

CONCRETE NOTES:

- ALL CONCRETE TO CONFORM TO BS 8500-2
- CONCRETE WHICH IS EXPOSED EXTERNALLY IS TO BE DESIGNATED MIX RC 35/45 U.N.O. SUB-STRUCTURE CONCRETE TO BE DESIGN SULPHATE CLASS DS-1, ACEC CLASS AC-1s. BLINDING CONCRETE TO BE DESIGNATED MIX GEN 1 (1:10 ALL IN).
- 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. PROPOSED CONSTRUCTION METHOD, POURING SEQUENCE AND LOCATION OF CONSTRUCTION JOINTS OF THE STRUCTURE TO BE ISSUED TO THE ENGINEER FOR COMMENT MINIMUM 14 DAYS PRIOR TO THE COMMENCEMENT OF WORK.
- THE ENGINEER IS TO BE NOTIFIED WHEN REINFORCEMENT CAGES ARE AVAILABLE FOR INSPECTION PRIOR TO CONCRETE BEING POURED MINIMUM 7 DAYS NOTICE REQUIRED. BAR REINFORCEMENT TO BE GRADE B500B OR B500C CONFORMING WITH BS 4449 ALL FABRIC REINFORCEMENT TO CONFORM WITH BS 4483 ALL REINFORCEMENT SUPPLIERS SHALL HOLD A VALID CERTIFICATE OF APPROVAL FOR MANUFACTURE AND / OR FABRICATION ISSUED BY 'CARES' OR EQUIVALENT IF REINFORCEMENT IS CUT AND BENT BY OTHER THAN A 'CARES' SUPPLIER THE FABRICATOR SHALL COMPLY WITH BS8606 AND OPERATE A QUALITY MANAGEMENT SYSTEM TO BS EN ISO 9001.
- MINIMUM BAR LAPS TO BE AS NOTED ON RC DRAWINGS. MINIMUM BAR ANCHORAGE LENGTHS TO BE AS NOTED ON RC DRAWINGS.
- CONCRETE CUBES: (WHERE REQUIRED BY ENGINEER)
 - 1 SET OF 4 SHALL BE TAKEN AT THE FOLLOWING FREQUENCY:-
 - SET FOR EACH DAY OF CONCRETING.
 - 1 CUBE SHALL BE CRUSHED AT 7 DAYS & 28 DAYS.
 - THE REMAINING CUBES SHALL BE CRUSHED ONLY IN THE EVENT OF A TEST FAILURE.
 - RESULTS ARE TO BE SUBMITTED TO THE ENGINEER.

FOUNDATION NOTES:

- REFER TO CONCRETE NOTES FOR DESIGNATED FOUNDATION AND BLINDING CONCRETE MIXES.
- CONCRETE COVER TO LINKS TO BE 40mm U.N.O. IF SHUTTERING OR BLINDING IS BEING USED. FOR CONCRETE CAST DIRECTLY AGAINST EARTH FACES, COVER SHOULD NOT BE LESS THAN 75mm AND THEREFORE THE SECTION SIZE SHOULD BE INCREASED, IF THIS OPTION IS ADOPTED, BEWARE! CASTING REINFORCEMENT DIRECTLY AGAINST EARTH FACES MAY ONLY BE CONSIDERED IF THE EARTH FACE IS STABLE AND CLEANLINESS OF THE POUR CAN BE ENSURED.
- EXCAVATIONS MUST NOT BE LEFT OPEN OVERNIGHT. ADEQUATE PRECAUTIONS AS NECESSARY ARE TO BE PROVIDED TO THE SIDES OF THE EXCAVATIONS. ANY LOOSE SOIL THAT FALLS INTO THE BOTTOM OF THE EXCAVATION MUST BE REMOVED PRIOR TO CONCRETING.
- FOUNDATIONS SHALL BE TAKEN DOWN TO THE SPECIFIED FORMATION IN NATURALLY OCCURRING MATERIAL. THE FORMATION LEVELS SHALL BE INSPECTED BY THE ENGINEER AND THE LOCAL AUTHORITY PRIOR TO CASTING ANY CONCRETE, BLINDING OR LAYING OF ANY hardcore. MINIMUM DEPTH BELOW EXISTING FINISHED GROUND LEVEL TO BE AS NOTED ON THE DRAWINGS.
- ANY SERVICES PASSING THROUGH THE SUB-STRUCTURE ARE TO BE IN ACCORDANCE WITH THE SERVICES ENGINEER'S DETAILS. ANY HOLES SHOWN ON HOCKLEY & DAWSON DRAWINGS ARE TO BE CROSS-CHECKED WITH SERVICES ENGINEER PRIOR TO FORMING.

