSTRUCTION IS NOTED ON A DRAWING IT SHOULD BE NOTED AND ANY VARIATION TO THIS SHOULD BE AGREED IN ADVANCE WITH THE ENGINEER.
3.5 ALL SPECIALIST NAMED MATERIALS AND PROPRIETARY PRODUCTS ARE TO BE USED AND FULLY FIXED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. ALTERNATIVE PRODUCTS TO THOSE NAMED ON THE DRAWINGS ARE SUBJECT TO APPROVAL BY THE ENGINEER AND MUST BE PROVED TO BE SUITABLE BY THE CONTRACTOR.
3.6 THE CONTRACTOR SHALL ENSURE THAT THE STABILITY OF THE BUILDING, AND ADJOINING STRUCTURE, IS MAINTAINED AT ALL STAGES OF THE WORKS.
3.7 ALL JOINTS HAVE BEEN DESIGNED FOR THE RANGE OF MOVEMENTS OF THE COMPLETED STRUCTURE. THE CONTRACTOR MUST ENSURE THAT THE CONSTRUCTION METHODOLOGY DOES NOT REQUIRE ALTERATIONS TO THESE JOINTS.
3.8 SERVICE HOLES THAT ARE NOT SHOWN ON THESE DRAWINGS SHALL NOT BE FORMED UNTIL THE STRUCTURAL ENGINEER HAS AGREED THE WORK.
3.9 THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR THE STABILITY AND STRUCTURAL INTEGRITY OF THE WORKS DURING THE CONTRACT AND PROVIDE SUPPORT AS NECESSARY. HE SHALL PREVENT OVERLOADING OF ANY COMPLETED OR PARTIALLY COMPLETED ELEMENTS.

4.0 PILING NOTES

- 4.1 ALL PILING WORKS ARE TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE "SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALLS" (SPERW) UNLESS SPECIFIED OTHERWISE ON DRAWINGS.
4.2 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH AECOM PILING SPECIFICATION DOCUMENT D30.
4.3 THE PILING WORKS COMPRISE THE DESIGN, SUPPLY AND INSTALLATION OF PILES AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE SPECIFICATION.
4.4 SETTING OUT OF THE PILES IS THE RESPONSIBILITY OF THE MAIN CONTRACTOR.
4.5 THE PILING CONTRACTOR SHALL CONFIRM THE SITE INVESTIGATION REPORT FINDINGS IN SO FAR THAT HE SHALL SATISFY HIMSELF THAT THE RESULTS OF THE BORINGS FROM 2 NO. OTHER PILE LOCATIONS ARE SATISFACTORY FOR THE PILE DESIGN. ANY SIGNIFICANT VARIATIONS DISCOVERED WHICH MAY AFFECT THE PILE DESIGN MUST BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER AND/OR THE CONTRACTORS ADMINISTRATOR IMMEDIATELY.

4.6 REINFORCEMENT:

- 4.7 ALL REINFORCEMENT SHALL HAVE A CHARACTERISTIC YIELD STRENGTH OF 500N/mm2 AND SHALL HAVE TYPE 2 BOND CHARACTERISTICS ALL IN ACCORDANCE WITH BS EN 1992-1-1:2004.
4.8 COVER TO ALL REINFORCEMENT SHALL BE 75mm U.N.O.
4.9 REINFORCEMENT LAPS TO BE: LONGITUDINAL BARS - 50 x DIAMETER. BINDERS - 34 x DIAMETER. LAPS OF LONGITUDINAL TO BE STAGGERED.

4.0 PILING CONTINUED.....

SETTING OUT:

- 4.11 DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.
4.12 ALL LEVELS ARE IN METRES A.O.D.

PILING INSTALLATION:

- 4.13 PILES SHALL BE INSTALLED FROM PILING MAT LEVEL. THE PILING MAT DESIGN, INSTALLATION AND PILING MAT LEVEL ARE BY OTHERS.