PILING NOTES:

- REFER TO CONCRETE NOTES FOR DESIGNATED MIXES.
- PILE DESIGN IS TO BE PREPARED BY A PILE SPECIALIST BASED UPON DATA GIVEN IN THE SITE INVESTIGATION REPORT REF.
- A FACTOR OF SAFETY OF 2.5 SHALL BE USED SUBJECT TO AGREEMENT WITH THE LOCAL AUTHORITY AND THE SUCCESSFUL LOAD TEST OF A PILE TO 150% OF WORKING LOAD. THE PILING DESIGNER IS RESPONSIBLE FOR OBTAINING LOCAL AUTHORITY AGREEMENT. A FACTOR OF SAFETY OF 3.0 SHALL BE USED WHERE LOAD TESTING IS NOT PROPOSED.
- PILE DIAMETERS ARE INDICATED AS A SUGGESTION. IF THE PILING CONTRACTOR PROPOSES ANY CHANGE FROM THIS, WRITTEN APPROVAL FROM HOCKLEY & DAWSON IS TO BE OBTAINED.
- FOR PILE S.W.L. & CUT OFF LEVELS SEE PILE SCHEDULES.
- ALL SINGLE OR DOUBLE PILES WHICH ARE NOT RESTRAINED IN TWO DIRECTIONS BY GROUND BEAMS OR PILE CAPS ARE TO BE DESIGNED TO RESIST A NOTIONAL HORIZONTAL FORCE OF 1.5% OF THE SAFE WORKING LOAD AT THE TOP OF EACH PILE.
- FOR SETTING OUT, THE CENTRE LINE OF PILES IS TO BE ON THE CENTRE LINE OF EXTERNAL CAVITY & PARTY WALLS & GROUND BEAMS U.N.O.
- ALL PILES ARE TO BE INTEGRITY TESTED.
- THE NUMBER OF PILES TO BE LOAD TESTED IS TO BE AGREED WITH HOCKLEY & DAWSON PRIOR TO PILE DESIGN.
- PILES SHALL BE CONCRETED NO LESS THAN 100mm ABOVE CUT-OFF LEVEL AND CUT DOWN TO SOUND CONCRETE AFTER HARDENING, ENSURING NO DAMAGE TO PILE.
- THE PLAN LOCATION OF THE PILES SHALL BE WITHIN ±75mm (OR 1 / 75 RAKE) OF THAT INDICATED ON THE SETTING OUT DRAWING. ANY DEVIATION FROM THIS SHALL BE REPORTED TO HOCKLEY & DAWSON BEFORE FORMING THE GROUND BEAMS OR THE PILE CAPS.
- ANY OBSTRUCTIONS ENCOUNTERED DURING PILING SHALL BE NOTIFIED TO THE ENGINEER AS SOON AS POSSIBLE. TO MINIMISE STANDING TIME PILE POSITIONS TO BE PROBED BY THE PILING CONTRACTOR IN ADVANCE OF PILING.
- CONCRETE COVER TO REBAR TO BE 50mm.
- PILE REINFORCEMENT TO BE IN ACCORDANCE WITH PILING SPECIALISTS DESIGN.
- CONCRETE CUBES ARE TO BE TAKEN AS NOTED IN THE CONCRETE NOTES SECTION.

STEELWORK NOTES:

- ALL STEELWORK SUPPLY, FABRICATION AND ERECTION IS TO COMPLY WITH THE LATEST EDITION OF THE NATIONAL STRUCTURAL STEELWORK SPECIFICATION (NSSS). ALL TESTING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NSSS. ALL STEELWORK TO BE GRADE S355 JO TO BS EN 10025 U.N.O. ALL HOLLOW SECTIONS ARE TO BE GRADE S355 JOH AND HOT ROLLED TO BS EN 10210-1 U.N.O.
- STEELWORK IS TO BE FABRICATED IN ACCORDANCE WITH EXECUTION CLASS EXC2 IN TABLE 8.3 OF BS EN 1090-2.
- T.O.S INDICATES TOP OF STRUCTURAL STEEL LEVEL. B.O.S INDICATES BOTTOM OF STRUCTURAL STEEL LEVEL (NOT INCLUDING PLATES).
- ALL BOLTS TO BE GRADE 8.8 U.N.O. IN ACCORDANCE WITH BS 3692, BS 4190 FOR HEX BOLTS, AND BS 4604 FOR H.S.F.G.BOLTS / BS EN 1993-1-8:2005
- FOR PAINT PROTECTION OF STEELWORK REFER TO THE STRUCTURAL SPECIFICATION. WHERE A SPECIFIC SYSTEM IS NOT SPECIFIED, ALL STEELWORK, UNLESS NOTED OTHERWISE, IS TO BE PAINTED TO ACHIEVE A LIFE TO FIRST MAINTENANCE OF 20 YEARS. DETAILS OF THE PROPOSED PROTECTION SYSTEM IS TO BE COMPATIBLE WITH FIRE PROTECTION SYSTEM AND ARE TO BE FORWARDED TO HOCKLEY & DAWSON FOR COMMENT MINIMUM 14 DAYS PRIOR TO FABRICATION.
- ALL STEELWORK WITHIN CAVITIES OR WITHIN MASONRY IS TO RECEIVE 2No. COATS OF BITUMINOUS PAINT 150 MICRONS DRY FILM THICKNESS.
- THE STEELWORK SUB-CONTRACTOR IS TO CONDUCT AN ACCURATE SITE SURVEY TO DETERMINE FINAL DIMENSIONS FOR ALL NEW STEELWORK AFFECTED BY EXISTING STRUCTURES.
- ALL STEELWORK HAS BEEN DESIGNED TO BS 5950 / BS EN 1993 AND THE DESIGN OF ALL CONNECTIONS, BY THE STEELWORK SUB-CONTRACTOR, ARE TO SATISFY THE SAME CODE. ALL REACTIONS, LOADS AND MOMENTS ARE FACTORED. REACTIONS ARE SHOWN IN KILONEWTONS (kN)
- MOMENTS ARE SHOWN IN KILONEWTON METRES (kNm)
- ALL END CONNECTIONS ARE TO BE DESIGNED FOR A MINIMUM END REACTION OF 75kN SHEAR OR TENSION.
- THE STEELWORK SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF STEEL TO CONCRETE CONNECTIONS TO THE FACTORED LOADS GIVEN ON THE ENGINEER'S DRAWINGS.
- ALL STEELWORK BELOW GROUND SLAB LEVEL IS TO BE ENCASED IN A MINIMUM OF 100mm CONCRETE, GRADE C28/35 (10mm AGGREGATE) - REINFORCED WITH D49 WRAPPING FABRIC, WITH 50mm COVER.
- ALL CONNECTIONS ARE TO BE FORMED WITH A MIN OF 2No. M16 GRADE 8.8 BOLTS U.N.O.
- ALL WELDS ARE TO BE MADE AND TESTED IN ACCORDANCE WITH BS EN 1011.
- STRAPS AND TIES ARE TO BE OF SIZES AND MATERIALS