TEMPORARY WORKS:

- 4.14 NOTWITHSTANDING ANY GUIDANCE ON TEMPORARY WORKS INCLUDED IN THE SPECIFICATIONS, ON THE DRAWINGS OR AS DIRECTED, THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, DETAILING AND IMPLEMENTATION OF ALL PROPPING, STRUTTING OR OTHER TEMPORARY WORKS REQUIRED BY THE CONSTRUCTION FOR THE SAFE EXECUTION AND STABILITY OF THE WORKS DURING CONSTRUCTION.
4.15 THE PILING CONTRACTOR IS TO CONSIDER THE REQUIREMENT FOR SLEEVES DURING CONSTRUCTION. PILING TENDER PRICE IS TO INCLUDE FOR SLEEVES AS REQUIRED.

PILE LOADS:

- 4.16 LOADS INDICATED ON PILE SCHEDULES ARE SAFE WORKING LOAD FACTORS TO E7 TO BE APPLIED BASED ON INTERPRETATIVE REPORTS.
4.18 ALL PILES SHALL HAVE THE NOMINAL LOAD CAPACITY AS SPECIFIED. ACTUAL FOUNDING LEVELS SHALL BE DETERMINED BY THE PILING CONTRACTOR AND ARE TO BE REVIEWED BY THE ENGINEER.
4.19 ALL SETTING OUT, DESIGN OF PILES, METHOD OF CONSTRUCTION AND CO-ORDINATION WITH THE TEMPORARY WORKS MUST BE APPROVED BY THE DESIGN AND BUILD CONTRACTORS, ENGINEER AND THE CLIENTS AGENT BEFORE CONSTRUCTION.
4.20 THE STRUCTURAL DESIGN OF THE PILES TO BS EN 1992-1-1:2004 THE PARTIAL LOAD FACTOR SHALL BE TAKEN AS 1.50 ON THE HORIZONTAL APPLIED LOADS AND 1.0 ON THE INTERNAL TENSION LOADS.
4.21 THE CONTRACTOR SHALL ALLOW FOR ANY BENDING MOMENTS INDUCED IN THE PILE DUE TO ECCENTRICITIES CAUSED BY PILE INSTALLATION TOLERANCES.
4.22 THE PILING CONTRACTOR IS TO DETERMINE IN HIS DESIGN TO THE APPROVAL OF THE ENGINEER, THE DEPTHS AT WHICH THE HORIZONTAL SHEAR LOADS ARE RESISTED BY THE PILES. ADDITIONAL BENDING MOMENTS DUE TO THE DEPTH OF GROUND RESTRAINT, DETERMINED BY THE PILING CONTRACTOR, SHALL BE ALLOWED FOR BY THE PILING CONTRACTOR.
4.23 THE PILING CONTRACTOR MUST ALLOW FOR OTHER LOADS WHICH AFFECT THE DESIGN OF THE PILES SUCH AS CLAY HEAVE AND CHANGES IN GROUNDWATER LEVEL.
4.24 EACH PILE TO RESIST 25kN MINIMUM HORIZONTAL SHEAR AT THE TOP OF EACH PILE U.N.O.
4.25 ALL PILES ARE TO BE DESIGNED WITH A MINIMUM ECCENTRICITY OF 75mm.
4.26 ALL PILES ARE TO BE DESIGNED FOR A MINIMUM TENSION OF 50kN UNLESS NOTED OTHERWISE.
4.27 ALL PILES ARE TO BE INTEGRITY TESTED. REFER TO (AECOM) PILING SPECIFICATION DOCUMENT D30.

5.0 CONCRETE

- 5.1 ALL REINFORCED CONCRETE IS TO BE IN ACCORDANCE WITH THE CONCRETE SPECIFICATION, UNLESS NOTED OTHERWISE.
5.2 MASS CONCRETE IS TO BE GRADE C25 IN ACCORDANCE WITH SPECIFICATION E10.
5.3 CONCRETE FOR BLINDING IS TO BE GRADE GEN1 IN ACCORDANCE WITH SPECIFICATION E10.
5.4 FOR FINISH TO SLABS REFER TO THE CONCRETE SPECIFICATION.
5.5 ALL FORMED SURFACES ARE TO BE BASIC FINISH TO E20/610 UNLESS NOTED OTHERWISE IN APPENDIX A OF THE SPECIFICATION FOR THE WORKS.
5.6 DRILLING HOLES FOR BOLTS/ANCHORS IN EXISTING REINFORCED CONCRETE: LOCAL EXISTING REINFORCEMENT TO BE LOCATED WITH A COVER METER ANY VARIANCES TO THE ASSUMED LOCATION ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
5.7 DRILLING INTO CONCRETE IS TO BE DONE USING DIAMOND DRILLING TECHNIQUES AND ONLY WITH PERMISSION FROM AECOM.
5.8 ALL REINFORCEMENT IS TO BE TO BS 4449 ABBREVIATIONS:

SLABS:

- T1 = EXTREME TOP OUTER LAYER
T2 = TOP SECOND LAYER
B2 = BOTTOM SECOND LAYER
B1 = EXTREME BOTTOM OUTER LAYER
ABR = ALTERNATE BARS REVERSED
STGD = STAGGERED

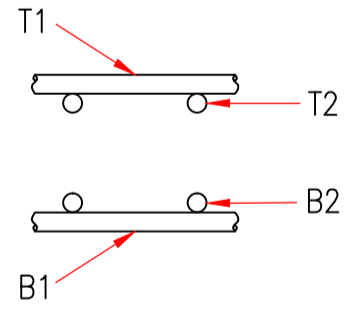
WALLS:

- NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
EW = EACH WAY

- 5.9 LOCATION OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO AECOM FOR APPROVAL.
5.10 INSERTS SHALL BE PROVIDED AS NECESSARY, INCLUDING SUPPORTS FOR MASONRY AND SERVICES. REINFORCEMENT SHALL BE ADJUSTED TO SUIT. PLASTIC TAPE SHALL BE USED TO PREVENT CONTACT OF DISSIMILAR METALS.
5.11 CONTRACTOR TO ALLOW FOR CARRYING OUT REPAIRS AND MAKING GOOD TO EXISTING CONCRETE ELEMENTS AS IDENTIFIED BY THE ENGINEER. CONTRACTOR TO ALLOW AN ADEQUATE PERIOD FOLLOWING SOFT STRIP FOR THE DESIGN TEAM TO VISUALLY INSPECT THE EXPOSED SURFACES.

6.0 REINFORCEMENT

- 6.1 ALL REINFORCEMENT TO BE GRADE 500 TYPE 2 UNLESS NOTED OTHERWISE.
6.2 CONCRETE COVER TO BE MAINTAINED BY THE USE OF CONCRETE OR PLASTIC SPACERS, PRE WELDED CHAIRS, STOOLS ETC. [BROKEN BRICKS OR TILES, ETC. MAY NOT BE USED].
6.3 MESH REINFORCEMENT TO BE LAPPED TO ENSURE THAT A MAXIMUM OF 3 NO. LAYERS IS NOT EXCEEDED AT CORNERS.
6.4 H DENOTES HIGH YIELD BARS TO B.S 4449. R DENOTES MILD STEEL BARS TO B.S 4449.