- SHOWN ON THE DRAWINGS FIXED AT THE SPACINGS SHOWN AND GENERALLY BE IN ACCORDANCE WITH BS EN 1995-1-1:2004 AND A1:2008.
- THE STEELWORK SUB-CONTRACTOR IS TO INCLUDE IN HIS RATES FOR THE PREPARATION OF SHOP DRAWINGS FOR ALL THE WORK IN ACCORDANCE WITH AND IMPLIED BY THE GENERAL ARRANGEMENT DRAWINGS AND THE SPECIFICATIONS, AND SHALL CONTINUE TO SUBMIT THE DRAWINGS IN DUPLICATE TO THE ENGINEER FOR COMMENT. A PROGRAM FOR THE SUBMISSION OF THE DRAWINGS FOR APPROVAL IS TO BE AGREED BEFORE THE WORK COMMENCES SO AS TO ENSURE THAT AMPLE TIME IS AVAILABLE FOR CHECKING AND COMPLIANCE WITH THE MAIN CONTRACTOR'S PROGRAM. DRAWINGS ARE TO BE SUBMITTED MINIMUM 14 DAYS PRIOR TO COMMENCING FABRICATION. THE ENGINEER'S APPROVAL SHALL IN NO WAY RELIEVE THE STEELWORK CONTRACTOR OF RESPONSIBILITY FOR ANY ERROR IN THE DETAILS SUBSEQUENTLY DISCOVERED.
- THE STEELWORK SUB-CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING ALL STAGES OF ERECTION INCLUDING ANY TEMPORARY BRACING OR PROPPING REQUIRED TO ENSURE THE STABILITY OF THE STRUCTURE DURING ERECTION.
- NO SITE WELDING IS PERMITTED WITHOUT THE EXPRESS PERMISSION OF THE ENGINEER. WHERE PERMITTED, FULL PROPOSALS FOR SUCH WELDING ARE TO BE ISSUED MINIMUM 7 DAYS PRIOR TO COMMENCING.
- COLUMN SPLICES, COLUMN SHAFTS TO BASE PLATES ARE TO BE MACHINE CUT FOR BEARING.
- WHERE STEELWORK IS VISIBLE, FABRICATION DRAWINGS AND CONNECTION DETAILS ARE TO BE SUBMITTED TO THE ARCHITECT FOR REVIEW MINIMUM 14 DAYS PRIOR TO COMMENCING FABRICATION WITH WELDS GROUND DOWN IF REQUIRED.
- BEAMS SUPPORTING PRECAST PLANKS ARE TO BE LOADED EVENLY ON BOTH SIDES WERE THIS IS NOT POSSIBLE BEAMS ARE TO BE PROPPED DURING CONSTRUCTION.
- BASEPLATE AND HOLDING DOWN BOLT DESIGN IS TO BE BY THE STEELWORK SUB-CONTRACTOR TO THE FACTORED LOADS INDICATED ON THE ENGINEER'S DRAWINGS. DRAWINGS AND CALCULATIONS ARE TO BE SUBMITTED MINIMUM 14 DAYS PRIOR TO COMMENCING FABRICATION.
- THE MAIN CONTRACTOR AND THE STEELWORK SUB-CONTRACTOR WILL BE RESPONSIBLE FOR AGREEING ALL HOLES AND FIXINGS IN THE STEELWORK REQUIRED BY SPECIALISTS AND SUB-CONTRACTORS SUPPLYING SECONDARY ELEMENTS AND INCORPORATING THESE IN THEIR SHOP DRAWINGS. ALL STRUCTURAL STEELWORK SUPPORTING STRUCTURE OTHER THAN ELEMENTS WHICH JUST SUPPORT THE ROOF ARE TO BE FIRE PROTECTED. REFER TO THE ARCHITECT'S DETAILS FOR METHOD OF PROTECTION.
- ALL STEELWORK IS TO BE GALVANISED WITH A MIN COATING OF 85µm. (TO BE AGREED WITH ARCHITECT).

project
LEISURE CENTRE BRIDGE CRANLEIGH

drawing title
CONSTRUCTION NOTES

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