7.0 STEELWORK

- 7.1 ALL STRUCTURAL STEELWORK IS TO BE DESIGNED AND FABRICATED IN ACCORDANCE WITH THE STEELWORK SPECIFICATION.
7.2 THE STEELWORK SUBCONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ALL NECESSARY SITE MEASUREMENTS PRIOR TO FABRICATION TO ENSURE THE CORRECT FIT OF THE NEW WORKS ON SITE.
7.3 STEELWORK TO BE FABRICATED FROM STEEL GRADE S355JR/S355JO/S355J2/S355K2 AS DIRECTED BY INDIVIDUAL THICKNESS AND MINIMUM SERVICE TEMPERATURE AS PER TABLE 4 OF BS 5950-1:2000. UNLESS NOTED OTHERWISE.
7.4 ALL NEW STEEL TO STEEL END CONNECTIONS ARE TO BE DESIGNED BY THE STEELWORK CONTRACTOR TO MEET THE REQUIREMENTS OF BS5950. COPIES OF THE CALCULATIONS ARE TO BE SUBMITTED TO AECOM FOR EXAMINATION. THE END CONNECTIONS SHALL BE DESIGNED TO RESIST A TENSILE FORCE EQUAL TO THE END REACTIONS SHOWN. WHERE NOT SHOWN THE END CONNECTION SHALL BE DESIGNED TO CARRY A MINIMUM ULTIMATE LIMIT STATE TIE FORCE OF 75kN.
7.5 THE CONTRACTOR IS TO COMPLETE THE DESIGN AND DETAILING OF STEELWORK CONNECTIONS IN ACCORDANCE WITH THE STEELWORK SPECIFICATION USING THE DESIGN LOADS AND MOMENTS INDICATED IN THESE DRAWINGS. ALL MOMENT LOADS ARE TO BE TREATED AS REVERSIBLE UNLESS NOTED OTHERWISE.
7.6 ALL BOLTED CONNECTIONS TO HAVE A MINIMUM OF FOUR BOLTS WITH WASHERS PLACED UNDER BOTH HEAD AND NUT U.N.O.. ALL BOLTS TO BE GRADE 8.8 TO BS 3692 AND MINIMUM BOLT SIZE TO BE M16 UNLESS NOTED OTHERWISE (REFER CLAUSE G10/115A OF THE SPECIFICATION FOR THE WORKS).
7.7 THE CONTRACTOR IS TO ENSURE THE USE OF NEOPRENE WASHERS OR SIMILAR SEPARATION MEDIUMS TO PREVENT BI-METALIC REACTIONS.
7.8 THE HOLDING DOWN BOLTS SHALL BE DESIGNED AND SUPPLIED BY THE STEELWORK SUBCONTRACTOR AND FIXED BY THE GENERAL CONTRACTOR. THE HOLDING DOWN BOLTS SHALL BE SET OUT IN ACCORDANCE WITH THE STEELWORK SUBCONTRACTORS SETTING OUT DETAILS.
7.9 ALL NEW STEEL TO STEEL CONNECTION PLATES ARE TO BE A MINIMUM OF 10mm THICK TO STEELWORK CONTRACTORS DESIGN IN ACCORDANCE WITH BS 5950
7.10 GROUTING OF STANCHION BASES IS TO BE CARRIED OUT IN ACCORDANCE WITH THE STEELWORK SPECIFICATION USING HIGH STRENGTH NON-SHRINK CEMENTITIOUS GROUT, TO BE APPROVED BY THE ENGINEER.
7.11 ALL WELDS ARE TO BE A MINIMUM 6MM FULL PROFILE CONTINUOUS FILLET WELD IN ACCORDANCE WITH BS 5135 UNLESS NOTED OTHERWISE. WHERE A WELD IS CALLED UP AS FULL STRENGTH BUTT WELD (FSBW) IT IS ASSUMED THAT IT WILL BE FULL PENETRATION.
7.12 SITE WELDING WILL NOT BE ACCEPTABLE WITHOUT PRIOR APPROVAL.
7.13 ALL FABRICATION DRAWINGS ISSUED FOR APPROVAL WILL BE COMMENTED ON WITHIN 10 WORKING DAYS. ANY ITEMS FABRICATED PRIOR TO APPROVAL SHALL BE AT THE CONTRACTORS RISK.
7.14 FIRE PROTECTION OF STEELWORK IS TO BE TO ARCHITECT'S REQUIREMENTS. ANY SPECIFICATION FOR INTUMESCENT COATINGS WILL BE OUTLINED IN THE STEELWORK SPECIFICATION.
7.15 SURFACE TREATMENT
- GALVANIZED FINISHES TO BE IN ACCORDANCE WITH THE SPECIFICATION.
- INTUMESCENT PROTECTIVE FINISHES TO BE IN ACCORDANCE WITH THE SPECIFICATION.
- "POWDER COAT" FINISHES AS IDENTIFIED ON THE ARCHITECT'S DRAWINGS TO BE SHOP APPLIED IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION. DETAILS AND COLOUR TO BE AGREED WITH THE ARCHITECT.
7.16 FINISHES AND TREATMENTS TO STRUCTURAL STEELWORK ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATION.
7.17 WP =WIND POST TO CONTRACTOR DESIGN.
7.18 PRE CAMBERING OF BEAMS, WHERE REQUIRED, TO BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATION.
7.20 DETAILS AND POSITIONS FOR CONSTRUCTION SPLICES TO BE AGREED WITH THE CONTRACTOR.

8.0 MISCELLANEOUS

- 8.1 THE CONTRACTOR SHALL ENSURE THAT THE STABILITY OF THE BUILDING AND ADJOINING PREMISES ARE MAINTAINED AT ALL STAGES OF CONSTRUCTION. HE SHALL DESIGN, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORK, AND PROGRAMME THE WORKS ACCORDINGLY.
8.2 THE DEMOLITION CONTRACTOR IS TO ALLOW FOR REGULAR MONITORING OF RETAINED STRUCTURES UNTIL COMPLETION OF THE NEW SUPERSTRUCTURE AND PROVIDE REPORTS. DETAILS OF MONITORING PROPOSALS ARE TO BE SUBMITTED FOR APPROVAL AND ARE TO MEET THE REQUIREMENTS OUTLINED IN THE STRUCTURAL MOVEMENT & TOLERANCES SPECIFICATION.

9.0 MASONRY

- 9.1 LOADBEARING BLOCKWORK TO HAVE A MINIMUM CHARACTERISTIC COMPRESSIVE STRENGTH OF 7.N/mm² TO BS 5628 PART 1:1992 UNLESS NOTED OTHERWISE. FURTHER DETAILS TO ARCHITECTS SPECIFICATIONS
9.2 LOADBEARING BRICKWORK TO HAVE A MINIMUM CHARACTERISTIC COMPRESSIVE STRENGTH OF 20N/mm² TO BS 5628 PART 1: 1992 UNLESS NOTED OTHERWISE. FURTHER DETAILS TO ARCHITECTS SPECIFICATION
9.3 ENGINEERING BRICKS TO HAVE A CHARACTERISTIC COMPRESSIVE STRENGTH OF 50.N/mm² TO BS 5628 PART 1:1992 UNLESS NOTED OTHERWISE. FURTHER DETAILS TO ARCHITECTS SPECIFICATION.
9.4 MORTAR IN LOAD BEARING WALLS TO BE DESIGNATION (III) TO B.S.5628 PART 1:1992
9.5 WHERE WALLS MAYBE SHOWN THIS IS FOR ILLUSTRATION ONLY. LOCATION, SETTING OUT AND DETAILS ARE TO BE TAKEN FROM THE ARCHITECTS DRAWINGS.
9.6 REFER TO ARCHITECTS SPECIFICATION FOR NON-LOADBEARING WALLS AND FACING WALLS.
9.7 ALL RETURNS SHALL BE FULLY BONDED
9.8 TYPICAL DETAILS FOR REPAIRING EXISTING DAMAGED MASONRY, EITHER THROUGH VISIBLE DE-BONDING OR CRACKING, ARE PROVIDED ON AECOM DRAWINGS.

10.0 TIMBER SPECIFICATION

- 10.1 STRENGTH GRADING OF TIMBER. GRADER: ANY COMPANY CURRENTLY REGISTERED UNDER A THIRD PARTY QUALITY ASSURANCE SCHEME OPERATED BY A CERTIFICATION BODY APPROVED BY THE UK TIMBER GRADING COMMITTEE.
10.2 GRADING AND MARKING OF SOFTWOOD. TIMBER OF A TARGET/ FINISHED THICKNESS LESS THAN 100mm AND NOT SPECIFIED FOR WET EXPOSURE: GRADED AT AN AVERAGE MOISTURE CONTENT NOT EXCEEDING 20% WITH NO READING BEING IN EXCESS OF 24% AND CLEARLY MARKED AS "DRY" OR "KD" (KILN DRIED). TIMBER GRADED UN-DRIED (GREEN) AND SPECIFIED FOR INSTALLATION AT HIGHER MOISTURE CONTENTS: CLEARLY MARKED AS "WET" OR "GRN". STRUCTURAL TIMBER MEMBERS CUT FROM LARGE GRADED SECTIONS: RE-GRADED TO APPROVAL AND MARKED ACCORDINGLY.

10.0 TIMBER CONTINUED...

- 10.3 STRUCTURAL SOFTWOOD (GRADED DIRECT TO STRENGTH CLASS)FOR STRUCTURAL USE GENERALLY. GRADING STANDARD: TO BS 4978 OR BS EN 519 OR OTHER NATIONAL EQUIVALENT AND SO MARKED. STRENGTH CLASS TO BS EN 338: C24. [UNO] TREATMENT: ORGANIC SOLVENT IMPREGNATION TO N.B.S SECTION Z12 AND BRITISH WOOD PRESERVING AND DAMP-PROOFING ASSOCIATION COMMODITY SPECIFICATION C8, SERVICE LIFE: 40 YEARS.
10.4 CROSS SECTION DIMENSIONS OF STRUCTURAL SOFTWOOD. DIMENSIONS: DIMENSIONS IN THESE GENERAL NOTES AND SHOWN ON DRAWINGS ARE TARGET SIZES AS DEFINED IN BS EN 336. TOLERANCES: THE TOLERANCE INDICATORS (T1) AND (T2) SPECIFY THE MAXIMUM PERMITTED DEVIATIONS FROM TARGET SIZES AS STATED IN BS EN 336, CLAUSE 4.3: TOLERANCE CLASS 1 (T1) FOR SAWN SURFACES. TOLERANCE CLASS 2 (T2) FOR FURTHER PROCESSED SURFACES.
10.5 WARPING OF TIMBER. BOW, SPRING, TWIST AND CUP: NOT GREATER THAN THE LIMITS SET DOWN IN BS 4978 OR BS EN 519 FOR SOFTWOOD, OR BS 5756 FOR HARDWOOD.
10.6 SELECTION AND USE OF TIMBER. TIMBER MEMBERS DAMAGED, CRUSHED OR SPLIT BEYOND THE LIMITS PERMITTED BY THEIR GRADING: DO NOT USE. NOTCHES AND HOLES: POSITION IN RELATION TO KNOTS OR OTHER DEFECTS SUCH THAT THE STRENGTH OF MEMBERS WILL NOT BE REDUCED. SCARF JOINTS, FINGER JOINTS AND SPLICE PLATES: DO NOT USE WITHOUT APPROVAL.
10.7 PROCESSING TREATED TIMBER. CUTTING AND MACHINING: AS MUCH AS POSSIBLE BEFORE TREATMENT. EXTENSIVELY PROCESSED TIMBER: RETREAT TIMBER SAWN LENGTHWAYS, PLANED, PLOUGHED, ETC. SURFACES EXPOSED BY MINOR CUTTING AND/OR DRILLING: TREAT WITH TWO FLOOD COATS OF A SOLUTION RECOMMENDED BY MAIN TREATMENT SOLUTION MANUFACTURER.
10.8 MOISTURE CONTENT. MOISTURE CONTENT OF WOOD AND WOOD BASED PRODUCTS AT TIME OF INSTALLATION: NOT MORE THAN: COVERED IN GENERALLY UNHEATED SPACES: 24%. COVERED IN GENERALLY HEATED SPACES: 20%. INTERNAL IN CONTINUOUSLY HEATED SPACES:20%.
10.9 PROTECTION. GENERALLY: KEEP TIMBER DRY AND DO NOT OVERSTRESS, DISTORT OR DISFIGURE SECTIONS OR COMPONENTS DURING TRANSIT, STORAGE, LIFTING, ERECTION OR FIXING. TIMBER AND COMPONENTS: STORE UNDER COVER, CLEAR OF THE GROUND AND WITH GOOD VENTILATION. SUPPORT ON REGULARLY SPACED, LEVEL BEARERS ON A DRY, FIRM BASE. OPEN PILE TO ENSURE FREE MOVEMENT OF AIR THROUGH THE STACK. TRUSSED RAFTERS: KEEP VERTICAL DURING HANDLING AND STORAGE.
10.10 EXPOSED TIMBER. PLANED STRUCTURAL TIMBER EXPOSED TO VIEW IN COMPLETED WORK: PREVENT DAMAGE TO AND MARKING OF SURFACES AND ARRISES.
10.11 JOINTING TIMBER - STAINLESS STEEL BOLTS, NUTS AND WASHERS. BOLTS AND NUTS: STANDARD: TO BS EN ISO 3506, GRADE A4. WASHERS: MATERIAL: TO MATCH BOLTS. DIAMETER: NOT LESS THAN 2 TIMES BOLT DIAMETER. THICKNESS: NOT LESS THAN 0.2 TIMES BOLT DIAMETER.
10.12 JOINTING TIMBER - BOLTED JOINTS. BOLT SPACING (MINIMUM): TO BS 5268-2, TABLE 81. HOLES FOR BOLTS: LOCATED ACCURATELY AND DRILLED TO DIAMETERS AS CLOSE AS PRACTICAL TO THE NOMINAL BOLT DIAMETER AND NOT MORE THAN 2mm LARGER. WASHERS: PLACED UNDER BOLT HEADS AND NUTS THAT WOULD OTHERWISE BEAR DIRECTLY ON TIMBER. USE SPRING WASHERS IN LOCATIONS WHICH WILL BE HIDDEN OR INACCESSIBLE IN THE COMPLETED BUILDING. BOLT TIGHTENING: SO THAT WASHERS JUST BITE THE SURFACE OF THE TIMBER. ENSURE THAT AT LEAST ONE COMPLETE THREAD PROTRUDES FROM THE NUT. CHECKING: AT AGREED REGULAR INTERVALS UP TO COMPLETION. TIGHTEN AS NECESSARY.
10.13 JOINTING TIMBER - GLUED JOINTS. ADHESIVE: EPOXY GAP FILLING GLUE. COMPATIBILITY: WHERE RELEVANT, OBTAIN MANUFACTURER'S CONFIRMATION THAT ADHESIVE IS COMPATIBLE WITH PRESERVATIVE/ FIRE RETARDANT TREATMENT. GLUED STRUCTURAL COMPONENTS: FABRICATED TO BS 6446 IN CLEAN, CONTROLLED WORKSHOP CONDITIONS.
10.14 ERECTION AND INSTALLATION - TEMPORARY BRACING. PROVISION: AS NECESSARY TO MAINTAIN STRUCTURAL TIMBER COMPONENTS IN POSITION AND TO ENSURE COMPLETE STABILITY DURING CONSTRUCTION.
10.15 ERECTION AND INSTALLATION - BEARINGS. TIMBER SURFACES WHICH ARE TO TRANSMIT LOADS: FINISHED TO ENSURE CLOSE CONTACT OVER THE WHOLE OF THE DESIGNED BEARING AREA. PACKING: WHERE PROVIDED, TO COVER THE WHOLE OF THE DESIGNED BEARING AREA. CRUSHING STRENGTH: NOT LESS THAN TIMBER BEING SUPPORTED. IN EXTERNAL LOCATIONS: ROT AND CORROSION PROOF.
10.16 ERECTION AND INSTALLATION - INSPECTION GENERALLY. STRUCTURAL TIMBER-WORK: GIVE REASONABLE NOTICE BEFORE COVERING UP.
10.17 ERECTION AND INSTALLATION - BOLTED JOINTS INSPECTION. TIMING: INSPECT ALL ACCESSIBLE BOLTS AT THE END OF THE DEFECTS LIABILITY PERIOD AND TIGHTEN IF NECESSARY.

11.0 CONSTRUCTION DESIGN AND MANAGEMENT (CDM)

- 11.1 AECOM ARE A 'DESIGNER' ON THIS PROJECT AS DEFINED IN THE CDM REGULATIONS.
11.2 AECOM HAVE ASSUMED COMPETENT AND EXPERIENCED CONTRACTORS AND SUBCONTRACTORS WILL BE EMPLOYED. AECOM HAVE CARRIED OUT A RISK ASSESSMENT TO IDENTIFY UNUSUAL RISKS. THIS RISK ASSESSMENT IS CONTAINED WITHIN THE HEALTH AND SAFETY PLAN.



MIDDLESEX HOSPITAL ANNEX

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GENERAL NOTES

ISSUE/REVISION

Table with 3 columns: Issue/Revision, Date, Description. Row 1: A, 16.12.16, FOR PLANNING. Row 2: I/R, DATE, DESCRIPTION.

KEY PLAN

PROJECT NUMBER

60516144

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

MHA-ACM-XX-XX-GN-S-00001

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